University of Minnesota

PUBLICATIONS

OF THE

FACULTIES

1952 - 1953

Minneapolis, Minnesota

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Publications of the Faculties

ADMINISTRATION

JAMES LEWIS MORRILL, B.A., LL.D., L.H.D., President

"Address of welcome." Thirty-ninth annual meeting of the American Association of Collegiate Registrars and Admissions Officers, Minneapolis, Minnesota, April 20-23, 1953. College and University, 28:465-71. July, 1953.

"The President's introduction." Pages xi-xiii in Walter W. Heller, Francis M. Boddy, and Carl L. Nelson, editors, Savings in the Modern Economy. Minneapolis: University of Minnesota Press. 1953.

MALCOLM M. WILLEY, Ph.D., L.H.D., LL.D., Vice President, Academic Administration

"The beadroll of American worthies." Minnesota, Voice of the Alumni, 52:5-8. October, 1952. "John Lyon Gardiner's judgeship." Long Island Forum, 15:185-86. October, 1952.

COLLEGE OF SCIENCE, LITERATURE, AND THE ARTS

Administration

ERRETT W. McDiarmid, Ph.D., Dean and Professor

Review of Alice I. Bryan, The Public Librarian (with a section on the education of librarians by Robert D. Leigh) in Journal of Applied Psychology, 36:428-29. December, 1952.

RUSSELL M. COOPER, Ph.D., LL.D., Professor, Assistant Dean, and Chairman

"Liberal arts education and national trends." Proceedings of Oklahoma Conference on Liberal Arts Education, pp. 8-11. 1952.

"Liberal education on trial." Ibid., pp. 19-25.

MARGARET THOMAS, M.A., Teaching Assistant

"Reliability of the original and the simplified Flesch reading ease formulas" (with G. W. England and D. G. Paterson). Journal of Applied Psychology, 37:111-13. April, 1953.

Anthropology

ROBERT F. SPENCER, Ph.D., Associate Professor

"The Arabian matriarchate: An old controversy." Southwestern Journal of Anthropology, 8:478-502. Winter, 1952.

"Native myth and modern religion among the Klamath Indians." Journal of American Folklore, 65:217-26. July-September, 1952.

"Sklaven und Sklavenbesitz unter den Klamath-Indianern." Zeitschrift für Ethnologie, 77:1-6.
1952.

ART

H. HARVARD ARNASON, M.A., M.F.A., Professor and Chairman

The Classic Tradition in Contemporary Art. Walker Art Center, Minneapolis, Minnesota. 1953. 56 page catalogue.

"Alternatives to a cross section." (Editorial.) Art Digest, p. 7. April 1, 1953.

Review of Carola Giedion-Welcker, Paul Klee in Everyday Art Quarterly, No. 26, p. 23. 1953.

Editor, Saul Baizerman Catalogue. Walker Art Center, Minneapolis, Minnesota. 1953.

IVAN DOSEFF, B.S., Professor

Designed 2 pieces of equipment for an industrial local concern. 1952-53.

DIMITRI T. TSELOS, M.A., M.F.A., Ph.D., Professor

"Unique portraits of the Evangelists in an English Gospel Book of the Twelfth Century." Art Bulletin, 34:257-77. December, 1952.

"Exotic influences in the architecture of Frank Lloyd Wright." Magazine of Art, 47:160-69, 184. April, 1953.

John Rood, Associate Professor

Exhibitions of sculpture

July-August, 1951: Walker Art Center, 6 States Sculpture Biennial: 1 piece sculpture.

April 29-October 1, 1951: Minnesota Historical Society: One-man retrospective exhibition, 53 pieces of sculpture.

Minnesota State Fair, 1951: 2 pieces of sculpture. 1st prize for sculpture "Jacob's Ladder." November, December, 1951: St. Paul Public Library. One man exhibition.

January 19-February 24, 1952; Pennsylvania Academy of Fine Arts, Philadelphia: 1 sculpture. February, 1952; San Francisco Art Association, 71st Annual: 1 sculpture.

February 18-March 8, 1952: Harriet Hanley Gallery: One man exhibition, drawings for sculpture.

March, 1952: Mt. Zion Temple, 95th Anniversary Exhibition, St. Paul: 3 sculptures.

April, 1952: Woman's Club Spring Salon, Minneapolis: 1 sculpture.

May 19-June 2, 1952: Minneapolis Institute of Fine Arts: 2nd Biennial Exhibition of Prints and Drawings: Honorable mention for drawing for sculpture.

Elmer E. Young, Associate Professor

Exhibited water-color Browns Yard in the Eighty-sixth Annual Exhibition of the American Water-color Society at the National Academy, New York City, February 26 to March 15, 1953.

Exhibited water-color *Jim's Place* in the Thirty-seventh Annual Local Artists Exhibition at the Minneapolis Institute of Arts, October 10 to November 9, 1952.

BERNARD P. ARNEST, Assistant Professor

Oil Painting

- "Street Corner with Figures." Florida Gulf Coast Art Center and other museums in Florida, Georgia and North and South Carolina, winter 1952-53.
- "Landscape at Chilmark." Dayton Art Museum, 1952-53.
- "Street Corner with Figures." Corcoran Gallery of Art, March, 1953.
- "Man in Orange." Carnegie Institute, November, 1952; San Francisco Museum of Art, January, 1953.
- "Man with Newspaper." Philips Memorial Gallery, Washington, D.C., December, 1952.
- "Incident in the Subway." Springville High School Art Association, April, 1953.
- "Two Readers." University of Nebraska, March, 1953.
- "Neon." American Federation of Art Traveling Show, Tokyo, Japan: San Francisco Museum.
- "View of the City thru Signs #2." Colorado Springs Fine Arts Center, March, 1953; Phillips Memorial Gallery, December, 1953.
- "Street Crossings with Figures #2." Montclair Museum, November, 1953; Pennsylvania Academy of Fine Arts.
- "Window." "Untitled." University of Nebraska, 1953.
- "Untitled." Walker Art Center, 1953.
- "Grey Station." (Honorable Mention.) The Minneapolis Woman's Club, Spring 1953.
- "Underpass." (Honorable Mention.) The Minneapolis Institute of Arts, Fall 1952.
- "Duluth Street." "Bridge." St. Catherine's College, Spring 1953.

HILMA L. G. BERGLUND, M.A., Assistant Professor

Weaving exhibits

October 4-6, 1952. Red Wing Art Association Exhibit, Red Wing, Minnesota.

November, 1952. Chicago Weavers Guild Exhibit sent by Twin City Weaver's Guild.

October 27-November 9. Midwestern College Art Conference, University of Illinois, Urbana, Illinois.

November 17-December 24. Craftsman's exhibit, St. Paul Gallery and School of Art, St. Paul, Minnesota.

February 15-30, 1953. "Good Design" Exhibit, Miami University, Oxford, Ohio.

April 1-26, 1953. Exhibition of Utilitarian Design, Joslyn Art Museum, Omaha, Nebraska.

May 18-30, 1953, Delta Phi Delta Exhibit at Dayton's Art Gallery, Minneapolis, Minnesota. (Honorable Mention.)

ROBERT COLLINS, M.F.A., Assistant Professor

Three paintings, "Halloween." Ford Times, Vol. 44, No. 10, pp. 2-7. October, 1952.

Design of double page cartograph "Iowa State College." Lincoln-Mercury Times, Vol. 5, No. 2, pp. 16-17. March-April, 1953.

A painting "Iowa State College." Ibid., Vol. 5, No. 2, p. 14. March, April, 1953.

Design of printed materials for Skarnes Engineering and Supply, Inc. Included: trade-mark, letterhead, quotation form, catclogue, calling cards, envelopes and tape. August, 1952.

A painting, "Mountain Lake, Washington," exhibited at the Minneapolis Woman's Club. April, 1953.

Two drawings, "Avocado" and "Totem" and a painting "Mountain Lake, Washington" exhibited at the Dayton Company, Minneapolis, Minnesota, June, 1953.

ALLEN DOWNS, M.A., Assistant Professor

Release of black and white sound film Art and Seeing, October, 1953, through University of Minnesota Audio-Visual Service.

One-man show and catalogue of photographs and drawings at the University Gallery, April 24 to May 22, 1953.

LORENZ E. A. EITNER, M.F.A., Ph.D., Assistant Professor

"Les activites des musees aux Etats Unis," Rencontres (Cahiers de l'Institut Provincial de l'Education et des Loisirs). La Louviere (Belgium), pp. 13-18. March, 1953.

"Deux peintures inconnus de Gericault." Bulletin des Musees Royaux de Belgique, Vol. 2, No. 3, pp. 10-21, 1953.

PHILIP G. MORTON, B.A., Assistant Professor

Exhibits of Sculpture

Bronze sculpture, "Aerial Catapult." Twin Cities Annual Art Show, Minneapolis Institute of Arts. October, 1952.

One-man show of small bronzes. Leonard Lynn Gallery, Winnetka, Illinois. October, 1952.

One-man show small bronzes, Colorado Springs Fine Arts Center, Colorado Springs, Colorado. November, 1952.

One-man show small bronzes, Contemporary Gallery, Salt Lake City, Utah. December, 1952.

San Francisco Art Association Annual Oil and Sculpture Exhibition. February to April, 1953. (Awarded Special Mention for Cast Bronze Sculpture "Aerial Catapult.")

Exhibits of Jewelry

Walnut Creek Annual Outdoor Show, Walnut Creek, California, August, 1952. First Prize for Jewelry.

Colorado Springs Fine Arts Center, Colorado Springs, Colorado, One-man show. November, 1952.

Contemporary Gallery, Salt Lake City, Utah. One-man show. December, 1952.

University of Nebraska Art Gallery, Lincoln, Nebraska. December, 1952.

College of St. Catherine, St. Paul, Minnesota. April, 1953.

MALCOLM H. MYERS, M.F.A., Assistant Professor

One-man show comprised of 70 prints and paintings at University Gallery, University of Minnesota. Catalogue was published. 1952-53.

One-man show at Walker Art Center, Minneapolis. Comprised of 30 prints and paintings. 1952-53. Show of paintings at the World Art Gallery in St. Paul, Minnesota. (To initiate the opening of the gallery.) 1952-53.

Organized an annual exhibition of Twin City Artists show at Rothschilds, Minneapolis. 1952-53.

Walter W. Quirt, Assistant Professor

"Art's theoretical basis." College Art Journal, Vol. 12, No. 1, pp. 12-15. Fall, 1952.

Paintings exhibited at Powers Store, Minneapolis, April, 1953.

- "Mysterious Reality"
- "A Little Man's Fantasies"
- "Three Sheets and a Wind"
- "Luxury"
- "Earth Dancing." College Art circulating exhibition, Painting and Prints from the Upper Midwest, 1952-53.
- "Triumphant Child." The Classic Tradition in Contemporary Art (Walker Art Center, April 24-June 28).
- "A Man." Big Ten circulating exhibition.
- "Woman in Blue." "Woman in Brown." Minnesota Artists Visit Nebraska (University of Nebraska).
- "Tired Woman." "Frustration." "Drawing." St. Catherine's Art Festival (St. Paul),

Drawings and water colors. One-man show, Walker Art Center, Fall, 1952.

Josephine L. Rollins, M.A., Assistant Professor

"Art in Minnesota." Journal of the American Association of University Women, 46:202-204.

May, 1953.

"Exploring with brush and palette." Minnesota History, 33:208-210. Spring, 1953.

Reproduction of casein painting "Bahamians Working at a Pea Vinery at Green Giant Minnesota Valley Canning Company, Le Sueur, Minnesota." (Done as part of a Regional Writing Fellowship Project.) Used as illustration for article "Recording the World Around Us" in Minnesota Journal of Education, March, 1953.

Reproduction for Christmas card published by the Minnesota Historical Society. Water color painting of the "Church of the Assumption in St. Paul."

Exhibitions

Show of thirty paintings—"Mexico and Minnesota Mid-Century." Rainbow Cafe, Minneapolis, during month of March 1953.

Selection of above shown at Grand Rapids, Ely, North St. Paul High School and Concordia College, St. Paul.

Nine paintings shown at Minnesota State Fair. "Minnesota Mid-Century."

Awards

First Prize in water color at Twin City Art Exhibition, Minneapolis Institute of Arts. "View from Mounds Park."

HYLTON A. THOMAS, Ph.D., Assistant Professor

Review of Skira, Spanish Painting from Velazquez to Picasso in Everyday Art Quarterly (Walker Art Center, Minneapolis, Minnesota), No. 24, p. 33, 1952.

Donald R. Torbert, Ph.D., Assistant Professor

"Purcell and Elmslie, architects." Introduction to the catalogue—Purcell and Elmslie, architects. Walker Art Center, March, 1953.

Reprint in Northwest Architect, 17:2, 3. April, 1953.

Review of Lewis Mumford, editor, Roots of Contemporary American Architecture in Everyday Art Quarterly, No. 23, pp. 15-16. June, 1953.

HAROLD TOVISH, Assistant Professor

Exhibitions during 1952-53

Sculpture: Grand Central Moderns. New York, New York. Swetzolf Gallery, Boston, Massachusetts. Artists Equity Exhibition. Walker Art Center, Minneapolis, Minnesota.

Drawing: Whitney Museum of American Art. New York, New York.

Cameron Booth, Lecturer

One-man exhibitions of paintings

Bertha Schaefer Gallery, New York City, March 23 to April 18, 1953.

The Arts Club of Chicago, Chicago, Illinois, April 19 to May 19, 1953.

Walker Art Center, Minneapolis, Minnesota, June 10 to August 30, 1953.

Commissioned portrait paintings:

Dr. Charles Nelson Pace, oil 54" x 45" for Hamline University, St. Paul, Minnesota.

Dr. Stanley Kerfoot, oil 54" x 44" for Hamline University, St. Paul, Minnesota.

PAUL D. FRAZIER, M.F.A., Instructor

Exhibitions

Minnesota State Fair, August, 1952.

Cranbrook Alumni Exhibition, Bloomfield Hills, Michigan, October, 1952.

Walnut Creek Outdoor Exhibition, Walnut Creek, California, November, 1952.

One-man exhibition, Walker Art Center, Minneapolis, Minnesota, June, 1953.

Awards

Cranbrook purchase prize.

First award, Sculpture. Walnut Creek, California.

JEROME LIEBLING, Instructor

Release of film Art and Seeing (with A. Downs). University of Minnesota Audio-Visual Service

Exhibition of photographs at Bethel College, St. Paul, Minnesota, May 1953.

ASTRONOMY

WILLEM J. LUYTEN, Ph.D., Professor and Chairman

- "The spectra and luminosities of white dwarfs." Astrophysical Journal, 116:283-91. 1952.
- "A determination of color classes for 204 stars of large proper motion" (with E. F. Carpenter). *Ibid.*, pp. 587-92.
- "New white dwarfs in the southern hemisphere, third list." Proceedings of the National Academy of Sciences, 39:135-37. 1953.
- "A further search for faint blue stars." Astronomical Journal, 58:75-79. 1953.
- "The smallest known star" (with E. F. Carpenter). Harvard Announcement Card, No. 1181. 1953.
- "Possible white dwarfs in the Praesepe and Coma clusters." Ibid., No. 1202.

BOTANY

A. ORVILLE DAHL, Ph.D., Professor and Chairman

- "The comparative morphology of the Icacinaceae. VI. The pollen." Journal of the Arnold Arboretum, 33:252-86, 9 plates. July, 1952.
- "Electron microscopy of ultrathin frozen sections of pollen grains" (with H. Fernández-Morán). Science, 116:465-67. October 31, 1952.

Ernst C. Abbe, Ph.D., Professor

"A floristic study of Cook County, northeastern Minnesota" (with F. K. Butters). Rhodora, 55:21-55; 63-101, 116-54, 161-201. February-March-April-May, 1953.

ALLAN H. BROWN, Ph.D., Professor

- "Photosynthesis" (with A. W. Frenkel). Annual Reviews of Plant Physiology, 4:23-58. June, 1953.
- "The relative rates of photosynthetic assimilation of isotopic forms of carbon dioxide" (with R. W. Van Norman). Plant Physiology, 27:691-709. October, 1952.

Donald B. Lawrence, Ph.D., Professor

Development of Vegetation and Soil on Deglaciated Terrain of Southeastern Alaska with Special Reference to the Accumulation of Nitrogen. Second Semiannual Progress Report (July 1 to December 31, 1952). Office of Naval Research Project NR160-183. 1953. 15 pages.

ALBERT W. FRENKEL, Ph.D., Associate Professor

- "Photosynthesis" (with A. H. Brown). Annual Reviews of Plant Physiology, 4:23-58. 1953.
- "Hydrogen evolution by the flagellate alga, Chlamydomonas Moewusii," Archives of Biochemistry and Biophysics, 38:219-30. July, 1952.
- "Some respiratory characteristics of the blue-green alga, Anabaena" (with G. C. Webster).

 Plant Physiology, 28:63-69. January, 1953.
- Laboratory guide for the study of elementary plant physiology. Mimeographed outline (revised), 1953.

GERALD B. OWNBEY, Ph.D., Associate Professor and Curator of Herbarium

Review of F. E. Clements, E. V. Martin, and F. L. Long, Adaptation and Origin in the Plant World in Ecology, 33:431. July, 1952.

JOHN W. HALL, Ph.D., Assistant Professor

Abstracts in Biological Abstracts, Vol. 27, 1953. Nos. 4455, 7422, 7423, 7427, 7433, 8456, 10422, 10423, 10424, 10425, 10426, 10427, 10446, 13778, 13782, 14117.

THOMAS MORLEY, Ph.D., Assistant Professor

"The genus Mouriri (Melastomaceae). A sectional revision based on anatomy and morphology." University of California Publications in Botany, Vol. 26, No. 3, pp. 223-312. 1953.

"A new genus and three new species in the Memecyleae (Melastomaceae)." American Journal of Botany, 40:248-55. April, 1953.

GEORGE C. WEBSTER, Ph.D., Research Fellow

"Some respiratory characteristics of the blue-green alga, Anabaena" (with A. W. Frenkel).

Plant Physiology, 28:63-69. January, 1953.

"The occurrence of a cytochrome oxidase in the tissues of higher plants." American Journal of Botany, 39:739-45. December, 1952.

"The effect of carbon monoxide on respiration in the sweet potato, Ipomoea batatas Lan." Science, 117:530-31. May 15, 1953.

GILBERT A. LEISMAN, M.S., Teaching Assistant

"The rate of organic matter accumulation on the sedge mat zones of bogs in the Itasca State Park region of Minnesota." *Ecology*, 34:81-101. January, 1953.

CLASSICS

WILLIAM A. McDonald, Ph.D., Associate Professor

Review of R. Scranton, Corinth: Results of Excavations. Vol. I, Pt. III in Classical Journal, 48:140-41. January, 1953.

Margaret Forbes, B.A., Instructor

Editor, Minnesota Latin News-Letter, 1952-53.

ENGLISH

THEODORE HORNBERGER, Ph.D., Professor and Chairman

The Literature of the United States (with W. Blair and R. Stewart). Vol. I. (Revised Edition.) Chicago: Scott, Foresman. 1953, xii, 1115 pages.

"Faulkner's reputation in Brazil." Faulkner Studies, 2:9-10. Spring, 1953.

Mimeographed bibliography: A list of American books translated into Portuguese and produced by Brazilian publishers. Rio de Janeiro: Evaluation Section, United States Embassy. December, 1952, 1010 items.

JAMES T. HILLHOUSE, Ph.D., Professor and Associate Chairman

"Sir Walter's last long poem." Huntington Library Quarterly, 16:53-73. November, 1952.

JAMES GRAY, B.A., Professor

General Mills, An Idea in Action, Minneapolis: General Mills, Inc. 52 pages, 1953.

"The journalist as a literary man." Part II, pages 95:147 in William Van O'Connor and Frederick J. Hoffman, editors, American Non Fiction, 1900-1950. Chicago: Henry Regnery Company, 1952.

Reviews of

John Horne Burns, A Cry of Children in Saturday Review, 35:37. September 18, 1952.

Joyce Cary, Prisoner of Grace. Ibid., p. 41. October 11, 1952.

Evelyn Waugh, Men at Arms. Ibid., p. 43. October 25, 1952.

TREMAINE McDowell, Ph.D., Professor

Review of D. L. Clark, Charles Brockden Brown in Saturday Review of Literature, pp. 36-37. April 4, 1953.

Associate Editor, American Quarterly. 1952-1953.

Samuel H. Monk, Ph.D., Professor

Reviews of

Frank L. Huntley, On Dryden's Essay of Dramatic Poetry in "The Romantic Movement: A Critical Bibliography." Philological Quarterly, 31:269-70. April, 1952.

Lillian de la Torre, The Heir of Doublas. New Republic, p. 20. October 13, 1952.

Marvin Mudrick, Jane Austen in United States Quarterly Book Review, 8:134. June, 1952. Edward L. McAdam, Doctor Johnson and the English Law. Ibid., p. 369. December, 1952.

Josephine Miles, The Primary Language of Poetry in the 1640's. The Primary Language of

Poetry in the 1740's and 1840's, and the Primary Language of Poetry in the 1940's in Journal of English and Germanic Philology, 51:426-28. July, 1952.

CECIL A. MOORE, Ph.D., Professor Emeritus

Backgrounds of English Literature 1700-1760. Minneapolis: University of Minnesota Press. 1953, 254 pages.

HENRY N. SMITH, Ph.D., Professor

"William Faulkner and reality." Faulkner Studies, 2:17-19. Summer, 1953.

Reviews of

Franklin Walker, Literary History of Southern California in American Literature, 25:119-21. March, 1953.

Raymond Leopold Bruckberger, French and American Journals, Bernard Iddings Bell, Crowd Culture, and David Reisman, Faces in the Crowd in Yale Review, 3:445-48. March, 1953.

ALLEN TATE, B.A., Litt.D., Professor

- "The angelic imagination: Poe and the power of words." Kenyon Review, 14:455-75. Summer, 1952.
- "Is literary criticism possible?" Partisan Review, 19:546-57. September-October, 1952.
- "The man of letters in the modern world." Phi Beta Kappa address, University of Minnesota, May 1, 1952. Hudson Review, 5:335-45. Autumn, 1952; World Review (London). October, 1952.
- "Orthodoxy and the standard of literature." New Republic, pp. 24-25. January 5, 1952.
- "Clarity, elegance, and power." Ibid., pp. 17-18. March 2, 1953.
- "The point of dying: Donne's 'virtuous men.' " Sewance Review, 61:76-81. Winter, 1953.
- "Ode aux morts Confédérés." (A poem.) Translated by Jacques and Raisa Maritain. Sewance Review, 61:513-17. Summer, 1952.
- "The Swimmers." (A poem.) Hudson Review, 5:471-73. Winter, 1953.
- "The Buried Lake." (A poem.) Sewance Review, 61:175-180. Spring, 1953.

Review of Brom Weber, editor, The Letters of Hart Crane in New Republic, pp. 25-26. November 17, 1952.

Bernard R. Bowron, Jr., Ph.D., Associate Professor

Review of Edward Wagenknecht, Cavalcade of the American Novel in Nineteenth Century Fiction. 7:305-307. March, 1952.

JOHN W. CLARK, Ph.D., Associate Professor

- "American English." Pages 110-31 in Ernest Weekley, The English Language. London: Andre Deutsch. 1952.
- "American practice." Pages 211-21 in Eric Partridge, You Have a Point There. London: Hamish Hamilton, 1953.

Louis O. Coxe, B.A., Associate Professor

Play, The Witchfinders, performed at Studio Theatre, University of Minnesota. November, 1952.

Play, The General (with R. H. Chapman). Performed at Harvard University. April-May, 1953.

Poem, "Union Soldier." Furioso, pp. 44-45. Spring, 1953.

Poem, "The Veteran." Partisan Review, pp. 215-16. March-April, 1953.

Poems, "Tower," "Aubade." Western Review, 17:200-201. Spring, 1953.

Reviews of

Ellsworth Barnard, The Poetry of E. A. Robinson in Poetry, 81:187-91. December, 1952.

Robert O. Bowen, Bamboo in Saturday Review, pp. 41-42. May 16, 1953.

Elizabeth Jackson, Ph.D., Associate Professor

"Misunderstood phrases in Kipling." Word Study, Vol. 28, No. 4, pp. 7, 8, April, 1953.

Leo Marx, Ph.D., Associate Professor

Review of Lawrance Thompson, Mclville's Quarrel with God in Nineteenth Century Fiction, 7:138-40. September, 1952.

WILLIAM V. O'CONNOR, Ph.D., Associate Professor

Poems for Study (with L. Unger). New York: Rinehart. 1953, 743 pages.

- "A vessel on the open sea." Poetry: A Magazine of Verse, 81:129-43. November, 1952.
- "A short view of Faulkner's Sanctuary." Faulkner Studies, 1:33-39. Fall, 1952.
- "William Faulkner's apprenticeship." Southwest Review, 38:1-14. Winter, 1953.
- "The wilderness theme in Faulkner's The Bear." Accent, 13:12-21. Winter, 1953.
- "The Sound and the Fury and the impressionist novel." Northern Review, Vol. 6, No. 2, pp. 17-23. June-July, 1953.
- "The hero with the guileless face." Western Review, 17:293-98. Summer, 1953.
- "Puerto Rico; a travelogue." (A poem.) New Yorker, Vol. 28, No. 62, p. 65. February 14, 1953. Reviews of
 - Brewster Ghiselin, The Creative Process, A Symposium in Western Humanities Review, pp. 377-80. Autumn, 1952.
 - Wallace Stevens, The Man with the Blue Guitar Including Ideas of Order in Poetry, A Magazine of Verse, 81:139-43. November, 1952.
 - Laurence Babb, The Elizabethan Maladay in Journal of Aesthetics and Art Criticism, 11: 177-78, December, 1952.
 - Charles Glicksberg, American Literary Criticism in American Literature, 25:118-19. March, 1953.

Ward Miner, The World of William Faulkner in Faulkner Studies, 2:24-26. Summer, 1953.

LEONARD UNGER, Ph.D., Associate Professor

Poems for Study (with W. V. O'Connor). New York: Rinehart, 1953, 743 pages.

DAVID V. ERDMAN, Ph.D., Assistant Professor

- "The dating of William Blake's engravings," Philological Quarterly, 31:337-43, July, 1952.
- "Blake's vision of slavery." Journal of Warberg and Courtaild Institutes, 15:242-52. 1952.
- "Blake's 'Nest of Villains.' " Keats-Shelley Journal, 2:61-71, 1953.
- "'Blake' entries in Godwin's diary." Notes and Queries, 198:354-56. August, 1953.

Reviews of

- W. Graham Robertson, The Blake Collection in Philological Quarterly, 32:107. April, 1953.
- C. L. Cline, Byron, Shelley and their Pisan Circle. Ibid., p. 108.
- J. D. Morporgo, The Last Days of Shelley and Byron. Ibid., p. 108.

MURRAY KRIEGER, Ph.D., Assistant Professor

"Critics at Work." Western Review, 16:325-28. July, 1952.

Editor, The Problems of Aesthetics (with E. Vivas), New York: Rinehart, 1953, xvi, 639 pages.

G. Robert Stange, Ph.D., Assistant Professor

"Tennyson's garden of art: a study of The Hesperides." Publications of the Modern Language Association, 67:732-43. September, 1952.

MARY C. TURPIE, Ph.D., Assistant Professor

Note on Audio-Visual Aids in "American Calendar." American Quarterly, 4:287-88. Fall, 1952.

A Selected List of Paintings for Study of American Civilization. (Annotations.) Minneapolis:
University of Minnesota Mimcograph Department. 1953. 112 pages.

MARK HARRIS, M.A., Instructor

The Southpaw, Indianapolis and New York: Bobbs-Merrill. 1953. 350 pages.

Danforth R. Ross, M.A., Instructor

"The cloud." Sewance Review, 61:256-84. Spring, 1953.

Douglas C. Stenerson, M.A., Instructor

"Emerson and the Agrarian tradition." Journal of the History of Ideas, 14:95-115. January, 1953.

GERALD WILLEN, M.A., Instructor

"The fuss." Perspective, 5:183-88. Autumn, 1952.

"English is a culture course." Published in *Perspective*. Summer, 1951, listed under Distinctive Short Stores in American Magazines in *The Best American Short Stories*, 1952, edited by Martha Foley. Boston: Houghton Mifflin Company. 1952.

RICHARD B. Erno, M.A., Teaching Assistant

"Bargain wife." Colliers, 131:30-33. April 11, 1953.

"Cyclops." Family Circle, 42:22-23, 45-51. June, 1953.

PAUL RAMSEY, JR., M.A., Teaching Assistant

Letter (About Delmore Schwartz' article "The Duchess' Red Shoes" in Partisan Review, January-February, 1953) in Partisan Review. May-June, 1953.

DAVID R. WEIMER, M.A., Teaching Assistant

Review of Daniel Aaron, Men of Good Hope in Western Humanities Review, 6:294-96. Summer, 1952.

GENERAL STUDIES

RALPH G. Ross, Ph.D., Professor

Reviews of

Barrows Dunham, Giant in Chains in New Republic, 128:20. April 20, 1953.

Peter Viereck, Shame and Glory of the Intellectuals in Partisan Review, 20:352-56. May-June, 1953.

Egbert and Persons, editors, Socialism and American Life (2 vols.) in Public Opinion, 17: 158-62. Spring, 1953.

GEORGE AMBERG, Ph.D., Associate Professor

"Richard Lindner." Page 68 in Posters. New York: Reinhold Publishing Corp. 1952.

"Fritz Eichenberg." Graphis, 43:422-23. 1952.

"Art, films, and 'art films.' " Magazine of Art, 45:124-33. March, 1952.

MARK A. GRAUBARD, Ph.D., Associate Professor

"Persecution as the pathology of freedom and authority." Chapter 35, pages 393-408 in Lyman Bryson, Louis Finkelstein, R. M. MacIver, and Richard McKeon, editors, Freedom and Authority in Our Times. New York: Harper & Bros. 1953.

"The unfinished quest for perfection." Journal of Calendar Reform, 22:53-57. July, 1952.

"Science and human values." Minnesota Chemist, 4:7-9, 20, 22, 24, 26. September-October, 1952.

"More about science and human values." Ibid., 5:19-20. May-June, 1953.

"Science and religion." The Condenser, 7:3-17. December, 1952.

BENJAMIN N. NELSON, Ph.D., Associate Professor

Personality, Work, Community: An Introduction to Social Science (with D. W. Calhoun, M. Q. Sibley, A. Naftalin, and A. G. Papandreou). Chicago, Philadelphia, New York: J. B. Lippincott Co. 1953. 3 vols., 1189 pages.

Donald W. Calhoun, Ph.D., Assistant Professor

Personality, Work, Community: An Introduction to Social Science (with B. N. Nelson, M. Q. Sibley, A. Naftalin, and A. G. Papandreou). Chicago, Philadelphia, New York: J. B. Lippincott Co. 1953. 3 vols., 1189 pages.

DOROTHY T. DYER, M.A., Assistant Professor

"Premarital sex relations: The facts and the counselors role in relation to the facts." (Panel discussion.) Marriage and Family Living, 14:229-38. August, 1952.

"Family life program." Journal of Higher Education, 24:109-12, February, 1953.

Minnesota Tests for Household Skills. Battery of Five—Child Care; Cleaning; Laundering; Foods. Forms A and B (with Clara B. Arny and Margaret F. Prochek). Chicago: Science Research Associates. 1953. 37 pages.

JOSEPH J. KWIAT, Ph.D., Assistant Professor

"Stephen Crane and painting." American Quarterly, 4:331-38. Winter, 1952.

"The newspaper experience: The 'Ash-Can' painters." Western Humanities Review, 6:335-41.

Autumn, 1952.

Reviews of

Charles Coleman Sellers, Portraits and Miniatures by Charles Willson Peale in Mississippi Valley Historical Review, 39:543-44. December, 1952.

Alice Ford and Edward Hicks, Painter of the Peaceable Kingdom. Ibid., 40:133-34. June, 1953.

ISAAC ROSENFELD, M.A., Assistant Professor

"George." Partisan Review, 19:410-19. July-August, 1952.

"The Grossmans." Southwest Review, 37:212-20. Summer, 1952.

"America, land of the sad millionaire." Commentary, 14:131-35. August, 1952.

"Confessions of a writing teacher." American Mercury, 75:96-102. November, 1952.

"Popular misery." New Republic, 127:27. October 20, 1952.

Reviews of

Flannery O'Connor, The Wise Blood in New Republic, 127:19-20. July 7, 1952.

Nadine Gordimer, The Soft Voice of the Serpent. Ibid.

Irving Howe, William Faulkner. Ibid., pp. 18-19. August 4, 1952.

Stendahl, Lamiel. Ibid., pp. 20-21. August 25, 1952.

Maurice Druon, The Rise of Stephen Lachaume. Ibid., pp. 20-21. September 15, 1952.

Joyce Cary, A Prisoner of Grace. Ibid., p. 27. October 20, 1952.

Mark Twain. Report from Paradisc. Ibid., p. 18. December, 1952.

William Saroyan, Bicycle Rider in Beverly Hills. Ibid., p. 27.

Robie Macauley, Disguises of Love in Kenyon Review, 15:147-50. Winter, 1953.

R. W. Stallman, Stephan Crane: An Omnibus, Ibid., pp. 310-14. Spring, 1953.

Gertrude Stein. Mrs. Reynolds in New York Times Book Review, p. 6. September 21, 1952. Simone Weil, The Need for Roots in Partisan Review, 19:598-602. September-October, 1952.

BARRY A. MARKS, M.A., Instructor

"The concept of myth in Virgin Land." American Quarterly, 5:71-76. Spring, 1953.

GEOGRAPHY

JAN O. M. BROEK, Ph.D., Professor and Chairman

"Discussion" (of Notes on the Theory of Population Distribution in Relation to the Aboriginal Population of North America). Pages 237-41 in Vol. 3, Sol Tax, editor, Selected Papers of the XXIXth International Congress of Americanists, Chicago: The University of Chicago Press. 1952.

"Geography and international affairs." Bulletin of the Minnesota Council for the Social Studies 15:4-5. May, 1953.

JOHN C. WEAVER, Ph.D., Professor

World Resource Statistics: A Geographic Sourcebook (with F. E. Lukermann). (Second edition.)
Minneapolis: Burgess Publishing Co. 1953. 184 pages.

JOHN R. BORCHERT, Ph.D., Associate Professor

- "Regional differences in the world atmospheric circulation," Annals of the Association of American Geographers, Vol. 43, No. 1, pp. 14-26. March, 1953.
- "Geographic preparation for field trips in the social studies." Bulletin of the Minnesota Council for the Social Studies, 15:8-10. May, 1953.
- "The revealing face of Minnesota." Minnesota Journal of Education, 33:22-24. April, 1953.
- A Sample Unit on People and Resources for the Minnesota Twelfth Grade Social Studies Course (with Edith West). Minnesota Council for the Social Studies. 1952. 12 mimeographed pages.

GEOLOGY AND MINERALOGY

GEORGE A. THIEL, Ph.D., Professor and Chairman

- "Geologic features of the Minneapolis-St. Paul metropolitan area." Earth Science Digest, pp. 7-12. July, 1952.
- "Geologic observations of interest to agricultural teachers." Minnesota Vocational Agriculture Instructors Association Newsletter. Vol. 2, pp. 36-37. Spring edition, 1953.
- Instructors Association Newsletter. Vol. 2, pp. 36-37. Spring edition, 1953.
 "Drill holes for water and what they reveal." University of Minnesota Drilling Symposium Report, Hibbing, pp. 24-27. April, 1952.

SAMUEL S. GOLDICH, Ph.D., Professor

Reviews of

- A. W. Groves, Silicate Analysis in Journal of Geology, 61:87. January, 1953.
- J. Jakob, Chemische Analyse der Gesteine und silikatischen Mineralien. Ibid., p. 97. January, 1953.

JOHN W. GRUNER, Ph.D., Professor

Reports published by the Atomic Energy Commission:

- Part I. Annual Report for July 1, 1951 to June 30, 1951. Raw Materials Offices. #RMO.983. New Data of Syntheses of Uranium Minerals. July 1, 1952, 26 pages. Reproduced at Oak Ridge, Tennessee.
- Part III. Annual Report July 1, 1951 to June 30, 1952. Raw Materials Offices. #RMO-566.

 Mineral Associations in the Uranium Deposits of the Colorado Plateau and Adjacent
 Regions with Special Emphasis on Those in the Shinarump Formation. November 1, 1952,
 40 pages. Reproduced at Oak Ridge, Tennessee.
- Seventh Progress Report, April 1, 1952. 5 mimeographed pages.
- Reports for U. S. Signal Corps: Twinning Studies of Quartz Type Structures (with L. Gardiner). (Distributed by the U. S. Signal Corps, Squier Laboratory.)
 - Fifth Quarterly Progress Report, March 15 to June 15, 1952. 14 mimeographed pages.
 - Sixth Quarterly Progress Report, September 16 to December 15, 1952. 12 mimeographed pages.
 - Seventh Quarterly Progress Report, December 16, 1952, to March 15, 1953. 9 mimeographed pages.
- "Syntheses of uranium minerals at room and elevated temperatures." Bulletin of the Geological Society of America, 63:1257. December, 1952.
- "Widespread occurrence and character of pitchblende in the Triassic and Jurassic sediments of the Colorado Plateau" (with L. Gardiner and A. Rosenzweig). *Ibid.*, p. 1293.

George M. Schwartz, Ph.D., Professor and Director Minnesota Geological Survey

- "Chlorite-calcite pseudomorphs after orthoclase phenocrysts, Ray, Arizona." *Economic Geology*, 47: 665-72. September-October, 1952.
- "Geologic setting of the copper-nickel prospect in the Duluth Gabbro near Ely, Minnesota" (with D. M. Davidson). Mining Engineering, 4:699-702. July, 1952.
- "Correlation of aeromagnetics and rock formations in Minnesota." Abstracts of Technical Papers.

 American Institute of Mining 1953 Annual meeting. February, 1953.
- "Regional setting of the Cuyuna Range" in *Mining Symposium*, Geology of the Cuyuna Range. University of Minnesota Center for Continuation Study. April 5, 1953.

"Notes on field work in the copper-nickel prospect area" (with J. M. Harris). Summary Report No. 6. Minnesota Geological Survey. November, 1952. 8 mimeographed pages.

Frederick M. Swain, Ph.D., Associate Professor

- "Ostracoda from the Camden chert, western Tennessee." Journal of Paleontology, Vol. 27, No. 2, pp. 257-84, plates 37-39, 21 text figs. March, 1953.
- "Ostracodes from the upper part of the Sundance formation of South Dakota, Wyoming and Montana" (with J. A. Peterson). U. S. Geological Survey Professional Paper 243-A, pp. 1-17, plates 1-2, 1952,

HERBERT E. WRIGHT, JR., Ph.D., Associate Professor

- Terrain Analysis of Syria and Lebanon. Report for Arctic, Desert, Tropic Research Center, U. S. Air Force, 124 typed pages, 1952.
- Multiple Glaciation in the Eastern Alaska Range, Report on file with U. S. Geological Survey, 5 typed pages, 1952.
- "Cary and Mankato glaciation in central and northeastern Minnesota," (Abstract.) Bulletin of the Geological Society of America, Vol. 63, p. 1316. December, 1952.

GERMAN

FRANK H. Wood, Ph.D., Associate Professor

- "Rilke and Eliot: tradition and poetry." Germanic Review, 27:246-59. December, 1952.
- "Three poems on Whitman." Comparative Literature, Vol. 4, No. 1, pp. 44-53. Winter, 1952. Reviews of
 - F. W. Van Heerikhuizen, Rainer Maria Rilke in Germanic Review, 27:314-17, December,
 - Ludwig Marcuse, Heinrich Heine: Ein Leben zwischen Gestern und Morgen. Ibid., 28:66-68. February, 1953.

HISTORY

August C. Krey, Ph.D., Professor and Chairman

"History: An interest in people." Saturday Review of Literature, p. 22. September 20, 1952. Review of C. W. Previte-Orton, The Shorter Cambridge Medicval History (2 vols.) in Saturday Review of Literature, p. 15. March 22, 1952.

HERBERT HEATON, M.A., M.Com., Litt.D., Professor

Histoire économique de l'Europe: Tome II, De 1750 à nos jours. Paris: Armand Colin. 1952. 343 pages.

The Story of Trade and Commerce, with Special Reference to Canada. Toronto: Thomas Nelson & Sons. 1953. ix plus 296 pages.

Tom B. Jones, Ph.D., Professor

"Ancient Mesopotamian agriculture." Agricultural History, 26:46-51. April, 1952,

Review of M. Grant, Aspects of the Principate of Tiberius in Classical Philology, 47:263-64. October, 1952.

PHILIP D. JORDAN, Ph.D., Professor

Uncle Sam of America. St. Paul: Webb Publishing Co. 1953. 28 pages.

"How the Mississippi came to be." Gopher Historian, 7:1-2. May, 1953.

Reviews of

Walter Havighurst, George Rogers Clark in Gopher Historian, 7:18. February, 1953.

Fannie Anderson, Doctors Under Three Flags in Michigan History, 36:313-14. September, 1952.

Bell I. Wiley, The Life of Billy Yank in Minnesota History, 33:82-83. Summer, 1952.

Walter P. Webb, The Great Frontier. Ibid., p. 215. Spring, 1953.

North Callahan, Smoky Mountain Country in North Carolina Historical Review, 30:129-30. January, 1953.

Henry M. Belden and Arthur P. Hudson, editors. Folk Songs from North Carolina. Ibid., pp. 281-83. April, 1953.

James H. and Mary J. Rodabaugh, Nursing in Ohio in Ohio State Archaeological and Historical Quarterly, 61:206-207. April, 1952.

Nina B. Baker, Cyclone in Calico in United States Quarterly Book Review, 8:113. June, 1952, Jay Monaghan, The Great Rascal. Ibid., p. 119.

Allen Nevins and Milton H. Thomas, editors, The Diary of George Templeton Strong. Ibid., pp. 241-42. September, 1952.

Richard Bissell, The Monongahela. Ibid., p. 306.

Charles C. Howes, This Place Called Kansas. Ibid., p. 415. December, 1952.

Joseph K. Howard, Strange Empire. Ibid., 9:23-24. March, 1953.

Joseph Miller, editor, The Arizona Story. Ibid., p. 25.

Warren S. Tryon, editor, A Mirror for Americans. Ibid., p. 26.

John B. Wolf, Ph.D., Professor

Reviews of

Histoire de la France pour tous les Francais. Vol. I by Edouard Perroy, Roger Doucet, and Andrew Latreilla; Vol. II by George Lefebvre, Charles Pouthas, and Maurice Baumont in American Historical Review, 56:872-73. July, 1951.

Jean Orcibal, Louis XIV et les Protestants. Ibid., Vol. 58, No. 2, p. 432. January, 1953.

W. Donald Beatty, Ph.D., Associate Professor

"Venezuela: Rich abroad—poor at home." Current History, Vol. 24, No. 139, pp. 149-55. March, 1953.

CLARKE A. CHAMBERS, Ph.D., Assistant Professor

California Farm Organizations. A Historical Survey of the Grange, the Farm Bureau, and the Associated Farmers, 1929-1941. Berkeley: University of California Press. 1952. 277 pages.

International Relations and Area Studies

L. JOHN MARTIN, M.A., Research Fellow

"Bibliography." Pages 84-85 in *Institute on Military Factors in Foreign Policy*. Minneapolis: University of Minnesota Center for Continuation Study. 1952.

Reviews of

Selected Books on Military Factors in Foreign Policy. KUOM. October 1, 1952.

George Lenczowski, The Middle East in World Affairs. KSUM, Fairmont. April 8, 1953.

School of Journalism

RALPH D. CASEY, Ph.D., Professor and Director

"The impact of television on news reporting." Pages 249-52 in Alice Fox Pitts, editor, *Problems of Journalism*. Wilmington, Delaware: American Society of Newspaper Editors. 1953.

"Less 'pressuring' and better correspondents." Bulletin of the American Society of Newspaper Editors, No. 350, p. 2. January 1, 1953.

Reviews of

Norman Powell, Anatomy of Public Opinion in Journalism Quarterly, 29:345-56. Summer,

Eric Sevareid, In One Ear. Ibid., 30:86-87. Winter, 1953.

Editor, Foreign Communications Section in Journalism Quarterly, 30:55-62. Winter, 1953.

Co-editor, Foreign Communications Section in Journalism Quarterly, 29:320-327, 437-46. Summer, 1952; 30:208-20. Winter, 1953.

Editor, Proceedings of the Upper Midwest News Executives' Conference. Spring, 1953.

THOMAS F. BARNHART, M.A., Professor

"The weekly newspaper: a bibliography--1925-51." Publishers' Auxiliary, Part 18, management classification, continued, Vol. 87, No. 36, pp. 6, 8. September 6, 1952.

"Reader reaction to nine-column newspapers and page shrinkage" (with R. L. Jones). Journalism Quarterly, 30:170-78. Spring, 1953.

J. EDWARD GERALD, Ph.D., Professor

- "The great need for rate structure study." Bulletin of the Institute of Newspaper Controllers and Finance Officers, No. 52, p. 5. 1952.
- "Probable effects of television on income of other media" (with G. N. Ecklund). Journalism Quarterly, 29:385-95. 1952.
- "A selected bibliography from foreign journals." Ibid., 29:113, 245, 364, 491. Summer, 1952; 30:108. Winter, 1953.
- Review of William J. Coughlin, Conquered Press: The MacArthur Era in Japanese Journalism in Annals of the American Academy of Political and Social Science, 283:234, 1952.

RAYMOND B. NIXON, Ph.D., Professor

- "Concentration and absenteeism in daily newspaper ownership." Part 5, pages 193-207 in Bernard Berelson and Morris Janowitz, editors, Reader in Public Opinion and Communication. (Enlarged edition.) Glencoe, Illinois: The Free Press. 1953.
- "Newspapers." Pages 834-37 in The American Peoples Encyclopedia Year Book, 1952. Chicago: The Spencer Press, Inc. 1952.

Reviews of

Richard Barksdale Harwell, editor, Three Months in the Confederate Army in Emory University Quarterly, 9:125-26. June, 1953.

Daniel Lerner and Harold D. Lasswell, editors, The Policy Sciences: Recent Developments in Scope and Method in Journalism Quarterly, 29:462. Fall, 1952. Editor, Journalism Quarterly, 1952-53.

W. Edwin Emery, Ph.D., Associate Professor

"Press association service to American dailies." Journalism Quarterly, 29:459-60. Fall, 1952. Reviews of

John Tebbel, The Life and Good Times of William Randolph Hearst in Journalism Quarterly, 29:471-72. Fall, 1952.

Editors of La Prensa, Defense of Freedom in St. Paul Pioneer Press. August 10, 1952.

Approximately 100 editorials in St. Paul Pioneer Press and Dispatch. June-September, 1952. Assistant editor, Journalism Quarterly. 1952-53.

EDWIN H. FORD, M.A., M.S., Associate Professor

Reviews of

Harold Herd, The March of Journalism in Journalism Quarterly, 29:466. Fall, 1952.

Donald Nevis Bigelow, William Conant Church and The Army and Navy Journal, 1bid., 30:234-35. Spring, 1953.

ROBERT L. JONES, Ph.D., Associate Professor

- "Reader reaction to nine-column newspapers and page shrinkage" (with T. F. Barnhart).

 **Journalism Quarterly, 30:170-78. Spring, 1953.
- 1952 Minneapolis Morning Tribune Readership Survey (with L. A. Beldo). Mimeographed report of research project submitted to the Minneapolis Star and Tribune Co.
- 1952 Minneapolis Sunday Tribune Readership Survey (with L. A. Beldo). Mimeographed report of research project submitted to Minneapolis Star and Tribune Co.
- 1952 Minneapolis Sunday Tribune Readership Survey (Youth) (with L. A. Beldo). Mimeographed report of research project submitted to Minneapolis Star and Tribune Co.
- 1952 Minneapolis Star Readership Survey (with L. A. Beldo). Mimeographed report of research project submitted to Minneapolis Star and Tribune Co.
- Comparative Audiences of Minneapolis Newspapers (with L. A. Beldo). Minneapolied report of research project submitted to Minneapolis Star and Tribune Co.

 Hospital Public Relations Survey of Minneapolis Area Residents (with L. A. Beldo). Minneapolis
- graphed report of research project submitted to the Minneapolis Hospital Council.

 Hospital Public Relations Survey of Minneapolis Area Hospital Employees (with L. A. Beldo).
- Mimeographed report of research project submitted to Minneapolis Hospital Council.
- Hospital Public Relations Survey of Hennepin County Physicians (with L. A. Beldo). Mimeographed report of research project submitted to Minneapolis Hospital Council.

Comparative Summary of Hospital Public Relations Surveys of Residents, Employees, and Physicians (with L. A. Beldo). Mimeographed report of research project submitted to Minneapolis Hospital Council.

HAROLD W. WILSON, M.A., Associate Professor

"Electronics and plastics in photo-journalism." Journalism Quarterly, Vol. 29, No. 3, pp. 316-19. Summer, 1952.

Review of Truman Pouncey, Photographic Journalism, A Guide for Learning With the Graphic in Scholastic Editor, 32:14. January, 1953.

ALEXANDER G. PARK, Ph.D., Assistant Professor

Review of W. and Zelda Coates, Soviets in Central Asia in American Slavonic and East European Review. Winter, 1953.

Co-editor, Foreign Communications Section in Journalism Quarterly, 29:320-27, 437-46. Summer, 1952; 30:208-20. Winter, 1953.

ROGER C. PERRY, M.B.A., Instructor

"Three step planning for better classified advertising." National Real Estate and Building Journal, Vol. 53, No. 10, p. 26. October, 1952.

"Are you getting the most from your TV advertising?" Ibid., Vol. 54, No. 6, p. 30, June, 1953.

WILLIAM S. CALDWELL, B.A., Teaching Assistant

"The press and propaganda in the Italian election campaign of 1948." Journalism Quarterly, 30:208-19. Spring, 1953.

"The foreign policy of the United States." Minneapolis Star, September 29, 1952.

"How our foreign policy is made." Ibid., October 6, 1952.

"America and the Pacific." Ibid., November 9, 1952.

"The United Nations-man's hope for peace." Ibid., January 18, 1953.

Weekly tests of the Program of Information on World Affairs, published on 26 Thursdays of the public school year in the Minneapolis Star and also distributed in leaflet form to an estimated 14,000 high school and grade students in the Upper Midwest. 1952-53.

Co-editor, "Guide to the Study of World Affairs" (Guide for 1952-53). Program of Information on World Affairs of the Minneapolis Star.

HAROLD L. NELSON, M.A., Teaching Assistant

"The political reform press: A case study." Journalism Quarterly, 28:294-302. Summer, 1952.

Laboratory for Research in Social Relations

ROBERT L. HALL, M.A., Research Assistant

"Briefer studies and annotations: Group-derived restraints and audience persuasion" (with S. Schachter). Human Relations, Vol. 5, No. 4, pp. 397-406. 1952; Reprint Series No. 14, Laboratory for Research in Social Relations, College of Science, Literature, and the Arts, University of Minnesota.

MATHEMATICS

RAYMOND W. BRINK, Ph.D., Professor and Chairman

Editor, Appleton-Century Mathematics Series: Lloyd L. Smail, Analytic Geometry and Calculus, 1953.

ROBERT H. CAMERON, Ph.D., Professor

Reviews of

Gen-ichiro Sunouchi, Harmonic Analysis and Wiener Integrals in Mathematical Reviews, 13:754, 1952.

Tosio Kitagawa, Analysis of Variance Applied to Function Spaces (wtih R. E. Fagen). Ibid., p. 855.

WILLIAM L. HART, Ph.D., Professor

College Algebra. (Fourth edition.) Boston: D. C. Heath and Company. 1953. 480 pages.

GERHARD K. KALISCH, Ph.D., Associate Professor

Design of Experiments and Decision Processes. Santa Monica, California. Report No. 26 (n-person games). Summer, 1952.

Design of Experiments and Decision Processes. Santa Monica, California. Working Memo. No. 6 (3-person games). Summer, 1952.

Design of Experiments and Decision Processes (with J. Marschak et al). Santa Monica, California. Working Memo. No. 42 (Coalitions and Bargaining). Summer, 1952.

Reports of an informal conference on n-person games. Generalized Quota Games, pp. 1-3.
Princeton University. March, 1953.

"Some experimental n-person games" (with J. W. Milnor, J. Nash and E. D. Nering). Research Memorandum - 948. Santa Monica, California: Rand Publication. August 25, 1952.

"Measure in semigroups" (with B. R. Gelbaum). Canadian Journal of Mathematics, 4:369-406. 1952.

Reviews of

Al Ghika, Prelungirea functionalelor . . . in Mathematical Review, 13:565. 1952.

Al Ghika, Aspura inclelor . . . Ibid.

S. Sherman, On a Theorem by Hardy . . . Ibid., pp. 633-34.

M. Deerleijn, Beschouwingen over coordinaten-ruimten . . . Thesis, s'Graven Hage, 1951. Ibid., p. 658.

Al Ghika, Spatii metrice generale. Ibid., p. 673.

Al Ghika, Spatii modul normate . . . Ibid.

BERNARD R. GELBAUM, Ph.D., Assistant Professor

"Measure in semigroups" (with G. K. Kalisch). Canadian Journal of Mathematics, 4:396-406. 1952.

"Analysis of the differential LSE network." Lightning and Transients Research Institute Report, pp. 10-17. January, 1953.

"Diffraction of a plane wave by a spherical shell of finite conductivity." *Ibid.*, pp. 12-15. March, 1953.

Reviews of

- I. Yu. Harrik, On a Problem of the Constructive Theory of Functions Connected with an Investigation of Convergence of Variational Processes (Russian) in Mathematical Reviews, 14:25. January, 1953.
- V. P. Il'in, On the Convergence of Variational Processes (Russian). Ibid., p. 25.
- I. Yu. Harrik, On a Problem of Approximation of Functions Connected with the Investigation of the Convergence of Variational Processes (Russian), Ibid., p. 25.
- M. A. Krasnosel's skii and Ya. B. Rutickii, Linear Integral Operators in Orlicz Spaces (Russian). Ibid., p. 57.
- M. K. Fage, The Rectification of Bases in Hilbert Space (Russian). Ibid., p. 184, February, 1953.
- N. K. Bari, Biorthogonal Systems and Bases in Hilbert Space (Russian). Ibid., p. 289. March, 1953.
- I. M. Gel'fand, Remark on the Work of N. K. Bari "Biorthogonal Systems and Bases in Hilbert Space" (Russian). Ibid.
- N. I. Pol'skii, Some Generalizations of B. G. Galerkin's Method (Russian), Ibid., pp. 384-85, April, 1953.

WARREN S. LOUB, Ph.D., Assistant Professor

Reviews of

- J. C. Jaeger, An Introduction to Applied Mathematics in American Mathematical Monthly, 19:558. October, 1952.
- C. R. Wylie, Jr., Advanced Engineering Mathematics. Ibid., p. 559.

EVAR D. NERING, Ph.D., Assistant Professor

"Some experimental n-person games" (with G. K. Kalisch, J. W. Milnor, and J. Nash). Research Memorandum—948. Santa Monica, California: Rand Publication. August 25, 1952. Design of Experiments and Decision Processes. Santa Monica, California. Report No. 16 (Solutions of n-person games). Summer, 1952.

Design of Experiments and Decision Processes. Santa Monica, California. Working Memo No. 10 (Implicit coalitions). Summer, 1952.

Design of Experiments and Decision Processes. Santa Monica, California. Communication No. 6 (On an experiment proposed by Hildroth). Summer, 1952.

Report of an informal conference on the Theory of n-Person Games, Princeton University, General-Sum Four-Person Games and Zero-Sum Five Person Games, pp. 7-8. March, 1953.

R. E. FAGEN, B.A., Research Assistant

Review of

Tosio Kitagawa, Analysis of Variance Applied to Function Spaces (with R. H. Cameron) in Mathematical Reviews, 13:855, 1952.

Music

GERALD R. PRESCOTT, M.A., Bandmaster and Associate Professor

Six Way Concert Melodies: Elementary School Band Material (with J. C. Phillips). Minneapolis: Paul A. Schmitt Music Company, 1953, 608 pages.

Intermission: Seven Shows for the Secondary School Sports Season. Minneapolis: Paul A. Schmitt Music Company. 1953. 544 pages.

JAMES W. McConkie, Ph.D., Assistant Professor

Musical score for the University of Minnesota Theater production of A Cry of Players. October, 1952.

Four American Folksongs. Presented at the Second Annual Southwestern Symposium of Contemporary American Music at the University of Texas, Austin, Texas. March, 1953.

Piano Sonatina. Presented over radio station WNYC (New York City). February, 1953.

The Twenty-Fourth Psalm, a cantata for women's voices, presented at the Composer's Forum, April 27, 1953, at the festival of the arts at St. Catherine's College, St. Paul. The performers were the Cecilian Singers of Minneapolis.

The Twenty-Fourth Psalm. Presented at the annual concert of the Cecilian Singers at the Woman's Club, May 22, 1953. At this concert three other original works were performed.

PAUL FETLER, M.M., Instructor

Musical Compositions:

A Comedy Overture (for orchestra). Contract signed in February, 1953 for all performance rights with Carl Fischer, Inc.

Three Pieces for Violin and Piano. Received annual publication award for 1953-54 from the Society for the Publication of American Music.

Guggenheim Award in Musical Composition for 1953-54.

Performances of original works:

Impromptu for Piano performed by Marion Perkins in Holland, Austria, and Germany in 16 concerts during January and February, 1953. This work also performed by Wayne Peterson at the local Composers Forum. April, 1953.

Three Pieces for Violin and Piano. Performers, Rafael Druian and Dr. Paul Oberg.

Presented at the American Music Festival on tape over WNYC (New York City). March,
1953. This performance was repeated over KUOM. May, 1953.

Symphony No. 2 performed at the Southwestern Music Symposium in Austin, Texas. April, 1953.

Ballade for Violoncello and Piano performed by John White and Lothar Klein at recital in Scott Hall. May, 1953.

EARL R. GEORGE, M.M., Instructor

Group review in Music Library Association Notes, 2nd Series, Vol. 10, No. 3, pp. 496-97. June, 1953:

- S. Barber, Melodies Passageres
- L. Bernstein, Afterthought

Silhouette

- D. Diamond, My Spirit Will Not Haunt the Mound
- P. Glanville-Hicks, Five Songs
- H. S. Hillyer, Time After Time

P. Nordoff, Song of Innocence

N. Rorem, What if Some Little Pain . . .

Philomel

Flight for Heaven

C. Shaw, To You

H. Swanson, Saw a Grave upon a Hill

I Will Lie Down in Autumn

R. Ward, Sorrow of Mydath

Publications:

By the Waters of Babylon, Motet for mixed voices unaccompanied. St. Louis: Concordia Publishing House.

Little Prelude, Piano solo. Boston: American Music Company.

Ave Verum Corpus, Motet for mixed voices unaccompanied. Philadelphia: Elkan-Vogel, Inc. Performances:

Five Sonnets of Edna St. Vincent Millay, for mezzo-soprano and piano. New York, N. Y.; Boise, Idaho; Duluth and Minneapolis.

Songs of Innocence, for mixed voices unaccompanied. Cincinnati, Ohio; New York, N. Y. (broadcast); Minneapolis and tour (Hamline choir).

By the Waters of Babylon, for mixed voices unaccompanied. Chicago and tour (Bethany Lutheran College choir).

Cantate Domino, for mixed voices unaccompanied. Chicago and tour (Bethany Lutheran College choir).

Abraham Lincoln Walks at Midnight, for mezzo-soprano solo, chorus and orchestra. Bloomington, Illinois; Sterling-Rock Falls, Illinois.

Missa Brevis, for soloists, chorus and orchestra (trans. for band). Minneapolis, Minnesota. Prelude, Aria and Burlesca, for two pianos. St. Paul, Minnesota.

Drama of a Minnesota Farm, film score. Premiere in Minneapolis, Minnesota.

Риговорну

WILFRID S. SELLARS, M.A. (Oxon), Professor and Chairman

- "Comments on Mr. Hempel's theses on Empirical Certainty." Review of Metaphysics, 5:623-25.
 June, 1952.
- "Mind, meaning and behavior." Philosophical Studies, 3:83-95. December, 1952.
- "Particulars," Philosophy and Phenomenological Research, 13:184-99. December, 1952.
- "Is there a synthetic apriori?" Philosophy of Science, 20:121-38. April, 1953.
- "A semantical solution of the mind-body problem." Methods, 5:45-82. April, 1953.

Co-editor, Philosophical Studies. 1950-

HERBERT FEIGL, Ph.D., Professor

"Comments on Mr. Ushenko's theses." The Review of Metaphysics, 6:475-77. March, 1953.

Co-editor, Philosophical Studies, 1950-

Member, Advisory Board, Philosophy of Science, 1939.

Member, Advisery Committee, International Encyclopedia of Unified Science, 1938.

PAUL L. HOLMER, Ph.D., Associate Professor

- "The nature of theology." Journal of Religious Thought, 9:136-46. Spring-Summer, 1952.
- "Religion and illusion." Chicago Lutheran Seminary Record, 57:26-32. October, 1952.
- "Kierkegaard and ethical theory." Ethics, an International Journal of Social, Political, and Legal Philosophy, 63:157-71. April, 1953.

Reviews of

- D. D. Runes, editor, Spinoza Dictionary in Lutheran Quarterly, 4:351-52. August, 1952.
- W. T. Stace, Time and Eternity: An Essay in the Philosophy of Religion. Ibid., 5:226-29. May, 1953.
- Philip D. Bookstaber, Idea of the Development of the Soul in Medieval Jewish Philosophy. Ibid., pp. 230-31.

MAY BRODBECK, Ph.D., Assistant Professor

"An analytic principle of induction?" Journal of Philosophy, 49:747-50. November, 1952. Advisory editor, Philosophical Studies, 1952-53.

JOHN J. HOSPERS, Ph.D., Assistant Professor

Introduction to Philosophical Analysis, New York: Prentice-Hall. 1953, 640 pages.

Hunter Mead, An Introduction to Esthetics. Journal of Esthetics and Art Criticism, 11: 271-72. March, 1953.

Melvin M. Rader, A Modern Book of Esthetics. Ibid., pp. 272-73.

Advising editor, Philosophical Studies. 1952-53.

FRANCIS V. RAAB, Ph.D., Instructor

"A criterion of necessity." Review of Metaphysics, 6:123, 130-31. September, 1952.

MICHAEL J. SCRIVEN, M.A., Instructor

"The mechanical concept of mind." Mind, 62N.S. 246:230-40. April, 1953.

"Academic freedom." Minnesota Daily, April 9, 1953.

Review of G. Sommerhoff, Analytical Biology in Mind, 61N.S., 243:416-20. July, 1952.

D. BURNHAM TERRELL, B.A., Instructor

"A remark on good reasons." Philosophical Studies, 4:58-63. June, 1953.

PHYSICS

J. WILLIAM BUCHTA, Ph.D., Professor, Chairman, and Assistant Dean

Editor, Reviews of Modern Physics. 1952-53.

Editor, Physical Review Index, 1921-50—Analytical Subject Index, 498 pages; Author Index, 543 pages, New York: American Institute of Physics, 1953.

ALFRED O. C. NIER, Ph.D., Professor

"A double-focusing mass spectrometer." Page 29 in Proceedings of National Bureau of Standards Symposium on Mass Spectroscopy in Physics Research, Circular 522, National Bureau of Standards. Washington, D. C.: U. S. Government Printing Office. 1952.

"The present status of isotopic abundances." Ibid., p. 131.

"The Mass Spectrometer." Scientific American, 188:68-73. March, 1953.

JOHN R. WINCKLER, Ph.D., Associate Professor

"Improved Cerenkov detector for cosmic rays" (with K. A. Anderson). Review of Scientific Instruments, Vol. 23, No. 12, p. 765. December, 1952.

"High Altitude Cosmic-Ray Investigation by Means of a Cerenkov Counter"

"I. Instrumentation details" (with K. A. Anderson). Bulletin of the American Physical Society, Vol. 28, No. 7, 1953.

"II. Experimental results" (with K. A. Anderson). Ibid.

Отто H. Schmitt, Ph.D., Professor. See Department of Zoology.

KENDALL F. FAMULARO, Ph.D., Research Associate

Abstract of R. J. S. Brown, H. D. Holmgren, and D. M. Van Patter, Differential Cross Sections for the Elastic Scattering of 1.0 to 3.25 Mev. Deuterons by He³ in Bulletin of American Physical Society, Vol. 28, No. 3, April, 1953.

PHYLLIS S. FREIER, Ph.D., Research Associate

"Time and directional study of primary heavy nuclei" (with G. W. Anderson and J. E. Naugle). (Abstract.) Bulletin of American Physical Society, Vol. 28, No. 3, p. 7, 1953.

GEORGE R. KEEPIN, Ph.D., Research Associate

"Fast neutron counting with hydrogenous liquid phosphors" (with R. H. Lovberg). Review of Scientific Instruments, 23:483-84. September, 1952.

"The elastic scattering of deuterons by tritons" (with T. F. Stratton, W. R. Stratton, G. D. Freier, and D. Rankin). *Physical Review*, 88:257-61. October, 1952.

RAPHAEL B. LEVINE, Ph.D., Research Associate

"Electrocardiographic Mirror Pattern Studies"

- "I. Experimental validity test of the dipole hypothesis and of the central terminal theory" (with O. H. Schmitt and E. Simonson). American Heart Journal, 45:416. March, 1953.
- "II. The statistical and individual validity of the heart dipole concept as applied in electrocardiographic analysis" (with O. H. Schmitt and E. Simonson). *Ibid.*, 45:500. April, 1953.
- "III. Mirror pattern cancellation in normal and abnormal subjects" (with O. H. Schmitt, E. Simonson, and J. Dahl). *Ibid.*, 45:655. May, 1953.

GEORGE D. FREIER, Ph.D., Assistant Professor

- "Differential cross section measurements for the scattering of protons by deuterons" (with R. J. S. Brown, H. D. Holmgren, W. R. Stratton, and J. L. Yarnell). *Physical Review*, 88:253-56. October 15, 1952.
- "The elastic scattering of deuterons by tritons" (with W. R. Stratton, T. F. Stratton, G. R. Keepin, and D. Rankin). *Ibid.*, pp. 257-61.
- "The angular distribution of alpha-particles from the reaction of deuterons with tritons" (with T. F. Stratton). *Ibid.*, pp. 261-63.

NORTON M. HINTZ, Ph.D., Assistant Professor

"Excitation functions to 100 Mev." Physical Review, 88:19-27. October 1, 1952.

HAYM KRUGLAK, Ph.D., Assistant Professor

- Performance Tests in Physics. Technical Report No. 1, ONR Contract N8onr-66213. Minneapolis: Department of Physics, University of Minnesota. 1952.
- An Electric Multiple Choice Maze (with C. E. Schensted and H. C. Self). Technical Report No. 2, ONR Contract N8onr-66213. Minneapolis: Department of Physics, University of Minnesota. November, 1952.
- Electromaze Performance of Graduate Students in Physics and American Studies. Technical Report No. 3 ONR Contract N8onr-66213. Minneapolis: Department of Physics, University of Minnesota. December, 1952.
- "Achievement of physics students with and without laboratory work." American Journal of Physics, 21:14-16. January, 1953.

DOUGLAS M. VAN PATTER, Ph.D., Assistant Professor

"Investigation of the (d,p) and (d,a) reactions of the silicon isotopes" (with W. W. Buechner).

Physical Review, 87:51-59. July, 1952.

Abstracts in Physics Abstracts, Vol. 55, Nos. 6049, 6050 and 7549. 1952.

Abstract of R. J. S. Brown, K. F. Famularo, and H. D. Holmgren, Differential Cross Sections for the Elastic Scattering of 1.0-3.25 Mev. Deuterons by He² in Bulletin of the American Physical Society, Vol. 28, No. 3. April, 1953.

George W. Anderson, Ph.D., Research Assistant

"Time and directional study of primary heavy nuclei" (with J. E. Naugle and P. S. Freier). (Abstract.) Bulletin of the American Physical Society, Vol. 28, No. 3, p. 7, 1953.

KINSEY A. ANDERSON, M.A., Research Assistant

- "Improved Cerekov detector for cosmic rays" (with J. R. Winckler). Review of Scientific Instruments, Vol. 23, No. 12, p. 765. December, 1952.
- "High Altitude Cosmic-Ray Investigations by Means of a Cerenkov Counter"
 - "I. Instrumentation details" (with J. R. Winckler), Bulletin of the American Physical Society, Vol. 28, No. 7, 1953.
 - "II. Experimental results" (with J. R. Winckler). Ibid.

ROBERT J. S. BROWN, Ph.D., Research Assistant

- "Differential cross section measurements for the scattering of protons by deuterons" (with G. D. Freier, H. D. Holmgren, W. R. Stratton, and J. L. Yarnell). *Physical Review*, 88:253-56. October 15, 1952.
- Abstract of K. F. Famularo, H. D. Holmgren, and D. M. Van Patter, Differential Cross Sections for the Elastic Scattering of 1.0 to 3.25 Mev. Deuterons by He³ in Bulletin of the American Physical Society, Vol. 28, No. 3. April, 1953.

RICHARD E. HALSTED, Ph.D., Research Assistant

"Atomic masses from palladium through xenon." Physical Review, 88:666-72. November 1, 1952.

HARRY D. HOLMGREN, Ph.D., Research Assistant

- "Differential cross section measurements for the scattering of protons by deuterons" (with R. J. S. Brown, G. D. Freier, W. R. Stratton, and J. L. Yarnell). *Physical Review*, 88:253-56. October 15, 1952.
- Abstract of R. J. S. Brown, K. F. Famularo, and D. M. Van Patter, Differential Cross Sections for the Elastic Scattering of 1.0 to 3.25 Mev. Deuterons by He³ in Bulletin of the American Physical Society, Vol. 28, No. 3. April, 1953.

WALTER H. JOHNSON, M.A., Research Assistant

- "Mass of V50." Physical Review, 87:166-67. July 1, 1952.
- "Mass of K⁴⁰." *Ibid.*, 88:1213. December 1, 1952.

Abstract in Bulletin of the American Physical Society, Vol. 28, 1953. No. T3.

RALPH H. LOVBERG, M.A., Research Assistant

- "Fast neutron counting with hydrogenous liquid phosphors" (with G. R. Keepin), Review of Scientific Instruments, 23:483-84. September, 1952.
- "Angular distribution of the reaction He³ (d,p) He⁴ between 240 Kev. and 3.56 Mev." (with J. L. Yarnell and W. R. Stratton). *Physical Review*, 90:292-95. April, 1953. Abstract in *Physics Abstracts*, Vol. 55, 1952. No. 9076.

JOHN E. NAUGLE, M.A., Research Assistant
"A high energy nuclear interaction" (Abstract) Physical Region, Vol. 88, No. 1, 1952

"A high energy nuclear interaction." (Abstract.) Physical Review, Vol. 88, No. 1, 1952.

"Time and directional study of primary heavy nuclei" (with G. W. Anderson and P. S. Freier).

(Abstract.) Bulletin of the American Physical Society, Vol. 28, No. 3, p. 7, 1953.

DAVID RANKIN, M.A., Research Assistant

"The elastic scattering of deuterons by tritons" (with W. R. Stratton, T. F. Stratton, G. D. Freier, and G. R. Keepin). *Physical Review*, 88:257-61. October, 1952.

BOWEN E. SIMMONS, M.A., Research Assistant

Abstract (with II. W. Lewis and E. Merzbacher) in Bulletin of American Physical Society, Vol. 27, No. 5, 1952.

THOMAS F. STRATTON, M.A., Research Assistant

- "The elastic scattering of deuterons by tritons" (with W. R. Stratton, G. D. Freier, G. R. Kcepin, and D. Rankin). *Physical Review*, 88:257-61. October, 1952.
- "The angular distribution of alpha-particles from the reaction of deuterons with tritons" (with G. D. Freier), *Ibid.*, 88:261-63. October, 1952.
- Abstract (with W. R. Stratton, J. L. Yarnell, and R. N. Louberg) in Physical Review, 88:158. October, 1952.

WILLIAM R. STRATTON, Ph.D., Research Assistant

- "Differential cross section measurements for the scattering of protons by deuterons" (with R. J. S. Brown, G. D. Freier, H. D. Holmgren, and J. L. Yarnell). *Physical Review*, 88:253-56. October 15, 1952.
- "The elastic scattering of deuterons by tritons" (with G. D. Freier, G. R. Keepin, D. Rankin, and T. F. Stratton). *Ibid.*, 88:257-61. October, 1952.
- "Angular distribution of the reaction He3 (d,p) He1 between 240 Kev. and 3.56 Mev." (with R. H. Lovberg and J. L. Yarnell). Ibid., 90:292-95. April, 1953.

Abstract (with T. F. Stratton). Ibid., 88:158. October, 1952.

JOHN L. YARNELL, Ph.D., Research Assistant

- "Differential cross section measurements for the scattering of protons by deuterons" (with R. J. S. Brown, G. D. Freier, H. D. Holmgren, and W. R. Stratton). *Physical Review*, 88:253-56. October 15, 1952.
- "Angular distribution of the reaction He3 (d,p) He1 between 240 Kev. and 3.56 Mev." (with R. H. Lovberg and W. R. Stratton), *Ibid.*, 90:292-95, April, 1953.

POLITICAL SCIENCE

LLOYD M. SHORT, Ph.D., Professor, Chairman, and Director

- "Special examining committees for personnel director recruitment" (with K. C. Tollenaar). Public Personnel Review, 13:186-90. October, 1952.
- "States that have not met their constitutional requirements." Symposium in Legislative Reapportionment. Law and Contemporary Problems (Duke University School of Law), Vol. 17, pp. 377-86, Spring, 1952.

WILLIAM ANDERSON, Ph.D., Professor

American Government (with E. W. Weidner). (4th edition.) New York: Henry Holt and Co., 1953. xv, 989 pages.

ASHER N. CHRISTENSEN, B.A., Professor

- The People, Politics, and the Politician. (Revised Brief Edition.) New York: Henry Holt and Co., 1952, 541 pages.
- Section on "Government," pages 113-20, Vol. 15 (for 1949) in Handbook of Latin American Studies. Gainesville, Florida: University of Florida Press. 1952.
- "Government in Latin America." Current History, Vol. 24, No. 139, pp. 129-35. March, 1953.
- "Tomas Jefferson: Arquitecto de la democracia Americana." Summario de IPNA (Lima, Peru), Vol. 18, Ano VI, pp. 12-21. 1952.

WERNER LEVI, Ph.D., Professor

Free India in Asia. Minneapolis: University of Minnesota Press. 1952. 161 pages.

- "Government and politics in Nepal I." Far Eastern Survey, 21:185-91. December 17, 1952. "Government and politics in Nepal II." Ibid., 22:5-10. January 14, 1953.
- Review of Heinrich Wenz, Weltmacht India (Bielefeld, 1951) in Pacific Affairs, 25:107-108. 1952.

CLARENCE C. LUDWIG, M.A., C.P.A., Professor and Director. See General Extension Division, Municipal Reference Bureau.

LENNOX A. MILLS, Ph.D., Professor

Reviews of

- Harold M. Vinacke, The United States and The Far East, 1945-1951 in American Historical Review, 58:189. October, 1952.
- Sir Charles Collins, Public Administration in Ceylon, and I.D.S. Weerawardana, Government and Politics in Coylon (1931-1946) in Pacific Affairs, 25:198-99. June, 1952.
- H. G. Quaritch Wales, The Making of Greater India: A Study in Southeast Asian Culture Change in Far Eastern Quarterly, 11:407. May, 1952.
- David R. Rees-Williams, Tan Cheng Lock, S. G. Awberry, and F. W. Dalley, Three Reports on the Malayan Problem, Ibid., pp. 407-408.

CHARLES H. McLAUGHLIN, M.A., LL.B., Associate Professor

Annual Report, Center for International Relations and Area Studies, July 1,:1951-June 30, 1952. 16 mimeographed pages.

Employment Opportunities for Students in International Relations and Area Studies. Center for International Relations and Area Studies, reissue of 1952. 12 mimeographed pages.

International Relations Center, Facilities and Services for Students. (October, 1952.) 2 mimeographed pages.

Preliminary Outline of Matters to Be Covered in Survey of International Relations Programs. Center for International Relations and Area Studies, October 1952. 7 mimeographed pages. Department of Political Science, Memorandum for Graduate Students. Revision of May 1, 1953. 7 mimeographed pages.

Examinations for courses in International Law and Conduct of U. S. Foreign Relations. 25 mimeographed pages.

ARTHUR NAFTALIN, Ph.D., Associate Professor

Personality, Work, Community: An Introduction to Social Science (with D. W. Calhoun, M. Q. Sibley, B. N. Nelson, and A. G. Papandreou). Chicago, Philadelphia, New York: J. B. Lippincott Co. 1953, 3 vols., 1189 pages.

"Political freedom and military necessity" in *The Garrison State: Its Human Problems.* University of Minnesota, Social Science Research Center of the Graduate School. 1953. (Annual public lecture on problems of current interest in the social sciences.)

Minnesota Political Roundup, weekly newsletter to 50 Minnesota newspapers on governmental and political trends in the State of Minnesota, 1952-53.

MULFORD Q. SIBLEY, Ph.D., Associate Professor

Conscription of Conscience: The American Conscientions Objector, 1940-47 (with P. E. Jacob). Ithaca, N. Y.: Cornell University Press. 1952, 580 pages.

Personality, Work, Community: An Introduction to Social Science (with A. Naftalin, D. W. Calhoun, B. N. Nelson, and A. G. Papandreou). Chicago, Philadelphia, New York: J. B. Lippincott Co. 1953. 3 vols., 1189 pages.

Review of Cecil Palmer, The British Socialist Ill-Fare State in Western Humanities Review, Vol. 7, No. 1, p. 87. Winter, 1953.

Public Administration Training Center

GEORGE A. WARP, M.A., LL.B., Associate Professor

Nippon no chiho ni kwansuru jakon no kosatsu. Tokyo: Japan Local Self Government Institute. 1952. 33 pages.

"Nippon no chiho ni kwansuru jakon no kosatsu." Pages 97-128 in Toshi jichi no kakuritsu hosaku. Tokyo: National Mayors' Conference and Tokyo Institute for Municipal Research. 1952

"'Americanization' in Japan." National Municipal Review, 41:443-48. October, 1952. Japanese translation published in Toshi Mondai, 44:131-39. January, 1953.

"In our image and likeness." National Municipal Review, 42:175-78, 188. April, 1953.

"Nippon no chiho ni kwansuru jakon no kosatsu." Toshi Mondai, 43:581-613. October, 1952.

Psychology

PAUL E. MEEHL, Ph.D., Professor and Chairman

"Technical recommendations for psychological tests and diagnostic techniques: preliminary proposal" (with L. J. Cronbach, E. S. Bordin, R. C. Challman, H. S. Conrad, L. G. Humphreys, and D. E. Super). American Psychologist, 7:461-75. 1952.

"Drive conditioning as a factor in latent learning" (with K. MacCorquodale). Journal of Experimental Psychology, 45:20-24, 1953.

"Preliminary suggestions as to a formalization of expectancy theory" (with K. MacCorquodale).

Psychological Review, 60:55-63, 1953.

Consulting editor, Psychology Series, Prentice-Hall, Inc. 1952-53.

Assistant editor, Philosophical Studies, 1951.

CHARLES BIRD, Ph.D., Professor

"Infiltration and the attitudes of white and Negro parents and children" (with E. D. Monachesi and H. Burdick). Journal of Abnormal and Social Psychology, 47:688-99, 1952.

"Studies of Group Tensions"

"II. Methods for validating a questionnaire concerning white-Negro relationships by means of voluntary statements" (with E. D. Monachesi and H. Burdick). *Human Relations*, 6:99-111, 1953.

"III. The effect of parental discouragement of play activities upon the attitudes of white children toward Negroes" (with E. D. Monachesi and H. Burdick). *Child Development*, 23:295-306, 1952.

RICHARD M. ELLIOTT, Ph.D., Professor

"Richard M. Elliott (a professional autobiography)." Pages 75-95 in A Ilistory of Psychology in Autobiography, Vol. 4. Worcester: Clark University Press. 1952.

Editor, The Century Psychology Series:

Raymond G. Kuhlen and George G. Thompson, Psychological Studies of Human Development. 1952.

Sister Annette Walters in collaboration with Sister Kevin O'Hara, Persons and Personality, An Introduction to Psychology. 1953.

LEON FESTINGER, Ph.D., Professor

"Some consequences of de-individuation in a group" (with A. Pepitone and T. Newcomb). Journal of Abnormal and Social Psychology, 47:382-89. 1952.

"The influence process in the presence of extreme deviates" (with H. B. Gerard, B. Hymovitch, H. H. Kelley, and B. Raven). Human Relations, 5:327-46. 1952.

WILLIAM T. HERON, Ph.D., Professor

Clinical Applications of Suggestion and Hypnosis. (Second edition.) Springfield, Ill.: Charles C Thomas. 1953. 152 pages.

"Instruction in hypnosis." Pages 281-94 in Jerome M. Schneck, editor, Hypnosis in Modern Medicine. Springfield, Ill.: Charles C Thomas. 1953.

"Hypnotherapy for relief of pain" (with I. I. Sertes). Dental Items of Interest, 75:391-93, 1953.

HOWARD P. LONGSTAFF, Ph.D., Professor

"Fakability of the Jurgensen Classification Inventory" (with C. E. Jurgensen). Journal of Applied Psychology, 37:86-89, 1953.

DONALD G. PATERSON, M.A., LL.D., Professor

Publication Manual of the American Psychological Association (with others). Supplement to the Psychological Bulletin, Vol. 49, No. 4, Part 2, 1952, 61 pages.

"Attitudes toward the employment of older people" (with W. Kirchner and T. Lindbom). Journal of Applied Psychology, 36:154-56, 1952.

"Reliability of the original and the simplified Flesch reading ease formulas" (with G. W. England and M. Thomas). *Ibid.*, 37:111-13. 1953.

"Subsidizing publication." American Psychologist, 7:548, 1952.

"Miller Analogies test scores and ratings of Ph.D.'s in psychology" (with G. V. Watters). *Ibid.*, 8:89-90, 1953.

"College catalogues and industrial psychology." Ibid., pp. 202-203. 1953.

"The influence of size of type on speed of reading in the primary grades" (with W. J. McNamara and M. A. Tinker). Sight-Saving Review, 23:28-33, 1953.

Reviews of

R. Flesch, The Art of Clear Thinking in Management Review, 41:546. August, 1952.

M. M. Bruce, Aptitude Associates Test of Sales Aptitude: A Test for Measuring Knowledge of Basic Principles of Selling in Oscar Buros, editor, Fourth Mental Measurements Yearbook, 824:823-25, 1953.

Oscar Buros, editor, Life Insurance Agency Management Association, Aptitude Index. Ibid., 825:825-26. 1953.

Verne Steward, Steward Selection System, 1951 Edition. Ibid., 828:828-29. 1953.

"Academic freedom." University of Minnesota Daily, March 2, 1953. Editor, Journal of Applied Psychology. 1952-53.

Editor, Journal of Apparea Esychology. 1952-

MILES A. TINKER, Ph.D., Professor

"Effect of vibration upon speed of perception while reading six-point print." Journal of Educational Research, 46:459-64, 1953.

"The effect of intensity of illumination upon speed of reading six point italic print." American Journal of Psychology, 65:600-602, 1952.

"Interpretation of illumination data." American Journal of Optometry and Archives of American Academy of Optometry, 29:293-300, 1952.

"The influence of size of type on speed of reading in the primary grades" (with W. J. McNamara and D. G. Paterson). Sight-Saving Review, 23:28-33, 1953.

"How well do your pupils read?" Journal of the National Education Association, 42:83-84, 1953, "Visual hygiene in sight-saving classes." Sight-Saving Newsletter (St. Paul), 1:9, 1953. Reviews of

D. M. Roberts, Leadership of Teen-Age Groups in Journal of Educational Psychology, 43:442-43, 1952.

- N. O. Rush, Letters of G. Stanley Hall to Jonas Gilman Clark. Ibid., pp. 503-504.
- D. Y. Deegan, The Stereotype of the Single Woman in American Novels. Ibid., 44:59-61.
- W. C. Morse, F. A. Ballantine, and W. R. Dixon, Studies in the Psychology of Reading. Ibid., pp. 188-89.
- C. P. Stone, editor, Annual Review of Psychology. Ibid., p. 249.
- IES Lighting Handbook. Journal of Applied Psychology, 37:59-60. 1953.
- I. J. Hirsh, The Measurement of Hearing. Ibid., p. 148.
- A. J. Harris, Harris Tests of Lateral Dominance in Oscar Buros, editor, Fourth Mental Measurements Yearbook, p. 648, 1953.
- W. R. Miles, A-B-C Vision Test for Ocular Dominance. Ibid., pp. 654-56. 1953.

The Master Ophthalmograph. Ibid., pp. 660-62. 1953.

Consulting Editor, Journal of Educational Psychology, 1952-53.

Progress in Psychology at Minnesota (1890-1953). Minneapolis: University of Minnesota Mimeograph Department, 1953, 15 pages.

KENNETH E. CLARK, Ph.D., Associate Professor

Research on Scoring Methods for the U. S. Navy. Vocational Interest Inventory. Technical Report No. 5, Project N6ori-212, T. O. III. Department of Psychology, University of Minnesota. November, 1952. 23 mimeographed pages.

Reviews of

- H. H. Remmers, Generalized Attitude Scales in O. K. Buros, editor, The Fourth Mental Measurements Yearbook, pp. 46-47. 1953.
- H. C. Hand, G. C. Findlay, and A. J. Dolio, Illinois Opinion Inventorics. Ibid., p. 52. H. H. Remmers, B. Shimberg, and A. J. Drucker, SRA Youth Inventory. Ibid., pp. 91-92. "Recent developments in information gathering techniques" (with J. J. Jenkins). Page 3 in Professional Approaches to Current Employment Problems in Industry. Center for Continuation Study, University of Minnesota. October, 1952. Mimeographed.

Kenneth MacCorquodale, Ph.D., Associate Professor

- "Drive conditioning as a factor in latent learning" (with P. E. Meehl). Journal of Experimental Psychology, 45:20-24, 1953.
- "Preliminary suggestions as to a formalization of expectancy theory" (with P. E. Meehl). Psychological Review, 60:55-63. 1953.
- Review of David C. McClelland, Personality in American Journal of Psychiatry, 109:556-57. 1953.

JAMES J. JENKINS, Ph.D., Assistant Professor

"Associative clustering during recall" (with W. A. Russell). Journal of Abnormal and Social Psychology, 47:818-21. 1952.

Reviews of

- A. Keys, et al, The Biology of Human Starvation in Journal of Applied Psychology, 36:357-58, 1952.
- Heinz Von Foerster (ed.), Cybernetics: Circular Causal and Feedback Mechanism in Biological and Social Systems, Ibid.
- Associative Clustering and Response Rank in the Kent-Rosanoff Test (with W. A. Russell). Technical Report No. 2. The Role of Language in Behavior, Minneapolis: University of Minnesota Mimeograph Department, 1952, 7 pages.
- Associative Clustering and Commonality of Response in the Kent-Rosanoff Test (with W. A. Russell). Technical Report No. 3. The Role of Language in Behavior. Minneapolis: University of Minnesota Mineograph Department. 1952. 7 pages.
- "Recent developments in information gathering techniques" (with K. E. Clark). Page 3 in Professional Approaches to Current Employment Problems in Industry, Center for Continuation Study, University of Minnesota. October, 1952.

EPHRAIM ROSEN, Ph.D., Assistant Professor

- "A note on some representative method of studying personality." Part 1, pages 242-45 in Arthur Naftalin, An Introduction to Social Science. Chicago: J. B. Lippincott. 1953.
- "MMPI and Rorschach correlates of the Rorschach white space response." Journal of Clinical Psychology, 8:283-88, 1952.

Reviews of

- D. J. VanLennep, Four-Picture Test in Oscar Buros, editor, The Fourth Mental Measurements Yearbook, pp. 173-74. 1953.
- J. N. Buck, H-T-P: A Projective Device and a Measure of Adult Intelligence, Ibid., p. 181.

Wallace A. Russell, Ph.D., Assistant Professor

"Associative clustering during recall" (with J. J. Jenkins). Journal of Abnormal and Social Psychology, 47:818-21, 1952.

Associative Clustering and Response Rank in the Kent-Rosanoff Test (with J. J. Jenkins). Technical Report No. 2. The Role of Language in Behavior. Minneapolis: University of Minnesota Mimeograph Department. 1952. 7 pages.

Associative Clustering and Commonality of Response in the Kent-Rosanoff Test (with J. J. Jenkins). Technical Report No. 3. The Role of Language in Behavior. Minneapolis: University of Minnesota Mimeograph Department. 1952, 7 pages,

STANLEY SCHACHTER, Ph.D., Assistant Professor

"Briefer studies and annotations: Group-derived restraints and audience persuasion" (with R. L. Hall). Human Relations, Vol. 5, No. 4, pp. 397-406. 1952. Reprint Series No. 14, Laboratory for Research in Social Relations, College of Science, Literature, and the Arts, University of Minnesota 1952.

GERALD C. HELMSTADTER, B.Sc., M.Sc., Instructor

"Rate of manipulative learning as a function of goal-setting techniques" (with D. S. Ellis). Journal of Experimental Psychology, 43:125-29. February, 1952.

ROMANCE LANGUAGES

WALTER T. PATTISON, Ph.D., Professor

Review of William P. Shepard and Frank W. Chambers, editors and translators, The Poems of Aimeric de Peguilhan, with Introduction and Commentary in Romance Philology, Vol. 6, No. 4, pp. 348-50. May, 1953.

THOMAS B. IRVING, Ph.D., Associate Professor

"Ibn-Khaldun on agriculture." Message (Delhi), p. 8. March 27, 1953.

"Arab Spain in history." *Ibid.*, p. 10. May 1, 1953.
"Arab Spain in history." *Muslim Digest* (Durban, S. AF). 3:135-38. June, 1953.

"Ibn-Khaldun on agriculture." Ibid., 4:16-17. July, 1953.

"A Cuban poet at Niagara Falls" (partial translation of Niágara by J. M. Heredia), Canadian Modern Language Review, 9:12-13. June, 1953.

"The Spanish reflexive and the verbal sentence." Hispania, 25:305-309. August, 1952.

Review of Edelberto Torres' La dramática vida de Rubén Darío in Hispania, 36:256-57. May, 1953.

REINO VIRTANEN, Ph.D., Visiting Lecturer

"Proust and Emerson." Symposium, 6:123-39. May, 1952.

G. Bree, Du Temps perdu au Temps retrouvé in Symposium, 6:209-13. May, 1952.

Lassi Nummi, Vuoripaimen in Books Abroad, 26:292. Summer, 1952.

Tuuli Reijonen, Yksisiipinen Enkeli. Ibid., 27:91. Winter. 1953.

"Emile Zola après cinquante ans." Le Trait d'Union, 11:8-9. February, 1953. (Mimeographed.)

SLAVIC AND ORIENTAL LANGUAGES

MARTHE W. BLINOFF, M.A., Assistant Professor

Reviews of

Nadejda Gorodetzky, Saint Tikkon Zadonsky in Russian Review, 11:175. July, 1952.

Gleb Struve, Russky Europeec (A Russian European) in American Slavic and East European Review, 11:232. October, 1952.

SCHOOL OF SOCIAL WORK

JOHN C. KIDNEIGH, M.A., Professor and Director

Manual of Accrediting Standards. New York: Council on Social Work Education, Commission on Accreditation. 1953.

"Social work administration." Part II, pages 7-13, in Education for Social Work Administration.

New York: American Association of Social Work. 1952.

"Professional participation in perspective." Journal of the American Dietetic Association, Vol. 29, No. 5, pp. 465-67. May, 1953.

Professional Service in Social Work. (Annual Meeting Address---Minneapolis Jewish Family and Childrens Service). 1953. (Mineographed.)

WERNER W. BOEHM, M.S.W., LL.B., Ph.D., Associate Professor

"Agency-school partnership in staff development." Pages 263-73 in The Social Welfare Forum. New York: Columbia University Press. 1952.

Reviews of

John Dollard and Neal E. Miller, Personality and Psychotherapy in Social Casework, pp. 82-83. February, 1953.

Fritz Redl and William W. Wattenberg, Mental Hygiene in Teaching in Jewish Social Service Quarterly, 29:360. Spring, 1953.

Generic and Specific Aspects of Settings (Syllabus). 1952-53.

Casework Concepts in the Process of Social Administration (Syllabus). 1952-53.

"Shaping the professional person." 60th Annual Minnesota State Welfare Conference, March 29, 1953. 13 mimeographed pages.

RICHARD G. GUILFORD, M.A., Associate Professor

Review of William B. Whiteside, The Boston Y.M.C.A. and Community Need: A Century Evaluation 1851-1951 in Social Service Review, Vol. 26, No. 2, pp. 255-56. June, 1952.

MALCOLM B. STINSON, Ph.D., Associate Professor

"Medical care and rehabilitation for the aged." Geriatrics, Vol. 8, No. 4, pp. 226-29. April, 1953.

Lydia M. Hermann, M.S.W., Assistant Professor. See Students' Health Service.

Sociology

ELIO D. MONACHESI, Ph.D., Professor and Chairman

"Infiltration and the attitudes of white and Negro parents and children" (with C. Bird and H. Burdick). Journal of Abnormal and Social Psychology, 47:688-99. July, 1952.

"The Minnesota Multiphasic Personality Inventory in the study of juvenile delinquents" (with S. R. Hathaway). American Sociological Review, 17:704-10. December, 1952. "Studies of Group Tensions"

"II. Methods for validating a questionnaire concerning white-Negro relationships by means of voluntary statements" (with C. Bird and H. Burdick). *Human Relations*, 6:99-111. 1953.

"III. The effect of parental discouragement of play activities upon the attitudes of white children toward Negroes" (with C. Bird and H. Burdick). Child Development, 23: 295-306. December, 1952.

Reviews of

David Abrahamsen, Who Are the Guilty! A Study of Education and Crime in Annals of the American Academy of Political and Social Science, 285:200-201. January, 1953.

Lloyd E. Ohlin, Selection for Parole in Journal of Criminal Law, Criminology and Police Science, 43:233-34. July-August, 1953.

F. STUART CHAPIN, Ph.D., Professor

"A three-dimensional model for visual analysis of group structure." Social Forces, 31:20-25. October, 1952.

"The expanding horizons of social science research." Social Science Research Center of the Graduate School, University of Minnesota, Annual Public Lecture Series, Vol. 6, 20 pages. June, 1953.

Review of Elbridge Sibley, Support for Independent Scholarship and Research in American Journal of Sociology, 58:124-25. July, 1952.

Editor, Harpers Social Science Series:

Mabel A. Elliott, Crime in Modern Society. November, 1952.

Herbert H. Stroup, Community Welfare Organization. November, 1952.

Paul Hanly Furfey, The Scope and Method of Sociology. January, 1953.

George E. Simpson and J. Milton Yinger, Racial and Cultural Minorities. February, 1953. T. Lynn Smith, The Sociology of Rural Life (3rd revised edition). May, 1953.

Arnold M. Rose, Ph.D., Professor

"Power distribution in the community through voluntary associations." Pages 74-83 in J. E. Hulett, Jr., and Ross Stagner, editors, *Problems in Social Psychology*. Urbana: University of Illinois, 1952.

"The potential contribution of sociological theory and research to economics." American Journal of Economics and Sociology, 12:23-33. October, 1952.

"Needed research on the meditation of labor disputes." Personnel Psychology, 5:187-200. Autumn, 1952. Reprinted under the title, "La conciliation dans les conflicts du travaii: Un plan de recherche scientifique" in Hommes et Techniques, 93:11-17. Septembre, 1953.

"Quelques développements récents de la sociologie américaine." Les Etudes Philosophiques, 7:118-31. Janvier-Juin, 1952.

"Les sources de la reformisme." Esprit, 11:596-605. Novembre, 1952.

Reviews of

Florian Znaniechi, Modern Nationalities in American Sociological Review, 18:341. June, 1953.

P. II. Chombart de Lauve et al, Paris et L'agglomeration in American Journal of Sociology, 58:622-23. May, 1953.

George B. Vold, Ph.D., Professor

"Extent and trend of capital crimes in the United States." Annals of the American Academy of Political and Social Sciences, 284:1-7. November, 1952.

"Some basic problems in criminological research." Federal Probation, 17:37-42. March, 1953. Reviews of

Frank Tannenbaum, Crime and the Community in Journal of Criminal Law and Criminology, 43:86-88. May-June, 1952.

H. E. Barnes and N. K. Teeters, New Horizons in Criminology (2nd ed.) in American Journal of Sociology, 58:125-26. July, 1952.

M. J. Sethna, Society and the Criminal. Ibid., pp. 613-14. May, 1953.

David Abrahamsen, Who Are the Guilty? Ibid., pp. 614-15.

Charles Hamilton, editor, Men of the Underworld: The Professional Criminals' Own Story in Annals of the American Academy of Political and Social Science, 286:207-208. March, 1953.

Marshall B. Clinard, The Black Market: A Study of White Collar Crime in University of Pennsylvania Law Review, 101:901-903. April, 1953.

Revision of Criminal Statistics Supplement. February, 1953. 49 mimeographed pages.

THEODORE CAPLOW, Ph.D., Associate Professor

"Urban structure in France." American Sociological Review, 17:544-49. October, 1952.

"The theory of traffic control." Traffic Quarterly, 6:426-39. October, 1952.

"How much orientation training?" College and University Personnel Association News, Vol. 4. September, 1952.

"Market attitudes: A research report from the medical field." Harvard Business Review, 30: 105-12. November-December, 1952.

"Defense and social institutions." Pages 42-45 in The Garrison State: Its Human Problems. Social Science Research Center, University of Minnesota. 1953.

"The modern Latin-American city." Pages 255-60 in Proceedings of the XXIX International Congress of Americanists, Vol. II of Sol Tax, editor, Acculturation in the Americas. Chicago: University of Chicago Press. 1952.

Don A. Martindale, Ph.D., Associate Professor

Translated and edited Max Weber's Ancient Judaism (with Hans Gerth). Glencoe: The Free Press. Fall, 1952, 486 pages.

Review of S. Asch, Social Psychology in American Journal of Sociology, 58:6. May, 1953.

LEO G. REEDER, Ph.D., Research Associate

"The central area of Chicago-A re-examination of the process of decentralization." Land Economics, 28:369-73. November, 1952.

"A note on the Burgess-Davie, Firey differences regarding industrial location." American Sociological Review, 18:189-91. April, 1953.

CHARLES E. RAMSEY, Ph.D., Assistant Professor

Review of R. Faris, Social Psychology in Rural Sociology, 17:4. December, 1952.

JOHN D. KELLEY, B.A., Instructor

"Statement of Mr. John Kelley." Pages 340-41 in Vol. 5, The People Speak. Excerpts from Regional Public Hearings on Health, series entitled, Building America's Health: A Report to the President by the President's Commission on the Health Needs of the Nation. Washington: U. S. Government Printing Office. 1953.

"What do Co-ops mean to today's youth?" (with M. J. Taves). Minnesota Farm and Home Science, 10:14-15. February, 1953.

Changes in Minnesota's Population by Counties—Natural Increase and Net Migration (with D. G. Marshall). Division of Rural Sociology, University of Minnesota. September 3, 1952. 9 mimeographed pages.

"Deaths in resident institutions—How they affect reports on population dynamics." Division of Rural Sociology, University of Minnesota. November 1, 1952. 3 dittoed pages.

"Selected bibliography on rural health and welfare." Department of Rural Sociology, University of Minnesota. April 20, 1953. 2 dittoed pages.

ARTHUR E. PRELL, M.A., Instructor

Review of Block's Social and Personal Disorganization in Journal of Criminal Law and Criminology, 5:43. 1953.

Marvin J. Taves, Th.B., B.D., M.A., Instructor

"Characteristics associated with acceptance of agricultural extension recommended practices" (with N. Gross). Rural Sociology, 17:321-29. December, 1952.

"A study in the dynamics of small town social attitudes." Journal of Social Psychology, 35:161-73. 1952.

"An experimental design to preserve randomization in social experiments." American Sociological Review, 18:90-96. February, 1953.

"What do Co-ops mean to today's youth?" (with J. D. Kelley), Farm and Home Science, 10:14-15. February, 1953.

Reviews of

E. Solberg, Rural Zoning in the United States in Rural Sociology, 17:302-303. September, 1952.

E. McHose, Family Life Education in School and Community. Ibid., p. 392. December, 1952.

CLARA KANUN, M.A., Teaching Assistant

"The residential mobility of Ramsey County public assistance recipients." St. Paul: Amberst H. Wilder Charity, Department of Research and Statistics. September, 1952. 85 pages.

"Conciliation and mediation in Minnesota" (with J. G. Turnbull). Labor Law Journal, Vol. 3, No. 10, pp. 677-84. October, 1952.

SPEECH AND THEATER ARTS

E. WILLIAM ZIEBARTH, Ph.D., Professor and Chairman

"International communication in a divided world." Minnesota Council for the Social Studies Bulletin, Vol. 15, No. 2, pp. 4-5. March, 1953. "Democracy and the men we choose to serve us." Minnesota Farm Bureau News, Vol. 32, No. 1, p. 3. September, 1952.

Review of Robert T. Oliver, Verdict in Korea in Quarterly Journal of Speech, Vol. 39, No. 2, pp. 238-39. April, 1953.

BRYNG BRYNGELSON, Ph.D., Professor

"Man and his symbol." The Speech Teacher, Vol. 2, No. 2, pp. 81-86. March, 1953.

Frank M. Whiting, Ph.D., Professor

"University Theatre." Pages 662-64 in John Gassner, Producing the Play. New York: The Dryden Press. 1953.

"The University Theatre; it trains while it entertains." Minnesota, Voice of the Alumni. Vol. 52, No. 9, pp. 10-11. May-June, 1953.

KENNETH L. GRAHAM, Ph.D., Associate Professor

Review of Winifred Ward, Stories to Dramatize in The Educational Theatre Journal, 5:82-83.

March, 1953.

Teaching Aids for The Piper for the Sixth-grade. 1952-53.

Teaching Aids for Aladdin. Mimeographed material for Minneapolis and St. Paul fifth-grade teachers for use prior to Young People's University Theatre production of Aladdin. 1952-53. Operating Code of the Children's Theatre Conference. (Division of the American Educational Theatre Association). Six-page mimeographed constitution for this organization. 1952-53.

WILLIAM S. HOWELL, Ph.D., Associate Professor

Persuasion (with W. L. Bremback). New York: Prentice-Hall. 1952. 488 pages.

"Procedure for discussion, 1952-1953." Minnesota State High School League Bulletin, Vol. 27, No. 2, p. 11. Fall, 1952.

"Discussion Outline 1952-1953. How can we as a nation improve our ethical and moral conduct?" *Ibid.*, pp. 12-13.

"Is forensic experience valuable after college." The Gavel, Vol. 35, No. 4, pp. 85-86. May, 1953. A Sample of Senator Joseph R. McCarthy's Speaking—In Context. University of Minnesota Mimeograph Department. January, 1953. 13 pages.

Frank M. Lassman, Ph.D., Associate Professor

"Audiology." Bulletin of the University of Minnesota Hospitals and Minnesota Medical Foundation, 24:281-87. January 16, 1953.

Abstracts of audiology publication in *Journal of Speech and Hearing Disorders*, Vol. 17, Nos. 3, 4, pp. 361, 443, 446, 447, 1952; Vol. 18, Nos. 1, 2, pp. 79, 82-86, 211-13, 218, 1953.

WILLIAM W. FLETCHER, Ph.D., Assistant Professor

Assistant Editor, Periodicals Department of Quarterly Journal of Speech, in charge of Psychology and Pathology of Speech Section. 1952-53.

DONALD K. SMITH, Ph.D., Assistant Professor

Entries from journals of language and literature, education in Frederick W. Haberman, editor, A Bibliography of Rhetoric and Public Address for the Year 1951. Speech Monographs, 19:79-102. June, 1952.

HENRY GOODMAN, Ph.D., Instructor

Reviews of

Walter Staaks, The Theatre of Louis-Benoit Picard in Players Magazine, 29:165-66. April, 1953.

Louis Verneuil, Affairs of State. Ibid., pp. 187-88. May, 1953.

JANET S. JENSEN, M.A., Instructor

"The brave Indian who talked like a white man." Gopher Historian, 7:7-8. November, 1952.

ROBERT D. MOULTON, M.A., Instructor

"The history of a costume." Dance Observer, Vol. 19, No. 9, p. 132. December, 1952.

Want Ads (Libretto and Choreography). University of Minnesota Theatre, first performance August 17, 1952.

Comedia (Choreography). University of Minnesota Theatre, first performance August 17, 1952. Three Studies in Focus. YWCA Workshop, first performance December 12, 1952.

Young Maiden and the Unicorn. YWCA Workshop, first performance December 12, 1952.

Dawn Web. YWCA Workshop, first performance NW College Symposium, May 17, 1953.

ZOOLOGY

SHELDON C. REED, Ph.D., Professor and Director of Dight Institute

"Heredity counseling and research." Eugenical News, 37:41-46. September, 1952.

"A panel discussion: Genetics counseling." (Participant.) Ibid., 4:332-46. December, 1952.

"A clinical and genetical study of microcephaly" (with J. A. Böök and John W. Schut). American Journal of Mental Deficiency, 57:637-60. April, 1953.

Отто H. Schmitt, Ph.D., Professor

"Electrocardiographic Mirror Pattern Studies"

- "I. Experimental validity test of the dipole hypothesis and of the central terminal theory" (with R. B. Levine and E. Simonson). American Heart Journal, 45:416. March, 1953.
- "II. The statistical and individual validity of the heart dipole concept as applied in electrocardiographic analysis" (with R. B. Levine and E. Simonson). *Ibid.*, 45:500. April, 1953.
- "III. Mirror pattern cancellation in normal and abnormal subjects" (with R. B. Levine, E. Simonson, and J. Dahl). *Ibid.*, 45:655. May, 1953.

NELSON T. SPRATT, Ph.D., Professor

"Metabolism of the early embryo." Annals of the New York Academy of Sciences, Vol. 55, pp. 40-49. August, 1952.

"Differentiation in reducing enzyme systems in the early chick blastoderm." Anatomical Record, 113:96. September, 1952.

"Quantitative survey of the succinic dehydrogenase system in homogenates of 2-8 day chick embryos." Ibid., p. 97.

"Comparison of quantitative changes in activity of the succinic dehydrogenase system in whole, sliced and homogenized 2-6 day chick embryos." Ibid., pp. 97-98.

"Developmental physiology." Annual Review of Physiology, 15:21-38. January, 1953.

Franklin G. Wallace, Ph.D., Associate Professor

Introduction to the Study of Animal Parasites and Parasitism (with W. A. Riley). Minneapolis: Burgess Publishing Company. 1952. vii and 94 pages.

DAVID J. MERRELL, Ph.D., Assistant Professor

"Gene frequency changes in small laboratory populations of Drosophila melanogaster." Evolution, 7:95-101. June, 1953.

DWAIN W. WARNER, Ph.D., Assistant Professor

"The Green Kingfisher." Wilson Bulletin, 64:131-32. September, 1952.

"Yellow-breasted Chat in Southeastern Minnesota." The Flicker, 24:88-89. June, 1952.

"M.O.U. cooperative bird studies—1953" (with W. J. Breckenridge and H. L. Gunderson). *Ibid.*, 25:28-29. March, 1953.

"The rodents of New Caledonia" (with A. J. Nicholson). Journal of Mammalogy, 34:168-79. May, 1953.

JOSEPH G. GALL, Ph.D., Instructor

"The lampbrush chromosomes of Triturus viridescens." Experimental Cell Research, Supp. 2, pp. 95-102. 1952.

INSTITUTE OF TECHNOLOGY

ADMINISTRATION

ATHELSTAN F. SPILHAUS, D.Sc., Dean and Professor

- "Controlled altitude balloons and vertical motion in the high atmosphere." (Abstract and discussion.) Pages 125-26 in Proceedings of the Seventh Pacific Science Congress of the Pacific Science Association, Vol. 3. Wellington: R. E. Owen, Government Printer. 1952.
- "Description of bathythermograph with water sampling apparatus." (Summary of discussion.) Ibid., p. 224.
- "Technology's contribution to the economic future of the state." Minnesota Engineer, Vol. 4, No. 5, pp. 5-7, 1953.

COLLEGE OF ENGINEERING

AERONAUTICAL ENGINEERING

JOHN D. AKERMAN, B.S., Professor and Head

"Grown ups in children's camp" (82 hexametric verses in Latvian.) Tilts, No. 11, pp. 34-38. May, 1953.

RUDOLF HERMANN, Ph.D., Dr. Habil., Professor

- "Supersonic diffuser problems for inlet ducts and wind tunnels in one-dimensional analysis (condensed version)." Pages 231-42 in Proceedings of the Second Midwestern Conference on Fluid Mechanics. Columbus: Ohio State University. 1952.
- "The decay of weak oblique shock waves in two-dimensional supersonic flow." Pages 335-52 in Proceedings of the Third Midwestern Conference on Fluid Mechanics. Minneapolis: University of Minnesota. 1953.
- "Diffuser efficiency of free-jet supersonic wind tunnels at variable test chamber pressure." Journal of the Aeronautical Sciences, 19:375-84, 1952.

RALPH H. UPSON, M.E., A.E., Professor

- "Aeronautical science." Minnesota History, 33:242-46. Summer, 1953.
- "Open-book examinations." Journal of Engineering Education, 43:429-30, 1953.

EUGENE STOLARIK, M.A., M.S. (Aero.E.), Associate Professor

Notes on Interference Effects in Slotted Wind Tunnels (classified). Seattle: Boeing Airplane Company Research Report, Boeing Wind Tunnel 227. September, 1952, 23 pages.

Toma Riabokin, M.S., Research Associate

- "M. Ostrogradsky—Great Ukrainian Scientist." Svoboda (Ukrainian newspaper, Jersey City, N. J. Sunday edition, No. 5 (30), Volume 61. February 1, 1953.
- On Real Unicursal Curves. Rosemount Aeronautical Engineering Research Laboratories Research Report 86. Minneapolis: University of Minnesota Minneapolis Department. October, 1952. 124 pages.

ALFRED E. CRONK, M.S. (Aero.E.), Assistant Professor

Fast Rising Balloon Study (with D. F. Melton and C. Eumurian). Minneapolis: General Mills Report No. 1112. June, 1952. 154 pages.

WALTER S. BRADFIELD, JR., M.S. (Aero.E.), A.E., Lecturer

- Experimental Investigation of the Characteristics of the Supersonic Laminar and Turbulent
 Boundry Layer at M. 3.1 (with D. G. DeCoursin and C. B. Blumer). New York:
 Sherman M. Fairchild Publication Fund Preprint, Institute of Aeronautical Sciences. January, 1953. 27 pages.
- "Measurements of laminar skin friction in supersonic cone flow." Pages 289-97 in *Proceedings* of the Second Midwestern Conference on Fluid Mechanics. Columbus: Ohio State University. 1952.

Characteristics of Laminar and Turbulent Boundry Layer at Supersonic Velocity (with D. G. DeCoursin and C. B. Blumer). Rosemount Aeronautical Engineering Laboratories Research Report 83. Minneapolis: University of Minnesota Mimeograph Department. July, 1952. 130 pages.

BERNARD M. LEADON, B.S. (Math.), M.S. (Aero.E.), Lecturer

- "Very accurate measurement of fringe shifts in an optical interferometer study of gas flow" (with F. D. Werner). Review of Scientific Instruments, 24:121-24. February, 1953.
- The Stagnation Streamline Assorted with Certain Two-Dimensional Bodies in Shear Flow of a Perfect Fluid Near a Wall. Rosemount Aeronautical Engineering Laboratories Research Report 93. Minneapolis: University of Minnesota Mineograph Department. June, 1953. 20 pages.

Tung Sheng Liu, M.S. (Aero.E.), Lecturer

- An Experimental Investigation of the Pulse Starting Technique of Choked Wind Tunnel at Mach Number 3.47 (with J. Cordero and E. G. Voltin). Wright Air Development Center Technical Report 53-140, 1953, 125 pages.
- The running time for supersonic blowdown wind tunnels." Pages 547-66 in *Proceedings of the Third Midwestern Conference on Fluid Mechanics*. Minneapolis: University of Minnesota. 1953.

FRANK D. WERNER, M.S. (Aero.E.), Lecturer

- Design and Performance Studies for Improved Multiple Shielded Total Gas Temperature Probes Useful over Wide Ranges of Temperature and Pressure (with R. E. Keppel and M. A. Bernards). Wright Air Development Center Technical Report 53-194. April, 1953. 70 pages.
- Applications of the Corona Discharge for Measurements of Density and Velocity Transients in Air Flow (with R. L. Geronime). Wright Air Development Center Technical Report 53-142. June, 1953. 85 pages.
- "An improved multiple shield gas temperature probe" (with R. E. Keppel). Pages 463-78 in Proceedings of the Third Midwestern Conference on Fluid Mechanics. Minneapolis: University of Minnesota. 1953.
- "Very accurate measurement of fringe shifts in an optical interferometer study of gas flow" (with B. M. Leadon). Review of Scientific Instruments, 24:121-24. February, 1953.
- Investigation of a Corona Discharge for Measurements in Air Flow (with R. L. Geronime).

 Rosemount Aeronautical Engineering Laboratories Research Report 84. Minneapolis: University of Minnesota Mimeograph Department. August, 1952. 77 pages.

RICHARD V. DELEO, B.S. (Aero.E.), M.S., Scientist

- An Experimental Investigation of the Use of Hot Gas Ejectors for Boundary Layer Removal (with R. D. Wood). University of Minnesota, Institute of Technology, Department of Aeronautical Engineering, Rosemount Aeronautical Laboratories Research Report Number 77. Minneapolis, Minnesota, July, 1952. 50 pages.
- Aerodynamic Characteristics of Several External Store Installations on a Swept-Wing Configuration at Transonic Speeds (with R. E. Rose). University of Minnesota Rosemount Aeronautical Laboratories Research Report No. 89. April, 1953, 60 pages.

PAUL M. LELAND, M.S. (Aero.E.), Scientist

Experimental Measurements of Gust Loads on an Airfoil at High Subsonic Airspeeds. University of Minnesota, Rosemount Aeronautical Laboratories, Research Report 88, 1952, 42 pages.

ROBERT L. GERONIME, B.S., Associate Scientist

- Investigation of a Corona Discharge for Measurements in Air Flow (with F. D. Werner).

 University of Minnesota Department of Aeronautical Engineering Research Report 84.

 August, 1952, 77 pages.
- Applications of the Corona Discharge for Measurements of Density and Velocity Transients in Air Flow (with F. D. Werner). Wright Air Development Center Technical Report 53-142. June, 1953. 85 pages.

sota. 1953.

MARWIN A. BERNARDS, B.S., Assistant Scientist

Design and Performance Studies for Improved Multiple Shielded Total Gas Temperature Probes Useful over Wide Ranges of Temperature and Pressure (with F. D. Werner and R. E. Keppel), Wright Air Development Center Technical Report 53-194, April, 1953, 70 pages.

ROBERT E. KEPPEL, B.S., Assistant Scientist

Design and Performance Studies for Improved Multiple Shielded Total Gas Temperature Probes Useful over Wide Ranges of Temperature and Pressure (with F. D. Werner and M. A. Bernards). Wright Air Development Center Technical Report 53-194. April, 1953. 70 pages. "An improved multiple shield gas temperature probe" (with F. D. Werner). Pages 463-78 in Proceedings of the Third Midwestern Conference on Fluid Mechanics. University of Minne-

MERWIN D. PEARSON, B.Aero. Eng., Assistant Scientist

Aerodynamic Characteristics of the E-61 Bomb. University of Minnesota, Rosemount Aeronautical Laboratories Research Report No. 87. (Confidential.) 1952. 30 pages.

RAYMOND E. Rose, B.S., Assistant Scientist

Aerodynamic Characteristics of Several External Store Installations on a Swept-Wing Configuration at Transonic Speeds (with R. V. DeLeo). University of Minnesota Rosemount Aeronautical Laboratories Research Report No. 89. April, 1953. 60 pages.

JOSEPH J. SHEPPARD, JR., B.A., Assistant Scientist

The Barometer and the Manometer in Pressure Measurements. University of Minnesota, Rosemount Aeronautical Laboratories Engineering Memorandum No. 24, 1953, 53 pages.

CIVIL ENGINEERING AND HYDRAULICS

LORENZ G. STRAUB, Ph.D., C.E., Professor, Head, and Director

Importance of Inlet Design on Culvert Capacity (with A. G. Anderson and C. E. Bowers). University of Minnesota St. Anthony Falls Hydraulic Laboratory Technical Paper No. 13, Series B. 1953. 21 pages, 8 illustrations.

Velocity Measurements of Air-Water Mixtures (with J. M. Killen and O. P. Lamb). New York: American Society of Civil Engineers Separate No. 193, May, 1953, 14 pages.

"Use of models in planning water control works." Indian Journal of Engineering and Technology, 4:112-14. May, 1952; pp. 130-32. June, 1952.

"An invitation to Indian engineers." Ibid., p. 133. June, 1952.
"Toward better hydraulic design of culverts." Proceedings of the Forty-fifth Annual Convention, American Concrete Pipe Association. February, 1953. Chairman, Editorial Committee. Civil Engineering Series, published by Ronald Press, 1952-53.

PAUL ANDERSEN, Ph.D., Professor

Statically Indeterminate Structures, Their Analysis and Design. New York: Ronald Press Company. 1953. 318 pages.

George J. Schroepfer, M.S.C.E., C.E., Professor

Anaerobic Treatment of Packinghouse Wastes (with A. S. Johnson and N. R. Ziemke). Chicago: American Meat Institute. 1952, 106 pages.

New Developments in Packinghouse Waste Treatment. Chicago: American Meat Institute. 1953. 20 pages.

Armand S. Johnson, B.S. (C.E.), Instructor

Anaerobic Treatment of Packinghouse Wastes (with G. J. Schroepfer and N. R. Ziemke). Chicago: American Meat Institute. 1952. 106 pages.

NORMAN R. ZIEMKE, B.C.E., Instructor

Anaerobic Treatment of Packinghouse Wastes (with A. S. Johnson and G. J. Schroepfer). Chicago: American Meat Institute. 1952. 106 pages.

St. Anthony Falls Hydraulies Laboratory

EDWARD SILBERMAN, M.S.C.E., Associate Professor

Secondary Flows in Guide Vane Bends. University of Minnesota St. Anthony Falls Hydraulic Laboratory Project Report No. 36. 1953. 97 pages.

Importance of Secondary Flow in Guide Vane Bends, University of Minnesota St. Anthony Falls Hydraulic Laboratory Technical Paper No. 14, Series B. 1953. 25 pages,

"Importance of secondary flow in guide vane bends." Pages 669-86 in Proceedings of the Third Midwestern Conference on Fluid Mechanics. Minneapolis: University of Minnesota. 1953. Chairman, Editorial Committee, Proceedings of the Third Midwestern Conference on Fluid Mechanics. Minneapolis: University of Minnesota. 1953.

CHARLES E. BOWERS, M.S. (C.E.), Research Associate

Importance of Inlet Design on Culvert Capacity (with L. G. Straub and A. G. Anderson).
University of Minnesota St. Anthony Falls Hydraulic Laboratory Technical Paper No. 13,
Series B. 1953. 21 pages, 8 illustrations.

REUBEN M. OLSON, M.S. (C.E.), Research Associate

Model Studies of a Water Tunnel with an Air-Bubble Resorber; A Diverging Closed-jet Test Section for a Water Tunnel. University of Minnesota St. Anthony Falls Hydraulic Laboratory Project Report No. 32, 1952, 33 pages.

ALVIN G. ANDERSON, Ph.D., Assistant Professor

Importance of Inlet Design on Culvert Capacity (with L. G. Straub and C. E. Bowers). University of Minnesota St. Anthony Falls Hydraulic Laboratory Technical Paper No. 13, Series B. 1953. 21 pages, 8 illustrations.

"The characteristics of sediment waves formed by flow in open channels." Pages 379-95 in Proceedings of the Third Midwestern Conference on Fluid Mechanics. Minneapolis: University of Minnesota. 1953.

LOYAL A. JOHNSON, B.Ag.E., Assistant Professor

Editor, St. Anthony Falls Hydraulic Laboratory Project Reports and Papers, 1952-53.

JOHN B. HERBICH, B.Sc. (C.E.), Research Fellow

Accidental Air in Concrete. Boston: American Concrete Institute. 1953. 30 pages.

OWEN P. LAMB, B.S., Research Fellow

Velocity Measurements of Air-Water Mixtures (with J. M. Killen and L. G. Straub). New York: American Society of Civil Engineers Separate No. 193. May, 1953. 14 pages.

JOHN M. KILLEN, B.E.E., Assistant Scientist

Velocity Measurements of Air-Water Mixtures (with O. P. Lamb and L. G. Straub). New York: American Society of Civil Engineers Separate No. 193. May, 1953. 14 pages.

ELECTRICAL ENGINEERING

JOHN H. KUHLMANN, E.E., Professor

"My summer in Brazil." EE Transconductor, Vol. 2, No. 2, p. 5. 1952.

JOSEPH M. PESTARINI, C.E., E.E., Dr.Math., Visiting Professor Metadyne Statics. New York: John Wiley and Sons, Inc. 1952. 415 pages.

WILLIAM G. SHEPHERD, Ph.D., Professor

"The use of radioactive isotopes in a study of evaporation from thermionic cathodes" (with W. F. Leverton). Journal of Applied Physics, 23: 787-93. 1952.

Study of Electrical and Physical Characteristics of Secondary Emitting Surfaces. University of Minnesota Department of Electrical Engineering Quarterly Reports on Contract DA-36-039-SC-159 for the U.S. Army Signal Corps.

Eighth Quarterly Report. June, 1952. 36 mimcographed pages.

Ninth Quarterly Report. September, 1952. 46 mimeographed pages.

Tenth Quarterly Report. February, 1953. 140 mimeographed pages.

ALDERT VAN DER ZIEL, Ph.D., Professor

- "Fluctuation phenomena." Advances in Electronics, 4:109-55. June, 1952.
- "Theory of the production of secondary electrons in solids" (with A. J. Dekker). Physical Review, 86:755-60, 1952.
- "On the shot effect of P-N junctions" (with R. L. Anderson). Transactions of the Institute of Radio Engineers-Professional Group on Electron Devices, 1:20-24. November, 1952.
- "On the flicker noise caused by an interface layer" (with W. W. Lindemann). Journal of Applied Physics, 23:1410-11. 1952.
- "Shot noise in germanium filaments" (with R. H. Mattson). Ibid., 24:222, 1953.
- "Noise in gas discharges." Ibid., pp. 223-24.
- "A simple method for measuring interface impedance," Ibid., p. 496.

O. WILLIAM MUCKENHIRN, Ph.D., Associate Professor

- "Magnetic tape recording demagnetization for simple cyclic excitations." Transactions of the Institute of Radio Engineers-Professional Group on Audio, 10:25-27. November-December, 1952.
- "A single tube square wave generator." Journal of Engineering Education, 43:542-44. 1953.

PAUL A. CARTWRIGHT, M.S.E.E., Assistant Professor

- "A passive compensator for voltage flicker." Transactions of the American Institute of Electrical Engineers, Vol. 71, Pt. 3, pp. 658-60, 1952.
- "Resnatron plate supply rectifier" (with R. P. Featherstone and C. Ling). Communication and Electronics, 6:145-52. May, 1953.
- Research and Development on Design Method for Reactors (with J. T. Ludwig). University of Minnesota Department of Electrical Engineering Reports on Contract DA-36-039-SC-42573 for the U.S. Army Signal Corps.

First Quarterly Report. December, 1952. 24 mimeographed pages.

Second Quarterly Report. March, 1953. 13 mimeographed pages.

Third Quarterly Report. June, 1953. 40 mimeographed pages.

ARTHUR C. GANNETT, B.S.E.E., B.A., Instructor

"Dynamic testing of materials and structures with a new resonance vibration exciter and controller" (with J. Brown, B. J. Lazan, P. G. Kirmser, and J. H. Klumpp). Proceedings of the American Society for Testing Materials, 52:858-75. 1952.

BERNARD V. HANBY, B.E.E., M.S., Instructor

"Effect of the evaporation products from a BaO coated cathode on the secondary emission of MgO thin films" (with P. Wargo). Physical Review, 89:893. 1953.

PHILIP N. HESS, B.S.E.E., M.S.E.E., Instructor

"Identification of tornadoes by observation of waveform atmospherics" (with H. L. Jones). Proceedings of the Institute of Radio Engineers, 40:1049-52. 1952.

GORDON J. MURPHY, M.S.E.E., Instructor

"An approximate transfer function for the analysis and design of pulsed servos." Transactions of the American Institute of Electrical Engineers, Vol. 71, Pt. 2, pp. 435-40. 1952.

WALLACE W. LINDEMANN, B.E.E., Research Fellow

"On the flicker noise caused by an interface layer" (with A. van der Ziel). Journal of Applied Physics, 23:1410-11, 1952.

JOHN T. LUDWIG, M.S.E.E., Research Fellow

Research and Development on Design Method for Reactors (with P. A. Cartwright). University of Minnesota Department of Electrical Engineering reports on Contract DA-36-039-SC-42573 for the U.S. Army Signal Corps.

First Quarterly Report. December, 1952. 24 mimeographed pages.

Second Quarterly Report. March, 1953. 13 mimeographed pages.

Third Quarterly Report. June, 1953. 40 mimeographed pages.

Peter Wargo, B.S., Research Fellow

"Effect of the evaporation products from a BaO coated cathode on the secondary emission of MgO thin films" (with B. V. Haxby). Physical Review, 89:893. 1953.

MATHEMATICS AND MECHANICS

STEFAN E. WARSCHAWSKI, Ph.D., Professor and Acting Head

"On conformal mapping of variable regions." Pages 175-87 in U. S. National Bureau of Standards Applied Mathematics Series 18, Construction and Application of Conformal Maps, Proceedings of a Symposium. Washington, D.C.: U. S. Government Printing Office. 1952.

FULTON KOEHLER, Ph.D., Associate Professor

"Estimates for the errors in the Rayleigh-Ritz method." Pacific Journal of Mathematics, Vol. 3, No. 1, pp. 153-64, 1953.

PAUL C. ROSENBLOOM, Ph.D., Associate Professor

"The fix-points of entire functions." Pages 186-92 in Communications du Séminaire Mathématique de l'Université de Lund, Tome Supplémentaire, dédié à Marcel Riesz, Lund, Sweden. 1952.

"Mass distribution and their potentials." Pages 130-38 in Proceedings, 11. Skandinaviske Matematikerkongress, Trondheim, Norway, 1949. (Appeared 1952).

"The difference equation method for solving the Dirichlet problem." Pages 231-37 in U. S. National Bureau of Standards Applied Mathematics Series 18, Construction and Application of Conformal Maps, Proceedings of a Symposium. Washington, D.C.: U. S. Government Printing Office. 1952.

"The linearized theory of supersonic flow about a thin airfoil." Pages 319-34 in Proceedings of the Third Midwestern Conference on Fluid Mechanics. Minneapolis: University of Minnesota.

"Quelques classes de problèmes extrémaus (suite)." Bulletin de la Société Mathématique de France, 80:183-215. 1952.

Chairman, Committee on Slaught Memorial Papers, Mathematical Association of America.

ALLAN A. BLATHERWICK, B.S.E.E., M.S. (Math. and Mech.), Instructor

Fatigue Properties of Aluminum Alloys at Various Direct Stress Ratios. Part I—Rolled Alloys (with B. J. Lazan). Wright Air Development Center Technical Report 52-307 resulting from University of Minnesota Research Contract AF33(038)-20840. December, 1952. 78 pages.

Fatigue Properties of Aluminum Alloys at Various Direct Stress Ratios. Part II—Extruded Alloys (with B. J. Lazan). Wright Air Development Center Technical Report 52-307 resulting from University of Minnesota Research Contract AF33(038)-20840. December, 1952. 29 pages.

ROBERT L. EVANS, Ph.D., Instructor

"Solution of linear ordinary differential equations containing a parameter." Proceedings of the American Mathematical Society, 4:92-94. 1953.

"Isotope curves in red blood cell studies." Nature, 171:797. 1953.

"Red cell survival and ashby curves." Ibid., p. 798.

"Liver function and bromsulfalein disappearance." Science, 117:718. 1953.

PHILIP G. KIRMSER, M.S. (Math.), Instructor

"Dynamic testing of materials and structures with a new resonance vibration exciter and controller" (with J. Brown, A. C. Gannett, J. H. Klumpp, and B. J. Lazan). Proceedings of the American Society for Testing Materials, 52:858-75. 1952.

"An estimate of variations in amplitude of forced vibrations," American Mathematical Monthly, 60:73, 1953.

MECHANICAL ENGINEERING

RICHARD C. JORDAN, Ph.D., Professor and Head

"Refrigeration." Pages 807-44 in American Society of Heating and Ventilating Engineers Guide (thirty-first edition). New York: American Society of Heating and Ventilating Engineers. 1953.

Research Related to Migration of Water Vapor Through Insulated Panels (with A. B. Algren, C. E. Lund, and G. R. Whitnah). University of Minnesota Department of Mechanical Engineering Progress Reports on Contract DA-44-109-qm-1144 with Quartermaster Research and Development Laboratories, Department of the Army, Jeffersonville, Indiana.

Progress Report No. 1. October, 1952. 34 pages. Progress Report No. 2. January, 1953. 27 pages.

Progress Report No. 3. April, 1953. 15 pages.

Progress Report—Friction on Snow and Ice (with C. D. Fitz, H. T. Mantis, R. G. Mokadam, and R. Simon). University of Minnesota Department of Mechanical Engineering Report on Contract DA-11-190-ENG-1 with Corps of Engineers, Snow, Ice and Permafrost Research Establishment, Wilmette, Illinois. July, 1952. 180 mimeographed pages.

AXEL B. ALGREN, M.S. (M.E.), Professor

Research Related to Migration of Water Vapor Through Insulated Panels (with R. C. Jordan, C. E. Lund, and G. R. Whitnah). University of Minnesota Department of Mechanical Engineering Progress Reports on Contract DA-44-109-qm-1144 with Quartermaster Research and Development Laboratories, Department of the Army, Jeffersonville, Indiana.

Progress Report No. 1. October, 1952, 34 pages. Progress Report No. 2. January, 1953, 27 pages.

Progress Report No. 3. April, 1953. 15 pages.

"Field studies of floor panel control systems" (with E. F. Snyder and J. S. Locke). Heating, Piping and Air Conditioning, 25:120-31. February, 1953.

"Field studies of floor panel control systems." (Abstract.) Industrial Heating Engineer, Vol. 15, No. 5, pp. 152-55, 160. May, 1953.

ERNST R. G. ECKERT, Ph.D., Professor

"Interferometric studies on the stability and transition to turbulence of a free convection boundary layer" (with E. Soehngen). Pages 321-23 in General Discussion on Heat Transfer. New York: American Society of Mechanical Engineers, 1952.

"Developments in convective heat transfer research." Pages 309-18 in *Proceedings of the Second Midwestern Conference on Fluid Mechanics*. Ohio State University Engineering Experiment Station Bulletin No. 149, 1952.

"Convective heat transfer at high velocities." Pages 173-93 in Heat Transfer Symposium, Ann Arbor: University of Michigan Press, 1953.

"Transpiration and film cooling." Ibid., pp. 195-210.

"Temperature distribution in the walls of heat exchangers with noncircular flow passages."

Pages 703-18 in Proceedings of the Third Midwestern Conference on Fluid Mechanics.

Minneapolis: University of Minnesota. 1953.

"Heat transfer." Industrial and Engineering Chemistry, 45:951-56. 1953.

Reviews of

F. Bosnjakovic, Vergasungsdiagramme in Zeitschr. Ver. Deutsch. ing., 95:96. February, 1953. F. Bosnjakovic, Einheitliche Berechnung von Rekuperatoren. Ibid., 95:205. March, 1953.

Member, Editorial Committee, Proceedings of the Third Midwestern Conference on Fluid Mechanics. Minneapolis: University of Minnesota. 1953.

NEWMAN A. HALL, Ph.D., Professor

Research on Pump Characteristics of Various Temperatures (with E. E. Melby and T. E. Murphy). University of Minnesota Department of Mechanical Engineering Reports on Contract DA-44-009-Eng-1042 with Department of the Army, Fort Belvoir, Virginia.

Quarterly Report I (1 April to 31 July 1952). August 4, 1952. 39 pages.

Quarterly Report II (1 August to 30 November 1952). December 1, 1952. 37 pages.

- Report on Lubricating Oil Pump Performance (with E. E. Melby and T. E. Murphy). University of Minnesota Department of Mechanical Engineering Research Report, Part I, on Contract DA-44-009-Eng-1042 with Department of the Army, Fort Belvoir, Virginia. April, 1953. 121 pages.
- Report on Coolant Pump Performance (with E. E. Melby and T. E. Murphy). University of Minnesota Department of Mechanical Engineering Research Report, Part II, on Contract DA-44-009-Eng-1042 with Department of the Army, Fort Belvoir, Virginia. June, 1953. 83 pages.
- "Orifice and flow coefficients in pulsating flow." American Society of Mechanical Engineers Transactions, 74:925-29. 1952.
- "Engineering science." Science, Vol. 117, No. 3033, p. 3. February, 1953.

Abstracts of

- Carlo Ferrari, Velocity and Temperature Distribution Through the Laminar Boundary Layer in Supersonic Flow in Mathematical Reviews, 13:882. 1952.
- P. L. Kapica, Heat Conduction and Diffusion in a Fluid Medium with a Periodic Flow. Ibid., 14: No. 1, p. 107. 1953.
- I. G. Saposnikov, On the Theory of Weak Convection. Ibid., No. 2, p. 217.
- E. Drahlin, On Heat Convection in a Spherical Cavity. Ibid.
- E. M. Zuhovickii, On Free Steady Convection in an Infinite Horizontal Tube. Ibid.
- J. A. W. van der Does de Bye and J. Schenk, Heat Transfer in Laminar Flow Between Parallel Plates. Ibid., No. 3, p. 332.
- P. M. Stocker, The Transients Arising from the Addition of Heat to a Gas Flow. Ibid.
- J. D. Cole and T. Y. Wo, Heat Conduction in a Compressible Fluid. Ibid., No. 5, p. 512.
- C. S. Yih, Laminar Free Convection Due to a Line Source of Heat. Ibid.
 P. S. Lincikin, On the Cooling of the Surface Layer of the Sea in Applied Mechanics Review, Vol. 5, No. 7, p. 327, 1952.
- L. I. Kudryashev, On the Connection of Generalized Integral Relations with the Hydrodynamic Theory of Heat Transfer. Ibid.
- A. K. Andreevskii, Modeling of Heat Transfer Phenomena in a Body with Internal Heat Sources. Ibid., Vol. 6, No. 3, p. 159, 1953.
- P. L. Kapitsa, IIcat Conduction and Diffusion in a Fluid Medium with a Periodic Flow. Ibid., No. 5, p. 255.
- D. M. Mints, On the Hydrodynamic Resistance of a Granular Layer Suspended in a Flow, Ibid., No. 6, p. 309.

EMORY N. KEMLER, Ph.D., Professor

- Review of Literature (with E. A. Baillif, R. J. Howe, M. H. LaJoy, and A. J. Madden).

 University of Minnesota Department of Mechanical Engineering Research Report No. 1 on
 Contract NOY-27489 with U. S. Naval Civil and Evaluation Center, Port Hueneme, California. August, 1952. 63 pages.
- Review of Patent Literature (with E. A. Baillif, R. J. Howe, M. H. LaJoy, and A. J. Madden).

 University of Minnesota Department of Mechanical Engineering Research Report No. 2
 on Contract NOY-27489 with U. S. Naval Civil and Evaluation Center, Port Hueneme,
 California. September, 1952. 262 pages.
- Theoretical Possibilities for Water Recovery Systems (with E. A. Baillif, R. J. Howe, M. H. LaJoy, and A. J. Madden). University of Minnesota Department of Mechanical Engineering Research Report No. 3 on Contract NOY-27489 with U. S. Naval Civil and Evaluation Center, Port Hueneme, California. April, 1953. 93 pages.
- Manufacturers and Users Information on Water Recovery Systems (with E. A. Baillif, R. J. Howe, M. H. LaJoy, and A. J. Madden). University of Minnesota Department of Mechanical Engineering Research Report No. 4 on Contract NOY-27489 with U. S. Naval Civil and Evaluation Center, Port Hueneme, California. May, 1953. 55 pages.
- Summary and Recommendations (with E. A. Baillif, R. J. Howe, M. H. LeJoy, and A. J. Madden). University of Minnesota Department of Mechanical Engineering Research Report No. 5 on Contract NOY-27489 with U. S. Naval Civil and Evaluation Center, Port Hueneme, California. May, 1953. 12 pages.
- "How to meet the engineering shortage." Oil and Gas Journal, Vol. 51, No. 37, pp. 102-105. January, 1953.

JAMES J. RYAN, M.S.M.E., M.E., Professor

"Crash-worthiness of aircraft and crash injury prevention" (with E. J. Baldes). Journal of Aviation Medicine, 23:433-38. October, 1952.

"Force measurement on balloon plastics and parachute cloth by means of strain gages."

Instrument Society of America Proceedings, 7:47-49. 1952.

DANA YOUNG, Ph.D., Professor

"Theory of dynamic vibration absorbers for beams." Pages 91-95 in *Proceedings of the First U. S. National Congress of Applied Mechanics* (published every four years). New York: American Society of Mechanical Engineers. 1953.

MILLARD H. LAJOY, M.S.M.E., LL.B., Associate Professor

- Review of Literature (with R. J. Howe, E. A. Baillif, E. N. Kemler, and A. J. Madden).

 University of Minnesota Department of Mechanical Engineering Research Report No. 1
 on Contract NOY-27489 with U. S. Naval Civil and Evaluation Center, Port Hueneme,
 California. August, 1952. 63 pages.
- Review of Patent Literature (with E. A. Baillif, R. J. Howe, E. N. Kemler, and A. J. Madden). University of Minnesota Department of Mechanical Engineering Research Report No. 2 on Contract NOY-27489 with U. S. Naval Civil and Evaluation Center, Port Hueneme, California. September, 1952, 262 pages.
- Theoretical Possibilities for Water Recovery Systems (with E. A. Baillif, R. J. Howe, E. N. Kemler, and A. J. Madden). University of Minnesota Department of Mechanical Engineering Research Report No. 3 on Contract NOY-27489 with U. S. Naval Civil and Evaluation Center, Port Hueneme, California. April, 1953. 93 pages.
- Manufacturers and Users Information on Water Recovery Systems (with E. A. Baillif, R. J. Howe, E. N. Kemler, and A. J. Madden). University of Minnesota Department of Mechanical Engineering Research Report No. 4 on Contract NOY-27489 with U. S. Naval Civil and Evaluation Center, Port Hueneme, California. May, 1953. 55 pages.
- Summary and Recommendations (with E. A. Baillif, R. J. Howe, E. N. Kemler, and A. J. Madden). University of Minnesota Department of Mechanical Engineering Research Report No. 5 on Contract NOY-27489 with U. S. Naval Civil and Evaluation Center, Port Hueneme, California, May, 1953. 12 pages.

THOMAS E. MURPHY, M.S. (Aero. Eng.), Associate Professor

Research on Pump Characteristics of Various Temperatures (with E. E. Melby and N. A. Hall). University of Minnesota Department of Mechanical Engineering Reports on Contract DA-44-009-Eng-1042 with Department of the Army, Fort Belvoir, Virginia.

Quarterly Report I (1 April to 31 July 1952), August 4, 1952. 39 pages.

Quarterly Report II (1 August to 30 November 1952). December 1, 1952. 37 pages.

- Report on Lubricating Oil Pump Performance (with E. E. Melby and N. A. Hall). University of Minnesota Department of Mechanical Engineering Research Report, Part I, on Contract DA-44-009-Eng-1042 with Department of the Army, Fort Belvoir, Virginia. April, 1953. 121 pages.
- Report on Coolant Pump Performance (with E. E. Melby and N. A. Hall). University of Minnesota Department of Mechanical Engineering Research Report, Part II, on Contract DA-44-009-Eng-1042 with Department of the Army, Fort Belvoir, Virginia. June, 1953. 83 pages.

EARL E. MELBY, B.M.E., Research Associate

Research on Pump Characteristics of Various Temperatures (with T. E. Murphy and N. A. Hall). University of Minnesota Department of Mechanical Engineering Reports on Contract DA-44-009-Eng-1042 with Department of the Army, Fort Belvoir, Virgina.

Quarterly Report I (1 April to 31 July 1952). August 4, 1952. 39 pages.

Quarterly Report II (1 August to 30 November 1952). December 1, 1952. 37 pages.

- Report on Lubricating Oil Pump Performance (with N. A. Hall and T. E. Murphy). University of Minnesota Department of Mechanical Engineering Research Report, Part I on Contract DA-44-009-Eng-1042 with Department of the Army, Fort Belvoir, Virginia. April, 1953. 121 pages.
- Report on Coolant Pump Performance (with N. A. Hall and T. E. Murphy). University of Minnesota Department of Mechanical Engineering Research Report, Part II on Contract DA-44-009-Eng-1042 with Department of the Army, Fort Belvoir, Virginia. June, 1953. 83 pages.

HOMER T. MANTIS, Ph.D., Assistant Professor

Progress Report—Friction on Snow and Ice (with C. D. Fitz, R. C. Jordan, R. Mokadam, and R. Simon). University of Minnesota Department of Mechanical Engineering Report on Contract DA-11-190-ENG-1 with Corps of Engineers, Snow, Ice and Permafrost Research Establishment, Wilmette, Illinois. July, 1952. 180 mimeographed pages.

GAYLE W. McElrath, M.S., Assistant Professor

"Some theory of acceptance sampling." Pages 45.63 in Proceedings of the Seventh Annual Michigan Forum of the American Society of Quality Control. Ann Arbor: University of Michigan Press. September, 1952.

Reviews of

- H. M. Walker, Mathematics Essential for Elementary Statistics in Industrial Quality Control, Vol. 9, No. 1, p. 44. 1952.
- J. M. Cameron, Tables for Constructing and for Computing the Operating Characteristics of Single Sampling Plans in Mathematical Tables and Other Aids to Computation, Vol. 7, No. 41, pp. 24-25. January, 1953.

E. Allen Baillif, B.S. (Acro. Eng.), M.S.M.E., Instructor

- Review of Literature (with R. J. Howe, E. N. Kemler, M. H. LaJoy and A. J. Madden).

 University of Minnesota Department of Mechanical Engineering Research Report No. 1
 on Contract NOY-27489 with U. S. Naval Civil and Evaluation Center, Port Hueneme,
 California. August, 1952. 63 pages.
- Review of Patent Literature (with R. J. Howe, E. N. Kemler, M. H. LaJoy and A. J. Madden).
 University of Minnesota Department of Mechanical Engineering Research Report No. 2 on Contract NOY-27489 with U. S. Naval Civil and Evaluation Center, Port Hueneme, California. September, 1952. 262 pages.
- Theoretical Possibilities for Water Recovery Systems (with R. J. Howe, E. N. Kemler, M. H. LaJoy and A. J. Madden). University of Minnesota Department of Mechanical Engineering Research Report No. 3 on Contract NOY-27489 with U. S. Naval Civil and Evaluation Center, Port Hueneme, California. April, 1953. 93 pages.
- Manufacturers and Users Information on Water Recovery Systems (with R. J. Howe, E. N. Kemler, M. H. LaJoy and A. J. Madden). University of Minnesota Department of Mechanical Engineering Research Report No. 4 on Contract NOY-27489 with U. S. Naval Civil and Evaluation Center, Port Hueneme, California. May, 1953. 55 pages.
- Summary and Recommendations (with R. J. Howe, E. N. Kemler, M. H. LaJoy and A. J. Madden). University of Minnesota Department of Mechanical Engineering Research Report No. 5 on Contract NOY-27489 with U. S. Naval Civil and Evaluation Center, Port Hueneme, California. May, 1953. 12 pages.

COLEMAN D. FITZ, M.S.M.E., Instructor

Progress Report—Friction on Snow and Ice (with R. C. Jordan, H. T. Mantis, R. G. Mokadam, and R. Simon). University of Minnesota Department of Mechanical Engineering Report on Contract DA-11-190-ENG-1 with Corps of Engineers, Snow, Ice and Permafrost Research Establishment, Wilmette, Illinois. July, 1952. 180 mimeographed pages.

RICHARD J. HOWE, M.S.M.E., Instructor

- Review of Literature (with E. A. Baillif, E. N. Kemler, M. H. LaJoy, and A. J. Madden).

 University of Minnesota Department of Mechanical Engineering Research Report No. 1
 on Contract NOY-27489 with U. S. Naval Civil and Evaluation Center, Port Hueneme,
 California. August, 1952. 63 pages.
- Review of Patent Literature (with E. A. Baillif, E. N. Kembler, M. H. LaJoy, and A. J. Madden). University of Minnesota Department of Mechanical Engineering Research Report No. 2 on Contract NOY-27489 with U. S. Naval Civil and Evaluation Center, Port Hueneme, California. September, 1952. 262 pages.
- Theoretical Possibilities for Water Recovery Systems (with E. A. Baillif, E. N. Kemler, M. H. LaJoy, and A. J. Madden). University of Minnesota Department of Mechanical Engineering Research Report No. 3 on Contract NOY-27489 with U. S. Naval Civil and Evaluation Center, Port Hueneme, California. April, 1953. 93 pages.
- Manufacturers and Users Information on Water Recovery Systems (with E. A. Baillif, E. N. Kemler, M. H. LaJoy, and A. J. Madden). University of Minnesota Department of Mechanical Engineering Research Report No. 4 on Contract NOY-27489 with U. S. Naval Civil and Evaluation Center, Port Hueneme, California. May, 1953. 55 pages.

Summary and Recommendations (with E. A. Baillif, E. N. Kemler, M. H. LaJoy, and A. J. Madden). University of Minnesota Department of Mechanical Engineering Research Report No. 5 on Contract NOY-27489 with U. S. Naval Civil and Evaluation Center, Port Hueneme, California. May, 1953. 12 pages.

WARREN E. IBELE, M.S.M.E., Instructor Reviews of

- R. H. Norris and W. A. Spoffard, High Performance Fins for Heat Transfer in American Society of Mechanical Engineering Transactions, 64:489-96. 1952.
- R. II. Wilhelm, W. C. Johnson, and F. S. Action, Conduction, Convection and Heat Release in Catalytic Convertors in Industrial and Engineering Chemistry, 35:562-75, 1953.

GORDON R. WHITNAH, M.S.M.E., Instructor

Research Related to Migration of Water Vapor Through Insulated Panels (with A. B. Algren, R. C. Jordan, and C. E. Lund). University of Minnesota Department of Mechanical Engineering Progress Reports on Contract DA-44-109-qm-1144 with Quartermaster Research and Development Laboratories, Department of the Army, Jeffersonville, Indiana.

Progress Report No. 1. October, 1952. 34 pages.

Progress Report No. 2. January, 1953. 27 pages.

Progress Report No. 3. April, 1953. 15 pages.

RAGHUNATH G. MOKADAM, M.S.M.E., Research Assistant

Progress Report - Friction on Snow and Ice (with C. D. Fitz, R. C. Jordan, H. T. Mantis, and R. Simon). University of Minnesota Department of Mechanical Engineering Report on Contract DA-11-190-ENG-1 with Corps of Engineers, Snow, Ice and Permafrost Research Establishment, Wilmette, Illinois. July, 1952. 180 mimeographed pages.

KENNETH T. WHITBY, B.S. Naval Tech., B.M.E., Non-Service Fellow

"Recovery of low-ash stocks with an air-jet separator." Milling Production, Vol. 17, No. 8, p. 4, 1952.

Engineering Experiment Station

Benjamin J. Lazan, Ph.D., Professor and Director

Properties of Temperature-Resistant Materials under Tensile and Compressive Fatigue Stress (with E. Westberg). Wright Air Development Center Technical Report 52-227. November, 1952. 40 pages.

Metallographic Studies on N-155 Specimens Exposed to Static and Dynamic Stress at Elevated Temperatures (with F. R. Morral). Wright Air Development Center Technical Report 52-253. December, 1952. 39 pages.

Fatigue Properties of Aluminum Alloys at Various Direct Stress Ratios.

Part I—Rolled Alloys (with A. A. Blatherwick). Wright Air Development Center Technical Report 52-307 resulting from University of Minnesota Research Contract AF33(038)-20840. December, 1952, 78 pages.

Part II -Extruded Alloys (with A. A. Blatherwick). 29 pages.

Damping, Elasticity, and Fatigue Properties of Unnotched and Notched N-155 at Room and Elevated Temperatures (with L. J. Demer). Wright Air Development Center Technical Report 53-70 resulting from University of Minnesota Research Contract AF33(038)-18903. February, 1953. 70 pages.

Investigation of Axial Loading Fatigue Properties of Heat-Resistant Alloy N-155 (with F. W. DeMoney). Wright Air Development Center Technical Report 52-226, Part 1, resulting from University of Minnesota Research Contract AF33(038)-18903. March, 1953. 18 pages.

"Dynamic testing of materials and structures with a new resonance vibration exciter and controller" (with J. Brown, A. C. Gannett, P. G. Kirmser, and J. H. Klumpp). Proceedings of the American Society for Testing Materials, 52:858-75. 1952.

"Effect of damping constants and stress distribution on the resonance response of members."

**Journal of Applied Mechanics, 20:201-209, 1953.

- CLARENCE E. LUND, M.S.M.E., Professor and Assistant Director
- Pressurization of Buildings (with R. E. Paul). Reports resulting from University of Minnesota Research Contract NOy 73218 with U. S. Naval Civil Engineering Research and Evaluation Laboratory, Port Hueneme, California.
 - Supplementary Report No. 2. July, 1952. 21 mimeographed pages.
 - Supplementary Report No. 3. August, 1952. 21 mimeographed pages.
 - Final Report. November, 1952. 76 mimeographed pages.
- Study of Moisture Migration through Concrete Floors (with R. E. Paul). Quarterly Report No. 1 resulting from University of Minnesota Research Contract NOy 73218. October, 1952. 40 mimeographed pages.
- Moisture Control in Built-Up Roof Construction (with R. E. Paul). Insulation Board Institute Circular No. 7. Minneapolis: University of Minnesota. September, 1952. 27 mimeographed pages.
- Strength of Fiberboard Roof Insulation Applied to Steel Decks (with R. E. Paul). Insulation Board Institute Research Report. Minneapolis: University of Minnesota. September, 1952. 18 mimeographed pages.
- Field Study of the Performance of an Insulated Built-Up Roof Located in Minneapolis. Insulation Board Institute Research Report. Minneapolis: University of Minnesota. September, 1952. 23 mimeographed pages.
- Air Infiltration Through Different Types of Weatherstripped Double Hung Windows (with R. E. Paul). Weatherstrip Research Institute Research Report. Minneapolis: University of Minnesota Report No. 1. September, 1952, 11 mimeographed pages; Report No. 1A, October, 1952. 19 mimeographed pages.
- Layman's Manual for Self-Help Housing Construction in Alaska (with M. L. Erickson). University of Minnesota Research Contract H-77 with U. S. Housing and Home Finance Agency. October, 1952. 293 mimeographed pages + 285 illustrations.
- Research Related to Migration of Water Vapor Through Insulated Panels (with A. B. Algren, R. C. Jordan, and G. R. Whitnah). University of Minnesota Department of Mechanical Engineering Progress Reports on Contract DA-44-109-qm-1144 with Quartermaster Research and Development Laboratories, Department of the Army, Jeffersonville, Indiana.
 - Progress Report No. 1. October, 1952. 34 pages. Progress Report No. 2. January, 1953. 27 pages.
 - Progress Report No. 3. April, 1953. 15 pages.
- "Condensation control in buildings." Heating and Ventilating, Vol. 49, No. 8, pp. 80-84. 1952.
 "Technological aspects of condensation control in building structures." Pages 13-26 in Proceedings
 Condensation Control in Buildings, February 26-27, 1952. Washington, D.C.: Building Research Advisory Board, National Research Council. September, 1952.

FRANZ H. VITOVEC, Dr. Techn., Assistant Professor

- "On the athermic plasticity, and the notch effect in the space lattice (Ueber die athermische plastizitat und die kerbwirkung in raumgitter)." Oesterreichisches Ing. Archiv., 6:185-87. 1952.
- "The yieldpoint of mild steel as a problem of stability (Die ausgepraegte streckgrenze als stabilitaetsproblem)." *Ibid.*, 7:4-11, 1953.

Louis J. Demer, B.S.M.E., M.S. (Met.), Research Fellow

Damping, Elasticity, and Fatigue Properties of Unnotched and Notched N-155 at Room and Elevated Temperatures (with B. J. Lazan). Wright Air Development Center Technical Report 53-70 resulting from University of Minnesota Research Contract AF33(038)-18903. February, 1953. 70 pages.

Fred W. DeMoney, B.S., M.S. (Met.), Research Fellow

- Investigation of Axial Loading Fatigue Properties of Heat-Resistant Alloy N-155 (with B. J. Lazan). Wright Air Development Center Technical Report 52-226, Part I, resulting from University of Minnesota Research Contract AF33(038)-18903. March, 1953. 18 pages.
- An Exploratory Investigation of the Effect of Temperature, Time, and Stress on Fracture Characteristics and Metallographic Structure of N-155 and Hardness of N-155 and S-816. Wright Air Development Center Technical Report 52-226, Part II, resulting from University of Minnesota Research Contract AF33(038)-18903. February, 1953. 36 pages.

MERLE L. ERICKSON, M.S.M.E., Research Fellow

Layman's Manual for Self-Help Housing Construction in Alaska (with C. E. Lund). University of Minnesota Research Contract H-77 with U. S. Housing and Home Finance Agency. October, 1952. 293 mimeographed pages + 285 illustrations.

ROBERT E. PAUL, B.M.E., Research Fellow

Pressurization of Buildings (with C. E. Lund). Reports resulting from University of Minnesota Research Contract NOy 73218 with U. S. Naval Civil Engineering Research and Evaluation Laboratory, Port Hueneme, California.

Supplementary Report No. 2. July, 1952. 21 mimeographed pages.

Supplementary Report No. 3, August, 1952. 21 mimeographed pages.

Final Report. November, 1952. 76 mimeographed pages.

- Study of Moisture Migration Through Concrete Floors (with C. E. Lund). Quarterly Report No. 1 resulting from University of Minnesota Research Contract NOy 73218. October, 1952. 40 mimeographed pages.
- Moisture Control in Built-Up Roof Construction (with C. E. Lund). Insulation Board Institute Circular No. 7. Minneapolis: University of Minnesota. September, 1952, 27 mimeographed pages.
- Strength of Fiberboard Roof Insulation Applied to Steel Decks (with C. E. Lund). Insulation Board Institute Research Report. Minneapolis: University of Minnesota. September, 1952. 18 mimeographed pages.
- Air Infiltration Through Different Types of Weatherstripped Double Hung Windows (with C. E. Lund). Weatherstrip Research Institute Research Report. Minneapolis: University of Minnesota Report No. 1, September, 1952. 11 mimeographed pages; Report No. 1A, October, 1952. 19 mimeographed pages.

JAMES H. KLUMPP, M.S., Research Assistant

"Dynamic testing of materials and structures with a new resonance vibration exciter and controller" (with B. J. Lazan, J. Brown, A. C. Gannett, and P. G. Kirmser). Proceedings of the American Society for Testing Materials, 52:858-75. 1952.

SCHOOL OF ARCHITECTURE

Roy C. Jones, M.Arch., Professor and Head

"Annual report for the National Architectural Accrediting Board." American Institute of Architects Journal, 18:152-59. October, 1952.

ROBERT G. CERNY, M.Arch., Professor

- "Rural Electrification Association power plant at Elk River, Minnesota" (with R. N. Thorshov).

 Progressive Architecture, 33:72-75. August, 1952.
- "Portland Avenue Christian Church, Minneapolis" (with R. N. Thorshov). Ibid., 34:65. January, 1953.
- "Office building-warehouse, Minneapolis" (with R. N. Thorshov). Ibid., pp. 101-103. February, 1953.
- "Minneapolis, First Unitarian Church" (with R. N. Thorshov). Architectural Forum, 97: 106-107. December, 1952.
- "Prototype for a chain of service stations" (with R. N. Thorshov). Architectural Record, 113: 165. May, 1953.

Winston A. Close, M.Arch., Professor and Advisory Architect

"Duluth Campus plan." Architectural Record, 113:123-27. June, 1953.

Review of Lewis Mumford, Roots of Contemporary American Architecture in Minneapolis Sunday Tribune, January 25, 1953.

Hartle house. Deutsch house. Driscoll house. King house. Minneapolis Sunday Tribune, September 21, 1952.

HARLAN E. McClure, M.Arch., Professor

- "Training architects in Britain today." Progressive Architecture, 34:149-62. May, 1953.
- "Architectural education in the United States." London: Architectural Association. November, 1952, 14 mimeographed pages.

Considerable number of paintings, sketches, and photographs in England and on the continent during sabbatical year 1952-53.

WALTER K. VIVRETT, M.Arch., Associate Professor

Preliminary design for elementary school, Twin Valley, Minnesota. 1952.

Preliminary design for an elementary and secondary grade school, Long Prairie, Minnesota. 1953. Five architectural renderings. 1952-53.

ROBERT L. BLISS, B.Arch., Assistant Professor

Second prize, flat roof, Class II, Central and Northwestern Region, Carrier Corporation Competition. Announced in "Air-conditioned house prize winners." House and Home, 3:154. June, 1953.

CARL O. GRAFFUNDER, M.Arch., Lecturer

- "Graffunder designs his own home." Everyday Art Quarterly, No. 22, pp. 13-15. 1952.
- "More house for your money." Better Homes and Gardens, 31:66, 268-70. May, 1953.

GEORGE E. RAFFERTY, M.Arch., Lecturer

First prize, pitched roof, Class II, Central and Northwestern Region, Carrier Corporation Competition. Announced in "Air-conditioned house prize winners." House and Home, 3:154. June, 1953.

SCHOOL OF CHEMISTRY

CHEMISTRY

Analytical Chemistry

IZAAK M. KOLTHOFF, Ph.D., Professor and Chief

- Polarography (with J. J. Lingane). (Second edition.) New York: Interscience Publishers, Inc. 1952. Two volumes, 990 pages.
- Textbook of Quantitative Inorganic Analysis (with E. B. Sandell). (Third edition.) New York: Macmillan. 1952. 759 pages.
- "Aging of crystalline precipitates." Analyst, 77:1000-11. 1952.
- "Reduction of carbon disulfide at dropping mercury electrode" (with P. E. Toren and R. W. Ramette). Analytical Chemistry, 24:1037. 1952.
- "Exaltation of the limiting current of oxygen by hydrogen peroxide at the rotated gold electrode as a means for amperometric determination of traces of oxygen" (with J. Jordan). *Ibid.*, pp. 1071-72, 1952.
- "Determination of osmium" (with E. P. Parry). Ibid., 25:188. 1953.
- "Volumetric determination of persulfate in the presence of organic substances" (with E. M. Carr). *Ibid.*, pp. 298-301.
- "The chemistry of persulfate. III. The reaction of persulfate with mercaptans solubilized in sodium laurate solution in the presence of unsaturated compounds" (with I. K. Miller). Journal of the American Chemical Society, 74:4419-22. 1952.
- "Polarography of glutathione" (with W. Stricks). Ibid., pp. 4646-53.
- "Oxygen induced electroreduction of hydrogen peroxide and reduction of oxygen at the rotated gold wire electrode" (with J. Jordan). *Ibid.*, pp. 4801-4805.
- "Polarography of nitroprusside. Equilibrium constant of the reaction between nitroprusside and hydroxyl ions" (with P. E. Toren). *Ibid.*, 75:1197-1201, 1953.
- "Mechanism of initiation of emulsion polymerization by persulfate" (with E. J. Meehan and E. M. Carr). *Ibid.*, pp. 1439-41.
- "Voltammetry of iodine and iodide at rotated platinum wire electrodes" (with J. Jordan). *Ibid.*, pp. 1571-75.
- "Acid strength of iodine monochloride, antimony trichloride and picric acid with reference to the bases pyridine and aniline in nitrobenzene" (with D. Stocesova and T. S. Lee). *Ibid.*, p. 1834.
- "Sorption of GR-S type of polymer on carbon black. III. Sorption by commercial blacks" (with R. G. Gutmacher). Journal of Physical Chemistry, 56:740-45. 1952.

"Redox Recipes"

- "VI. Redox systems containing potassium chromate as oxidizing constituent" (with E. J. Meehan). Journal of Polymer Science, 9:327-42. 1952.
- "VII. A recipe with ferric versenate, hydrazine and hydroperoxide as activating system (veroxazine recipe)" (with E. J. Meehan). *Ibid.*, pp. 343-67.
- "VIII. A recipe with ferric versenate, sodium sulfide and hydroperoxide as activating system (veroxasulfide recipe)" (with E. J. Meehan). *Ibid.*, pp. 433-52.

Reviews of

- O. H. Müller, The Polarographic Method of Analysis in Archives of Biochemistry and Bio-physics, 41:242. November, 1952.
- Proceedings of the First International Polarographic Congress in Prague, 1951, Volume 3 in Analytical Chemistry, 25:298. 1953.
- W. M. Latimer, Oxidation Potentials in Chemical and Engineering News, 31:1683. April, 1953.

EDWARD J. MEEHAN, Ph.D., Professor

- Mechanism of initiation of emulsion polymerization by persulfate" (with I. M. Kolthoff and E. M. Carr). Journal of the American Chemical Society, 75:1439-41, 1953. "Redox Recipes"
 - "VI. Redox systems containing potassium chromate as oxidizing constituent" (with I. M. Kolthoff). Journal of Polymer Science, 9:327-42, 1952.
 - "VII. A recipe with ferric versenate, hydrazine and hydroperoxide as activating system (veroxazine recipe)" (with I. M. Kolthoff). *Ibid.*, pp. 343-67.
 - "VIII. A recipe with ferric versenate, sodium sulfide and hydroperoxide as activating system (veroxasulfide recipe)" (with I. M. Kolthoff). *Ibid.*, pp. 433-52.

ERNEST B. SANDELL, Ph.D., Professor

- Textbook of Quantitative Inorganic Analysis (with I. M. Kolthoff). (Third edition.) New York: Macmillan. 1952. 759 pages.
- "The beryllium content of igneous rocks." Geochimica Cosmochimica Acta, 2:211-16. 1952.
- "Photometric determination of traces of molybdenum after sulfide precipitation" (with R. B. Henrickson). Analytica Chimica Acta, 7:57-62, 1952.
- "Separation of aluminum from iron with thioglycolic acid" (with R. A. Hummel). *Ibid.*, 7:308-12. 1952.
- "Copper (II)-dithizone equilibria in water-carbon tetrachloride" (with R. W. Geiger). Ibid., 8: 197-208. 1953.

WALTER STRICKS, Ph.D., Research Associate

"Polarography of glutathione" (with I. M. Kolthoff). Journal of the American Chemical Society, 74:4646-53, 1952.

Joseph Jordan, Ph.D., Instructor

- "Exaltation of the limiting current of oxygen by hydrogen peroxide at the rotated gold electrode as a means for amperometric determination of traces of oxygen" (with I. M. Kolthoff). Analytical Chemistry, 24:1071-72, 1952.
- "Oxygen induced electroreduction of hydrogen peroxide and reduction of oxygen at the rotated gold wire electrode" (with I. M. Kolthoff). *Journal of the American Chemical Society*, 74: 4801-4805, 1952.
- "Voltammetry of iodine and iodide at rotated platinum wire electrodes" (with I. M. Kolthoff). Ibid., 75:1571-75, 1953.

RICHARD W. RAMETTE, B.A., Fellow

"Reduction of carbon disulfide at dropping mercury electrode" (with I. M. Kolthoff and P. E. Toren). Analytical Chemistry, 24:1037, 1952.

Paul E. Toren, M.S., Research Fellow

- "Reduction of carbon disulfide at dropping mercury electrode" (with I. M. Kolthoff and R. W. Ramette). Analytical Chemistry, 24:1037. 1952.
- "Polarography of nitroprusside. Equilibrium constant of the reaction between nitroprusside and hydroxyl ions" (with I. M. Kolthoff). Journal of the American Chemical Society, 75:1197-1201. 1953.

Inorganic Chemistry

PAUL R. O'CONNOR, Ph.D., Associate Professor and Acting Chief

"The Claisen rearrangement of phenyl allyl ethers, labelled with carbon-14" (with J. P. Ryan).

Journal of the American Chemical Society, 74:5866, 1952.

HERVEY H. BARBER, Ph.D., Professor

Semimicro Qualitative Analysis. Thioacetamide-Pressure Bulb Method (with T. I. Taylor). New York: Harper and Brothers. 1953. 404 pages.

M. CANNON SNEED, Ph.D., Professor

Comprehensive Inorganic Chemistry, Volume I (with R. C. Brasted and J. L. Maynard). New York: D. Van Nostrand. 1953. 230 pages.

ROBERT C. BRASTED, Ph.D., Associate Professor

Comprehensive Inorganic Chemistry, Volume I (with J. L. Maynard and M. C. Sneed). New York: D. Van Nostrand. 1953, 230 pages.

"Reaction of sodium nitrite and sulfamic acid. Indirect gravimetric determination of nitrites."

Analytical Chemistry, 24:1111. 1952.

"Amperometric titration of sulfamates." Ibid., 25:221. 1953.

"Sulfuric acid concentration as variable in permanganate-oxalate titration." Ibid., p. 673.

Otto H. Johnson, Ph.D., Associate Professor

"Propylchlorogermanes and propylgermanes" (with L. V. Jones). Journal of Organic Chemistry, 17:1172-76, 1952.

"Germanium and its inorganic compounds." Chemical Reviews, 51:431-69. 1952.

"Analytical methods for germanium" (with II. H. Krause). Analytical Chemistry, 25:134-38, 1953.

"Tetraalkoxygermanes" (with II. E. Fritz). Journal of the American Chemical Society, 75: 718-21. 1953.

J. LEWIS MAYNARD, Ph.D., Associate Professor

Comprehensive Inorganic Chemistry, Volume I (with M. C. Sneed and R. C. Brasted), New York; D. Van Nostrand. 1953. 230 pages.

Z. ZIMMERMAN HUGUS, JR., Ph.D., Assistant Professor

"The participation of f orbitals in bonding in uranium and the transuranium elements" (with R. E. Connick). Journal of the American Chemical Society, 74:6012, 1952.

"Hydrolysis and halide complexing of indium (III)" (with L. G. Hepler). Ibid., p. 6115.

ALFRED R. PRAY, Ph.D., Assistant Professor

"Conductance of aluminum chloride in sulfuryl chloride on adding benzophenone or sulfur monochloride" (with C. R. McCrosky). Journal of the American Chemical Society, 74:4719. 1952.

HORATIO H. KRAUSE, B.S., Teaching Assistant

"Anaytical methods for germanium" (with O. II. Johnson). Analytical Chemistry, 25:134-38.

HENRY E. FRITZ, B.S., Fellow

"Tetraalkoxygermanes" (with O. H. Johnson). Journal of the American Chemical Society, 75: 718-21, 1953.

Organic Chemistry

LEE I. SMITH, Ph.D., Professor and Chief

"Cyclopropanes"

"X. The reaction between nitrocyclopropyl ketones and sodio malonic ester" (with R. E. Kelly). Journal of the American Chemical Society, 74:3300-3305, 1952.

- "XI. Pyrones from nitrocyclopropyl ketones" (with R. E. Kelly). Ibid., pp. 3305-3309.
- "XII. The action of bases upon tertiary nitrocyclopropyl ketones" (with J. S. Showell).

 **Journal of Organic Chemistry, 17:827-35. 1952.
- "XIII. 1-acetyl-2-nitro-3-phenylcyclopropane and its reaction with sodium methoxide" (with J. S. Showell). *Ibid.*, pp. 836-38.
- "XIV. Incidental experiments, and an attempt to synthesize bicyclopropyl" (with J. S. Showell). *Ibid.*, pp. 839-44.

C. Frederick Koelsch, Ph.D., Professor

"Some thermochromic spirans" (with W. R. Workman). Journal of the American Chemical Society, 74:6288-89, 1952.

"Synthesis of n-methylmorphinane" (with N. F. Albertson). Ibid., 75:2095-97. 1953.

WILLIAM E. PARHAM, Ph.D., Associate Professor

"Studies of the bicyclo (2,2,1)heptene-2 ring system. (II)" (with W. T. Hunter, R. Hanson, and T. Lahr). Journal of the American Chemical Society, 74:5646-48, 1952. "Heterocyclic Vinyl Ethers"

"II. Benzo-1,4-dithiadiene" (with T. M. Roder and W. R. Hasek). *Ibid.*, 75:1647-51. 1953. "III. The synthesis of 1,4-dithiadiene and 1,4-dithiadiene disulfone" (with H. Wynberg and F. L. Ramp). *Ibid.*, pp. 2065-69.

STUART W. FENTON, Ph.D., Assistant Professor

"Molecular rearrangement of cyclooctene oxide on solvolysis" (with A. C. Cope and C. S. Spencer). Journal of the American Chemical Society, 74:5884-88, 1952.

Review of R. H. F. Manske, The Alkaloids in Journal of the American Chemical Society, 75:251, 1953.

Jules V. Hallum, Ph.D., Instructor

"The synthesis of 9,10-dihydro-9,10-(11-aminoethano) anthracenes" (with S. Wawzonek). Journal of Organic Chemistry, 18:288, 1953.

HANS WYNBERG, Ph.D., Research Fellow

"Heterocyclic vinyl ethers. III. The synthesis of 1,4-dithiadiene and 1,4-dithiadiene disulfone" (with W. E. Parham and F. L. Ramp). Journal of the American Chemical Society, 75:2065-69. 1953.

WILLIAM R. HASEK, B.S., Fellow

"Heterocyclic vinyl ethers. II. Benzo-1,4-dithiadiene" (with W. E. Parham and T. M. Roder).

Journal of the American Chemical Society, 75:1647-51. 1953.

WESLEY R. WORKMAN, M.S., Fellow

"Some thermochromic spirans" (with C. F. Koelsch). Journal of the American Chemical Society, 74:6288-89, 1952.

Physical Chemistry

WILLIAM N. LIPSCOMB, Ph.D., Associate Professor and Acting Chief

"The crystal and molecular structure of diketene" (with L. Katz). Acta Crystallographica, 5:313-18, 1952.

"The structure of mercuric amido-bromide" (with L. Nijssen). Ibid., p. 604.

"On the crystal structures, residual entropy and dielectric anomaly of methanol" (with K. J. Tauer), Ibid., pp. 606-12.

"The crystal structure of phosgene, COCle" (with B. Zaslow and M. Atoji). *Ibid.*, pp. 833-37. "The x-ray scattering from a hindered rotator. II" (with M. Atoji and T. Watanabe). *Ibid.*, 6:62-64. 1953.

"The crystal and molecular structure of 1,2-dichloroethane at -140° C" (with T. B. Reed). Ibid., pp. 75-78.

"The crystallography of cycloheptatriene" (with T. B. Reed). Ibid., p. 108.

"Solutions of sodium in liquid ammonia." Journal of Chemical Physics, 21:52-54. 1953.

- "The molecular structure of B₄Cl₄" (with M. Atoji). Ibid., p. 172.
- "Reactions of mercury(I) compounds with ammonia." Analytical Chemistry, 25:737-39. 1953.

BRYCE L. CRAWFORD, JR., Ph.D., Professor

- "National Academy of Science Conference on quantum-mechanical methods in valence theory" (with R. G. Parr). Proceedings of National Academy of Science, 38:547-53, 1952.
- "Vibrational intensities. II. The use of isotopes." Journal of Chemical Physics, 20:977-81. 1952. "The potential function of ethylene" (with J. E. Lancaster and R. G. Inskeep). Ibid., 21:678-86.
- "The macroscopic equations of transport" (with J. G. Kirkwood). Journal of Physical Chemistry, 56:1048-51, 1952.
- Co-editor, Conference on Quantum-Mechanical Methods in Valence Theory. 1953.

ROBERT S. LIVINGSTON, Ph.D., Professor

- "Concerning the spectrum of chlorophyll in piperidine" (with J. W. Weigl). Journal of the American Chemical Society, 74:3452. 1952.
- "An attempt to detect hydrogen-deuterium exchange between chlorophyll and water" (with J. W. Weigl). *Ibid.*, pp. 4160-62.
- "Concerning hydrogen transfer in a reaction sensitized by chlorophyll" (with J. W. Weigl). *1bid.*, pp. 4211-12.
- "Activation of the fluorescence of chlorophyll solutions." Nature, 170:750-52. 1952.
- "The absolute quantum yields of the fluorescence of chlorophyll solutions" (with L. S. Forster).

 Journal of Chemical Physics, 20:1315-20. 1952.

STEPHAN PRAGER, Ph.D., Assistant Professor

"Diffusion of hydrocarbon vapors into polyisobutylene. II" (with E. Bagley and F. A. Long).

Journal of American Chemical Society, 75:1255, 1953.

WILLIS B. PERSON, Ph.D., Instructor

- "The structure of cyclooctatetraene" (with G. C. Pimentel and K. S. Pitzer). Journal of American Chemical Society, 74:3437, 1952.
- "Thermodynamic properties and the characteristic CH2 frequencies of n-paraffins" (with G. C. Pimentel). *Ibid.*, 75:532-34, 1953.
- "Infrared studies of mixed crystals: Naphthalene-ds in naphthalene" (with G. C. Pimentel).

 Journal of Chemical Physics, 20:1913. 1952.

Masao Atoji, M.S., Research Fellow

- "The crystal structure of phosgene, COCl2" (with W. N. Lipscomb and B. Zaslow). Acta Crystallographica, 5:833-37. 1952.
- "The x-ray scattering from a hindered rotator, II" (with W. N. Lipscomb and T. Watanabe). Ibid., 6:62-64, 1953.
- "The molecular structure of B₄Cl₄" (with W. N. Lipscomb). Journal of Chemical Physics, 21: 172, 1953.

Louis R. Lavine, M.S., Fellow

"Corrections to Grison's paper on the Harker-Kasper inequalities and to Zachariasen's paper on the 'Statistical Method.' " Acta Crystallographica, 5:846, 1952.

Lies Nijssen, M.S., Research Assistant

"The structure of mercuric amido-bromide" (with W. N. Lipscomb). Acta Crystallographica, 5:604, 1952.

CHEMICAL ENGINEERING

NEAL R. AMUNDSON, Ph.D., Professor and Head

- "Effect of intraparticle diffusion. Agitated nonflow adsorption systems" (with F. J. Edeskuty).

 Industrial and Engineering Chemistry, 44:1698-1703. 1952.
- "Effect of intraparticle diffusion. Analytical solution for simple systems in moving bed adsorbers" (with P. R. Kasten). Ibid., pp. 1704-11.

- "Solution of transient stagewise operations on an analog computer" (with A. Acrivos). Ibid., 45:467-71. 1953.
- "Mathematics of adsorption in beds. VI. The effect of longitudinal diffusion in ion exchange and chromatographic columns" (with L. Lapidus). *Journal of Physical Chemistry*, 56:984-88. 1952.
- Member, Editorial Committee, Proceedings of the Third Midwestern Conference on Fluid Mechanics. Minneapolis: University of Minneapola. 1953.

NORMAN H. CEAGLSKE, Ph.D., Professor

"Guest editorial." Instruments, 26:35. 1953.

EDGAR L. PIRET, Ph.D., Professor

- "Fundamental aspects of grinding." Chemical Engineering Progress, 49:56-63. February, 1953. Reviews of
 - M. W. Thring, The Science of Flames and Furnaces in Chemical Engineering Progress, 48:38. September, 1952.
 - W. Jost, Diffusion in Solids, Liquids, Gases. Ibid., p. 63. November, 1952.
 - George Dupont, Cours de Chimie Industrielle. Tome 1. Les Industries Minerales in Chemical and Engineering News, 30:4080. September, 1952.

HERBERT S. ISBIN, M.S., Sc.D., Assistant Professor

- "Applications of pile-kinetic equations" (with J. W. Gorman). Nucleonics, Vol. 10, No. 11, pp. 68-71. 1952.
- "Supplement to nuclear reactor catalog." Ibid., Vol. 11, No. 6, pp. 65-69. 1953.
- "Heat transfer-Atlantic City." Chemical Engineering Progress Symposium Series, No. 5, Vol. 49, pp. 88-89, 1953.

ARTHUR J. MADDEN, JR., Ph.D., Assistant Professor

- Review of Literature (with E. A. Baillif, R. J. Howe, E. N. Kemler, and M. H. LaJoy).

 University of Minnesota Department of Mechanical Engineering Research Report No. 1
 on Contract NOY-27489 with U. S. Naval Civil and Evaluation Center, Port Hueneme,
 California. August, 1952. 63 pages.
- Review of Patent Literature (with E. A. Baillif, R. J. Howe, E. N. Kemler, and M. H. LaJoy).
 University of Minnesota Department of Mechanical Engineering Research Report No. 2 on Contract NOV-27489 with U. S. Naval Civil and Evaluation Center, Port Hueneme, California, September, 1952, 262 pages.
- Theoretical Possibilities for Water Recovery Systems (with E. A. Baillif, R. J. Howe, E. N. Kemler, and M. H. LaJoy). University of Minnesota Department of Mechanical Engineering Research Report No. 3 on Contract NOY-27489 with U. S. Naval Civil and Evaluation Center, Port Hueneme, California. April, 1953. 93 pages.
- Manufacturers and Users Information on Water Recovery Systems (with E. A. Baillif, R. J. Howe, E. N. Kemler, and M. H. LaJoy). University of Minnesota Department of Mechanical Engineering Research Report No. 4 on Contract NOY-27489 with U. S. Naval Civil and Evaluation Center, Port Hueneme, California. May, 1953. 55 pages.
- Summary and Recommendations (with E. A. Baillif, R. J. Howe, E. N. Kemler, and M. H. LaJoy). University of Minnesota Department of Mechanical Engineering Research Report No. 5 on Contract NOY-27489 with U. S. Naval Civil and Evaluation Center, Port Hueneme, California, May, 1953, 12 pages.
- "Corrosion." Minnesota Engineer, Vol. 4, No. 1, pp. 9-10. 1953.

ANDREW ACRIVOS, MS. (Ch.E.), Teaching Assistant

"Solution of transient stagewise operations on an analog computer" (with N. R. Amundson).

Industrial and Engineering Chemistry, 45:467-71. 1953.

SCHOOL OF MINES AND METALLURGY

STRATHMORE R. B. COOKE, Ph.D., Professor

"The design and construction of a five-foot Wadsworth-type grating spectrograph" (with R. A. Wilson). Chapter 5, pages 88-121 in Amateur Telescope Making, Vol. III. New York: Scientific American Publishing Co. 1953.

- "The effect of certain starches on quartz and hematite suspensions" (with N. F. Schulz and E. W. Lindroos). Mining Engineering, 4:697-98. 1952.
- "The effect of heat treatment and certain additives on the strength of fired magnetite pellets" (with W. F. Stowasser, Jr.). *Ibid.*, pp. 1223-30.
- "Microstructures in iron ore pellets" (with T. E. Ban). Transactions of the American Institute of Mining and Metallurgical Engineers, 193:1053-58. 1952.
- "Winter skies." Minnesota Naturalist, Vol. 3, No. 2, pp. 20-25. December, 1952.

RALPH L. DOWDELL, Ph.D., Professor

"Treasurer's report." Transactions of the American Society for Metals, 45:10-13, 1953; Metals Review, Vol. 25, No. 12, pp. 5-6, 1952.

EUGENE P. PFLEIDER, E.M., Professor

"Research on the cutting action of the diamond drill bit" (with R. L. Blake). Mining Engineering, 5:187-95. 1953.

WASHINGTON D. LACABANNE, Ph.D., Assistant Professor

"Oil from the Williston Basin." Minnesota Technolog, Vol. 33, No. 5, pp. 10-11, 42, 44, 46. 1953.

HAROLD M. MOONEY, Ph.D., Assistant Professor

- "Magnetic Susceptibility Measurements in Minnesota"
 - "Part I: Technique of measurement." Geophysics, 17:531-43. 1952.
 - "Part II: Analysis of field results" (with R. L. Bleifuss). Ibid., 18:383-93. 1953.

MINES EXPERIMENT STATION

HENRY H. WADE, E.M., Administrative Assistant and Acting Director

Mining Directory of Minnesota, 1953 (with Mildred R. Alm). Bulletin of the University of Minnesota, Vol. 56, No. 21, 1953, 270 pages.

NORMAN F. SCHULZ, Ph.D., Research Associate

"The effect of certain starches on quartz and hematite suspensions" (with S. R. B. Cooke and E. W. Lindroos). Mining Engineering, 4:697-98, 1952.

INSTITUTE OF AGRICULTURE

ADMINISTRATION

- HAROLD MACY, Ph.D., Dean of the Institute of Agriculture and Professor of Bacteriology
- Journal of Dairy Science 10 Year Index Volumes XXI-XXX. American Dairy Science Association. Lancaster: Pennsylvania Business Press, Inc. 1953. 313 pages.
- "From Dr. Harold Macy, Dean of the Institute." Page 1 in Samplings. Department of Rhetoric, St. Paul Campus, University of Minnesota. Spring, 1953.
- "Foreword." Pages 4-5 in Fifty-Ninth Annual Report Agricultural Experiment Station University of Minnesota July 1, 1951 to June 30, 1952. 1952.
- "Our Dean says: Welcome." 51st Annual Farm and Home Week, January 13-16, 1953. Bulletin of University of Minnesota, Institute of Agriculture, Vol. 55, No. 52, p. 3. December 29, 1952.
- "Foreword." Gopher Peavey 1903-1953 (Golden Anniversary). 1953.
- "Agriculture." Minnesota, Voice of the Alumni, Vol. 52, No. 8, p. 6. 1953.

CLYDE H. BAILEY, Ph.D., D.Sc., Dean and Professor Emeritus

"Science builds better bread." Gamma Alpha Record, Vol. 43, No. 2, pp. 20-26. 1953.

Review of J. Storck and W. D. Teague, Flour for Man's Bread. A History of Milling in Cereal Chemistry, 29:482, 1952.

Information Service

HAROLD B. SWANSON, M.S., Associate Professor, Editor

Welcome to the St. Paul Campus—University of Minnesota. (Revised.) University of Minnesota, Institute of Agriculture. 1953. 8 pages.

Facts About Minnesota Agriculture and the University of Minnesota Institute of Agriculture. (Revised.) University of Minnesota, Institute of Agriculture. 1953. 16 pages.

"Air conditioned laboratory." Minnesotan, Vol. 6, No. 1, p. 6. 1952.

"Your Thanksgiving turkey." Minnesota, Voice of the Alumni, Vol. 52, No. 3, p. 18. 1952.

"Young farmers study management." Extension Service Review, Vol. 23, No. 7, p. 124, 1952; Farmers' Digest, Vol. 16, No. 6, p. 83, 1952.

"County Agents-College 'Profs' in work clothes." Greater Minneapolis, Vol. 4, No. 6, pp. 20-21.

"Heavy roughage feeding brings 16¢ beef gain." Country Gentleman. Vol. 123, No. 1, p. 26. 1953. Editor, ACE, July, 1952.

Co-editor

Minnesota Farm and Home Science, 1952-53.

All regular series publications of the Agricultural Experiment Station, Agricultural Extension Service, Office of Agricultural Short Courses, and other units of the Institute of Agriculture, comprising about 100 different bulletins, reports, folders, pamphlets, etc. 1952-53.

University Farm Radio Shorts. Weekly service of short educational items. 3 pages. 1952-53. All regular newspaper releases including University Farm News, County Agent fill-in releases, Ask University Farm, Our Land, Home Garden Tips, Timely Tips, and other special features. 1952-53.

Reaching Rural People with Information Tools (with Josephine B. Nelson, R. P. Raustadt, E. H. Madison, Gwen Haws, and R. S. Wolf). Monthly tip sheet to all county extension agents. 1952-53.

Fifty Years of Agricultural Extension Work. 6 mimeographed pages. 1953.

ROBERT P. RAUSTADT, B.A., Instructor and Information Specialist

- "Rotated pastures give three times more feed." Farm Journal, Vol. 76, No. 8, p. 53. 1952.
- "Manage farm woodlots profitably." Better Farming Methods, Vol. 24, No. 10, p. 44. 1952.
- "Mindrum, Magnuson are fluster-proof." South St. Paul Daily Reporter, Vol. 60, No. 97, p. 18. 1952.
- "Thanks to U research, turkeys are better than ever." Minnesotan, Vol. 6, No. 2, p. 11, 1952.
- "Alvin Larson's motto-man, dig those crazy weeds." Ibid., No. 6, p. 13. 1953.
- "Red River Valley Potato Marketing Clinic." Potato Chipper, Vol. 12, No. 5, p. 28. 1952.
- "Big corn payoff from first-year legumes." Country Gentleman, Vol. 123, No. 1, p. 30. 1953.
- "Personal county columns." ACE, Vol. 25, No. 5, p. 1. 1953.
- "Farm, Home Week gives wide choice in mental menu." Farm Bureau News, Vol. 32, No. 5, p. 1. 1953.
- "Minnesota has a unique soil conservation program." Agricultural Leaders' Digest, Vol. 34, No. 3, p. 16. 1953.
- "County (Itasca) staff in new quarters." Extension Service Review, Vol. 24, No. 3, p. 56, 1953. "That grand and glorious feeling." (F. Svoboda). Ibid., No. 6, p. 107, 1953.
- "Timely Tips," bi-weekly column of farm information paragraphs. Farmer. 1952-53.
- Co-editor, all regular newspaper releases including University Farm News, County Agent fill-in releases, Ask University Farm, Our Land, Home Garden Tips, Timely Tips, and other special special features. 1952-53.
- Reaching Rural People with Information Tools (with H. B. Swanson, Josephine B. Nelson, R. S. Wolf, Gwen Haws, and E. H. Madison). Monthly tip sheet to all county extension agents. 1952-53.

COLLEGE OF AGRICULTURE, FORESTRY, AND HOME ECONOMICS

- AUSTIN A. Dowell, Ph.D., Director of Resident Instruction and Assistant Dean, Professor of Agricultural Economics
- The Export Market for Pork and Lard (with R. E. Olson and O. B. Jesness). University of Minnesota Agricultural Experiment Station Bulletin No. 418, 1953, 36 pages.
- Relative Accuracy of Pricing Butcher Hogs on Foot and by Carcass Weight and Grade (with G. Engelman and R. E. Olson). University of Minnesota Agricultural Experiment Station Technical Bulletin No. 208. 1953. 52 pages.
- "Hog-cattle price picture shows wide changes" (with R. R. Newberg). Minnesota Farm Business Notes, No. 339, pp. 1-2. July, 1952.
- "Six methods of pricing slaughter hogs compared" (with R. E. Olson). *Ibid.*, No. 340, pp. 1-2. September, 1952.
- "Pricing hogs on foot and on the rail" (with R. E. Olson). Minnesota Farm and Home Science, Vol. 10, No. 1, pp. 8-9. 1952.
- "Prices of Minnesota farms reached new high in '52" (with L. O. Sorenson). Ibid., Vol. 10, No. 3, pp. 12, 15, 1953.

AGRICULTURAL ECONOMICS

OSCAR B. JESNESS, Ph.D., Professor and Head

- The Export Market for Pork and Lard (with A. A. Dowell and R. E. Olson). University of Minnesota Agricultural Experiment Station Bulletin No. 418, 1953, 36 pages.
- Minnesota Dairy Cooperatives (with T. W. Manning and E. F. Koller). University of Minnesota Agricultural Experiment Station Bulletin No. 420, 1953, 48 pages.
- Short-Term Agricultural Lending of Selected Minnesota Country Banks (with R. P. Dahl). University of Minnesota Department of Agricultural Economics Report No. 500. February, 1953. 16 mimeographed pages.
- "What sort of a farm price policy is practical in the U.S.A.?" Journal of Farm Economics, 34:616-24. December, 1952.
- "Are price supports the answer?" Bankers Monthly, Vol. 69, No. 9, pp. 43, 46-50, 71-72. 1952. "What is this farm problem?" Bulletin of the Robert Morris Associates, Vol. 35, No. 3, pp. 73-78. 1952.
- "Interest in egg quality on upswing in state." Minnesota Farm Business Notes, No. 341, p. 1-2. October, 1952.
- "Wanted general economic health--not depression fears." Ibid., No. 342, pp. 2-3. November, 1952. "Our changing economic picture." Pages 112-20 in Abstract of Fair Management Short Courses.
- "Our changing economic picture." Pages 112-20 in Abstract of Fair Management Short Cour St. Paul: University of Minnesota Agricultural Short Courses. June, 1953.

Reviews of

- Henry C. and Anne Dewees Taylor, The Story of Agricultural Economics in the United States, 1840-1932 in Journal of Farm Economics, 35:297-98. May, 1953.
- Harold G. Halcrow, Agricultural Policy in the United States. Ibid., pp. 298-300. May, 1953.

WILLARD W. COCHRANE, Ph.D., Professor

- "A theoretical scaffolding for considering governmental pricing policies in agriculture." Journal of Farm Economics, 35:1-14. February, 1953.
- "The nature of the race between food supplies and demand in the United States, 1951-75" (with H. C. Lampe). *Ibid.*, pp. 203-22. May, 1953.
- "Living costs and the middle-income classes." Pages 20-27 in Human Problems of the Garrison State, Social Science Lecture Series, Minneapolis: University of Minnesota Press, 1953.
- "Supports help change potato industry pattern" (with R. W. Gray and V. L. Sorenson). Minnesota Farm Business Notes, No. 342, pp. 1-3. November, 1952.
- "Let's take a look at price supports for potatoes" (with R. W. Gray and V. L. Sorenson).

 Minnesota Farm and Home Science, Vol. 10, No. 2, pp. 18-19, February, 1953.

E. FRED KOLLER, Ph.D., Professor

- Minnesota Dairy Cooperatives (with T. W. Manning and O. B. Jesness). University of Minnesota Agricultural Experiment Station Bulletin No. 420. 1953. 44 pages.
- Minnesota Farm Supply Associations (with T. W. Manning). University of Minnesota Agricultural Experiment Station Bulletin No. 421, 1953, 40 pages.

- "Some aspects of the financing of farmers' cooperatives." Journal of Farm Economics, 34:949-57.

 December, 1952.
- "Home use of nonfat dry milk" (with D. G. Stallings). Butter, Cheese and Milk Products Journal, 43:58. September, 1952.
- "Costs of drying milk" (with D. E. Butz). Ibid., pp. 28-32, 38-46. October, 1952.
- "Small-town milk business in period of change" (with C. C. Cable, Jr.). Minnesota Farm Business Notes, No. 345, pp. 1-2. March, 1953.

GEORGE A. POND, Ph.D., Professor

- Changes in the Dairy Farm Picture (with W. E. McDaniels). University of Minnesota Agricultural Experiment Station Bulletin No. 416. 1953. 20 pages.
- 1951 Annual Report of Veterans Farm Management Service Southwestern Minnesota (with T. R. Nodland and H. W. Swanson). University of Minnesota Division of Agricultural Economics Report No. 198. July, 1952. 28 mineographed pages.
- Farm Labor and Farm Costs (with N. Rorholm and S. A. Engene). University of Minnesota Division of Agricultural Economics Report No. 199. August, 1952. 44 mimeographed pages.
- Feeder Cattle Costs and Returns (with H. G. Routhe and T. R. Nodland). University of Minnesota Division of Agricultural Economics Report No. 200. August, 1952. 13 mimeographed pages.
- 1951 Annual Report Veterans Farm Management Service Northern Minnesota (with T. R. Nodland and H. W. Swanson). University of Minnesota Division of Agricultural Economics Report No. 201. August, 1952. 27 mineographed pages.
- 1951 Annual Report Veterans Farm Management Service Southeastern Minnesota (with T. R. Nodland and H. W. Swanson). University of Minnesota Division of Agricultural Economics Report No. 202. September, 1952. 30 mimeographed pages.
- Farm Costs, 1951, Southern Minnesota (with N. Rorholm and S. A. Engene). University of Minnesota Division of Agricultural Economics Report No. 203. October, 1952. 19 mimeographed pages.
- Crop Costs, 1951, Red River Valley (with N. Rorholm and S. A. Engene). University of Minnesota Division of Agricultural Economics Report No. 204. December, 1952. 39 mimeographed pages.
- Poultry Costs and Returns, 1947-1951 (with F. T. Hady and T. R. Nodland). University of Minnesota Department of Agricultural Economics Report No. 205. January, 1953. 12 mimeographed pages.
- Summary Report Southwestern Minnesota Farm Management Service, 1940-1951 (with T. R. Nodland). University of Minnesota Department of Agricultural Economics Report No. 206. March, 1953. 44 mimcographed pages.
- 1952 Annual Report Southwestern Minnesota Farm Management Service (with T. R. Nodland). University of Minnesota Department of Agricultural Economics Report No. 207. April, 1953. 25 mimeographed pages.
- Farm Labor and Farm Costs, 1952 (with N. Rorholm and S. A. Engene). University of Minnesota Department of Agricultural Economics Report No. 208. May, 1953. 45 mimeographed pages.
- 1952 Annual Report Southeastern Minnesota Farm Management Service (with T. R. Nodland). University of Minnesota Department of Agricultural Economics Report No. 209. June, 1953. 27 mimeographed pages.
- "Fifty years of farm records in Minnesota." Journal of Farm Economics, 35:249-59. May, 1953. "Caution is keynote for '53 farm program." Minnesota Farm Business Notes, No. 344, pp. 2-3. January, 1953.
- "Modern farming is more of an economic risk" (with T. R. Nodland). Ibid., No. 346, pp. 1-2. April, 1953.
- "Fifty years of farm records." Minnesota Farm and Home Science, Vol. 10, No. 1, pp. 7, 9. October, 1952.

Rex W. Cox, Ph.D., Associate Professor

- Competition Between Butter and Margarine, Minneapolis, 1952. University of Minnesota Agricultural Experiment Station Bulletin No. 417. 1953. 16 pages.
- "Farm income about same in '52-but expenses up." Minnesota Farm Business Notes, No. 344, pp. 1-2. January, 1953.
- "Less butter on Minneapolis tables." Ibid., No. 345, p. 3. March, 1953.
- "The outlook corner" (with S. A. Engene, S. B. Cleland, and H. C. Pederson). Ibid., Nos. 339-340, 342, 344-345, 347. July, 1952-May, 1953.

"What's happening to butter and margarine?" Minnesota Farm and Home Science, Vol. 10, No. 3, pp. 3, 7. May, 1953.

Selmer A. Engene, Ph.D., Associate Professor

- Farm Labor and Farm Costs (with G. A. Pond and N. Rorholm). University of Minnesota Division of Agricultural Economics Report No. 199. August, 1952. 44 mimeographed pages.
- Farm Costs, 1951, Southern Minnesota (with G. A. Pond and N. Rorholm). University of Minnesota Division of Agricultural Economics Report No. 203, October, 1952, 19 mimeographed pages.
- Crop Costs, 1951, Red River Valley (with G. A. Pond and N. Rorholm). University of Minnesota Division of Agricultural Economics Report No. 204. December, 1952. 39 mimeographed
- Farm Labor and Farm Costs, 1952 (with N. Rorholm and G. A. Pond). University of Minnesota Department of Agricultural Economics Report No. 208. May, 1953. 45 mimeographed pages. "Feeders, hogs give best labor returns" (with N. Rorholm). Minnesota Farm Business Notes, No. 339, pp. 2-3. July, 1952.
- "Expense sharing becomes a problem" (with M. Kottke). Ibid., No. 346, pp. 2-3. April, 1953.
- "Machinery costs about \$1,000 yearly" (with N. Rorholm). Ibid., p. 3.
- "How farmers use their time" (with N. Rorholm). Ibid., No. 347, p. 3. May, 1953.
- "The outlook corner" (with R. W. Cox, S. B. Cleland, and H. C. Pederson). Ibid., Nos. 339-340, 342, 344-345, 347. July, 1952-May, 1953.
- "Machinery, servant or master" (with N. Rorholm). Minnesota Farm and Home Science, Vol. 10, No. 2, pp. 4-5. February, 1953.
- "Loose housing saves labor" (with J. A. Shute). Ibid., No. 3, pp. 17, 19. May, 1953.

TRUMAN R. NODLAND, Ph.D., Assistant Professor

- 1951 Annual Report of Veterans Farm Management Service Southwestern Minnesota (with H. W. Swanson and G. A. Pond). University of Minnesota Division of Agricultural Economics Report No. 198. July, 1952. 28 mimeographed pages.
- Feeder Cattle Costs and Returns (with H. G. Routhe and G. A. Pond). University of Minnesota Division of Agricultural Economics Report No. 200. August, 1952. 13 mimcographed pages.
- 1951 Annual Report Veterans Farm Management Service Northern Minnesota (with H. W. Swanson and G. A. Pond). University of Minnesota Division of Agricultural Economics Report No. 201. August, 1952. 27 mimeographed pages.
- 1951 Annual Report Veterans Farm Management Service Southeastern Minnesota (with H. W. Swanson and G. A. Pond). University of Minnesota Division of Agricultural Economics Report No. 202. September, 1952. 30 mimeographed pages.
- Poultry Costs and Returns, 1947-1951 (with F. T. Hady and G. A. Pond). University of Minnesota Department of Agricultural Economics Report No. 205. January, 1953. 12 mimeographed pages.
- Summary Report Southwestern Minnesota Farm Management Service, 1940-1951 (with G. A. Pond), University of Minnesota Department of Agricultural Economics Report No. 206. March, 1953. 44 mimeographed pages.
- 1952 Annual Report Southwestern Minnesota Farm Management Service (with G. A. Pond). University of Minnesota Department of Agricultural Economics Report No. 207. April, 1953. 25 mimeographed pages.
- 1952 Annual Report Southeastern Minnesota Farm Management Service (with G. A. Pond). University of Minnesota Department of Agricultural Economics Report No. 209. June, 1953. 27 mimeographed pages.
- "Turkey men must weigh costs and returns." Minnesota Farm Business Notes, No. 341, p. 4. October, 1952.
- "Modern farming is more of an economic risk" (with G. A. Pond). Ibid., No. 346, pp. 1-2. April, 1953.
- "Farm poultry flock can add to family income" (with F. T. Hady). Ibid., p. 4.
- "How much capital is needed to start farming" (with B. F. Stanton). Ibid., No. 347, pp. 1-2. May, 1953.

REYNOLD P. DAHL, M.S., Instructor

Short-Term Agricultural Lending of Selected Minnesota Country Banks (with O. B. Jesness). University of Minnesota Department of Agricultural Economics Report No. 500. February, 1953. 16 mimeographed pages.

- Short-Term Bank Loans to Minnesota Farmers. University of Minnesota Department of Agricultural Economics Report No. 501. June, 1953. 14 mimeographed pages.
- "Farmers use more short-term credit." Minnesota Farm Business Notes, No. 340, p. 3. September, 1952.

TRAVIS W. MANNING, M.S., Instructor

- Minnesota Dairy Cooperatives (with E. F. Koller and O. B. Jesness). University of Minnesota Agricultural Experiment Station Bulletin No. 420, 1953, 48 pages.
- Minnesota Farm Supply Associations (with E. F. Koller). University of Minnesota Agricultural Experiment Station Bulletin No. 421, 1953, 40 pages.
- "Survey shows changes in rural co-op stores." Minnesota Farm Business Notes, No. 340, pp. 2-3. September, 1952.

RICHARD R. NEWBERG, M.A., Instructor

"Hog-cattle picture shows wide changes" (with A. A. Dowell). Minnesota Farm Business Notes, No. 339, pp. 1-2. July, 1952.

BERNARD F. STANTON, M.S., Instructor

"How much capital is needed to start farming?" (with T. R. Nodland). Minnesota Farm Business Notes, No. 347, pp. 1-2. May, 1953.

GROVER C. CHAPPELL, M.S., Research Fellow

"Handling fresh sweet corn for market. Part 2" (with R. E. Nylund, A. F. Legun, and J. D. Winter). Pre-Pack-Age, Vol. 6, No. 2, pp. 24-27. 1952.

ROGER W. GRAY, Ph.D., Research Fellow

- "Supports help change potato industry pattern" (with W. W. Cochrane and V. L. Sorenson).

 Minnesota Farm Business Notes, No. 342, pp. 1-3. November, 1952.
- "Let's take a look at price supports for potatoes" (with W. W. Cochrane and V. L. Sorenson).

 Minnesota Farm and Home Science, Vol. 10, No. 2, pp. 18-19. February, 1953.

VERNON L. SORENSON, Ph.D., Research Fellow

- "Supports help change potato industry pattern" (with W. W. Cochrane and R. W. Gray).

 Minnesota Farm Business Notes, No. 342, pp. 1-3. November, 1952.
- "Let's take a look at price supports for potatoes" (with W. W. Cochrane and R. W. Gray).

 Minnesota Farm and Home Science, Vol. 10, No. 2, pp. 18-19. February, 1953.

HENNING W. SWANSON, M.S., Research Fellow

- 1951 Annual Report of Veterans Farm Management Service Southwestern Minnesota (with T. R. Nodland and G. A. Pond). University of Minnesota Division of Agricultural Economics Report No. 198, July, 1952. 28 mimcographed pages.
- 1951 Annual Report Veterans Farm Management Service Northern Minnesota (with T. R. Nodland and G. A. Pond). University of Minnesota Division of Agricultural Economics Report No. 201. August, 1952. 27 mimeographed pages.
- 1951 Annual Report Veterans Farm Management Service Southeastern Minnesota (with T. R. Nodland and G. A. Pond). University of Minnesota Division of Agricultural Economics Report No. 202. September, 1952. 30 mimeographed pages.

C. Curtis Cable, Jr., M.S., Research Assistant

"Small-town milk business in period of change" (with E. F. Koller). Minnesota Farm Business Notes, No. 345, pp. 1-2. March, 1953.

MARVIN W. KOTTKE, M.S., Research Assistant

"Expense sharing becomes a problem" (with S. A. Engene). Minnesota Farm Business Notes, No. 346, pp. 2-3. April, 1953.

HARLAN C. LAMPE, B.S., Research Assistant

"The nature of the race between food supplies and demand in the United States, 1951-75" (with W. W. Cochrane). Journal of Farm Economics, 35:203-22. May, 1953.

JERRY M. LAW, M.S., Research Assistant

"Minnesota farm prices." Minnesota Farm Business Notes, Nos. 339-340, 342, 344-345, 347, p. 4. July, 1952-May, 1953.

NIELS RORHOLM, B.S., Research Assistant

- Farm Labor and Farm Costs (with G. A. Pond and S. A. Engene). University of Minnesota Division of Agricultural Economics Report No. 199. August, 1952. 44 mimeographed pages.
- Farm Costs, 1951, Southern Minnesota (with G. A. Pond and S. A. Engene). University of Minnesota Division of Agricultural Economics Report No. 203. October, 1952. 19 mimeographed pages.
- Crop Costs, 1951, Red River Valley (with G. A. Pond and S. A. Engene). University of Minnesota Division of Agricultural Economics Report No. 204. December, 1952. 39 mimeographed pages.
- Farm Labor and Farm Costs, 1952 (with G. A. Pond and S. A. Engene). University of Minnesota Department of Agricultural Economics Report No. 208. May, 1953. 45 mimcographed pages.
- "Feeders, hogs give best labor returns" (with S. A. Engene). Minnesota Farm Business Notes, No. 339, pp. 2-3. July, 1952.
- "Machinery costs about \$1,000 yearly" (with S. A. Engene). Ibid., No. 346, p. 3. April, 1953.
- "How farmers use their time" (with S. A. Engene). Ibid., No. 347, p. 3. May, 1953.
- "Machinery, servant or master" (with S. A. Engene). Minnesota Farm and Home Science, Vol. 10, No. 2, pp. 4-5. February, 1953.

HARLUND G. ROUTHE, B.S., Research Assistant

- Feeder Cattle Costs and Returns (with T. R. Nodland and G. Λ. Pond). University of Minnesota Division of Agricultural Economics Report No. 200. August, 1952. 13 mimeographed pages.
- "Feeder cattle returns probed." Minnesota Farm Business Notes, No. 339, p. 3. July, 1952.

LEONARD O. SORENSON, B.A., Research Assistant

"Prices of Minnesota farms reached new high in '52" (with A. A. Dowell). Minnesota Farm and Home Science, Vol. 10, No. 3, pp. 12, 15, May, 1953.

DALE G. STALLINGS, M.S., Research Assistant

- "Dry milk sales boom in Minnesota stores." Minnesota Farm Business Notes, No. 345, pp. 2-3. March, 1953.
- "Home use of nonfat dry milk" (with E. F. Koller). Butter, Cheese and Milk Products Journal, 43:58. September, 1952.

AGRICULTURAL ENGINEERING

ARTHUR J. SCHWANTES, M.S., Professor and Head

- "Minnesota's 1949-50 tractor fatalities" (with G. I. Prickett). Farm Safety Review, Vol. 10, No. 4, pp. 12-13, 1952.
- "Tractor fatalities in Minnesota" (with G. I. Prickett). Interview study of tractor fatalities on farms in Minnesota 1949-50, 12 mimeographed pages, 1952.

Andrew Hustrulid, Ph.D., Professor

- Freezing Foods for Home Use (with W. J. Aunan, J. D. Winter, and Shirley Trantanella). (Revised.) University of Minnesota Agricultural Extension Service Bulletin No. 244. 1952. 48 pages.
- "Differences in phosphorus uptake by corn from superphosphate broadcast and applied in the hill" (with A. C. Caldwell and Freida L. Hammers). Food Technology, 6:62-63, 1952.
- "The uptake of phosphorus from phosphate fertilizer by second-cutting alfalfa" (with A. C. Caldwell and Freida L. Hammers). *Ibid.*, pp. 87-90.
- "The effect of nitrogen and potassium on the uptake of phosphorus by corn, oats, and alfalfa in the greenhouse" (with A. C. Caldwell and R. F. Holt). *Ibid.*, pp. 91-94.
- "The effect of nitrogen and potassium on the uptake of phosphorus by corn in the field" (with A. C. Caldwell and Freida L. Hammers). *Ibid.*, pp. 95-97.

- "The yield, phosphorus content, and uptake of phosphorus from phosphate fertilizer by wheat and flax" (with A. C. Caldwell and Freida L. Hammers). *Ibid.*, pp. 125-28.
- "Phosphorus uptake of a number of inbred lines of corn" (with A. C. Caldwell, E. H. Rinke, E. L. Pinnell, and Freida L. Hammers). *Ibid.*, pp. 129-30.
- "The effect of fluctuating storage temperature on the quality of stored frozen foods" (with J. D. Winter, Isabel Noble, and Enid S. Ross). *Ibid.*, pp. 311-18.
- Physics Laboratory Manual for Courses Ag. En. 23, 24, 25, and 35 (with A. M. Flikke). (Revised.) University of Minnesota Mimeograph and Bulletins Department. 1952. 86 pages.

PHILIP W. MANSON, M.S., Professor

Bibliography on Sulfate Resistance of Portland Cements, Concretes and Mortars (Annotated) (with D. G. Miller and R. T. H. Chen). Chicago: Portland Cement Association. 1952. 133 pages.

CHARLES K. OTIS, M.S., Professor

"Liquid meter for slow and varying flow rates" (with J. H. Pomroy). Journal of the American Society of Agricultural Engineers, 34:385-86. June, 1953.

CLARENCE H. CHRISTOPHERSON, M.A., Associate Professor

Farm Machinery Housing—Farm Shops, Shop Equipment (with W. J. Promersberger, J. O. Curtis, K. Engler, M. M. Jones, G. M. Peterson, W. H. Sheldon, and D. G. Carter). North Central Regional Publication No. 31, University of Illinois Circular No. 702. 1952. 31 pages.

JOHN STRAIT, M.S., Associate Professor

"Sheller for limas—peas, too." Electricity on the Farm, Vol. 26, No. 6, pp. 10-11. 1953.

DALTON G. MILLER, C.E., Research Associate

Bibliography on Sulfate Resistance of Portland Cements, Concretes and Mortars (Annotated) (with P. W. Manson and R. T. H. Chen). Chicago: Portland Cement Association, 1952. 133 pages.

"Sulfate resistant cement—primary requirement for sulfate resistant concrete pipe." Journal of the American Concrete Institute, 24:217-24. November, 1952.

Arnold M. Flikke, M.S., Assistant Professor

"Frost-free stock watering tank." Minnesota Farm and Home Science, Vol. 10, No. 1, p. 6. 1952.

"Standby electric generators." Turkey World, Vol. 27, No. 11, pp. 17, 68-72, 1952.

"This tank needs no heater in winter." Hoard's Dairyman, 98:80-81. January 25, 1953.

Physics Laboratory Manual for Course Ag. En. 23, 24, 25, and 35 (with A. Hustrulid). (Revised.) University of Minnesota Mimeograph and Bulletins Department. 1952. 86 pages.

CURTIS L. LARSON, M.S., Instructor

"Farm drainage benefits land." Minneapolis Sunday Tribune, February 22, 1953.

"Farm drainage does not cause floods." Ibid., March 1, 1953.

WILLIAM F. MILLIER, Ph.D., Instructor

"Silage moves from silo to feed bunk" (with J. H. Pomroy). Minnesota Farm and Home Science, Vol. 10, No. 2, pp. 10-11. 1953.

JESSE H. POMROY, M.S., Instructor

"Silage moves from silo to feed bunk" (with W. F. Millier). Minnesota Farm and Home Science, Vol. 10, No. 2, pp. 10-11. 1953.

"Liquid meter for slow and varying flow rates" (with C. K. Otis). Journal of the American Society of Agricultural Engineers, 34:385-86. June, 1953.

"Push button farming's no dream for "U" men." Minneapolis Sunday Tribune, March 8, 1953.

ROBERT T. H. CHEN, M.S., Research Fellow

Bibliography on Sulfate Resistance of Portland Cements, Concretes and Mortars (Annotated) (with D. G. Miller and P. W. Manson), Chicago: Portland Cement Association, 1952, 133 pages.

AGRONOMY AND PLANT GENETICS

WILL M. MYERS, Ph.D., Professor and Head

- Varietal Trials of Farm Crops (with E. R. Ausemus, J. O. Culbertson, E. H. Rinke, J. W. Lambert, H. L. Thomas, E. L. Pinnell, L. J. Elling, R. G. Robinson, K. S. Koo, K. J. Hsu, and D. W. Sunderman). University of Minnesota Agricultural Experiment Station Miscellaneous Report No. 18, 1953, 36 pages.
- "Crop varieties recommended for 1953." Minnesota Feed Service, pp. 1-2. December 4, 1952.
- "Report on oats." Minnesota Seed Grower, Vol. 26, No. 1, pp. 1, 3-4, 1953.
- "Clintafe." Ibid., No. 3, pp. 1-3. 1953.
- "Grassland research at Rosemount, Minnesota." Hormel Farmer, Vol. 16, No. 5, p. 5, 1953.
- "Grassland farming in Minnesota." Conservation Volunteer, Vol. 16, No. 91, pp. 11-15. 1953. "Contribution from Minnesota" (with F. K. S. Koo, S. Goto, and M. B. Moore). 1952 National Oat Newsletter, 3:45-46, 1953.
- "Corn crossing stock announcement" (with C. Borgeson, E. L. Pinnell, and E. H. Rinke). 1953.

 13 multigraphed pages.

ELMER R. AUSEMUS, Ph.D., Professor

- Varietal Trials of Farm Crops (with W. M. Myers, J. O. Culbertson, E. H. Rinke, J. W. Lambert, H. L. Thomas, E. L. Pinnell, L. J. Elling, R. G. Robinson, K. S. Koo, K. J. Hsu, and D. W. Sunderman). University of Minnesota Agricultural Experiment Station Miscellaneous Report No. 18, 1953. 36 pages.
- Inheritance of Reaction to Leaf Rust, Puccinia rubigo-vera tritici (Erikss.) Carleton, and of Certain Other Characters in a Wheat Cross (with L. M. Martinez and C. R. Burnham), University of Minnesota Agricultural Experiment Station Technical Bulletin No. 205, 1953, 35 pages.
- "Inheritance of a leaf rust reaction and other characters in a spring wheat cross" (with C. S. Wu). Agronomy Journal, 45:43-48, 1953.
- Annual Report of Winter and Spring Wheat Experiments in Minnesota in 1952 (with K. J. Hsu and D. W. Sunderman). 1952, 244 mimeographed pages.
- Results on Spring Wheat Varieties Grown in Cooperative Plot and Nursery Experiments in the Spring Wheat Region in 1952, 1952, 64 mimeographed pages.

CHARLES R. BURNHAM, Ph.D., Professor

Inheritance of Reaction to Leaf Rust, Puccinia rubigo-vera tritici (Erikss.) Carleton, and of Certain Other Characters in a Wheat Cross (with L. M. Martinez and E. R. Ausemus). University of Minnesota Agricultural Experiment Station Technical Bulletin No. 205, 1953, 35 pages.

JOSEPH O. CULBERTSON, Ph.D., Professor

- Varietal Trials of Farm Crops (with W. M. Myers, E. R. Ausemus, E. H. Rinke, J. W. Lambert, H. L. Thomas, E. L. Pinnell, L. J. Elling, R. G. Robinson, K. S. Koo, K. J. Hsu, and D. W. Sunderman). University of Minnesota Agricultural Experiment Station Miscellaneous Report No. 18, 1953, 36 pages.
- "Present status of flax varieties in Minnesota." Minnesota Seed Grower, Vol. 26, No. 1, p. 4, 1953.
- Annual Report of Cooperative Seed Flax Investigations in Minnesota, 1952, 81 mimeographed pages.

RAYMOND S. DUNHAM, M.S., Professor

- Chemical Weed Control in Minnesota—1953 (with R. E. Nylund, R. F. Crim, and H. L. Hansen). University of Minnesota Agricultural Extension Service Pamphlet No. 187, 1953, 16 pages.
- "Conference on weed control." Minnesota Seed Grower, Vol. 25, No. 6, pp. 1, 4, 1952.
- "Response of legumes to 2,4-D, MCP, and TCA" (with J. II. Miller). Research Report Ninth Annual North Central Weed Control Conference, pp. 111-12, 1952.
- "Quack grass control with TCA and subsequent cropping" (with R. G. Robinson and A. F. Wiese). Ibid., p. 6.
- "Response of weed species to 2,4-D, MCP, and TCA" (with A. H. Larson, H. G. Heggeness, and L. E. Anderson). *Ibid.*, pp. 37-38.

- "Pre-emergence, post-emergence, and pre-harvest applications of CMU on corn. flax, soybeans, and alfalfa" (with R. G. Robinson, A. F. Wiese, and L. E. Anderson). Ibid., pp. 95-96.
- "CMU for quack grass control" (with R. G. Robinson, A. F. Wiese, and O. E. Rud). Ibid., pp. 9-10.
- "Effects of herbicides on flax." Proceedings Joint Meeting of the North Central Weed Control Conference, pp. 4-5. 1952.

HERBERT K. HAYES, D.Sc., Professor Emeritus

- "Development of the heterosis concept." Chapter 3, pages 49-65 in Heterosis. Ames: Iowa State College Press. 1952.
- "Gamete selection for specific combining ability" (with E. L. Pinnell and E. H. Rinke). Ibid., Chap. 24, pp. 378-88.
- "Inheritance studies in oats with particular reference to the Santa Fe type of crown rust resistance" (with R. D. Osler). Agronomy Journal, 45:49-53. 1953.

ERNEST H. RINKE, Ph.D., Professor

- Maturity Ratings of Corn Hybrids in Minnesota, 1952-53 (with Gertrud Joachim and N. C. Olmeim). University of Minnesota Agricultural Experiment Station Miscellaneous Report No. 17, 1953, 12 pages.
- Varietal Trials of Farm Crops (with W. M. Myers, E. R. Ausemus, J. O. Culbertson, J. W. Lambert, H. L. Thomas, E. L. Pinnell, L. J. Elling, R. G. Robinson, K. S. Koo, K. J. Hsu, and D. W. Sunderman). University of Minnesota Agricultural Experiment Station Miscellaneous Report No. 18, 1953, 36 pages.
- "Gamete selection for specific combining ability" (with E. L. Pinnell and H. K. Hayes). Chapter 24, pages 378-88 in Heterosis. Ames: Iowa State College Press. 1952.
- "Phosphorus uptake of a number of inbred lines of corn" (with A. C. Caldwell, A. Hustrulid, E. L. Pinnell, and Freida L. Hammers). Compilation of Experimental Work Reported at the Fourth Annual Phosphate Conference of North Central Region, pp. 5a-5c. 1952.
- "Corn breeders cooperate" (with E. L. Pinnell). Minnesota Farm and Home Science, Vol. 10, No. 3, p. 9. 1953.
- "What's new in corn" (with E. L. Pinnell). Minnesota Seed Grower, Vol. 26, No. 1, pp. 6-7.
- "Corn crossing stock announcement" (with C. Borgeson, W. M. Myers, and E. L. Pinnell). 1953. 13 multigraphed pages.

CARL BORGESON, M.S., Associate Professor

- "Branch oats and Marine flax." Minnesota Seed Grower, Vol. 25, No. 5, pp. 1, 4, 1952.
- "Improvements for handling and processing seed at the branch stations." *Ibid.*, pp. 2-4. "Foundation and registered seedstock sales." *Ibid.*, Vol. 26, No. 3, pp. 5-6. 1953.
- "Corn crossing stock announcement" (with W. M. Myers, E. L. Pinnell, and E. H. Rinke). 1953. 13 multigraphed pages.

JEAN W. LAMBERT, Ph.D., Associate Professor

- Varietal Trials of Farm Crops (with W. M. Myers, E. R. Ausemus, J. O. Culbertson, E. H. Rinke, H. L. Thomas, E. L. Pinnell, L. J. Elling, R. G. Robinson, K. S. Koo, K. J. Hsu, and D. W. Sunderman). University of Minnesota Agricultural Experiment Station Miscellaneous Report No. 18, 1953, 36 pages.
- "Studies of various characters of six-rowed segregates from crosses between two-rowed and six-rowed barleys" (with T. J. Liang). Agronomy Journal, 44:364-69, 1952.
- "The relationships between certain agronomic and malting quality characters of barley" (with G. T. Den Hartog). Ibid., 45:208-12. 1953.
- "Barley." Minnesota Seed Grower, Vol. 26, No. 1, p. 1. 1953.
- "Soybeans." Ibid., p. 6.
- "Narrow rows mean higher soybean yields." Minnesota Farm and Home Science, Vol. 10, No. 2, pp. 8, 11. 1953.

EMMETT L. PINNELL, Ph.D., Associate Professor

Varietal Trials of Farm Crops (with W. M. Myers, E. R. Ausemus, J. O. Culbertson, E. H. Rinke, J. W. Lambert, H. L. Thomas, L. J. Elling, R. G. Robinson, K. S. Koo, K. J. Hsu, and D. W. Sunderman). University of Minnesota Agricultural Experiment Station Miscellaneous Report No. 18, 1953, 36 pages,

- "Gamete selection for specific combining ability" (with E. H. Rinke and H. K. Hayes). Chapter 24, pages 378-88 in *Heterosis*. Ames: towa State College Press, 1952.
- "Phosphorus uptake of a number of inbred lines of corn" (with A. C. Caldwell, A. Hustrulid, E. H. Rinke, and Freida L. Hammers). Compilation of Experimental Work Reported at the Fourth Annual Phosphate Conference of North Central Region, pp. 5a-5c. 1952.
- "Corn breeders cooperate" (with E. H. Rinke). Minnesota Farm and Home Science, Vol. 10, No. 3, p. 9. 1953.
- "What's new in corn" (with E. H. Rinke). Minnesota Seed Grower, Vol. 26, No. 1, pp. 6-7,
- "Corn crossing stock announcement" (with C. Borgeson, W. M. Myers, and E. H. Rinke). 1953. 13 multigraphed pages.

Alois R. Schmid, Ph.D., Associate Professor

- Clovers for Minnesota (with H. L. Thomas, E. R. Duncan, M. F. Kernkamp, and A. G. Paterson). University of Minnesota Agricultural Experiment Station Bulletin No. 415, 1952, 27 pages.
- "Good crop rotation boosts corn yields" (with R. F. Crim and C. O. Rost). Minnesota Farm and Home Science, Vol. 10, No. 1, pp. 4-5. 1952.

HORACE L. THOMAS, Ph.D., Associate Professor

- Clovers for Minnesota (with E. R. Duncan, M. F. Kernkamp, A. G. Peterson, and A. R. Schmid). University of Minnesota Agricultural Experiment Station Bulletin No. 415, 1952, 27 pages.
- Varietal Trials of Farm Crops (with W. M. Myers, E. R. Ausemus, J. O. Culbertson, E. H. Riuke, J. W. Lambert, E. L. Pinnell, L. J. Elling, R. G. Robinson, K. S. Koo, K. J. Hsu, and D. W. Sunderman). University of Minnesota Agricultural Experiment Station Miscellancous Report No. 18, 1953, 36 pages.
- "Brome grass, red clover and sweet clover." Minnesota Seed Grower, Vol. 26, No. 1, p. 8, 1953.

LADDIE J. ELLING, Ph.D., Research Associate

- Varietal Trials of Farm Crops (with W. M. Myers, E. R. Ausemus, J. O. Culbertson, E. H. Rinke, J. W. Lambert, H. L. Thomas, E. L. Pinnell, R. G. Robinson, K. S. Koo, K. J. Hsu, and D. W. Sunderman). University of Minnesota Agricultural Experiment Station Miscellaneous Report No. 18, 1953, 36 pages.
- "Alfalfa varieties." Minnesota Seed Grower, Vol. 26, No. 1, p. 7, 1953.

ROBERT G. ROBINSON, Ph.D., Assistant Professor

- Varietal Trials of Farm Crops (with W. M. Myers, E. R. Ausemus, J. O. Culbertson, E. H. Rinke, J. W. Lambert, H. L. Thomas, E. L. Pinnell, L. J. Elling, K. S. Koo, K. J. Hsu, and D. W. Sunderman). University of Minnesota Agricultural Experiment Station Miscellaneous Report No. 18, 1953, 36 pages.
- "Quack grass control with TCA and subsequent cropping" (with R. S. Dunham and A. F. Wiese). Research Report Ninth Annual North Central Weed Control Conference, p. 6, 1952.
- "Pre-emergence, post-emergence, and pre-harvest applications of CMU on corn, flax, soybeans, and alfalfa" (with A. F. Wiese, L. E. Anderson, and R. S. Dunham). *Ibid.*, pp. 95-96. 1952.
- "CMU for quack grass control" (with A. F. Wiese, O. E. Rud, and R. S. Dunham). *Ibid.*, pp. 9-10, 1952.
- "Rye, sunflowers, safflower, and field peas." Minnesota Seed Grower, Vol. 26, No. 1, p. 7. 1953. "Sunflowers for Minnesota?" (with O. C. Soine). Minnesota Farm and Home Science, Vol. 10, No. 3, pp. 14-15, 1953.

KUAN JEN HSU, Ph.D., Research Fellow

- Varietal Trials of Farm Crops (with W. M. Myers, E. R. Ausemus, J. O. Culbertson, E. H. Rinke, J. W. Lambert, H. L. Thomas, E. L. Pinnell, L. J. Elling, R. G. Robinson, K. S. Koo, and D. W. Sunderman). University of Minnesota Agricultural Experiment Station Miscellaneous Report No. 18, 1953, 36 pages.
- Annual Report of Winter and Spring Wheat Experiments in Minnesota in 1952 (with E. R. Ausemus and D. W. Sunderman). 1952. 244 mimeographed pages.

GERTRUD S. JOACHIM, M.S., Research Fellow

Maturity Ratings of Corn Hybrids in Minnesota, 1952-53 (with E. H. Rinke and N. C. Olmeim). University of Minnesota Agricultural Experiment Station Miscellaneous Report No. 17. 1953. 12 pages.

Keh-shing Koo, Ph.D., Research Fellow

- Varietal Trials of Farm Crops (with W. M. Myers, E. R. Ausemus, J. O. Culbertson, E. H. Rinke, J. W. Lambert, H. L. Thomas, E. L. Pinnell, L. J. Elling, R. G. Robinson, K. J. Hsu, and D. W. Sunderman). University of Minnesota Agricultural Experiment Station Miscellaneous Report No. 18, 1953, 36 pages.
- "Contribution from Minnesota" (with S. Goto, W. M. Myers, and M. B. Moore). 1952 National Oat Newsletter, 3:45-46, 1953.

LAUREL E. ANDERSON, M.S., Research Assistant

- "Response of weed species to 2,4-D, MCP, and TCA" (with R. S. Dunham, A. H. Larson, and II. G. Heggeness). Research Report Ninth Annual North Central Weed Control Conference, pp. 37-38, 1952.
- "Pre-emergence, post-emergence, and pre-harvest applications of CMU on corn, flax, soybeans, and alfalfa" (with R. G. Robinson, A. F. Wiese, and R. S. Dunham). Ibid., pp. 95-96. 1952.

ORVIN E. RUD, B.S., Research Assistant

"CMU for quack grass control" (with R. G. Robinson, A. F. Wiese, and R. S. Dunham). Research Report Ninth Annual North Central Weed Control Conference, pp. 9-10. 1952.

ALLEN F. WIESE, Ph.D., Research Assistant

- "Quack grass control with TCA and subsequent cropping" (with R. S. Dunham and R. G. Robinson). Research Report Ninth Annual North Central Weed Control Conference, p. 6. 1952.
- "Pre-emergence, post-emergence, and pre-harvest applications of CMU on corn, flax, soybeans, and alfalfa" (with R. G. Robinson, L. E. Anderson, and R. S. Dunham). Ibid., pp. 95-96.
- "CMU for quack grass control" (with R. G. Robinson, O. E. Rud, and R. S. Dunham). Ibid., pp. 9-10.

Animal Husbandry

EVAN F. FERRIN, M.Agr., Professor and Head

- "A new era?" Chester White Journal, Vol. 42, No. 7, p. 7, 1952.
- "Modern methods are making more money from roughages." Washington Farmer, Vol. 77, No. 19, p. 4. October, 1952; Idaho Farmer, Vol. 70, No. 20, p. 4. October, 1952; Oregon Farmer, Vol. 75, No. 20, p. 4. October, 1952.
- "Stop wasting cheap roughages." Western Livestock Journal, Vol. 30, No. 30, pp. 45, 64, 65. October 15, 1952.
- "Make money from roughages," Flour and Feed, Vol. 53, No. 60, p. 30. November, 1952. "Modern methods make money from roughages." American Hereford Journal, Vol. 43, No. 18, p. 52. January 15, 1953.
- "Start right to get top breeding gilts." American Hampshire Herdsman, Vol. 28, No. 6, pp. 100, 102. June. 1953.
- Procaine Penicillin Improves a Pig Starter for Suckling Pigs (with L. E. Hanson), University of Minnesota Agricultural Experiment Station Division of Animal Husbandry. Report H-106. 1952. 5 mimeographed pages.
- Riboflavin, Niacin, and Calcium Pantothenate as Supplements to a Mixed Ration for Growing, Fattening Pigs Fed In Dry Lot (with L. E. Hanson). University of Minnesota Agricultural Experiment Station Division of Animal Husbandry, Report H-107, 1952, 4 mimeographed
- Do Pigs Over 125 lbs. in Weight Benefit from the Feeding of Antibiotics? (with L. E. Hanson, P. A. Anderson, and W. J. Aunan). University of Minnesota Agricultural Experiment Station Division of Animal Husbandry. Report H-108, 1952, 6 mimeographed pages.

- Antibiotics for Pigs on Pasture (with L. E. Hanson and W. J. Auman), University of Minnesota Agricultural Experiment Station Division of Animal Husbandry, Report H-109, 1952, 4 mimeographed pages,
- The Effect of Various Levels of Arsanilic Acid (with R. M. Anderson and L. E. Hanson). University of Minnesota Agricultural Experiment Station Division of Animal Husbandry. Report II-110. 1952. 2 mimeographed pages.
- The Influence of Arsanilic Acid on Protein Requirements of the Growing Pig (with R. M. Anderson and L. E. Hanson). University of Minnesota Agricultural Experiment Station Division of Animal Husbandry, Report H-111, 1952, 2 mineographed pages.
- The Effect of Limited Peeding on Growth and Reproduction of Gilts (with L. E. Hanson and W. J. Auuan). University of Minnesota Agricultural Experiment Station Division of Animal Husbandry. Report H-112, 1952, 5 mimeographed pages.
- Lamb Feeding Trials 1952-53 (with P. S. Jordan and H. G. Croom). University of Minnesota Institute of Agriculture, West Central Experiment Station, and Department of Animal Husbandry. Morris S-43. 1953. 8 mimeographed pages.

LESTER E. HANSON, Ph.D., Professor

- Distillers' Solubles in Market Pig Rations (with M. L. Baker, G. N. Baker, and M. G. A. Rumery). University of Nebraska Agricultural Experiment Station Bulletin No. 415, 1952, 19 pages.
- Farrowing Stalls Are Worth While (with G. Swartz and H. G. Zavoral), University of Minnesota Agricultural Extension Service. Form AH-1, 1952, 1 page.
- Strong, Healthy Pigs Are Farrowed from Well Fed Sows (with H. G. Zavoral). University of Minnesota Agricultual Extension Service. Form AH-22, 1952. 1 page.
- "Heritability of gain in different growth periods of swine" (with C. T. Blunn and G. N. Baker).

 Journal of Animal Science, 12:39-50. February, 1953.
- "Miracle drugs have proved valuable." Minnesota Feed Service, pp. 2-3. February, 1953.
- Procaine Penicillin Improves a Pig Starter for Suckling Pigs (with E. F. Ferrin). University of Minnesota Agricultural Experiment Station Division of Animal Husbandry. Report H-106, 1952. 5 mimeographed pages.
- Riboflavin, Niacin, and Calcium Pantothenate as Supplements to a Mixed Ration for Growing, Fattening Pigs Fed in Dry Lot (with E. F. Ferrin). University of Minnesota Agricultural Experiment Station Division of Animal Husbandry. Report II-107. 1952. 4 mimeographed pages.
- Do Pigs Over 125 lbs. in Weight Benefit from the Feeding of Antibiotics? (with E. F. Ferrin, P. A. Anderson, and W. J. Aunan). University of Minnesota Agricultural Experiment Station Division of Animal Husbandry. Report H-108, 1952. 6 mimeographed pages.
- Antibiotics for Pigs on Pasture (with E. F. Ferrin and W. J. Aunan). University of Minnesota Agricultural Experiment Station Division of Animal Husbandry. Report H-109, 1952, 4 mimeographed pages.
- The Effect of Various Levels of Arsanilic Acid (with R. M. Anderson and E. F. Ferrin). University of Minnesota Agricultural Experiment Station Division of Animal Husbandry. Report H-110. 1952. 2 mimeographed pages.
- The Influence of Arsanilic Acid on Protein Requirements of the Growing Pig (with R. M. Anderson, and E. F. Ferrin). University of Minnesota Agricultural Experiment Station Division of Animal Husbandry. Report H-111. 1952. 2 mimeographed pages.
- The Effect of Limited Feeding on Growth and Reproduction of Gilts (with E. F. Ferrin and W. J. Annan). University of Minnesota Agricultural Experiment Station Division of Animal Husbandry. Report H-112. 5 mineographed pages.
- Observations on the Use of Farrowing Stalls and Artificial Sow's Milk (with G. Swartz). University of Minnesota Agricultural Experiment Station Division of Animal Husbandry. Report H-113, 1952. 2 mimeographed pages.

ALFRED L. HARVEY, Ph.D., Professor

- A Report of the Horse Breeding Industry in Minnesota. State of Minnesota Stallion Registration Board Bulletin No. 39, 1952, 7 pages.
- "University of Minnesota builds new herd." American Hereford Journal, Vol. 43, No. 5, pp. 328-30. July, 1952.
- "Advertising tips for new breeders." Shorthorn World, Vol. 37, No. 10, pp. 94, 340-41. August, 1952.
- "Saddle club growth in the Northwest." Directory of Upper Midwest Saddle Clubs, p. 4, 1953.
- "Minnesota proves cull spuds valuable for beef fattening." Daily Bulletin, Vol. 49, No. 154, pp. 10A-11A. 1952.

LAURENCE M. WINTERS, Ph.D., Professor

- Development and Performance of Inbred Lines of Chickens (with R. N. Shoffner, H. J. Sloan, T. H. Canfield, and A. M. Pilkey). University of Minnesota Agricultural Experiment Station Technical Bulletin No. 207, 1953, 34 pages.
- "Rotational crossbreeding and heterosis." Chapter 23, pages 371-77 in Heterosis. Ames: Iowa State College Press. 1952.
- "A closed herd with a crack in the door." Shorthorn World, Vol. 37, No. 10, pp. 41, 439-41. August, 1952.
- "Selection for an increase in growth rate and market score in two inbred lines of swine" (with N. C. Fine). Journal of Animal Science, 12:251-62. May, 1953.
- "Research in sheep breeding." Minnesota Farm and Home Science, Vol. 10, No. 2, pp. 9-11.
- "Minnesota swine breeders." Ibid., Vol. 10, No. 3, pp. 18-19, 1953.

PHILIP A. ANDERSON, B.S., Associate Professor

- Sheep on Minnesota Farms (with W. E. Morris), (Revised.) University of Minnesota Agricultural Extension Service Bulletin No. 141, 1953, 20 pages.
- Do Pigs Over 125 lbs. in Weight Benefit from the Feeding of Antibiotics? (with E. F. Ferrin, L. E. Hanson, and W. J. Aunan). University of Minnesota Agricultural Experiment Station Division of Animal Husbandry. Report H-108. 1952. 6 mimeographed pages.

RAYMOND M. ANDERSON, Ph.D., Assistant Professor

- The Effect of Various Levels of Arsanilic Acid (with L. E. Hanson and E. F. Ferrin). University of Minnesota Agricultural Experiment Station Division of Animal Husbandry. Report H-110. 1952. 2 mineographed pages.
- The Influence of Arsanilic Acid on Protein Requirements of the Growing Pig (with L. E. Hanson and E. F. Ferrin). University of Minnesota Agricultural Experiment Station Division of Animal Husbandry. Report H-111. 1952. 2 mimeographed pages.

WOODROW J. AUNAN, Ph.D., Assistant Professor

- Freezing Foods for Home Use (with J. D. Winter, A. Hustrulid, and Shirley Trantanella). (Revised.) University of Minnesota Agricultural Extension Service Bulletin No. 244, 1952, 48 pages.
- Do Pigs Over 125 lbs. in Weight Benefit from the Feeding of Antibiotics? (with E. F. Ferrin, P. A. Anderson, and L. E. Hanson). University of Minnesota Agricultural Experiment Station Division of Animal Husbandry. Report H-108. 1952. 6 mimeographed pages.
- Antibiotics for Pigs on Pasture (with E. F. Ferrin and L. E. Hanson). University of Minnesota Agricultural Experiment Station Division of Animal Husbandry. Report H-109, 1952. 4 mimeographed pages.
- The Effect of Limited Feeding on Growth and Reproduction of Gilts (with E. F. Ferrin and L. E. Hanson). University of Minnesota Agricultural Experiment Station Division of Animal Husbandry. Report H-112. 5 mimeographed pages.

AGRICULTURAL BIOCHEMISTRY

WILLIAM F. GEDDES, Ph.D., Professor and Head

- "The effect of various milk serum proteins and sulhydryl groups on bread quality" (with B. L. Layson and R. Jenness). (Abstract.) Journal of Dairy Science, 35:482, 1952.
- "The effect of various milk serum proteins and their sulfhydryl groups on bread quality" (with B. L. Larson and R. Jenness). Cercal Chemistry, 29:440-47, 1952.
- "The heat resistance of the thermophilic spores present in wheat and wheat products" (with W. L. Jones and J. J. Jezeski). *Ibid.*, 30:12-21. 1953.
- "Further studies of the heat labile loaf volume depressant of milk serum proteins" (with A. L. Gordon and R. Jenness). *Ibid.*, pp. 213-21.
- Review of Merck and Company, The Merck Index of Chemicals and Drugs (sixth edition) in Cereal Chemistry, 29:319. 1952.

Editor

Cereal Chemistry, 1952-53.

Transactions of American Association of Cereal Chemists. 1952-53.

Member of editorial board, Advances in Food Research, 1952-53.

DAVID R. BRIGGS, Ph.D., Professor

- "The number of catalytically active sites present on the chymotrypsin molecule" (with Mary W. Loewus). Journal of Biological Chemistry, 199:857-64. 1952.
- "Electrophoretic analysis of protein interaction. II. Explanation of a boundary anomaly in the system bovine serum albumin—methyl orange" (with J. R. Colvin). *Journal of Physical Chemistry*, 56:717-22. 1952.
- "Diffusion of dissolved materials through wood" (with E. A. Behr and F. H. Kaufert). Ibid., 57:476-80. 1953.
- "Studies on the Chemistry of the Living Bark of the Black Locust in Relation to its Frost Hardiness"
 - "III. The validity of plasmolysis and diseccation tests for determining the frost hardiness of bark tissue" (with D. Siminovitch), Plant Physiology, 28:15-34, 1953.
 - "IV. Effects of ringing on translocation, protein synthesis and the development of hardiness" (with D. Siminovitch). *Ibid.*, pp. 177-200.

WILLIAM M. SANDSTROM, Ph.D., Professor Emeritus

- "The action of oxygen on glucose in the presence of potassium hydroxide" (with B. Warshowsky). Archives of Biochemistry and Biophysics, 37:46-55, 1952.
- "Identification of phenols by paper partition chromatography" (with W. H. Chang and R. L. Hossfeld). Journal of the American Chemical Society, 74:5766. 1952.

MAX O. SCHULTZE, Ph.D., Professor

- "Orotic acid in milk" (with L. E. Hallanger and J. W. Laakso). Journal of Biological Chemistry, 202:83-89. 1953.
- "Nutritional Value of Plant Materials"
 - "VIII. Lactation failure of rats fed diets containing purified soybean proteins." Journal of Nutrition, 249:231-43, 1953.
 - "IX. The effect of various supplements on lactation failure of rats fed diets containing purified soybean proteins." Ibid., pp. 245-56.

Fred Smith, Ph.D., D.Sc., Professor

- "Chemistry of the carbohydrates" (with R. Montgomery). Pages 79:108 in Annual Review of Biochemistry, Vol. 21. Stanford, California: Annual Reviews, Inc. 1952.
- "Simple fractionating device for chromatographic analysis" (with L. A. Boggs, L. S. Cuendet, and M. Dubois). Analytical Chemistry, 24:1148-51, 1952.
- "The carbohydrates of the *Gramineae*. The constitution of the water-soluble polysaccharides of the grain of barley (*Hordeum vulgare*)" (with K. A. Gilles and W. O. S. Meredith). Cereal Chemistry, 29:314-16. 1952.
- "A new procedure for the determination of the fine structure of polysaccharides" (with M. Abdel Akher, J. K. Hamilton, and R. Montgomery). *Journal of American Chemical Society*, 74: 4970-71. 1952.
- "Synthesis of ascorbic acids by the osone-cyanide method" (with J. K. Hamilton). *Ibid.*, pp. 5162-63.
- "Threitan and erythritan and their reaction with periodate" (with H. Klosterman). Ibid., pp. 5336-39.
- "Organic fluorides. Part XII. Simple rotating reactor for fluorination" (with W. E. Massingham, R. Montgomery, and B. R. J. Thomas). Journal of Applied Chemistry, 2:221-24. 1952.
- "The constitution of mesquite gum. Part IV. Determination of the structure of the amide of 6-β-(4-methyl D-glucopyruronosyl) α-methyl-D-galactopyranoside" (with M. Abdel Akher and D. Spriestersbach). Journal of the Chemical Society, pp. 3637-40. 1952. "Organic Fluorides"
 - "Part XIII. High-temperature dimerisation of chlorofluoroethylene" (with M. W. Buxton, D. W. Ingram, M. Stacey, and J. C. Tatlow). *Ibid.*, pp. 3830-34.
 - "Part XIV. The synthesis of some aromatic fluoro- and chloro compounds" (with L. V. Johnson, M. Stacey, and J. C. Tatlow). *Ibid.*, pp. 4710-13.
- "A new procedure for correlating the structure of glycosides" (with M. A. Akher, J. E. Cadotte, R. Montgomery, J. W. Van Cleve, and Bertha Lewis). Nature, 171:474-76. 1953.

PAUL D. BOYER, Ph.D., Associate Professor

- "Spectrophotometric measurement of the interaction of p-chloromercuribenzoate with sulfhydryl groups." (Abstract.) American Chemical Society Meeting, p. 31C. 1953.
- "Combinations of modified serum γ-globulin with other proteins" (with E. W. Turner). Archives of Biochemistry and Biophysics, 37:353-65, 1952.

- "Effect of temperature and antioxidants upon the lipoxidase-catalyzed oxidation of sodium lino-leate" (with A. L. Tappel and W. O. Lundberg). *Ibid.*, 42:293-304, 1953.
- "Kinetic analysis of enzyme reactions, 1, Further considerations of enzyme inhibition and analysis of enzyme activation" (with H. L. Segal and J. F. Kachmar). *Enzymologia*, 15:187-98, 1952.
- "Role of sulfhydryl groups in D-glyccraldehyde-3-phosphate dehydrogenase catalysis" (with H. L. Segal). Federation Proceedings, 12:181, 1953.
- "The reaction mechanism of soybean lipoxidase" (with A. L. Tappel and W. O. Lundberg).

 Journal of Biological Chemistry, 199:267-81, 1952.
- "Kinetic analysis of enzyme reactions. II. The potassium activation and calcium inhibition of pyruvic phosphoferase" (with J. F. Kachmar). Ibid., 200:669-82, 1953.
- "Interaction of Protein Antigens and Antibodies"
 - "I. Inhibition studies with the egg albumin-anti-egg albumin system" (with W. J. Klein-schmidt). Journal of Immunology, 69:247-55, 1952.
 - "II. Dissociation studies with egg albumin-anti-egg albumin precipitates" (with W. J. Kleinschmidt). Ibid., pp. 257-64.
 - "III. Dissociation studies with diphtheria toxoid-antitoxic precipitates" (with E. W. Turner). *Ibid.*, pp. 265-71.
- "The role of potassium and related cations in the action of pyruvic phosphoferase and other enzymes." Journal-Lancet, 73:195-96, 1953.
- "Letter to the editor." Nutrition Reviews, 10:223. 1952.

ROBERT JENNESS, Ph.D., Associate Professor

- "Characterization of the sulfhydryl groups and the kinetics of the heat denaturation of crystalline β-lactoglobulin" (with B. L. Larson). Journal of the American Chemical Society, 74: 3090-93, 1952.
- "The effect of various milk serum proteins and sulfhydryl groups on bread quality" (with B. L. Larson and W. F. Geddes). (Abstract.) Journal of Dairy Science, 35:482, 1952.
- "The interrelationships of processing treatments and oxidation-reduction systems as factors affecting the keeping quality of dry whole milk" (with H. A. Harland and S. T. Coulter). *Ibid.*, pp. 643-54, 1952.
- "An improved method of determining peroxide values of butterfat in dry and fluid milk" (with C. M. Stine, H. A. Harland, and S. T. Coulter). (Abstract.) *Ibid.*, p. 561, 1953.
- "The denaturation of milk serum proteins at temperatures ranging from 180° to 290° F." (with H. A. Harland, V. H. Townley, and S. T. Coulter). (Abstract.) *Ibid.*, 36:568-69. 1953.
- "The effect of various milk serum proteins and their sulfhydryl groups on bread quality" (with B. I., Larson and W. F. Geddes). Cereal Chemistry, 29:440-47, 1952.
- "Further studies of the heat labile loaf volume depressant of milk serum proteins" (with A. L. Gordon and W. F. Geddes). *Ibid.*, 30:213-21. 1953.
- "Amperometric method for determining the sorption of iodine by starch" (with B. L. Larson and K. A. Gilles). Analytical Chemistry, 25:802-804. 1953.

REX MONTGOMERY, Ph.D., Research Associate

- "Chemistry of the carbohydrates" (with F. Smith). Pages 79-108 in Annual Review of Biochemistry, Vol. 21. Stanford, California: Annual Reviews, Inc. 1952.
- "Organic fluorides, Part XII. Simple retating reactor for fluorination" (with W. E. Massingham, F. Smith, and B. R. J. Thomas). Journal of Applied Chemistry, 2:221-24, 1952.
- "A new procedure for the determination of the fine structure of polysaccharides" (with M. A. Akher, J. K. Hamilton, and F. Smith). Journal of the American Chemical Society, 74:4970-71, 1952.
- "Chemical production of lactic and other acids from molasses." American Documentation Institute,
 Document No. 3966, 1953.
- "Chemical production of lactic and other acids from molasses" (with R. A. Ronca). Industrial and Engineering Chemistry, 45:1136-43. 1953.
- "Observations on alkaline degradation of sugars." Ibid., 45:1144-47. 1953.
- "A new procedure for correlating the structure of glycosides" (with M. A. Akher, J. E. Cadotte, F. Smith, J. W. Van Cleve, and Bertha Lewis). Nature, 171:474-76. 1953.

Louis S. Cuendet, Ph.D., Assistant Professor

- "Simple fractionating device for chromatographic analysis" (with L. A. Boggs, M. Dubois, and F. Smith). Analytical Chemistry, 24:1148-51, 1952.
- "A simple and accurate device for measuring the volume of layer cakes" (with W. W. Luchsinger). Transactions, American Association of Cercal Chemists, 10:173-75, 1952.

Review of C. Renaudin, La fabrication industrielle des pates alimentaires in Cereal Chemistry, 29:318, 1952.

IRVIN E. LIENER, Ph.D., Assistant Professor

- "Purification of a toxic substance from defatted soybean flour" (with M. J. Pallansch). Journal of Biological Chemistry, 197:29-36, 1952.
- "Properties of soyin, a toxic protein isolated from soybean flour" (with M. J. Pallansch and J. E. Rose). Federation Proceedings, 12:790, 1953.
- "Soyin, a toxic protein from the soybean. I. Inhibition of rat growth." Journal of Nutrition, 49:527-39, 1953.
- "The effect of heat treatment on the nutritive value and hemagglutinating activity of soybean oil meal" (with E. G. Hill). *Ibid.*, pp. 609-20.
- "Liver xanthine oxidase activity in relation to availability of methionine from soybean protein" (with S. Wada). Proceedings of the Society for Experimental Biology and Medicine, 82: 484-86, 1953.

Reviews of

- E. G. Ball, Editor, Biochemical Preparations in Cereal Chemistry, 29:484, 1952.
- Morris B. Jacobs, Editor, The Chemistry and Technology of Food and Food Products. Ibid., 30:66, 1953.
- Central Food Technological Institute (Mysorc, India) Symposia, Food and Population and Development of Food Industries in India. Ibid., pp. 174-75.
- H. C. Sherman, Chemistry of Food and Nutrition. Ibid., pp. 175-76.

HAROLD L. SEGAL, Ph.D., Instructor

- "Kinetic analysis of enzyme reactions. I. Further considerations of enzyme inhibition and analysis of enzyme activation" (with J. F. Kachmar and P. D. Boyer). *Enzymologia*, 15:187-98. 1952.
- "Role of sulfhydryl groups in D-glyceraldehyde-3-phosphate dehydrogenase catalysis" (with P. D. Bover). Federation Proceedings, 12:181, 1953.

DAVID R. SPRIESTERSBACH, M.S., Instructor

"The constitution of mesquite gum. Part IV. Determination of the structure of the amide of 6-β-(4-methyl D-glucopyruronosyl) α-methyl-D-galactopyranoside" (with M. A. Akher and F. Smith). Journal of the Chemical Society, pp. 3637-40. 1952.

JOHN K. HAMILTON, Ph.D., Research Fellow

- "A new procedure for the determination of the fine structure of polysaccharides" (with M. A. Akher, R. Montgomery, and F. Smith). Journal of the American Chemical Society, 74: 4970-71, 1952.
- "Synthesis of ascorbic acids by the osone-cyanide method" (with F. Smith). Ibid., pp. 5162-63.

DAVID SIMINOVITCH, Ph.D., Research Fellow

- "Studies on the Chemistry of the Living Bark of the Black Locust in Relation to Its Frost Hardiness"
 - "III. The validity of plasmolysis and desiccation tests for determining the frost hardiness of bark tissue" (with D. R. Briggs). Plant Physiology, 28:15-34, 1953.
 - "IV. Effects of ringing on translocation, protein synthesis and the development of hardiness" (with D. R. Briggs). *Ibid.*, pp. 177-200.

LAWRENCE A. Boggs, Ph.D., Teaching Assistant

"Simple fractionating device for chromatographic analysis" (with L. S. Cuendet, M. Dubois, and F. Smith). Analytical Chemistry, 24:1148-51, 1952.

MARY W. LOEWUS, Ph.D., Teaching Assistant

"The number of catalytically active sites present on the chymotrypsin molecule" (with D. R. Briggs). Journal of Biological Chemistry, 199:857-64, 1952.

JOHN W. VAN CLEVE, Ph.D., Teaching Assistant

"A new procedure for correlating the structure of glycosides" (with M. A. Akher, J. E. Cadotte, R. Montgomery, F. Smith, and Bertha Lewis). Nature, 171:474-76, 1953.

JOHN R. COLVIN, Ph.D., Research Assistant

"Electrophoretic analysis of protein interaction. II. Explanation of a boundary anomaly in the system bovine serum albumin—methyl orange" (with D. R. Briggs). Journal of Physical Chemistry, 56:717-22. 1952.

KENNETH A. GILLES, Ph.D., Research Assistant

- "Amperometric method for determining the sorption of iodine by starch" (with B. L. Larson and R. Jenness). Analytical Chemistry, 25:802-804, 1953.
- "The carbohydrates of the Gramineae. The constitution of the water-soluble polysaccharides of the grain of barley (Hordeum vulgare)" (with W. O. S. Meredith and F. Smith). Cereal Chemistry, 29:314-16. 1952.

ARTHUR L. GORDON, Ph.D., Research Assistant

"Further studies of the heat labile loaf volume depressant of milk serum proteins" (with R. Jenness and W. F. Geddes). Cereal Chemistry, 30:213-21. 1953.

JOHN F. KACHMAR, Ph.D., Research Assistant

"Kinetic Analysis of Enzyme Reactions"

- "I. Further considerations of enzyme inhibition and analysis of enzyme activation" (with H. L. Segal and P. D. Boyer). Enzymologia, 15:187-98, 1952.
- "II. The potassium activation and calcium inhibition of pyruvic phosphoferase" (with P. D. Boyer). Journal of Biological Chemistry, 200:669-82. 1953.

WALTER J. KLEINSCHMIDT, Ph.D., Research Assistant

"Interaction of Protein Antigens and Antibodies"

- "I. Inhibition studies with the egg albumin-anti-egg albumin system" (with P. D. Boyer).

 Journal of Immunology, 69:247-55, 1952.
- "H. Dissociation studies with egg albumin-anti-egg albumin precipitates" (with P. D. Boyer). *Ibid.*, pp. 257-64.

HAROLD J. KLOSTERMAN, M.S., Research Assistant

"Threitan and erythritan and their reaction with periodate" (with F. Smith). Journal of the American Chemical Society, 74:5336-39. 1952.

JOHN W. LAAKSO, M.S., Research Assistant

"Orotic acid in milk" (with L. E. Hallanger and M. O. Schultze). Journal of Biological Chemistry, 202:83-89. 1953.

BRUCE L. LARSON, Ph.D., Research Assistant

- "The effect of various milk serum proteins and their sulfhydryl groups on bread quality" (with R. Jenness and W. F. Geddes). Cereal Chemistry, 29:440-47, 1952.
- "Characterization of the sulfhydryl groups and the kinetics of the heat denaturation of crystalline β-lactoglobulin" (with R. Jenness). Journal of the American Chemical Society, 74: 3090-93, 1952.
- "The effect of various milk serum proteins and sulfhydryl groups on bread quality" (with W. F. Geddes and R. Jenness). (Abstract.) Journal of Dairy Science, 35:482. 1952.
- "Amperometric method for determining the sorption of iodine by starch" (with K. A. Gilles and R. Jenness). Analytical Chemistry, 25:802-804. 1953.

BERTHA A. LEWIS, B.Ch., Research Assistant

"A new procedure for correlating the structure of glycosides" (with M. A. Akher, J. E. Cadotte, R. Montgomery, F. Smith, and J. W. Van Cleve). Nature, 171:474-76. 1953.

WAYNE W. LUCHSINGER, B.S., Research Assistant

"A simple and accurate device for measuring the volume of layer cakes" (with L. S. Cuendet).

Transactions of the American Association of Cereal Chemists, 10:173-75. 1952.

MICHAEL J. PALLANSCH, B.S., Research Assistant

- "Purification of a toxic substance from defatted soybean flour" (with I. E. Liener). Journal of Biological Chemistry, 197:29-36. 1952.
- "Properties of soyin, a toxic protein isolated from soybean flour" (with J. E. Rose and I. E. Liener). Federation Proceedings, 12:790, 1953.

ALOYS L. TAPPEL, Ph.D., Research Assistant

- "The reaction mechanism of soybean lipoxidase" (with W. O. Lundberg and P. D. Boyer).

 Journal of Biological Chemistry, 199:267-81. 1952.
- "Effect of temperature and antioxidants upon the lipoxidase-catalyzed oxidation of sodium linoleate" (with W. O. Lundberg and P. D. Boyer). Archives of Biochemistry and Biophysics, 42:293-304. 1953.

EARL W. TURNER, Ph.D., Research Assistant

- Combinations of modified serum γ -globulin and other proteins" (with P. D. Boyer). Archives of Biochemistry and Biophysics, 37:353-65. 1952.
- "Interaction of protein antigens and antibodies. 111. Dissociation studies with diphtheria toxoid-antitoxic precipitates" (with P. D. Boyer). Journal of Immunology, 69:265-71. 1952.

Shohachi Wada, B.S., Research Assistant

"Liver xanthine oxidase activity in relation to availability of methionine from soybean protein" (with I. E. Liener). Proceedings of the Society for Experimental Biology and Medicine, 82:484-86, 1953.

BENJAMIN WARSHOWSKY, Ph.D., Research Assistant

"The action of oxygen on glucose in the presence of potassium hydroxide" (with W. M. Sandstrom). Archives of Biochemistry and Biophysics, 37:46-55, 1952.

Dairy Husbandry

WILLES B. COMBS, M.A., Professor

- "Preparation of hardened ice milk." Ice Cream Review, Vol. 36, No. 4, pp. 111-13. November, 1952.
- "Cooking with butter" (with H. A. Morris). Hoard's Dairyman, 97:907. 1952.
- "Canned milk fat" (with H. A. Morris). Ibid., 98:138. 1953.

Samuel T. Coulter, Ph.D., Professor

- "The interrelationships of processing treatments and oxidation-reduction systems as factors affecting the keeping quality of dry whole milk" (with R. Jenness and H. Λ. Harland). Journal of Dairy Science, 35:643-54, 1952.
- "An improved method of determining peroxide values of butterfat in dry and fluid milk" (with C. M. Stine, H. A. Harland, and R. Jenness). (Abstract.) *Ibid.*, 36:561, 1953.
- "The denaturation of milk serum proteins at temperatures ranging from 180° to 290° F." (with H. A. Harland, V. H. Townley, and R. Jenness). (Abstract.) *Ibid.*, pp. 568-69.
- "The stability of added vitamin A in fluid and dry milks" (with D. H. Cox and W. O. Lundberg). (Abstract.) *Ibid.*, pp. 572-73.

THOR W. GULLICKSON, Ph.D., Professor

- Feeding the Dairy Herd (with H. R. Searles, R. D. Leighton, and R. W. Wayne). (Revised.)
 University of Minnesota Agricultural Extension Service Bulletin No. 218, 1952, 55 pages.
 "Calves die when vegetable oil or fat replaces butterfat in whole milk." Guernsey Breeders'
 Journal, Vol. 88, No. 1, pp. 17, 43, 1953.
- "Vegetable oils versus butterfat in the diet of dairy calves" (with R. S. Adams, J. Gander, and J. H. Sautter). Journal of Dairy Science, 36:599-600. 1953.

WILLIAM E. PETERSEN, Ph.D., Professor

Dairy Farming (with A. M. Field), Chicago: J. B. Lippincott Company, 1953, 534 pages.

"Dairy department." Pages 153-225 in *The Livestock Book*. State College, Mississippi, and Memphis, Tennessee: W. R. Thompson and John McKinney Publishers. 1952.

- "A study of milk ingredient formation by the use of carbon 14 labelled precursors." Pages 298-310 in The Role of Atomic Energy in Agriculture, Proceedings of the Fourth Annual Oak Ridge Summer Symposium, August 25-30, 1952. Oak Ridge, Tennessee: The United States Atomic Energy Commission. 1953.
- "Milk, blood and urine concentrations of aureomycin after intramammary infusions and intravenous administration" (with I. A. Schipper). Veterinary Medicine, 47:367-71. 1952.
- "Taking advantage of the architecture of the cow." Holstein-Friesian World, 7:23, 79. July 21, 1952.
- "The relationship of milk letdown factors to milk production" (with J. D. Donker, M. C. Hervey, and J. H. Koshi). (Abstract.) Journal of Animal Science, 11:791-92, 1952.
- "A comparison between daily rotational grazing and continuous grazing" (with A. L. Brundage).

 Journal of Dairy Science, 35:623-30. 1952.
- "Use of the Whiteside test in designating herds from which mastitis milk is being delivered to the creamery" (with I. A. Schipper). (Abstract.) Ibid., 36:595. 1953.
- "Antibiotic levels of milk following intramammary administration of various antibiotics" (with I. A. Schipper). *Ibid*.
- "What we can learn from New Zealand." Quonset Farmstead News, 1:10-11. January, 1953.
- "Utilization of good roughage." Certified Milk, Vol. 28, No. 5, pp. 12-13. May, 1953.
- "The relationship of nutrition to disease in dairy animals." Grain and Feed Journals Consolidated, 110:23-28. June 10, 1953.
- "Feeding the dairy cow according to what she is built for." Proceedings of the Fourth Annual Montana Nutrition Conference, Bozeman, Montana, pp. 64-68. March 19-20, 1953.
- "What grass and pasture mixtures can do under proper management." Ibid., pp. 11-16.

MARSHALL C. HERVEY, Ph.D., Associate Professor

- "The heritability of the length of the estrones cycle in the bovine" (with P. J. Dziuk, J. D. Donker, and A. L. Brundage). (Abstract.) Journal of Animal Science, 11:740, 1952.
- "The relationship of milk letdown factors to milk production" (with J. D. Donker, J. H. Koshi, and W. E. Petersen). (Abstract.) *Ibid.*, pp. 791-92.

JAMES J. JEZESKI, Ph.D., Associate Professor

- "The heat resistance of the thermophilic spores present in wheat and wheat products" (with W. L. Jones and W. F. Geddes). Cereal Chemistry, 30:12-21, 1953.
- "The influence of the type of diluent on the growth and survival of Pseudomonas putrefaciens" (with R. O. Wagenaar). Journal of Dairy Science, 35:738-54. 1952.
- Abstracts in Journal of Dairy Science. Section on Abstracts of Literature. Vol. 35, No. 367. 1952; Vol. 36, No. 20. 1953.

HERBERT A. HARLAND, Ph.D., Research Associate

- "The interrelationships of processing treatments and oxidation-reduction systems as factors affecting the keeping quality of dry whole milk" (with S. T. Coulter and R. Jenness). *Journal of Dairy Science*, 35:643-54, 1952.
- "An improved method of determining peroxide values of butterfat in dry and fluid milk" (with C. M. Stine, S. T. Coulter, and R. Jenness). (Abstract.) *Ibid.*, 36:561, 1953.
- "The denaturation of milk serum proteins at temperatures ranging from 180° to 290° F." (with S. T. Coulter, V. H. Townley, and R. Jenness). (Abstract.) *Ibid.*, pp. 568-69.

HOWARD A. MORRIS, Ph.D., Assistant Professor

- "Cooking with butter" (with W. B. Combs). Hoard's Dairyman, 97:907, 1952.
- "Canned milk fat" (with W. B. Combs). Ibid., 98:138. 1953.

JOHN D. DONKER, Ph.D., Research Fellow

- "The heritability of the length of the estrones cycle in the bovine" (with P. J. Dzuik, M. C. Hervey, and A. L. Brundage). (Abstract.) Journal of Animal Science, 11:740, 1952.
- "The relationship of milk letdown factors to milk production" (with W. E. Petersen, M. C. Hervey, and J. H. Koshi). (Abstract.) *Ibid.*, pp. 791-92.
- "The effect of hourly milking with the use of oxytocin on the butterfat percentage and saponification number" (with J. H. Koshi). (Abstract.) Journal of Dairy Science, 36:590, 1953.
- "The effect on milk production in the bovine when milking intervals were varied and intravenously administered oxytocin was used for milk ejection" (with J. H. Koshi). (Abstract.)

 Hid

GERMAIN B. MARION, Ph.D., Research Fellow

"A technique of freezing and factors affecting the revival of bovine spermatozoa" (with E. F. Graham). (Abstract.) Journal of Dairy Science, 36:597. 1953.

ITHEL A. SCHIPPER, D.V.M., Research Fellow

- Don't Gamble with Mastitis. University of Minnesota Agricultural Extension Service Folder No. 175. 1953. 7 pages.
- "Mastitis therapy." North American Veterinarian, 33:74-75. 1952.
- "Milk, blood, and urine concentrations of aureomycin after intrammary infusions and intravenous administration" (with W. E. Petersen). Veterinary Medicine, 47:367-71. 1952.
- "Mastitis-the powder and the fuse." Hoard's Dairyman, 97:879. 1952.
- "Handle with care." *Ibid.*, p. 931.
 "What to do about mastitis." *Ibid.*, pp. 969, 985.
- "Use of the White side test in designating herds from which mastitis milk is being delivered to the creamery" (with W. E. Petersen). (Abstract.) Journal of Dairy Science, 36:595. 1953.
- "Antibiotic levels of milk following intramammary administration of various antibiotics" (with W. E. Petersen). (Abstract.) Ibid.

CHARLES M. STINE, M.S., Research Fellow

"An improved method of determining peroxide values of butterfat in dry and fluid milk" (with H. A. Harland, S. T. Coulter, and R. Jenness). (Abstract.) Journal of Dairy Science, 36: 561. 1953.

VERNE H. TOWNLEY, M.S., Research Fellow

"The denaturation of milk serum proteins at temperatures ranging from 180° to 290° F." (with S. T. Coulter, H. A. Harland, and R. Jenness). (Abstract.) Journal of Dairy Science, 36: 568-69. 1953.

RICHARD S. ADAMS, B.S., Research Assistant

"Vegetable oils versus butterfat in the diet of dairy calves" (with T. W. Gullickson, J. Gander, and J. H. Sautter). Journal of Dairy Science, 36:599-600. 1953.

ARTHUR L. BRUNDAGE, M.S., Research Assistant

- "A comparison between daily rotational grazing and continuous grazing" (with W. E. Petersen). Journal of Dairy Science, 35:623-30. 1952.
- "The heritability of the length of the estrones cycle in the bovine" (with P. J. Dziuk, J. D. Donker, and M. C. Hervey). (Abstract.) Journal of Animal Science, 11:740, 1952.

DENNIS H. Cox, B.S., Research Assistant

"The stability of added vitamin A in fluid and dry milks" (with S. T. Coulter and W. O. Lundberg). (Abstract.) Journal of Dairy Science, 36:572-73. 1953.

Philip J. Dziuk, M.S., Research Assistant

- "New aid to semen collection." Hoard's Dairyman, 98:478. 1953.
- "The heritability of the length of the estrones cycle in the bovine" (with M. C. Hervey, A. L. Brundage, and J. D. Donker). (Abstract.) Journal of Animal Science, 11:740, 1952.
- "Application of the electroejaculation technique to the bull" (with E. F. Graham). (Abstract.) Journal of Dairy Science, 36:598. 1953.

JOHN GANDER, B.S., Research Assistant

"Vegetable oils versus butterfat in the diet of dairy calves" (with R. S. Adams, T. W. Gullickson, and J. H. Sautter). Journal of Dairy Science, 36:599-600. 1953.

EDMUND F. GRAHAM, M.S., Research Assistant

- "A technique of freezing and factors affecting the revival of bovine spermatozoa" (with G. B. Marion). (Abstract.) Journal of Dairy Science, 36:597, 1953.
- "Application of the electroejaculation technique to the bull" (with P. J. Dzuik). (Abstract.) Ibid., 36:598.

JAMES H. KOSHI, B.S., Research Assistant

"The relationship of milk letdown factors to milk production" (with J. D. Donker, W. E. Petersen, and M. C. Hervey). (Abstract.) Journal of Animal Science, 11:791-92. 1952.

"The effect of hourly milking with the use of oxytocin on the butterfat percentage and saponification number" (with J. D. Donker). (Abstract.) Journal of Dairy Science, 36:590, 1953.

"The effect on milk production in the bovine when milking intervals were varied and intravenously administered oxytocin was used for milk ejection" (with J. D. Donker). (Abstract.) Ibid.

HUGH LIVINGSTON, M.S., Research Assistant

"Romance in the dairy barn." Hoard's Dairyman, 97:607. 1952.

Entomology and Economic Zoology

CLARENCE E. MICKEL, Ph.D., Professor and Head

"Values of insect collections." Pages 60-64 in Insects-The Year Book of Agriculture. United States Department of Agriculture, 1952.

"The Mutillidae (wasps) of British Guiana." Zoologica, 37:105-50. October, 1952.

ALEXANDER A. GRANOVSKY, Ph.D., Professor

How to Control Wireworms. University of Minnesota Agricultural Extension Service Folder No. 170. 1952. 6 pages.

How to Control Cutworms. University of Minnesota Agricultural Extension Service Folder No. 171, 1952, 8 pages.

How to Control Wireworms. (Revised.) University of Minnesota Agricultural Extension Service Folder No. 170, 1953, 8 pages.

How to Control Cutworms. (Revised.) University of Minnesota Agricultural Extension Service Folder No. 171, 1953, 8 pages.

Virus Yellows of Celery (with R. C. Rose). University of Minnesota Agricultural Extension Service Form PL-13, 1953, 2 pages.

"Soil insects in greenhouses." Plant News, Vol. 2, No. 7, pp. 1-3. 1952.

"Chlordane, dieldrin, aldrin-new insecticides control white grubs in strawberries." Minnesota Farm and Home Science, Vol. 10, No. 2, p. 7. 1953.

"New insecticides control white grubs in strawberries." Minnesota Horticulturist, 81:53, 1953.

ALEXANDER C. HODSON, Ph.D., Professor

"Insect control -a population problem." Conference on Insecticide Resistance and Insect Physiology, National Academy of Sciences -- National Research Council, Publication 219, pp. 82-86. 1952.

"Leaf injury caused by the first-generation corn borer in field corn" (with H. C. Chiang). Journal of Economic Entomology, 46:68-73. 1953.

"Natural control of the forest tent caterpillar." Minnesota Farm and Home Science, Vol. 10, No. 3, pp. 8-9, 1953.

WILLIAM H. MARSHALL, Ph.D., Professor

A Survey of Farm-Game Habitat Restoration Programs in Fifteen States. Reprint from Transactions of the Eighteenth North American Wildlife Conference. Published by the Wildlife Management Institute, Washington, D.C. 1953. 22 pages.

"The relationship of grazing practices to waterfowl breeding populations and production on stock ponds in western South Dakota" (with L. Blankenship and I. Bue). Transactions of the Seventeenth North American Wildlife Conference, pp. 396-414. 1952.

A. GLENN RICHARDS, Ph.D., Professor

"Structure and function of the integument." Chapter 1, pages 1-22 in K. D. Roeder, editor, Insect Physiology. New York: John Wiley and Sons. 1953. "Chemical and physical properties of cuticle." Ibid., Chap. 2, pp. 23-41.

"The penetration of substances through the cuticle." Ibid., Chap. 3, pp. 42-54.

"Studies on the nutritional value of soybean flour to Tribolium confusum" (with S. Lin). Journal of the New York Entomological Society, 60:107-18, 1952.

"Studies on Arthropod Cuticle"

- "VIII. The antennal cuticle of honeybees, with particular reference to the sense plates." Biological Bulletin, 103:201-25, 1952.
- "IX. Quantitative effects of diet, age, temperature and humidity on the cuticles of five representative species of insects" (with C. H. Tsao). Annals of the Entomological Society of America, 45:585-99. 1952.
- "Some notes on the role of epidermis in insects and ticks." Entomological News, 64:73-76. 1952.
- "A new vitamin discovered in insect nutrition." Ibid., 63:153-55, 1952.
- "Comments and communications--more on editorial prerogatives." Science, 117:486. 1953.
- Review of R. E. Snodgrass, A Textbook of Arthropod Anatomy in Science, 117:464. April, 1953. Editor, Physiology and Toxicology Department, Annals of the Entomological Society of America. 1952-53.

LAURENCE K. CUTKOMP, Ph.D., Associate Professor

- Fruit Spray Schedules (with L. C. Snyder and T. H. King). (Revised.) University of Minnesota Agricultural Extension Service Pamphlet No. 184, 1953, 8 pages.
- "Control of adult mosquitoes and backflies by DDT sprays applied from aircraft" (with A. W. A. Brown, R. P. Thompson, and C. R. Twinn). Mosquito News, 11:75-84, 1951.
- "The importance of some biological characteristics of European corn borer on timing of application of insecticides" (with H. C. Chiang). Journal of Economic Entomology, 46:277-87. 1953.
- The Scale Insect Problem. University of Minnesota, Department of Entomology and Economic Zoology, April 1, 1953. 4 mincographed pages.

Mykola H. Haydak, Ph.D., Associate Professor

Pollen Substitutes, (Revised.) University of Minnesota Agricultural Extension Service Folder No. 130, 1953.

- "Bee venom." Iowa, Report of the State Apiarist for 1951, pp. 105-26. 1952.
- "Food value of honey." Minnesota Beckeeper, Vol. 5, No. 3, pp. 10-13. 1952.
- "Feeding pollen substitutes to bees in the spring." Ibid., Vol. 6, No. 2, pp. 7-10. 1953.
- "The right diet for bees." Gleanings in Bee Culture, 81:209-11, 250. 1953.
- Editor, Agricultural Section, Biological Abstracts. 1952-53.
- Abstracts in *Biological Abstracts*, Vol. 26. 1952. Nos. 26279, 26280, 26281, 26282, 26283, 26284, 26285, 26286, 26287, 26288, 27704, 27705.

LLOYD L. SMITH, Jr., Ph.D., Associate Professor

"Movements of marked walleyes, Stizostedion vitreum vitreum (Mitchill), in the fishery of the Red Lakes, Minnesota" (with R. L. Butler and L. W. Krefting). Transactions of the American Fisheries Society, 81:179-96. 1952.

ROBERT L. BUTLER, M.S., Research Associate

"Movements of marked walleyes, Stizostedion vitreum vitreum (Mitchill), in the fishery of the Red Lakes, Minnesota" (with L. L. Smith, Jr., and L. W. Krefting). Transactions of the American Fisherics Society, 81:179-96.

THOMAS A. GOCHNAUER, Ph.D., Research Associate

"Chemical control of bee diseases." Minnesota Beekeeper, Vol. 6, No. 1, pp. 11-15. 1953.

ALLAN G. PETERSON, Ph.D., Research Associate

Clovers for Minnesota (with H. L. Thomas, E. R. Duncan, M. F. Kernkamp, and A. R. Schmid).
 University of Minnesota Agricultural Experiment Station Bulletin No. 415. 1952. 27 pages.
 Onion Seed Treatment for Control of the Onion Maggot. University of Minnesota, Department of Entomology and Economic Zoology. February, 1953. 1 mimeographed page.

JAMES R. BEER, Ph.D., Assistant Professor

Mole Control (with H. L. Parten). University of Minnesota, Department of Entomology and Economic Zoology, October 22, 1952. 2 mimeographed pages.

FREDERICK G. HOLDAWAY, Ph.D., Lecturer

Sweet Clover Weevil (with B. A. Haws). University of Minnesota, Department of Entomology and Economic Zoology. February 24, 1953. 1 mimeographed page.

EDWIN F. COOK, Ph.D., Instructor

- "The Trichodectid of the hog-nosed skunk (Conopatus lenconotus Lichtenstein)." Entomological News, 64:60-67. 1953.
- "On the early stages of Neopachygaster maculicornis (Hine) and Berkshiria aldrichi (Malloch)."

 Annals of the Entomological Society of America, 46:293-99. June, 1953.

HUAI-CHANG CHIANG, Ph.D., Research Fellow

- "Leaf injury caused by the first generation corn borer in field corn" (with A. C. Hodson).

 Journal of Economic Entomology, 46:68-73, 1953.
- "The importance of some biological characteristics of European corn borer on timing of application of insecticide" (with L. K. Cutkomp), *Ibid.*, pp. 277-87.

B. Austin Haws, M.S., Research Fellow

Sweet Clover Weevil (with F. G. Holdaway). University of Minnesota, Department of Entomology and Economic Zoology, February 24, 1953. 1 mineographed page.

Sping Lin, Ph.D., Research Fellow

"Studies on the nutritional value of soybean flour to Tribolium confusum" (with A. G. Richards).

Journal of the New York Entomological Society, 60:107-18, 1952.

STANLEY W. HARRIS, M.S., Teaching Assistant

- "Four unusual bird records for eastern Washington." Murrelet, 32:43. September, 1951.
- "Birds of the Lower Grand Coulee and Potholes Area, Grant County, Washington" (with C. F. Yocom). Ibid., 33:18-28, 1953.
- "A throw-net for capturing female waterfowl on the nest." Journal of Wildlife Management, 16:515. October, 1952.
- "Food habits of mountain quail (Orcortyx picta) in eastern Washington" (with C. F. Yocom). Ibid., 17:204-207. April, 1953.

ARTHUR K. BURDITT, M.S., Research Assistant

"Comments on the effect of insecticides on predators found in a corn field." Proceedings of the Seventh Annual Meeting of the North Central States Branch of the American Association of Economic Entomologists, p. 21. March, 1952.

School of Forestry

FRANK H. KAUFERT, Ph.D., Director and Professor

- "Occurrence and probable cause of heartwood degradation in commercial species of Populus" (with V. H. Clausen). Journal of Forest Products Research Society, Vol. 2, No. 4, pp. 62-65, 1952.
- "Construction of a small low-cost vacuum treating plant" (with J. R. Neetzel, R. L. Hossfeld, and L. W. Rees). *Ibid.*, Vol. 3, No. 1, pp. 1-4, 1953.
- "This new plant" (with J. R. Neetzel and R. L. Hossfeld). Minnesota Farm and Home Science, Vol. 10, No. 2, pp. 10-11, 1953.
- "Diffusion of dissolved materials through wood" (with E. A. Behr and D. R. Briggs). Journal of Physical Chemistry, 57:476-80, 1953.
- "Our part in the training of men for the building products industry." Mississippi Valley Lumbermen, Vol. 84, No. 34, pp. 8, 10, 30, 1953.
- "Laminated timbers" (with Committee). Proceedings of American Wood Preservers Association, 49:74-76, 1953.
- A Small Vacuum Treating Plant (with J. R. Neetzel, R. L. Hossfeld, and L. W. Rees). Minnesota Forestry Note No. 12. December 15, 1952. 2 multilithed pages.
- The Control of Dwarf Mistletoe on Black Spruce (with R. L. Anderson). Minnesota Forestry Note No. 13, January 15, 1953, 2 multilithed pages.
- THORVALD SCHANTZ-HANSEN, Ph.D., Professor and Director Lake Itasca Forestry and Biological Station
- "Cloquet thinning plots." Journal of Forestry, 50:480-82. June, 1952.
- "The effect of source of seed on growth of jack pine" (with R. A. Jensen). *Ibid.*, pp. 539-44 July, 1952.

"The Cloquet Experimental Forest." Conservation Volunteer, Vol. 15, No. 88, pp. 35-36, 1952.

Results of Testing Exotic Trees and Shrubs for Hardiness in Northern Minnesota (with O. F. Hall). Minnesota Forestry Note No. 5. August 15, 1952. 2 multilithed pages.

HENRY L. HANSEN, Ph.D., Associate Professor

Chemical Weed Control in Minnesota (with R. S. Dunham, R. E. Nylund, and R. F. Crim). University of Minnesota Agricultural Extension Service Pamphlet No. 187, 1953, 16 pages.

"Some observations on population dynamics of secondary woody vegetation." Proceedings of the North Central Weed Control Conference and Western Canadian Weed Control Conference, pp. 51-53, 1952.

"Control of woody plants—a summary for 1952." Research Report, North Central Weed Control Conference, pp. 51-52. 1952.

"Ecology of some woody weeds." Proceedings Lake States Forestry Clinic, pp. 13-15, 1952.

"Thirty years of windbreak studies" (with D. P. Duncan). Minnesota Farm and Home Science, Vol. 10, No. 1, pp. 18-19. 1952.

Characteristics of Black Spruce Seed from Cones of Different Ages (with T. S. Chai). Minnesota Forestry Note No. 2, July 15, 1952. 2 multilithed pages.

The Tolerance of Several Tree Species to TCA Used in Controlling Quack Grass (Agropyron repens (L.) Beav.) in Nurseries. Minnesota Forestry Note No. 6. August 15, 1952. 2 multi-lithed pages.

Suppression Effects in Twenty-Five-Year-Old Windbreak Plantings (with P. E. Collins). Minnesota Forestry Note No. 14. February 15, 1952. 2 multilithed pages.

Effects of Deer and Rabbits on Hazel Brush at Itasca State Park (with E. V. Bakuzis). Minnesota Forestry Note No. 10. November 15, 1952. 2 multilithed pages.

Killing Woody Plants with Chemicals (with L. W. Melander). Minnesota State Department of Agriculture, Dairy, and Food, Division of Plant Industry, Section of Weed Control, Circular No. 3, 1953, 5 multilithed pages.

RALPH L. HOSSFELD, Ph.D., Associate Professor

"The chemical utilization of tamarack." Pages 19-21 in Minnesota State Department of Agriculture, Dairy, and Food Circular No. 204. 1952.

"Identification of phenols by paper partition chromatography" (with W. H. Chang and W. M. Sandstrom). Journal of the American Chemical Society, 74:5766. 1952.

"Construction of a small low-cost vacuum treating plant" (with F. H. Kaufert, J. R. Neetzel, and L. W. Rees). Journal of Forest Products Research Society, Vol. 3, No. 1, pp. 1-4, 1953.

"This new plant" (with F. H. Kaufert and J. R. Neetzel). Minnesota Farm and Home Science, Vol. 10, No. 2, pp. 10-11, 1953.

Reviews of

Erik Hagglund, Chemistry of Wood in Science, 115:320. 1952.

F. E. Brauns, Chemistry of Lignin. Ibid., 116:72. 1953.

A Small Vacuum Treating Plant (with F. H. Kaufert, J. R. Neetzel, and L. W. Rees). Minnesota Forestry Note No. 12. December 15, 1952. 2 multilithed pages.

Louis W. Rees, Ph.D., Associate Professor

"Construction of a small low-cost vacuum treating plant" (with F. H. Kaufert, J. R. Neetzel, and R. L. Hossfeld). Journal of Forest Products Research Society, Vol. 3, No. 1, pp. 1-4. 1953.

"Home grown timber for farm buildings." MVAIA Newsletter, pp. 27-29. Spring, 1953.

A Small Vacuum Treating Plant (with F. H. Kaufert, J. R. Neetzel, and R. L. Hossfeld). Minnesota Forestry Note No. 12. December 15, 1952. 2 multilithed pages.

The Strength of Northern White-Cedar Posts. Minnesota Forestry Note No. 15. March 15, 1953. 2 multilithed pages.

ARTHUR E. SCHNEIDER, M.A., Ph.D., Associate Professor

Regeneration Following Cutting in Black Spruce Swamps (with R. E. Buckman). Minnesota Forestry Note No. 3. July 15, 1952. 2 multilithed pages.

STEPHEN H. SPURR, Ph.D., Associate Professor

"Origin of concept of forest succession." Ecology, 33:426-27. July, 1952.

"Three-dimensional prints from color film." Photogrammetric Engineering, 18:827-30, 1952.

"A further note concerning shadows on aerial photographs." Ibid., pp. 832-33.

- "Aerial photographs in forest management." Ibid., 19:1-9. 1953.
- "Use of color film in making anaglyphs from black and white prints." Ibid., pp. 125-26.
- "Post-war Forestry in Western Europe"
 - "Part I. England and Scotland." Journal of Forestry, 51:195-99, 1953.
 - "Part II. Germany, Switzerland, and France." Ibid., pp. 415-21.
- Computing Tree Volume Graphically. Minnesota Forestry Note No. 8. September 15, 1952. 2 multilithed pages.
- Index Cards for Tree Records. Minnesota Forestry Note No. 11. December 15, 1952. 2 multilithed pages.
- Growth of Mature Red Pine. Minnesota Forestry Note No. 9. October 15, 1952. 2 multilithed pages.

JOHN R. NEETZEL, M.S., Research Associate

- Building Better Farm Fences, University of Minnesota Agricultural Extension Service Bulletin No. 272, 12 pages, 1953.
- "Building good fence corners." MVAIA Newsletter, pp. 32-33. Fall, 1952.
- "Construction of a small low-cost vacuum treating plant" (with F. H. Kaufert, R. L. Hossfeld, and L. W. Rees). *Journal of Forest Products Research Society*, Vol. 3, No. 1, pp. 1-4, 1953. "Timely tips on fencing," *Farmer*, Eighteen tips on fencing used from March 7-21, 1953.
- "Mr. Farmer—fence row burning costs you money." Minnesota Conservation Volunteer, Vol. 16, No. 92, pp. 25-27, 1953.
- "Use of treated lumber and posts on the farm." Ibid., p. 16.
- "Building better farm fences." Proceedings of the Twenty-Fifth Annual Meeting of the Minnesota Farm Managers' Association, pp. 15-16, 1953.
- "This new plant" (with F. H. Kaufert and R. L. Hossfeld). Minnesota Farm and Home Science, Vol. 10, No. 2, pp. 10-11, 1953.
- Power Driving of Wood Fence Posts. Minnesota Forestry Note No. 4. July 15, 1952. 2 multilithed pages.
- A Small Vacuum Treating Plant (with F. H. Kaufert, R. L. Hossfeld, and L. W. Rees). Minnesota Forestry Note No. 12. December 15, 1952. 2 multilithed pages.

DONALD P. DUNCAN, Ph.D., Assistant Professor

- Teacher's Guide to the New Paul Bunyan (with O. F. Hall). New York: Modern Talking Picture Service, Inc. 30 pages. 1952.
- "The biology of tamarack and its management." Proceedings of Conference on Economic Aspects of Larch Sawfly, Injury to Tamarack. Minnesota State Entomologists Office, pp. 16-19. 1952.
- "Poplar, elm, and Colorado spruce investigations at the University of Minnesota." *Proceedings Lake States Forest Genetics Conference*. Lake States Forest Experiment Station Miscellaneous Report No. 22, pp. 18-20. March 31-April 1, 1953.
- "Thirty years of farmstead windbreak research." Proceedings of Twenty-fifth Annual Meeting Minnesota Farm Manager's Association, pp. 13-14, 1953.
- "Collecting seed from conebearing trees." KMG Leaflet, Study Lesson No. 24, pp. 1-2. 1952.
- "Thirty years of windbreak studies" (with H. L. Hansen). Minnesota Farm and Home Science, Vol. 10, No. 1, pp. 18-19, 1952.
- "Better Minnesota windbreaks." Minnesota Vocational Agriculture Instructor's Association Newsletter, pp. 26-27, 1953.
- "Let 'er snow and blow." Capper's Farmer, pp. 36, 83-85. April, 1953.
- Reproduction Cutting in Tamarack. Minnesota Forestry Note No. 7. September 15, 1952. 2 multilithed pages.
- Abstracts in Biological Abstracts, Vol. 27, No. 4, 1953, Nos. 10766, 10768, 10771, 10781, 10786, 10787, 10795, 10796, 10808; Vol. 27, No. 5, 1953, Nos. 14017, 14020, 14033, 14053, 17794.

Otis F. Hall, M.F., Instructor

- Teacher's Guide to the New Paul Bunyan (with D. P. Duncan). New York: Modern Talking Picture Service, Inc. 30 pages. 1952.
- Results of Testing Exotic Trees and Shrubs for Hardiness in Northern Minnesota" (with T. Schantz-Hansen). Minnesota Forestry Note No. 5. August 15, 1952. 2 multilithed pages.

EGOLFS V. BAKUZIS, M.S., Research Assistant

Effects of Deer and Rabbits on Hazel Brush at Itasca State Park (with H. L. Hansen). Minnesota Forestry Note No. 10. November 15, 1952. 2 multilithed pages.

ROBERT E. BUCKMAN, M.F., Research Assistant

Regeneration Following Cutting in Black Spruce Swamps (with A. E. Schneider). Minnesota Forestry Note No. 3. July 15, 1952. 2 multilithed pages.

School of Home Economics

ALICE BIESTER, M.A., Professor

"The National Food and Nutrition Institute." Minnesota Dietetic Association Bulletin, 12:11-12. May, 1953.

JANE M. LEICHSENRING, Ph.D., Professor

- "Food composition table for short method of dietary analysis" (with Eva D. Wilson). (Second revision.) Pages 81-88 in Dorothea Turner, Handbook of Diet Therapy. (Revised edition.) Chicago: University of Chicago Press. 1952.
- "Hemoglobin, red cell count and mean corpuscular hemoglobin of healthy infants" (with Loana M. Norris and Mary L. Halbert). American Journal of Diseases of Children, 84:27-34. July, 1952.
- "Short method of dietary analysis as based on the new data of food composition." Journal of the American Dietetic Association, 28:806-808, 1952.

Isabel T. Noble, Ph.D., Professor

- "The effect of fluctuating storage temperature on the quality of stored frozen foods" (with J. D. Winter, A. Hustrulid, and E. S. Ross). Food Technology, 6:311-18, 1952.
- "Thiamine and riboflavin retention in veal" (with Elaine Asp and Lucille Gomez). Journal of the American Dietetic Association, 29:251-53. 1953.
- "National Food and Nutrition Institute." Journal of Home Economics, 45:80. 1953.

ETHEL L. PHELPS, M.S., Professor

"The relative roles of laundering and of wear in the deterioration of four types of cotton uniform fabrics" (with Frances P. McLean, Marian M. Moore, Louise S. Greenwood, June Very, Norma H. Holm, and Vivian White). Journal of Home Economics, 45:174-78. 1953.

ELAINE H. ASP, M.S., Instructor

"Thiamine and riboflavin retention in veal" (with Isabel Noble and Lucille Gomez), Journal of the American Dietetic Association, 29:251-53, 1953.

EVELYN M. JONES, M.S., Instructor

"Effect of orange and lime juice on calcium metabolism" (with Marguerite G. Mallon). Journal of the American Dietetic Association, 28:939-42, 1952.

HORTICULTURE

WILLIAM H. ALDERMAN, B.S.A., Professor and Head

- Metcor Cherry (with W. G. Brierly, T. S. Weir, A. N. Wilcox, R. C. Blake, K. W. Hanson, and L. C. Snyder). University of Minnesota Agricultural Experiment Station Miscellaneous Report No. 16, 1952, 4 pages.
- "It's easy to propagate small fruits." American Fruit Grower, Vol. 73, No. 3, pp. 16-17, 48-49.
- "Meteor cherry" (with T. S. Weir). Minnesota Horticulturist, 81:3. 1953.
- "Chemical thinning of apples in 1952" (with W. G. Brierley and T. S. Weir). Fruit Growers Meeting, Winona, Minnesota, November, 1952. 9 tables and 6 mimeographed pages.

WILFRID G. BRIERLEY, Ph.D., Professor

Meteor Cherry (with W. H. Alderman, T. S. Weir, A. N. Wilcox, R. C. Blake, K. W. Hanson, and L. C. Snyder). University of Minnesota Agricultural Experiment Station Miscellaneous Report No. 16, 1952, 4 pages.

- "The effect of daily alternations between 27° and 39° F. on retention or loss of cold resistance in the Latham raspberry" (with R. J. Stadtherr). Proceedings of the American Society for Horticultural Science, 59:173-76, 1952.
- "Hormones help black walnut root grafts." Minnesota Horticulturist, 81:44, 1953; Nutshell, Vol. 5, No. 3, pp. 19-20, 1953.
- "Chemical thinning of apples in 1952" (with W. H. Alderman and T. S. Weir). Fruit Growers Meeting, Winona, Minnesota, November, 1952. 9 tables and 6 mimeographed pages.
- "Orchard studies: how light intensity is affected by use of filler trees" (with A. A. Piringer). For fruit growers. Department of Horticulture, May 1953. 1 figure and 5 mimeographed
- "Orchard studies: how areas occupied by apple tree beads increase with age." For fruit growers. Department of Horticulture. June, 1953. 1 figure, 2 tables and 4 mimeographed pages.
- "Orchard studies: axillary fruit buds on some apple varieties in Minnesota." For fruit growers. Department of Horticulture. June, 1953. 3 tables and 5 mimeographed pages.

TROY M. CURRENCE, Ph.D., Professor

- "Better asparagus for your table." Minnesota Farm and Home Science, Vol. 10, No. 2, p. 17. 1953
- "Evaluating heterosis in tomato improvement." Report of the Tomato Genetics Cooperative, No. 3, pp. 9-10, 1953.
- "Combining ability of different backcross generations" (with S. Honma). Ibid., pp. 12-14.

FRED A. KRANTZ, Ph.D., Professor

"What housewives want in potatoes." Minnesota Farm and Home Science, Vol. 10, No. 3, p. 13. 1953.

ARTHUR E. HUTCHINS, Ph.D., Associate Professor

"Maternal inheritance of a color variation (chimaera) in the squash, Cucurbita maxima Duch" (with V. B. Youngner). Proceedings of the American Society for Horticultural Science, 60:370-78. 1952.

ROBERT E. NYLUND, Ph.D., Associate Professor

- Chemical Weed Control in Minnesota-1953 (with R. S. Dunham, R. F. Crim, and H. L. Hansen), University of Minnesota Agricultural Extension Service Pamphlet No. 187, 1953, 16 pages.
- "The response of onions to soil and foliar applications of manganese." Proceedings of the American Society for Horticultural Science, 60:283-85. 1952.
- "The control of weeds in onions with pre-emergence sprays." Research Report Ninth Annual North Central Weed Control Conference, pp. 71-72, 1952.
- "Control of weeds in onions by pre-emergence application of herbicides." Ibid., p. 121.
- "The influence of date of planting and time of application on the effectiveness of CMU as a pre-emergence herbicide for onions." Ibid., pp. 121-22.
- "Post-emergence weed control in onions." *Ibid.*, pp. 122.
 "Handling fresh sweet corn for market. Part 2" (with J. D. Winter, A. F. Legun, and G. C. Chappell). Pre-Pack-Age. Vol. 6, No. 2, pp. 24-27, 1952.
- "The influence of variety and date of planting on the relative cooking quality of potatoes graded according to specific gravity" (with A. J. Poivan). American Potato Journal, 30:107-18, 1953.

ARTHUR N. WILCOX, Ph.D., Associate Professor

- Meteor Cherry (with W. H. Alderman, W. G. Brierley, T. S. Weir, R. C. Blake, K. W. Hanson, and L. C. Snyder). University of Minnesota Agricultural Experiment Station Miscellaneous Report No. 16, 1952, 4 pages.
- "Freezing quality in strawberry breeding" (with J. D. Winter and Shirley Trantanella). Minnesota Farm and Home Science, Vol. 10, No. 2, p. 6. 1953.

JAMES D. WINTER, M.S., Associate Professor

Freezing Foods for Home Use (with A. Hustrulid, Shirley Trantanella, and W. J. Aunan). (Revised.) University of Minnesota Agricultural Extension Service Bulletin No. 244, 1952. 48 pages.

- "The effect of fluctuating storage temperature on the quality of stored frozen foods" (with A. Hustrulid, Isabel Noble, and E. S. Ross). Food Technology, 6:311-18, 1952.
- "Handling fresh sweet corn for market. Part 2" (with R. E. Nylund, A. F. Legun, and G. C. Chappell). Pre-Pack-Age, Vol. 6, No. 2, pp. 24-27, 1952.
- "Freezing quality in struwberry breeding" (with A. N. Wilcox and Shirley Trantanella). Minnesota Farm and Home Science, Vol. 10, No. 2, p. 6. 1953.

Editor, Orchard and Garden Department, Farmer. 1952-53.

Consulting editor, Packaging-Wrapping, Frozen Food Center. 1952-53.

ROBERT A. PHILLIPS, M.S., Assistant Professor

Your Garden. St. Paul Sunday Pioneer Press. 1952-53. 52 articles.

RICHARD E. WIDMER, M.S., Instructor

- "Are your house plants up to date?" Minnesota Horticulturist, 80:135-37. 1952.
- "Snapdragon-a favorite garden annual." Ibid., 81:90. 1953.
- "Systemic insecticides." Mega, Vol. 12, No. 5, pp. 10-11, 19. 1952.
- "1952 Lily leaf scorch experiments." Minnesota State Florists' Bulletin, pp. 2-5. December, 1952.
- "Cleaning of Easter Lily foliage." Ibid., pp. 8-9. February, 1953.
- "Carnation culture notes." Ibid., pp. 1-3. June, 1953.

Editor, Minnesota State Florists' Bulletin. 1952-53.

ALBERT A. PIRINGER, Ph.D., Teaching Assistant

"Orchard studies: how light intensity is affected by use of filler trees" (with W. G. Brierley).

For fruit growers. Department of Horticulture, May 1953. 1 figure and 5 mimeographed pages.

SHIGEMI HONMA, Ph.D., Research Assistant

"Combining ability of different backcross generations" (with T. M. Currence). Report of the Tomato Genetics Cooperative, No. 3, pp. 12-14. 1953.

ARTHUR J. POIVAN, M.S., Research Assistant

"The influence of variety and date of planting on the relative cooking quality of potatoes graded according to specific gravity" (with R. E. Nylund). American Potato Journal, 30:107-18. 1953,

RICHARD J. STADTHERR, M.S., Research Assistant

"The effect of daily alternations between 27° and 39° F. on retention or loss of cold resistance in the Latham raspberry" (with W. G. Brierley). Proceedings of the American Society for Horticultural Science, 59:173-76.

VICTOR B. YOUNGNER, Ph.D., Research Assistant

"Maternal inheritance of a color variation (chimaera) in the squash, Cucurbita maxima Duch" (with Λ. Ε. Hutchins). Proceedings of the American Society for Horticultural Science, 60:370-78. 1952.

PLANT PATHOLOGY AND BOTANY

ELVIN C. STAKMAN, Ph.D., D.Sc., Professor and Head

- "Introductory statement." Pages 3.4 in Vol. 1, Ponencias VI Congreso Internacional de Patologia Comparada. Madrid, Spain. May 4-11, 1952.
- "Characters of fungi important in comparative pathology." Ibid., pp. 6-13.
- "The behavior of mutable black lines of Ustilago zeae" (with S. I. Lu and J. B. Rowell). (Abstract.) Phytopathology, 42:480, 1952.
- "The natural science program in UNESCO." American Institute of Biological Societies, 2:12-15. 1952.
- "The rust problem today." (Abstract.) Grain Rust Review of 1953. North Dakota Agricultural Experiment Station Bimonthly Bulletin, 15:196-99. 1953.
- Review of E. Gaümann, Pflanzliche Infektionslehre in Archives of Biochemistry and Biophysics, 41:486-87. 1952.

Physiologic Races of Puccinia graminis in the United States in 1951 (with D. M. Stewart).
U. S. Department of Agriculture, Bureau of Entomology and Plant Quarantine, Bureau of Plant Industry, Soils, and Agricultural Engineering, and Minnesota Agricultural Experiment Station. April, 1953. 10 mimeographed pages.

Jonas J. Christensen, Ph.D., Professor and Acting Head

- The Black Point Disease of Wheat in the United States (with E. W. Hanson). University of Minnesota Agricultural Experiment Station Technical Bulletin No. 206. 1953. 30 pages.
- "The dissemination of pasmo of flax by insects and other animals." Minnesota Seed Grower, 26:4-6, 1953.
- Review of Neil E. Stevens and Russell B. Stevens, Disease in Plants in Mycologia, 45:150-51. 1953.

CLYDE M. CHRISTENSEN, Ph.D., Professor

- Comparative Tests of Various Culture Media in the Study of Air-borne Molds. Report to meeting of College of Allergists, Pittsburgh, Pa., April 7-10, 1952.
- It Pays to Protect Stored Grain (with H. C. Pederson, H. L. Parten, and D. M. Ryan). University of Minnesota Agricultural Extension Service Folder No. 173, 1952.
- "Aeroaliergens. II. Fungus and mold identification" (with Mary Ann Swaelly). Chapter 16, pages 293-310 in John M. Sheldon, Robert G. Lovell, and Kenneth P. Mathews, A Manual of Clinical Allergy, Philadelphia: W. B. Saunders Co. 1953.
- "Grain Storage Studies"
 - "XI. Lipolytic action of fungi isolated from stored corn" (with J. J. Goodman). Cereal Chemistry, 29:299-308. 1952.
 - "XII. The fungus flora of stored rice seed" (with F. A. Del Prado). Ibid., pp. 456-62.
- "Molds in housedust, furniture stuffing, and in the air within homes" (with Mary Ann Swaebly).

 **Journal of Allergy, 23:370-74. 1952.
- "Fungi important in storage of barley" (with J. Tuite). (Abstract.) Phytopathology, 42:476. 1952.
- "Microbiological content of grain dust" (with Mary Ann Swaebly). (Abstract.) Ibid.
- "Sick wheat." Minnesota Farm and Home Science, Vol. 10, No. 1, pp. 3, 19. 1952.
- "Molds in housedust and furniture stuffing" (with Mary Ann Swaebly). Ibid., Vol. 10, No. 2, p. 20, 1952.

CARL J. EIDE, Ph.D., Professor

- "An isolate of Fusarium with unusual virulence for the resistant Iroquois muskmelon" (with A. Makila). (Abstract.) Phytopathology, 42:465, 1952.
- "The appearance and survival of new races of Phytophthora infestans" (with H. D. Thurston). (Abstract.) Ibid., p. 481.

HELEN HART, Ph.D., Professor

Review of E. Gaümann, Pflanzliche Infektionslehre in Archives of Biochemistry and Biophysics, 41:486-87. 1952.

MILTON F. KERNKAMP, Ph.D., Associate Professor

- Clovers for Minnesota (with H. L. Thomas, E. R. Duncan, A. G. Peterson, and A. R. Schmid).
 University of Minnesota Agricultural Experiment Station Bulletin No. 415, 1952, 27 pages.
- "Alfalfa seed loss due to Ascochyta imperfecta Pk. (blackstem)" (with G. A. Hemerick). (Abstract.) Phytopathology, 42:468. 1952.
- "Diseases reduce alfalfa seed yields." Minnesota Farm and Home Science, Vol. 10, No. 2, p. 16, 1953.
- "What's new in soybean diseases." Minnesota Seed Grower, Vol. 26, No. 1, p. 6. 1953.
- "Effect of seed treatment on yield and nodulation of soybeans in Minnesota" (with F. I. Frosheiser and J. W. Gibler). Plant Disease Reporter, 37:222-25. 1953.

THOMAS H. KING, Ph.D., Associate Professor

- Fruit Spray Schedules (with L. C. Snyder and L. K. Cutkomp). (Revised.) University of Minnesota Agricultural Extension Service Pamphlet No. 184, 1953, 8 pages.
- "The effect of copper on growth requirements of Coniothyrium fuckelii" (with N. E. Krog and H. W. Schroeder). (Abstract.) Phytopathology, 42:468, 1952.

"Strawberry stunt virus in Fragaria vesca" (with R. L. Skiles). Plant Disease Reporter, 36:406-407. 1952.

JOHN B. ROWELL, Ph.D., Research Associate

- "The behavior of mutable black lines of Ustilago zeae" (with S. I. Lu and E. C. Stakman). (Abstract.) Phytopathology, 42: 480. 1952.
- "Mutation and environmental selection of growth types in Ustilago zeae" (with Elsa L. Jackson). (Abstract.) Ibid.

ALVIN H. LARSON, B.S., Assistant Professor

- "Response of weed species to 2,4-D, MCP and TCA" (with R. S. Dunham, H. G. Heggeness, and L. E. Anderson). Research Report of the Ninth Annual North Central Weed Control Conference, pp. 37-38. December, 1952.
- "How to control perennial weeds" (with H. G. Heggeness). Minnesota Farm and Home Science, Vol. 10, No. 3, p. 20. 1953.

DAVID W. FRENCH, Ph.D., Instructor

- "Performance of paper machine wet felts. II. Further studies of the plugging of felts." Technical Association Pulp and Paper Industry, 36:20-35. 1953.
- "Mycelial mats of oak wilt found in Minnesota during dry weather" (with R. N. Campbell). Plant Disease Reporter, 37:243. 1953.

HAROLD G. HEGGENESS, M.S., Instructor

- "Response of weed species to 2,4-D, MCP and TCA" (with R. S. Dunham, A. H. Larson, and L. E. Anderson). (Abstract.) Research Report of the Ninth Annual North Central Weed Control Conference, pp. 37-38. December, 1952.
- "The effect of aqueous extracts of green plant tissue on germination and seedling growth" (with D. LeTourneau and G. D. Failes). (Abstract.) *Ibid.*, p. 161.
- "How to control perennial weeds" (with A. H. Larson). Minnesota Farm and Home Science, Vol. 10, No. 3, p. 20. 1953.

MATTHEW B. MOORE, M.S., Instructor

- "The cause and transmission of blue dwarf and red leaf of oats." (Abstract.) Phytopathology, 42:471. 1952.
- "Mercury bichloride solution as a surface disinfectant for cereal seeds" (with C. R. Olien). (Abstract.) Ibid.
- "Contribution from Minnesota" (with F. K. S. Koo, S. Goto, and W. M. Myers.) 1952 National Oat Newsletter, 3:45-46, 1953.
- "Red leaf." Ibid., p. 47.
- "New developments in oat diseases." Minnesota Farm and Home Science, Vol. 10, No. 3, p. 5, 1953.
- "Oat diseases in 1952." Minnesota Seed Grower, Vol. 26, No. 2, pp. 1, 3, 4. 1953.

James W. Broyles, M.S., Research Fellow

"Marker races useful in studying survival ability of races of Puccinia graminis tritici" (with K. R. Bromfield). (Abstract.) Phytopathology, 42:497, 1952.

EDWARD E. BUTLER, M.S., Research Fellow

"A new species of Mucor." Mycologia, 64:561-63. 1952.

JAMES E. DEVAY, Ph.D., Research Fellow

"A note on the effect of mold growth and increased moisture content on the free amino acids in hard red spring wheat." Cereal Chemistry, 29:309-11. 1952.

ROBERT N. CAMPBELL, B.S., Research Assistant

"Mycelial mats of oak wilt found in Minnesota during dry weather" (with D. W. French). Plant Disease Reporter, 37:243. 1953.

GEORGE D. FAILES, B.S., Research Assistant

"The effect of aqueous extracts of green plant tissue on germination and seedling growth" (with D. LeTourneau and H. G. Heggeness). (Abstract.) Research Report of Ninth Annual North Central Weed Control Conference, p. 161. December, 1952.

FRED I. FROSHEISER, M.S., Research Assistant

"Effect of seed treatment on yield and nodulation of soybeans in Minnesota" (with M. F. Kernkamp and J. W. Gibler). Plant Disease Reporter, 37:222-25. 1953.

SHOSUKE GOTO, M.S., Research Assistant

- "Septoria black stem of oats in Minnesota." (Abstract.) Phytopathology, 42:466. 1952.
- "Contribution from Minnesota" (with F. K. S. Koo, M. B. Moore, and W. M. Myers). 1952 National Oat Newsletter, 3:45-46. 1953.
- "Western wheat mosaic on oats" (with R. E. Atkinson). Ibid., pp. 47-48.

ELSA L. JACKSON, B.A., Research Assistant

"Mutation and environmental selection of growth types in Ustilago zeae" (with J. B. Rowell). (Abstract.) Phytopathology, 42:480, 1952.

NORMAN E. KROG, Ph.D., Research Assistant

- "The use of chromotropic acid for the quantitative determination of 2,4-Dichlorophenoxyacetic acid" (with D. J. LeTourneau). Plant Physiology, 27:822-27, 1952.
- "The effect of copper on growth requirement of Coniothyrium fuckelii" (with T. H. King and H. W. Schroeder). (Abstract.) Phytopathology, 42:468, 1952.

DUANE J. LETOURNEAU, M.S., Research Assistant

- "The effect of aqueous extracts of green plant tissue on germination and seedling growth" (with G. D. Failes and H. G. Heggeness). (Abstract.) Research Report of the Ninth Annual North Central Weed Control Conference, p. 161. December, 1952.
- "The use of chromotropic acid for the quantitative determination of 2,4-Dichlorophenoxyacetic acid" (with N. E. Krog). Plant Physiology, 27:822-27, 1952.

ARMAS A. MAKILA, B.S., Research Assistant

"An isolate of Fusarium with unusual virulence for the resistant Iroquois muskmelon" (with C. J. Fide). (Abstract.) Phytopathology, 42:465, 1952.

CHARLES R. OLIEN, B.A., Research Assistant

"Mercury bichloride solution as a surface disinfectant for cereal seeds" (with M. B. Moore). (Abstract.) Phytopathology, 42:471, 1952.

HARRY W. SCHROEDER, B.S., Research Assistant

"The effect of copper on growth requirement of Coniothyrium fuckelii" (with T. H. King and N. E. Krog). (Abstract.) *Phytopathology*, 42:468, 1952.

ROBERT L. SKILES, Ph.D., Research Assistant

"Strawberry stunt virus in Fragaria vesca" (with T. H. King). Plant Disease Reporter, 36:406-407, 1952.

MARY ANN SWAEBLY, Ph.B., Research Assistant

- "Aeroallergens, II. Fungus and mold identification" (with C. M. Christensen), Chapter 16, pages 293-310 in John M. Sheldon, Robert G. Lovell, and Kenneth P. Mathews, A Manual of Clinical Allergy, Philadelphia: W. B. Saunders Co. 1953.
- "Molds in housedust, furniture stuffing, and in the air within homes" (with C. M. Christensen).

 Journal of Allergy, 23:370-74, 1952.
- "Microbiological content of grain dust" (with C. M. Christensen). (Abstract.) Phytopathology, 42:476, 1952.
- "Molds in housedust and furniture stuffing" (with C. M. Christensen). Minnesota Farm and Home Science, Vol. 10, No. 2, p. 20, 1952.

HERBERT D. THURSTON, M.S., Research Assistant

"The appearance and survival of new races of Phytophthora infestans" (with C. J. Eide). (Abstract.) Phytopathology, 42:481, 1952.

JOHN F. TUITE, B.A., Research Assistant

"Fungi important in storage of barley" (with C. M. Christensen). (Abstract.) Phytopathology, 42:476, 1952,

Poultry Husbandry

ELTON L. JOHNSON, Ph.D., Professor and Head

- "Unidentified factors, protein quality, and quantity in poultry nutrition." Proceedings of the Iowa Nutrition School for Feed Men, pp. 4-7. September, 1952.
- "Range nutrients for turkeys." Minnesota Gobbles, 7:26-27. November, 1952.
- "Antibiotics and turkey rations." Ibid., pp. 20-21. April, 1953.
- "Providing vitamin B12, antibiotic and unknown growth factor activity for chick diets." Poultry Science, 31:955-61. 1952.
- "Laboratory estimation of the nutritive value of soybean oil meals" (with S. L. Balloun and L. K. Arnold), Ibid., 32:517-27, 1953.
- "Anticoagulant properties of unheated soybean meal in chick diets" (with S. L. Balloun). Archives of Biochemistry and Biophysics, 42:355-59. 1953.
- "New growth factors in fats" (with D. Carver). Successful Farming, Vol. 51, No. 6, p. 63. 1953. Abstracts of
 - Stanley L. Balloun and Elton L. Johnson, Underheated Soybean Oil Meal Increases Blood Clotting Time of Chicks in Poultry Science, 31:905-906. 1952.
 - Stanley L. Balloun and Elton L. Johnson, Fluorescing Properties of Expeller Soybean Oil Meals. Ibid., p. 906.
 - Donald S. Carver and Elton L. Johnson, Unidentified Growth Factors in Vegetable Oils and Fatty Acid Concentrates. Ibid., pp. 910-11.

THOMAS H. CANFIELD, M.S., Associate Professor

- Development and Performance of Inbred Lines of Chickens (with R. N. Shoffner, H. J. Sloan, L. M. Winters, and A. M. Pilkey). University of Minnesota Agricultural Experiment Station Technical Bulletin No. 207, 1953, 34 pages.
- "Prevention of perosis in goslings by nicotinic acid" (with M. J. Battig, E. G. Hill, and H. J. Sloan). Poultry Science, 32:550-51. 1953.
- "The Chicktester is here to stay." Hatchery and Feed, Vol. 27, No. 3, pp. 20-23, 1953. "Sex segregation—Does it pay?" Turkey World, Vol. 28, No. 3, p. 11, 1953.
- "The goose industry awakes." Poultry Processing and Marketing, Vol. 59, No. 5, pp. 16-17. 1953.
- Review of T. H. Canfield, Poultry Production 8th Edition in Poultry Science, 32:559. 1953.

ROBERT N. SHOFFNER, Ph.D., Associate Professor

Development and Performance of Inbred Lines of Chickens (with H. J. Sloan, L. M. Winters, T. H. Canfield, and A. M. Pilkey). University of Minnesota Agricultural Experiment Station Technical Bulletin No. 207, 1953, 34 pages.

MILO H. SWANSON, Ph.D., Assistant Professor

- "What is this thing called egg quality?" Farm Business Notes, No. 341, pp. 2-4. October, 1952.
- "A proposal for the use of carbon dioxide in retail egg cartons." Poultry Science, 32:369-71. 1953.
- Abstract of M. H. Swanson and H. J. Sloan, Some Protein Changes in Stored Frozen Poultry in Poultry Science, 31:938. 1952.

MARSHALL J. BATTIG, B.S., Research Assistant

"Prevention of perosis in goslings by nicotinic acid" (with E. G. Hill, T. H. Canfield, and H. J. Sloan). Poultry Science, 32:550-51, 1953.

ELDON G. HILL, M.S., Research Assistant

- "The effect of heat treatment on the nutritive value and hemagglutinating activity of soybean oil meal" (with I. E. Liener). Journal of Nutrition, 49:609-20. 1953.
- "Prevention of perosis in goslings by nicotinic acid" (with M. J. Battig, T. H. Canfield, and H. J. Sloan). Poultry Science, 32:550-51. 1953.
- "L-lyxoflavin in the starting diets of turkeys and chickens" (with D. H. Sherwood and H. J. Sloan). Proceedings of the Society for Experimental Biology and Medicine, 83:395-98. 1953.

RHETORIC

RALPH G. NICHOLS, Ph.D., Professor and Head

- "The Gilman Plan for the reorganization of the Speech Association of America." Quarterly Journal of Speech, 38:338-39. October, 1952.
- "Material for courses in communication." Ibid., pp. 465-69. December, 1952.
- "Report of the committee on listening comprehension." Journal of Communication, 2:81-84. November, 1952.

JAMES I. BROWN, Ph.D., Associate Professor

- Brown-Carlson Listening Comprehension Test (with G. R. Carlson). New York: World Book Company. 1953, 16 pages.
- "Report of the committee on reading comprehension." Journal of Communication, 2:84-86. November, 1952.
- Review of Sylvia C. Kay, Reading Critically in Quarterly Journal of Speech, 38:481. December, 1952.

FRANCIS E. DRAKE, Ph.D., Assistant Professor

Review of Richard Rosenheim, The Eternal Drama in Quarterly Journal of Speech, 38:477-78. December, 1952.

DONALD Z. WOODS, Ph.D., Assistant Professor

"Playhouse for pioneers: The story of the Pence Opera House." Minnesota History, 33:169-78. Winter, 1952.

RURAL SOCIOLOGY

Lowry Nelson, B.S., M.S., Ph.D., Professor

- The Mormon Village: A Pattern and Technique of Land Settlement. Salt Lake City: University of Utah Press. 1952, xvii + 296 pages + 13 pages of maps and photographs.
- Migratory Workers: The Mobile Tenth of American Agriculture. Planning Pamphlet No. 82.

 Washington: The National Planning Association, February, 1953, v. phys. 33, pages
- Washington: The National Planning Association. February, 1953. x plus 33 pages. "Minnesota is becoming an urban state." Minnesota Farm and Home Science, Vol. 10, No. 1, pp. 12-13. October, 1952.
- "Education and the changing size of Mormon families." Rural Sociology, Vol. 17, No. 4, pp. 335-42. December, 1952.

Reviews of

- Robert K. Merton, Ailsa P. Gray, Barbara Hockey, and Hanan C. Selvin, Reader in Bureaucracy in Rural Sociology, 17:288-89, 1952.
- Donald Pierson, Cruz das Almas: A Brazilian Village in American Journal of Sociology, 58: 168-69. 1952.

Soils

CLAYTON O. ROST, Ph.D., Professor and Head

Influence of Fertilizers on Four Legumes When Grown as Green Manures (with D. G. Baker and H. W. Kramer). University of Minnesota Agricultural Experiment Station Technical Bulletin No. 204, 1952, 32 pages.

- Feed Your Corn for X-tra Yields (with P. M. Burson and H. E. Jones). University of Minnesota Agricultural Experiment Station Miscellaneous Paper No. 811, Soil Series No. 36, 1953.
 10 pages.
- "Good crop rotation boosts corn yields" (with A. R. Schmid and R. F. Crim). Minnesota Farm and Home Science, Vol. 10, No. 1, pp. 4-5. 1952.
- "Phosphate experiments in Minnesota involving superphosphate, rock phosphate, and other phosphate carriers" (with A. C. Caldwell). Compilation of Experimental Work Reported at the Fourth Annual Phosphorus Conference of the North Central Region, pp. 5a-5c. 1952.
- "Feed your corn for higher yields" (with P. M. Burson). *Ibid.*, Vol. 10, No. 3, pp. 4, 15, 1953. "A soils program for increased crop production." MVAIA Newsletter, A Publication of Minne.
- "A soils program for increased crop production." MVAIA Newsletter, A Publication of Minnesota Vocational Agriculture Instructors Association, Vol. 2, pp. 23-24. Winter edition. 1953.
- "Can we feed our growing population?" Progress Thru Research, Vol. 7, No. 3, pp. 6-9. 1953. "Fertilize for high yields" (with P. M. Burson). Minnesota Feed Service, pp. 1-2. February 16, 1953
- Review of Byron T. Shaw, Editor, Soil Physical Conditions and Plant Growth in Cereal Chemistry, 30:173-74. March, 1953.

PAUL M. BURSON, M.S., Professor

- Feed Your Corn for X-tra Yields (with C. O. Rost and H. E. Jones). University of Minnesota Agricultural Experiment Station Miscellaneous Paper No. 811, Soil Series No. 36, 1953, 10 pages.
- "Fertilizer needs for Minnesota." Minnesota Farm Bureau News, Vol. 32, No. 35, pp. 7-8. 1952. "Get the most from your soil tests" (with J. L. Keogh). Minnesota Farm and Home Science, Vol. 10, No. 2, pp. 3, 5. 1953.
- "Feed your corn for higher yields" (with C. O. Rost). *Ibid.*, Vol. 10, No. 3, pp. 4, 15, 1953. "Fertilize for high yields" (with C. O. Rost). *Minnesota Feed Service*, pp. 1-2, February 16, 1953.

ALFRED C. CALDWELL, Ph.D., Associate Professor

- Anhydrous Ammonia Comes to Minnesota (with H. E. Jones). University of Minnesota Agricultural Experiment Station Miscellaneous Paper No. 814, Soil Series No. 37. 1953. 4 pages.
- "Phosphate experiments in Minnesota involving superphosphate, rock phosphate, and other phosphate carriers" (with C. O. Rost). Compilation of Experimental Work Reported at the Fourth Annual Phosphorus Conference of the North Central Region, pp. 5a-5c. 1952.
- "Differences in phosphorus uptake by corn from superphosphate broadcast and applied in the hill" (with A. Hustrulid and Freida L. Hammers). *Ibid.*, pp. 62-63, 1952.
- "The uptake of phosphorus from phosphate fertilizer by second-cutting alfalfa" (with A. Hustrulid and Freida L. Hammers). *Ibid.*, pp. 87-90. 1952.
- "The effect of nitrogen and potassium on the uptake of phosphorus by corn, oats, and alfalfa in the greenhouse" (with A. Hustrulid and R. F. Holt). *Ibid.*, pp. 91-94. 1952.
- "The effect of nitrogen and potassium on the uptake of phosphorus by corn in the field" (with A. Ilustrulid and Freida L. Hammers). *Ibid.*, pp. 95-97, 1952.
- "The yield, phosphorus content, and uptake of phosphorus from phosphate fertilizer by wheat and flax" (with A. Hustrulid and Freida L. Hammers). *Ibid.*, pp. 125-28, 1952.
- "Phosphorus uptake of a number of inbred lines of corn" (with A. Hustrulid, E. H. Rinke, E. L. Pinnell, and Frieda L. Hammers). *Ibid.*, pp. 129-30. 1952.
- "Boom in ammonia use seen in Minnesota" (with H. E. Jones). Agricultural Ammonia News, Vol. 2, No. 4, p. 15, 1953,
- "Fertilizer recommendations for 1953." Hormel Farmer, Vol. 17, No. 8, pp. 6-8. 1953.

JOHN M. MACGREGOR, Ph.D., Associate Professor

Fall Versus Spring Fertilizer Application (with C. F. Halsey). Soil Series No. 35. 7 mimeographed pages. July, 1952.

Donald G. Baker, M.S., Research Assistant

Influence of Fertilizers on Four Legumes When Grown as Green Manures (with C. O. Rost and H. W. Kramer). University of Minnesota Agricultural Experiment Station Technical Bulletin No. 204, 1952. 32 pages.

ROBERT F. HOLT, Ph.D., Research Assistant

"The effect of nitrogen and potassium on the uptake of phosphorus by corn, oats, and alfalfa in the greenhouse" (with A. Hustrulid and A. C. Caldwell). Compilation of Experimental Work Reported at the Fourth Annual Phosphorus Conference of the North Central Region, pp. 91-94. 1952.

JOSEPH L. KEOGH, M.S., Research Assistant

"Get the most from your soil tests" (with P. M. Burson). Minnesota Farm and Home Science, Vol. 10, No. 2, pp. 3, 5, 1953.

VETERINARY MEDICINE

WILLARD L. BOYD, D.V.S., Professor Emeritus

- "Diseases of cattle in which abortion is a common symptom." Veterinary Medicine, 48:215-17, 1953.
- "The present concept of bovine infertility." Haver-Glover Messenger, Vol. 33, Nos. 4-5, pp. 5-7, 42-44. May-June, 1953.
- "Research in veterinary medicine as related to the livestock industry." Michigan State College Veterinarian, 13:172-73, 177. 1953.

REUEL FENSTERMACHER, D.V.M., Professor

- "Paratyphoid infections." Pages 261-300 in H. E. Biester and L. H. Schwarte, editors, Diseases of Poultry. (Third edition.) Ames: Iowa State College Press. 1952.
- "Diagnosis lab helps fight animal ills" (with C. Gale). Minnesota Feed Service, p. 3. September 2, 1952.
- "What about infectious bronchitis in poultry?" (with B. S. Pomeroy). Minnesota Farm and Home Science, Vol. 10, No. 3, pp. 6-7. 1953.

HOWARD C. H. KERNKAMP, D.V.M., M.S., Professor

- "Edema disease of swine." Pages 205-10 in Proceedings of the U. S. Livestock Sanitary Association, Fifty-Fifth Annual Meeting, 1951.
- "Radiological localization in diagnosis of foreign bodies in cattle" (with F. A. Spurrell). Pages 79-84 in Proceedings of the Eighty-Ninth Annual Meeting of the American Veterinary Medical Association, 1952.
- "Overgrowths of toes and snouts in pigs" (with C. C. Morrill and T. L. Steenerson). North American Veterinarian, 34:337-39, 1953.

BENJAMIN S. POMEROY, D.V.M., Ph.D., Professor

- "Susceptibility of the causative agent of infectious sinusitis of turkeys to sulfamethazine, crystal violet, and antibiotics" (with H. H. Hoyt and M. H. Roepke). Pages 268-71 in Proceedings of the Eighty-Ninth Annual Meeting of the American Veterinary Medical Association, 1952.
- "Coccidiosis is yielding to new medical weapons." Minnesota Feed Service, pp. 1, 3. May 20, 1953.
- "Inoculation may be answer to bronchitis problem." Ibid., pp. 1-2. May 20, 1953.
- "What about infectious bronchitis in poultry?" (with R. Fenstermacher). Minnesota Farm and Home Science, Vol. 10, No. 3, pp. 6-7. 1953.

MARTIN H. ROEPKE, Ph.D., Acting Assistant Dean, Professor

- "Studies of the physical properties and agglutinability of Brucella antigens used in the Americas" (with F. M. Murdock and B. D. Blood). Pages 122-32 in Proceedings of the Third Inter-American Congress on Brucellosis. 1953.
- "Field studies on the diagnosis of animal brucellosis with special emphasis on the ring test" (with F. C. Driver). *Ibid.*, pp. 133-44.
- "Brucellosis research." Pages 12-13 in Report of the North Central States Brucellosis Conference, St. Paul, Minnesota, July 7-9, 1952.
- "Susceptibility of the causative agent of infectious sinusitis of turkeys to sulfamethazine, crystal violet, and antibiotics" (with H. H. Hoyt and B. S. Pomeroy). Pages 268-71 in Proceedings of the Eighty-Ninth Annual Meeting of the American Veterinary Medical Association. 1952.

HARVEY H. HOYT, D.V.M., Ph.D., Associate Professor

"Susceptibility of the causative agent of infectious sinusitis of turkeys to sulfamethazine, crystal violet, and antibiotics" (with B. S. Pomeroy and M. H. Roepke). Pages 268-71 in Proceedings of the Eighty-Ninth Annual Meeting of the American Veterinary Medical Association. 1952.

CHARLES GALE, D.V.M., Instructor

- "Diagnosis lab helps fight animal ills" (with R. Fenstermacher). Minnesota Feed Service, p. 3. September 2, 1952.
- "Diseases common to mink." United States Fur Rancher, Vol. 31, No. 8, p. 11. 1953.

WILLIAM R. HESS, Ph.D., Research Fellow

- "Studies on a Nonspecific Brucella-agglutinating Substance in Bovine Serum"
 - "I. The differentiation of the specific and nonspecific agglutinins by heat treatment."

 American Journal of Veterinary Research, 14:192-94, 1953.
 - "II. Isolation and purification of the Brucella-agglutinating substances." Ibid., pp. 195-97.

GABRIEL G. NAHAS, M.D., Research Fellow

- "Effect of hypoxia on the metabolic response to cold" (with A. Hemingway). Journal of Applied Physiology, 5:267-72. 1952.
- "Effect of varying degrees of hypoxia on temperature regulation" (with A. Hemingway).

 American Journal of Physiology, 170:426-33, 1952.
- "Temperature changes of pulmonary blood during exposure to cold" (with A. Hemingway and G. W. Mather). *Ibid.*, 173:390-92. 1953.
- "Angiostomy cannulae for the study of pulmonary circulation" (with G. W. Mather and A. Hemingway). Alaskan Air Command, Arctic Aero Medical Laboratory, Ladd Air Force Base, Research Report No. 22-1301-0002, pp. 1-11. 1953; Proceedings of the Society for Experimental Biology and Medicine, 82:309-11. 1953.

HARRY C. ROWSELL, D.V.M., Research Fellow

"Actinomycosis and actinobacillosis in dogs" (with J. H. Sautter and R. B. Hohn). North American Veterinarian, 34:341-46. 1953.

Joseph E. Rose, B.S., Research Assistant

"Properties of soyin, a toxic protein isolated from soybean flour" (with M. J. Pallansch and I. E. Liener). Proceedings of the Federation of American Societies for Experimental Biology, 12:790, 1953.

SCHOOL OF VETERINARY MEDICINE

ALLAN HEMINGWAY, Ph.D., Professor

- "Pulmonary edema in guinea pigs during severe hypoxia." Journal of Applied Physiology, 4: 868-72, 1952.
- "Effect of hypoxia on the metabolic response to cold" (with G. G. Nahas). *Ibid.*, 5:267-72. 1952. "Effect of varying degrees of hypoxia on temperature regulation" (with G. G. Nahas). *American Journal of Physiology*, 170:426-33. 1952.
- "Temperature changes of pulmonary blood during exposure to cold" (with G. W. Mather and G. G. Nahas). *Ibid.*, 173:390-92. 1953.
- "Thermistor thermometry in investigational work" (with G. W. Mather). Alaskan Air Command, Arctic Aero Medical Laboratory, Ladd Air Force Base, Research Report Project No. 22-1301-0002, pp. 1-11, 1953
- "Angiostomy cannulae for the study of pulmonary circulation" (with G. W. Mather and G. G. Nahas). Ibid., pp. 1-6, 1953; Proceedings of the Society for Experimental Biology and Medicine, 82:309-11, 1953.

HENRY J. GRIFFITHS, Ph.D., D.V.M., Associate Professor

Discases and Parasites of Minks (with J. R. Gorham), U. S. Department of Agriculture Farmers' Bulletin No. 2050, 1952, 41 pages.

RALPH L. KITCHELL, D.V.M., Ph.D., Associate Professor

- "The experimental production of malformations and other abnormalities in fetal pigs by means of attenuated hog cholera virus" (with A. J. Luedke, J. H. Sautter, and G. A. Young). Pages 146-50 in Proceedings of the Ninetieth Annual Meeting of the American Veterinary Medical Association, 1953; Anatomical Record, 115:334. February, 1953.
- "Cardiac, aortic arch and other anomalies in newborn pigs" (with C. E. Stevens). Anatomical Record, 115:398, 1953.

George W. Mather, D.V.M., Ph.D., Associate Professor

- "Thermistor thermometry in investigational work" (with A. Hemingway). Alaskan Air Command, Arctic Aero Medical Laboratory, Ladd Air Force Base, Research Report Project No. 22-1301-0002, pp. 1-11. 1953.
- "Angiostomy cannulae for the study of pulmonary circulation" (with G. G. Nahas and A. Hemingway). Ibid., pp. 1-6. 1953; Proceedings of the Society for Experimental Biology and Medicine, 82:309-11, 1953.
- "Chronic pulmonary osteoarthropathy in the dog" (with D. Low). Journal of the American Veterinary Medical Association, 122:167-71, 1953.
- "Temperature changes of pulmonary blood during exposure to cold" (with G. G. Nahas and A. Hemingway). American Journal of Physiology, 173:390-92. 1953.

JAY H. SAUTTER, D.V.M., Ph.D., Associate Professor

- "You can prevent bloat in cattle and sheep." Minnesota Farm and Home Science, Vol. 8, No. 3, p. 15, 1951.
- "Aplastic Anemia of Cattle Associated with Ingestion of Trichloroethylene-extracted Soybean Oil Meal (Stockman disease, Duren disease, Brabant disease)"
 - "I. Clinical and laboratory investigation of field cases" (with W. R. Pritchard and C. E. Rehfeld). Journal of the American Veterinary Medical Association, 121:1-8. 1952.
 - "II. Necropsy findings in field cases" (with C. E. Rehfeld and W. R. Pritchard). *Ibid.*, pp. 73-79.
- "Osseous pachymeningitis in a dog with radiographic demonstration" (with F. A. Spurrell). Ibid., 123:49-50. 1953.
- "Actinomycosis and actinobacillosis in dogs" (with H. C. Rowsell and R. B. Hohn). North American Veterinarian, 34:341-46. 1953.
- "The experimental production of malformations and other abnormalities in fetal pigs by means of attenuated hog cholera virus" (with A. J. Luedke, R. L. Kitchell, and G. A. Young). Pages 146-50 in Proceedings of the Nineticth Annual Meeting of the American Veterinary Medical Association, 1953; Anatomical Record, 115:334. February, 1953.
- "Vegetable oils versus butterfat in the diet of dairy calves" (with R. S. Adams, J. Gander, and T. W. Gullickson). Journal of Dairy Science, 36:599-600, 1953.

DAVID E. BARTLETT, D.V.M., Ph.D., Instructor

"The Trichomonas foetus-infected bull in artificial insemination" (with K. Moist and F. A. Spurrell). Journal of the American Veterinary Medical Association, 122:366-70. 1953.

Donald H. Clifford, D.V.M., Instructor

"Actinomycosis (nocardiosis) in a dog with a brief review of this disease" (with A. T. Christensen). American Journal of Veterinary Research, 14:298-306. 1953.

WILLIAM J. HADLOW, D.V.M., Instructor

"Adrenal cortical atrophy in the dog. Report of 3 cases." American Journal of Pathology, 29: 353-62, 1953.

PAUL B. HAMMOND, D.V.M., Instructor

"Dihydrostreptomycin dose-serum level relationships in cattle." Journal of the American Veterinary Medical Association, 122:203-206. 1953.

LESTER L. LARSON, M.S., D.V.M., Instructor

"The internal pudendal (pudic) nerve block for anesthesia of the penis and relaxation of the retractor penis muscle." Journal of the American Veterinary Medical Association, 123:18-27. 1953.

DONALD G. LOW, D.V.M., Instructor

"Chronic pulmonary osteoarthropathy in the dog" (with G. W. Mather). Journal of the American Veterinary Medical Association, 122:167-71. 1953.

WINSTON A. MALMQUIST, D.V.M., Instructor

"Influence of various amounts of aluminum hydroxide on the immunity produced by foot-and-mouth disease vaccine" (with E. G. Fogedby, O. L. Osteen, and M. L. Johnson). Nordisk Veterinärmedicin, 4:745-54. 1952.

Kenneth F. Moist, D.V.M., Instructor

"The Trichomonas foctus infected bull in artificial insemination" (with D. E. Bartlett and F. A. Spurrell). Journal of the American Veterinary Medical Association, 122:366-70. 1953.

WILLIAM R. PRITCHARD, D.V.M., Instructor

- "Aplastic Anemia of Cattle Associated with Ingestion of Trichloroethylene-extracted Soybean Oil Meal (Stockman disease, Duren disease, Brabant disease)"
 - "I. Clinical and laboratory investigation of field cases" (with C. E. Rehfeld and J. H. Sautter). Journal of the American Veterinary Medical Association, 121:1-8. 1952.
- "II. Necropsy findings in field cases" (with J. H. Sautter and C. E. Rehfeld). *Ibid.*, pp. 73-79. "Toxic hazards of pesticides to livestock." *Veterinary Science News*, Vol. 6, No. 3, pp. 11-17. 1952.

CARL E. REHFELD, D.V.M., Instructor

- "Aplastic Anemia of Cattle Associated with Ingestion of Tricholoroethylene-extracted Soybean Oil Meal (Stockman disease, Duren disease, Brabant disease)"
 - "I. Clinical and laboratory investigation of field cases" (with W. R. Pritchard and J. H. Sautter). Journal of the American Veterinary Medical Association, 121:1-8. 1952
 - "II. Necropsy findings in field cases" (with J. H. Sautter and W. R. Pritchard). *Ibid.*, pp. 73-79.

Francis A. Spurrell, D.V.M., Instructor

- "Radiological localization in diagnosis of foreign bodies in cattle" (with H. C. H. Kernkamp).

 Pages 79-84 in Proceedings of the Eighty-Ninth Annual Meeting of the American Veterinary

 Medical Association. 1952.
- "The Trichomonas foetus-infected bull in artificial insemination" (with D. E. Bartlett and K. Moist). Journal of the American Veterinary Medical Association, 122:366-70. 1953.
- "Osseous pachymeningitis in a dog with radiographic demonstration" (with J. H. Sautter). Ibid., 123:49-50. 1953.

CLARENCE M. STOWE, D.V.M., Instructor

"Sulfisoxazole—some aspects of its pharmacology in dairy cattle." Journal of the American Veterinary Medical Association, 122:315-18. 1953.

ALBERT J. LUEDKE, B.S., Teaching Assistant

"The experimental production of malformations and other abnormalities in fetal pigs by means of attenuated hog cholera virus" (with R. L. Kitchell, J. H. Sautter, and G. A. Young). Pages 146-50 in the Proceedings of the Ninctieth Annual Meeting of the American Veterinary Medical Association. 1953.

CHARLES E. STEVENS, B.S., Teaching Assistant

"Cardiac, aortic arch and other anomalies in newborn pigs" (with R. L. Kitchell). Anatomical Record, 115:398, 1953.

AGRICULTURAL EXTENSION

Spencer B. Cleland, M.S., Professor and Extension Economist Farm Management Pasture Feeding of Beef Cattle (with W. E. Morris). University of Minnesota Agricultural Extension Service Folder No. 169. 1952. 12 pages.

- 1953 Livestock Outlook. University of Minnesota Agricultural Extension Service Pamphlet No. 186, 1952, 8 pages.
- "New ideas on farm fences." Midland Cooperator, Vol. 19, No. 49, p. 11, 1952.
- "Loose housing barns." Ibid., No. 51, p. 12.
- "Give alfalfa a rest in the fall." Ibid., Vol. 20, No. 3, p. 9.
- "What to watch for at conservation days." Ibid., No. 5, p. 1.
- "Chemical spray for quack grass." Ibid., No. 9, p. 6.
- "Good operators can stay ahead." Ibid., No. 15, p. 1.
- "Midland farmers will do well in 1953 given normal weather." Ibid., No. 16, p. 1.
- "Pasture feeding of beef cattle." Farmer, Vol. 70, No. 19, p. 52, 1952.
- "Long hay silage." Ibid., No. 22, p. 24.
- "Family agreements." Ibid., Vol. 71, No. 5, p. 54, 1953.
- "Pasture feeding." Ibid., No. 7, p. 30.
- "Sudan grass." Ibid., No. 8, p. 22.
- "Community machinery." Ibid., No. 9, p. 28.
- "Hay on shares." Ibid., No. 10, p. 22.
- "Handle your hay the easy way." Quonset Farmstead News, Vol. 1, No. 2, pp. 10-11. 1953.
- "The outlook corner" (with S. A. Engene, R. W. Cox, and H. C. Pederson). Minnesota Farm Business Notes, Nos. 339-40, 342, 344-45, 347. July, 1952-May, 1953.

WILLIAM H. DANKERS, Ph.D., Professor and Extension Economist Marketing

More Money for Eggs (with Cora Cooke). University of Minnesota Agricultural Extension Service Folder No. 80, 1952, 8 pages.

Know the Eggs You Buy (with Cora Cooke and Eleanor Loomis). University of Minnesota Agricultural Extension Service Folder No. 174, 1952, 6 pages.

Know Your Cooperative. University of Minnesota Agricultural Extension Service Bulletin No. 232, 1952, 16 pages.

WILLIAM E. Morris, M.S., Professor and Extension Animal Husbandman

Sheep on Minnesota Farms (with P. A. Anderson). (Revised.) University of Minnesota Agricultural Extension Service Bulletin No. 141. 1953. 20 pages.

Fattening Lambs (with P. S. Jordan). (Revised.) University of Minnesota Agricultural Extension Service Folder No. 37, 1952. 8 pages.

Pasture Feeding of Beef Cattle (with S. B. Cieland). University of Minnesota Agricultural Extension Service Folder No. 169. 1952. 12 pages. "Preventing loss in lamb production." Hormel Farmer, Vol. 17, No. 7, p. 8. 1953.

- "Little things . . . keep the profit in sheep." Cooperative Shipper, Vol. 33, No. 4, pp. 8-9. 1953.
- "Your sheep business." Wool Sack. Column printed monthly. 1952-53.
- Editor, Livestock Department, Farmer. 1952-53.

HAROLD R. SEARLES, B.S., Professor and Extension Dairyman

Feeding the Dairy Herd (with T. W. Gullickson, R. D. Leighton, and R. W. Wayne). (Revised.) University of Minnesota Agricultural Extension Service Bulletin No. 218, 1952, 55 pages. Editor, Dairy Department, Farmer. 1952-53.

LEON C. SNYDER, Ph.D., Professor and Extension Horticulturist

Meteor Cherry (with W. G. Brierley, T. S. Weir, A. N. Wilcox, R. C. Blake, K. W. Hanson, and W. H. Alderman). University of Minnesota Agricultural Experiment Station Miscellaneous Report No. 16, 1952, 4 pages.

Fruit Spray Schedule for 1953 (with L. K. Cutkomp and T. H. King). University of Minnesota Agricultural Extension Service Pamphlet No. 184, 1953, 8 pages.

"Do you know your evergreens?" Minnesota Horticulturist, 81:7. 1953.

"The home lawn." Ibid., p. 59, 1953.

HENRY G. ZAVORAL, B.S., Professor and Extension Animal Husbandman

Farrowing Stalls Are Worth While (with G. Swartz and L. E. Hanson). University of Minnesota Agricultural Extension Service. Form AH-1, 1952. 1 page.

Strong, Healthy Pigs Are Farrowed from Well Fed Sows (with L. E. Hanson). University of Minnesota Agricultural Extension Service. Form AH-22, 1952, 1 page.

- "These little pigs went to market sooner." Feed Age, Vol. 2, No. 9, pp. 26-28, 52. 1952.
- "Rations for swine." Minnesota Feed Service, p. 3. December, 1952.
- "Synthetic sow's milk." REA News, p. 9. March, 1952; Yorkshire Journal, pp. 3-4. July, 1952.

"Top prices for the wool crop." Hormel Farmer, Vol. 17, No. 8, pp. 6-7. 1953. Editor, Livestock Department, Stock and Dairy Farmer. 1952-53.

ROLAND H. ABRAHAM, M.P.A., Associate Professor and District Supervisor County Agent Work

"Building respect and public support for extension." Pages 8-12 in Report of Regional Extension Supervisory Workshop, Ames: Iowa State College, 1953.

WILLIAM A. BILLINGS, D.V.M., Associate Professor and Extension Veterinarian

- "Turkey's cheaper than New York dressed sardines!" Minnesota Gobbles, Vol. 7, No. 2, pp. 9-10. 1952.
- "Covering the upper midwest . . . reports from here and there." Ibid., No. 3, pp. 9-10, 14-15.
- "Howja like a nice Arizona bred kitten?" Ibid., No. 4, pp. 7-8, 16-17.
- "It looks like fewer turkeys next year." Ibid., No. 5, pp. 11-12, 24-25.
- "Election's over; fight continues." Ibid., No. 6, pp. 7-8, 27.
- "A very Merry Christmas." Ibid., No. 7, pp. 7, 21, 23.
- "A few new year predictions," *Ibid.*, No. 8, pp. 9, 18, 26, 1953. "Convention time is just around the corner." *Ibid.*, No. 9, pp. 7, 16-17.
- "Arizona bound . . . just headin' for the sunny south." Ibid., No. 10, pp. 11, 17-18.
- "Billings tells all . . . latest cat news from Arizona." Ibid., No. 11, pp. 7-9.
- "Let's make this a good year." Ibid., No. 12, pp. 6, 8-9.
- "Don't forget . . . that North Dakota picnic." Ibid., No. 13, pp. 7, 12-13.
- "Dr. Billings says." Produce Packer. Column issued weekly. 1952-53.
- Editor, Talking Turkey. Turkey World. Issued monthly. 1952-53.
- Turkey News Letter. Issued monthly, 1952-53, 2 multilithed pages.

RALPH F. CRIM, B.S., Associate Professor and Extension Agronomist

- Chemical Weed Control in Minnesota-1953 (with R. S. Dunham, H. L. Hansen, and R. E. Nylund). University of Minnesota Agricultural Extension Service Pamphlet No. 187. 1953. 16 pages.
- "Good crop rotation boosts corn yields" (with A. R. Schmid and C. O. Rost). Minnesota Farm and Home Science, Vol. 10, No. 1, pp. 4-5. 1952.

Editor, Minnesota Seed Grower. 1952-53.

DANIEL C. DVORACEK, M.S., Associate Professor and Extension Economist Market-

Who Gets the Consumer's Dollar? University of Minnesota Agricultural Extension Service Pamphlet No. 185. 1952. 4 pages.

LEONARD L. HARKNESS, B.S., Associate Professor and State Leader 4-H Club

"Serving as loyal citizens through 4-H." Stock and Dairy Farmer, Vol. 40, No. 6, p. 3. 1952. "Harkness calls junior show a high point of season." Daily Reporter, Vol. 60, No. 97, p. 1. 1952.

HAROLD E. JONES, Ph.D., Associate Professor and Extension Specialist Soils

Barnyard Manure. University of Minnesota Agricultural Extension Service Folder No. 168.

Plan a Land Appreciation School (with R. S. Harris). University of Minnesota Agricultural Extension Service Form No. S-27. 1953. 8 pages.

Feed Your Corn for X-tra Yields (with P. M. Burson and C. O. Rost). University of Minnesota Agricultural Experiment Station Miscellaneous Paper No. 811, Soil Series No. 36, 1953. 10 pages.

Anhydrous Ammonia Comes to Minnesota (with A. C. Caldwell). University of Minnesota Agricultural Experiment Station Miscellaneous Paper No. 814, Soil Series No. 37. 1953. 4 pages.

Nitrogen Side-Dressing on Corn. University of Minnesota Soil Series No. 38. 1953. 9 pages.

"Superphosphate urged for manure." Minnesota Feed Service, p. 2. September 2, 1952.

"Nitrogen ups corn yields." Ibid., p. 2. May 20, 1953. "The diagnostic approach in corn fertilizer demonstrations in Minnesota" (with L. E. Orth). Better Crops with Plant Food, 37:17-20, 1953.

"Boom in ammonia use seen in Minnesota" (with A. C. Caldwell). Agricultural Ammonia News, Vol. 2, No. 4, p. 15. 1953.

- GLENN I. PRICKETT, B.A., Associate Professor and Extension Specialist Farm Safety "Minnesota's 1949-50 tractor fatalities" (with A. J. Schwantes). Farm Safety Review, Vol. 10, No. 4, pp. 12-13, 1952.
- "Your family doctor-farm safety" (with W. Allen). Valley Farmer, Vol. 3, No. 5, p. 30; Vol. 3, No. 6, p. 30. 1952.
- "Are you a tractor gambler?" Capper's Farmer, Vol. 64, No. 2, p. 33, 1953.
- Tractor Fatalities in Minnesota (with A. J. Schwantes). Interview study of tractor fatalities on farms in Minnesota 1949-50. 12 mimeographed pages. 1952.
- DENNIS M. RYAN, B.C.E., Associate Professor and Extension Agricultural Engineer It Pays to Protect Stored Grain (with C. M. Christenson, H. L. Parten, and H. C. Pederson). University of Minnesota Agricultural Extension Service Folder No. 173, 1952, 8 pages.
- Water Systems and Sewage Disposal on the Farm. (Revised.) University of Minnesota Agricultural Extension Service Bulletin No. 247, 1952, 24 pages.
- "Are you having trouble with your septic tank?" (with D. W. Bates). Hoard's Dairyman, 97: 610-11, July, 1952.
- "How to build an above ground pump house" (with D. W. Bates). Ibid., p. 720. September, 1952
- "Beating the drainage bottleneck," Ibid., p. 806. October, 1952.
- ORRIN C. TURNOUIST, Ph.D., Associate Professor and Extension Specialist Horticulture
- Vegetable Varieties for Minnesota. (Revised.) University of Minnesota Agricultural Extension Service Folder No. 154, 1953, 8 pages.
- Getting Started with Your l'egetable Garden. (Revised.) University of Minnesota Agricultural Extension Service Folder No. 164, 1953, 10 pages.
- Summer Care of Vegetable Gardens. (Revised.) University of Minnesota Agricultural Extension Service Folder No. 167, 1953, 10 pages.
- "Do vegetables mix?" Minnesota Horticulturist, 80:115. 1952.
- "All-America vegetable varieties." Ibid., 81:20-21. 1953.
- "Your vegetable garden." Ibid., pp. 74-75.
 "Vitamins in your own back yard." Suburban Living, pp. 4-5. April, 1953.
- "Varieties of vegetables for plants." Minnesota State Florists' Bulletin, pp. 5-7. February 1, 1953.
- RALPH W. WAYNE, M.S., Associate Professor and Extension Dairyman
- Feeding the Dairy Herd (with T. W. Gullickson, R. D. Leighton, and H. R. Searles). (Revised.) University of Minnesota Agricultural Extension Service Bulletin No. 218, 1952, 55 pages. Editor, Dairy Department, Stock and Dairy Farmer. 1952-53.
- PARKER O. ANDERSON, B.S., Assistant Professor and Extension Forester
- Planting the Farmstead Shelterbelt. (Revised.) University of Minnesota Agricultural Extension Service Bulletin No. 196, 1953, 16 pages.
- Tips on Tree Planting. (Revised.) University of Minnesota Agricultural Extension Service Folder No. 85, 1953, 5 pages.
- Donald W. Bates, M.S., Assistant Professor and Extension Agricultural Engineer "Are you having trouble with your septic tank?" (with D. M. Ryan). Hoard's Dairyman, 97: 610-11. July, 1952.
- "How to build an above ground pump house" (with D. M. Ryan). Ibid., pp. 720. September,
- "A second home on your farm" (with L. L. Boyd). Ibid., p. 881. November, 1952.
- "How to lay out a flight of stairs." Ibid., 98:31. January, 1953.
- "How to fix a sagging door." Ibid., p. 133. February, 1953.
- "How to sharpen a twist drill." Ibid., p. 206.
- "Check girders and floor joists now." Ibid., p. 517. June, 1953.
- "One wall for barn and silo." Ibid., p. 525.
- Grace D. Brill, M.S., Assistant Professor and Extension Nutritionist
- 4-H Food Preparation (with Mary Anderson). University of Minnesota Agricultural Extension Service 4-H Bulletin No. 32, 1952, 35 pages.

Freezing Fruits and Vegetables. (Revised.) University of Minnesota Agricultural Extension Service Folder No. 156. 1953. 8 pages.

CORA E. COOKE, B.S., Assistant Professor and Extension Specialist Poultry

- Raising Chicks the 4-H Way. (Revised.) University of Minnesota Agricultural Extension Service 4-H Bulletin No. 22, 1952. 8 pages.
- More Money for Eggs (with W. H. Dankers). University of Minnesota Agricultural Extension Service Folder No. 80. 1952. 8 pages.
- Know the Eggs You Buy (with Eleanor Loomis and W. H. Dankers). University of Minnesota Agricultural Extension Service Folder No. 174. 1952. 6 pages.
- "Help poultrymen use mash wisely." Minnesota Feed Service, p. 4. December 4, 1952.

KATHLEEN S. Flom, B.S., Assistant Professor and Assistant State Leader 4-H Club—Rural Youth

Recreation Favorites (with R. R. Pinches). University of Minnesota Agricultural Extension Service Handbook for Recreation Chairmen and Leaders. 1953. 25 pages.

CHARLOTTE KIRCHNER, M.A., Assistant Professor and Extension Specialist Home Furnishing

- Lampshades You Can Make. University of Minnesota Agricultural Extension Service Bulletin No. 268, 1952, 12 pages.
- Slip Covering Your Furniture, University of Minnesota Agricultural Extension Service Bulletin No. 269, 1952, 16 pages.
- Backgrounds for Your Home. University of Minnesota Agricultural Extension Service Bulletin No. 270, 1952, 12 pages.
- Refinishing Your Furniture. University of Minnesota Agricultural Extension Service Bulletin No. 271, 1952, 8 pages.

RAMER D. LEIGHTON, B.S., Assistant Professor and Extension Dairyman

Feeding the Dairy Herd (with T. W. Gullickson, H. R. Searles, and R. W. Wayne). (Revised.)
University of Minnesota Agricultural Extension Service Bulletin No. 218, 1952, 55 pages.

HAROLD C. Pederson, M.S., Assistant Professor and Extension Economist Marketing

- It Pays to Protect Stored Grain (with C. M. Christenson, H. L. Parten, and D. M. Ryan). University of Minnesota Agricultural Extension Service Folder No. 173. 1952. 8 pages.
- "Artificial drying of grain is increasing." Minnesota Farm Business Notes, No. 343, pp. 1-4. December, 1952.
- "The outlook corner" (with S. A. Engene, R. W. Cox, and S. B. Cleland). *Ibid.*, Nos. 339-40, 342, 344-45, 347. July, 1952-May, 1953.
- "Cost accounts can save you money." Minnesota Feed Service, p. 4. February 16, 1953.
- "Artificial grain drying comes into its own." Minicapolis Sunday Tribune, January 4, 1953.

RAYMOND C. Rose, M.S., Assistant Professor and Extension Plant Pathologist

- Virus Yellows of Celery (with A. A. Granovsky). University of Minnesota Agricultural Extension Service Form PL-13. 1953. 2 pages.
- Seed Treatment for Better Crops. University of Minnesota Agricultural Extension Service Form PL-14. 1953. 2 pages.
- Vegetable Seed Treatments, University of Minnesota Agricultural Extension Service Form PL-15, 1953, 2 pages,
- "Treat your seed." Farmer, Vol. 71, No. 3, p. 14, 1953.
- "Some lawn grass disease problems." Minnesota Horticulturist, 81:100. 1953.

INA B. Rowe, M.S., Extension Nutritionist and Assistant Professor

Home Canning Fruits and Vegetables. (Revised.) University of Minnesota Agricultural Extension Folder No. 100. 1953. 10 pages.

RAYMOND S. WOLF, B.S., Assistant Professor and Extension Specialist Information "That sponsorship problem." ACE, Vol. 35, No. 7, p. 5. 1953.

Co-editor, University Farm Radio Shorts. Weekly service of short educational items. 3 pages. 1952-53

Reaching Rural People with Information Tools (with Josephine Nelson, R. P. Raustadt, E. H. Madison, Gwen Haws, and H. B. Swanson). Monthly tip sheet to all county extension agents. 1952-53.

MARY R. ANDERSON, B.S., Instructor and State Club Agent

4-H Food Preparation (with Grace Brill). University of Minnesota Agricultural Extension Service 4-H Bulletin No. 32. 1952, 35 pages.

ELDON H. MADISON, B.S., Instructor

Reaching Rural People with Information Tools (with H. B. Swanson, Josephine B. Nelson, R. P. Raustadt, Gwen Haws, and R. S. Wolf). Monthly tip sheet to all county extension agents. 8 mimeographed pages. 1952-53.

Josephine B. Nelson, M.A., Instructor and Extension Assistant Editor

- "First of its kind." Agricultural Leaders' Digest, Vol. 33, No. 7, pp. 26-27. 1952.
- "4-H'ers preach and practice conservation." Conservation Volunteer, Vol. 15, No. 89, pp. 10-13. 1952.
- "Minnesota-Mississippi 4-H club exchange." Kraftsman, Vol. 10, No. 4, p. 11. 1952.
- "Christmas crafts." Minnesotan, Vol. 5, No. 3, p. 11. 1952.
- "Home equipment course teaches p's and q's of pots and pans." Ibid., Vol. 6, No. 5, p. 11. 1953. Co-editor

University Farm Radio Shorts. Weekly service of short educational items. 3 pages. 1952-53. All regular newspaper releases including University Farm News County Agent fill-in releases, Ask University Farm, Our Land, Home Garden Tips, Timely Tips, and other special features. 1952-53.

Helps for Home Agents. Short items on homemaking for radio and newspaper column use. Sent twice monthly to home agents. 4 or more mimeographed pages. 1952-53.

Reaching Rural People with Information Tools (with H. B. Swanson, R. P. Raustadt, R. S. Wolf, Gwen Haws, and E. H. Madison). Monthly tip sheet to all county extension agents. 1952-53.

HERBERT L. PARTEN, B.S., Instructor and Extension Entomologist

It Pays to Protect Stored Grain (with C. M. Christenson, H. C. Pederson, and D. M. Ryan).
University of Minnesota Agricultural Extension Service Folder No. 173, 1952. 8 pages.

Mole Control (with J. R. Beer). University of Minnesota, Department of Entomology and Economic Zoology, October 22, 1952. 2 mineographed pages.

ROBERT R. PINCHES, B.S., Instructor and Rural Youth Agent

Recreation Favorites (with Kathleen Flom). University of Minnesota Agricultural Extension Service Handbook for Recreation Chairmen and Leaders. 1953. 25 pages.

- "Life in these United States." Extension Service Review, Vol. 23, No. 10, pp. 180-81. 1952.
- "Minnesota 4-H'ers on tour." National 4-H News, Vol. 30, No. 9, p. 17. 1952.
- "Volunteer and professional-a team." Minnesota Welfare, 8:15-17. April, 1953.

MARVIN E. SMITH, B.S., Instructor and Extension Forester

Forestry in 4-H. University of Minnesota Agricultural Extension Service 4-H Bulletin No. 26. 1952. 40 pages.

"Fencing goes modern." Hormel Farmer, 16:7-8. January, 1953.

ROGER S. HARRIS, B.S., Agricultural Extension Specialist Soil Conservation

Plan a Land Appreciation School (with H. E. Jones). University of Minnesota Agricultural Service Form No. S-27, 1953, 8 pages.

MATTHIAS A. THORFINNSON, B.S., Agricultural Extension Specialist Soil Conservation

Handbook for Soil Conservation District Supervisors. State Soil Conservation Committee. 20 pages. 1953.

Editor, Soil Conservation District News, Issued quarterly. 1952-53.

ELEANOR Y. LOOMIS, B.S., Consumer Marketing Agent

Know the Eggs You Buy (with Cora Cooke and W. H. Dankers). University of Minnesota Agricultural Extension Service Folder No. 174, 1952. 6 pages.

Know the Milk You Buy. University of Minnesota Agricultural Extension Service Folder No. 176. 1953. 8 pages.

Know Your Minnesota Apples. University of Minnesota Agricultural Extension Service Folder No. 177, 1953. 6 pages.

"Why the influx of beef from New Zealand?" Stock and Dairy Farmer, Vol. 40, No. 10, p. 11. 1953.

AGRICULTURAL EXPERIMENT STATION

HUBERT J. SLOAN, Ph.D., Director, Agricultural Experiment Station and Professor of Poultry Husbandry

Development and Performance of Inbred Lines of Chickens (with R. N. Shoffner, L. M. Winters, T. H. Canfield, and A. M. Pilkey). University of Minnesota Agricultural Experiment Station Technical Bulletin No. 207. 1953. 34 pages.

"Prevention of perosis in goslings by nicotinic acid" (with M. J. Battig, E. G. Hill, and T. H. Canfield). Poultry Science, 32:550-51. 1953.

"Effect of cobalt in the diet of the chick" (with R. L. Davis and G. M. Briggs). Proceedings of the Society for Experimental Biology and Medicine, 82:175-77. 1953.

"L-lyxoflavin in the starting diets of turkeys and chickens" (with D. H. Sherwood and E. G. Hill). *Ibid.*, 83:395-98. 1953.

Abstract of M. H. Swanson and H. J. Sloan, Some Protein Changes in Stored Frozen Poultry in Poultry Science, 31:938. 1952.

Abstracts in Poultry Supply Dealer. Monthly, 1952-53.

SCHOOL OF AGRICULTURE

- John O. Christianson, B.A., D.Sc., L.H.D., Professor and Superintendent; Director of Agricultural Short Courses
- "Old Home Building dismantled." Agreview, Vol. 30, No. 7, p. 1. 1952.
- "Our finest year!" Ibid., Vol. 31, No. 1, p. 1. 1952.
- "Looking ahead." Visitor, Vol. 39, No. 4, pp. 1-3. 1952.
- "Practical nurses and homemakers for rural Minnesota" (with Eugenia Taylor and Katharine J. Densford). Minnesota Medicine, 35:847-49. September, 1952; American Journal of Nursing, 52:1233. October, 1952.

Editor, forty-three programs of short courses offered by the Agricultural Short Course office and abstracts of the papers presented at six of these short courses. 1952-53.

RALPH E. MILLER, M.S., Associate Professor

"Parliamentary procedure code for your county fair meetings." Pages 105-11 in Abstract of Fair Management Short Course, February 9, 10, 11, 1953. University of Minnesota Institute of Agriculture, Agricultural Short Courses. 1953.

RALPH E. WILLIAMS, M.Ed., Instructor

American Panorama. Composition for mixed chorus with band accompaniment. Chicago: Kjos Publishing Company, 1952.

Dawn of Destiny. Composition for band. New York: Bourne, Inc. 1952.

BRANCH STATIONS

Crookston

THOMAS M. McCALL, M.S., Professor, Superintendent

Program of the Forty-third Annual Northwest School Farmers' Week and Women's Meetings at Crookston, University of Minnesota, Northwest School and Experiment Station, Vol. 45, Crookston Series, No. 1. February, 1953.

Program of the Twenty-eighth Annual Women's Camp at Crookston, University of Minnesota,

Program of the Twenty-eighth Annual Women's Camp at Crookston, University of Minnesota, Northwest School and Experiment Station, Vol. 45, Crookston Series, No. 2. June, 1953. 4-H Club News, University of Minnesota, Northwest School and Experiment Station, Vol. 45, Crookston Series, No. 3. June, 1953.

1952-53 Cattle Feeding Trial (with A. L. Harvey, E. F. Ferrin, H. D. Fausch, and L. Sumption). Mimeographed report for Cattle Feeders' Day, Northwest School and Experiment Station, Crookston, April 23, 1953. 6 pages.

Editor, Northwest School News, 1952-53.

Contributor of items to

Northwest School Project News, 1952-53.

Aggie Rouser, 1952-53.

Contributor of weekly news items to seventy northwestern Minnesota newspapers on the work of the Northwest School and Experiment Station. 1952-53.

OLAF C. Soine, Ph.D., Associate Professor

"Field peas" (with R. G. Robinson). Pages 32-34 in Varietal Trials of Farm Crops, Minnesota Agricultural Experiment Station Miscellaneous Report No. 18, June, 1953.

"Sunflowers and safflower" (with R. G. Robinson and R. O. Bridgford). Ibid., pp. 34-36.

"Sunflowers for Minnesota" (with R. G. Robinson). Minnesota Farm and Home Science, Vol. 10, No. 3, pp. 14-15, 1953.

Contributor of items to Northwest School News. 1952-53.

Northwest School Project News. 1952-53.

Contributor of news items to northwestern Minnesota newspapers on work of the Northwest School and Experiment Station, 1952-53.

BRUCE C. BERESFORD, M.S., Assistant Professor

Contributor of items to

Northwest School Project News, 1952-53.

Northwest School News. 1952-53.

Local and Valley newspapers, 1952-53.

Homer D. Fausch, Ph.D., Assistant Professor

1952-53 Cattle Feeding Trial (with A. L. Harvey, E. F. Ferrin, T. M. McCall, and L. Sumption). Mimeographed report for Cattle Feeders' Day, Northwest School and Experiment Station, Crookston, April 23, 1953. 6 pages.

Contributor of items to

Northwest School Project News. 1952-53.

Northwest School News. 1952-53.

Local and Valley newspapers, 1952-53.

HERSCHEL H. LYSAKER, M.S., Assistant Professor

Editor and regular contributor to Northwest School Project News. July-September, 1952; April-June, 1953.

Regular contributor to Northwest School News, 1952-53.

Contributor of weekly and daily articles on sports activities at school to local and Valley newspapers, 1952-53.

ERWIN N. REIERSGORD, M.S., Assistant Professor

Contributor to Northwest School Project News. 1952-53.

HARRY W. SODERBURG, M.A., Assistant Professor

Contributor of items to

Northwest School Project News. 1952-53.

Northwest School News. 1952-53.

RETTA BEDE, B.S., Instructor, Preceptress

Contributor of items to Northwest School Project News. 1952-53.

ALVEY M. PILKEY, Instructor

Development and Performance of Inbred Lines of Chickens (with R. N. Shoffner, H. J. Sloan, L. M. Winters, and T. H. Canfield). University of Minnesota Agricultural Experiment Station Technical Bulletin No. 207. 1953. 34 pages.

1952 Turkey Feeding Summary. Mimeographed report on Turkey Feeding Trials for Turkey Day on October 30, 1952, Northwest School and Experiment Station, Crookston. 4 pages. Contributor of items to

Northwest School Project News. 1952-53.

Northwest School News, 1952-53.

LAVON J. SUMPTION, B.S., Instructor

Contributor of items to Northwest School Project News. 1952-53.

1952-53 Cattle Feeding Trial (with A. L. Harvey, E. F. Ferrin, H. D. Fausch, and T. M. McCall). Mimeographed report for Cattle Feeders' Day, Northwest School and Experiment Station, Crookston, April 23, 1953. 6 pages.

DULUTH

MARK J. THOMPSON, M.S., Professor, Superintendent

"Down Arrowhead Furrows." Weekly radio talks in Cooperative Builder. 1952-53.

"Mark Thompson's Farm Talks." Stock and Dairy Farmer. Monthly. 1952-53.

"Farming in fifty-two." Annual Report of St. Louis County Club, p. 8. 1952.

EXCELSIOR

THEODORE S. WEIR, M.S., Associate Professor and Assistant Superintendent

Grafting Fruit Trees. University of Minnesota Agricultural Extension Service Bulletin No. 273. 1953. 16 pages.

Meteor Cherry (with W. H. Alderman, W. G. Brierley, A. N. Wilcox, R. C. Blake, K. W. Hanson, and L. C. Snyder). University of Minnesota Agricultural Experiment Station Miscellaneous Report No. 16, 1952. 4 pages.

"Meteor cherry" (with W. H. Alderman). Minnesota Horticulturist, 81:3. 1953.

"Chemical thinning of apples in 1952" (with W. G. Brierley and W. H. Alderman). Fruit Growers Meeting, Winona, Minnesota. November, 1952. 9 tables and 6 mimeographed pages.

Morris

ALLEN W. EDSON, M.S., Professor, Superintendent Co-editor, West Central School News. 1952-53.

Roy O. Bridgford, M.S., Associate Professor

"Sunflowers and safflower" (with R. G. Robinson and O. C. Soine). Pages 34-36 in Varietal Trials of Farm Crops, University of Minnesota Agricultural Experiment Station Report No. 18, 1953.

"The weather for 1952." Morris Sun and Tribune, December 30, 1952.

Philip S. Jordan, B.S., Associate Professor

Fattening Lambs (with W. E. Morris). (Revised.) University of Minnesota Agricultural Extension Service Bulletin No. 141. 1953. 20 pages.

"What a pill (Stilbestrol)!" Feed Age. November, 1952.

Lamb Feeding Trials 1952-53 (with E. F. Ferrin and H. G. Croom). University of Minnesota Institute of Agriculture, West Central Experiment Station and Department of Animal Husbandry. Morris S-43. 1953. 8 mimeographed pages.

HERBERT G. CROOM, M.S., Assistant Professor and Assistant Superintendent

"What a pill (Stilbestrol)!" Feed Age. November, 1952.

Lamb Feeding Trials 1952-53 (with E. F. Ferrin and P. S. Jordan). University of Minnesota Institute of Agriculture, West Central Experiment Station and Department of Animal Husbandry, Morris S-43, 1953. 8 mimeographed pages.

Rosemount

Albert C. Heine, B.S., Associate Professor, Superintendent

Occasional news items for local papers concerning the activities at the Agricultural Experiment Station, Rosemount. 1952-53.

ROLLIN M. DENNISTOUN, M.S., Instructor and Assistant Superintendent

"Introduction" (with others). Pages 1-7 in Welcome to Agricultural Experiment Station, Resemount. May, 1953.

WASECA

ROBERT E. HODGSON, M.S., Professor, Superintendent

- "Beets are the darndest things." Crystal-ized Facts About Sugar Beets, Vol. 7, No. 1, pp. 7-9. 1952.
- "Soybeans are tough." Soybean News, Vol. 4, No. 4, pp. 1, 4, 1953.
- "Farm topics." Farmer. 24 discussions of current farm activities. 1952-53.

COLLEGE OF MEDICAL SCIENCES

ADMINISTRATION

HAROLD S. DIEHL, M.A., M.D., D.Sc., Dean and Professor of Public Health

Report of the Committee on Hospitals and Medical Education. Pages 12-14 in Proceedings of One Hundredth Annual Session of the House of Delegates, Minnesota State Medical Association. 1953.

"Medical school faculties in the national emergency. Part I" (with M. D. West and R. W. Barclay). Journal of Medical Education, 27:4:233-43. July, 1952.

"Staffing patterns at four-year medical schools. Part II" (with M. D. West and R. W. Barclay). Ibid., 27:5:309-15.

"Physical fitness of priority physicians under Public Law 779" (with M. D. West and P. K. Koetzel). Journal of the American Medical Association, 151:161. February, 1953.

"Medical schools and medical education over the past century." Minnesota Medicine, 36:332-36. April, 1953.

"Medical research at Minnesota." Minnesota: Voice of the Alumni, 52:10-11. March, 1953. "How the Medical School serves the state." Ibid., pp. 13-15. April, 1953.

"Greetings to the staff." Bulletin of the Minnesota Hospitals and Minnesota Medical Foundation, 24:1. October 3, 1952. WILLIAM F. MALONEY, M.D., Acting Assistant Dean and Instructor in Medicine "Reliability of the low frequency critically damped ballistocardiogram" (with H. L. Taylor). Federation Proceedings, 12:142-43. 1953.

MEDICAL SCHOOL

ANATOMY

EDWARD A. BOYDEN, Ph.D. (Med.Sc.), Professor and Head

"The effect of double vagotomy on the motor activity of the human gall bladder" (with F. E. Johnson). Surgery, 32:591-601. September, 1952.

"A critique of the international nomenclature on bronchopulmonary segments." Diseases of the Chest, 23:266-70. March, 1953.

American editor, Acta Anatomica, Basel, Switzerland. 1952-53.

OLOF LARSELL, Ph.D., D.Sc., Professor

"Section VIII, the anatomy of the nervous system." Pages 901-1213 in J. Parsons Schaeffer, editor. Morris' Human Anatomy (11th edition), New York: The Blakiston Company, 1953.

"George Ellett Coghill," pages 21-24 and "Magnus Gustaf Retzius," pages 83-86 in Webb Hay-maker, editor, The Founders of Neurology. Springfield, Illinois: Charles C Thomas. 1953.
"The marphogenesis and adult nattern of the lobules and fissures of the cerebellum of the white

"The morphogenesis and adult pattern of the lobules and fissures of the cerebellum of the white rat." Journal of Comparative Neurology, 97:281-356. October, 1952.

"Further observations on the cerebellum of birds" (with D. W. Whitlock). Journal of Comparative Neurology, 97:545-66, 1952.

Associate Editor, Journal of Comparative Neurology. 1952-53.

Consulting Editor, Journal of History of Medicine and Allied Sciences. 1952-53.

Andrew T. Rasmussen, Ph.D., Professor Emeritus

"Experimental contributions to problem of consciousness" (with E. Gellhorn and M. Bernhaut).

**Journal of Neurophysiology*, 16:21-35, 1953.

W. LANE WILLIAMS, Ph.D., Associate Professor

"The effects of cortisone upon the parenchymal cells of the rabbit liver" (with C. U. Lowe and L. Thomas). Anatomical Record, 115:247-63. February, 1953.

"Histochemical studies of Charcot-Leyden crystals" (with C. J. Dawe). *Ibid.*, pp. 53-73. May, 1953.

R. DOROTHY SUNDBERG, Ph.D., M.D., Assistant Professor

"Experimental nutritional megaloblastic anemia. Part II. Hematology" (with F. E. Schaar and C. D. May). Blood, The Journal of Hematology, 7:1143-81. 1952.

"Tissue mast cells in human umbilical cord and the anticoagulant activity of dried extracts of cords and placentae" (with F. E. Schaar and M. D. Powell). *Anatomical Record*, 115:372. February, 1953.

SAMUEL O. CORNWELL, M.S., Instructor

"Poliomyelitis"

"VI. The hypothalamus" (with A. B. Baker and I. A. Brown). Archives of Neurology and Psychiatry, 68:16-36. July, 1952.

"VIII. Studies on temperature regulation" (with A. B. Baker and I. A. Brown). *Ibid.*, 69:332-42. March, 1953.

BACTERIOLOGY AND IMMUNOLOGY

JEROME T. SYVERTON, M.D., Professor and Head

"The pathogenesis of the rabbit papilloma-to-carcinoma sequence." Annals of the New York Academy of Sciences, 54:1126-40. July, 1952.

"Studies on the Propagation in vitro of Poliomyelitis Viruses"

"I. Viral multiplication in tissue cultures employing monkey and human testicular cells" (with W. F. Scherer). Journal of Experimental Medicine, 96:355-67. October, 1952.

- "II. A description of the growth curve and its relation to the cytopathogenicity of poliomyelitis virus" (with W. F. Scherer). *Ibid.*, pp. 369-88.
- "III. The propagation of poliomyelitis viruses in tissue cultures devoid of nerve cells" (with W. F. Scherer). *Ibid.*, pp. 389-400.
- "IV. Viral multiplication in a stable strain of human malignant epithelial cells (strain Hel.a) derived from an epidermoid carcinoma of the cervix" (with W. F. Scherer and George O. Gey). *Ibid.*, 97:695-710. May, 1953.
- "The inactivation in vitro of transplantable myeloid and lymphoid mouse leukemic cells by antibodies produced in a foreign host species" (with A. A. Werder, A. Kirschbaum, and E. C. MacDowell). Cancer Research, 12:886-89. December, 1952.
- "The combined effects of cortisone and roentgen radiation upon natural and induced resistance to homoiotransplantation of mouse leukemia, line Ib" (with A. A. Werder, J. Friedman, and E. C. MacDowell). *Ibid.*, 13:158-64. February, 1953.
- "Time as a factor in the enhancive effect of cortisone and roentgen radiation upon experimental moniliasis and blastomycosis" (with J. Friedman and F. Roth, Jr.). Federation Proceedings, 12:401. March, 1953.

DENNIS W. WATSON, Ph.D., Professor

- "Immunization of rabbits with type II pneumococcal polysaccharide" (with P. Morgan and W. J. Cromartie). Proceedings of the Society for Experimental Biology and Medicine, 80:512-16. September, 1952.
- "Antimicrobial activity of a natural and a synthetic polypeptide" (with W. L. Bloom). *Ibid.*, 81:29-33. October, 1952.
- "Production of generalized Shwartzman reaction with group A streptococcal factors" (with J. H. Schwab and W. J. Cromartie). *Ibid.*, 82:754-61. 1953.
- "Type specificity of 'immunological paralysis' induced in mice with pneumococcal type II polysaccharide" (with P. Morgan and W. J. Cromartie). *Journal of Bacteriology*, 65:224-25. February, 1953.

WILLIAM J. CROMARTIE, M.D., Associate Professor

- "Immunization of rabbits with type II pneumococcal polysaccharide" (with P. Morgan and D. W. Watson). Proceedings of the Society for Experimental Biology and Medicine, 80:512-16. October, 1952.
- "Production of generalized Shwartzman reaction with group Λ streptococcal factors" (with J. H. Schwab and D. W. Watson). Ibid., 82:754-61. 1953.
- "Type specificity of 'immunological paralysis' induced in mice with pneumococcal type II polysaccharide" (with P. Morgan and D. W. Watson). *Journal of Bacteriology*, 65:224-25. February, 1953.

HERMAN C. LICHSTEIN, D.Sc., Associate Professor

- "Advanced methods of microbial biochemistry" (with R. C. Bard). Pages 3-23 in Manual of Methods for Pure Culture Study of Bacteria. Geneva, N.Y.: Biotech Publications. 1952.
- "Effects of nutrition on aspartic acid deaminase system of Bacterium cadaveris" (with W. L. Boyd). Proceedings of the Society for Experimental Biology and Medicine, 81:424-25, 1952.
- "Effect of carbohydrates on aspartic acid deaminase activity of bacteria" (with W. L. Boyd). Ibid., 82:45-47. January, 1953.
- "Metabolism of microorganisms." Annual Review of Microbiology, 6:1-28. 1952.
- "The formic hydrogenlyase system of Acrobacter aerogenes" (with Ruth B. Boyd), Journal of Bacteriology, 65:617-18, 1953.

KARL R. JOHANSSON, Ph.D., Assistant Professor

- "Effects of dietary aureomycin upon the intestinal microflora and the intestinal synthesis of a vitamin B₁₂ in the rat" (with G. E. Peterson and E. C. Dick). Journal of Nutrition, 49: 135-52. January, 1953.
- "A modified egg yolk medium for detecting lecithinase producing anaerobes in feces." Journal of Bacteriology, 65:225-26. February, 1953.

WILLIAM F. SCHERER, M.D., Assistant Professor

- "Studies on the Propagation in vitro of Poliomyelitis Viruses"
 - "I. Viral multiplication in tissue cultures employing monkey and human testicular cells" (with J. T. Syverton). Journal of Experimental Medicine, 96:355-67. October, 1952.

- "II. A description of the growth curve and its relation to the cytopathogenicity of poliomyelitis virus" (with J. T. Syverton). *Ibid.*, pp. 369-88.
- "III. The propagation of poliomyelitis viruses in tissue cultures devoid of nerve cells" (with J. T. Syverton). *Ibid.*, pp. 389-400.
- "IV. Viral multiplication in a stable strain of human malignant epithelial cells (strain HeLa) derived from an epidermoid carcinoma of the cervix" (with J. T. Syverton and G. O. Gey). *Ibid.*, 97:695-710. May, 1953.
- "Current application of tissue cultures in medicine." Bulletin of the University of Minnesota Hospitals and the Minnesota Medical Foundation, 24:225-40. December, 1952.
- "The utilization of a pure strain of mammalian cells (Earle) for the cultivation of viruses in vitro. 1. Multiplication of pseudorabies and herpes simplex viruses." American Journal of Pathology, 29:113-37. 1953.
- "Agglutination of a pure strain of mammalian cells (L strain, Earle) by suspensions of vaccinia virus." Proceedings of the Society for Experimental Biology and Medicine, 80:598-602, 1952.

ALVAR A. WERDER, Ph.D., Assistant Professor

- "The inactivation in vitro of transplantable myeloid and lymphoid mouse leukemic cells by antibodies produced in a foreign host species" (with A. Kirschbaum, E. C. MacDowell, and J. T. Syverton). Cancer Research, 12:886-89. December, 1952.
- "The combined effects of cortisone and roentgen radiation upon natural and induced resistance to homoiotransplantation of mouse leukemia, line Ib" (with J. Friedman, E. C. MacDowell, and J. T. Syverton). Cancer Research, 13:158-64. February, 1953.

Frank J. Roth, M.S., Instructor

"Time as a factor in the enhancive effect of cortisone and roentgen radiation upon experimental moniliasis and blastomycosis" (with J. Friedman and J. T. Syverton). Federation Proceedings, 12:401. March, 1953.

WILLIAM L. BOYD, Ph.D., Research Assistant

- "Effects of nutrition on aspartic acid deaminase system of Bacterium cadaveris" (with H. C. Lichstein). Proceedings of the Society for Experimental Biology and Medicine, 81:424-25. 1952.
- "Effect of carbohydrates on aspartic acid deaminase activity of bacteria" (with H. C. Lichstein). *Ibid.*, 82:45-47. January, 1953.

Elliot C. Dick, M.S., Research Assistant

"Effects of dietary aureomycin upon the intestinal microflora and the intestinal synthesis of a vitamin B_{12} in the rat" (with K. R. Johansson and G. E. Peterson). *Journal of Nutrition*, 49:135-52. January, 1953.

Perry Morgan, Ph.D., Research Assistant

- "Immunization of rabbits with type II pneumococcal polysaccharide" (with D. W. Watson and W. J. Cromartie). Proceedings of the Society for Experimental Biology and Medicine, 80:512-16. October, 1952.
- "Type specificity of 'immunological paralysis' induced in mice with pneumococcal type II polysaccharide" (with D. W. Watson and W. J. Cromartie). *Journal of Bacteriology*, 65:224-25. February, 1953.

GLEN E. PETERSON, M.S., Research Assistant

"Effects of dietary aureomycin upon the intestinal microflora and the intestinal synthesis of a vitamin B₁₂ in the rat" (with K. R. Johansson and E. C. Dick). *Journal of Nutrition*, 49:135-52. January, 1953.

JOHN H. SCHWAB, M.S., Research Assistant

"Production of generalized Shwartzman reaction with group A streptococcal factors" (with D. W. Watson and W. J. Cromartie). Proceedings of the Society for Experimental Biology and Medicine, 82:754-61. 1953.

MEDICINE

CECIL J. WATSON, M.D., Ph.D., Professor and Head

- "The direct preparation of crystalline urobilin from bilirubin." Journal of Biological Chemistry, 200:691-96, February, 1953.
- "A simple method of isolation of crystalline stercobilin or urobilin from feces" (with P. T. Lowry, V. E. Sborov, W. H. Hollinshead, S. Kohan, and H. O. Matte). *Ibid.*, pp. 697-701. February, 1953.
- "A method for the isolation of bilirubin from feces" (with P. T. Lowry and Irene Bossenmaier). Ibid., 202;305-309. May, 1953.
- "Normal limits of urinary coproporphyrin excretion determined by an improved method" (with E. Hill, L. Zieve, and S. Schwartz). *Journal of Laboratory and Clinical Medicine*, 41:663, 1953.
- "Urinary and Fecal Coproporphyrin Excretion in Rats"
 - "I. Results in normals and castrates" (with S. Schwartz and F. W. Hoffbauer). Proceedings of the Society for Experimental Biology and Medicine, 83:228. 1953.
 - "II. Results in experimental liver damage" (with S. Schwartz and F. W. Hoffbauer). Ibid., p. 232.
 - "III. The excretion of injected coproporphyrin" (with S. Schwartz and F. W. Hoffbauer). *Ibid.*, p. 238.

RICHARD V. EBERT, M.D., Clark Professor

- "A critical comparison of the T-1824 dye and iodinated albumin methods for plasma volume measurement" (with J. F. Hammersten, B. I. Heller, and A. L. Schultz). Journal of Clinical Investigation, 32:107-12. 1953.
- "The effects of dextran in normovolemic and oligemic subjects" (with J. F. Hammarsten and B. I. Heller). *Ibid.*, pp. 340-44.

Francis W. Lynch, M.D., M.S., Clinical Professor

"Dermatology in the first century of medicine in Minnesota." Minnesota Medicine, 36:375-77. April, 1953.

WESLEY W. SPINK, M.D., Professor

- "The Influence of Cortisone and Adrenocorticotrophic Hormone on Brucellosis"
 - "I. Cortisone in experimentally infected animals" (with R. S. Abernathy). Journal of Clinical Investigation, 31:947-57. November, 1952.
 - "H. Adrenocorticotrophic hormone (ACTH) in acute and chronic human brucellosis" (with W. H. Hall). *Ibid.*, pp. 958-68.
- "Correlation of a rapid slide-agglutination test (Castaneda) with a tube-agglutination test in screening suspected cases of human brucellosis" (with D. Anderson). Journal of Laboratory and Clinical Medicine, 40:593-600. October, 1952.
- "Some biologic and clinical problems related to intracellular parasitism in brucellosis." New England Journal of Medicine, 247:603. October 16, 1952.
- "The protection of intracellular brucella against therapeutic agents and the bactericidal action of serum" (with J. M. Shaffer and C. Kucera). Journal of Experimental Medicine, 7:77-90. January, 1953.
- "Evaluation of prolonged antibiotic therapy in mice with chronic brucella infection due to brucella melitensis" (with J. M. Shaffer and C. Kucera). *Journal of Immunology*, 70:31-38. January, 1953.
- "Clinical problems relating to the management of infections with antibiotics." Journal of the American Medical Association, 152:585-90. June, 1953.
- "The management of staphylococcal disease" (with R. I. Wise). Bulletin of the University of Minnesota Hospitals and Minnesota Medical Foundation, 24:645-58. June, 1953.

WILLIAM B. TUCKER, M.D., Professor

- "Recent developments in the antimicrobial therapy of tuberculosis" (with others). American Review of Tuberculosis, 66:251-53. August, 1952.
- "The effect of cortisone and/or corticotropin on tuberculous infection in man" (with others). Ibid., pp. 254-56.
- "The role of the Committee on Therapy in the American Trudeau Society" (with others). Ibid., pp. 644-46. November, 1952.

- "Resection of residual necrotic pulmonary tuberculous lesions" (with others). *Ibid.*, 67:268. February, 1953.
- "The current status of isoniazid in the treatment of tuberculosis" (with others). *Ibid.*, p. 269. "The need for rest therapy in connection with long courses of drug treatment in pulmonary tuberculosis" (with others). *Ibid.*, p. 679. May, 1953.
- "Chemotherapy in tuberculosis: A panel discussion" (with N. D. D'Esopo, H. C. Hinshaw, C. Muschenheim, and C. W. Temper). *Ibid.*, pp. 680-97.
- "Studies on the antituberculous effect of viomycin in the treatment of pulmonary tuberculosis, in ten Veterans Administration hospitals." Quarterly Progress Report, Veterans Administration, Washington, D. C. October, 1952.
- "A controlled study of the variables in the chemotherapy of pulmonary tuberculosis: An account and a critique of the investigation by the cooperative group of the Veterans Administration, Army, and Navy, 1946-53." Transactions of the Twelfth Conference on the Chemotherapy of Tuberculosis, Atlanta, Georgia, February 9-12, 1953. Veterans Administration, Washington, D.C.
- "Current trends in the treatment of tuberculosis: An internist's viewpoint." Cincinnati Journal of Medicine, 34:75-81. March, 1953; pp. 109-114. April, 1953.

S. MARX WHITE, M.D., Professor Emeritus

"A century of medicine, 1853-1953." Minnesota Medicine, 36:349-55. April, 1953.

JAMES B. CAREY, M.D., Clinical Associate Professor

"Gastritis." Pages 272-74 in Howard F. Conn, editor, Current Therapy. Philadelphia and London: W. B. Saunders Co. 1953.

STEPHAN EPSTEIN, M.D., Clinical Associate Professor

- "The antigen-antibody reaction in contact dermatitis." Annals of Allergy, 10:633-58. September-October, 1952.
- "Tips for the management of infantile eczema." Bulletin of the Marshfield Clinic, 2:16-19. January, 1953.

Assistant Editor, Quarterly Review of Allergy and Applied Immunology. 1949-

Editorial Board

Journal of Investigative Dermatology

Annals of Allergy

Quarterly Review of Allergy and Applied Immunology

Excerpta Medica, Section XIII (Amsterdam)

Dermatologica (Basel)

Journal Kosm. Med. (Berlin)

EDMUND B. FLINK, M.D., Ph.D., Associate Professor

"Magnesium deficiency in delirium tremens" (with F. L. Stutzman, A. R. Anderson, and T. J. Konig). Proceedings of the American Society for Clinical Investigation, 32:568-69, 1953.

Frederick W. Hoffbauer, M.S., M.D., Associate Professor

- "Cirrhosis of the liver." Pages 246-50 in Current Therapy, 1952.
- "Hepatic lesions in the living patient with chronic ulcerative colitis as demonstrated by needle biopsy." Gastroenterology, 22:13-33. September, 1952.
- "Dietary hepatic necrosis: Absence of cirrhosis following recurrent episodes." Federation Proceedings, 12:392. March, 1953.
- "Urinary and Fecal Coproporphyrin Excretion in Rats"
 - "I. Results in normals and castrates" (with S. Schwartz and C. J. Watson). Proceedings of the Society for Experimental Biology and Medicine, 83:228, 1953.
 - "II. Results in experimental liver damage" (with S. Schwartz and C. J. Watson). *Ibid.*, p. 232.
 - "III. The excretion of injected coproporphyrin" (with S. Schwartz and C. J. Watson). Ibid., p. 238.

JOHN F. MADDEN, M.A., M.D., M.S., Clinical Associate Professor

- "Care of the psoriatic patient." Current Therapy. 1953.
- "Obituary of Dr. Charles D. Freeman." Archives of Dermatology and Syphilology, 66:543-44. October, 1953.
- "Pancreatic function and X-ray studies in psoriasis" (with I. M. Karon). Ibid., 67:66-75. 1953.

Samuel Nesbitt, M.D., Ph.D., Associate Professor

- "Bilirubin and protein in the cerebrospinal fluid of jaundiced patients with severe liver disease with and without hepatic coma" (with D. S. Amatuzio and L. W. Weber). Journal of Laboratory and Clinical Medicine, 41:615-18. April, 1953.
- "Interpretation of the rapid intravenous glucose tolerance test in normal individuals and in mild diabetes mellitus" (with D. S. Amatuzio, F. L. Stutzman, and M. Vanderbilt). *Ibid.*, 42:428. May, 1953.

Samuel Schwartz, M.D., Associate Professor

- "Experimental porphyria. III. Hepatic type produced by sedormid" (with R. Schmid). Proceedings of the Society for Experimental Biology and Medicine, 81:685, 1952.
- "Flurophotometric determination of uranium" (with G. R. Price and R. J. Ferretti). Analytical Chemistry, 25:322-31, 1953.
- "Normal limits of urinary coproporphyrin exerction determined by an improved method" (with L. Zieve, E. Hill, and C. J. Watson). Journal of Laboratory and Clinical Medicine, 41:663. 1953.
- "Urinary and Fecal Coproporphyrin Excretion in Rats"
 - "I. Results in normals and castrates" (with F. W. Hoffbauer and C. J. Watson). Proceedings of the Society for Experimental Biology and Medicine, 83:228, 1953.
 - "II. Results in experimental liver damage" (with F. W. Hoffbauer and C. J. Watson). Ibid., p. 232.
 - "III. The excretion of injected coproporphyrin" (with F. W. Hoffbauer and C. J. Watson). *Ibid.*, p. 238.

Horatio B. Sweetser, M.D., Clinical Associate Professor

"Hiatus hernia masquerading as coronary disease." Minnesota Medicine, 35:971-72. October, 1952.

GEORGE R. PRICE, Ph.D., Research Associate

- "Fluorophotometric determination of uranium" (with R. J. Ferratti and S. Schwartz). Analytical Chemistry, 25:322-31, 1953.
- "Altman's theory of economic cycles." Science, 117:335-36. 1953.

JACOB S. BLUMENTHAL, M.D., Clinical Assistant Professor

"ACTH and cortisone in allergy." Bulletin of the University of Minnesota Hospitals and Minnesota Medical Foundation, 24:395-440. February 27, 1953.

JOSEPH F. BORG, M.D., Clinical Assistant Professor

"Anticoagulants in cardiovascular disease." Minnesota Medicine, 35:1047-51. November, 1952.

ABRAHAM FALK, M.D., Assistant Professor

- "Hypopotassemia and hyponatremia in pulmonary tuberculosis during treatment with paraminosalicylic acid" (with D. S. Amatuzio, R. B. Breitenbucher, and F. L. Stutzman). American Review of Tuberculosis, 66:357-63. September, 1952.
- "Bronchospirometric study of pulmonary function after decortication in pulmonary tuberculosis" (with R. T. Pearson and F. Martin). *Ibid.*, pp. 509-21. November, 1952.

Isadore Fisher, M.D., Clinical Assistant Professor

- "Pemphigus. A clinical and laboratory study." Archives of Dermatology and Syphilology, 66:49. July, 1952.
- "Dermatoses of the lower extremities." Minnesota Medicine, 35:39. January, 1952.

PAUL S. HAGEN, M.D., Assistant Professor

"Hemolytic anemia." Minnesota Medicine, 36:128-32. 1953.

Wendell H. Hall, M.D., Ph.D., Assistant Professor

- "The use and misuse of antibiotics." Minnesota Medicine, 35:629-32. July, 1952.
- "Canicola fever. Report of a human infection due to leptospira canicola in Minnesota." *Ibid.*, pp. 1127-30. December, 1952.

- "Chronic laryngeal and pharyngeal histoplasmosis successfully treated with ethyl vanillate. A case report." *Ibid.*, 36:249-52. March, 1953.
- "Brucellosis in man. A study of 35 cases due to brucella abortus." Ibid., pp. 460-65. May, 1953.
- "The influence of cortisone and adrenocorticotrophic hormone on brucellosis. II. Adrenocorticotrophis hormone (ACTH) in acute and chronic human brucellosis" (with W. W. Spink). Journal of Clinical Investigation, 31:958-68. November, 1952.
- "Comparison of the Coombs test with other methods for brucella agglutinins in human serum." *Ibid.*, 32:96-106. January, 1953.
- "A study of the pathology and bacteriology of surgically resected pulmonary tuberculous lesions."

 Pages 219.24 in Transactions of the 12th Conference on the Chemotherapy of Tuberculosis.

 Atlanta, Georgia, February 9, 1953.
- "Antibiotics in oral surgery." North-West Dentistry, 32:93-96. April, 1953.
- "A study of 23 cases of Reiter's syndroma." Annals of Internal Medicine, 38:533-50. March, 1953.
- "Clinical, pathologic and bacteriologic study of resected pulmonary tuberculous lesions." Transactions of the 49th Annual Meeting of the National Tuberculosis Association. Los Angeles California. May, 1953.
- Editorial Board, Journal of Laboratory and Clinical Medicine. 1952-53.
- Diagnostic Laboratory Methods. (Revised.) 12th Conference on the Chemotherapy of Tuberculosis. Atlanta, Georgia, June, 1953. 22 mimeographed pages.

JAMES F. HAMMARSTEN, M.D., Assistant Professor

- "A critical comparison of the T-1824 dye and iodinated albumin methods for plasma volume measurement" (with A. L. Schultz, B. I. Heller, and R. V. Ebert). *Journal of Clinical Investigation*, 32:107-12. 1953.
- "The effects of dextran in normovolemic and oligemic subjects" (with B. I. Heller and R. V. Ebert). *Ibid.*, p. 340.
- Editor, Clinicopathological Conferences, Journal-Lancet. 1952-53.

BEN I. HELLER, M.D., Assistant Professor

- "A critical comparison of the T-1824 dye and iodinated albumin methods for plasma volume measurement" (with A. L. Schultz, J. F. Hammarsten, and R. V. Ebert). Journal of Clinical Investigation, 32:107-12. 1953.
- "The effects of dextran in normovolemic and oligemic subjects" (with J. F. Hammarsten and R. V. Ebert). *Ibid.*, p. 340.

ROBERT B. HOWARD, M.D., Ph.D., Assistant Professor and Director Continuation Medical Education

"The Continuation Medical Education program." (Editorial.) Journal-Lancet, 73:481. March, 1953.

WYMAN E. JACOBSON, M.D., Clinical Assistant Professor

"The effect of propylthiouracil on the thyroid uptake of Ina and the plasma conversion ratio in hyperthyroidism" (with A. L. Schultz). Journal of Clinical Endocrinology and Metabolism, 12:1205-14. September, 1952.

JOHN W. LABREE, M.D., Clinical Assistant Professor

"The roentgenological aspects of heart catheterization" (with J. Jorgens, F. H. Adams, and L. G. Rigler). American Journal of Roentgenology, Radium Therapy and Nuclear Medicine, 68:610-18. October, 1952.

GEORGE G. ROTH, M.D., Clinical Assistant Professor

"Chemotherapy in tuberculosis." (Editorial.) Minnesota Medicine, 36:494. May, 1953.

ASHER A. WHITE, M.D., Clinical Assistant Professor

"Fallacy in allergy." Postgraduate Medicine, 13:410. May, 1953.

J. Allen Wilson, Ph.D., M.D., Clinical Assistant Professor

"Medical treatment of massive hemorrhage from peptic ulcer." Postgraduate Medicine, 13:159-63.

1953.

DONALD S. AMATUZIO, M.D., Instructor

- "Interpretation of rapid intravenous glucose tolerance test in normal individuals and in mild diabetes mellitus" (with F. L. Stutzman, M. Vanderbilt, and S. Nesbitt). *Journal of Clinical Investigation*, 32:428. 1953.
- "Blood serum magnesium in portal cirrhosis and diabetes mellitus" (with F. L. Stutzman).

 Journal of Laboratory and Clinical Medicine, 41:215, 1953.
- "Bilirubin and protein in the cerebrospinal fluid of jaundiced patients with severe liver disease with and without hepatic coma" (with L. W. Weber and S. Nesbitt). Journal of Laboratory and Clinical Medicine, 41:615-18.
- "Isotope curves in red cell studies" (with R. L. Evans). Nature, 171:798. 1953.
- "Red cell survival and Ashby curves" (with R. L. Evans). Ibid., p. 799.

PAUL I. BILKA, M.D., M.S. in Med., Clinical Instructor

"Intra-articular use of hydrocortisone in rheumatic diseases." Minnesota Medicine, 35:938-43, 968. October, 1952.

PAUL G. FRICK, M.D., Instructor

- "Hemophilia-like disease following pregnancy with transplacental transfer of an acquired circulating anticoagulant." Journal of Laboratory and Clinical Medicine, 40:800, 1952.
- "Hemolytic transfusion reaction caused by anti-C antibody." American Journal of Medical Science, 225:630, 1953.

ELMER HILL, M.D., Clinical Instructor

"Normal limits of urinary coproporphyrin exerction determined by an improved method" (with L. Zieve, S. Schwartz, and C. J. Watson). Journal of Laboratory and Clinical Medicine, 41:663, 1953.

IRVINE M. KARON, M.D., Clinical Instructor

"Pancreatic function of X-ray studies in psoriasis" (with J. F. Madden). Annals of Dermatology and Syphilology, 67:66-75. January, 1953.

FRANK E. MARTIN, M.D., Instructor

- "A bronchospirometric study of pulmonary function after decortication in pulmonary tuberculosis." American Review of Tuberculosis, 66:509-21. 1952.
- "Physiologic Studies Following Thoracic Surgery"
 - "HI. Ventilatory studies in the immediate postoperative period." Journal of Thoracic Surgery, 25:417-21, 1953.
 - "IV. The mechanism of the development of acidosis during anesthesia" (with W. W. Stead and N. K. Jensen). *Ibid.*, pp. 435-47. May, 1953.

JAMES G. MYHRE, M.D., M.S. in Med., Clinical Instructor

"Danger of ammonium chloride acidosis. Report of a case." Minnesota Medicine, 36:133-34. February, 1953.

HAROLD G. RAVITS, M.D., M.S. in Med., Clinical Instructor

Assistant editor, Quarterly Review of Allergy and Applied Immunology. 1952-53.

Rudi Schmid, M.D., Instructor

- "Porphyria" (with C. B. Findlay). American Journal of Nursing, 52:1249. 1952.
- "Experimental porphyria. III. Hepatic type produced by sedormid" (with S. Schwartz). Proceedings of the Society for Experimental Biology and Medicine, 81:685, 1952.

ALVIN L. SCHULTZ, M.D., M.S. in Med., Instructor

- "The effect of propylthiouracil on the thyroid uptake of I₁₅₁ and the plasma conversion ratio in hyperthyroidism" (with W. E. Jacobson). *Journal of Clinical Endocrinology and Metabolism*, 12:1205-14. September, 1952.
- "A critical comparison of the T-1824 dye and the iodinated albumin methods for plasma volume measurement" (with J. F. Hammersten, B. F. Heller, and R. V. Ebert). *Journal of Clinical Investigation*, 32:107-12. February, 1953.

LESLIE ZIEVE, M.D., Ph.D., Instructor

"Normal limits of urinary coproporphyrin excretion determined by an improved method" (with E. Hill, S. Schwartz, and C. J. Watson). *Journal of Laboratory and Clinical Medicine*, 41:663. 1953.

DONALD L. FRY, M.D., Research Fellow

- "The measurement of intraesophageal pressure and its relationship to intrathoracic pressure."

 Journal of Laboratory and Clinical Medicine, 40:664-73. 1952.
- "The elastic properties of the lung in normal men and in patients with chronic pulmonary emphysema," *Ibid.*, pp. 674-81.

ROBERT I. WISE, Ph.D., M.D., Research Fellow

"The management of staphylococcal disease" (with W. W. Spink). Bulletin of the University of Minnesota Hospitals and Minnesota Medical Foundation, 24:645-58. June, 1953.

ROBERT S. ABERNATHY, M.D., Medical Fellow

"The influence of cortisone and adrenocorticotrophic hormone on brucellosis. I. Cortisone in experimentally infected animals" (with W. W. Spink). *Journal of Clinical Investigation*, 31:947-57. November, 1952.

LOWELL W. WEBER, M.D., Clinical Assistant

"Bilirubin and protein in the cerebrospinal fluid of jaundiced patients with severe liver disease with and without hepatic coma" (with D. S. Amatuzio and S. Nesbitt). Journal of Laboratory and Clinical Medicine, 41:615-18. April, 1953.

OBSTETRICS AND GYNECOLOGY

JOHN L. McKelvey, M.D.C.M., Professor and Head

"Carcinoma in situ of the cervix: A general consideration." American Journal of Obstetrics and Gynecology, Vol. 64, No. 4, pp. 816-32. October, 1952; Bulletin of the University of Minnesota Hospitals and Minnesota Medical Foundation, Vol. 24, No. 4, pp. 101-105. October 24, 1952.

"Adenocarcinoma of the endometrium" (with R. G. Holly and K. A. Prem). American Journal of Obstetrics and Gynecology, 64-A:295-308. December, 1952.

Roy G. Holly, M.D., Ph.D., Assistant Professor

- "Hypoplastic anemia in pregnancy." Obstetrics and Gynecology. Vol. 1, No. 5, pp. 535-43. May, 1953.
- "Adenocarcinoma of the endometrium" (with J. L. McKelvey and K. A. Prem). American Journal of Obstetrics and Gynecology, 64-A:295-308. December, 1952.

Roy E. Swanson, Ph.D., M.D., Clinical Assistant Professor

"The antipartum diagnosis of anencephalic monster." Minnesota Medicine. 35:1147-48. December, 1952.

IRWIN H. KAISER, M.D., Instructor

"Primary carcinoma of the vagina." Cancer, Vol. 5, No. 6, pp. 1146-60. November, 1952.

DAVID I. SEIBEL, M.D., Instructor

"Culdoscopy." Bulletin of the University of Minnesota Hospitals and Minnesota Medical Foundation, Vol. 24, No. 25, pp. 503-507. April 17, 1953.

RODNEY F. STURLEY, M.D., Clinical Instructor

"Functional uterine bleeding." Minnesota Medicine, 35:1052-54. November, 1952.

JAMES J. SWENDSON, M.D., Clinical Instructor

"Intrauterine implantation of oviducts for cornual occlusion by a Reamer technique." American Journal of Obstetrics and Gynecology, Vol. 65, No. 1, pp. 150-57. January, 1953.

Konald A. Prem, M.D., Medical Fellow

"Adenocarcinoma of the endometrium" (with J. L. McKelvey and R. G. Holly). American Journal of Obstetrics and Gynecology, 64-A:295-308. December, 1952.

PATHOLOGY

ELEXIOUS T. BELL, M.D., Professor Emeritus

- "The incidence and significance of degranulation of the beta cells in the Islets of Langerhans in diabetes mellitus." Diabetes, 2:125-30, 1953.
- "Renal vascular disease in diabetes mellitus." Ibid., pp. 376-89.
- "Experimental studies with the nematoid parasite, gongylonema neoplasticum (spirotera neoplasticum) and vitamin A-deficient diets affecting the forestomachs of the rat: comparison of results with those of J. Fibiger" (with C. R. Hitchcock). Journal of the National Cancer Institute, 13:949-77. February, 1953.

BENJAMIN J. CLAWSON, M.D., Ph.D., Professor Emeritus

"Diseases of the heart." Pages 650-90 in Textbook of Pathology. (Seventh edition.) Philadelphia: Lea and Febiger. 1952.

JAMES S. McCARTNEY, M.D., Professor

"A ray of hope for a change." Minnesota Medicine, 36:490-91. May, 1953.

JOHN F. NOBLE, M.D., Associate Professor

"Nature of bleeding in esophageal varices" (with T. W. Wagenknecht and I. D. Baronofsky). Surgery, 33:869-74. June, 1953.

John I. Coe, M.D., Assistant Professor

"Hamartonia of the spleen: A study of four cases" (with S. C. Vondrasheck), American Journal of Pathology, 28:663-71, 1952.

PAUL H. LOBER, M.D., Ph.D., Instructor

"Pathogenesis of coronary sclerosis." A.M.A. Archives of Pathology, 55:357-83. May, 1953.

SAMUEL T. NERENBERG, M.D., Ph.D. in Path., Instructor

- "A modification of Gamari's stain for the demonstration of beta granules in the Islets of Langerhans." Diabetes, 2:130-31, 1953,
- "Regranulation of the beta cells of the Islets of Langerhans following starvation and insulin."

 American Journal Clinical Pathology, 23:340-42, 1953.

PEDIATRICS

IRVINE McQUARRIE, M.D., Professor and Head

- "Spontaneous hypoglycemia: Clinical and metabolic studies." Pages 76-91 in Victor A. Najjar,
 A Symposium on the Clinical and Biochemical Aspects of Carbohydrate Utilization in Health
 and Disease. Baltimore, Maryland: Johns Hopkins Press. 1952.
- "Metabolic and clinical effects of corticotropin (ACTH) on essential glycogenosis (von Gierke's disease)" (with R. A. Ulstrom, Mildred R. Ziegler, and Doris Doeden). Metabolism, Vol. 1, No. 4, pp. 291-99. 1952.
- "Clinical and metabolic studies of von Gierke's glycogen storage disease and of galactosemia" (with R. A. Ulstrom, Mildred R. Ziegler, and Doris Doeden). Bulletin of the University of Minnesota Hospitals and Minnesota Medical Foundation. Vol. 24, No. 2, pp. 54-66. 1952.

REYNOLD A. JENSEN, M.D., Professor (Child Psychiatry)

- "Doctor-child relationship." Pages 1-6 in Postgraduate Seminar on Emotional Disturbances in Children. June 2-6, 1952. Los Angeles, California: Childrens Hospital Society.
- "Parent-child relationship." Ibid., pp. 1-7.
- "Psychiatric implications of physical handicaps in children." Pages 11-12 in Continuation Course on Pediatric Neurology. Minneapolis: University of Minnesota Center for Continuation Study. January 26-31, 1953.
- "Discussion of pilot study of childhood accidents." Current Topics in Home Safety, 13:15-16.
 1952.
- "Psychological disturbances during adolescence" (with W. S. Langford). *Pediatrics*, 11:79-81. January, 1953.
- "Neurologic and psychiatric trends in Minnesota" (with A. B. Baker, B. C. Schiele, and D. W. Hastings). *Minnesota Medicine*, 36:384-86. April, 1953.

MAX SEHAM, M.D., Clinical Professor

"The politics of medicine." The Progressive, Vol. 16, No. 11, pp. 20-22. November, 1952.

Albert V. Stoesser, M.D., Ph.D., Clinical Professor

- "Allergy in children" (with L. S. Nelson). Section 10. The Allergic Diseases, pages 469-72 in Howard F. Conn, editor, Current Therapy of 1953. Philadelphia and London: W. B. Saunders Company. 1953.
- "The care of infantile eczema." New Orleans Medical and Surgical Journal, 104:677-80. October, 1952.
- "Allergic diseases of infancy and childhood" (with L. S. Nelson). Annals of Allergy, M.D., 7:353-59. November, 1952.
- "Synthetic vitamin A in treatment of eczema in children" (with L. S. Nelson). Annals of Allergy, 10:703-704. November-December, 1952.

LEWIS THOMAS, M.D., Professor

- "The effect of ACTH and cortisone upon infection and resistance." Pages 147-60 in Gregory Shwartzman, editor, The Effect of ACTH and Cortisone upon Infection and Resistance. Symposia No. 6. New York Academy of Medicine. Section on Microbiology. New York: Columbia University Press. 1953.
- "Inhibition by heparin of the local and generalized Shwartzman reactions" (with R. A. Good).

 Journal of Laboratory and Clinical Medicine, 40:804-805. November, 1952.
- "Studies on the Generalized Shwartzman Reaction"
 - "I. General observations concerning the phenomenon" (with R. A. Good). Journal of Experimental Medicine, 96:605-24. December, 1952.
 - "II. The production of bilateral cortical necrosis of the kidneys by a single injection of bacterial toxin in rabbits previously treated with thorotrast or trypan blue" (with R. A. Good). *Ibid.*, pp. 625-41.
 - "III. Lesions of the myocardium and coronary arteries accompanying the reaction in rabbits prepared by infection with group A streptococci" (with F. W. Denny and Joan Floyd). *Ibid.*, 97:751-66. May, 1953.
 - "IV. Prevention of the local and generalized Shwartzman reactions with heparin" (with R. A. Good). *Ibid.*, p. 871. June, 1953.
 - "V. Effect of intravenous injection of colloidal iron on response of rabbits to meningococcal toxin" (with R. T. Smith and R. A. Good). Proceedings of the Society for Experimental Biology and Medicine, 82:712-15. June, 1953.
- "Recent advances in research on rheumatic fever." Minnesota Medicine, 35:1105-10. December, 1952.
- "The pathogenesis of rheumatic fever" (with F. W. Denny, R. A. Good, and R. T. Smith).

 Bulletin of the University of Minnesota Hospitals and Minnesota Medical Foundation, 24:341-48. February, 1953.
- "Experimental fibrinoid necrosis of the coronary arteries in streptococcal-infected rabbits" (with F. W. Denny and R. A. Good). *Journal of Clinical Investigation*, 32:562. June, 1953,
- "Factors involved in the production of tissue damage by endotoxins derived from gram-negative micro-organisms" (with R. A. Good, F. W. Denny, and R. T. Smith). American Journal Diseases of Children, 86:473, 1953.
- "The effects of cortisone upon the parenchymal cells of the rabbit liver" (with W. L. Williams and C. E. Lowe). Anatomical Record, 115:247-63. February, 1953.

PAUL F. DWAN, M.D., Clinical Associate Professor

"Mucolytic enzyme systems. XVIII. Nonspecific hyaluronidase inhibitor concentrations in the blood serum of siblings and parents of children with rheumatic fever" (with F. H. Adams, D. Glick, and R. C. Anderson). *Journal of Pediatrics*, Vol. 41, No. 3, pp. 258-61, 1952.

ROBERT A. GOOD, M.D., Ph.D., Associate Professor

- "Inhibition by heparin of the local and generalized Shwartzman reaction" (with L. Thomas).

 **Journal of Laboratory and Clinical Medicine, 40:804-805. November, 1952.
- "Studies of the Generalized Shwartzman Reaction"
 - "I. Some general observations concerning the phenomenon" (with L. Thomas). Journal of Experimental Medicine, 96:605-24. December, 1952.
 - "II. The production of bilateral cortical necrosis of the kidneys by a single injection of bacterial toxin in rabbits previously treated with thorotrast and trypan blue" (with L. Thomas). *Ibid.*, pp. 625-41.
 - "IV. The prevention of the local and generalized Shwartzman reactions with heparin" (with L. Thomas). *Ibid.*, 97:871. June, 1953.
 - "V. Effect of intravenous injection of colloidal iron or carbon on response of rabbits to meningococcal toxin" (with R. T. Smith and L. Thomas). Proceedings of the Society for Experimental Biology and Medicine, 82:712-15. April, 1953.
- "The pathogenesis of rheumatic fever" (with L. Thomas, F. W. Denny, and R. T. Smith).

 Bulletin of the University of Minnesota Hospitals and Minnesota Medical Foundation, 24:341-48. February, 1953.
- "Factors involved in the production of tissue damage by endotoxins derived from gram-negative micro-organisms" (with F. W. Denny, R. T. Smith, and L. Thomas). American Journal Discases of Children, 86:473, 1953.
- "Experimental fibrinoid necrosis of the coronary arteries in streptococcus-infected rabbits" (with F. W. Denny and L. Thomas). Journal of Clinical Investigation, 32:562. June, 1953.

CHARLES D. MAY, M.D., Associate Professor

- "Experimental Nutritional Megaloblastic Anemia and Scurvy in the Monkey"
 - "III. Protoporphyrin, coproporphyrin, urobilinogen and iron in blood and exercta" (with Elsa C. Proehl). Blood, the Journal of Hematology, Vol. 7, No. 7, pp. 671-82. July, 1952.
 - "IV. Vitamin B₁₂ and folic acid compounds in the diet, liver, urine and feces and effects of therapy" (with Agnes Hamilton and C. T. Stewart). *Ibid.*, No. 10, pp. 978-91, 1952.
 - "V. Nature of the relation of ascorbic acid deficiency to the metabolism of folic acid compounds" (with Agnes Hamilton and C. T. Stewart). *Journal of Nutrition*, Vol. 49, No. 1, pp. 121-33, 1953.
- "Experimental nutrition megaloblastic anemia, II. Hematology" (with R. Dorothy Sundberg and Frances E. Schaar). Blood, The Journal of Hematology, Vol. 7, No. 12, pp. 1143-81. December, 1952.
- "Function of the adrenal cortex in ascorbic acid deficiency and scurvy in the monkey" (with C. T. Stewart and R. J. Salmon). *Journal of Laboratory and Clinical Medicine*, Vol. 40, No. 5, pp. 657-63. 1952.
- "Factors determining effect of insulin on metabolism of glucose in ascorbic acid deficiency and scurvy in the monkey" (with C. T. Stewart and R. J. Salmon). American Journal of Diseases of Children, 84:677, 1952.
- "Further studies on the metabolism of L-tyrosine in scorbutic monkeys" (with R. J. Salmon).

 Journal of Laboratory and Clinical Medicine, Vol. 41, No. 3, pp. 376-92. March, 1953.

LAURENCE F. RICHBORF, M.D., Clinical Associate Professor

"Four siblings with hepatic disease leading to cirrhosis" (with R. C. Anderson and F. H. Adams).

American Journal of Diseases of Children, 84:168-74. August, 1952.

ROBERT J. SALMON, M.S., Research Associate

- "Function of the adrenal cortex in ascorbic acid deficiency and scurvy in the monkey" (with C. D. May and C. T. Stewart). *Journal of Laboratory and Clinical Medicine*, Vol. 40, No. 5, pp. 657-63, 1952.
- "Further studies on the metabolism of L-tyrosine in scorbutic monkeys" (with C. D. May). *Ibid.*, Vol. 41, No. 3, pp. 376-92. March, 1953.
- "Factors determining effect of insulin on metabolism of glucose in ascorbic acid deficiency and scurvy in the monkey" (with C. T. Stewart and C. D. May). American Journal of Diseases of Children, 84:677, 1952.

RICHARD VON KORFF, Ph.D., Research Associate

- "A method for purification of coenzyme A" (with H. Beinert, D. E. Green, D. A. Buyske, R. F. Handschumacher, Harvey Higgins, and F. M. Strong). Journal of the American Chemical Society, 74:854, 1952.
- "A method for the purification of coenzyme Λ from yeast" (with H. Beinert and D. E. Green).

 Journal of Biological Chemistry, 200:385, 1953.
- "Effect of alkali metal ions on tissue acetokinase activity" (with T. Vanderwal Glaman). Federation Proceedings, Vol. 12, No. 1, p. 240. March, 1953.
- "A rapid spectrophotometric assay for coenzyme A." Journal of Biological Chemistry, 200:401. 1953.
- "The effect of alkali metal ions on acctate activation by an enzyme from heart muscle." Journal-Lancet, 73:196. May, 1953.
- "The effect of alkali metal ions on the acetate activating enzyme system." Journal of Biological Chemistry, 203:265-71. 1953.

FORREST H. ADAMS, M.D., Assistant Professor

- "Toxoplasmosis in children," Postgraduate Medicine, Vol. 12, No. 1, pp. 93-96. July, 1952.
- "Four siblings with hepatic disease leading to cirrhosis" (with R. C. Anderson and L. F. Richdorf). American Journal of Diseases of Children, 84:168-74. August, 1952.
- "The relationship of intracardiac pressures and electrocardiographic findings in cases of congenital heart disease" (with H. W. Orme). *Journal of Pediatrics*, Vol. 41, No. 1, pp. 53-72, 1952.
- "Endocardial fibroelastosis" (with B. Katz), Ibid., No. 2, pp. 141-52.
- "Mucolytic enzyme systems XVIII. Nonspecific hyaluronidase inhibitor concentrations in the blood scrum of siblings and parents of children with rheumatic fever" (with D. Glick, R. C. Anderson, and P. F. Dwan). *Ibid.*, No. 3, pp. 258-61.
- "Further studies on the blood of children with cyanotic heart disease with special reference to the hemoglobin" (with Shirley Cunningham). *Ibid.*, No. 4, pp. 424-29.
- "Congenital pulmonary stenosis without cyanosis" (with J. Jorgens and J. J. Galligan). Journal of Pediatrics, 41:562-71. November, 1952.
- "The roentgenological aspects of heart catheterization" (with J. Jorgens, J. W. LaBree, and L. G. Rigler). American Journal of Roentgenology, Radium Therapy and Nuclear Medicine, Vol. 68, No. 4, pp. 610-18. October, 1952.

RAY C. ANDERSON, M.D., Assistant Professor

- "Four siblings with hepatic disease leading to cirrhosis" (with F. H. Adams and L. F. Richdorf).

 American Journal of Diseases of Children, 84:168-74. August, 1952.
- "Mucolytic enzyme systems, XVIII. Nonspecific hyaluronidase inhibitor concentrations in the blood serum of siblings and parents of children with rheumatic fever" (with F. II. Adams, D. Glick, and P. F. Dwan). *Journal of Pediatrics*, Vol. 41, No. 3, pp. 258-61, 1952.

STUART L. AREY, M.D., Clinical Assistant Professor

"Transient diabetes in infancy." Pediatrics, Vol. 11, No. 2, pp. 140-44. February, 1953.

Spencer F. Brown, M.D., Assistant Professor

"The role of anxiety in the physician-patient relationship." Journal-Lancet, 73:47. February, 1953.

FLOYD W. DENNY, M.D., Assistant Professor

- "The pathogenesis of rheumatic fever" (with L. Thomas, R. A. Good, and R. T. Smith). Bulletin of the University of Minnesota Hospitals and Minnesota Medical Foundation, 24:341-48. February, 1953.
- "Studies on the generalized Shwartzman reaction. III. Lesions of the myocardium and coronary arteries accompanying the reaction in rabbits prepared by infection with group A streptococci" (with L. Thomas and Joan Floyd). Journal of Experimental Medicine, 97:751-66. May, 1953.
- "Factors involved in the production of tissue damage by endotoxins derived from gram-negative micro-organisms" (with R. A. Good, L. Thomas, and R. T. Smith). American Journal Diseases of Children, 86:473. 1953.
- "Experimental fibrinoid necrosis of the coronary arteries in streptococcal-infected rabbits" (with R. A. Good and L. Thomas). Journal of Clinical Investigation, 32:562. June, 1953.

ROBERT ROSENTHAL, M.D., Clinical Assistant Professor

"One hundred years of organized medicine in Minnesota: History of Minnesota State Medical Association, 1853-1953." Minnesota Medicine, 36:323-31, 370. April, 1953.

ROBERT A. ULSTROM, M.D., Assistant Professor

- "Metabolic and clinical effects of corticotropin (ACTH) on essential glycogenosis (von Gierke's disease)" (with Mildred R. Ziegler, Doris Doeden, and I. McQuarrie). Metabolism, Vol. 1, No. 4, pp. 291-99, 1952.
- "Clinical and metabolic studies of von Gierke's glycogen storage disease and of galactosemia" (with Mildred R. Ziegler, Doris Doeden, and I. McQuarrie). Bulletin of the University of Minnesota Hospitals and Minnesota Medical Foundation, Vol. 24, No. 2, pp. 54-66. 1952.
- "Morning changes in number of circulating eosinophila in infants" (with F. Halberg). Proceedings of the Society for Experimental Biology and Medicine, 80:747-48, 1952.

MILDRED R. ZIEGLER, Ph.D., Assistant Professor

- "Metabolic and clinical effects of corticotropin (ACTH) on essential glycogenosis (von Gierke's disease)" (with R. A. Ulstrom, Doris Doeden, and I. McQuarrie). Metabolism, Vol. 1, No. 4, pp. 291-99. 1952.
- "Clinical and metabolic studies on von Gierke's glycogen storage disease and of galactosemia" (with R. A. Ulstrom, Doris Doeden, and I. McQuarrie). Bulletin of the University of Minnesota Hospitals and Minnesota Medical Foundation, Vol. 24, No. 2, pp. 54-66. 1952.
- "Use of mineral-enriched meats as a substitute for milk in various clinical conditions." Post-graduate Medicine, Vol. 13, No. 5, pp. 461-68. May, 1953.

LLOYD S. NELSON, M.D., Clinical Instructor

- "Allergy in children" (with A. V. Stoesser). Section 10: The Allergic Diseases, pages 469-72 in Howard F. Conn, editor, Current Therapy of 1953. Philadelphia and London: W. B. Saunders Company, 1953.
- "Allergic diseases of infancy and childhood" (with A. V. Stoesser). Annals of Allergy, M.D., 7:353-59. November, 1952.
- "Synthetic vitamin A in treatment of eczema in children" (with A. V. Stoesser). Annals of Allergy, 10:703-704. November-December, 1952.

WENTWORTH QUAST, M.D., Ph.D., Instructor

"First days at school—accentuate the positive." Everybody's Health, 38:4-5. May, 1953.

Frances E. Schaar, M.S., M.D., Clinical Instructor

- "Experimental nutritional megaloblastic anemia, Part II. Hematology" (with C. D. May and R. Dorothy Sundberg). Blood, The Journal of Hematology, 7:1143. December, 1952.
- "Tissue mast cells in human umbilical cord and the anticoagulant activity of dried extracts of cords and placentae" (with R. Dorothy Sundberg and M. Denboer Powell). Anatomical Record, 115:372. February, 1953.

THEODORE S. SMITH, M.D., Clinical Instructor

"Results of Kenny treatment of acute poliomyelitis" (with M. E. Knapp and L. Sher). Journal of the American Medical Association, 151:117-20. January 10, 1953.

RICHARD T. SMITH, M.D., Research Fellow

- "The pathogenesis of rheumatic fever" (with R. A. Good, L. Thomas, and F. W. Denny).

 Bulletin of the University of Minnesota Hospitals and Minnesota Medical Foundation, 24:341-48. February, 1953.
- "Studies on the generalized Shwartzman reaction. V. Effect of intravenous injection of colloidal iron or carbon on response of rabbits to meningococcal toxin" (with L. Thomas and R. A. Good). Proceedings of the Society for Experimental Biology and Medicine, 82:712-15. April, 1953.
- "Factors involved in the production of tissue damage by endotoxins derived from gram-negative micro-organisms" (with R. A. Good, L. Thomas, and F. W. Denny). American Journal Diseases of Children, 86:473, 1953.

CHARLES T. STEWART, M.D., Medical Fellow

- "Experimental Megaloblastic Anemia and Scurvy in the Monkey"
 - "IV. Vitamin B₁₂ and folic acid compounds in the diet, liver, urine and feces and effects of therapy" (with Agnes Hamilton and C. D. May). Blood, The Journal of Hematology, Vol. 7, No. 10, pp. 978-91. 1952.
 - "V. Nature of the relation of ascorbic acid deficiency to the metabolism of folic acid compounds" (with Agnes Hamilton and C. D. May). *Journal of Nutrition*, Vol. 49, No. 1, pp. 121-33, 1953.
- "Function of the adrenal cortex in ascorbic acid deficiency and scurvy in the monkey" (with C. D. May and R. J. Salmon). *Journal of Laboratory and Clinical Medicine*, Vol. 40, No. 5, pp. 657-63, 1952.
- "Factors determining effect of insulin on metabolism of glucose in ascorbic acid deficiency and scurvy in the monkey" (with C. D. May and R. J. Salmon). American Journal of Diseases of Children, 84:677, 1952.

JOHN J. GALLIGAN, M.D., Clinical Assistant

- "Persistent sequelae of bulbar poliomyelitis" (with W. W. Lueck and J. Bosma). Journal of Pediatrics, 41:549-54, 1952.
- "Congenital pulmonary stenosis without cynosis" (with F. H. Adams and J. Jorgens). *Ibid.*, pp. 562-71.

GEORGE W. LUND, M.D., Clinical Assistant

"Growth study of children with the tetralogy of Fallot." Journal of Pediatrics, 41:572, 1952.

SIDNEY S. SCHERLING, M.D., Clinical Assistant

"Premature survival with emphasis on the role of the public health nurse." Minnesota Medicine, 36:253-54, 262. March, 1953.

LEWIS SHER, M.D., Clinical Assistant

"Result of Kenny treatment of acute poliomyelitis" (with M. E. Knapp and T. S. Smith). Journal of the American Medical Association, 151:117-20. January 10, 1953.

PHARMACOLOGY

RAYMOND N. BIETER, M.D., Ph.D., Professor and Head

- "Limitations in the clinical use of banthine in peptic ulcer" (with R. F. Rauch). Surgery, Vol. 33, No. 1, pp. 21-27. January, 1953.
- "Chemotherapeutic activity of nucleic acids and high protein diets against the infection caused by the MM virus in mice" (with T. B. O'Dell and H. N. Wright). Journal of Pharmacology and Experimental Therapeutics, Vol. 107, No. 2, pp. 232-40. February, 1953.
- "The treatment of postprandial distress following gastric resection" (with R. F. Rauch). Gastro-enterology, 23:347-55. March, 1953.

HAROLD N. WRIGHT, Ph.D., Professor

- "Chemotherapeutic activity of nucleic acids and high protein diets against the infection caused by the MM virus in mice" (with T. B. O'Dell and R. N. Bieter). Journal of Pharmacology and Experimental Therapeutics, Vol. 107, No. 2, pp. 232-40. February, 1953.
- "Isolation and identification of organic poisons by spectrophotometric methods" (with Eleanor Berman and G. Roche). Federation Proceedings, Vol. 12, Pt. I, No. 1, pp. 381-82. March, 1953.

James M. Shaffer, M.S., M.D., Instructor

- "The protection of intracellular brucella against therapeutic agents and the bactericidal action of serum" (with W. W. Spink and C. Kucera). Journal of Experimental Medicine, 7:77-90. January, 1953.
- "Evaluation of prolonged antibiotic therapy in mice with chronic brucella infection due to brucella melitensis" (with W. W. Spink and C. Kucera) Journal of Immunology, 70:31-38. January, 1953.

Physical Medicine and Rehabilitation

- FREDERIC J. KOTTKE, Ph.D., M.D., Associate Professor and Head "Clinical research in physical medicine." Archives of Physical Medicine, 33:491-93. August, 1952.
- "Studies of the effect of massage on the flow of lymph from the foreleg of the dog" (with M. P. Ladd and R. S. Blanchard). Archives of Physical Medicine, 33:604-11. October, 1952.
- "Physical medicine and rehabilitation for medical students." Archives of Physical Medicine and Rehabilitation, 34:109-11. February, 1953.
- "A study of degenerative changes of the cervical spine in relation to age: A preliminary report" (with R. S. Blanchard). Bulletin of the University of Minnesota Hospitals and Minnesota Medical Foundation, 24:470-79, March 27, 1953,
- "The effects of continuous infusions of epinephrine and nor-epinephrine into the portal vein of dogs" (with W. G. Kubicek and Mildred E. Olson). Federation Proceedings, 12:80. March,

Editorial Board, Archives of Physical Medicine and Rehabilitation, 1952-53.

MILAND E. KNAPP, M.D., Clinical Professor

- "Physical medicine in general practice." Minnesota Medicine, 35:1123-26. December, 1952.
- "Results of Kenny treatment of poliomyelitis" (with L. Sher and T. S. Smith). Journal of the American Medical Association, Vol. 151, No. 2, pp. 117-20. January 10, 1953.

WILLIAM G. KUBICEK, Ph.D., Associate Professor

"The effects of continuous infusions of epinephrine and nor-epinephrine into the portal vein of dogs" (with F. J. Kottke and Mildred E. Olson). Federation Proceedings, 12:80. March, 1953.

RUSSELL S. BLANCHARD, M.D., Medical Fellow

- "Studies of the effect of massage on the flow of lymph from the foreleg of the dog" (with M. P. Ladd and F. J. Kottke). Archives of Physical Medicine, 33:604-11. October, 1952.
- "Studies of degenerative changes of the cervical spine in relation to age: A preliminary report" (with F. J. Kottke). Bulletin of the University of Minnesota Hospitals and Minnesota Medical Foundation, 24:470-79. March 27, 1953.

Physiological Chemistry

Wallace D. Armstrong, Ph.D., M.D., Professor and Head

- "Phosphorus metabolism in the skeleton." Pages 698-727 in William D. McElroy and Bentley Glass, editors, Phosphorus Metabolism, Vol. 2. Baltimore: The Johns Hopkins Press, 1952.
- "Rates of transcapillary movement of calcium and sodium and of calcium exchange by the skeleton" (with J. A. Johnson, L. Singer, R. I. Lienke, and M. L. Premer). American Journal of Physiology, 171:641-51. December, 1952.
- "In vitro loss of calcium from plasma of whole blood" (with L. Singer). Federation Proceedings, Vol. 12, No. 1, p. 171. March, 1953.
- "Reduction of dental decay by fluoride." Minnesota Chemist, 5:13-16. May-June, 1953.

DAVID GLICK, Ph.D., Professor

"Studies in Histochemistry"

- "XXIV. Determination of cholesterol in microgram quantities of tissue" (with D. J. Cavanaugh). Analytical Chemistry, 24:1839-41. 1952.
- "XXV. Determination of phenolsulfatase in microgram quantities of tissue and its distribution in the adrenal of several species" (with B. G. Malmstrom). Archives of Biochemistry and Biophysics, 40:56-67, 1952.
- "XXVI. Determination of β -glucuronidase in microgram quantities of tissue and its distribution in the cow adrenal" (with L. W. Wattenberg). Journal of Histochemistry and Cytochemistry, 1:1-7, 1953.

"Mucolytic Enzyme Systems"

"XVIII. Nonspecific hyaluronidase inhibitor concentrations in the blood serum of siblings and parents of children with rheumatic fever" (with F. H. Adams, R. C. Anderson, and P. Dwan). Journal of Pediatrics, Vol. 41, No. 3, pp. 258-61. 1952.

- "XIX. Comparison of hyaluronidase inhibitor and heparin levels in serum" (with M. J. Ochs). Proceedings of the Society for Experimental Biology and Medicine, 81:363-67, 1952.
- "The future of clinical microchemical analysis." Chemical and Engineering News, 31:139-42. 1953.
- "The effect of cold stress, ACTII, cortisone, pyrogen, and nitrogen mustard on tissue mast cells in the skin and subcutaneous tissues of the rat" (with E. P. Schoch, Jr.). Journal of Investigative Dermatology, 20:119-31, 1953.

CYRUS P. BARNUM, Ph.D., Associate Professor

"A 24-hour periodicity in relative specific activity of phosphorus fractions from liver microsomes of mice" (with F. Halberg). Metabolism: Clinical and Experimental, 2:271-75. May, 1953.

SAUL L. COHEN, Ph.D., Associate Professor

- "Paper chromatography of the pregnanediol fraction of urine" (with H. S. Bloch, M. J. Mohaupt, M. M. Goldfine, and B. Zimmermann). Journal of Laboratory and Clinical Medicine, 40:780. November, 1952.
- "Dioxane-acid hydrolysis of ketosteroid conjugates" (with I. B. Oneson). Federation Proceedings, Vol. 12, No. 1, March, 1953.
- "The nature of the conjugated estrone in human pregnancy urine" (with I. B. Oneson). Endocrinology, 51:173-82. September, 1952.
- "Glucuronidase hydrolysis for pregnancdiol assays" (with M. M. Goldfine). Endocrinology, 52: 597-604. May, 1953.

WILLIAM O. CASTER, Ph.D., Assistant Professor

"A simple procedure for preparing anaerobic plasma." Proceedings of the Society for Experimental Biology and Medicine, 81:578-79. 1952.

LEON SINGER, Ph.D., Assistant Professor

- "Rates of transcapillary movement of calcium and sodium and of calcium exchange by the skeleton" (with W. D. Armstrong, J. A. Johnson, R. I. Lienke, and M. L. Premer). American Journal of Physiology, 171:641-51. December, 1952.
- "In vitro loss of calcium from plasma of whole blood" (with W. D. Armstrong). Federation Proceedings, Vol. 12, No. 1, p. 171. March, 1953.

CHARLES W. CARR, Ph.D., Instructor

- "Studies on the Binding of Small Ions in Protein Solutions with the Use of Membrane Electrodes"
 - "I. The binding of the chloride ion and other inorganic anions in solutions of serum albumin."

 Archives of Biochemistry and Biophysics, 40:286, 1952.
 - "II. The binding of calcium ions in solutions of bovine serum albumin." Ibid., 43:147, 1953.

Physiology

MAURICE B. VISSCHER, M.D., Ph.D., Professor and Head

- Probleme des Hypophysen-Nebennierenrindensystems (with F. Halberg). Berlin, Goettingen, Heidelberg: Springer Verlag. 1953.
- "Some problems of experimental design in studies of aging." Pages 348-49 in Symposium on Aging. Federation of American Societies for Experimental Biology, New York, 1952.
- "Further studies on influence of age and diet upon reproductive senescence in strain A female mice" (with J. T. King and Y. C. P. Lee). American Journal of Physiology, 170:72-76. July, 1952.
- "Strain difference in vitamin E and B₁₂ and certain mineral trace element requirements for reproduction in A and Z mice" (with J. T. King and Y. C. P. Lee). *Ibid.*, 173:456-58. 1953.
- "The effect of graded doses of cortisone on circulating eosinophils in intact mice" (with F. Halberg). Journal of Clinical Endocrinology, 12:932-33. July, 1952.
- "A difference between the effects of dietary calorie restriction on the estrous cycle and on the 24-hour adrenal cortical cycle in rodents" (with F. Halberg). Endocrinology, 51:329-35. October, 1952.

- "The effects of androgen and estrogen in castrated and hypophysectomized C₂H mice" (with D. J. Ferguson). *Ibid.*, 52:463. April, 1953.
- "The absorption and excretion of potassium in the intestine." Journal-Lancet, 73:173-74. May, 1953.
- "The Fick principle: Analysis of potential errors in its conventional application" (with J. A. Johnson). Journal of Applied Physiology, 5:635-38. April, 1953.
- "Relation of 24-hour rhythm in body temperature to lighting conditions and to the adrenal" (with F. Halberg and L. Levy). Federation Proceedings, 12:59, 1953.

Editing:

Board of Editors, Journal-Lancet.

Editorial Staff, Consultant in Science, Modern Medicine.

Editorial Board, Physiological Reviews.

Editorial Committee, Annual Review of Physiology.

Associate Editor, Geriatrics.

JOHN J. BITTNER, Ph.D., Professor of Cancer Biology

- "Tumor-inducing properties of the mammary tumor agent in young and adult mice." Cancer Research, 12:510-15. July, 1952.
- "Studies on the inherited susceptibility and inherited hormonal influence in the genesis of mammary cancer in mice." *Ibid.*, pp. 594-601. August, 1952.
- "Assay of spontaneous and transplanted mammary tumors for the mammary tumor agent." *Ibid.*, 13:361-66. April-May, 1953.

ERNST GELLHORN, M.D., Ph.D., Professor (Neurophysiology)

- Physiological Foundations of Neurology and Psychiatry, Minneapolis: University of Minnesota Press, 556 pages, 1953.
- "Factors modifying conditioned reactions and their relation to the autonomic nervous system."

 Annals of the New York Academy of Sciences, 56:200-13. February, 1953.
- "Experimental contributions to problem of consciousness" (with M. Bernhaut and A. T. Rasmussen). Journal of Neurophysiology, 16:21-35, 1953.
- "Carbon dioxide and cortical spike frequency" (with L. A. French). Archives Internationales de Pharmacodynamie et de Therapie, Vol. 93, Nos. 3-4, pp. 427-33. April, 1953.
- "The hypothalamic-cortical system in barbiturate anesthesia." Ibid., pp. 434-42.

NATHAN LIFSON, M.D., Ph.D., Professor

"Kinetics concerned with distribution of isotopic water in isolated perfused dog heart and skeletal muscle" (with J. A. Johnson and H. M. Cavert). American Journal of Physiology, 171:687-93. December, 1952.

ERNEST B. BROWN, JR., Ph.D., Associate Professor

- "The effect of pH changes on vagal inhibition of heart" (with G. S. Campbell and F. J. Haddy).

 Pages 283-87 in Surgical Forum. Philadelphia: W. B. Saunders Co. 1952.
- "Respiratory acidoses: Its relationship to cardiac function and other physiologic mechanisms" (with F. A. Miller, J. J. Buckley, F. H. Van Bergen, and R. L. Varco). Surgery, 32:171-83. August, 1952.
- "Tolerance of the dog heart to carbon dioxide" (with F. A. Miller). American Journal of Physiology, 176:550-54. September, 1952.
- "Vagal inhibition of the dog heart at different blood pH levels" (with G. S. Campbell and F. J. Haddy). Federation Proceedings, 12:23. March, 1953.
- "Postanesthetic hypotension following cyclopropane: Its relationship to hypercapnia" (with J. J. Buckley, F. H. Van Bergen, A. B. Dobkin, F. A. Miller, and R. L. Varco). *Anesthesiology*, 14:226-37. May, 1953.

Joseph T. King, M.D., Ph.D., Associate Professor

- "Further studies on influence of age and diet upon reproductive senescence in strain A female mice" (with M. B. Visscher and Y. C. P. Lee). American Journal of Physiology, 170:72-76. July, 1952.
- "Strain difference in vitamin E and B₁₂ and certain mineral trace element requirements for reproduction in A and Z mice" (with Y. C. P. Lee and M. B. Visscher). *Ibid.*, 173:456-58, 1953.

WERNER P. KOELLA, M.D., Associate Professor

- "EEG changes following thalamic stimulation in unanesthetized cats" (with R. Hess, Jr., and K. Akert). EEG Clinical Neurophysiology, 5:75-90. February, 1953.
- "The influence of position in space on the cerebellar inhibitory and facilitory effects in the cat." American Journal of Physiology, 173:443-48. 1953.

Franz Halberg, M.D., Research Associate

- Probleme des Hypophysen-Nebennierenrindensystems (with M. B. Visscher). Berlin, Goettingen, Heidelberg: Springer Verlag. 1953.
- "The relation of the pituitary and adrenal to the eosinophil cell." Pages 11a-11f in *Proceedings* of the Symposium on Eosinophils. R. B. Jackson Memorial Laboratory, Bar Harbor, Maine. July, 1952.
- "Clinical studies on eosinophil rhythm" (with E. B. Flink). Journal of Clinical Endocrinology, 12:922. July, 1952.
- "The effect of graded doses of cortisone on circulating eosinophils in intact mice" (with M. B. Visscher). Journal of Clinical Endocrinology, 12:932-33. July, 1952.
- "The diurnal rhythm in EEG discharge and in circulating cosinophils in certain types of epilepsy" (with R. Engel and R. J. Gully). Electroencephalography and Clinical Neurophysiology, 4:115-16, 1952.
- "Morning changes in number of circulating eosinophils in infants" (with R. A. Ulstrom), Proceedings of the Society for Experimental Biology and Medicine, 80:747-48. August-September, 1952.
- "Eosinopenia during the last third of pregnancy and after delivery in several stocks of mice." *Ibid.*, 83:338-40. 1953.
- "Changes in eosinophil count of mice with venisections repeated at intervals of several days." 1bid., 82:160-62. January, 1953.
- "Some correlations between chemical structure and maximal eosinopenia in adrenalectomized and hypophysectomized mice." Journal of Pharmacology and Experimental Therapeutics, 106:135-40. October, 1952.
- "A difference between the effects of dietary caloric restriction on the estrous cycle and on the 24-hour adrenal cortical cycle in rodents" (with M. B. Visscher). *Endocrinology*, 51:329-35. October, 1952.
- "The application of the 24-hour eosinophil rhythm to the study of seizure mechanisms: I. Methods; H. Results" (with R. Engel). Epilepsia, Vol. 1. November, 1952.
- "Effect of light and of availability of food upon the 24-hour rhythm in number of circulating cosinophils in mice." American Journal of Physiology, 171:732. December, 1952.
- "Some physiological and clinical aspects of 24-hour periodicity." Journal-Lancet, 73:20-32. January, 1953.
- "Relation of 24-hour rhythm in body temperature to lighting conditions and to the adrenal" (with L. Levy and M. B. Visscher). Federation Proceedings, 12:59, 1953.
- "Endogenous eosinopenia in institutionalized patients with mental deficiency" (with R. Engel, A. E. Treloar, and R. J. Gully). A.M.A. Archives of Neurology and Psychology, 69:462-69. April, 1953.
- "A 24-hour periodicity in relative specific activity of phosphorus fractions from liver microsomes of mice" (with C. P. Barnum), Metabolism, Clinical and Experimental, 2:271-75. May, 1953.

H. MEAD CAVERT, M.D., Ph.D., Assistant Professor

"Kinetics concerned with distribution of isotopic water in isolated perfused dog heart and skeletal muscle" (with J. A. Johnson and N. Lifson). American Journal of Physiology, 171:687-93. December, 1952.

John A. Johnson, Ph.D., Assistant Professor

- "Rates of transcapillary movement of calcium and sodium and of calcium exchange by the skeleton" (with W. D. Armstrong, L. Singer, R. I. Lienke, and M. L. Premer). American Journal of Physiology, 171:641-51. December, 1952.
- "Kinetics concerned with distribution of isotopic water in isolated perfused dog heart and skeletal muscle" (with H. M. Cavert and N. Lifson). *Ibid.*, pp. 687-93.
- "The Fick principle: Analysis of potential errors in its conventional application" (with M. B. Visscher). Journal of Applied Physiology, 5:635-38. April, 1953.

EUGENE GRIM, Ph.D., Instructor

"Relation between pressure and concentration differences across membranes permeable to solute and solvent." Proceedings of the Society for Experimental Biology and Medicine, 83:195-200, 1953.

FRANCIS J. HADDY, M.D., Research Fellow

- "The effect of pH change upon vagal inhibition of the dog heart" (with G. S. Campbell and E. B. Brown, Jr.). Pages 283-87 in Surgical Forum. Philadelphia: W. B. Saunders. 1952.
- "Cardiodynamics of experimental infundibular (pulmonic) stenosis" (with J. L. Alden, W. L. Adams, and I. D. Baronofsky). *Ibid.*, pp. 299-304.
- "Pulmonary vascular resistance in anesthetized dogs" (with G. S. Campbell). American Journal of Physiology, 172:747-51. March, 1953.
- "Vagal inhibition of the dog heart at different blood pH levels" (with G. S. Campbell and E. B. Brown, Jr.). Federation Proceedings, 12:23. March, 1953.
- "An evaluation of wedge pressures in dogs under conditions of normal and elevated pulmonary vascular pressure" (with J. F. Alden, A. L. Ferrin, D. W. Hannon, W. L. Adams, and I. D. Baronofsky). Circulation Research, Vol. I, No. 2, pp. 157-61. March, 1953.
- "Cardiac function in experimental mitral stenosis" (with A. L. Ferrin, D. W. Hannon, J. F. Alden, W. L. Adams, and I. D. Baronofsky). *Ibid.*, No. 3, pp. 219-25. May, 1953.

GABRIEL G. NAHAS, M.D., M.S., Research Fellow

- "Effect of varying degrees of hypoxia on temperature regulation" (with A. Hemingway). American Journal of Physiology, 170:426-33. August, 1952.
- "The oxygen dissociation curve of arterial blood in men breathing a high concentration of oxygen" (with E. H. Morgan and E. H. Wood). Journal of Applied Physiology, 5:169-79. October, 1952.
- "Effect of hypoxia on the metabolic response to cold" (with A. Hemingway). *Ibid.*, pp. 267-72. December, 1952.
- "Angiostomy cannulae for the study of pulmonary circulation" (with G. W. Mather and A. Hemingway). Proceedings of the Society for Experimental Biology and Medicine, Vol. 82, No. 2, pp. 309-11. February, 1953.

Y. CHIUNG PUH LEE, B.S., Research Assistant

- "Further studies on influence of age and diet upon reproductive senescence in strain A female mice" (with M. B. Visscher and J. T. King). American Journal of Physiology, 170:72-76. July, 1952.
- "Strain difference in vitamin E and B₁₂ and certain mineral trace element requirements for reproduction in A and Z mice" (with J. T. King and M. B. Visscher). *Ibid.*, 173:456-58, 1953.

HOMER R. WARNER, M.D., Teaching Assistant. See Mayo Foundation Fellows

PSYCHIATRY AND NEUROLOGY

DONALD W. HASTINGS, M.A., M.D., Professor and Head

- "The future and the criminal." Journal-Lancet, 73:33. January, 1953.
- "Neurologic and psychiatric trends in Minnesota" (with A. B. Baker, B. C. Schiele, and R. A. Jensen). Minnesota Medicine, 36:384-86. April, 1953.

ABE B. BAKER, M.D., Ph.D., Professor and Director

- "Rehabilitation of the neurologically disabled child." Neurology, 2:441-45. September-October, 1952.
- "Poliomyelitis"
 - "V. The pons" (with H. Matzke). Archives of Neurology and Psychiatry, 68:1-15. July, 1952
 - "VI. The hypothalamus" (with S. O. Cornwell and I. A. Brown). Ibid., pp. 16-36.
 - "VIII. Studies on temperature regulation" (with I. A. Brown and S. O. Cornwell). *Ibid.*, 69:332-42. March, 1953.

- "Acute anterior poliomyelitis" (with F. Tichy). Medical Clinics of North America, 37:363-72. March, 1953.
- "Neurologic and psychiatric trends in Minnesota" (with B. C. Schiele, R. A. Jensen, and D. W. Hastings). *Minnesota Medicine*, 36:384-86. April, 1953.

ERIC K. CLARKE, M.D., Clinical Professor

"Group therapy in rehabilitation." Federal Probation, 16:28-32. December, 1952.

STARKE R. HATHAWAY, Ph.D., Professor and Director

"The Minnesota Multiphasic Personality Inventory in the study of juvenile delinquents" (with E. D. Monachesi). American Sociological Review, 17:704-10. December, 1952.

HYMAN S. LIPPMAN, M.D., Ph.D., Clinical Associate Professor

- "Making healthy personalities." Minnesota Welfare, 8:6-11. July, 1952.
- "Emotional problems presented by the child in the school setting." Bulletin of National Association of School Social Workers, Vol. 28, No. 2, pp. 3-8. December, 1952.
- "The role of parents in emotional problems presented by children in the school setting." *Ibid.*, No. 4, pp. 3-7. June, 1953.
- "Preventing delinquency." Federal Probation, Vol. 17, No. 1, pp. 24-26. March, 1953.
- "Psychodynamics of child delinquency." American Journal of Orthopsychiatry, Vol. 23, No. 1, pp. 39-42. January, 1953.

Reviews of

Percival M. Symonds, The Ego and the Self in Psychoanalytic Quarterly, Vol. 21, No. 4, pp. 564-68. October, 1952.

Franz Alexander and Helen Ross, editors, Dynamic Psychiatry in Minnesota Welfare, pp. 20-21. October, 1952.

BURTRUM C. SCHIELE, M.D., Professor

"Neurologic and psychiatric trends in Minnesota" (with A. B. Baker, D. W. Hastings, and R. A. Jensen). Minnesota Medicine, 36:384-86. April, 1953.

C. Knight Aldrich, M.D., Associate Professor

- "The handling of emotional problems by the family physician." New England Journal of Medicine, 284:174-79. January, 1953.
- "Psychiatric teaching on an inpatient medical service." Journal of Medical Education, 28:36-39.

 June, 1953.

GORDON R. KAMMAN, M.D., Clinical Associate Professor

"Treatment of multiple neuritis." Pages 645-47 in Howard F. Conn, editor, Current Therapy. Philadelphia: W. B. Saunders. 1953.

WILLIAM SCHOFIELD, Ph.D., Associate Professor

- "Research in clinical psychology: 1951." Journal of Clinical Psychology, 8:255-61. July, 1952. "A further study of the effects of therapies on MMPI responses." Journal of Abnormal and
- "A further study of the effects of therapies on MMP1 responses." Journal of Abnormal and Social Psychology, 48:67-77. January, 1953.
- "A study of medical students with the MMPI. III. Personality and academic success." Journal of Applied Psychology, 37:47-52. February, 1953.

WERNER SIMON, M.D., Clinical Associate Professor

- "An admission program for psychiatric patients in general hospitals" (with J. B. Lund). VA Information Bulletin, 1B 10-26, pp. 22-25. September, 1952.
- "The diagnosis of brain tumor masked by mental symptoms." Military Surgeon, 3:411-21. December, 1952.
- "Mental symptoms of brain tumor." Modern Medicine, 21:130-34. February, 1953.

SAMUEL O. CORNWELL, M.S., Research Associate

"Poliomyelitis"

- "VI. The hypothalamus" (with A. B. Baker and I. A. Brown). Archives of Neurology and Psychiatry, 68:16-36. July, 1952.
- "VIII. Studies on temperature regulation" (with A. B. Baker and I. A. Brown). Ibid., 69:332-42. March, 1953.

NATHANIEL J. BERKWITZ, M.D., Clinical Assistant Professor

"Out-patient treatment with faradic (non-convulsive electric) stimulation." Diseases of the Nervous System, 13:1-11. November, 1952.

FRANK KIESLER, M.D., Assistant Professor

"Masked schizophrenia." Bulletin of the University of Minnesota Hospitals and Minnesota Medical Foundation, 24:211-17. December, 1952.

ZONDAL R. MILLER, M.D., Clinical Assistant Professor

"Treatment of the convulsive disorders." Minnesota Medicine, 35:1025-30, 1041. November, 1952.

FAE Y. TICHY, M.D., Ph.D., Assistant Professor

- "Barbiturate intoxication." Neurology, 3:58-67. January, 1953.
- "Acute anterior poliomyelitis" (with A. B. Baker). Medical Clinics of North America, 37:363-72. March, 1953.
- "Etiology and treatment of urinary lithiasis in severe poliomyelitis" (with C. D. Creevy).

 **Archives of Neurology and Psychiatry, 68:539-48. October, 1952.

IAN A. Brown, M.D., Ph.D., Instructor

"Poliomyelitis"

- "VI. The hypothalamus" (with A. B. Baker and S. O. Cornwell). Archives of Neurology and Psychiatry, 68:16-36. July, 1952.
- "VIII. Studies on temperature regulation" (with A. B. Baker and S. O. Cornwell). *Ibid.*, 69:332-42. March, 1953.
- "Hypotensive anaesthesia" (with F. H. Van Bergen, J. J. Buckley, A. B. Dobkin, W. T. Peyton, and L. A. French). Bulletin of the University of Minnesota Hospitals and Minnesota Medical Foundation, 24: 452-59. March 20, 1953.

MAYNARD COHEN, M.D., Ph.D., Clinical Instructor

"Fatality following the use of intrathecal penicillin." Journal of Neuropathology and Experimental Neurology, 11:335-39. July, 1952.

LEO J. HANVIK, Ph.D., Clinical Instructor

"The Goodenough test as a measure of intelligence in child psychiatric patients." Journal of Clinical Psychology, 9:71-72. January, 1953.

HAROLD A. LADWIG, M.D., Clinical Instructor

"The central nervous system in thrombotic thrombocytopenic purpura." Neurology, 3:267-76. April, 1953.

J. BENJAMIN LUND, M.D., Clinical Instructor

"An admission program for psychiatric patients in general hospitals" (with W. Simon). VA Information Bulletin, IB 10-26, pp. 22-25. September, 1952.

Albert Rosen, Ph.D., Clinical Instructor

"Test-retest stability of MMPI scales for a psychiatric population." Journal of Consulting Psychology, 17:217-21. June, 1953.

HILDRED SCHUELL, Ph.D., Clinical Instructor

- "Auditory impairment in aphasia: Significance and retraining techniques." Journal of Speech and Hearing Disorders, 17:18. 1953.
- "Aphasic difficulties understanding spoken language." Neurology, 3:176-84. March, 1953.

SIDNEY K. SHAPIRO, M.D., Clinical Instructor

- "Drug therapy in Parkinsonism." Minnesota Medicine, 35:1031-35. November, 1952.
- "Spontaneous thrombosis of the carotid arteries" (with W. T. Peyton). Bulletin of the University of Minnesota Hospitals and Minnesota Medical Foundation, 24:188-203. November, 1952.
- "Neurologic complications following the use of efocaine" (with D. D. Norman). Journal of the American Medical Association, 152:608-609, June, 1953.

DAVID D. NORMAN, M.D., Medical Fellow

"Neurologic complications following the use of efocaine" (with S. K. Shapiro). Journal of the American Medical Association, 152:608-609. June, 1953.

RADIOLOGY

Leo G. Rigler, M.D., Professor and Head

- "The role of roentgenology in the diagnosis of diseases of the digestive tract." Pages 319-37 in Portis' Diseases of the Digestive System (third edition). Philadelphia: Lea and Febiger. 1953.
- "The roentgenological aspects of heart catheterization" (with J. Jorgens, J. W. LaBree and F. H. Adams). American Journal of Roentgenology, Radium Therapy and Nuclear Medicine, 68:610-18. October, 1952.
- "Significance of unilateral enlargement of the hilus shadow in the early diagnosis of carcinoma of the lung with observations on a method of mensuration" (with B. J. O'Loughlin and R. C. Tucker). Radiology, 59:683-93. November, 1952.
- "Roentgen hepatography by injection of a contrast medium into the aorta" (with P. C. Olfelt and R. W. Krumbach). Radiology, 60:363-67. March, 1953.
- "Segmental anatomy of the lung." Radiology, 59:252-53. August, 1952.
- "Clinical studies on effect of barium in the peritoneal cavity following rupture of the colon" (with N. Zheutlin and E. C. Lasser). Surgery, 32:967-79. December, 1952.
- "Roentgen observations in strangulation obstruction" (with H. Z. Mellins). Bulletin of University of Minnesota Hospitals and Minnesota Medical Foundation, 24:241-49. December 19, 1952.
- "A method of binding lantern slides to reduce weight and bulk." Medical Radiography and Photography, 28:130. December, 1952.
- "The duration of carcinoma of the lung" (with B. J. O'Loughlin and R. C. Tucker). Diseases of the Chest, 23:50-71. January, 1953.

KARL W. STENSTROM, Ph.D., Professor

- "Irradiation therapy in Hodgkin's disease" (with C. M. Nice, Jr.). Bulletin of the University of Minnesota Hospitals and Minnesota Medical Foundation, 24:430-42. March 13, 1953.
- "Malignant lesions of the tonsil" (with D. B. Parshall). Radiology, 60:564-72. April, 1953.

BERNARD J. O'LOUGHLIN, M.D., M.S., Ph.D., Associate Professor

- "Significance of unilateral enlargement of the hilus shadow in the early diagnosis of carcinoma of the lung with observations on a method of mensuration" (with L. G. Rigler and R. C. Tucker). Radiology, 59:683-93. November, 1952.
- "The duration of carcinoma of the lung" (with L. G. Rigler and R. C. Tucker). Diseases of the Chest, 23:50-71. January, 1953.

H. Milton Berg, M.D., Clinical Assistant Professor

- "Antral gastritis." Radiology, 58:324-35. September, 1952.
- "Results of the miniature chest X-ray program" (with R. O. Saxvik and K. Mosser). Journal-Lancet, 73:122-27. April, 1953.

HARRY Z. MELLINS, M.D., M.S., Assistant Professor

"Roentgen observations in strangulation obstruction" (with L. G. Rigler). Bulletin of University of Minnesota Hospitals and Minnesota Medical Foundation, 24:241-49. December 19, 1952.

JACK FRIEDMAN, M.D., M.S., Clinical Instructor

- "The combined effects of cortisone and roentgen radiation upon natural and induced resistance to homoiotransplantation of mouse leukemia, line Ib" (with A. A. Werder, E. MacDowell, and J. T. Syverton). Cancer Research, 13:158-64. February, 1953.
- "Time as a factor in the enhancive effect of cortisone and roentgen radiation upon experimental moniliasis and blastomycosis" (with F. Roth, Jr. and J. T. Syverton). Federation Proceedings, 12:401. March, 1953.
- "Roentgen studies of the effect on the small bowel from emotional disturbances." Bulletin of the University of Minnesota Hospitals and Minnesota Medical Foundation, 124:593-602. May 22, 1953.

JOSEPH JORGENS, M.D., M.S., Instructor

- "The roentgenological aspects of heart catheterization" (with J. W. LaBree, F. H. Adams, and L. G. Rigler). American Journal of Roentgenology, Radium Therapy and Nuclear Medicine, 68:610-18. October, 1952.
- "Congenital pulmonary stenosis without cyanosis" (with J. J. Galligan and F. H. Adams).

 **Journal of Pediatrics, 41:562-71. November, 1952.

ELLIOTT C. LASSER, M.D., M.S., Instructor

- "Clinical studies on effect of barium in the peritoneal cavity following rupture of the colon" (with L. G. Rigler and N. Zheutlin). Surgery, 32:967-79. December, 1952.
- Bertram Levin, M.D., Clinical Instructor and Fellow American Heart Association "Female pseudohermaphroditism" (with A. C. Rambar and I. Shapiro). American Journal of Rochtgenology, Radium Therapy and Nuclear Medicine, 69:948-52. June, 1953.

CHARLES M. NICE, JR., M.D., M.S., Instructor

"Irradiation therapy in Hodgkin's disease" (with K. W. Stenstrom). Bulletin of the University of Minnesota Hospitals and Minnesota Medical Foundation, 24:430-42. March 13, 1953.

NORMAN ZHEUTLIN, M.D., Clinical Instructor

"Clinical studies on effect of barium in the peritoneal cavity following rupture of the colon" (with L. G. Rigler and E. C. Lasser). Surgery, 32:967-79. December, 1952.

PAUL C. OLFELT, M.D., Medical Fellow

"Roentgen hepatography by injection of a contrast medium into the aorta" (with L. G. Rigler and R. W. Krumbach). Radiology, 60:363-67. March, 1953.

RICHARD C. TUCKER, M.D., Medical Fellow

- "Significance of unilateral enlargement of the hilus shadow in the early diagnosis of carcinoma of the lung with observations on a method of mensuration" (with L. G. Rigler and B. J. O'Loughlin). Radiology, 59:683-93. November, 1952.
- "The duration of carcinoma of the lung" (with L. G. Rigler and B. J. O'Loughlin). Diseases of the Chest, 23:50-71. January, 1953.

SURGERY

OWEN H. WANGENSTEEN, M.D., Ph.D., Professor and Head

- "Tubular resection with transverse gastroplasty as a suitable operation for duodenal ulcer" (with W. D. Kelly, S. Hallgrimson, and R. H. Egdahl). Pages 54-58 in Surgical Forum, Clinical Congress of the American College of Surgeons. Philadelphia: W. B. Saunders. September, 1952.
- "The effect of increased atmospheric pressure on the viability of the bowel wall and the absorption of gas in closed-loop obstruction" (with F. S. Cross). *Ibid.*, pp. 111-16.

- "Effect of antibiotics on obstructive appendicitis in rabbits" (with R. W. Toon). Proceedings of the Society for Experimental Biology and Medicine, 80:578-80, 1952.
- "Effect of complete hepatic vein ligation on portal pressures and ascites formation in dogs with porta-caval shunts" (with F. S. Cross, R. W. Toon, F. L. Raffucci). *Ibid.*, 82:505-509. March, 1953.
- "Surgical lesions of the csophagus (including discussions of esophagitis, 'spontaneous' (acid-peptic) perforation of the esophagus, dystonia (cardiospasm) paraesophageal hernia, varices and cancer, together with remarks upon surgical management of peptic ulcer." Review of Gastroenterology, 19:525-49. July, 1952.
- "The impact of physiology on progress in surgery." Proceedings of the Staff Meetings of the Mayo Clinic, 27:532-52. December 17, 1952.
- "The University and medical research," Journal-Lancet, 72:560-64. December, 1952.
- "The future relationship of physiology to clinical medicine and surgery." Ibid., 73:73. February, 1953.
- "The present status and likely future accomplishments of surgery of the alimentary tract." Journal of National Cancer Institute, 13:981. February, 1953.
- "Remarks on acid-peptic perforation (spontaneous perforation) of the esophagus." (Discussion of S. Mackler, Diseases of the Esophagus.) Review of Gastroenterology, 19:550-52. July, 1952.
- "Remarks on the surgical management of peptic ulcer." Discussion of J. B. Kirsner, E. Levin, and W. L. Palmer, Refractory Peptic Ulcer. Ibid., pp. 620-22. August, 1952.
- "Remarks on the role of the antrum in gastric resection for duodenal ulcer." (Discussion of E. M. Miller, The Indications for Vagotomy in the Surgical Treatment of Patient with Chronic Peptic Ulcer Which Has Failed to Respond to Medical Management.) Ibid., pp. 627-28.
- "Remarks on postcholecystectomy syndrome." Discussion of Roy Upham, Postcholecystectomy Syndrome. Ibid., 20:328-29. May, 1953.
- "Remarks on the surgical management of carcinoma of the esophagus." Discussion of M. M. Ravitch, H. T. Bahnson, and T. N. P. Johns, Carcinoma of the Esophagus in Journal of Thoracic Surgery, 24:267-68. September, 1952.
- "Remarks on acid peptic perforation of esophagus (so-called 'spontaneous perforation')." Discussion of R. L. Anderson, Rupture of the Esophagus. Ibid., p. 386.
- "A proposal for excision of multiple diverticula of the jejuno-illeum." (Discussion of C. W. May, R. H. Baskin, Jr., and A. B. Hagedorn, Hemorrhagic Jejunal Diverticulitis). Annals of Surgery, 136:669-70. October, 1952.

General Surgery

N. LOGAN LEVEN, M.D., Ph.D., D.Sc., Clinical Professor

- "The surgical management of congenital atresia of the esophagus and tracheo-esophageal fistula" (with B. G. Lannin, R. L. Varco, and L. A. Tongen). *Annals of Surgery*, 136:701-19, 1952
- "Experiences with the operative management of delayed restoration of alimentary continuity in children originally treated by the multiple stage procedure for correction of congenital tracheo-esophageal defects" (with R. L. Varco). Journal of Thoracic Surgery, 25:16-23, 1953.

CHARLES E. REA, M.D., M.S., Ph.D., Clinical Professor

- "Conservative versus operative treatment of perforated peptic ulcer." Surgery, 32:654-57, 1952. "Emphysema of the leg following perforation of the rectum" (with W. C. Bernstein and
- H. Ghent). Minnesota Medicine, 35:1138-39. December, 1952.

RICHARD L. VARCO, M.D., Ph.D., Professor

- "Long-term observations on autogenous pericardial and venous grafts in the thoracic aorta" (with Y. Sako). Pages 136-40 in the Surgical Forum, Clinical Congress of the American College of Surgeons. 1952. Philadelphia: W. B. Saunders. 1952.
- "The tolerance of the canine heart to temporary complete vena caval occlusion" (with M. Cohen, R. N. Hammerstrom, M. W. Spellman, and C. W. Lillehei). *Ibid.*, pp. 172-77.
- "The surgical management of congenital atresia of the esophagus and tracheo-esophageal fistula" (with N. L. Leven, B. G. Lannin, and L. A. Tongen). Annals of Surgery, 136:701-19. 1952.
- "Surgical problems in rheumatic valvular heart disease" (with I. D. Baronofsky). Journal-Lancet, 72:545, 1952.

- "Postanesthetic hypotension following cyclopropane: Its relationship to hypercapnia" (with F. H. Van Bergen, J. J. Buckley, A. B. Dobkin, E. B. Brown, Jr., and F. A. Miller).

 Anesthesiology, 14:226-37. May, 1953.
- "Mitral stenosis: the surgeon's role. Surgery, 32:1021-22. December, 1952.
- "Surgical treatment of congenital heart disease. Analysis of the results in 388 cases" (with C. W. Lillehei and I. D. Baronofsky). Bulletin of the University of Minnesota Hospitals and Minnesota Medical Foundation, Vol. 24, No. 3, pp. 75-93. October 17, 1952.
- "Experiences with the operative management of delayed restoration of alimentary continuity in children originally treated by the multiple stage procedure for correction of congenital tracheo-esophageal defects" (with N. L. Leven). Journal of Thoracic Surgery, 25:16-23, 1953.

OSWALD S. WYATT, M.D., Clinical Professor

"Surgical approach to atelectasis in the newborn" (with W. P. Eder, T. C. Chisholm, and E. Berglund). Minnesota Medicine, 36:172-73. February, 1953.

IVAN D. BARONOFSKY, M.D., Ph.D., Associate Professor

- "Cardiodynamics of experimental infundibular (pulmonic) stenosis" (with J. F. Alden, F. J. Haddy, and W. L. Adams). Pages 299-304 in Surgical Forum, Clinical Congress of the American College of Surgeons. Philadelphia: W. B. Saunders Company. 1953.
- "Surgical treatment of congenital heart disease, Analysis of the results of 388 cases" (with C. W. Lillehei and R. L. Varco). Bulletin of the University of Minnesota Hospitals and Minnesota Medical Foundation, Vol. 24, No. 3, pp. 75-93. October 17, 1952.
- "Clinical and physiologic study of the results of valvotomy in patients with mitral stenosis" (with A. M. Richards and C. W. Borden). *Ibid.*, No. 15, pp. 310-33, January, 1953.
- "Surgical problems in rheumatic valvular heart disease" (with R. L. Varco). Journal-Lancet, 72:545, 1952.
- "An evaluation of wedge pressure in dogs under conditions of normal and elevated pulmonary vascular pressures" (with F. J. Haddy, A. L. Ferrin, D. W. Hannon, J. F. Alden, and W. L. Adams). Circulation Research, Vol. 1, No. 2, pp. 157-61. March, 1953.
- "Cardiac function in experimental mitral stenosis" (with F. J. Haddy, A. L. Ferrin, D. W. Hannon, J. F. Alden, and W. L. Adams). *Ibid.*, No. 3, pp. 219-25, May, 1953.
- "Nature of bleeding in esophageal varices" (with T. W. Wagenknecht and J. F. Noble). Surgery, 33:869-74. June, 1953.

Lyle J. Hay, M.D., Ph.D., Clinical Associate Professor

"Polyps and adenomas of the stomach." Surgery, 33:446-67. March, 1953.

NATHAN K. JENSEN, M.D., Clinical Associate Professor

- "Recovery of pulmonary function after crushing injuries of the chest." Discuses of the Chest, 22:319-46. September, 1952.
- "Management of patients with trauma of the chest." Minnesota Medicine, 36:247-48. March, 1953.
- "Physiologic studies following thoracic surgery. IV. The mechanism of the development of acidosis during anesthesia" (with W. W. Stead and F. E. Martin). Journal of Thoracic Surgery, 25:435-47. May, 1953.

ARNOLD J. KREMEN, M.D., Ph.D., Clinical Associate Professor

- "Evaluation of tests for intestinal viability; an experimental study" (with I. F. Engquist).

 Pages 87-94 in Surgical Forum, Clinical Congress of the American College of Surgeons.

 Philadelphia: W. B. Saunders Co. September, 1952.
- "A classification of edema and dehydration in surgical patients as determined by analysis of muscle biopsies" (with I. M. Ariel and E. Frier). *Ibid.*, pp. 589-96,
- "History of blood transfusion." Journal-Lancet, 72:335. July, 1952.
- "Notes on the management of fluid balance." Surgery, 32:875-76. November, 1952.
- "Rh incompatibility accompanied by acute renal failure" (with L. D. MacLean, C. R. Hitchcock, and A. Blomquist). Minnesota Medicine, 35:1039-41. November, 1952.
- "Carcinoma of the tongue." Ibid., 36:828-30. 1953.
- "The concentration of area in the gastric juice of patients with diseases of the stomach" (with H. S. Bloch and E. E. Mason). Journal of the National Cancer Institute, 13:1041. February, 1953.

F. JOHN LEWIS, M.S., M.D., Ph.D., Associate Professor

- "The therapeutic effectiveness of the artificial kidney" (with R. H. Egdahl, M. P. Reiser, and K. Chung). A.M.A. Archives of Surgery, 65:588-98. October, 1952.
- "Closure of atrial septal defects with the aid of hypothermia; experimental accomplishments and the report of one successful case" (with M. Taufic). Surgery, 33:52-59. January, 1953. "Intestinal atresia in identical twins." Ibid., pp. 121-25. January, 1953.
- "A device for the experimental creation of ventricular septal defects" (with M. Taufic).

 Journal of Thoracic Surgery, 25:413-16. April, 1953.

C. Walton Lillehei, M.D., M.S., Ph.D., Associate Professor

- "The tolerance of the canine heart to temporary complete vena caval occlusion" (with R. N. Hammerstrom, M. W. Spellman, M. Cohen, and R. L. Varco). Pages 172-77 in Surgical Forum. Philadelphia: W. B. Saunders Company. 1952.
- "Localization of intracranial lesions by radioactive isotopes" (with W. T. Peyton, L. A. French, and S. N. Chou). Journal of Neurosurgery, 9:432-42. September, 1952.
- "Surgical treatment of congenital heart disease. Analysis of the results in 388 cases" (with I. D. Baronofsky and R. L. Varco). Bulletin of the University of Minnesota Hospitals and Minnesota Medical Foundation, 24:75-93. October 17, 1952.

GEORGE E. MOORE, M.D., Ph.D., Clinical Associate Professor

- "Investigations of irradiation changes in the gastric mucosa of mice utilizing intra-gastric balloons" (with C. R. Hitchcock). Pages 22-28 in Surgical Forum, Chinical Congress of the American College of Surgeons, Philadelphia; W. B. Saunders Company, September, 1952.
- "Tobacco and intra-oral cancer" (with L. L. Bissinger and E. C. Prochl), Ibid., pp. 685-88,
- "Use of intra-gastric balloons containing P³² in an attempt to produce adenocarcinoma of the stomach in the mouse" (with E. L. Brackney and G. A. Smith). *Journal of the National Cancer Institute*, 13:963-67. February, 1953.
- "Radioisotope investigations on the blood-brain and blood-liquor barrier" (with L. A. French and G. L. Haines). Neurology, 3:460-65, 1953.

CARL O. RICE, M.D., Clinical Associate Professor

"The use of polyethylene tube for intravenous therapy" (with P. D. Erwin and J. H. Stickler).

A.M.A. Archives of Surgery, 66:673-78. May, 1953.

DAVID STATE, M.D., M.S., Ph.D., Clinical Associate Professor

- "Surgery of tumors and hyperfunctioning states of the adrenal glands," Surgery, 32:134-58. July, 1952.
- "Surgical treatment for idiopathic congenital megacolon (Hirschsprung's disease)." Surgery, Gynccology and Obstetrics, 95:201-12. August, 1952.
- "Cancer detection" (with T. B. Hubbard, Jr.). Minnesota Medicine, 35:925-29. October, 1952.

HENRY S. BLOCH, Ph.D., Research Associate

- "Paper chromatography of the pregnanediol fraction of urine" (with B. Zimmerman, M. J. Mohaupt, S. L. Cohen, and M. M. Goldfine). Journal of Laboratory and Clinical Medicine, 40:780. November, 1952.
- "The concentration of urea in the gastric juice of patients with diseases of the stomach" (with E. E. Mason and A. J. Kremen). Journal of the National Cancer Institute, 13:1041, February, 1953.

TAGUE C. CHISHOLM, M.D., Clinical Assistant Professor

- "Surgical approach to atelectasis in the newborn" (with W. P. Eder, O. S. Wyatt, and E. Berglund). Minnesota Medicine, 36:172-73. February, 1953.
- "Exstrophy of the urinary bladder" (with T. H. Sweetser and W. P. Thompson). Minnesota Medicine, 35:654-57. July, 1952.

DONALD J. FERGUSON, M.D., Ph.D., Assistant Professor

- "The antral phase of gastric secretion before and after vagotomy--experiments on gastric pouch dogs." Surgery, 33:352. March, 1953.
- "The effects of androgen and estrogen in castrated and hypophysectomized CaH mice" (with M. B. Visscher). Endocrinology, 52:463. April, 1953.

BERNARD G. LANNIN, M.D., Ph.D. in Surg., Clinical Assistant Professor

"The surgical management of congenital atresia of the esophagus and tracheo-esophageal fistula" (with N. L. Leven, R. L. Varco, and L. A. Tongen). Annals of Surgery, 136:701-19, 1952.

WALTER P. EDER, M.D., Clinical Instructor

"Surgical approach to atelectasis in the newborn" (with T. C. Chisholm, O. S. Wyatt, and E. Berglund), Minnesota Medicine, 36:172-73, February, 1953.

DAVITT A. FELDER, M.D., Ph.D., Clinical Instructor

"Raynaud's syndrome and its treatment." Ontario Medical Review, February 12, 1953.

"Stasis dermatitis and stasis ulcer." Current Therapy, pp. 594-95, 1953.

CLAUDE R. HITCHCOCK, M.D., Instructor and Director Cancer Detection Center

"Investigations of irradiation changes in the gastric mucosa of mice utilizing intragastric balloons" (with G. E. Moore). Pages 22-27 in Surgical Forum, Clinical Congress of the American College of Surgeons. Philadelphia: W. B. Saunders Company. September, 1952.

"Rh incompatibility accompanied by acute renal failure" (with A. J. Kremen, L. D. MacLean, and A. Blomquist). Minnesota Medicine, 35:1039-41. November, 1952.

"Experimental studies with the nematoid parasite, gongylonema neoplasticum (spirotera neoplasticum) and vitamin A-deficient diets affecting the forestomachs of the rat: comparison of results with those of J. Fibiger" (with E. T. Bell). Journal of the National Cancer Institute, 13:949-77. February, 1953.

T. Brannon Hubbard, Jr., M.D., Ph.D., Instructor

"Cancer detection" (with D. State). Minnesota Medicine, 35:925-29. October, 1952.

Yoshio Sako, M.D., Ph.D., Clinical Instructor

"Long-term observations of autogenous pericardial and venous grafts in the thoracic aorta" (with R. L. Varco). Pages 136-40 in Surgical Forum, Clinical Congress of the American College of Surgeons. Philadelphia: W. B. Saunders Company. September, 1952.

WALTER R. SCHMIDT, M.D., Clinical Instructor

"Segmental resection in the treatment of inflammatory pulmonary lesions," Minnesota Medicine, 35:944-46. October, 1952.

Lyle A. Tongen, M.D., Instructor

"The surgical management of congenital atresia of the esophagus and tracheo-esophageal fistula" (with R. L. Varco, L. X. Leven, and B. G. Lannin). *Annals of Surgery*, Vol. 136, No. 4, pp. 701-19. October, 1952.

BERNARD ZIMMERMAN, M.D., Ph.D., Clinical Instructor

"The effect of surgery and adrenal stimulation on the excretion of pregnanediol in the male." Journal of Clinical Endocrinology, 12:972. July, 1952.

"Paper chromatography of the pregnanediol fraction of urine" (with H. S. Bloch, S. L. Cohen, M. J. Mohaupt, and M. M. Goldfine). Journal of Laboratory and Clinical Medicine, 40:780. November, 1952.

Frederick S. Cross, M.D., Ph.D., Research Fellow

"The effect of increased atmospheric pressures on the viability of the bowel wall and the absorption of gas in closed-loop obstructions" (with O. H. Wangensteen). Pages 111-16 in Surgical Forum, Clinical Congress of the American College of Surgeons. Philadelphia: W. B. Saunders Company. September, 1952.

"Effect of complete hepatic vein ligation on portal pressures and ascites formation in dogs with porta-caval shunts" (with F. L. Raffucci, R. W. Toon, and O. H. Wangensteen). Proceedings of the Society for Experimental Biology and Medicine, 82:505-509. March, 1953.

ROBERT N. HAMMERSTROM, M.D., Research Fellow

"The tolerance of the canine heart to temporary complete vena caval occlusion" (with C. W. Lillehei, M. W. Spellman, M. Cohen, and R. L. Varco). Pages 172-77 in Surgical Forum, Clinical Congress of the American College of Surgeons. Philadelphia: W. B. Saunders Company. September, 1952.

WILLIAM D. KELLY, M.D., Research Fellow

"Tubular resection with transverse gastroplasty as a suitable operation for duodenal ulcer" (with S. Hallgrimson, R. H. Egdahl, and O. II. Wangensteen). Pages 54-58 in Surgical Forum, Clinical Congress of the American College of Surgeons. Philadelphia: W. B. Saunders. September, 1952.

FLETCHER A. MILLER, M.D., Clinical Research Fellow

- "Postanesthetic hypotension following cyclopropane: its relationship to hypercapnia" (with F. H. Van Bergen, J. J. Buckley, A. B. Dobkin, E. B. Brown, Jr., and R. L. Varco). Anesthesiology, 14:226-37. May, 1953.
- "Tolerance of the dog heart to carbon dioxide" (with E. B. Brown, Jr.). American Journal of Physiology, 170:550-54. September, 1952.

ROBERT F. RAUCH, M.D., Clinical Research Fellow

- "An evaluation of gastric resection for peptic ulcer; review of 893 cases." Surgery, 32:638-53. October, 1952.
- "Limitations in the clinical use of banthine in peptic ulcer" (with R. N. Bieter). *Ibid.*, 33:21-27. January, 1953.
- "The treatment of postprandial distress following gastric resection" (with R. N. Bieter), Gastro-enterology, 23:347-55. March, 1953.

MANSUR TAUFIC, M.D., Research Fellow

- "Closure of atrial septal defects with the aid of hypothermia" (with F. J. Lewis). Surgery, 33: 52-59. January, 1953.
- "A device for the experimental creation of ventricular septal defects" (with F. J. Lewis). Journal of Thoracic Surgery, 25:413-16. April, 1953.

ROBERT W. TOON, M.D., Research Fellow

- "Effect of antibiotics on obstructive appendicitis in rabbits" (with O. H. Wangensteeu). Proceedings of the Society for Experimental Biology and Medicine, 80:578-80. 1952.
- "Effect of complete hepatic vein ligation on portal pressures and ascites formation in dogs with porta-caval shunts" (with F. S. Cross, F. L. Raffucci, and O. H. Wangensteen). Proceedings of the Society for Experimental Biology and Medicine, 82:505-509. March, 1953.

JOHN F. ALDEN, M.D., Medical Fellow

"An evaluation of wedge pressures in dogs under conditions of normal and evaluated pulmonary vascular pressures" (with I. D. Baronofsky, F. J. Haddy, A. L. Ferrin, D. W. Hannon, and W. L. Adams). Circulation Research, Vol. 1, No. 2, pp. 157-61. March, 1953.

IRVING M. ARIEL, M.D., M.S., Medical Fellow

"A classification of edema and dehydration in surgical patients as determined by analysis of muscle biopsies" (with E. Frier and Λ. J. Kremen). Pages 589-96 in Surgical Forum, Clinical Congress of the American College of Surgeons. Philadelphia: W. B. Saunders Company. September, 1952.

LESTER L. BISSINGER, M.D., Medical Fellow

"Tobacco and intra-oral cancer" (with G. E. Moore and E. C. Proehl). Pages 685-88 in Surgical Forum, Clinical Congress of the American College of Surgeons. Philadelphia: W. B. Saunders Company. September, 1952.

EDWIN L. BRACKNEY, M.D., Medical Fellow

"Use of intra-gastric balloons containing P⁸² in an attempt to produce adenocarcinoma of the stomach in the mouse" (with G. E. Moore and G. A. Smith). Journal of the National Cancer Institute, 13:903-67. February, 1953.

GILBERT S. CAMPBELL, M.D., M.S., Medical Fellow

- "The effect of pH changes on vagal inhibition of the heart" (with F. J. Haddy and E. B. Brown, Jr.). Pages 283-86 in Surgical Forum, Clinical Congress of the American College of Surgeons. Philadelphia: W. B. Saunders Company, September, 1952.
- "Pulmonary vascular resistance in anesthetized dogs" (with F. J. Haddy). American Journal of Physiology, 172:747-51. March, 1953.
- "Vagal inhibition of the dog heart at different blood pH levels" (with F. J. Haddy and E. B. Brown, Jr.). Federation Proceedings, 12:23. March, 1953.
- "An abetting factor in cardiac arrest." (Editorial.) Surgery, 33:915-16. June, 1953.

CARREL M. CAUDILL, M.D., Medical Fellow

- "Increased intracranial pressure following compression of the superior sagittal sinus" (with G. L. Haines and L. A. French). Neurology, 3:231-33, 1953.
- "Neurosurgical procedures for relief of pain" (with L. A. French and W. T. Peyton). Bulletin of the University of Minnesota Hospitals and Minnesota Medical Foundation, 24:355-66, 1953.

IRVING F. ENQUIST, M.D., M.S., Medical Fellow

"Evaluation of tests for intestinal viability; an experimental study" (with A. J. Kremen). Pages 87-94 in Surgical Forum, Clinical Congress of the American College of Surgeons. Philadelphia: W. B. Saunders Company, September, 1952.

PAUL D. ERWIN, M.D., Medical Fellow

"The use of polyethylene tube for intravenous therapy" (with J. H. Strickler and C. O. Rice).

A.M.A. Archives of Surgery, 66:673-78, May, 1953.

ALLAN L. FERRIN, M.D., Medical Fellow

- "An evaluation of wedge pressure in dogs under conditions of normal and elevated pulmonary vascular pressures" (with I. D. Baronofsky, F. J. Haddy, D. W. Hannon, J. F. Alden, and W. L. Adams). Circulation Research, 1:157-61. March, 1953.
- "Cardiac function in experimental mitral stenosis" (with W. L. Adams, F. J. Haddy, J. L. Alden, D. W. Hannon, and I. D. Baronofsky). *Ibid.*, Vol. 1, No. 3, pp. 219-25. May, 1953.

DONALD W. HANNON, M.D., Medical Fellow

"An evaluation of wedge pressure in dogs under conditions of normal and elevated pulmonary vascular pressures" (with I. D. Baronofsky, F. J. Haddy, A. L. Ferrin, J. F. Alden, and W. L. Adams). Circulation Research, Vol. 1, No. 2, pp. 157-61. March, 1953.

LLOYD D. MACLEAN, M.D., Medical Fellow

- "Rh incompatability accompanied by acute renal failure" (with A. J. Kremen, C. R. Hitchcock, and A. Blomquist). *Minnesota Medicine*, 35:1039-41. November, 1952.
- "Tubular gastric resection: a preliminary evaluation." Bulletin of the University of Minnesota Hospitals and Minnesota Medical Foundation, 24:255-73. January, 1953.

EDWARD E. MASON, M.D., M.S., Medical Fellow

"The concentration of urca in the gastric juice of patients with diseases of the stomach" (with H. S. Bloch and A. J. Kremen). Journal of the National Cancer Institute, 13:1041. February, 1953.

GRAFTON A. SMITH, M.D., Medical Fellow

"A study of intestinal intubation using a flexible stylet with controllable tip." Surgery, 32:17-50. July, 1952.

- "Use of intra-gastric balloons containing P³² in an attempt to produce adenocarcinoma of the stomach in the mouse" (with G. E. Moore and E. L. Brackney). *Journal of the National Cancer Institute*, 13:963-67. February, 1953.
- "The practical value of cardiopulmonary function tests" (with A. A. Siebens, M. N. Newman, and C. F. Storey). U. S. Armed Forces Medical Journal, 4:653-64, 1953.

MITCHELL W. SPELLMAN, M.D., Medical Fellow

"The tolerance of the canine heart to temporary complete vena caval occlusion" (with R. N. Hammerstrom, M. Cohen, C. W. Lillehei, and R. L. Varco). Pages 172-77 in Surgical Forum, Clinical Congress of the American College of Surgeons. Philadelphia: W. B. Saunders Company. September, 1952.

THEODORE W. WAGENKNECHT, JR., M.D., Medical Fellow

"Nature of bleeding in esophageal varices" (with 1. D. Baronofsky and J. F. Noble). Surgery, 33:869-74. June, 1953.

MORLEY COHEN, M.D., Research Assistant

"The tolerance of the canine heart to temporary complete vena caval occlusion" (with C. W. Lillehei, M. W. Spellman, R. N. Hammerstrom, and R. L. Varco). Pages 172-77 in Surgical Forum, Clinical Congress of the American College of Surgeons. Philadelphia: W. B. Saunders Company. September, 1952.

Francisco L. Raffucci, M.D., Research Assistant

- "Effect of complete hepatic vein ligation on portal pressures and ascites formation in dogs with porta-caval shunts" (with F. S. Cross, R. W. Toon, and O. H. Wangensteen). Proceedings of the Society for Experimental Biology and Medicine, 82:505-509. March, 1953.
- "The effects of temporary occlusion of the afferent hepatic circulation in dogs." Surgery, 33:342-51. March, 1953.

RICHARD H. EGDAHL, M.D., Teaching Assistant

- "Tubular resection with transverse gastroplasty as a suitable operation for peptic ulcer" (with W. D. Kelly, S. Hallgrimson, and O. H. Wangensteen). Pages 54-58 in Surgical Forum, Clinical Congress of the American College of Surgeons. Philadelphia: W. B. Saunders. September, 1952.
- "The therapeutic effectiveness of the artificial kidney" (with F. J. Lewis, M. P. Reiser, and K. Chung). A.M.A. Archives of Surgery, 65:588-98. October, 1952.

Hamlin A. Mattson, M.D., M.S. in Surg., Clinical Assistant

"Cooper's ligament inguinal hernioplasties: Experience with 323 cases." Journal-Lancet, 72:503-505. November, 1952.

JACOB H. STRICKLER, M.D., M.S., Clinical Assistant

"The use of polyethylene tube for intravenous therapy" (with P. D. Erwin and C. O. Rice).

A.M.A. Archives of Surgery, 66:673-78. May, 1953.

Anesthesia

JOSEPH J. BUCKLEY, M.D., Clinical Instructor

- "Postanesthetic hypotension following cyclopropane: its relationship to hypercapnia" (with F. H. Van Bergen, A. B. Dobkin, E. B. Brown, Jr., F. A. Miller, and R. L. Varco). Anesthesiology, 14:226-37. May, 1953.
- "Hypotensive anesthesia" (with F. H. Van Bergen, A. B. Dobkin, W. T. Peyton, I. A. Brown, and L. A. French). Bulletin of the University of Minnesota Hospitals and Minnesota Medical Foundation, 24:452-59. March 20, 1953.

ELLIS N. COHEN, M.D., M.S. in Anesth., Clinical Instructor

- "Resuscitation of the newborn." Minnesota Medicine, 35:750-52. August, 1952.
- "Endotracheal anesthesia." (Discussion of Hochfilzer.) Laryngoscope, Vol. 63, No. 5, pp. 395-402. May, 1953.

ALLEN B. DOBKIN, M.D., Clinical Instructor

- "Hypotensive anesthesia" (with F. H. Van Bergen, J. J. Buckley, W. T. Peyton, I. A. Brown, and L. A. French). Bulletin of the University of Minnesota Hospitals and Minnesota Medical Foundation, 24:452-59. March 20, 1953.
- "Postanesthetic hypotension following cyclopropane: Its relationship to hypercapnia" (with F. H. Van Bergen, J. J. Buckley, E. B. Brown, Jr., F. A. Miller, and R. L. Varco). *Anesthesiology*, 14:226-37. May, 1953.

FREDERICK H. VAN BERGEN, M.D., M.S., Clinical Instructor

- "The management of severe systemic tetanus" (with J. J. Buckley). Anesthesiology, 13:599-604.

 November, 1952.
- "Postanesthetic hypotension following cyclopropane: its relationship to hypercapnia" (with J. J. Buckley, A. B. Dobkin, E. B. Brown, Jr., F. A. Miller, and R. L. Varco). *Ibid.*, 14:226-37. May, 1953.
- "Hypotensive anesthesia" (with J. J. Buckley, A. B. Dobkin, W. T. Peyton, I. A. Brown, and L. A. French). Bulletin of the University of Minnesota Hospitals and Minnesota Medical Foundation, 24:452-59. March 20, 1953.

Neurosurgery

WILLIAM T. PEYTON, M.D., M.A., Ph.D., Professor and Director

- "Spontaneous cerebrospinal rhinorrhea secondary to the Arnold-Chiari malformation" (with N. A. Youngs), Laryngoscope, Vol. 63, No. 3, pp. 241-48, March, 1953.
- "Spontaneous thrombosis of the carotid arteries" (with S. K. Shapiro). Bulletin of the University of Minnesota Hospitals and Minnesota Medical Foundation, Vol. 24, No. 8, pp. 188-203. November 21, 1952.
- "Neurosurgical procedures for relief of pain" (with L. A. French and C. M. Caudill). Ibid., No. 17, pp. 355-66. February 13, 1953.
- "Hypotensive anesthesia" (with F. H. Van Bergen, J. J. Buckley, A. B. Dobkin, L. A. French, and I. A. Brown). *Ibid.*, No. 22, pp. 452-59. March 20, 1953.

Lyle A. French, M.D., M.S., Ph.D., Clinical Associate Professor

- "Subdural hematoma in infants." Post Graduate Medicine, 2:538, 1952.
- "Increased intracranial pressure following compression of the superior sagittal sinus" (with G. L. Haines and C. M. Caudill). Neurology, 3:231-33, 1953.
- "Radioisotope investigations on the blood-brain and blood-liquor barrier" (with G. L. Haines and G. E. Moore). *Ibid.*, pp. 460-65.
- "Effect of denervation of thermal cutaneous receptors on the rectal temperature response to limb immersion" (with A. Hemingway). Federation Proceedings, 12:65, 1953,
- "Neurosurgical procedures for relief of pain" (with C. M. Caudill and W. T. Peyton). Bulletin of the University of Minnesota Hospitals and Minnesota Medical Foundation, 24:355-56. 1953.
- "Hypotensive anesthesia" (with F. H. Van Bergen, J. J. Buckley, A. B. Dobkin, W. T. Peyton, and I. A. Brown). *Ibid.*, pp. 452-59,
- "Carbon dioxide and cortical spike frequency" (with E. Gellhorn). Archives Internationales de Pharmacodynamic et de Therapie, Vol. 93, Nos. 3-4, pp. 427-33. April, 1953.

WALLACE P. RITCHIE, M.D., M.S. in Surg., Clinical Assistant Professor

- "Relief of pain by neurosurgical procedures" (with A. W. Adson and H. J. Svien). A.M.A. Archives of Surgery, 65:139-49. July, 1952.
- "Spontaneous intracranial hemorrhage in children" (with J. Haines). Ibid., 66:452. April, 1953.
- "Treatment of pain from cancer." Medical Times, 80:767-72. December, 1952.
- "Obituary of Alfred W. Adson." Minnesota Medicine, 36:1. January, 1953.

GERALD L. HAINES, M.D., Medical Fellow

- "Increased intracranial pressure following compression of the superior sagittal sinus" (with L. A. French and C. M. Caudill). Neurology, 3:231-33. 1953.
- "Radioisotope investigations on the blood-brain and blood-liquor barrier" (with L. A. French and G. E. Moore). Ibid., pp. 460-65.

Orthopedic Surgery

LEONARD F. PELTIER, M.D., Ph.D., Clinical Instructor

- "Fat embolism following intramedullary nailing." Surgery, 32:719-22. October, 1952.
- "The impact of Roentgen's discovery upon the treatment of fractures." Ibid., 33:579-86. April, 1953.
- "Obstructive apnea in artificially hyperventilated subjects during sleep." Journal of Applied Physiology, 5:614-18. April, 1953.

KENATH H. SPONSEL, M.D., Clinical Instructor

- "Elbow dislocations in children and an analysis of associated injuries," Bulletin of the Swedish Hospital, 3:16:21, 1952.
- "Myxoma and myxosarcoma of the soft tissues of the extremities" (with J. R. McDonald and R. K. Ghormley). Journal of Bone and Joint Surgery, 34:820:26, 1952.

Proctology

WALTER A. FANSLER, M.A., M.D., Clinical Professor

- "Adenomas of the large intestine." Bulletin of the University of Minnesota Hospitals and Minnesota Medical Foundation, 24:296-300. January 23, 1953. "Diagnosis and treatment of polyps of the large bowel." Houston: Medical Record and Annals,
- "Diagnosis and treatment of polyps of the large bowel." Houston: Medical Record and Annals, Vol. 47, No. 6, pp. 545-50. June, 1953.

WILLIAM C. BERNSTEIN, M.D., Clinical Assistant Professor

"Emphysema of the leg following perforation of the rectum" (with C. E. Rea and H. Ghent).

Minnesota Medicine, 35:1138-39. December, 1952.

ROBERT J. TENNER, M.D., M.S., Clinical Assistant Professor

"Melanin spots of the lips, oral mucosa and digits associated with intestinal polyposis" (with L. F. Sherman). Minnesota Medicine, 35:1131-34. December, 1952.

LLOYD F. SHERMAN, M.D., M.S., Clinical Instructor

"Melanin spots of the lips, oral mucosa and digits associated with intestinal polyposis" (with R. J. Tenner). Minnesota Medicine, 35:1131-34. December, 1952.

Urology

CHARLES D. CREEVY, M.D., Ph.D., Professor and Director

- "Observations on hemolysis during transurethral resection: the effects of urea." Journal of Urology, 68:324-27. July, 1952.
- "Practical scheme for treatment of urinary tract infections." Journal-Lancet, 72:353-56, 388, 390. August, 1952.
- "Hemoglobinuric nephrosis." Ibid., p. 575. December, 1952.
- "Wilms' tumors" (with M. P. Reiser). Journal of Urological Survey, 2:413-31. October, 1952.
- "Advances in urology during the past twenty-five years." Surgery, 32:749-56. October, 1952.
- "Disadvantages of ureterosigmoidostomy." Ibid., 33:131. January, 1953.
- "Etiology and treatment of urinary lithiasis in severe poliomyclitis" (with F. Y. Tiehy). A.M.A. Archives of Neurology and Psychiatry, 68:539-48. October, 1952.

- "Some observations upon absorption after ureterosigmoidostomy." Transactions of the American Association of Genito-Urinary Surgeons, pp. 25-31, 1952.
- "Observations upon the absorption of urinary constituents after ureterosigmoidostomy: the importance of renal damage" (with M. P. Reiser). Surgery, Gynecology and Obstetrics, 95: 589-96. November, 1952.
- "Facts about urcterosigmoidostomy." Journal of the American Medical Association, 151:120-23, January 10, 1953.
- "Electrolyte imbalance after ureterosigmoidostomy." Modern Medicine, 21:122. February 1, 1953. "Adrenalectomy in prostatic cancer and malignant hypertension." Canadian Medical Association Journal, 69:581-83, 1953.
- "An evaluation of translumbar aortography" (with W. E. Price and R. W. Krumbach). Bulletin of the University of Minnesota Hospitals and Minnesota Medical Foundation, 24:413-29. March 6, 1953.

FREDERIC E. B. FOLEY, M.D., Clinical Associate Professor

"Radical nephrectomy for neoplasm" (by invitation W. P. Mulvaney, E. J. Richardson, and I. Victor). Journal of Urology, 68:39-49. July, 1952.

THEODORE H. SWEETSER, M.D., Clinical Associate Professor

- "Exstrophy of the urinary bladder" (with T. C. Chisholm and W. P. Thompson). Minnesota Medicine, 35:654-57. July, 1952.
- "The choice of surgical approach for retroperitoneal tumors." Journal of the International College of Surgeons, 19:253-55. February, 1953.

WILLIAM E. PRICE, M.D., Clinical Instructor

"An evaluation of translumbar aortography" (with C. D. Creevy and R. W. Krumbach). Bulletin of the University of Minnesota Hospitals and Minnesota Medical Foundation, 24:413-29. March 6, 1953.

RONALD W. KRUMBACH, M.D., M.S., Medical Fellow

- "An evaluation of translumbar aortography" (with C. D. Creevy and W. E. Price). Bulletin of the University of Minnesota Hospitals and Minnesota Medical Foundation, 24:413-29. March 6, 1953.
- "Roentgen hepatography by injection of a contrast medium into the aorta" (with L. G. Rigler and P. C. Olfelt). Radiology, 60:363-67. March, 1953.

MILTON P. REISER, M.D., Medical Fellow

- "The therapeutic effectiveness of the artificial kidney" (with F. J. Lewis, R. H. Egdahl, and K. Chung). A.M.A. Archives of Surgery, 65:588-98. October, 1952.
- "Wilms' tumors" (with C. D. Creevy). Journal of Urological Survey, 2:413-31. October, 1952.
- "Observations upon the absorption of urinary constituents after ureterosigmoidostomy: the importance of renal damage" (with C. D. Creevy). Surgery, Gynecology and Obstetrics, 95: 589-96. November, 1952.

SCHOOL OF NURSING

KATHARINE J. DENSFORD, M.A., D.Sc., LL.D., Professor and Director

"Practical nurses and homemakers for rural Minnesota" (with J. O. Christianson and Eugenia Taylor). Minnesota Medicine, 35:847-49. September, 1952; American Journal of Nursing, 52:1233. October, 1952.

MYRTLE H. COE, B.A., Assistant Professor

- "Annual report of the president." Minnesota Registered Nurse, 25:136-38. September, 1952.
- "A time for inventory." Ibid., pp. 210-13. November, 1952.
- "I believe." Ibid., pp. 104-105. June, 1953.
- Introduction to Medical Sciences. (Revision of 1947 edition.) Minneapolis: University of Minnesota Mimeograph Department. 133 pages.

Georgia G. Nobles, B.S., Assistant Professor

"Married nurses and hospital staffing." American Journal of Nursing, 53:438. April, 1953.

SUMNER S. COHEN, M.D., Lecturer

"Tibione in the treatment of pulmonary tuberculosis" (with R. H. Frost and Wen-Yao Yue).

Diseases of the Chest, 23:507. May, 1953.

"Pyricidin (isoniazid) in the treatment of pulmonary tuberculosis." Journal-Lancet, 73:120. April, 1953.

Lois D. Anderson, B.S., Instructor

"A SPANner looks at England's mental nursing." Minnesota Registered Nurse, 25:238-40. January, 1953.

HELEN C. HANSON, M.A., Instructor

"The challenge of cancer nursing." Minnesota Registered Nurse. 25:68-69. April, 1953.

EUGENIA R. TAYLOR, B.S., Instructor

"Practical nurses and home makers for rural Minnesota" (with Katharine J. Densford and J. O. Christianson). Minnesota Medicine, 35:847-49. September, 1952; American Journal of Nursing, 52:1233. October, 1952.

SCHOOL OF PUBLIC HEALTH

GAYLORD W. ANDERSON, M.D., Dr.P.H., Mayo Professor and Director

"Public Health—A mandate from the people." Presidential address to American Public Health Association. American Journal of Public Health, 42:1367-73. November, 1952.

"Epidemiology of tuberculosis." American Review of Tuberculosis, 67:123-31. February, 1953; Transactions of the National Tuberculosis Association, 48th Annual Meeting, pp. 470-78. 1952.

HERBERT M. BOSCH, M.P.H., Professor

"Global opportunity for a better environment. Part II." American Journal of Public Health, 43:20-25. June, 1953.

Report on a visit to Yugoslavia, June 30-August 8, 1952, U.N. World Health Organization, September, 1952, 20 mimeographed pages plus 4 appendices.

Report on a visit to Finland. August 24 to September 3, 1952. U.N. World Health Organization, Geneva, October, 1952. 6 mimeographed pages.

The Sanitation Worker's Role in Health Education, U.N. World Health Organization, World Health Organization Third Session, Geneva, July, 1953, 7 mimcographed pages.

Albert J. Chesley, M.D., Clinical Professor Emeritus

"Tuberculosis in Indians." Report of the Tuberculosis Facilities Commission, pp. 31-36. January, 1953.

"Eighty years of public health" (with Netta W. Wilson). Minnesota Medicine, 36:337-40. April, 1953.

J. Arthur Myers, M.D., Ph.D., Professor

"Tuberculosis." Pages 696-97 in 1953 Britannica Book of the Year.

"Tuberculosis, etiology, epidemiology, and extrathoracic tuberculosis." Pages 71-84 in C. J. Watson, editor, Outlines of Internal Medicine (seventh edition). Dubuque, Iowa: Wm. C. Brown Company, 1952.

"Sarcoidosis." Ibid., pp. 121-25.

"The ever-continuing search for immunity in tuberculosis." Postgraduate Medicine, 12:101-17, 264-82, 469-88. August, September, and November, 1952.

"Tuberculosis lurks among the aged." Geriatrics, 7:324-32. November-December, 1952.

"Primary tuberculosis acquired in adulthood." Diseases of the Chest, 22:293-312. September, 1952.

"Chemotherapy in tuberculosis." (Editorial.) Ibid., pp. 598-600. November, 1952.

- "The effects of the diminished incidence of primary infection on the tuberculosis control program." Ibid., pp. 607-25. December, 1952.
- "Effects of isonicotinic acid hydrazide in mentally ill patients" (with A. E. Krieser, A. G. Sanderson, and M. Vik). *Ibid.*, 23:28-35. January, 1953.
- "Tuberculosis control among veterans." (Editorial.) Ibid., pp. 586-87. May, 1953.
- "Introduction to section on pain." Journal-Lancet, 72:525. November, 1952.
- "Minnesota legislators and health." Ibid., 73:103-106. March, 1953.
- "When tuberculosis begins." Ibid., pp. 143-44. April, 1953.
- "Refinements in the diagnosis of early tuberculosis." Journal of the Michigan State Medical Society, 51:1441-44. November, 1952.
- "Lung shadows in children." Journal of the American Medical Association, 150:1359. November 29, 1952.
- "The tuberculin reaction: its relative and actual importance." Medical Record and Annals, 46:338-43. December, 1952.
- "Tuberculin testing in relation to epidemiology." Pages 717-25 in Transactions of the Fortyeighth Annual Meeting of the National Tuberculosis Association, 1952.
- "A tribute to Olaf Jenson Hagen." Everybody's Health, 38:6. April, 1953.
- "Simple spontaneous pneumothorax." Bulletin of the University of Minnesota Hospitals and Minnesota Medical Foundation, 24:524-38. April 24, 1953.

Reviews of

Codias J. Drolet and Anthony M. Lowell, A Half Century's Progress Against Tuberculosis in New York City, 1900 to 1950 in Diseases of the Chest, 23:474. April, 1953.

Rene and Jean Dubos, The White Plague. Ibid., p. 593. May, 1953.

Marjorie Pyle, Help Yourself Get Well in Journal-Lancet, 72:382. August, 1952.

Rene and Jean Dubos, The White Plague. Ibid., p. 581. December, 1952.

James E. Perkins and Floyd M. Feldmann, You and Tuberculosis. Ibid., 73:145. April, 1953. Editor, Diseases of the Chest, 1952-53.

Chairman, Editorial Board, Journal-Lancet, 1952-53.

Associate Editor, American Journal of School Health, 1952-53.

Editor, Diseases of the Chest, American Lecture Series, 1952-53.

STEWART C. THOMSON, M.S., M.D., M.P.H., Associate Professor and Assistant Director

Avicenna of Iran (with Y. Armajani and K. Nag). St. Paul: Louis W. and Maud Hill Family Foundation, Macalester Project. 1952-53. Bulletin No. 1. 16 pages.

ALAN E. TRELOAR, Ph.D., Professor

- "Endogenous eosinopenia in institutionalized patients with mental deficiency" (with F. Halberg, R. Engel, and R. J. Gully). A.M.A. Archives of Neurology and Psychiatry, 69:462-69. April, 1953.
- "Causes, correlates, and chance." Bulletin of the University of Minnesota Hospitals and Minnesota Medical Foundation, 24:611-15, 1953.

ROBERT N. BARR, M.D., M.P.H., Lecturer

- "The responsibility of the practicing physician and health department in the care of the aged."

 Minnesota Medicine, 36:137-41, February, 1953.
- Minnesota Medicine, 36:137-41. February, 1953. "One hundred and fifty years of vaccination." Minnesota Pharmacist, pp. 12-13, 44. March, 1953.

JEROME W. BROWER, LL.B., M.A., Lecturer

"The registration of deaths in Minnesota," Mid-Continent Mortician, pp. 14, 24. June, 1953.

DEAN S. FLEMING, M.D., M.P.H., Lecturer

"Analysis of tuberculosis case registers in Minnesota." Minnesota Medicine, Vol. 36, No. 5, p. 486. May, 1953.

Leslie W. Foker, M.D., M.P.H., Lecturer

"Pre-employment medical examinations to select—not reject." Connecticut State Medical Journal, 16:822-25. November, 1952.

WILLIAM A. JORDAN, D.D.S., M.P.H., Lecturer

- "Progress in Minnesota's dental health program." North-West Dentistry, Vol. 31, No. 3, pp. 157-62. Iuly, 1952.
- "The Askov dental demonstration" (with J. K. Peterson). Progress Report IV. Ibid., Vol. 32, No. 1, pp. 24-29. January, 1953.
- "Your pre-fluoridation base line survey" (with J. K. Peterson). Ibid., Vol. 32, No. 2, pp. 110-14. April, 1953.
- "Fluoride -A safe, effective means to reduce dental decay." Everybody's Health, pp. 7, 17. May, 1953.
- Editor, Public Health Section, North-West Dentistry. 1952-53.

HELEN L. KNUDSEN, M.D., M.P.H., Lecturer

"Interstate hospital planning" (with E. C. Slagle and D. R. Freeman). Hospitals, 27:49-52. February, 1953.

GEORGE S. MICHAELSEN, M.S., Lecturer

"Leaded gasoline used in carbon blasting poisons mechanic" (with W. E. Park). Occupational Health, Vol. 12, No. 10, p. 160. October, 1952.

ANN NYQUIST, R. N., Lecturer

Public Health Nursing in Minnesota. Biennial Summary 1950-51. Minneapolis: Minnesota State Department of Health, Section on Public Health Nursing.

Record Manual. Minneapolis: Minnesota State Department of Health, Section on Public Health Nursing, May, 1953.

MELVINA F. PALMER, R.N., M.S., Lecturer

"Extending adult health services through industrial contacts." Nursing Outlook, 1:93-95. February, 1953.

WILFORD E. PARK, M.D., Lecturer

- "Leaded gasoline used in carbon blasting poisons mechanic" (with G. S. Michaelsen). Occupational Health, Vol. 12, No. 10, p. 160. October, 1952.
- "Master mechanics in human maintenance." Advanced Management, Vol. 17, No. 12, p. 15. December, 1952.
- "The application of medical science to industry." Minnesota Engineer, Vol. 3, No. 12, pp. 23-24. January, 1953.
- "People need maintenance, too." National Safety News, pp. 32. May, 1953.
- "Industrial medicine-historical background." Bulletin of the Hennepin County Medical Society, Vol. 23, No. 9, p. 342. September, 1952.
- "Industrial medicine—a preventive program." Ibid., No. 10, p. 388. October, 1952.
- "Industrial medicine -introduction to industrial medical practice." Ibid., No. 11, p. 436. November, 1952.
- "Industrial medicine-- varieties of industrial health service." Ibid., No. 12, p. 477. December,
- "Industrial medicine-professional ethics in industrial medicine." Ibid., Vol. 24, No. 1, p. 28. January, 1953.
- "Industrial medicine- the doctor on call." Ibid., No. 2, p. 60. February, 1953.
- "Industrial medicine-some problems of the part-time industrial physician." Ibid., No. 3, p. 108. March, 1953.
- "Industrial medicine—physical examinations." *Ibid.*, No. 4, p. 168. April, 1953. "Industrial medicine—impact on employee relations." *Ibid.*, No. 5, p. 212. May, 1953.
- "Industrial medicine- the role of the physician in accident prevention." Ibid., No. 6, p. 262. June, 1953.
- First Aid in Small Plants, Minneapolis Health Department, 1952-53, Mimeographed.

Abraham B. Rosenfield, M.D., M.P.H., Lecturer

"Minnesota maternal mortality surveys." American Journal of Public Health, 43:56-67. January, 1953.

NETTA W. WILSON, M.A., Lecturer

"Eighty years of public health" (with A. J. Chesley). Minnesota Medicine, 36:337-40. April, 1953.

LABORATORY OF PHYSIOLOGICAL HYGIENE

ANCEL B. KEYS, Ph.D., Professor and Director

"Undernutrition." Pages 573-99 in Garfield G. Duncan, editor, Discases of Metabolism (third edition). Philadelphia: W. B. Saunders Company, 1952.

"Nutritional rehabilitation--Lessons from the Minnesota experiment." Proceedings of the XIth International Congress of Pure and Applied Chemistry, London, Vol. 3, pp. 511-17, 1947.

"Personality differences between normal young and middle-aged men: Item analysis of a psychosomatic inventory" (with J. Brozek). American Psychologist, 7:402-403, 1952.

"Real nutritional deficiency" (with H. Sinclair). British Medical Bulletin, 8:262-64, 1952.

"The effect of age and body weight on the electrocardiogram of healthy men" (with E. Simonson). Circulation, 6:749-61, 1952.

"Basal cardiac function and body composition with special reference to obesity" (with H. L. Taylor and J. Brozek). Journal of Clinical Investigation, 31:976-83, 1952.

"Notes from a medical journey." Journal-Lancet, 71:503-505, 539-40, 1951; 72:25-26, 103-104, 159-61, 205-207, 261-63, 302-303, 340-42, 380-82, 488-90, 536-40, 1952.

"The trend of serum-cholesterol levels with age" (with F. Fidanza, V. Scardi, and G. Bergami). Lancet, 263:209-10, 1952.

"Body build and body composition" (with J. Brozek). Science, 116:140-42. 1952.

"The cholesterol problem." Vocding, 13:539-55, 1952.

"Diet and the incidence of heart disease." Bulletin of the University of Minnesota Hospitals and Minnesota Medical Foundation, 24:376-88, 1953.

"Dietary fat and serum cholesterol" (with J. T. Anderson), Federation Proceedings, 12:169, 1953.

"Relative body weight, age, and fatness" (with J. Brozek). Geriatrics, 8:70-75, 1953.

"Variabilité et fidélité des mesures biologiques chez les jeunes gens" (with J. Brozek and H. L. Taylor). Le Travail Humain, 16:71-80, 1953.

"Obesity measurement and the composition of the body." Overcating, Overceight and Obesity, Nutrition Symposium Series, No. 6, pp. 13-35, 1953.

Member of Editorial Board, Journal-Lancet. 1952-53.

Associate Editor, Mctabolism. 1952-53.

Associate Editor, Geriatrics, 1953.

Josef Brozek, Ph.D., Associate Professor

"Jindrich Matiegka and the development of Czech physical anthropology" (with B. Skerlj).

*American Journal of Physical Anthropology, 10:515-19, 1952.

"Personality differences between normal young and middle-aged men: Item analysis of a psychosomatic inventory" (with A. Keys). American Psychologist, 7:402-403, 1952.

"Changes of body composition in man during maturity and their nutritional implications," Federation Proceedings, 11:784-93, 1952.

"Starvation and nutritional rehabilitation: A quantitative case study." Journal of the American Dietetic Association, 28:917-26, 1952.

"Basal cardiac function and body composition with special reference to obesity" (with H. L. Taylor and A. Keys). Journal of Clinical Investigation, 31:976-83, 1952.

"Personality of young and middle-aged normal men: Item analysis of a psychosomatic inventory," Journal of Gerontology, 7:410-18, 1952.

"Flicker fusion frequency: Background and applications" (with E. Simonson). Physiological Regieves, 32:349-78, 1952.

"Reliable and questionable significance in a series of statistical tests" (with K. Tiede). Psychological Bulletin, 49:339-41, 1952.

"Body build and body composition" (with A. Keys). Science, 116:140-42, 1952.

"Age and sex differences in man's fat content during maturity" (with Kung Pei Chen, W. Carlson, and F. Bronczyk). Federation Proceedings, 12:21-22, 1953.

"Relative body weight, age, and fatness" (with A. Keys). Geriatrics, 8:70-75, 1953.

"To be or not to be-fat (and how to tell if you are)." Journal of the American Dietetic Association, 29:344-45, 1953.

"Changes in flicker fusion frequency under stress" (with E. Simonson and H. L. Taylor).

Journal of Applied Physiology, 5:330-34, 1953.

- "Semistarvation and nutritional rehabilitation: A qualitative case study, with emphasis on behavior." Journal of Clinical Nutrition, 1:107-18, 1953.
- "Variabilité et fidélité des mesures biologiques chez les jeunes gens" (with H. L. Taylor and A. Keys). Le Travail Humain, 16:71-80, 1953.
- "Restriction of food intake and health." Nutrition Reviews, 10:199-202. 1952.
- "Nervous system and animal behavior in B-complex deficiencies: Maze learning." Ibid., pp. 235-38.
- "Specific gravity, skinfolds and body fat." Ibid., pp. 246-49.
- "Nervous system and animal behavior in B-complex deficiencies: Conditioned responses." *Ibid.*, pp. 273-76.
- "Personality alterations in undernutrition." Ibid., pp. 331-33.
- "Cold-war dietary restrictions in Berlin." Ibid., 11:5-6, 1953.
- "Deterioration of personality in experimental starvation." Ibid., pp. 45-47.
- "Measurement in the study of nutriture." Ibid., pp. 68-70.
- "Changes in body build and body composition during aging." Ibid., pp. 100-103, 1953.
- "Subcutaneous fat." Ibid., pp. 131-34.
- "Obesity, weight reduction, and longevity." Ibid., pp. 144-46.
- "Fat soluble substances in measurement of body composition," Ibid., pp. 165-67.

Associate Editor, Nutrition Reviews. 1952-53.

Ernst Simonson, M.D., Associate Professor

- "The distribution of cardiac potentials around the chest in one hundred and three normal men." ("irculation, 6:201-11, 1952.
- "The effect of age and body weight on the electrocardiogram of healthy men" (with A. Keys), Ibid., pp. 749-61.
- "A spatial vector analyzer for the conventional electrocardiogram." Ibid., 7:403-12, 1953.
- "Effect of moderate exercise on the electrocardiogram in healthy young and middle-aged men," Journal of Gerontology, 7:495-96, 1952.
- "Flicker fusion frequency: Background and applications" (with J. Brozek). Physiological Reviews, 32:349-78, 1952.
- "Electrocardiographic Mirror Patterns Studies"
 - "I. Experimental validity tests of the dipole hypothesis and of the central terminal theory" (with O. H. Schmitt and R. B. Levine). American Heart Journal, 45:416-28, 1953.
 - "II. The statistical and individual validity of the heart dipole concept as applied in electrocardiographic analysis" (with R. B. Levine and O. H. Schmitt). *Ibid.*, pp. 500-18.
 - "III. Mirror pattern cancellation in normal and abnormal subjects" (with O. H. Schmitt, R. B. Levine, and J. C. Dahl). *Ibid.*, pp. 655-64.
- "The effect of moderate and hard muscular work on the spatial electrocardiogram" (with N. Kimura). American Heart Journal, 45:676-82, 1953.
- "Spatial vector analysis of early right ventricular preponderance" (with J. C. Dahl). *Ibid.*, pp. 841-54.
- "Effect of moderate and hard muscular work on the spatial electrocardiogram" (with K. Kimura). Federation Proceedings, 12:132, 1953.
- "Changes in flicker fusion frequency under stress" (with J. Brozek and H. L. Taylor), Journal of Applied Physiology, 5:330-34, 1953.
- "Effect of moderate exercise on the electrocardiogram in healthy young and middle-aged men." *Ibid.*, pp. 584-88.

Member of the Editorial Board, Journal of Applied Physiology. 1952-53.

HENRY L. TAYLOR, Ph.D., Associate Professor

- "Basal cardiac function and body composition with special reference to obesity" (with J. Brozek and A. Keys), Journal of Clinical Investigation, 31:976-83, 1952.
- "Reliability of the low frequency critically damped ballistocardiogram" (with W. F. Maloney).

 Federation Proceedings, 12:142-43, 1953.
- "Changes in flicker fusion frequency under stress" (with J. Brozek and E. Simonson). Journal of Applied Physiology, 5:330-34, 1953.
- "Variabilité et fidélité des mesures biologiques chez les jeunes gens" (with J. Brozek and A. Keys). Le Travail Humain, 16:71-80, 1953.

IOSEPH T. ANDERSON, Ph.D., Assistant Professor

"Dietary fat and serum cholesterol" (with A. Keys), Federation Proceedings, 12:169, 1953.

James C. Dahl, M.D., Research Fellow

- "Electrocardiographic mirror pattern studies. III. Mirror pattern cancellation in normal and abnormal subjects" (with E. Simonson, O. H. Schmitt, and R. B. Levine). American Heart Journal, 45:655-64, 1953.
- "Spatial vector analysis of early right ventricular preponderance" (with E. Simonson). *Ibid.*, pp. 841-54.

UNIVERSITY HOSPITALS

GERTRUDE I. THOMAS, Director of Hospital Nutrition Service and Professor

"Professional teamwork" (with A. L. Baker). Journal of the American Dietetic Association, Vol. 28, No. 11, pp. 1039-41, November, 1952.

Annie Laurie Baker, M.A., Associate Professor of Social Work

"Professional teamwork" (with Gertrude I. Thomas). Journal of the American Dietetic Association, Vol. 28, No. 11, pp. 1039-41. November, 1952.

SCHOOL OF DENTISTRY

WILLIAM H. CRAWFORD, D.D.S., Dean and Professor

"University news." North-West Dentistry, Vol. 31, No. 3, pp. 163-66. July, 1952; No. 4, p. 226.
October, 1952; Vol. 32, No. 1, pp. 67-69. January, 1953; No. 2, pp. 116-19. April, 1953.

HENRY B. CLARK, JR., M.D., D.D.S., Professor

"Deepening of labial sulcus by mucosal flap advancement." Journal of Oral Surgery, Vol. 11, No. 2, pp. 165-68. April, 1953.

THOMAS D. SPEIDEL, D.D.S., M.S., Professor

"Jaw growth and tooth eruption in their relation to space maintenance." Journal American Dental Association, 45:541. November, 1952.

HAROLD C. WITTICH, D.D.S., Professor

"A preliminary report on the use of capping preparations." North-West Dentistry, Vol. 31, No. 4, pp. 194-95. October, 1952.

Douglas H. Yock, D.D.S., Professor

- "Fixed crown and bridgework." Journal of the Tennessee Dental Association, 32:365-72. October, 1952.
- "Plastic resins in crown and bridge prosthesis." Journal of the American Dental Association, Vol. 46, No. 5, pp. 505-509. May, 1953.

HELMUT A. ZANDER, D.M.D., D.D.S., M.S., Professor

- "The pulp-an ally in the preservation of young permanent teeth." Journal of the California State Dental Association and the Nevada State Dental Society, 29:3. May-June, 1953.
- "The attachment of calculus to root surfaces." Journal of Periodontia, 24:16-19. January, 1953.
- "The effect of self-curing filling resins on the dental pulp." Journal of Dental Education, 16:241-46. November, 1952.

MELLOR R. HOLLAND, D.D.S., M.S.D., Associate Professor

"Surgical treatment of prognathism of the mandible." Minneapolis District Dental Journal, Vol. 37, No. 1, pp. 6-8. March, 1953.

DAVID F. MITCHELL, D.D.S., Ph.D., Associate Professor

"Ammoniated dentifrices and hamster caries: further studies on effects of ingestion." Science, 116:537. November 14, 1952.

"Focal infection: practical considerations." North-West Dentistry, 32:103. April, 1953.

DOROTHEA F. RADUSCH, D.D.S., M.S., Clinical Associate Professor

"The diet and deutal health." Journal of the American Dietetic Association, 29:555. June, 1953. "The periodontal benefits of well-planned diets." Journal of the American Deutal Association, 47:14. July, 1953.

Reviews of

- C. Thoma, Nutrition and Climatic Stress With Particular Reference to Man in Journal of the American Dental Association, Vol. 44, No. 5, pp. 591-92. May, 1952.
- C. Thoma, Food and You. Ibid., Vol. 45, No. 3, p. 378. September, 1952.
- L. Miller, Reducing Cookbook and Diet Guide. Ibid., 46:727. June, 1953.

SHERWOOD R. STEADMAN, D.D.S., M.S., Clinical Associate Professor

"The relation of upper anterior teeth to lower anterior teeth as present on plastic models of a group of acceptable occlusions." The Angle Orthodontist, Vol. 22, No. 2, p. 91. April, 1952.

Joseph C. Tam, D.D.S., M.S.D., Assistant Professor

"Thoughts to be remembered before doing impacted tooth removal." Minneapolis District Dental Journal, Vol. 37, No. 1, pp. 3-6. March, 1953.

"Removal of calculi from the right submaxillary duct." Ibid., No. 2, pp. 33-34. June, 1953.

LAW SCHOOL

KENNETH C. DAVIS, B.A., LL.B., Professor

"Standing, ripeness and civil liberties: A critique of Adler vs. Board of Education." American Bar Association Journal, 38:924-27. November, 1952.

"Chief Justice Wolfe on administrative law." Utah Law Review, 4:175-89. Fall, 1952.

"Legislative history and the Wheat Board Case." Canadian Bar Review, 31:1-17. January, 1953. Cases and Problems on Public Law. Mineapolis: University of Minnesota Mimeograph Department, 1953, 40 additional pages.

DAVID W. LOUISELL, B.S.L., LL.B., Professor

"The Safety Appliance Act and F.E.L.A.: A plea for clarification" (with K. M. Anderson).

**Law and Contemporary Problems, 18:281-95. Summer, 1953.

Reviews of

Honorable Bernard Botein, Trial Judge in Minnesota Law Review, 37:83-87. December, 1952. John Evarts Tracy, Handbook of the Law of Evidence. Ibid., pp. 499-501. May, 1953.

Robert Wyness Millar, Civil Procedure of the Trial Court in Historical Perspective. Ibid., pp. 643-46. June, 1953.

"Spiritual neglect brings brutality." Minnesota Daily, November 21, 1952.

Cases and Materials on Litigation: Science and Art. University of Minnesota Mimeograph Department, 1952-53, xiv plus 928 pages.

Kenneth M. Anderson, B.A., LL.M., Associate Professor

"The Safety Appliance Act and F.E.L.A.: A plea for clarification" (with D. W. Louisell). Law and Contemporary Problems, 18:281-95. Summer, 1953.

MONRAD G. PAULSEN, B.A., J.D., Associate Professor

"Government planning for national defense." Pages 1-11 in *The Garrison State, Its Human Problems.* Minneapolis: Social Science Research Center of the Graduate School of the University of Minnesota. 1953.

CHARLES A. WRIGHT, B.A., LL.B., Assistant Professor

"Complaints." Pages 1-795 in Winslow's Forms of Pleading and Practice. (Third edition.) Vol. 2. St. Paul: West Publishing Co. 1952.

- "Non-partisanship doesn't work." The Progressive, 17:26-27. January, 1953.
- "Operating ratio-a regulatory tool." Public Utilities Fortnightly, 51:24-29. January 1, 1953.
- "Problems of transit finance." Ibid., pp. 611-15. May 7, 1953.
 "A critical analysis of a so-called 'critical analysis.'" North Dakota Law Review, 29:151-54. April, 1953.
- "Modern pleading and the Pennsylvania rules." University of Pennsylvania Law Review, 101: 909-47. May, 1953.

Reviews of

- B. Shartel, Our Legal System and How It Operates in Indiana Law Journal, 27:467-69. Spring, 1952.
- R. Morris, Fair Trial in Yale Law Journal, 62:509-12. February, 1953.
- H. Laube, Cases on Quasi Contracts in Minnesota Law Review, 37:306-307. March, 1953.
- L. Grebler, Housing Market Behavior in a Declining Area. Ibid., p. 307.
- "Nonpartisan state legislature has failed in Minnesota." Minneapolis Tribune, December 29, 1952.

COLLEGE OF PHARMACY

EARL B. FISCHER, Ph.D., Professor

"Report of committee on research." (Abstract.) Proceedings of the Minnesota State Pharmacentical Association, p. 26, 1952.

OLE GISVOLD, Ph.D., Professor

- "The synthesis of some effective antioxidants" (with Li-Chin Chiang), Journal of the American Pharmaceutical Association (Scientific edition), Vol. 41, No. 7, pp. 348-51. July, 1952.
- "Nitrogen tetroxide studies. I. The preliminary oxidation of L-sorbose" (with O. Braenden). Ibid., pp. 382-85.
- "The synthesis of some simple n-alkyl esters of 4-aminohexane-1-carboxylic acid" (with R. K. Patel). Ibid., Vol. 42, No. 5, p. 321. May, 1953.
- "An improved procedure for the preparation of p-cyanobenzoic acids" (with R. H. Miller). Ibid., No. 6, pp. 367-69. June, 1953.
- "The synthesis of some N-alkyl-p-cyanobenzamides" (with R. H. Miller). Ibid., pp. 369-71. "The synthesis of some alkyl p-N-alkyl amidinobenzoates" (with W. Rost). Ibid., pp. 371-73.

WILLARD J. HADLEY, Ph.D., Professor

- "Refresher course." Minnesota Pharmacist, Vol. 7, No. 5, p. 13. February, 1953.
- "Program of continuation study course is replete with discussions of timely topics." Ibid., No. 6, p. 18. March, 1953.
- "Report of the secretary to the sixty-ninth annual convention." Ibid., No. 9, p. 10. June, 1953.
- "Continuation study in pharmacy." North Western Druggist, 61:36. March, 1953.
- "Sixteenth continuation pharmacy course at University of Minnesota." Ibid., p. 36, April, 1953.
- "Report of the Association secretary." Proceedings of the Minnesota State Pharmaceutical Association, Report of the 68th Annual Meeting, p. 12. May, 1952.
- Editor, Facts and News from the College of Pharmacy, Minnesota Pharmacist. 1952-53.

Editor, University of Minnesota College of Pharmacy News, North Western Druggist. 1952-53.

CHARLES V. NETZ, Ph.D., Professor

- "Report of Board of Publications." Proceedings of the Minnesota State Pharmaceutical Association, Report of the 68th Annual Meeting, pp. 30-32, 1952.
- "Report of delegate to the 1951 A.Ph.A. convention." Ibid., pp. 33-34.
- "Report of committee on public health." Minnesota Pharmacist, 6:16-17. August, 1952.
- Editor, Proceedings of the Minnesota State Pharmaceutical Association, Report of 68th Annual Meeting in 1952, 1952.

TAITO O. SOINE, Ph.D., Professor

"Preparation of \$\beta\$-bromoethylphthalimide" (with M. R. Buchdahl). Pages 18-20 in Organic Synthesis, Vol. 32. New York: Wiley and Sons. 1952.

- "Experiments with Khellin."
 - "II. The synthesis of 5, 6-dymethoxy-2-methylfuro (2', 3', 7, 8)-chromone and its identity with isokhellin" (with H. Abu-Shady). Journal of the American Pharmaceutical Association, Scientific edition, 41:403-407. August, 1952.
 - "III. The formation of desmythylisokhellin from khellin" (with H. Abu-Shady). *Ibid.*, pp. 429-30.
 - "IV. A convenient method for the preparation of khellin and some observations on the constituents of ami visnaga fruits grown in Minnesota" (with H. Abu-Shady). *Ibid.*, 42:481-83. September, 1952.
- "The preparation of 8-allylvisnagin" (with H. Abu-Shady). Journal of the American Pharmaceutical Association, Scientific edition, 42:351, 1953.
- "The importance of heterocyclic chemistry in the teaching of organic pharmaceutical chemistry."

 American Journal of Pharmaceutical Education, 17:194-97. April, 1953.

ROBERT H. MILLER, Ph.D., Assistant Professor

- "The synthesis of some N-alky-p-cyanobenzamides" (with O. Gisvold). Journal of the American Pharmaccutical Association (Scientific edition), Vol. 47, No. 6, pp. 369-71. June, 1953.
- "An improved procedure for the preparation of p-cyanobenzoic acids" (with O. Gisvold). *Ibid.*, pp. 367-69.

COLLEGE OF EDUCATION

Administration

WALTER W. COOK, Ph.D., Dean and Professor

- Educational Psychology in Teacher Education: A Guide for Instructors (with W. C. Trow, W. R. Baller, G. M. Blair, W. F. Bruce, F. S. Freeman, H. N. Rivlin, D. Snygg, and D. A. Worcester). National Society of College Teachers of Educational Monograph No. 3, 1953, 99 pages.
- Curriculum in the Modern Elementary School (with R. H. Beck and N. C. Kearney), New York: Prentice-Hall, Inc. 1953, 584 pages.
- "Tests for both evaluation and counseling in Minnesota schools" (with W. H. Edson). Pages 7-9 in Bulletin of the Minnesota Association of Secondary School Principals, Vol. 17, No. 2. St. Paul: Minnesota Association of Secondary School Principals. May, 1953.
- "Procedure for determining number and nature of norm groups for the Minnesota Teacher Attitude Inventory" (with C. J. Hoyt). Educational and Psychological Measurement, 12: 562-73. Winter, 1952.
- "Standards in the education of teachers." Minnesota Journal of Education, 33:16, 32. February, 1953.
- "Relationships between visual characteristics and specific silent reading abilities" (with W. H. Edson and G. L. Bond). Journal of Educational Research, 46:451-57. February, 1953.
- WILLIAM H. EDSON, Ph.D., Assistant Professor and Director of Student Personnel "Selective admission, retention, counseling, and placement." Chapter 7, pages 124-28 in Jesse A. Bond and John A. Hockett, editors, Curriculum Trends and Teacher Education, Thirty-second Yearbook of the Association for Student Teaching. Lock Haven, Pennsylvania: The Association for Student Teaching. 1953.
- "Tests for both evaluation and counseling in Minnesota schools" (with W. W. Cook). Pages 7-9 in Bulletin of the Minnesota Association of Secondary School Principals, Vol. 17, No. 2. St. Paul: Minnesota Association of Secondary School Principals. May, 1953.
- "Relationships between visual characteristics and specific silent reading abilities" (with G. L. Bond and W. W. Cook). Journal of Educational Research, 46:451-57. February, 1953.

AGRICULTURAL EDUCATION

MILO J. PETERSON, Ph.D., Professor and Chairman

Public Relations in Agricultural Education. Washington, D.C.: U. S. Office of Education. 1953. 100 pages.

Standards for Institutions Training Teachers of Agriculture. Washington, D.C.: U. S. Office of Education. 1953. 100 pages.

The County Fair—A Cooperative Program with Public Schools. Minneapolis: University of Minnesota. June, 1953. 6 pages.

"FFA crusades for farm safety." Minnesota Farm Bureau News, 32:6. November, 1952.

"The place of economics in agricultural education programs." Journal of Farm Economics, 34:857.

December, 1952.

"The concept of an individual farming program" (with G. Stevens). Agricultural Education Magazine, 25:186. February, 1953.

"Professional improvement—it's our job." Ibid., p. 197. March, 1953.

"The superintendent and the summer program." Ibid., p. 278. June, 1953.

Editor, Program of Education Department, Minnesota State Fair. November, 1952.

Editor, The Visitor. 1952-53.

Co-editor, MVAIA Newsletter. 1952-53.

The School Administrator and the Summer Program in Vocational Agriculture. Minneapolis: University of Minnesota Mimeograph Department. 1953, 1 page.

The Demand for Teachers of Agriculture. Minneapolis: University of Minnesota Mimeograph Department. 1953. 1 page.

ELDON H. MADISON, B.S., Instructor

Editor, Visual Aids Tip Sheet. 1953.

Editor, Agricultural Extension Service Audio-Visual Catalog, June, 1953.

GORDON I. SWANSON, M.S., Instructor

"Youth opportunities." The Visitor, 40:2-3. November, 1952.

"Why graduate study." Ibid., p. 1. April, 1953.

"Public relations is your business" (with J. F. Malinski). Agricultural Education Magazine, 25:156. January, 1953.

ART EDUCATION

CLIFTON A. GAYNE, JR., Ph.D., Professor and Chairman

"How can art education improve its organization?" Journal of the National Art Education Association, 6:13. March, 1953.

Editor, Western Arts Association Bulletin. 1952-53.

How Art Education Can Contribute Toward Developing Standards For Accreditation of Art Teachers in Cooperation With the American Association of Colleges for Teacher Education. Minneapolis: University of Minnesota Mimeograph Department. 1952-53. 22 pages.

WILLIAM R. HASTIE, M.A., Assistant Professor

"Art teachers at the point of decision." Pages 23-27 in Growth in Art Education, Yearbook of the Art Education Association of Indiana. Terre Haute: Indiana Art Education Association. October, 1952.

"College teachers of art education section on teacher preparation." Western Arts Association Bulletin, 37:23-25. November, 1952.

AGNES B. BRATLEE, M.Ed., Instructor

Editor, Western Arts Association Newsletter, 1952-53.

GENERAL EDUCATION

CLIFFORD P. ARCHER, Ph.D., Professor

Studies in Rural Education. Minneapolis: Bureau of Educational Research, University of Minnesota. April, 1953, 44 pages.

"The schools teach patriotism." Pages 14-15 in *Here Are Your Schools*. Minneapolis: Minnesota Citizens Committee for Public Education. September, 1952.

"The schools teach patriotism." Minnesota Journal of Education, 33:22-23. February, 1953.

ROBERT H. BECK, Ph.D., Professor

Curriculum in the Modern Elementary School (with N. C. Kearney and W. W. Cook). New York: Prentice-Hall. 1953, 584 pages.

"The Pilgrim's further progress." Educational Theory, 3:267-79. October, 1952.

"Education is conservative." Minnesota Journal of Education, 33:26-27. March, 1953.

Review of V. Jelenko, The Republic of the Schools: An Educational Program for Democracy in Annals of the American Academy of Political and Social Science, 286:188. March, 1953.

CHARLES W. BOARDMAN, Ph.D., Professor

Democratic Supervision in Secondary Schools (with H. R. Douglass and R. K. Bent). Boston: Houghton Mifflin Company, 1953, 557 pages.

GUY L. BOND, Ph.D., Professor

Stories in Pictures (with Marie Cuddy). Chicago: Lyons and Carnahan. 1953. 64 pages.

Teacher's Edition of Stories in Pictures (with Marie Cuddy). Chicago: Lyons and Carnahan. 1953. 96 pages.

Fun to Do Book for Stories to Remember (with Marie Cuddy). Chicago: Lyons and Carnahan. 1952. 96 pages.

Stories from Everywhere: Classmate Edition (with Marie Cuddy), Chicago: Lyons and Carnahan, 1953, 316 pages.

Meeting New Friends: Classmate Edition (with Marie Cuddy). Chicago: Lyons and Carnahan. 1953. 408 pages.

"Teaching selections in reading." Chapter 4, pages 30-41 in Road to Better Reading. Albany: New York State Department of Education, 1953.

"Relationships between visual characteristics and specific silent reading abilities" (with W. H. Edson and W. W. Cook). Journal of Educational Research, 46:451-57. February, 1953.

LEO J. BRUECKNER, Ph.D., Professor

Secing Numbers (with Elda Merton), Philadelphia: John C. Winston Company, 1952, 128 pages (textbook) and 256 pages (teacher's edition).

Finding Numbers (with Elda Merton). Philadelphia: John C. Winston Company. 1952. 128 pages (textbook) and 256 pages (teacher's edition).

Knowing About Numbers (with Elda Merton and F. E. Grossnickle). Philadelphia: John C. Winston Company. 1952. 394 pages.

Thinking with Numbers (with Elda Merton and F. E. Grossnickle). Philadelphia: John C. Winston Company. 1952. 393 pages.

Teachers Guide for Discovering Numbers (with Elda Merton and F. E. Grossnickle). Philadelphia: John C. Winston Company. 1953. 171 pages.

Teachers Guide for Learning Numbers (with Elda Merton and F. E. Grossnickle). Philadelphia: John C. Winston Company, 1953, 175 pages.

Teachers Guide for Exploring Numbers (with Elda Merton and F. E. Grossnickle). Philadelphia: John C. Winston Company. 1953. 148 pages.

Teachers Guide for Understanding Numbers (with Elda Merton and F. E. Grossnickle). Philadelphia; John C. Winston Company, 1953, 147 pages.

"Diagnostic chart for fundamental processes in arithmetic." Page 413 in The Fourth Mental Measurement Yearbook. Highland Park, New Jersey: The Gryphon Press. 1953.

"Exceptional teacher service record." Ibid., p. 796.

"Scale for rating effective teacher behavior." Ibid., p. 804.

"Making arithmetic meaningful and significant." California Mathematicians' Annual Bulletin, Vol. 10, No. 2, pp. 1-8. November, 1952.

"Principles of diagnosis and remedial teaching of arithmetic." National Association for Remedial Teaching News, Vol. 4, No. 1, pp. 1, 4, 8. January, 1953.

WILLIS E. DUGAN, Ph.D., Professor

Improving Student Personnel Services in Teacher Education (with J. Shaw). Oneonta: Committee on Implementation of the Student Personnel Association for Teacher Education, in Cooperation with the AACTE Committee on Studies and Standards. August, 1952. 30 pages. Co-editor, Guidance in Minnesota Section, Minnesota Education Association Journal. 1952-53.

RUTH E. ECKERT, Ed.D., Professor

"Intercollegiate cooperation." National Education Association Quarterly, 42:217-18. April, 1953. Review of Salvatore S. DiMichael, Improving Personality and Study Skills in College in Journal of Higher Education, 29:222-23. April, 1953.

PAUL R. GRIM, Ph.D., Professor

- The Student Teacher in the Secondary School (with J. U. Michaelis). New York: Prentice-Hall, Inc. 1953, 484 pages.
- The Student Teacher in the Elementary School (with J. U. Michaelis). New York: Prentice-Hall, Inc. 1953. 450 pages.
- A History of Teacher Certification: A Preliminary Study. Washington, D.C.: National Commission on Teacher Education and Professional Standards, National Education Association. 1953. 38 pages.
- "Identifying and interpreting the distinctive characteristics of teacher education." Section 1, pages 25-33 in Evaluating Progress and Charting the Future of Teacher Education. Washington, D.C.: National Commission on Teacher Education and Professional Standards, National Education Association, 1952.
- "Excerpts from two instruments for appraising teaching competency" (with C. J. Hoyt). Journal of Educational Research, 46:705-10. May, 1953.
- Editor of "Teacher education at the University of Minnesota." Chapter 8, pages 124-57 in Curriculum Trends and Teacher Education, Thirty-second Yearbook, the Association for Student Teaching. Lock Haven, Pennsylvania: The Association for Student Teaching. 1953.

PALMER O. JOHNSON, Ph.D., Professor

- Educational Research and Appraisal (with A. S. Barr and R. A. Davis). Philadelphia: J. B. Lippincott Company, 1953, 362 pages.
- Introduction to Statistical Methods (with R. W. B. Jackson). New York: Prentice-Hall, Inc. 1953, 357 pages.
- "Appraisal of the test of application of principles in physical science: general education series." Pages 622-23 in Fourth Mental Measurement Yearbook. Highland Park, New Jersey: The Gryphon Press. 1953.
- "Appraisal of the college entrance examination board achievement test in physics," *Ibid.*, pp. 642-43.
- Statistical editor, Journal of Experimental Education, 1952-53.

WILFORD S. MILLER, Ph.D., Professor Emeritus

Miller Analogies Test, Form J. New York: Psychological Corporation, 1952. 4 pages.

Manual for Miller Analogies Test. (Revised edition.) New York: Psychological Corporation, 1952, 15 pages.

MERVIN G. NEALE, Ph.D., Professor

A Survey of the University of New Mexico. Albuquerque: University of New Mexico. 1952. 75 pages.

DORA V. SMITH, Ph.D., Professor

- "The goals of the literature period and the grade sequence of desirable experiences." Pages 188-94 in *Improving Reading in All Curriculum Areas*, Supplementary Educational Monographs No. 76. Chicago: University of Chicago Press. 1952.
- "Dora V. Smith introduces: The language arts." Scholastic, 61:11T. September 24, 1952.
- "Selected references on elementary school instruction: English." *Elementary School Journal*, 52:104-108. October, 1952.
- "The English language arts: A link between yesterday and tomorrow," English Journal, 42:72-79, February, 1953.
- "Selected references on secondary school instruction: English." School Review, 61:101-104. February, 1953.
- "A way to understanding." Delta Kappa Gamma Bulletin, Vol. 19, No. 4, pp. 5-11. Summer, 1953.

C. GILBERT WRENN, Ph.D., Professor

"The selection and education of student personnel workers." Personnel and Guidance Journal, 31:9-14. October, 1952.

- "The ethics of counseling." Educational and Psychological Measurement, 12:161-77. Summer, 1952; Minnesota Journal of Education, 34:36, 68. October, 1952.
- "Counseling-helping students to help themselves." Informational Bulletin of the Illinois Air Training Command, 4:7-12. Spring, 1953.
- Review of Ernest Havemann and Patricia West, They Went to College: The College Graduate in America Today in Personnel and Guidance Journal, 31:556-57. May, 1953.

OTTO E. DOMIAN, Ph.D., Associate Professor and Director of Surveys

- Minnesota Public School Facilities Survey—A Study of Scleeted Aspects of Minnesota Public Secondary Schools, Excluding Minneapolis, St. Paul and Duluth (with I. O. Friswold, R. C. Prentis, and F. H. Smith), St. Paul: State Department of Education, 1953, 217 pages.
- School Building Survey, Brookings, South Dakota (with W. H. Strand). Minneapolis: Bureau of Field Studies and Surveys, College of Education, University of Minnesota. 1953. 103 pages.
- School Building Survey, Buffalo Lake School District (with F. II. Smith). Minneapolis: Bureau of Field Studies and Surveys, College of Education, University of Minnesota. 1952. 109 pages.
- School Building Survey, Crookston (with W. H. Strand). Minneapolis: Bureau of Field Studies and Surveys, College of Education, University of Minnesota. 1952. 181 pages.
- School Building Survey, East Grand Forks (with S. W. Harvey). Minneapolis: Bureau of Field Studies and Surveys, College of Education, University of Minnesota. 1953. 179 pages.
- Supplementary Report, School Building Survey, Hibbing School District (with S. W. Harvey).
 Minneapolis: Bureau of Field Studies and Surveys, College of Education, University of Minnesota. 1953. 37 pages.
- School Building Survey of the Northfield High School Area (with S. W. Harvey). Minneapolis: Bureau of Field Studies and Surveys, College of Education, University of Minnesota. 1952. 225 pages.
- Owatonna High School Building Survey. Minneapolis: Bureau of Field Studies and Surveys, College of Education, University of Minnesota. 1952. 40 pages.
- School Building Survey, St. Louis Park. Minneapolis: Bureau of Field Studies and Surveys, College of Education, University of Minnesota. 1953. 95 pages.
- School Building Survey, Waterville (with K. J. Vander Horck). Minneapolis: Bureau of Field Studies and Surveys, College of Education, University of Minnesota. 1952. 130 pages.
- Better School Buildings for Brookings (with W. H. Strand). Brookings: Board of Education. 1953. 25 pages.
- Their Education -- Your Responsibility (Buffalo Lake) (with F. H. Smith and Emma L. Menssen). Buffalo Lake: Board of Education. 1952. 21 pages.
- School Building Survey of the Crookston Area (with W. H. Strand). Crookston: Board of Education. 1952. 32 pages.
- Educational Growth in East Grand Forks (with S. W. Harvey and Lois M. Randall). East Grand Forks: Board of Education. 1953. 29 pages.
- Supplement to School Building Survey, Faribault School District (with W. H. Strand). Minneapolis: Bureau of Field Studies and Surveys, College of Education, University of Minnesota. 1952. 21 pages.
- School Building Needs of the Northfield High School Area (with S. W. Harvey). Northfield: Board of Education, 1952, 28 pages.
- School Buildings for St. Louis Park Children. St. Louis Park: Board of Education. 1953. 28 pages.
- Building for Your Children's Future (Waterville) (with K. J. Vander Horck). Waterville: Board of Education, 1952, 28 pages.
- "Your investment in public schools." Minnesota Journal of Education, 33:28-29. May, 1953.

CARL V. GOOSSEN, Ph.D., Associate Professor

"Elementary education." Pages 136-38 in Curriculum Trends and Teacher Education, Thirtysecond Yearbook of the Association for Student Teaching. Lock Haven, Pennsylvania: The Association for Student Teaching. 1953.

TRACY F. TYLER, Ph.D., Associate Professor

- "Teachers must meet added responsibilities." Journal of the Association for Education by Radio, 12:1. October, 1952.
- "Is educational TV moving ahead?" Ibid., p. 13. November, 1952.
- "Educational TV's success depends on cooperation." Ibid., p. 25. December, 1952.

- "Planning television programs." Ibid., p. 37. January, 1953.
- "TV-education's most critical problem." Ibid., p. 49. February, 1953.
- "Will educational TV survive?" Ibid., p. 61. March, 1953. "Saluting another Columbus institute." Ibid., p. 73. April, Ibid., p. 73. April, 1953.
- "As your editor sees it." Ibid., p. 85. May, 1953.
- "The educational television programs institute." NAEB Newsletter, p. 14. May, 1953.
- Editor, Journal of the Association for Education by Radio. 1952-53.

FREDERICK E. ELLIS, Ed.D., Assistant Professor

- "The concept of liberty in the papal encyclical: Libertas Praestantissimum." Educational Theory, 3:247-57. October, 1952.
- "Communication concerning the article: The concept of liberty in the papal encyclical: Libertas Praestantissimum." Ibid., pp. 74-75. January, 1953. "The responsibility for freedom." Churchman, 167:6-7. May 15, 1953.

Reviews of

- B. Bell, Crowd Culture in Churchman, 166:17. December 1, 1952.
- R. May, Man's Search for Himself. Ibid., 167:14. February 15, 1953.
- C. Kegley and R. Bretall, editors, The Theology of Paul Tillich. Ibid., p. 15. March 1, 1953.
- J. Conant, Modern Science and Modern Man. Ibid., p. 13. March 15, 1953.
- Sister A. Walters and Sister K. O'Hara, Persons and Personality: an Introduction to Psychology. Ibid., p. 15. April 1, 1953.
- T. Woody, Liberal Education for Free Men in Educational Theory, 3:188-89. April, 1953.

NED A. FLANDERS, Ph.D., Assistant Professor

- "A circuit for continuous, constant direct-current measurement of palmar resistance." American Journal of Psychology, 66:295-99. April, 1953.
- "So we teach for leadership" (with S. Havumaki). Minnesota Journal of Education, 33:40-42. April, 1953.
- Teaching with Groups. Minneapolis: Board of Education Mineograph Department. 1953. 17 pages.

WILLIAM J. MOONAN, Ph.D., Assistant Professor

- A Multivariate Approach to Tests of Hypotheses Associated with the Electromaze. Minneapolis: Office of Naval Research, University of Minnesota. April, 1953. 17 pages.
- Specification and Experimental Design of Problems Associated with Faculty Promotion Policies at the University of Minnesota. Minneapolis: Bureau of Institutional Research, University of Minnesota. March, 1953. 9 pages.
- Statistical Training for Mathematical Students in Secondary Schools. Minneapolis: Statistical Laboratory, College of Education, University of Minnesota. April 25, 1953. 16 pages.
- "The statistical interpretation of degrees of freedom." Journal of Experimental Education, 21: 259-64. March, 1953.
- An Introduction to Some Matrix Algebra for Students of Educational Statistics. Minneapolis: University of Minnesota Mimeograph Department. February 10, 1953. 12 pages.
- Charts of the Power Function for Analysis of Variance Tests and Illustrations of Their Use. Minneapolis: University of Minnesota Mimeograph Department. May 3, 1953. 11 pages.

MAYNARD C. REYNOLDS, Ph.D., Assistant Professor

"A study of the relationships between auditory characteristics and specific silent reading abilities," Journal of Educational Research, 46:439-49. February, 1953.

GORDON M. A. MORK, Ph.D., Lecturer

- "The schools turn out a good product." Pages 4.5 in Here Are Your Schools, St. Paul: Minnesota Citizens Committee for Public Education, Minnesota Congress of Parents and Teachers, Minnesota Education Association, and Minnesota School Board Association. 1952.
- "The education of secondary teachers." Pages 140-42 in Jesse A. Bond and John A. Hockett, editors, Curriculum Trends and Teacher Education, 1953 Yearbook of the Association for Student Teaching. Ann Arbor: Edwards Brothers, Inc. 1953.
- "The schools turn out a good product." Minnesota Journal of Education, 33:28-29. September, 1952.

NAOMI C. CHASE, M.A., Instructor

"Evaluation." Chapter 7, pages 207-13 in A Guide for Instruction in the Language Arts. Curriculum Bulletin No. 8. Minnesota State Department of Education. St. Paul: Department of Education. 1952.

"Using community resources." Chapter 9 in The Student Teacher in the Elementary School. New York: Prentice Hall, Inc. 1953.

"Elementary student teaching." Page 139 in Curriculum Trends and Teacher Education, 1953

Vearbook of the Association for Student Teaching. Lock Haven, Pennsylvania: Association for Student Teaching. 1953.

"Speech in the elementary school." Elementary English, 30:137-41. March, 1953.

Reviews of

James L. Summers, Open Season in Elementary English, 29:120. February, 1952.

Lilla Stirling, Jockie, a Story of Prince Edward Island, Ibid., pp. 123-24.

Geoffrey Trease, Cue for Treason. Ibid., p. 371. October, 1952.

Helen Garrett, Polly Roughhouse. Ibid.

Lucile Rosenheim, The Dancing Heart. Ibid., p. 442. November, 1952.

Henry Lent, O. K. for Drive-Away. Ibid.

David E. Weingast, Franklin D. Roosevelt: Man of Destiny. Ibid., p. 506. December, 1952. Shannon Garst, Jim Bridger: Greatest of the Mountain Men. Ibid., 30:125. February, 1953.

KENNETH B. HOYT, M.A., Instructor

"Why guidance is necessary." American Vocational Journal, 8:21. 1953.

NEVILLE P. PEARSON, M.A., Instructor

Co-editor, Film Council News Letter. 1953-54.

Production work on the following motion picture films made for the United States State Department, U.S.I.E., in Iran and Greece:

Iran:

Tuberculosis Near East Foundation
Dysentery Water, Irrigation
Nutrition Sanitary Privy
Clean Water

Greece:

Greek Fighting Man American Farm School Exchange of Persons

HELEN A. STRAND, M.A., Instructor

"Were you there?" Lutheran Teacher, 28:19-20. April, 1953.

Review of Helen Witmer and Ruth Kotinsky, editors, Personality in the Making in Lutheran Teacher, 28:31. February, 1953.

Editor, Studies in Rural Education. 1953.

Arnold S. Woestehoff, M.A., Director of Bureau of Recommendations and Instructor

Your Carcer in Education. Minneapolis: University of Minnesota Printing Department. 1952.
15 pages.

Annual Report of the Burcau of Recommendations. Minneapolis: University of Minnesota Mimeograph Department. 1952. 32 pages.

SULO HAVUMAKI, M.A., Teaching Assistant

"So we teach for leadership" (with N. A. Flanders). Minnesota Journal of Education, 33:40-42. April, 1953.

MAX L. KLAEGER, M.Ed., Teaching Assistant

320 pen drawings for VanWagenen's Listening-Picture Vocabulary Scales, Books A, B, C. Minneapolis: University of Minnesota Printing Department. 1953. 18 pages.

PATRICK D. ROCCIIIO, M.A., Teaching Assistant

"Measuring teachers' personal effectiveness." Minnesota Association of Secondary School Principals Bulletin, 17:57-61. May, 1953.

HENRY C. WEBB, M.A., Teaching Assistant

Educational films 1952-53:

Three motion picture scripts, Counseling Adolescents, correlated with the textbook Counseling Adolescents, by E. G. Williamson.

Drama of an Old Farm (author, script, direction, photography).

Heart Hospital Report (photography).

Homespun (author).

Marsh Waters, Waste or Wealth? (script, unit manager).

Minnesota Brown Trout (author, script, unit manager, film editor, music).

Pueblo Arts (author, script, film editor, unit manager).

Youth and the U. N. (author, photography, direction, script).

HOME ECONOMICS EDUCATION

CLARA B. ARNY, M.A., Professor

Evaluation in Home Economics. New York: Appleton-Century-Crofts. 1953. 378 pages.

Minnesota Tests in Household Skills (with Dorothy T. Dyer and Margaret Proshek). Chicago: Science Research Associates, 1953, 37 pages.

"Evaluation." Journal of Home Economics, 44:550-51. September, 1952.

ELLA J. ROSE, Ph.D., Professor

"Home economics education." Pages 154-57 in Curriculum Trends and Teacher Education,
Thirty-second Vearbook of The Association for Student Teaching. Lock Haven, Pennsylvania:
The Association for Student Teaching. 1953.

HEDDA KAFKA, M.A., Assistant Professor

Reviews of

- J. B. Edmouson, Improving the Effectiveness of College Teaching in Journal of Home Economics, 45:121. February, 1953.
- L. Detchen, Instructional Values Associated with the Use of Questionnaires. Ibid.
- R. H. Simpson and E. S. Brown, College Learning and Teaching. Ibid.

MARY ELIZABETH COOK, M.S., Instructor

Abstracts in Journal of Home Economics, Vol. 44, December, 1952. No. 10, p. 803.

MUSIC EDUCATION

PAUL S. IVORY, Ed.D., Assistant Professor

"Minneapolis." Musical America, 3:300. February, 1953.

"Band programs in Minnesota." Journal of Research in Music Education, 1:3-10. Spring, 1953. Reviews of

Albert Keiser, College Names: Their Origin and Significance in Minneapolis Sunday Tribune, August 10, 1952.

W. H. Prosser, Nine to Five. Ibid., March 1, 1953.

"Menuhin impressive in concert." St. Paul Pioneer Press, October 22, 1952.

"Jamieson top-flight." Ibid., January 16, 1952.

"Symphony concert review." Ibid., February 21, 1953.

"New civic orchestra competent." Ibid., May 6, 1953.

JOHANNA B. HECK, B.S., Instructor

Manual for Adventures in Music (a program for in-school listening over KUOM). Minneapolis: University of Minnesota Mimeograph Department. Tuesdays, September 23, 1952-May 19, 1953. 30 pages.

TRADE AND INDUSTRIAL EDUCATION

Homer J. Smith, Ph.D., Professor and Chairman

Higher Education Looks Ahead. Minnesota's Colleges: Their Functions, Their Problems and Their Goals, St. Paul: State Department of Education. 1953. 48 pages.

Moving Forward with Vocational Education: Trends, Needs, Next Steps in Minnesota. St. Paul: State Department of Education. 1953. 64 pages.

Better Education for More People: Good Schools and Good Colleges Improve the Quality of Living for Citizens, Communities, State. St. Paul: State Department of Education. 1953. 32 pages.

"Selected references on elementary school instruction—industrial arts." Elementary School Journal, 53:171-73. November, 1952.

"Selected references on secondary school instruction---industrial and vocational arts." School Review, 61:168-70. March, 1953.

Reviews of

William T. Bawden, A History of Kansas State Teachers College, 1903-1941 in Industrial Arts and Vocational Education, 41:28A, 31A. December, 1952.

Lynn A. Emerson, How to Prepare Training Manuals: A Guide in the Preparation of Written Instructional Materials in Industrial and Labor Relations Review, 6:438-39. April, 1953.

Preface to Discussion (Supplement to Minutes of January 14th Session of Minnesota Comission on Vocational and Higher Education). St. Paul: State Department of Education Mimeograph Department. 1953. 5 pages.

WILLIAM J. MICHEELS, Ph.D., Professor

Contributor to Survey of the Educational Program of the Artillery School, Antiaircraft and Guided Missiles Branch, Report and Recommendations by a Special Survey Commission (restricted). Washington: Human Resources Research Office, George Washington University. 1952. 98 pages.

"Review of mechanical drawing test: state high school tests for Indiana." Pages 557-58 in Oscar Krisen Buros, editor, *The Fourth Mental Measurements Yearbook*. Highland Park, New Jersey: The Gryphon Press. 1953.

"Review of Middleton industrial arts test." Ibid., pp. 558-59.

What Is a Person Like Who Has Achieved the Broad Objectives of Industrial Arts? St. Paul: St. Paul Public Schools Mimeograph Department. 1952. 54 pages.

HAROLD T. WIDDOWSON, M.A., Associate Professor

Central Region Trade and Industrial Conference Report 1952-53. Washington, D.C.: U. S. Office of Education Mimcograph Department. 1953. 65 pages.

University High School

EMMA M. BIRKMAIER, Ph.D., Associate Professor

"The modern language program." Chapter 7, pages 150-54 in Curriculum Trends and Teacher Education, 1953 Yearbook of the Association for Student Teaching. Ann Arbor: Edward Bros. 1953.

"Motivation in second language learning." 12 pages in Proceedings of the Sixth Annual University of Kentucky Foreign Language Conference. Lexington, Kentucky: University of Kentucky. 1953.

"Twentieth annual meeting of the A.A.T.G." German Quarterly, 26:55-61. January, 1953.

"Foreign language study gains in popularity." St. Paul Sunday Pioneer Press, May 24, 1953. Editor, German News. 1952-53.

Donovan A. Johnson, Ph.D., Associate Professor

"Special methods in academic majors." Pages 142-44 in Curriculum Trends and Teacher Education, Thirty-second Yearbook of the Association for Student Teaching. Lock Haven, Pennsylvania: The Association for Student Teaching. 1953.

"A unit on our number system." School Science and Mathematics, 52:556-61. October, 1952.
"A report card for marking achievement in mathematics." Mathematics Teacher, 45:423-26.
October, 1952.

- "Affiliated group activities." *Ibid.*, pp. 99-100. February, 1953. "Let's do something for the gifted." *Ibid.*, pp. 322-25. May, 1953.
- "Three dimensional graphs." Ibid., pp. 339-40.
- Co-editor, Aids to Teaching Department, Mathematics Teacher. 1952-53.

CLARENCE H. BOECK, Ph.D., Assistant Professor

"Teaching chemistry for scientific method and attitude development." Science Education, 37: 81-84. March, 1953.

Edith West, Ph.D., Assistant Professor

Editor, Special Bulletin of the Minnesota Council for the Social Studies, Resource Unit on the U.S.S.R. 1952-53.

Some Selected Sources of Materials for Social Studies Classes (1953 revision). Minneapolis: University of Minnesota Mimeograph Department. 1953. 9 pages.

ROBERT J. ANDERSON, M.A., Instructor

"The use of color photography in the classroom." Bulletin of the Minnesota Council for the Social Studies, 15:11-12. May, 1953.

Lyle M. Eakins, B.C.E., B.S., Instructor

Achievement Examinations for Secondary Schools: Elementary Algebra. Minneapolis: Educational Test Bureau. 1953. 4 pages.

"Test construction." Minnesota Mathematics Newsletter, 4:7-8. November, 1952.

"Test construction." Ibid., 5:9. February, 1953; p. 11. April, 1953.

Make-up editor, Minnesota Mathematics Newsletter. 1952-53.

STANLEY B. KEGLER, M.A., Instructor

"Teaching to overcome pupils' listening lag." Clearing House, 27:497-99. April, 1953.

THEODORE E. KELLOGG, M.A., Instructor

"Review of the Columbia Research Bureau plane geometry test" (with C. J. Hoyt). Review 422, pages 519-20 in Oscar Krisen Buros, editor. Fourth Mental Measurements Yearbook. Highland Park, New Jersey: The Gryphon Press. 1953.

"Review of the cooperative plane geometry test" (with C. J. Hoyt). Ibid., Review 423, pp. 520-21.

"Review of the Shaycoft plane geometry test" (with C. J. Hoyt). Ibid., Review 433, pp. 524-25.

"The new Minnesota state guide for instruction in mathematics." Minnesota Journal of Education, 33:23-24. January, 1953.

RUTH A. MARFELL, B.S., Instructor and Librarian

Reading Is Fun. Minneapolis: University of Minnesota Mimeograph Department. 1952. 3 pages.

LEE D. STARK, B.A., B.S., Instructor

French I-II Test. Minneapolis: Educational Test Bureau. May, 1953. 6 pages.

BEN R. WHITINGER, B.E., Instructor

Achievement Examination in Biology. Minneapolis: Educational Test Bureau. 1953. 6 pages.

BUREAU OF EDUCATIONAL RESEARCH

CYRIL J. HOYT, Ph.D., Associate Professor and Director of Educational Research Tables for Interpretation of Correlation and Reliability Coefficients (with C. L. Stunkard).

Minneapolis: University of Minnesota, College of Education. 1952. 36 pages.

"Review of Columbia Research Bureau plane geometry test" (with T. E. Kellogg). Review 422, pages 519-20 in Oscar Krisen Buros, editor, The Fourth Mental Measurements Yearbook. Highland Park, New Jersey: The Gryphon Press. 1953.

- "Review of cooperative plane geometry test" (with T. E. Kellogg). Ibid., Review 423, pp. 520-21.
- "Review of Shaycoft plane geometry test" (with T. E. Kellogg). Ibid., Review 433, pp. 524-25.
- "Procedure for determining number and nature of norm groups for the Minnesota Teacher Attitude Inventory" (with W. W. Cook). Educational and Psychological Measurement, 12:562-73. Winter, 1952.
- "Estimation of test reliability for unrestricted item scoring methods" (with C. L. Stunkard). *Ibid.*, pp. 756-58.
- "Excerpts from two instruments for appraising teaching competency" (with P. R. Grim).

 Journal of Educational Research, 46:705-10. May, 1953.
- Co-editor, Educational Research Department, Minnesota Journal of Education. 1952-53.

CLETUS J. CUMMISKEY, M.A., Research Fellow

"Are teacher and pupil skills related?" Minnesota Journal of Education, 33:22-24. January, 1953

CLAYTON L. STUNKARD, M.A., Research Fellow

- Tables for Interpretation of Correlation and Reliability Coefficients (with C. J. Hoyt). Minneapolis: University of Minnesota, College of Education. 1952. 36 pages.
- "Estimation of test reliability for unrestricted item scoring methods" (with C. J. Hoyt), Educational and Psychological Measurement, 12:75:-55. 55 inter, 1972.
- "Re: the situational quality" (with C. M. Hagen). Progressive Education, 30:127-28. February, 1953.

RAYMOND O. COLLIER, JR., M.A., Research Assistant

"Some applications of the method of pivotal condensation in statistical analysis." Journal of Experimental Education, 21:233-41. March, 1953.

SAMUEL T. MAYO, M.A., Research Assistant

"Validation of a test battery in a school of nursing." Nursing World, 126:16-17, 39. December, 1952

BUREAU OF FIELD STUDIES AND SURVEYS

Samuel W. Harvey, M.A., Instructor and Field Assistant

- School Building Surveys, East Grand Forks (with O. E. Domian). Minneapolis: Bureau of Field Studies and Surveys, College of Education, University of Minnesota. 1953. 179 pages.
- Supplementary Report, School Building Survey, Hibbing School District (with O. E. Domian).
 Minneapolis: Bureau of Field Studies and Surveys, College of Education, University of Minnesota, 1953, 37 pages.
- School Building Survey of the Northfield High School Area (with O. E. Domian). Minneapolis: Bureau of Field Studies and Surveys, College of Education, University of Minnesota. 1952. 225 pages.
- Educational Growth in East Grand Forks (with O. E. Domian and Lois M. Randall). East Grand Forks: Board of Education, 1953, 29 pages.
- School Building Needs of the Northfield High School Area (with O. E. Domian). Northfield: Board of Education. 1952. 28 pages.

ROY C. PRENTIS, B.E., M.A., Instructor and Field Assistant

- Minnesota Public School Facilities Survey—A Study of Selected Aspects of Minnesota Public Secondary Schools, Excluding Minneapolis, St. Paul and Duluth (with O. E. Domian, I. O. Friswold, and F. H. Smith). St. Paul: State Department of Education. 1953. 217 pages.
- "Educational programs in typical high schools." American School Board Journal, 126:47-48. May, 1953.

FRANK H. SMITH, M.A., Instructor and Field Assistant

Minnesota Public School Facilities Survey—A Study of Selected Aspects of Minnesota Public Secondary Schools, Excluding Minneapolis, St. Paul and Duluth (with O. E. Domian, I. O. Friswold, and R. C. Prentis). St. Paul: State Department of Education. 1953. 217 pages.

- School Building Survey, Buffalo Lake School District (with O. E. Domian). Minneapolis: Bureau of Field Studies and Surveys, College of Education, University of Minnesota. 1952. 109 pages.
- Their Education—Your Responsibility (Buffalo Lake) (with O. E. Domian and Emma L. Menssen). Buffalo Lake: Board of Education. 1952. 21 pages.

WILLIAM H. STRAND, M.A., Instructor and Field Assistant

- School Building Survey, Brookings, South Dakota (with O. E. Domian). Minneapolis: Bureau of Field Studies and Surveys, College of Education, University of Minnesota. 1953. 103
- School Building Survey, Crookston (with O. E. Domian). Minneapolis: Bureau of Field Studies and Surveys, College of Education, University of Minnesota. 1952. 181 pages.
- Better School Buildings for Brookings (with O. E. Domian). Brookings: Board of Education. 1953. 25 pages.
- School Building Survey of the Crookston Area (with O. E. Domian). Crookston: Board of Education. 1952. 32 pages.
- Supplement to School Building Survey, Faribault School District (with O. E. Domian). Minneapolis: Bureau of Field Studies and Surveys, College of Education, University of Minnesota. 1952. 21 pages.

KARL J. VANDER HORCK, B.A., Instructor and Field Assistant

- School Building Survey, Waterville (with O. E. Domian). Minneapolis: Bureau of Field Studies and Surveys, College of Education, University of Minnesota, 1952, 130 pages.
- Building for Your Children's Future (Waterville) (with O. E. Domian). Waterville: Board of Education. 1952, 28 pages.

Bureau of Institutional Research

ROBERT J. KELLER, Ph.D., Professor

- Criteria for the Accreditation of Private Secondary Schools. University of Minnesota, Committee on Institutional Relationships Bulletin. November, 1952. 11 pages.
- Survey of the Status and Use of Examinations in the Basic Sciences for the State of Minnesota (with R. S. Melton). Minneapolis: University of Minnesota, Bureau of Institutional Research Bulletin. May, 1953, 44 pages.
- Problems of Minnesota Junior Colleges. Minneapolis: University of Minnesota, Bureau of Institutional Research, February, 1953, 14 mineographed pages.
- What Happens to Former Students of the College of Science, Literature, and the Arts with Implications for College Teaching. Minneapolis: University of Minnesota, Bureau of Institutional Research. September 22, 1952. 19 mimeographed pages.
- Whither Junior College Education. Minneapolis: University of Minnesota, Bureau of Institutional Research. March 26, 1953. 7 mineographed pages.

GRADUATE SCHOOL

ADMINISTRATION

- THEODORE C. BLEGEN, Ph.D., Litt.D., L.H.D., Dean and Professor
- "Salute to Sherlock Holmes" (with E. W. McDiarmid). Pages 7-20 in T. C. Blegen and E. W. McDiarmid, editors, *Sherlock Holmes, Master Detective*. LaCrosse, Wisconsin: Sumac Press. 1952.
- "Along came Charles." Ibid., pp. 21-35
- "Foreword." Pages iii-iv in Roland S. Vaile, Red Wing Five Years Later. Minneapolis: University of Minnesota Press. 1952.

- "Foreword." Pages v-vi in F. Stuart Chapin, Social Science Research: Its Expanding Horizons.
 Minneapolis: Social Science Research Center of the Graduate School, 1953.
- "Introduction." Pages v-vi in Aagot Raaen, Measure of My Days. Fargo, North Dakota: North Dakota Institute for Regional Studies. 1953.
- "Toward a common front." School and Society, 76:161-67. September 13, 1952. Pages 18-30 in W. H. Cartwright and W. B. Hamilton, The Duke University Centennial Conference on Teacher Training in Historical Papers of the Trinity College Historical Society, Series XXX. Durham, N. C.: Duke University Press. 1953.
- "The Graduate School," Minnesota, Voice of the Alumni, 52:7. April, 1953.
- "The University in crisis 'Fidelity to trust.' " Ibid., pp. 5-8, 31. May-June, 1953.
- Review of Halvdan Koht, Historikar i lacre in American Historical Review, 58:74-76. October, 1952.

Minnetonka Family, The Saga of Saga Hill, 1952, 77 mimeographed pages.

JOHN G. DARLEY, Ph.D., Associate Dean and Professor

- "How we make up our minds." Journal of the American Association of University Women, 46:6-10. October, 1952.
- "Studies of group behavior: Leaders, followers, and isolates in small organized groups" (with W. E. Martin and N. Gross). Journal of Abnormal and Social Psychology, 47:838-42. October, 1952.
- "Studies of group behavior: II. Methodological problems in the study of interrelationships of group members" (with W. E. Martin and N. Gross). Educational and Psychological Measurement, 12:533-53. Winter, 1952.
- "Studies of group behavior: Factors associated with the productivity of groups" (with N. Gross and W. C. Martin). Journal of Applied Psychology, 36:396-403. December, 1952.
- "Reply to Eells' comment on Darley's 'Special Review.' " Ibid., p. 424.
- "Contract support of research in psychology." American Psychologist, 7:719-21. December, 1952.

HORMEL INSTITUTE

WALTER O. LUNDBERG, Ph.D., Professor and Director

- "Chemical and kinetic studies on the autoxidation of fatty acid esters" (with O. S. Privett).

 Pages 6-10 in Annual Report, The Hormel Institute of the University of Minnesota, 1951-52.

 Published for the Hormel Institute by the University of Minnesota Press.
- "The reaction mechanism of soybean lipoxidase" (with A. L. Tappel and P. D. Boyer). Journal of Biological Chemistry, 199:267-81. November, 1952.
- "Effect of temperature and antioxidants upon the lipoxidase-catalyzed oxidation of aqueous sodium linoleate" (with A. L. Tappel and P. D. Boyer). Archives of Biochemistry and Biophysics, 42:293-304. February, 1953.
- "Preparation of peroxide concentrates from autoxidized fatty acid esters" (with O. S. Privett and E. Christense Nickell). Journal of the American Oil Chemists' Society, 30:17-21. January, 1953.
- "Structure of hydroperoxides obtained from autoxidized methyl linoleate" (with O. S. Privett, N. A. Khan, W. E. Tolberg, and D. H. Wheeler). *Ibid.*, pp. 61-66. February, 1953.
- "Antioxidants and their uses." The Manufacturing Confectioner, 33:19. April, 1953.
- "Interrelationships of fecal, body, and dietary fats" (with L. N. Norcia). (Abstract.) Federation Proceedings, 12:252, 1953.
- Co-editor, Progress in the Chemistry of Fats and Other Lipids, Pergamon Press, London, 1952-53.

LAWRENCE E. CARPENTER, Ph.D., Associate Professor

- "The effect of products obtained from Streptomyces aureofaciens fermentations on the growth and reproduction of swine" (with Nora L. Larson). Pages 44-48 in Annual Report, The Hormel Institute of the University of Minnesota, 1951-52. Published for the Hormel Institute by the University of Minnesota Press.
- "Effect of nutrition on reproduction in swine" (with Nora L. Larson). Ibid., pp. 48-52.
- "Effects of 3-nitro-4-hydroxy phenyl arsonic acid in the diet of swine." Ibid., pp. 52-54.
- "Studies on swine dysentery" (with Nora L. Larson). Ibid., pp. 54-57.
- "The role of vitamin E in reproduction in swine." Ibid., p. 57.
- "Nutritive requirement of swine." Ibid., p. 58.

RALPH T. HOLMAN, Ph.D., Associate Professor

- "Chromatography of fatty acids and related substances." Pages 104-26 in Progress in the Chemistry of Fats and Other Lipids, Vol. I. London: Pergamon Press. 1952.
- "Application of chromatography to separation problems in the lipid field." Pages 31-33 in Annual Report, The Hormel Institute of the University of Minnesota, 1951-52. Published for the Hormel Institute by the University of Minnesota Press.
- "Chemistry and metabolism of the essential fatty acids." Ibid., pp. 34-37.
- "Polyethenoid fatty acid metabolism. VI. Effect of pyridoxine on essential fatty acid conversions" (with P. W. Witten). Archives of Biochemistry and Biophysics, 41:266-73. December, 1952.

GEORGE A. YOUNG, B.A., D.V.M., Associate Professor and Assistant Director

- "Influenza vaccines for the reduction of suckling pig mortalities." Pages 58-61 in Annual Report. The Hormel Institute of the University of Minnesota, 1951-52. Published for the Hormel Institute by the University of Minnesota Press.
- "The effects of swine influenza and other swine disease viruses on fetal and suckling pig mortalities." Ibid., pp. 62-66.
- "Factors in natural resistance to virus infections." Ibid., pp. 66-68.
- "The establishment and maintenance of a disease-free swine population." Ibid., pp. 68-70.
- "A preliminary report on the etiology of edema of newborn pigs." Journal of the American Veterinary Medical Association, 121:394. November, 1952.
- "Dynamite in the livestock industry." Hormel Farmer, 15:3-6. September 15, 1952.
- "The experimental production of malformations and other abnormalities in fetal pigs by means of attenuated hog cholera virus" (with A. J. Luedke, R. L. Kitchell, and J. H. Sautter). Pages 146-50 in the Proceedings of the Nineticth Annual Meeting of the American Veterinary Medical Association, 1953.
- "We can eradicate swine diseases." Iowa State College Veterinarian, Vol. 15, No. 3, pp. 147-49.
- "An approach to eradication of swine diseases" (with R. W. Hinz and N. R. Underdahl).

 A 15 minute colored sound 16 mm. film. 1952-53.

JACQUES R. CHIPAULT, Ph.D., Assistant Professor

- "Preparation of esters of unsaturated fatty acids and a study of their film-forming properties."

 Pages 15-18 in Annual Report, The Hormel Institute of the University of Minnesota, 1951-52.

 Published for the Hormel Institute by the University of Minnesota Press.
- "Studies of fat metabolism in human subjects." Ibid., pp. 20-25.
- "A study of the antioxidants of natural spices." Ibid., pp. 25-30.
- "Studies of inhibitors of gastric secretion." Ibid., pp. 38-42.

ARNOLD J. LUND, Ph.D., Assistant Professor

- "Investigation of changes that take place in foods during storage in the frozen condition."

 Pages 70-79 in Annual Report, The Hormel Institute of the University of Minnesota, 1951-52.

 Published for the Hormel Institute by the University of Minnesota Press.
- "Investigation of factors influencing food sterilization and preservation." Ibid., pp. 79-82.

ORVILLE S. PRIVETT, Ph.D., Assistant Professor

- "Chemical and kinetic studies on the autoxidation of fatty acid esters" (with W. O. Lundberg).

 Pages 6-10 in Annual Report, The Hormel Institute of the University of Minnesota, 1951-52.

 Published for the Hormel Institute by the University of Minnesota Press.
- "The deterioration of fatty acids in meats during storage." Ibid., pp. 10-14.
- "Survey of literature on the fatty acid content of foods." Ibid., pp. 14-15.
- "Development of new products and uses for fats of animal origin." Ibid., pp. 19-20.
- "Development of a commercially suitable emulsifier for animal shortenings." Ibid., p. 19.
- "Solubilities of fatty acids and derivatives in several solvents." Ibid., pp. 37-38.
- "Preparation of peroxide concentrates from autoxidized fatty acid esters" (with W. O. Lundberg and E. Christense Nickell). Journal of the American Oil Chemists' Society, 30:17-21. January, 1953.
- "Structure of hydroperoxides obtained from autoxidized methyl linoleate" (with W. O. Lundberg, N. A. Khan, W. E. Tolberg, and D. H. Wheeler). Journal of the American Oil Chemists' Society, 30:61-66. February, 1953.

DAVID C. ENGLAND, Ph.D., Research Fellow

- "The Minnesota inbred Poland China lines." Inbred News, Vol. 2, No. 2, pp. 7-11. July and August, 1952; Vol. 2, No. 3, pp. 1-8. September-October, 1952.
- "History of the breeds. No. IV. The Montana No. 1." Ibid., Vol. 3, No. 5, pp. 4-9. February-April, 1953.
- "The effects of genetic diversity and performance of inbred lines per se on hybrid vigor in swine" (with L. M. Winters). (Abstract.) Journal of Animal Science, 11:740. November, 1952.

NURUL A. KHAN, Ph.D., Research Fellow

- "Ozonization and oxidation of stearolic acid to 9,10-diketostearic acid" (with M. S. Newman).

 Journal of Organic Chemistry, 17:1063-65, July, 1952.
- "Selective reduction of the unsaturated compounds. II. Preparation and properties of oleic acid and methyl oleate." Journal of the American Oil Chemists' Society, 30:40-43. January, 1953.
- "Structure of hydroperoxides obtained from autoxidized methyl linoleate" (with O. S. Privett, W. O. Lundberg, W. E. Tolberg, and D. H. Wheeler). *Ibid.*, pp. 61-66. February, 1953. "Selective reduction of the unsaturated compounds: Douterization of the gapen pickel catalysts."
- "Selective reduction of the unsaturated compounds: Deuterization of the raney nickel catalysts." Science, 117:130. February, 1953.

Nora L. Larson, Ph.D., Research Fellow

- "The effect of products obtained from Streptomyces aureofaciens fermentations on the growth and reproduction of swine" (with L. E. Carpenter). Pages 44-48 in Annual Report, The Hormel Institute of the University of Minnesota, 1951-52. Published for the Hormel Institute by the University of Minnesota Press.
- "Effect of nutrition on reproduction in swine" (with L. E. Carpenter). Ibid., pp. 48-52.
- "Studies on swine dysentery" (with L. E. Carpenter). Ibid., pp. 54-57.
- "Absence of meso inositol in purified amylase preparations from different sources" (with Mary L. Caldwell and Betty Huston). Cereal Chemistry, 29:463-69. November, 1952.

LEONARD N. NORCIA, Ph.D., Research Fellow

"Interrelationships of fecal, body, and dietary fats" (with W. O. Lundberg). (Abstract.) Federation Proceedings, 12:252. 1953.

MAYO FOUNDATION FOR MEDICAL EDUCATION AND RESEARCH

ANATOMY

WILLIAM H. HOLLINSHEAD, Ph.D., Professor

"Anatomy of the endocrine glands." Surgical Clinics of North America, pp. 1115-40. August, 1952.

Pathologic Anatomy

JESSE E. EDWARDS, M.D., Associate Professor

- "Congenital malformations of the heart and great vessels." Chapter 5, pages 266-503 in Sylvester Emanuel Gould, editor, Pathology of the Heart. Springfield, Illinois: Charles C Thomas. 1953.
- "Congenital malformation of the heart. Origin of transposed great vessels from the right ventricle associated with atresia of the left ventricular outlet, double orifice of the mitral valve, and single coronary artery" (with J. W. James and J. W. DuShane). Laboratory Investigation, 1:197-207. 1952.
- "Malformations of the aortic arch system manifested as 'vascular ring.' " Ibid., 2:56-75. January-February, 1953.
- "Biopsy of the lung and cardiac catheterization studies in patients treated surgically for mitral stenosis" (with R. G. Tompkins, R. T. Hood, Jr., J. W. Kirklin, and H. B. Burchell).

- (Abstract.) Proceedings of the Central Society for Clinical Research, 25:26-27. 1952; Journal of Laboratory and Clinical Medicine, 40:795-96. November, 1952.
- "The degree of coronary atherosclerosis in bilaterally oophorectomized women" (with J. H. Wuest). (Abstract.) Proceedings of the Central Society for Clinical Research, 25:99. 1952; (with J. H. Wuest and T. J. Dry), Circulation, 6:461-62. September, 1952; (with J. H. Wuest), Journal of Laboratory and Clinical Medicine, 40:963. December, 1952.
- "Thrombo-embolism in Acute and in Healed Myocardial Infarction"
 - "I. Intracardiac mural thrombosis" (with R. A. Jordan, R. D. Miller, and R. L. Parker). Circulation, 6:1-6. July, 1952.
 - "II. Systemic and pulmonary arterial occlusion" (with R. D. Miller, R. A. Jordan, and R. L. Parker). Ibid., pp. 7-15.
- "Presentle medial calcinosis of the arteries of the extremities" (with N. W. Barker and H. L. Smith). (Abstract.) Ibid., p. 468. September, 1952.
- "Measurement of arterioles in coarctation of the aorta" (with R. C. Painter and E. A. Hines, Jr.). Ibid., pp. 727-31. November, 1952.
- "Studies of the mitral valve, I. Anatomic features of the normal mitral valve and associated structures" (with E. E. Rusted and C. H. Scheifley). Ibid., pp. 825-31. December, 1952. "Rheumatic mitral insufficiency" (with H. B. Burchell). Ibid., 7:747-56. May, 1953.
- "Cardiac clinics. CXXXIX. Myxoma of the left atrium clinically simulating mitral stenosis: Report of case and pathologic studies" (with W. J. Block, Jr. and R. L. Parker). Proceedings of the Staff Meetings of the Mayo Clinic, 27:361-71. September 10, 1952.
- "Pathologic features of Epstein's malformation of the tricuspid valve." Ibid., 28:89-94. February 25, 1953.
- "Pathologic study of hearts previously catheterized" (with H. F. Helmholz, Jr., J. W. DuShane, and H. B. Burchell), Ibid., pp. 113-20, February 25, 1953.
- "Cardiae aneurysms: Clinicopathologic studies" (with W. S. Phares and H. B. Burchell). Ibid., pp. 264-71. May 6, 1953.
- "Cardiac clinics, CXL, Congenital pulmonary stenosis with intact ventricular septum in persons more than 50 years of age: Report of 2 cases" (with J. E. Geraci and H. B. Burchell). Ibid., pp. 346-52. June 17, 1953.
- "Amyloid localized to the heart; analysis of twenty-nine cases" (with A. J. Josselson and R. D. Pruitt). American Medical Association Archives of Pathology, 54:359-67. October, 1952.
- "Bilateral ductus arteriosus representing persistence of each sixth aortic arch; report of a case in which there were associated isolated dextrocardia and ventricular septal defects" (with J. R. Kelsey, Jr. and C. E. Gilmore). Ibid., 55:154-61. February, 1953.
- "Hemopericardium complicating myocardial infarction in the absence of cardiac rupture: Report of three cases" (with M. W. Anderson and N. A. Christensen). American Medical Association Archives of Internal Medicine, 90:634-45. November, 1952.
- "Double aortic arch associated with coarctation of the aorta: Surgically treated patient" (with T. J. Dry, O. T. Clagett, R. F. Saxon, Jr., and D. G. Pugh). Diseases of the Chest, 23:36-42. January, 1953.
- "Effect of cortisone on healing of experimentally produced myocardial infarction in dogs" (with N. G. Hepper and R. D. Pruitt). (Abstract.) Federation Proceedings, 12:391. March, 1953.
- "A method for the removal of parotid glandular tissue at necropsy" (with L. B. Thomas and P. T. Sloss). American Journal of Clinical Pathology, 23:228-31. March, 1953.
- "The bronchial arteries, IV. Experimental bronchial arterial occlusion and bronchial obstruction" (with F. H. Ellis and J. H. Grindlay), Journal of Thoracic Surgery, 25:358-65, April, 1953.

Anesthesiology

John S. Lundy, M.D., Professor

- "Anesthesia and childbirth." (Editorial.) Journal-Lancet, 72:305. June, 1952.
- "Section on pain." (Editorial.) *Ibid.*, p. 534. November, 1952. "Pain, the physiologic trigger." (Editorial.) *Ibid.*, 73:69. February, 1953.
- "Continuous spinal anesthesia in intracranial procedures" (with A. Uihlein). Proceedings of the Staff Meetings of the Mayo Clinic, 27:317-21. July 30, 1952.
- "Annual report for 1951 of the section of anesthesiology: Including data and remarks concerning blood transfusion and the use of plasma substitutes. I and II" (with R. C. Adams, T. H. Seldon, J. W. Pender, A. Faulconer, Jr., J. A. Paulson, R. W. Ridley, J. E. Osborn. and R. F. Courtin). Ibid., pp. 512-26. December 3, 1952.

- "Dextran for nephrotic edema: Clinical experience" (with J. T. Olive, Jr. and S. D. Mills). Ibid., 28:199-204. April 8, 1953.
- "The use and abuse of cortisone in surgery" (with C. H. Slocumb). Surgical Clinics of North America, pp. 1105-1107. August, 1952.
- "Evaluation of stellate ganglion block for acute focal cerebral infarcts; preliminary report of observations on eighty-seven patients" (with C. H. Millikan and L. A. Smith). Journal of the American Medical Association, 151:438-40. February 7, 1953.
- "Anesthesiology as an aid to other fields of medical practice." *Ibid.*, 152:805-806. June 27, 1953. "Use of Dextran (macrodex) in Burns"
 - "I. Review of the physiology of dextran" (with E. V. Johnston). American Journal of Surgery, 85:713-19. June, 1953.
 - "II. Clinical evaluation in eight cases" (with E. V. Johnston, W. A. Bennett, and J. M. Janes.) Ibid., pp. 720-28.

THOMAS H. SELDON, M.D.C.M., M.S. in Anesth., Associate Professor

- "Annual report for 1951 of the section of anesthesiology: Including data and remarks concerning blood transfusion and the use of plasma substitutes. I and II" (with J. S. Lundy, R. C. Adams, J. W. Pender, A. Faulconer, Jr., J. A. Paulson, R. W. Ridley, J. E. Osborn, and R. F. Courtin). Proceedings of the Staff Meetings of the Mayo Clinic, 27:512-26. December 3, 1952.
- "Cardiac massage for cardiac arrest during surgery" (with N. J. Bellegie and E. S. Judd). Ibid., 27:305-309. July 30, 1952.
- "An aid to the induction of general anesthesia in young children." *Ibid.*, pp. 371-72. September 10, 1952.
- "Blood transfusions and expanders of blood volume." Minnesota Medicine, 35:958-60. October, 1952.
- "Cerebral anoxia during anesthesia; prognostic significance of electroencephalographic changes" (with Y. K. J. Gronqvist and A. Faulconer, Jr.). Annales Chirurgiae et Gynaecologiae Fenniae, 41:149-59. 1952.

ALBERT FAULCONER, JR., M.D., M.S. in Anesth., Assistant Professor

- "Cerebral anoxia during anesthesia; prognostic significance of electroencephalographic changes" (with Y. K. J. Gronqvist and T. H. Seldon). Annales Chirurgiae et Gynaecologiae Fenniae, 41:149-59. 1952.
- "Respiratory studies during anesthesia with ether and with pentothal sodium" (with R. T. Patrick and J. Saari). Anesthesiology, 13:252-74. May, 1952.
- "Correlation of concentrations of ether in arterial blood with electro-encephalographic patterns occurring during ether-oxygen and during nitrous oxide, oxygen and ether anesthesia of human surgical patients." Anesthesiology, 13:361-69. July, 1952.
- "Annual report for 1951 of the section of anesthesiology: Including data and remarks concerning blood transfusion and the use of plasma substitutes. I and II" (with J. S. Lundy, R. C. Adams, T. H. Seldon, J. W. Pender, J. A. Paulson, R. W. Ridley, J. E. Osborn, and R. F. Courtin). Proceedings of the Staff Meetings of the Mayo Clinic, 27:512-26. December 3, 1952.
- "Some effects of barbiturate anesthesia on the depth electrogram" (with R. G. Bickford, C. W. Sem-Jacobsen, M. C. Petersen, H. W. Dodge, Jr., and F. J. Schnugg). *Ibid.*, 28:162-65. March 25, 1953.
- "Electroencephalographic patterns during anesthesia with cyclopropane: Correlation with concentration of cyclopropane in arterial blood" (with S. Possati, R. G. Bickford, and R. C. Hunter). Current Researches in Anesthesia and Analgesia, 32:130-35. March-April, 1953.

JOHN W. PENDER, M.D., M.S. in Anesth., Assistant Professor

- "Annual report for 1951 of the section of anesthesiology: Including data and remarks concerning blood transfusion and the use of plasma substitutes. I and II" (with J. S. Lundy, R. C. Adams, T. H. Seldon, A. Faulconer, Jr., J. A. Paulson, R. W. Ridley, J. E. Osborn, and R. F. Courtin). Proceedings of the Staff Meetings of the Mayo Clinic, 27:512-26. December 3, 1952.
- "Care of the patient during operation on the mitral valve for stenosis." Ibid., pp. 310-16. July 30, 1952.
- "Rh factor and the anesthesiologist." Anesthesiology, 13:608-14. November, 1952.

- "Anesthesia for mitral commissurotomy." Ibid., 14:77-84. January, 1953.
- "Preparation of patients for peroral endoscopy" (with A. M. Olsen). Journal of the American Medical Association, 150:842-44. November 1, 1952.

RAYMOND F. COURTIN, M.S. in Anesth., Instructor

"Some practical aspects of lumbar puncture." Postgraduate Medicine, 12:157-61. August, 1952.

"Annual report for 1951 of the section of anesthesiology: Including data and remarks concerning blood transfusion and the use of plasma substitutes. I and 11" (with J. S. Lundy, R. C. Adams, T. H. Seldon, J. W. Pender, A. Faulconer, Jr., J. A. Paulson, J. E. Osborn, and R. W. Ridley). Proceedings of the Staff Meetings of the Mayo Clinic, 27:512-26. December 3, 1952.

ROBERT T. PATRICK, M.D., M.S. in Anesth., Instructor

- "Respiratory studies during anesthesia with ether and with pentothal sodium" (with A. Faulconer, Jr., and J. Saari). Anesthesiology, 13:252-74. May, 1952.
- "Anesthesia for patients with certain diseases of the endocrine glands" (with L. O. Underdahl and R. C. Adams). Surgical Clinics of North America, pp. 1109-14. August, 1952.

JOHN A. PAULSON, M.D., M.S. in Anesth., Instructor

- "Thiopental sodium and ether anesthesia." Journal of the American Medical Association, 150: 983-87. November 8, 1952.
- "Annual report for 1951 of the section of anesthesiology: Including data and remarks concerning blood transfusion and the use of plasma substitutes. I and II" (with J. S. Lundy, R. C. Adams, T. H. Seldon, J. W. Pender, A. Faulconer, Jr., R. W. Ridley, J. E. Osborn, and R. F. Courtin). Proceedings of the Staff Meetings of the Mayo Clinic, 27:512-26. December 3, 1952.

ROGER W. RIDLEY, M.D., M.S. in Anesth., Instructor

"Annual report for 1951 of the section of anesthesiology: Including data and remarks concerning blood transfusion and the use of plasma substitutes. I and II" (with J. S. Lundy, R. C. Adams, T. H. Seldon, J. W. Pender, A. Faulconer, Jr., J. A. Paulson, J. E. Osborn, and R. F. Courtin). Proceedings of the Staff Meetings of the Mayo Clinic, 27:512-26. December 3, 1952

"Safety in anesthesia." South Dakota Journal of Medicine and Pharmacy, 6:113-16. May, 1953.

BACTERIOLOGY

FORDYCE R. HEILMAN, M.D., Ph.D. in Bact., Professor

- "Subacute bacterial endocarditis" (with W. E. Herrell). Pages 265-73 in Lewis Thomas, editor, Symposium on Rheumatic Fever. Minneapolis: University of Minnesota Press. 1952.
- "Concentration of antibiotics in the brain" (with W. E. Wellman, H. W. Dodge, Jr., and M. C. Petersen). (Abstract.) Proceedings of the Central Society for Clinical Research, 25:96-97. 1952; Journal of Laboratory and Clinical Medicine, 40:960-61. December, 1952.
- "Some laboratory and clinical observations on a new antibiotic, erythromycin (ilotycin)" (with W. E. Herrell, W. E. Wellman, and J. E. Geraci). Proceedings of the Staff Meetings of the Mayo Clinic, 27:285-304. July 16, 1952.
- "Effect of stilbamidine on blastomycosis in mice." Ibid., pp. 455-58. November 5, 1952.
- "Micrococcic (staphylococcic) enteritis as a complication of antibiotic therapy: Its response to erythromycin" (with W. H. Dearing, E. Warren, and Dorothy Rose). *Ibid.*, 28:121-34. March 11, 1953.

Lyle A. Weed, M.D., Ph.D., Associate Professor

- "Limitations of histopathologic technics in the diagnosis of granulomas" (with J. R. McDonald). Surgical Clinics of North America, pp. 1235-45. August, 1952.
- "The bacteriologic examination of tissue." (Editorial.) Surgery, Gynecology and Obstetrics, 95: 519-21. October, 1952.
- "El examen bacteriologico de los tejidos." El Dia Medico, 24:2020-21. November 13, 1952.

GERALD M. NEEDHAM, Ph.D., Assistant Professor

- "Pasteurella multocida in suppurative diseases of the respiratory tract" (with A. M. Olsen).

 American Journal of Medical Science, 224:77-81. July, 1952.
- "Recent changes in sensitivity of micrococcus pyogenes to various antibiotic agents" (with D. R. Nichols). Journal of Laboratory and Clinical Medicine, 41:150-56. January, 1953.

JOHN A. ULRICH, Ph.D., Instructor

"Kerion caused by trichophyton rubrum; report of two cases" (with W. M. Weber). American Medical Association Archives of Dermatology and Syphilology, 66:624-26. November, 1952.

BIOCHEMISTRY

HAROLD L. MASON, Ph.D., Professor

- "Adrenal function in surgical patients: Comparison in healthy and in chronically ill, debilitated patients" (wth F. H. Ellis, Jr. and J. T. Priestley). American College of Surgeons Clinical Congress, Proceedings of the Surgical Forum, 38:564-71. 1952.
- "Comparative metabolic effects of the intramuscular use of cortisone acetate and 17-hydroxy-corticosterone (compound F) acetate" (with R. M. Salassa, M. H. Power and R. G. Sprague). Journal of Clinical Investigation, 31:658. June, 1952.
- "Urinary formaldehydogenic corticoid as determined after enzymatic hydrolysis in normal subjects and in patients with adrenal and hypertensive disease" (with Harriet P. Dustan, A. C. Corcoran, and Geraldine Nickell). *Ibid.*, 32:60-67. January, 1953. "Values for fecal urobilinogen in childhood" (with S. D. Mills and Elizabeth Maclay). *American*
- "Values for fecal urobilinogen in childhood" (with S. D. Mills and Elizabeth Maclay). American Medical Association American Journal of Diseases of Children, 84:322-26. September, 1952.
- "Use of cortisone for congenital adrenal hyperplasia in the male: Report of case" (with C. F. Gastineau, G. B. Logan, and A. Albert). Journal of Clinical Endocrinology and Metabolism, 13:724-29. June, 1953.

BIOMETRY AND MEDICAL STATISTICS

ROBERT P. GAGE, M.S., Instructor

"Prognosis of angina pectoris: Observations in 6,882 cases" (with W. J. Block, Jr., E. L. Crumpacker, and T. J. Dry). Journal of the American Medical Association, 150:259-64. September 27, 1952.

BIOPHYSICS

EDWARD J. BALDES, Ph.D. in Biophys., Ph.D. in Physiol., Professor

- "Crash-worthiness of aircraft and crash injury prevention" (with J. J. Ryan). Journal of Aviation Medicine, 23:433-38. October, 1952.
- "Origin of the heart sounds (motion picture with sound recording)" (with H. E. Essex and H. L. Smith). (Abstract.) Federation Proceedings, 12:40. March, 1953.
- "Capillary microscopic examination in skin diseases" (with O. K. Gilje and P. A. O'Leary).

 Proceedings of the Staff Meetings of the Mayo Clinic, 28:287. May 20, 1953.

KENNETH N. OGLE, Ph.D., Professor

- "Physiologic optics." Pages 53-57 in Progress in Ophthalmology and Otolaryngology. Vol. 1. New York: Grune and Stratton. 1952.
- "Disparity limits of stereopsis." American Medical Association Archives of Ophthalmology, 48: 50-60. July, 1952.
- "Observations on vertical divergences and hyperphorias" (with A. deH. Prangen). Ibid., 49: 313-34. March, 1953.
- "Fundus photographs in color using a high-speed flash tube in the Zeiss retinal camera" (with C. W. Rucker). *Ibid.*, pp. 435-37. April, 1953.
- "On the limits of stereoscopic vision." Journal of Experimental Psychology, 44:253-59. October, 1952.

- "Application of high speed flash tube to photographing the fundus of the eye in color" (with M. Jacobs). Review of Scientific Instruments, 24:52-55. January, 1953.
- "Residual accommodation under homatropinecocaine cycloplegia" (with P. M. Brickley).

 *American Journal of Ophthalmology, 36:649-60. May, 1953.

EXPERIMENTAL BIOLOGY

George M. Higgins, Ph.D., Professor

- "Influence of the pituitary-adrenal axis on the hemogram of febrile white rats" (with W. L. Hubler, Julia F. Herrick, Mary J. Woods, and G. Christensen). Archives of Physical Medicine and Rehabilitation, 33:391-98. July, 1952.
- "Lack of effect of adrenalectomy and of administration of cortisone on concentration of histamine in blood of rabbits" (with P. B. Dews and C. F. Code). (Abstract.) American Journal of Physiology, 171:719. December, 1952.

MEDICINE

EDGAR V. ALLEN, M.D., M.S. in Med., Professor

- Enfermedades Vasculares Perifericas (with N. W. Barker and E. A. Hines, Jr.). Buenos Aires: Jose Bernades. 1952. 1022 pages.
- "Sympathectomy for essential hypertension." Circulation, 6:131-40. July, 1952.
- "A method for increasing blood flow to the extremities by simple conservation of body heat: Preliminary report of effect of an insulated plastic boot applied to the lower extremities" (with K. R. Woolling, Grace M. Roth, and K. G. Wakim). Proceedings of the Staff Meetings of the Mayo Clinic, 27:393-401. October 8, 1952.
- "The effect of adrenolytic drugs on pheochromocytoma with functioning metastatic lesions: Report of case" (with W. G. Bannon), Ibid., pp. 459-64, November 5, 1952,
- "Symposium on the treatment of essential hypertension: Introduction." *Ibid.*, pp. 473-74. November 19, 1952.
- "A survey of opinion about sympathectomy for essential hypertension." Ibid., pp. 495-500.

J. Arnold Bargen, M.D., M.S. in Med., Professor

- "Nutritional and metabolic disturbances in ulcerative colitis." Pages 83-98 in Nutrition in the Practice of Medicine with Comments on Nutrition, Disease and Geography, New York: National Vitamin Foundation, Inc. 1952.
- "Pseudomembranous enterocolitis: Clinicopathologic study of fourteen cases in which the disease was not preceded by an operation" (with M. S. Kleckner, Jr. and A. H. Baggenstoss). Gastroenterology, 21:212-22. June, 1952.
- "Hepatic lesions in the living patient with chronic ulcerative colitis as demonstrated by needle biopsy" (with M. S. Kleckner, Jr., M. H. Stauffer, and M. B. Dockerty). *Ibid.*, 22:13-33. September, 1952.
- "Painful anal lesions in intestinal disease" (with R. J. Jackman). Journal-Lancet, 72:530-32. November, 1952.
- "Problems of a patient with ileac stoma; report of a case with successful adjustment" (with A. G. Rogers). Journal of the American Medical Association, 151:815-17. March 7, 1953.
- "A study of masses in the right lower quadrant of the abdomen" (with JD Mortensen). Minnesota Medicine, 36:481-85, May, 1953.
- "Acute pseudomembranous enterocolitis" (with A. H. Baggenstoss and M. S. Kleckner, Jr.).

 Proceedings of the Staff Meetings of the Mayo Clinic, 28:313-19, June 3, 1953.

Nelson W. Barker, M.D., M.S. in Med., Professor

- Enfermedades Vasculares Perifericas (with E. V. Allen and E. A. Hines, Jr.). Buenos Aires: Jose Bernades. 1952. 1022 pages.
- "Preliminary studies of a new anticoagulant drug" (with D. A. Scholz). Proceedings of the Staff Meetings of the Mayo Clinic, 27:332-35. August 13, 1952.
- "Presenile medial calcinosis of the arteries of the extremities" (with H. L. Smith and J. E. Edwards). (Abstract.) Circulation, 6:468. September, 1952.

"The comparative effects of menadione sodium bisulfite and vitamin K₁ on the hypoprothrombinemia induced by dicumarol" (with W. G. Bannon and C. A. Owen, Jr.). Journal of Laboratory and Clinical Medicine, 41:393-404. March, 1953.

ARLIE R. BARNES, M.D., M.S. in Med., Professor

"Acute rheumatic fever treated with cortisone and corticotropin" (with II. L. Smith, C. II. Slocumb, H. F. Polley, and P. S. Hench). Pages 274-90 in Lewis Thomas, editor, Symposium on Rheumatic Fever. Minneapolis: University of Minnesota Press. 1952.

Mandred W. Comfort, M.D., M.S. in Neur., Professor

- "Medically treated small gastric ulcer; five year follow-up study of four hundred fourteen patients" (with J. C. Cain, G. L. Jordan, Jr., and H. K. Gray). Journal of the American Medical Association, 150:781-84. October 25, 1952.
- "Nontropical sprue: Observations on absorption and metabolism" (with E. E. Wollaeger, A. B. Taylor, and M. H. Power). Gastroenterology, 23:155-78. February, 1953.

SAMUEL F. HAINES, M.D., M.S. in Med., Professor

"Clinical orbitonometry in Graves' disease" (with T. P. Kearns and J. W. Henderson).

**American Journal of Ophthalmology, 36:45-55, January, 1953.

Frank J. Heck, M.D., M.S. in Path., Professor

- "Aplastic anemia associated with the administration of chloramphenicol" (with M. M. Hargraves and S. D. Mills). Proceedings of the Staff Meetings of the Mayo Clinic, 27:280-81. July 16, 1952; Journal of the American Medical Association, 149:1293-1300. August 2, 1952.
- "Treatment of anemia." Minnesota Medicine, 36:40-44. January, 1953.
- "The influence of drugs on blood and bone marrow." Postgraduate Medicine, 13:185-93. March, 1953; Bulletin of the Academy of Medicine of Cleveland, 38:11-12. April, 1953; pp. 11-12. May, 1953.

PHILIP S. HENCH, M.D., M.S. in Med., Professor

- "Acute rheumatic fever treated with cortisone and corticotropin" (with A. R. Barnes, H. L. Smith, C. H. Slocumb, and H. F. Polley). Pages 274-90 in Lewis Thomas, editor, Symposium on Rheumatic Fever. Minneapolis: University of Minnesota Press. 1952.
- "Cortisone and rheumatoid arthritis." Pages 1-14 in Proceedings of the Conference on the Effects of Cortisone. New Jersey: Merck & Co., Inc. 1952.
- "Presentation of the Kober medal to Edward Calvin Kendall, Ph.D., Sc.D." Transactions of the Association of American Physicians, 65:42-51, 1952.
- "Comparative effects of hydrocortisone, hydrocortisone acetate, and cortisone acetate in rheumatoid arthritis" (with L. E. Ward, H. F. Polley, and C. II. Slocumb). (Abstract.) Proceedings of the Central Society for Clinical Research, 25:95. 1952; Journal of Laboratory and Clinical Medicine, 40:959. December, 1952.
- "The effects of hormones and vitamins on rheumatoid arthritis with special reference to cortisone, hydrocortisone and corticotropin." *Internationale Zeitschrift für Vitaminforschung*, 23: 259-74, 1952.
- "Cortisone in treatment of rheumatoid arthritis" (with L. E. Ward, H. F. Polley, and C. H. Slocumb). Journal of the American Medical Association, 152:119-26. May 9, 1953.

EDGAR A. HINES, JR., M.D., M.A., M.S. in Med., Professor

- Enfermedades Vasculares Perifericas (with E. V. Allen and N. W. Barker). Buenos Aires: Jose Bernades. 1952, 1022 pages.
- "Arteriosclerotic popliteal aneurysm: A clinical follow-up study" (with R. W. Gifford, Jr. and J. M. Janes). (Abstract.) Circulation, 6:473. September, 1952.
- "Measurement of arterioles in coarctation of the aorta" (with R. C. Painter and J. E. Edwards). *Ibid.*, pp. 727-31. November, 1952.
- "New drugs in the treatment of hypertension." Minnesota Medicine, 35:1021-24. November, 1952. "Potassium thiocyanate and sodium nitroprusside." Proceedings of the Staff Meetings of the Mayo Clinic, 27:485-88. November 19, 1952.
- "Delirious reactions secondary to thiocyanate therapy of hypertension" (with C. A. Domzalski, Jr. and L. C. Kolb). *Ibid.*, 28:272-80. May 6, 1953.

- "An analysis and follow-up study of one hundred popliteal aneurysms" (with R. W. Gifford, Jr. and J. M. Janes). Surgery, 33:284-93. February, 1953.
- "The medical treatment of occlusive arterial disease of the extremities." Pennsylvania Medical Journal, 56:185-87. March, 1953.

F. RAYMOND KEATING, JR., M.D., M.S. in Med., Professor

- "The metabolism of radiothyroxine in exophthalmic goiter" (with R. S. Benua and A. Albert).

 Transactions of the American Goiter Association, pp. 218-30. 1952; Journal of Clinical Endocrinology and Metabolism, 12:1461-73. November, 1952.
- "The enterohepatic circulation of radiothyroxine" (with A. Albert). Transactions of the American Goiter Association, pp. 231-38. 1952.
- "Tumors and hyperplasia of the parathyroid glands; a review of the pathological findings in 140 cases of primary hyperparathyroidism" (with L. B. Woolner and B. M. Black). Cancer, 5:1069-88. November, 1952.
- "The role of the gastrointestinal tract, including the liver, in the metabolism of radiothyroxine" (with A. Albert, Nona Lorenz, and Elizabeth Ford). Endocrinology, 51:427-43. November, 1952.
- "Distribution and metabolism of radioactive 1-triiodothyronine compared with radioactive 1-thyroxine in the rat" (with A. Albert). (Abstract.) Journal of Clinical Investigation, 32:580. June, 1953.

HERMAN J. MOERSCH, M.D., M.S. in Med., Professor

- "Intrathoracic tracheal tumors: Development of surgical technics for their removal" (with O.T. Clagett and J. H. Grindlay). Annals of Surgery, 136:520-30. September, 1952; Transactions of the American Surgical Association, 70:224-34, 1952.
- "Problems in differential diagnosis of lesions of the lower portion of the esophagus and the cardia." Annals of Otolaryngology, Rhinology and Laryngology, 61:976-86. December, 1952.
- "A study of esophageal pressures in normal persons and patients with cardiospasm" (with J. W. Butin, A. M. Olsen, and C. F. Code). Gastroenterology, 23:278-91. February, 1953.
- "The significance of cell types in bronchogenic carcinoma" (with J. R. McDonald). Diseases of the Chest, 23:621-33. June, 1953.

EDWARD H. RYNEARSON, M.D., M.S. in Med., Professor

"Medical aspects of hypoglycemia" (with P. G. Skillern). Journal of Clinical Endocrinology and Metabolism, 13:587-603. May, 1953.

HARRY L. SMITH, M.D., M.S. in Med., Professor

- "Acute rheumatic fever treated with cortisone and corticotropin" (with A. R. Barnes, C. H. Slocumb, H. F. Polley, and P. S. Hench). Pages 274-90 in Lewis Thomas, editor, Symposium on Rheumatic Fever. Minneapolis: University of Minnesota Press. 1952.
- "Presentle medial calcinosis of the arteries of the extremities" (with N. W. Barker and J. E. Edwards). (Abstract.) Circulation, 6:468. September, 1952.
- "Hemochromatosis complicated by congestive heart failure and severe anemia: Report of a case" (with R. K. O'Cain). Journal of South Carolina Medical Association, 48:294-97. November, 1952.
- "Heart block apparently caused by trauma: Report of a case" (with R. K. O'Cain). Diseases of the Chest, 23:171-74. February, 1953.
- "Origin of the heart sounds (motion picture with sound recording)" (with H. E. Essex and E. J. Baldes). Federation Proceedings, 12:40. March, 1953.

RANDALL G. SPRAGUE, M.D., Ph.D. in Med., Professor

- "Comparative metabolic effects of the intramuscular use of cortisone acetate and 17-hydroxycorticosterone (compound F) acetate" (with R. M. Salassa, M. H. Power, and H. L. Mason). (Abstract.) Journal of Clinical Investigation, 31:658. June, 1952.
- "Management of certain hyperfunctioning lesions of the adrenal cortex and medulla" (with W. F. Kvale and J. T. Priestley). Journal of the American Medical Association, 151:629-39. February 21, 1953.
- "Electrolyte metabolism in diabetic acidosis" (with M. H. Power). Ibid., pp. 970-76. March 21, 1953.

- "Steroid diabetes." (Editorial.) Diabetes, 2:159. March-April, 1953.
- "Hypopotassemia and other electrolyte disturbances in Cushing's syndrome" (with M. H. Power).

 **Journal-Lancet, 73:217-19. June, 1953.

JOHN M. BERKMAN, M.D., M.S. in Med., Associate Professor

"Physiologic aspects of anorexia nervosa" (with C. A. Owen, Jr. and T. B. Magath). Post-graduate Medicine, 12:407-18. November, 1952.

PHILIP W. Brown, M.D., M.S. in Med., Associate Professor

"Experiences with the use of corticotropin in regional enteritis" (with W. G. Sauer and W. H. Dearing). Gastroenterology, 22:550-61. December, 1952.

HOWARD B. BURCHELL, M.D., Ph.D. in Med., Associate Professor

- "Experimental constrictive pericarditis: Analysis of induced circulatory failure" (with R. J. Boucek and J. H. Grindlay). American Journal of Physiology, 169:434-41. May 1, 1952.
- "Experimental constriction of inflow tracts in the heart: Analysis of circulatory failure" (with R. J. Boucek and J. H. Grindlay). *Ibid.*, pp. 442-52.
- "Ventricular pre-excitation in the isolated perfused heart." American Journal of Physiology, 169:721-25. June, 1952.
- "The effect of changes in concentration of cations on the electrocardiogram of the isolated perfused heart" (with W. A. Butcher, K. B. Wakim, H. E. Essex, and R. D. Pruitt).

 American Heart Journal, 43:801-14. June, 1952.
- "Uncomplicated isolated dextrocardia ('dextroversiocordis' type)" (with D. G. Pugh). *Ibid.*, 44: 196-206. August, 1952.
- "The effect of lithium chloride on the electrocardiogram of the isolated perfused heart" (with H. E. Essex, W. A. Butcher, and K. G. Wakim). *Ibid.*, 45:855-63. June, 1953.
- "Studies on the spread of excitation through the ventricular myocardium. II. The ventricular septum" (with H. E. Essex and R. D. Pruitt). Circulation, 6:161-71. August, 1952.
- "Surgical treatment of coarctation of the aorta in a ten week old infant: Report of a case" (with J. W. Kirklin, D. G. Pugh, E. C. Burke, and S. D. Mills). *Ibid.*, pp. 411-14. September, 1952. "Rheumatic mitral insufficiency" (with J. E. Edwards). *Ibid.*, 7:747-56. May, 1953.
- "Biopsy of the lung and cardiac catheterization studies in patients treated surgically for mitral stenosis" (with J. E. Edwards, R. G. Tompkins, R. T. Hood, Jr., and J. W. Kirklin). (Abstract.) Journal of Laboratory and Clinical Medicine, 40:795-96. November, 1952; Proceedings of the Central Society for Clinical Research, 25:26-27. 1952.
- "Quantitation of venous-arterial shunts in congenital heart disease on the basis of dye-dilution curves" (with H. J. C. Swan, J. Zapata-Diaz, and E. H. Wood). (Abstract.) Journal of Laboratory and Clinical Medicine, 40:953-54. December, 1952; Proceedings of the Central Society for Clinical Research, 25:89-90. 1952.
- "Wolff-Parkinson-White syndrome associated with situs inversus: Report of case simulating myocardial infarction electrocardiographically" (with L. G. Bartholomew). Proceedings of the Staff Meetings of the Mayo Clinic, 27:98-104. February 27, 1952.
- "Premature ventricular contractions and exercise" (with R. H. Mann). *Ibid.*, pp. 383-89. September 24, 1952.
- "Over-all experiences with cardiac catheterization" (with H. F. Helmholz, Jr. and E. H. Wood). *Ibid.*, 28:50-57. February 11, 1953.
- "Ebstein's malformation of the tricuspid valve: Report of 3 cases" (with J. C. Broadbent, E. H. Wood, and R. L. Parker). *Ibid.*, pp. 79-88.
- "Left-to-right intracardiac shunts in the presence of pulmonary stenosis" (with J. C. Broadbent and E. H. Wood). *Ibid.*, pp. 101-106. February 25, 1953.
- "Pressure pulses in the right side of the heart in a case of amyloid disease and in a case of idiopathic heart failure simulating constrictive pericarditis" (with P. S. Hetzel and E. H. Wood). *Ibid.*, pp. 107-12.
- "Pathologic study of hearts previously catheterized" (with J. E. Edwards, H. F. Helmholz, Jr., and J. W. DuShane). *Ibid.*, pp. 113-20.
- "Cardiac aneurysms: Clinicopathologic studies" (with W. S. Phares and J. E. Edwards). *Ibid.*, pp. 264-71. May 6, 1953.
- "Cardiac clinics. CXL. Congenital pulmonary stenosis with intact ventricular septum in persons more than 50 years of age: Report of 2 cases" (with J. E. Edwards and J. E. Geraci). *Ibid.*, pp. 346-52. June 17, 1953.

- "Action potentials supporting the presence of specialized conduction pathways in the dog's ventricle" (with H. E. Essex and E. H. Lambert). (Abstract.) Circulation Research, 1:186-88. March, 1953.
- "Rate of excitation of the endocardial ventricular myocardium" (with R. D. Pruitt). (Abstract.) Federation Proceedings, 12:22. March, 1953.

WILLIAM H. DEARING, M.D., Ph.D. in Med., Associate Professor

- "Experiences with the use of corticotropin in regional enteritis" (with W. G. Sauer and P. W. Brown). Gastroenterology, 22:550-61. December, 1952.
- "Micrococcie (staphylococcie) enteritis as a complication of antibiotic therapy: Its response to erythromycin" (with F. R. Heilman, E. Warren, and Dorothy Rose). Proceedings of the Staff Meetings of the Mayo Clinic, 28:121-34. March 11, 1953.

THOMAS J. DRY, M.A., M.S. in Med., Associate Professor

- "Inflammatory complications of congenital heart disease" (with D. C. Connolly). Pages 52-57 in Lewis Thomas, editor, Symposium on Rheumatic Fever. Minneapolis: University of Minnesota Press. 1952.
- "The surgical risk of patients with heart disease." (Editorial.) Surgery, Gynecology and Obstetrics, 95:120-22. July, 1952.
- "The degree of coronary atherosclerosis in bilaterally cophorectomized women" (with J. H. Wuest and J. E. Edwards). (Abstract.) Circulation, 6:461-462. September, 1952.
- "Present status of surgical treatment for cardiac diseases." Journal of the American Medical Association, 150:19-24. September 6, 1952.
- "Prognosis of angina pectoris: Observations in 6,882 cases" (with W. J. Block, Jr., E. L. Crumpacker, and R. P. Gage). Ibid., pp. 259-64. September 27, 1952.
- "Double aortic arch associated with coarctation of the aorta: Surgically treated patient" (with O. T. Clagett, R. F. Saxon, Jr., D. G. Pugh, and J. E. Edwards). Diseases of the Chest, 23:36-42. January, 1953.
- "Symposium on cardiac catheterization. III. Introduction." Proceedings of the Staff Meetings of the Mayo Clinic, 28:49. February 11, 1953.

EARL E. GAMBILL, M.D., M.S. in Med., Associate Professor

- "Coronary thrombosis with acute thrombosis of the mesenteric arteries and gangrene of the ileum simulating acute pancreatitis" (with A. H. Baggenstoss). Gastroenterology, 21:433-38. July, 1952.
- "The effects of banthine on pain and antral gastric motility in patients with duodenal ulcer" (with N. C. Hightower, Jr.). Ibid., 23:244-51. February, 1953.

MALCOLM M. HARGRAVES, M.D., Associate Professor

- "Aplastic anemia associated with the administration of chloramphenicol" (with S. D. Mills and F. J. Heck). Proceedings of the Staff Meetings of the Mayo Clinic, 27:280-81. July 16, 1952; Journal of the American Medical Association, 149:1293-1300. August 2, 1952.
- "The L. E. cell phenomenon." Proceedings of the Staff Meetings of the Mayo Clinic, 27:419-23. October 22, 1952.
- "The effect of blood coagulation on L. E. cell formation" (with F. E. Zimmer). Ibid., pp. 424-30. October 22, 1952.

WALLACE E. HERRELL, M.D., M.S. in Med., Associate Professor

- "Subacute bacterial endocarditis" (with F. R. Heilman). Pages 265-73 in Lewis Thomas, editor,
- Symposium on Rheumatic Fever. Minneapolis: University of Minnesota Press. 1952 "Penicillin, streptomycin and the newer antibiotics" (with W. E. Wellman). Chapter 44, pages 1-36 in Joseph Brennemann, editor, Practice of Pediatrics, Vol. 1. Hagerstown: W. F. Prior Company, 1952.
- "Current trends in antibiotic therapy." Journal of Iowa Medical Society, 42:287-92. July, 1952. "Some laboratory and clinical observations on a new antibiotic, erythromycin (ilotycin)" (with F. R. Heilman, W. E. Wellman, and J. E. Geraci). Proceedings of the Staff Meetings of the Mayo Clinic, 27:285-304. July 16, 1952.
- "Antibiotic and chemotherapeutic agents in infections of the blood stream and heart." Journal of the American Medical Association, 150:1450-55. December 13, 1952.

WALTER F. KVALE, M.D., M.S. in Med., Associate Professor

- "Diseases of the blood vessels: Orthostatic (postural) hypotension; periarteritis nodosa; temporal arteritis; arterioselerosis obliterans and thromboangiitis obliterans; sudden arterial occlusion; Raynard's disease; livedo reticularis and acrocyanosis; erythromelalgia; seleroderma" (with R. M. Shick). Pages 504-20 in Franklin Arthur Kyser, editor, Therapeutics in Internal Medicine by Eighty-four Authorities. New York: Hoeber. 1953.
- "The neurologic manifestations in pheochromocytoma: A study of 25 cases" (with L. M. Eaton).

 Transactions of the American Neurological Association, 77:9-13, 1952.
- "Evaluation of new adrenolytic drug (regitine) as test for pheochromocytoma" (with R. W. Gifford, Jr. and Grace M. Roth). Journal of the American Medical Association, 149:1628-34. August 30, 1952.
- "Hexamethonium and apresoline (1-hydrazinophthalazine)." Proceedings of the Staff Meetings of the Mayo Clinic, 27:489-94. November 19, 1952.
- "Management of certain hyperfunctioning lesions of the adrenal cortex and medulla" (with R. G. Sprague and J. T. Priestley). Journal of the American Medical Association, 151: 629-39. February 21, 1953.

CARL G. MORLOCK, M.D., M.S. in Med., Associate Professor

"Motility of the alimentary canal in man: Review of recent studies" (with C. F. Code and N. C. Hightower, Jr.). American Journal of Medicine, 13:328-51. September, 1952.

ARTHUR M. OLSEN, M.D., M.S. in Med., Associate Professor

- "Esophagitis after esophagogastric anastomosis" (with II. R. Ripley and J. W. Kirklin). Surgery, 32:1-9. July, 1952.
- "Pasteurella multocida in suppurative diseases of the respiratory tract" (with G. M. Needham).

 American Journal of Medical Science, 224:77-81. July, 1952.
- "Preparation of patients for peroral endoscopy" (with J. W. Pender). Journal of the American Medical Association, 150:842-44. November 1, 1952.
- "Pulmonary complications of cardiospasm" (with H. A. Andersen and C. B. Holman). *Ibid.*, 151:608-12. February 21, 1953.
- "A study of esophageal pressures in normal persons and patients with cardiospasm" (with J. W. Butin, H. J. Moersch, and C. F. Code). Gastroenterology, 23:278-91. February, 1953.
- "Severe crush injuries of the chest: Some problems in management" (with P. E. Bernatz and J. W. Kirklin). Proceedings of the Staff Meetings of the Mayo Clinic, 28:193-99. April 8, 1953
- "The diagnosis of cardiospasm" (with C. B. Holman and H. A. Andersen). Diseases of the Chest, 23:477-97. May, 1953.

ROBERT L. PARKER, M.D., M.S. in Med., Associate Professor

- "Diseases of the heart: Coronary insufficiency with angina pectoris" (with M. W. Anderson).

 Pages 441-47 in Franklin Arthur Kyser, editor, Therapeutics in Internal Medicine by Eighty-four Authorities. New York: Hoeber, 1953.
- "Diseases of the heart: Acute myocardial infarction." Ibid., pp. 447-56.
- "Thrombo-embolism in Acute and in Healed Myocardial Infarction"
 - "I. Intracardiac mural thrombosis" (with R. A. Jordan, R. D. Miller, and J. E. Edwards). Circulation, 6:1-6. July, 1952.
 - "H. Systemic and pulmonary arterial occlusion." Ibid., pp. 7-15.
- "Cardiac clinics, CXXXIX. Myxoma of the left atrium clinically simulating mitral stenosis: Report of case and pathologic studies" (with W. J. Block, Jr. and J. E. Edwards). Proceedings of the Staff Meetings of the Mayo Clinic, 27:361-71. September 10, 1952.
- "Ebstein's malformation of the tricuspid valve: Report of 3 cases" (with J. C. Broadbent, E. H. Wood, and H. B. Burchell). *Ibid.*, 28:79-88. February 11, 1953.

Louis E. Prickman, M.D., M.S. in Med., Associate Professor

"Smoking and asthma" (with G. A. Peters, G. A. Koelsche, and H. M. Carryer). Proceedings of the Staff Meetings of the Mayo Clinic, 27:329-31. August 13, 1952.

RAYMOND D. PRUITT, M.D., M.S. in Mcd., Associate Professor

"The effect of changes in concentration of cations on the electrocardiogram of the isolated perfused heart" (with W. A. Butcher, K. G. Wakim, H. E. Essex, and H. B. Burchell). American Heart Journal, 43:801-14. June, 1952.

- "Studies on the spread of excitation through the ventricular myocardium. II. The ventricular septum" (with H. B. Burchell and H. E. Essex). Circulation, 6:161-71. August, 1952.
- "Electrocardiographic findings in cardiac amyloidosis" (with A. J. Josselson). *Ibid.*, 7:200-204. February, 1953.
- "Amyloid localized to the heart; analysis of twenty-nine cases" (with A. J. Josselson and J. E. Edwards). American Medical Association Archives of Pathology, 54:359-67. October, 1952.
- "Recent advances in the diagnosis of heart disease." Journal of the Michigan Medical Society, 51:1421-26, 1432. November, 1952.
- "Rate of excitation of the endocardial ventricular myocardium" (with H. B. Burchell). (Abstract.) Federation Proceedings, 12:22. March, 1953.
- "Effect of cortisone on healing of experimentally produced myocardial infarction in dogs" (with N. G. Hepper and J. E. Edwards). (Abstract.) Ibid., p. 391.

HERBERT W. SCHMIDT, M.D., M.S. in Med., Associate Professor

- "Localized fibrous mesothelioma of the pleura" (with O. T. Clagett and J. R. McDonald).

 Journal of Thoracic Surgery, 24:213-28. September, 1952.
- "Examination of pleural fluid for carcinoma cells" (with G. G. Graham, J. R. McDonald and O. T. Clagett). *Ibid.*, 25:366-70. April. 1953.

CHARLES H. SLOCUMB, M.D., M.S., Associate Professor

- "Acute rheumatic fever treated with cortisone and corticotropin" (with A. R. Barnes, H. L. Smith, H. F. Polley, and P. S. Hench). Pages 274-90 in Lewis Thomas, editor, Symposium on Rheumatic Fever. Minneapolis: University of Minnesota Press. 1952.
- "The use and abuse of cortisone in surgery" (with J. S. Lundy). Surgical Clinics of North America, pp. 1105-1107. August, 1952.
- "Relative cortisone deficiency simulating exacerbation of arthritis." Bulletin of Rheumatic Discases, 3:21-22. October, 1952.
- "Comparative effect of hydrocortisone, hydrocortisone acetate, and cortisone acetate in rheumatoid arthritis" (with L. E. Ward, H. F. Polley, and P. S. Hench). (Abstract.) Journal of Laboratory and Clinical Medicine. 40:959. December, 1952; Proceedings of the Central Society for Clinical Research, 25:95. 1952.
- "Cortisone in treatment of rheumatoid arthritis" (with L. E. Ward, H. F. Polley, and P. S. Hench). Journal of the American Medical Association, 152:119-26. May 9, 1953.

JAMES F. WEIR, M.D., M.S. in Med., Associate Professor

- "Parenchymal calcification of the kidneys in patients with duodenal ulcer" (with D. L. Becker and A. H. Baggenstoss). American Journal of Clinical Pathology, 22:843-54. September, 1952.
- "Infarction of the liver" (with K. R. Woolling and A. H. Baggenstoss). Proceedings of the Staff Meetings of the Mayo Clinic, 28:239-44. April 22, 1953.

ERIC E. WOLLAEGER, M.D., M.S. in Med., Associate Professor

- "The pathogenesis of atrophy of the left lobe of the liver of man" (with E. J. Benz and A. H. Baggenstoss). Gastroenterology, 22:34-47. September, 1952.
- "Nontropical sprue: Observations on absorption and metabolism" (with M. W. Comfort, A. B. Taylor, and M. H. Power). *Ibid.*, 23:155-78. February, 1953.
- "Laboratory procedures of use in the diagnosis of pancreatitis." (Editorial.) Surgery, Gynecology and Obstetrics, 96:371-74. March, 1953.
- "Atrophy of the left lobe of the liver" (with E. J. Benz and A. H. Baggenstoss). Proceedings of the Staff Meetings of the Mayo Clinic, 28:232-38. April 22, 1953.
- "Tolerance to nasogastric tube feedings: A comparative clinical study of two dietary formulas" (with Elizabeth B. Smith and Sister Mary Victor). American Medical Association Archives of Internal Medicine, 91:721-28. June, 1953.

MILTON W. ANDERSON, M.D., M.S. in Med., Assistant Professor

- "Abuses of a low sodium content diet in cardiovascular disease." Minnesota Medicine, 35: 633-38. July, 1952.
- "Hemopericardium complicating myocardial infarction in the absence of cardiac rupture: Report of three cases" (with N. A. Christensen and J. E. Edwards). American Medical Association Archives of Internal Medicine, 90:634-45. November, 1952.
- "Valvular heart disease in older people." Postgraduate Medicine, 13:101-106. February, 1953.

JAMES C. CAIN, M.D., M.S. in Med., Assistant Professor

- "Medically treated small gastric ulcer; five year follow-up study of four hundred fourteen patients" (with G. L. Jordan, Jr., M. W. Comfort, and H. K. Gray). Journal of the American Medical Association, 150:781-84. October 25, 1952.
- "Treatment of duodenal ulcer." South Dakota Journal of Medicine and Pharmacy, 6:61-64, 88. March, 1953.
- "Cholecystoduodenal fistula associated with chronic abscess in the abdominal wall containing a gallstone" (with G. A. Hallenbeck and J. J. Berens). Proceedings of the Staff Meetings of the Mayo Clinic, 28:337-40. June 17, 1953.

DAVID T. CARR, M.D., M.S. in Med., Assistant Professor

- "Pulmonary resection for tuberculosis: A review of 73 cases with a follow-up of one year or longer" (with T. Takaro, O. T. Clagett, and C. H. Hodgson). Proceedings of the Staff Meetings of the Mayo Clinic, 27:345.50. August 27, 1952.
- "The effect of cortisone and/or corticotropin on tuberculous infection in man. A statement prepared by the Committee on Therapy" (with R. O. Canada, R. H. Ebert, K. S. Howlett, Jr., W. M. M. Kirby, R. S. Mitchell, W. M. Peck, N. J. Wilson, and W. B. Tucker). American Review of Tuberculosis, 66:254-56. August, 1952.
- "Prognosis in idiopathic hemoptysis" (with B. E. Douglass). Journal of the American Medical Association, 150:764-65. October 25, 1952.
- "Current status of antimicrobial therapy in tuberculosis." Ibid., pp. 1170-72. November 22, 1952.

HADDON M. CARRYER, M.D., Ph.D. in Med., Assistant Professor

"Smoking and asthma" (with L. E. Prickman, G. A. Peters, and G. A. Koelsche). Proceedings of the Staff Meetings of the Mayo Clinic, 27:329-31. August 13, 1952.

TALBERT COOPER, M.D., M.S. in Med., Assistant Professor

"Thrombotic thrombocytopenic purpura: Confirmation of clinical diagnosis by bone marrow aspiration" (with J. M. Stickney, Gertrude L. Pease, and W. A. Bennett). American Journal of Medicine, 13:374-83. September, 1952.

J. Earle Estes, M.D., M.S. in Med., Assistant Professor

- "Acute arterial occlusion." General Practitioner, 6:61-68. August, 1952.
- "Hemiplegia resulting from pheochromocytoma. Report of case" (with W. H. ReMine, M. B. Dockerty, and J. T. Priestley). Journal of the American Medical Association, 152:808-11. June 27, 1953.

Albert B. Hagedorn, M.D., M.S. in Med., Assistant Professor

- "The intravenous use of iron." Proceedings of the Staff Meetings of the Mayo Clinic, 27:277-80. July 16, 1952.
- "Hemorrhagic jejunal diverticulitis" (with C. W. Mayo and R. H. Baskin, Jr.). Transactions of the American Surgical Association, 70:354-62. 1952; Annals of Surgery, 136:691-99. October, 1952.

CORRIN H. HODGSON, M.D., M.S. in Med., Assistant Professor

"Pulmonary resection for tuberculosis: A review of 73 cases with a follow-up of one year or longer" (with T. Takaro, O. T. Clagett, and D. T. Carr). Proceedings of the Staff Meetings of the Mayo Clinic, 27:345-50. August 27, 1952.

GILES A. KOELSCHE, M.D., Ph.D. in Med., Assistant Professor

"Smoking and asthma" (with G. A. Peters, L. E. Prickman, and H. M. Carryer). Proceedings of the Staff Meetings of the Mayo Clinic, 27:329-31. August 13, 1952.

Donald R. Nichols, M.D., M.S. in Med., Assistant Professor

"Recent changes in sensitivity of Micrococcus pyogenes to various antibiotic agents" (with G. M. Needham). Journal of Laboratory and Clinical Medicine, 41:150-56. January, 1953.

GUSTAVUS A. PETERS, M.D., M.S. in Med., Assistant Professor

"Smoking and asthma" (with L. E. Prickman, G. A. Koelsche, and H. M. Carryer). Proceedings of the Staff Meetings of the Mayo Clinic, 27:329-31. August 13, 1952.

Howard F. Polley, M.D., M.S. in Med., Assistant Professor

- "Acute rheumatic fever treated with cortisone and corticotropin" (with A. R. Barnes, H. L. Smith, C. H. Slocumb, and P. S. Hench). Pages 274-90 in Lewis Thomas, editor, Symposium on Rheumatic Fever. Minneapolis: University of Minnesota Press. 1952.
- "Comparative effects of hydrocortisone, hydrocortisone acetate, and cortisone acetate in rheumatoid arthritis" (with L. E. Ward, C. H. Slocumb, and P. S. Hench). (Abstract.) Proceedings of the Central Society for Clinical Research, 25:95. 1952; Journal of Laboratory and Clinical Medicine, 40:959. December, 1952.
- "Cortisone in treatment of rheumatoid arthritis" (with L. E. Ward, C. H. Slocumb, and P. S. Hench). Journal of the American Medical Association, 152:119-26. May 9, 1953.

WILLIAM G. SAUER, M.D., M.S. in Med., Assistant Professor

"Experiences with the use of corticotropin in regional enteritis" (with P. W. Brown and W. H. Dearing). Gastroenterology, 22:550-61. December, 1952.

CHARLES H. Scheifley, M.D., M.S. in Med., Assistant Professor

"Studies of the mitral valve. I. Anatomic features of the normal mitral valve and associated structures" (with E. E. Rusted and J. E. Edwards), Circulation, 6:825-31, December, 1952.

RICHARD M. SHICK, M.D., M.S. in Med., Assistant Professor

- "Diseases of the blood vessels: Orthostatic (postural) hypotension; periarteritis nodosa; temporal arteritis; arteriosclerosis obliterans and thromboangiitis obliterans; sudden arterial occlusion: Raynaud's disease; livedo reticularis and acrocyanosis; erythromelalgia; selevoderma" (with W. F. Kvale). Pages 504-20 in Franklin Arthur Kyser, editor, Therapeutics in Internal Medicine by Eighty-four Authorities. New York: Hoeber. 1953.
- "Hazards and pitfalls of anticoagulant therapy." Illinois Medical Journal, 103:84-87. February, 1953.

LUCIAN A. SMITH, M.D., M.S. in Med., Assistant Professor

- "Present-day problems in appendicitis from the internist's viewpoint." Proceedings of the Staff Meetings of the Mayo Clinic, 28:1-5. January 14, 1953.
- "Evaluation of stellate ganglion block for acute focal cerebral infarcts: preliminary report of observations on eighty-seven patients" (with C. H. Milikan and J. S. Lundy). Journal of the American Medical Association, 151:438-40. February 7, 1953.

MINOTT J. STICKNEY, M.D., M.S. in Med., Assistant Professor

- "Cortisone and ACTH in acute leukemia: A clinicopathologic study" (with W. A. Bennett). Unio Internationales Cancrum ACTA, 8:573-74, 1952.
- "Thrombotic thrombocytopenic purpura: Confirmation of clinical diagnosis by bone marrow aspiration" (with T. Cooper, Gertrude L. Pease, and W. A. Bennett). American Journal of Medicine, 13:374-83. September, 1952.
- "Corticotropin and cortisone in blood diseases in children" (with S. D. Mills). Journal of the American Medical Association, 150:1278-80. November 29, 1952.
- "Agranulocytosis caused by phenylbutazone and 4-amino-antipyrine" (with J. M. Kiely).

 Proceedings of the Staff Meetings of the Mayo Clinic, 28:341-43. June 17, 1953.

CHARLES F. STROEBEL, JR., M.D., M.S. in Med., Assistant Professor

"Current concepts of polycythemia." Proceedings of the Staff Meetings of the Mayo Clinic, 27;282-85, July 16, 1952.

JAN H. TILLISCH, M.D., M.S. in Med., Assistant Professor

"Civil defense: A report to the membership" (with J. T. Smiley). Minnesota Medicine, 36: 457-59. May, 1953

LAURENTIUS O. UNDERDAHL, M.D., M.S. in Med., Assistant Professor

- "Multiple endocrine adenomas: report of 8 cases involving the parathyroids, pituitary and pancreas" (with L. B. Woolner and B. M. Black). (Abstract.) Journal of Clinical Endocrinology and Metabolism, 12:944. July, 1952; 13:20-47. January, 1953.
- "Anesthesia for patients with certain diseases of the endocrine glands" (with R. T. Patrick and R. C. Adams). Surgical Clinics of North America, pp. 1109-14. August, 1952.

HOWARD A. ANDERSEN, M.D., M.S. in Med., Instructor

- "Pulmonary complications of cardiospasm" (with C. B. Holman and A. M. Olsen). Journal of the American Medical Association, 151:608-12. February 21, 1953.
- "The diagnosis of cardiospasm" (with C. B. Holman and A. M. Olsen). Diseases of the Chest, 23:477-97. May, 1953.
- "One-stage esophagogastrectomy for perforated carcinoma in the presence of mediastinitis" (with R. T. Hood, Jr., J. W. Kirklin, and R. P. McBurney). Proceedings of the Staff Meetings of the Mayo Clinic, 28:281-86. May 20, 1953.

LLOYD G. BARTHOLOMEW, M.D., M.S. in Med., Instructor

"Wolf-Parkinson-White syndrome associated with situs inversus: Report of case simulating myocardial infarction electrocardiographically" (with H. B. Burchell). Proceedings of the Staff Meetings of the Mayo Clinic, 27:98-104. February 27, 1952.

NORMAN A. CHRISTENSEN, M.D., M.S. in Med., Instructor

"Hemopericardium complicating myocardial infarction in the absence of cardiac rupture: Report of three cases" (with M. W. Anderson and J. E. Edwards). American Medical Association Archives of Internal Medicine, 90:634-45. November, 1952.

Bruce E. Douglass, M.D., M.S. in Med., Instructor

"Prognosis in idiopathic hemoptysis" (with D. T. Carr). Journal of the American Medical Association, 150:764-65. October 25, 1952.

CLIFFORD F. GASTINEAU, M.D., Ph.D. in Med., Instructor

"Use of cortisone for congenital adrenal hyperplasia in the male: Report of case" (with G. B. Logan, A. Albert, and H. L. Mason). Journal of Clinical Endocrinology and Metabolism, 13:724-29. June, 1953.

RAY W. GIFFORD, JR., M.D., M.S. in Med., Instructor

- "Evaluation of new adrenolytic drug (regitine) as test for pheochromocytoma" (with Grace M. Roth and W. F. Kvale). Journal of the American Medical Association, 149:1628-34. August 30, 1952.
- "Arteriosclerotic popliteal aneurysm: A clinical follow-up study" (with E. A. Hines, Jr. and J. M. Janes). (Abstract.) Circulation, 6:473. September, 1952.
- "An analysis and follow-up study of one hundred popliteal aneurysms" (with E. A. Hines, Jr. and J. M. Janes). Surgery, 33:284-93. February, 1953.

DAVID G. HANLON, M.D., M.S. in Med., Instructor

- "Portal hypertension associated with sarcoidosis and with hemochromatosis: Report of 2 cases with splenectomy and splenorenal anastomosis" (with R. W. Dunlap, Jr. and G. A. Hallenbeck). Proceedings of the Staff Meetings of the Mayo Clinic, 27:266-72. July 2, 1952.
- "Some problems in the management and pathogenesis of idiopathic thrombocytopenic purpura." *Ibid.*, pp. 273-77. July 16, 1952.

GUSTAV A. HEDBERG, M.D., Instructor

"Water-soluble contrast medium for bronchography" (with M. E. Flipse and V. R. Krueger).

American Medical Association Archives of Otolaryngology, 57:188-205. February, 1953.

WALLACE A. MERRITT, M.D., M.S. in Med., Instructor

"The treatment of essential hypertension with veratrum." Proceedings of the Staff Meetings of the Mayo Clinic 27:481-85. November 19, 1952.

R. Drew Miller, M.D., M.S. in Med., Instructor

"Thrombo-embolism in Acute and in Healed Myocardial Infarction"

- "I. Intracardiac mural thrombosis" (with R. A. Jordan, J. E. Edwards, and R. L. Parker). Circulation, 6:1-6. July, 1952.
- "II. Systemic and pulmonary arterial occlusion" (with R. A. Jordan, R. L. Parker, and J. E. Edwards). Ibid., pp. 7-15.

ROBERT M. SALASSA, M.D., M.S. in Med., Instructor

- "Comparative metabolic effects of the intramuscular use of cortisone acetate and 17-hydroxycorticosterone (compound F) acetate" (with M. H. Power, H. L. Mason, and R. G. Sprague). (Abstract.) Journal of Clinical Investigation, 31:658. June, 1953.
- "Abuses of cortisone and corticotropin." Minnesota Medicine, 35:625-28. July, 1952.
- "Lesions of the adrenal glands of surgical significance" (with J. T. Priestley). Postgraduate Medicine, 13:500-506. June, 1953.

MAURICE H. STAUFFER, M.D., M.S. in Med., Instructor

- "Hepatic lesions in the living patient with chronic ulcerative colitis as demonstrated by needle biopsy" (with M. S. Kleckner, Jr., J. A. Bargen, and M. B. Dockerty). Gastroenterology, 22:13-33. September, 1952.
- "Posthepatitic and alcoholic cirrhosis: Clinicopathologic study of 43 cases of each" (with A. H. Baggenstoss). Ibid., pp. 157-80. October, 1952.
- "Posthepatitic cirrhosis" (with A. H. Baggenstoss). Proceedings of the Staff Meetings of the Mayo Clinic, 28:320-29. June 3, 1953.

L. Emmerson Ward, M.D., M.S. in Med., Instructor

- "Rheumatoid granulomatous nodules as destructive lesions of vertebrae" (with A. H. Baggenstoss and W. H. Bickel). Journal of Bone and Joint Surgery, 34-A:601-609. July, 1952.
- "Comparative effects of hydrocortisone, hydrocortisone acetate, and cortisone acetate in rheumatoid arthritis" (with H. F. Polley, C. H. Slocumb, and P. S. Hench). (Abstract.) Proceedings of the Central Society for Clinical Research, 25:95. 1952; Journal of Laboratory and Clinical Medicine, 40:959. December, 1952.
- "Cortisone in treatment of rheumatoid arthritis" (with H. F. Polley, C. H. Slocumb, and P. S. Hench). Journal of the American Medical Association, 152:119-26. May 9, 1953.

WILLIAM E. WELLMAN, M.D., M.S. in Med., Instructor

- "Penicillin, streptomycin and the newer antibiotics" (with W. E. Herrell). Vol. 1, Chapter 44, pages 1-36 in Joseph Brennemann, editor, Practice of Pediatrics. Hagerstown: W. F. Prior Company. 1952.
- "Concentration of antibiotics in the brain" (with H. W. Dodge, Jr., F. R. Heilman, and M. C. Petersen), (Abstract.) Proceedings of the Central Society for Clinical Research, 25:96-97. 1952; Journal of Laboratory and Clinical Medicine, 40:960-61. December, 1952.
- "Some laboratory and clinical observations on a new antibiotic, erythromycin (ilotycin)" (with F. R. Heilman, W. E. Herrell, and J. E. Geraci). Proceedings of the Staff Meetings of the Mayo Clinic, 27:285-304. July 16, 1952. "Current use of antibiotics." Postgraduate Medicine, 12:167-73. August, 1952.
- "Present concept of oral focal infection." Journal of Oral Surgery, 11:39-41. January, 1953.

Dermatology and Syphilology

Louis A. Brunsting, M.D., M.S. in Derm. and Syph., Professor

- "Disseminated (systemic) lupus erythematosus." Proceedings of the Staff Meetings of the Mayo Clinic, 27:410-12. October 22, 1952.
- "Tenth International Congress of Dermatology, London. July 21 to 26, 1952." Ibid., pp. 501-504. November 19, 1952.

"Quinacrine (atabrine) hydrochloride in treatment of discoid lupus erythematosus" (with R. R. Kierland and P. A. O'Leary). American Medical Association Archives of Dermatology and Syphilology, 67:633-34. June, 1953.

Hamilton Montgomery, M.D., M.S. in Derm. and Syph., Professor

- "Benign and malignant dermal neoplasms." Journal of the American Medical Association, 150: 1182-86. November 22, 1952.
- "Histopathologic studies of pigmented nevi in children" (O. C. Stegmaier). Journal of Investigative Dermatology, 20:51-62. January, 1953.
- "Lichen myxedematosus (differentiation from cutaneous myxedemas or mucoid states)" (with L. J. Underwood). *Ibid.*, pp. 213-33. March, 1953.

PAUL A. O'LEARY, M.D., Professor

- "Cortisone and corticotropin in the treatment of cutaneous diseases." Postgraduate Medicine, 12:10-14. July, 1952.
- "Symposium on systemic lupus erythematosus: Introduction." Proceedings of the Staff Meetings of the Mayo Clinic, 27:409-10. October 22, 1952.
- "Capillary microscopic examination in skin diseases" (with O. K. Gilje and E. J. Baldes). Ibid., 28:287. May 20, 1953.
- "Atopic dermatitis." Southern Medical Journal, 46:67-73. January, 1953.
- "Quinacrine (atabrine) hydrochloride in treatment of discoid lupus crythematosus" (with L. A. Brunsting and R. R. Kierland). American Medical Association Archives of Dermatology and Syphilology, 67:633-34. June, 1953.

ROBERT R. KIERLAND, M.D., M.S. in Derm. and Syph., Associate Professor

- "The treatment of eczema." Minnesota Medicine, 35:858-60. September, 1952.
- "Neurosyphilis." Ibid., 36:240-46. March, 1953.
- "A further note on the genetics of psoriasis" (with A. G. Steinberg, S. W. Becker, Jr., and T. B. Fitzpatrick). American Journal of Human Genetics, 4:373-75. December, 1952.
- "Quinacrine (atabrine) hydrochloride in treatment of discoid lupus erythematosus" (with P. A. O'Leary and L. A. Brunsting). American Medical Association Archives of Dermatology and Syphilology, 67:633-34. June, 1953.

Experimental Medicine

CARL F. SCHLOTTHAUER, V.M.D., Professor

- "Some noninfectious diseases common to human beings and lower animals." North American Veterinarian, 33:769-73. November, 1952.
- "Legg-Perthes' disease (coxa plana) in the dog" (with W. D. Anderson). Journal of the American Veterinary Medical Association, 122:115-16. February, 1953.
- "Method for treatment of fractures of the femoral neck in the dog. 1. An experimental study" (with W. D. Anderson and J. M. Janes). *Ibid.*, pp. 158-60. March, 1953.

EUNICE V. FLOCK, Ph.D., Associate Professor

- "Alkaline phosphate and amylase of plasma after hepatectomy" (with M. A. Block, J. L. Bollman, and F. C. Mann). American Journal of Physiology, 170:467-71. August, 1952.
- "The effect of glucose on the amino acids of plasma after total hepatectomy" (with M. A. Block, F. C. Mann, J. H. Grindlay, and J. L. Bollman). Journal of Biological Chemistry, 198:427-37. September, 1952.
- "Changes in free amino acids of brain and muscle after total hepatectomy" (with M. A. Block, J. H. Grindlay, F. C. Mann, and J. L. Bollman). *Ibid.*, 200:529-36. February, 1953.
- "Effect of insulin on free amino acids after hepatectomy" (with J. L. Bollman, F. C. Mann, and J. H. Grindlay). (Abstract.) Federation Proceedings, 12:203. March, 1953.

H. Frederic Helmholz, Jr., M.D., Instructor

- "Over-all experiences with cardiac catheterization" (with H. B. Burchell and E. H. Wood).

 Proceedings of the Staff Meetings of the Mayo Clinic, 28:50-57. February 11, 1953.
- "Pathologic study of hearts previously catheterized" (with J. E. Edwards, J. W. DuShane, and H. B. Burchell). *Ibid.*, pp. 113-20. February 25, 1953.

NEUROLOGY AND PSYCHIATRY

Neurology

Lealdes M. Eaton, M.D., M.S. in Neur., Professor

- "The neurologic manifestations of pheochromocytoma: A study of 25 cases" (with W. F. Kvale).

 Transactions of the American Neurological Association, 77:9-13, 1952.
- "Myasthenia gravis." Wisconsin Medical Journal, 51:378-83. April, 1952.
- "Stage of neuromuscular paralysis in myotonia" (with E. H. Lambert and C. H. Millikan).

 American Journal of Physiology, 171:741. December, 1952.

HENRY W. WOLTMAN, M.D., Ph.D. in Neur., Professor

- "The problem of synkinesis and contracture in cases of hemifacial spasm and Bell's palsy" (with II. L. Williams and E. II. Lambert). Transactions of the American Otolaryngological Society, 40:194-214, 1952; Annals of Otolaryngology, Rhinology, and Laryngology, 61:850-70. September, 1952.
- "Symposium on intracerebral electrography: Introduction." Proceedings of the Staff Meetings of the Mayo Clinic, 28:145-47. March 25, 1953.
- "What the patient's story suggests to the neurologist." Journal of the Iowa Medical Society, 43:169-73. May, 1953.

JOE R. BROWN, M.D., M.S. in Neur., Associate Professor

- "Management of patients with brain damage." Neurology, 2:273-83. July-August, 1952.
- "Clinical pathologic conference; from the sections of neurology and psychiatry, Mayo Clinic, Rochester, Minnesota" (with J. A. Bastron). *Ibid.*, pp. 537-42. November-December, 1952.

ALLAN A. BAILEY, M.D., M.S. in Neur., Assistant Professor

- "Investigation of a bacterial pyrogen as a therapeutic agent in neurologic disorders" (with E. D. Rooke and E. A. Rodin). Proceedings of the Staff Meetings of the Mayo Clinic, 27:340-43. August 13, 1952.
- "Treatment of epileptic disorders of adults." Ibid., 28:39-44. January 28, 1953.
- "Neurosurgical and neurologic application of depth electrography" (with H. W. Dodge, Jr., R. G. Bickford, M. C. Petersen, C. W. Scm-Jacobsen, and R. H. Miller). Ibid., pp. 188-91. March 25, 1953.
- "The diagnosis and treatment of acute cerebrovascular lesions," Journal-Lancet, 73:83-86, March, 1953.

CLARK H. MILLIKAN, M.D., Assistant Professor

- "Causes and treatment of sciatica." Postgraduate Medicine, 12:207-11. September, 1952.
- "Stage of neuromuscular paralysis in myotonia" (with E. H. Lambert and L. M. Eaton).

 American Journal of Physiology, 171:741. December, 1952.
- "Evaluation of stellate ganglion block for acute focal cerebral infarcts; preliminary report of observations on eighty-seven patients" (with J. S. Lundy and L. A. Smith). *Journal of the American Medical Association*, 151:438-40. February 7, 1953.

DAVID DALY, M.D., Ph.D. in Neur., Instructor

- "Some observations on the mechanism of photic and photo-metrazol activation" (with R. G. Bickford, C. W. Sem-Jacobsen, and P. T. White). Electroencephalography and Clinical Neurophysiology, 4:275-82. August, 1952.
- "The electroencephalogram in tumors of the posterior fossa and third ventricle" (with J. L. Whelan and C. S. MacCarty). (Abstract.) *Ibid.*, p. 378.
- "The electroencephalogram in cases of tumors of the posterior fossa and third ventricle" (with C. S. MacCarty, J. L. Whelan, and R. G. Bickford). *Ibid.*, 5:203-16. May, 1953.
- "Psychiatric symptoms associated with lesions of temporal lobe" (with D. W. Mulder). Journal of the American Medical Association, 150:173-76. September 20, 1952.
- "Some clinical and electro-encephalographic responses to sound stimulation in epileptic patients" (with R. M. Peet and R. G. Bickford). Transactions of the American Neurological Association, 77:215-17. 1952.
- "Motor, sensory and autonomic patterns in epilepsy." Proceedings of the Staff Meetings of the Mayo Clinic, 28:27-31. January 28, 1953.

DONALD W. MULDER, M.D., M.S. in Neur., Instructor

- "Psychiatric symptoms associated with lesions of temporal lobe" (with D. Daly). Journal of the American Medical Association, 150:173-76. September 20, 1952.
- "Paroxysmal psychiatric symptoms observed in epilepsy." Proceedings of the Staff Meetings of the Mayo Clinic, 28:31-35. January 28, 1953.
- "Evaluation of a new agent in the treatment of Parkinsonism." Ibid., pp. 210-16. April 8, 1953.

EDWARD D. ROOKE, M.D.C.M., M.S. in Neur., Instructor

"Investigation of a bacterial pyrogen as a therapeutic agent in neurologic disorders" (with A. A. Bailey and E. A. Rodin). Proceedings of the Staff Meetings of the Mayo Clinic, 27;340-43. August 13, 1952.

Psychiatry

Howard P. Rome, M.D., Professor

- "A synopsis of the scope, goal and content of psychiatry." Edition 7, chapter 12, pages 765-809 in Harold Rypins, editor, Rypins' Medical Licensure Examinations. Philadelphia: Lippincott. 1952.
- "The role of ACTII, cortisone and hydrocortisone in the provocation of certain psychologic responses" (with F. J. Braceland). Chapter XXII, pages 273-79 in Association for Research in Nervous and Mental Diseases: Psychiatric Treatment. Proceedings of the Association. Vol. 31. December 14 and 15, 1951. New York, N. Y. Baltimore: Williams and Wilkins Company, 1953.

ADELAIDE M. JOHNSON, D.Sc., Ph.D., M.D., Associate Professor

- "Collaborative therapy: Team setting." Pages 79-108 in Marcel Heiman, editor, Psychoanalysis and Social Work. New York: International Universities Press, 1953.
- "The genesis of antisocial acting out in children and adults." Psychoanalytical Quarterly, 21:323-43. July, 1952.

LAWRENCE C. KOLB, M.D., Associate Professor

- "Prevention of experimental allergic encephalomyelitis by various agents" (with A. G. Karlson and G. P. Sayre). Transactions of the American Neurological Association, 77:117-20, 1952.
- "Delirious reactions secondary to thiocyanate therapy of hypertension" (with C. A. Domzalski, Jr. and E. A. Hines, Jr.). Proceedings of the Staff Meetings of the Mayo Clinic, 28:272-80. May 6, 1953.

MAGNUS C. PETERSEN, M.D., Associate Professor

- "Prefrontal lobotomy in the treatment of mental illness" (with J. G. Love). Pages 97-105 in Proceedings of the International Conference on Psychosurgery, Lisbon. 1949.
- "Concentration of antibiotics in the brain" (with W. E. Wellman, H. W. Dodge, Jr., and F. R. Heilman). (Abstract.) Journal of Laboratory and Clinical Medicine, 40:960-61. December, 1952: Proceedings of the Central Society for Clinical Research, 25:96-97, 1952.
- "Electrical rhythms recorded from the depth of the frontal lobes during operations on psychotic patients" (with R. G. Bickford and A. Uihlein). Proceedings of the Staff Meetings of the Mayo Clinic, 28:135-43. March 11, 1953.
- "Technic of depth electrography" (with R. G. Bickford, H. W. Dodge, Jr., C. B. Holman, and C. W. Sem-Jacobsen). *Ibid.*, 28:147-55. March 25, 1953.
- "Depth distribution of normal electroencephalographic rhythms" (with R. G. Bickford, C. W. Sem-Jacobsen, and H. W. Dodge, Jr.). *Ibid.*, pp. 156-61.
- "Some effects of barbiturate anesthesia on the depth electrogram" (with R. G. Bickford, A. Faulconer, Jr., C. W. Sem-Jacobsen, H. W. Dodge, Jr., and F. G. Schnugg). *Ibid.*, pp. 162-65.
- "Human olfactory responses recorded by depth electrography" (with R. G. Bickford, C. W. Sem-Jacobsen, and H. W. Dodge, Jr.). *Ibid.*, pp. 166-70.
- "The depth electrogram in schizophrenic patients" (with R. G. Bickford, C. W. Sem-Jacobsen, and H. W. Dodge, Jr.) Ibid., pp. 170-75.
- "Studies on the electrical structure and activation of an epileptogenic focus" (with R. G. Bickford, H. W. Dodge, Jr., and C. W. Sem-Jacobsen). *Ibid.*, pp. 175-80.

"Observations on depth stimulation of the human brain through implanted electrographic leads" (with R. G. Bickford, H. W. Dodge, Jr., and C. W. Sem-Jacobsen). Ibid., pp. 181-87.

"Neurosurgical and neurologic application of depth electrography" (with R. G. Bickford, H. W. Dodge, Jr., A. A. Bailey, C. W. Sem-Jacobsen, and R. H. Miller). *Ibid.*, pp. 188-91.

OBSTETRICS AND GYNECOLOGY

LAWRENCE M. RANDALL, M.D., M.S. in Obst. and Gyn., Professor

"Fluorescent staining for detection of cancer cells in vaginal smears" (with C. L. Lay and M. B. Dockerty). American College of Surgeons, Clinical Congress. Proceedings of the Surgical Forum, 38:321-27, 1952.

ARTHUR B. HUNT, M.D., M.S. in Obst and Gyn., Associate Professor

"Cancer of the cervix in pregnancy" (with R. D. Mussey). Pages 622-29 in Progress in Gynecology, Vol. 2, New York: Grune and Stratton, 1950.

"Problems of delivery of the oversized infant." American Journal of Obstetrics and Gynecology, 64:559-64. September, 1952.

"Neurologic lesions in relation to the sequelae of birth injury" (with H. M. Keith and Mildred A. Norval). Neurology, 3:139-47. February, 1953.

"Postpartum amenorrhea." Obstetrics and Gynecology, 1:522-28. May, 1953.

DAVID G. DECKER, M.D., M.S. in Obst. and Gyn., Instructor

"Some observations on the pressor effect of an oxytocic agent used intravenously" (with R. L. Jackson). Proceedings of the Staff Meetings of the Mayo Clinic, 28:20-24. January 14, 1953.

OPHTHALMOLOGY

CHARLES W. RUCKER, M.D., M.S. in Ophth., Professor

"Visual hallucinations associated with tumors of the occipital lobe" (with D. Parkinson and W. McK. Craig). American Medical Association Archives of Neurology and Psychiatry, 68:66-68. July, 1952.

"Neuro-ophthalmology," American Medical Association Archives of Ophthalmology, 48:639-56.
November, 1952.

"Fundus photographs in color using a high-speed flash tube in the Zeiss retinal camera" (with K. N. Ogle). *Ibid.*, 49:435-37. April, 1953.

"Unusual lesions involving the optic chiasm" (with R. D. Weyand and W. McK. Craig).

Proceedings of the Staff Meetings of the Mayo Clinic, 27:505-11. December 3, 1952.
"Nystagmus," American Journal of Ophthalmology, 36:250-58. February, 1953.

HENRY P. WAGENER, M.D., M.S. in Ophth., Professor

"Amaurosis fugax." American Journal of Medical Science, 224:229-36. August, 1952.

"Retinal micro-aneurysms." Ibid., 225:205-20. February, 1953.

AVERY D. PRANGEN, M.D., Associate Professor

"Observations on vertical divergences and hyperphorias" (with K. N. Ogle). American Medical Association Archives of Ophthalmology, 49:313-34. March, 1953.

JOHN W. HENDERSON, M.D., M.S. in Ophth., Assistant Professor

"Clinical orbitonometry in Graves' disease" (with T. P. Kearns and S. F. Haines). American Journal of Ophthalmology, 36:45-55. January, 1953.

"Curare akinesia in cataract operations." Ibid., pp. 781-88. June, 1953.

"Management of obstructions of the lacrimal canaliculi with polyethylene tubes; a follow-up study." American Medical Association Archives of Ophthalmology, 49:182-84. February, 1953.

ROBERT W. HOLLENHORST, M.D., M.S. in Ophth., Instructor

"The influence of cortisone on the rate of blood absorption from the eye" (with W. H. Benedict).

American Journal of Ophthalmology, 36:247-49. February, 1953.

OTOLARYNGOLOGY AND RHINOLOGY

HENRY L. WILLIAMS, JR., M.D., M.S. in Otolar. and Rhin., Professor

Ménière's Disease. Springfield, llinois: Charles C Thomas. 1952. 349 pages.

"The basis for use of cortisone and ACTH in treatment of otorhinologic conditions." Volume 1, pages 642-53 in *Progress in Ophthalmology and Otolaryngology*. New York: Grune and Stratton. 1952.

"The use of cortisone and corticotropin in the field of otorhinology and laryngology." Annals of Otolaryngology, Rhinology, and Laryngology, 61:497-504. June, 1952.

"The problem of synkinesis and contracture in cases of hemifacial spasm and Bell's palsy" (with E. H. Lambert and H. W. Woltman). Transactions of the American Otolaryngological Society, 40:194-214. 1952; Annals of Otolaryngology, Rhinology and Laryngology, 61:850-70. September, 1952.

"Allergy of the inner ear. (Ménière's disease)." American Medical Association Archives of Otolaryngology, 56:24-44. July, 1952.

FRED Z. HAVENS, M.D., Associate Professor

"Angiomas of interest to the otolaryngologist" (with H. B. Lockhart). Annals of Otolaryngology, Rhinology, and Laryngology, 62:36-50. March, 1953.

KINSEY M. SIMONTON, M.D., M.S. in Otolar. and Rhin., Associate Professor

"Selection of patients for surgical procedures in chronic suppurative otitis media." Journal of the American Medical Association, 150:461-64. October 4, 1952.

OLAV E. HALLBERG, M.D., M.S. in Otolar. and Rhin., Assistant Professor

"Points to remember when treating a patient with severe epistaxis." Transactions of the Pennsylvania Academy of Ophthalmology and Otolaryngology, 5:99-105. June 15, 1952.

"Ottic proteus meningitis with recovery: Report of case" (with R. H. Freedman and J. G. Love). Proceedings of the Staff Meetings of the Mayo Clinic, 27:390-92. September 24, 1952.

CLIFFORD F. LAKE, M.D., M.S. in Otolar, and Rhin., Instructor

"The surgical treatment of chronic sinusitis." Surgical Clinics of North America, pp. 1149-58. August, 1952.

Parasitology

THOMAS B. MAGATH, Ph.D., M.D., Professor

"Physiologic aspects of anorexia nervosa" (with J. M. Berkman and C. A. Owen, Jr.). Post-graduate Medicine, 12:407-18. November, 1952.

"A syringe envelope." American Journal of Clinical Pathology, 23:100. January, 1953.

PATHOLOGY

JAMES W. KERNOHAN, M.A. in Anat. and Path., M.D., Professor

"Tumors of the central nervous system" (with G. P. Sayre). Page 129, Sec. X, Fascicles 35 and 37 in Atlas of Tumor Pathology. Washington, D.C.: National Research Council. 1952. "Megakaryocytes in the pulmonary capillaries" (with Lydia M. Seebach). American Journal of

Clinical Pathology, 22:646-51. July, 1952.

"Communicating hydrocephalus from diffuse meningeal tumor. Report of two cases with increased intracranial pressure treated by use of polyethylene tube" (with A. W. Adson and H. W. Dodge, Jr.). American Medical Association Archives of Neurology and Psychiatry, 68:329-38. September, 1952.

- "Supratentorial tumors among children" (with R. H. Miller and W. McK. Craig). Ibid., pp. 797-814. December, 1952.
- "Ependymoma of the brain: Pathologic aspects" (with H. J. Svien, W. McK. Craig, and R. F. Mabon). Neurology, 3:1-15. January, 1953.

JOHN R. McDonald, M.D., M.S. in Path., Professor

- "Primary amyloidosis of the renal pelvis and ureter; Report of case" (with L. W. Gilbert), Journal of Urology, 68:137-39. July, 1952.
- "Condylomata acuminata of the urethra" (with R. P. Morrow and J. L. Emmett). Ibid., pp. 909-17. December, 1952.
- "Muscle biopsy in the diagnosis of periarteritis nodosa. An evaluation" (with S. R. Maxeiner, Jr. and J. W. Kirklin). Surgical Clinics of North America, pp. 1225-33. August, 1952.
- "Limitations of histopathologic technics in the diagnosis of granulomas" (with L. A. Weed). Ibid., pp. 1235-45. August, 1952.
- "Localized fibrous mesothelioms of the pleura" (with O. T. Clagett and H. W. Schmidt), Journal of Thoracic Surgery, 24:213-28. September, 1952.
- "Obstructive pneumonitis secondary to bronchial adenoma" (with R. P. McBurney and O. T. Clagett). Ibid., pp. 411-19. October, 1952.
- "Examination of pleural fluid for carcinoma cells" (with G. G. Graham, O. T. Clagett, and H. W. Schmidt). Ibid., 25:366-70. April, 1953.
- "Myxoma and myxosarcoma of the soft tissues of the extremities" (with K. H. Sponsel and
- R. K. Ghormley). Journal of Bone and Joint Surgery, 34-A:820-26. October, 1952. "El reconocimiento de las celulas cancerosas en el esputo y las secreciones bronquiales." Dia Medico, 24:1800-1801. October 16, 1952.
- "The significance of cell types in bronchogenic carcinoma" (with H. J. Moersch). Discases of the Chest, 23:621-33. June, 1953.

Archie H. Baggenstoss, M.D., M.S. in Path., Associate Professor

- "Rheumatic disease of the heart." Chapter 8, pages 638-92 in Sylvester E. Gould, editor, Pathology of the Heart, (1st edition.) Springfield, Illinois: Charles C Thomas, 1953.
- "Pseudomembranous enterocolitis: Clinicopathologic study of fourteen cases in which the disease was not preceded by an operation" (with M. S. Kleckner, Jr. and J. A. Bargen). Gastroenterology, 21:212-22. June, 1952.
- "Coronary thrombosis with acute thrombosis of the mesenteric arteries and gangrene of the ileum simulating acute pancreatitis" (with E. E. Gambill). Ibid., pp. 433-38. July, 1952.
- "The pathogenesis of atrophy of the left lobe of the liver of man" (with E. J. Benz and E. E. Wollaeger). Ibid., 22:34-47. September, 1952.
- "Postkepatitic and alcoholic cirrhosis: Clinicopathologic study of 43 cases of each" (with M. H. Stauffer). Ibid., pp. 157-80. October, 1952.
- "Rheumatoid granulomatous nodules as destructive lesions of vertebrae" (with W. H. Bickel and L. E. Ward). Journal of Bone and Joint Surgery, 34-A:601-609. July, 1952.
- "Parenchymal calcification of the kidneys in patients with duodenal ulcer" (with D. L. Becker and J. F. Weir). American Journal of Clinical Pathology, 22:843-54. September, 1952.
- "Visceral lesions in disseminated lupus erythematosus." Proceedings of the Staff Meetings of the Mayo Clinic, 27:412-19. October 22, 1952.
- "Symposium on some aspects of the normal and abnormal circulation of the liver: Introduction." Ibid., 28:217-18. April 22, 1953.
- "Infarction of the liver" (with K. R. Woolling and J. F. Weir), Ibid., pp. 239-44.
- "Atrophy of the left lobe of the liver" (with E. J. Benz and E. E. Wollaeger). Ibid., pp. 232-38. "The vasculature of the human liver: A study by the injection-cast method" (with J. D. Mann and K. G. Wakim). Ibid., pp. 227-32.
- "Solitary nodules (focal cirrhosis) of liver" (with E. J. Benz). *Ibid.*, pp. 245-47. "Clinical aspects of nephrocalcinosis" (with J. L. Emmett and JD Mortensen). *Ibid.*, pp. 305-12. June 3, 1953.
- "Acute pseudomembranous enterocolitis" (with M. S. Kleckner, Jr. and J. A. Bargen). Ibid., pp. 313-19.
- "Posthepatitic cirrhosis" (with M. H. Stauffer). Ibid., pp. 320-29.

MALCOLM B. DOCKERTY, M.D.C.M., M.S. in Path., Associate Professor

"Functioning ovarian neoplasms." Pages 38-47 in Progress in Gynecology. New York: Grune and Stratton, Vol. 2, 1950.

- "Pathology of hyperthyroidism." Santa Monica, California, St. John's Hospital Bulletin of Post Graduate Assembly, 1:11-17. 1949-50.
- "Fluorescent staining for detection of cancer cells in vaginal smears" (with C. L. Lay and L. M. Randall). American College of Surgeons, Clinical Congress. Proceedings of the Surgical Forum, 38:321-27, 1952.
- "Lymphosarcoma of the small intestine" (with J. W. Faulkner). Surgery, Gynecology and Obstetrics, 95:76-84. July, 1952.
- "A clinical and pathological study of the significance of malignant pyloric obstruction on postresection prognosis" (with A. D. Anderson and H. K. Gray). *Ibid.*, pp. 85-92. July, 1952.
- "Carcinoma of the rectum in the female. Effect of vaginal invasion on prognosis" (with C. D. Knight and J. M. Waugh). *Ibid.*, pp. 220-28. August, 1952.
- "The value of fresh frozen sections." (Editorial.) Ibid., pp.. 366-69. September, 1952.
- "The prognosis in carcinoma of the colon perforating into the urinary bladder" (with E. R. Taylor and C. F. Dixon). Ibid., 96:193-99. February, 1953.
- "Subphrenie abscess" (with J. J. Berens and H. K. Gray). Ibid., pp. 463-70. April, 1953.
- "Interscapular hibernoma—report of a case with a brief review of the literature" (with J. R. Miller). California Medicine, 77:38-40. July, 1952.
- "Pathologic aspects of carcinoma of the stomach." Journal of the Missouri State Medical Association, 49:653-58. August, 1952.
- "Pheochromocytoma from the laboratory standpoint" (with Grace M. Roth and N. C. Hightower, Jr.). Surgical Clinics of North America, pp. 1065-77. August, 1952.
- "Hepatic lesions in the living patient with chronic ulcerative colitis as demonstrated by needle biopsy" (with M. S. Kleckner, Jr., M. H. Stauffer, and J. A. Bargen). Gastroenterology, 23:13-33. September, 1952.
- "Lipomatous retroperitoneal tumors" (with J. H. DeWeerd). American Journal of Surgery, 84:397-407. October, 1952.
- "Extramammary Paget's disease; a report of four cases in which certain features of histogenesis were exhibited" (with J. H. Pratt). Cancer, 5:1161-69. November, 1952.
- "El valor de los cortes por congelacion." (Editorial.) Dia Medico, 24:1950-52. November 3, 1952.
- "Certain small painful tumors of the extremities." Journal-Lancet, 73:57-62. February, 1953.
- "Rapid frozen sections--their value in diagnosis." Minnesota Medicine, 36:387-88. April, 1953.
- "Hemiplegia resulting from pheochromocytoma, Report of case" (with J. E. Estes, W. H. ReMine, and J. T. Priestley), Journal of the American Medical Association, 152:808-11, June 27, 1953.

FRANK D. MANN, M.D., M.S., Ph.D., Associate Professor

- "Liver" (with F. C. Mann). Pages 473-92 in Victor E. Hall, editor, Annual Review of Physiology, Vol. 15. California: Annual Reviews, Inc. and American Physiological Society. 1953.
- "Co-thromboplastin reaction, a further complexity of blood coagulation." (Abstract.) American Journal of Physiology, 171:748. December, 1952.
- "Clinical determination of hemoglobin." Minnesota Medicine, 36:255-56. March, 1953.
- "Temporary defect of coagulation produced by zymin (dried yeast)" (with Margaret Hurn). Federation Proceedings, 12:395-96. March, 1953.

WARREN A. BENNETT, M.D., M.S. in Path., Assistant Professor

- "Cortisone and ACTII in acute leukemia: A clinicopathologic study" (with J. M. Stickney). Unio Internationales Cancrum ACTA, 8:573-74, 1952.
- "Thrombotic thrombocytopenic purpura: Confirmation of clinical diagnosis by bone marrow aspiration" (with T. Cooper, J. M. Stickney, and Gertrude L. Pease). American Journal of Medicine, 13:374-83. September, 1952.
- "Renal lesions and function following prolonged experimental hypotension" (with M. A. Block, K. G. Wakim, and F. C. Mann). Surgery, 32:551-80. September, 1952.
- "Gonadotropins of the pituitary gland and the urine of the adult human female" (with R. C. Bahn, N. Lorenz, and A. Albert). Endocrinology, 52:135-39. February, 1953.
- "The pituitary gland in patients treated with cortisone and ACTH" (with R. A. Kilby). (Abstract.) American Journal of Pathology, 29:586-87. May-June, 1953.
- "Use of dextran (macrodex) in burns. II. Clinical evaluation in eight cases" (with J. M. Janes, E. V. Johnston, and J. S. Lundy). American Journal of Surgery, 85:720-28. June, 1953.

- DAVID C. DAHLIN, M.D., M.S. in Path., Assistant Professor
- "Chordoma; a study of fifty-nine cases" (with C. S. MacCarty). Cancer, 5:1170-78. November, 1952.
- "Tuberculous tenosynovitis" (with W. H. Bickel and R. F. Kimbrough). Journal of the American Medical Association, 151:31-35. January 3, 1953.
- "Retrograde intramural spread of carcinoma of the rectum and rectosigmoid; a microscopic study" (with E. A. Quer and C. W. Mayo). Surgery, Gynecology and Obstetrics, 96:24-30. January, 1953.
- "Aneurysmal bone cyst" (with B. E. Besse, Jr., A. Bruwer, H. J. Svien, and R. K. Ghormley).

 Proceedings of the Staff Meetings of the Mayo Clinic, 28:249-55. May 6, 1953.

CHARLES A. OWEN, JR., M.D., Ph.D. in Med., Assistant Professor

- "Physiologic aspects of anorexia nervosa" (with J. M. Berkman and T. B. Magath). Post-graduate Medicine, 12:407-18. November, 1952.
- "Effect of stable conversion factor in tests of prothrombin." (Abstract.) .imerican Journal of Physiology, 171:755. December, 1952.
- "Intercellular plasma of centrifuged human crythrocytes as measured by means of iodo¹³¹ albumin" (with M. H. Power). Journal of Applied Physiology, 5:323-29. January, 1953.
- "Distribution of iodide between cells and plasma as measured by means of radioactive iodide" (with M. H. Power). Journal of Biological Chemistry, 200:111-16. January, 1953.
- "The comparative effects of menadione sodium bisulfite and vitamin K1 on the hypoprothrombinemia induced by dicumarol" (with W. G. Bannon and N. W. Barker). Journal of Laboratory and Clinical Medicine, 41:393-404. March, 1953.
- "Changes in blood coagulation factors during the first week of life" (with Margaret M. Hurn).

 Journal of Pediatrics, 42:424-28. April, 1953.

EDITH M. PARKHILL, M.D., M.S. in Path., Assistant Professor

"The effects of microwave diathermy on the eye of the rabbit" (with L. Daily, Jr., K. G. Wakim, Julia F. Herrick, and W. L. Benedict). American Journal of Ophthalmology, 35:1001-17. July, 1952.

GEORGE P. SAYRE, M.D.C.M., M.S. in Path., Assistant Professor

- "Tumors of the central nervous system" (with J. W. Kernohan). Page 129, Section X, Fascicles 35 and 37 in Atlas of Tumor Pathology. Washington, D.C.: National Research Council, 1952.
- "Prevention of experimental allergic encephalomyelitis by various agents" (with L. C. Kolb and A. G. Karlson). Transactions of the American Neurological Association, 77:117-20. 1952.
- "Sugar content of the cerebrospinal fluid in diffuse neoplastic involvement of the meninges" (with H. W. Dodge, Jr. and H. J. Svien). Proceedings of the Staff Meetings of the Mayo Clinic, 27:259-66. July 2, 1952.

LEWIS B. WOOLNER, M.D.C.M., M.S. in Path., Assistant Professor

- "The surgeon's dilemma: Carcinoma or thyroiditis?" (with N. J. Bellegie and E. S. Judd). Transactions of the American Goiter Association, pp. 375-83. 1952.
- "Multiple endocrine adenomas: Report of 8 cases involving the parathyroids, pituitary and pancreas" (with L. O. Underdahl and B. M. Black). (Abstract.) Journal of Clinical Endocrinology and Metabolism, 12:944. July, 1952; 13:20-47. January, 1953.
- "Pathologic diagnosis of primary hyperparathyroidism." Surgical Clinics of North America, pp. 1043-52. August, 1952.
- "Tumors and hyperplasia of the parathyroid glands; a review of the pathological findings in 140 cases of primary hyperparathyroidism" (with F. R. Keating, Jr. and B. M. Black). Cancer, 5:1069-88. November, 1952.
- "Some uncommon causes of appendiceal mucocele" (with J. R. Hilsabeck and E. S. Judd). American Journal of Surgery, 84:670-74. December, 1952.
- "Carcinoma of the appendix: Comments on pathology." Proceedings of the Staff Meetings of the Mayo Clinic, 28:17-20. January 14, 1953.
- "Metastasizing bronchial adenomas" (with R. P. McBurney and J. W. Kirklin). Surgery, Gynecology and Obstetrics, 96:482-92. April, 1953.
- "Carotid body tumors (chemodectomas)" (with J. R. Pettet and E. S. Judd). Annals of Surgery, 137:465-77. April, 1953.

GERTRUDE L. PEASE, M.D., M.S. in Path., Instructor

"Thrombotic thrombocytopenic purpura: Confirmation of clinical diagnosis by bone marrow aspiration" (with T. Cooper, J. M. Stickney, and W. A. Bennett). American Journal of Medicine, 13:374-83. September, 1952.

Comparative Pathology

WILLIAM H. FELDMAN, D.V.M., M.D., Professor

- "Isoniazid in experimental tuberculosis of guinea pigs infected with tubercle bacilli resistant to streptomycin and to para-aminosalicylic acid" (with A. G. Karlson). American Review of Tuberculosis, 66:477-85. October, 1952.
- "A method for producing tuberculous meningitis in guinea pigs by lumbar intrathecal inoculation" (with R. P. Stevens and A. G. Karlson). *Ibid.*, pp. 722-31. December, 1952.
- "Irradiated antituberculosis vaccine, including comparison with BCG in experimentally infected guinea pigs" (with J. B. Seagle and A. G. Karlson). *Ibid.*, 67:341-52. March, 1953.

ALFRED G. KARLSON, D.V.M., M.S., Ph.D., Assistant Professor

- "Prevention of experimental allergic encephalomyelitis by various agents" (with L. C. Kolb and G. P. Sayre). Transactions of the American Neurological Association, 77:117-20. 1952.
- "The transmissible venereal tumor of dogs: Observations on forty generations of experimental transfers" (with F. C. Mann). Annals of the New York Academy of Science, 54:1197-1213. July 10, 1952.
- "Effect of isonicotinic acid hydrazide (isoniazid) on survival time of mice infected with tubercle bacilli resistant to the drug in vitro" (with Y. Ikemi). Proceedings of the Staff Meetings of the Mayo Clinic, 27:373-76. September 10, 1952.
- "Failure of cortisone to affect the therapeutic activity of streptomycin in experimental tuberculosis of guinea pigs" (with J. II. Gainer). *Ibid.*, pp. 465-71. November 5, 1952.
- "The effect of ultrasound on the transmissible Walker rat carcinoma" (with J. D. Schroder and Julia F. Herrick). Archives of Physical Medicine and Rehabilitation, 33:660-67. November, 1952.
- "Isoniazid in experimental tuberculosis of guinea pigs infected with tubercle bacilli resistant to streptomycin and to para-aminosalicylic acid" (with W. H. Feldman). American Review of Tuberculosis, 66:477-85. October, 1952.
- "A method for producing tuberculous meningitis in guinea pigs by lumbar intrathecal inoculation" (with R. P. Stevens and W. H. Feldman). *Ibid.*, pp. 722-31. December, 1952.
- "Irradiated antituberculosis vaccine, including comparison with BCG in experimentally infected guinea pigs" (with J. B. Seagle and W. H. Feldman). *Ibid.*, 67:341-53. March, 1953.

PEDIATRICS

ROGER L. J. KENNEDY, M.D., M.S. in Ped., Professor

- "Urologic abnormalities associated with congenital absence or deficiency of abdominal musculature" (with L. F. Greene, J. L. Emmett, and O. S. Culp). *Journal of Urology*, 68:217-29. July, 1952.
- "Congenital absence of abdominal muscles with urologic complications: A further report" (with L. F. Greene, J. L. Emmett, and O. S. Culp). Proceedings of the Staff Meetings of the Mayo Clinic, 27:325-27. July 30, 1952.

HADDOW M. KEITH, M.D., Associate Professor

- "Water intoxication. Report of case in which cumulative-chloride-balance data aided diagnosis and therapy" (with J. L. Baskin and B. H. Scribner). American Medical Association American Journal of Diseases of Children, 84:351-54. September, 1952.
- "Petit mal." Proceedings of the Staff Meetings of the Mayo Clinic, 28:35-39. January 28, 1953. "Neurologic lesions in relation to the sequelae of birth injury" (with Mildred A. Norval and A. B. Hunt). Neurology, 3:139-47. February, 1953.

George B. Logan, M.D., M.S. in Ped., Associate Professor

- "A plea for continued improvement in adoption practices in Minnesota." (Editorial.) Minnesota Medicine, 35:567-68. June, 1952.
- "Immunization during the first year." Ibid., pp. 845-46. September, 1952.
- "Obstructive lesions of the upper part of the respiratory tract of children." South Dakota Journal of Medicine and Pharmacy, 5:273-77. October, 1952.
- "Treatment of children having asthma." Ibid., pp. 311-13, 319. November, 1952.
- "Significance of hepatomegaly in infants and children." Postgraduate Medicine, 13:469-72. May, 1953.
- "Use of cortisene for congenital adrenal hyperplasia in the male: Report of case" (with C. F. Gastineau, A. Albert, and H. L. Mason). Journal of Clinical Endocrinology and Metabolism, 13:724-29. June, 1953.

JAMES W. DUSHANE, M.D., Assistant Professor

- "Congenital malformation of the heart. Origin of transposed great vessels from the right ventricle associated with atresia of the left ventricular outlet, double orifice of the mitral valve, and single coronary artery" (with J. E. Edwards and J. W. James). Laboratory Investigation, 1:197-207. 1952.
- "Pathologic study of hearts previously catheterized" (with J. E. Edwards, H. F. Helmholz, Jr., and H. B. Burchell). Proceedings of the Staff Meetings of the Mayo Clinic, 28:113-20. February 25, 1953.

STEPHEN D. MILLS, M.D., M.S. in Ped., Assistant Professor

- "Aplastic anemia associated with the administration of chloramphenicol" (with M. M. Hargraves and F. J. Heck). Proceedings of the Staff Meetings of the Mayo Clinic, 27:280-81. July 16, 1952; Journal of the American Medical Association, 149:1293-1300. August 2, 1952.
- "Surgical treatment of coarctation of the aorta in a ten week old infant: Report of a case" (with J. W. Kirklin, H. B. Burchell, D. G. Pugh, and E. C. Burke). Circulation, 6:411-14. September, 1952.
- "Values for fecal urobilinogen in childhood" (with H. L. Mason and Elizabeth Maclay).

 "American Medical Association American Journal of Diseases of Children, 84:322-26.

 September. 1952.
- "Corticotropin and cortisone in blood diseases in children" (with J. M. Stickney). Journal of the American Medical Association, 150:1278-80. November 29, 1952.
- "Dextran for nephrotic edema: Clinical experience" (with J. T. Olive, Jr. and J. S. Lundy).

 Proceedings of the Staff Meetings of the Mayo Clinic, 28:199-204. April 8, 1953.

ALVIN B. HAYLES, M.D., Instructor

"Urgent surgical conditions in the newborn." Minnesota Medicine, 36:49-54. January, 1953.

Physical Medicine and Rehabilitation

FRANK H. KRUSEN, M.D., Professor

- "The second John Stanley Coulter memorial lecture; report on the International Congress of Physical Medicine." Archives of Physical Medicine and Rehabilitation, 33:651-60. November, 1952.
- "Present status of the use of ultrasonic energy in physical medicine." Ultraschall in der Medizine, 5:163-71. December, 1952.
- "New frontiers in rehabilitation—To restore only the patient's body is to build a cathedral and omit the spire." Crippled Children, 30:12-14. December, 1952.
- "Physical medicine and obesity." Journal of the American Medical Association, 151:296:97.

 January 24, 1953.
- "Effects of ultrasound on growing bone; an experimental study" (with R. E. DeForest, Julia F. Herrick, and J. M. Janes). Archives of Physical Medicine and Rehabilitation, 34:21-31. January, 1953.
- "A new concept in physical medicine and rehabilitation. Treating 'the whole man.'" Hospitals, 27:59-60. January, 1953.

EARL C. ELKINS, M.D., Assistant Professor

- "Incidence of pain in idiopathic scoliosis" (with L. F. Bender, R. O. McMorris, and J. M. Janes). Archives of Physical Medicine and Rehabilitation, 33:406-408. July, 1952.
- "The effect of a surgically induced arteriovenous fistula on bone growth: Report of case" (with J. M. Janes). Proceedings of the Staff Meetings of the Mayo Clinic, 27:335-37. August 13, 1952.
- "An experimental study of the effect of various procedures on the flow of lymph" (with Julia F. Herrick, J. H. Grindlay, F. C. Mann, and R. E. DeForest). (Abstract.) American Journal of Physiology, 171:735-36. December, 1952; Archives of Physical Medicine and Rehabilitation, 34:31-39. January, 1953.
- GORDON M. MARTIN, M.D., M.S. in Phys. Med. and Rehab., Assistant Professor "The American Congress of Physical Medicine annual session, 1952." Annals of Physical Medicine, 1:212-17. April, 1953.

Physiological Chemistry

Marschelle H. Power, Ph.D., Professor

- "Comparative metabolic effects of the intramuscular use of cortisone acetate and 17-hydroxycorticosterone (compound F) acetate" (with R. M. Salassa, H. L. Mason, and R. G. Sprague). (Abstract.) Journal of Clinical Investigation, 31:658. June, 1952.
- "Diabetes mellitus and Cushing's syndrome: Concentrations of lactate and pyruvate in blood after ingestion of glucose" (with O. W. Hills and R. M. Wilder). Diabetes, 1:351-57. September-October, 1952.
- "Intercellular plasma of centrifuged human crythrocytes as measured by means of iodolical albumin" (with C. A. Owen, Jr.) Journal of Applied Physiology, 5:323-29. January, 1953.
- "Distribution of iodide between cells and plasma as measured by means of radioactive iodide" (with C. A. Owen, Jr.). Journal of Biological Chemistry, 200:111-16. January, 1953.
- "Nontropical sprue: Observations on absorption and metabolism" (with M. W. Comfort, E. E. Wollaeger, and A. B. Taylor). Gastroenterology, 23:155-78. February, 1953.
- "Electrolyte metabolism in diabetic acidosis" (with R. G. Sprague). Journal of the American Medical Association, 151:970-76. March 21, 1953.
- "Hypopotassemia and other electrolyte disturbances in Cushing's syndrome" (with R. G. Sprague).

 **Journal-Lancet, 73:217-19. June, 1953.

VERNON R. MATTOX, M.D., Ph.D., Assistant Professor

- "Steroids Derived from Bile Acids"
 - "XIX. Barbier-Wieland degradation in the 11-keto series" (with R. B. Turner, W. F. McGuckin, and E. C. Kendall). Journal of the American Chemical Society, 74: 5814-17. December 5, 1952.
 - "XX. Degradation of 3a, 9a-epoxy-11-ketonorcholanic acid to 3a, 9a-epoxy-11-ketoctiocholanic acid" (with R. B. Turner, W. F. McGuckin, Edith J. H. Chu, and E. C. Kendall). Ibid., pp. 5818-19.

Physiology

JESSE L. BOLLMAN, M.S., M.D., Professor

- "Measurement of renal gluconeogenesis" (with J. H. Grindlay). American Journal of Physiology, 170:38-44. July, 1952.
- "Alkaline phosphate and amylase of plasma after hepatectomy" (with Eunice V. Flock, M. A. Block, and F. C. Mann). *Ibid.*, pp. 467-71. August, 1952.
- "The effect of glucose on the amino acids of plasma after total hepatectomy" (with Eunice V. Flock, M. A. Block, F. C. Mann, and J. H. Grindlay). Journal of Biological Chemistry, 198:427-37. September, 1952.
- "Changes in free amino acids of brain and muscle after total hepatectomy" (with Eunice V. Flock, M. A. Block, J. H. Grindlay, and F. C. Mann). *Ibid.*, 200:529-36. February, 1953.

- "Effects of vagotomy on pancreatic secretion in dogs with chronic pancreatic fistula" (with E. F. Routley, F. C. Mann, and J. H. Grindlay). Surgery, Gynecology and Obstetrics, 95:529-36. November, 1952.
- "Symposium on experimental medicine; introduction." Proceedings of the Staff Meetings of the Mayo Clinic, 27:530-32. December 17, 1952.
- "Effect of occlusion of vessels entering the liver on hepatic venous pressure in normal and cirrhotic dogs; a preliminary report" (with J. H. Grindlay and R. Thors). American College of Surgeons, Clinical Congress. Proceedings of the Surgical Forum, 38:493-96, 1952.
- "Effect of ligation of the hepatic artery on oxygen content of blood from the hepatic vein in dogs" (with R. Thors and J. H. Grindlay). *Ibid.*, pp. 500-504, 1952.
- "Effect of insulin on free amino acids after hepatectomy" (with Eunice V. Flock, F. C. Mann, and J. H. Grindlay). (Abstract.) Federation Proceedings, 12:203. March, 1953.
- "Hepatic blood flow following arterial or portal vein occlusion" (with J. H. Grindlay). (Abstract.)

 1bid., p. 385.
- "Extravascular diffusion of dextran from blood." Journal of Laboratory and Clinical Medicine, 41:421-27. March, 1953.
- "Effect of gastric operations on loss of fecal fat in the dog" (with R. B. Welbourn and G. A. Hallenbeck). Gastroenterology, 23:441-51. March, 1953.

CHARLES F. CODE, M.D., Ph.D. in Physiol., Professor

- "The digestive system." Pages 107-38 in Victor E. Hall, editor, Annual Review of Physiology, Vol. 15. Stanford: Annual Review, Inc. and American Physiological Society. 1953.
- "The histamine content of white blood cells." Pages 292-305 in James L. Tullis, editor, Blood Cells and Plasma Proteins, Their State in Nature. New York: Academic Press, Inc. 1953.
- "Motility of the alimentary canal in man: Review of recent studies" (with N. C. Hightower, Jr. and C. G. Morlock). American Journal of Medicine, 13:328-51. September, 1952.
- "Lack of effect of adrenalectomy and of administration of cortisone on concentration of histamine in blood of rabbits" (with P. B. Dews and G. M. Higgins). (Abstract.) American Journal of Physiology, 171:719. December, 1952.
- "Source of a possible gastric secretory inhibitor in canine gastric juice and effects of vagotomy on its production" (with J. H. Grindlay and R. T. Hood, Jr.). Ibid., 173:270-74. May, 1953.
- "The effect of vagotomy and of methantheline bromide on the diarrhea produced by celiac and superior mesenteric ganglionectomy" (with M. A. Freedman and G. A. Hallenbeck). American College of Surgeons, Clinical Congress. Proceedings of the Surgical Forum, 38:481-86. 1952.
- "A study of esophageal pressures in normal persons and patients with cardiospasm" (with J. W. Butin, A. M. Olsen, and H. J. Moersch). Gastroenterology, 23:278-91. February, 1953.
- "Effects of cortisone and of adrenalectomy on secretion of gastric acid and on occurrence of gastric ulceration in the pylorus-ligated rat" (with R. B. Welbourn). *Ibid.*, pp. 356-62. March, 1953.
- "Do the vagus nerves have an inhibitory influence on gastric secretion?" (Abstract.) Federation Proceedings, 12:26-27. March, 1953.
- "Anaphylactic reactions and concentrations of antibody in rats and rabbits: Effect of adrenalectomy and of administration of cortisone" (with P. B. Dews). Journal of Immunology, 70:199-206. March, 1953.

KHALIL G. WAKIM, M.D., Ph.D. in Physiol., Professor

- "The effects of microwave diathermy on the eye of the rabbit" (with L. Daily, Jr., Julia F. Herrick, Edith M. Parkhill, and W. L. Benedict). American Journal of Ophthalmology, 35:1001-17. July, 1952.
- "Renal lesions and function following prolonged experimental hypotension" (with M. A. Block, F. C. Mann, and W. A. Bennett). Surgery, 32:551-80. September, 1952.
- "Effect of severe acute hemorrhage on kidney of rat" (with M. A. Block and F. C. Mann).

 American Medical Association Archives of Pathology, 54:443-49. November, 1952.
- "Reactions of the vessels of the rat kidney after experimental occlusion of the renal artery for various periods" (with M. A. Block and F. C. Mann). Proceedings of the Society for Experimental Biology and Medicine, 80:465-66. July, 1952.
- "Effect of water and electrolyte restriction on pathologic changes in kidney of jaundiced rats" (with M. A. Block and F. C. Mann). *Ibid.*, pp. 765-68. August-September, 1952.
- "A method for increasing blood flow to the extremities by simple conservation of body heat:
 Preliminary report of effect of an insulated plastic boot applied to the lower extremities"

- (with K. R. Woolling, E. V. Allen, and Grace M. Roth). Proceedings of the Staff Meetings of the Mayo Clinic, 27:393-401. October 8, 1952.
- "The blood supply of the normal liver" (with F. C. Mann). *Ibid.*, 28:218-27. April 22, 1953. "The vasculature of the human liver: A study by the injection-cast method" (with J. D. Mann and A. H. Baggenstoss). *Ibid.*, pp. 227-32.
- "The effect of changes in concentration of cations on the electrocardiogram of the isolated perfused heart" (with W. A. Butcher, H. E. Essex, R. D. Pruitt, and H. B. Burchell).

 *American Heart Journal, 43:801-14, June, 1952.
- "The effect of lithium chloride on the electrocardiogram of the isolated perfused heart" (with W. A. Butcher, H. E. Essex, and H. B. Burchell). *Ibid.*, 45:855-63. June, 1953.
- "Circulation through kidney during stimulation of the renal nerves" (with M. A. Block and F. C. Mann). American Journal of Physiology, 169:659-69. June, 1952.
- "Renal function during stimulation of renal nerves" (with M. A. Block and F. C. Mann).

 American Journal of Physiology, pp. 670-77.
- "Appraisal of certain factors influencing compensatory renal hypertrophy" (with M. A. Block and F. C. Mann). American Journal of Physiology, 170:60-66. January, 1953.
- "Ultrasonic energy as applied to medicine." American Journal of Physical Medicine and Rehabilitation, 32:32-46. February, 1953.
- "Influence of frequency of muscle stimulation on circulation in the stimulated extremity" (with R. Arns). Archives of Physical Medicine and Rehabilitation, 34:291-95. May, 1953.

EARL H. WOOD, M.S., Ph.D., M.D., Professor

- "Blood gas transport." Pages 235-58 in Annual Review of Physiology. Vol. 14, 1952.
- "Some factors which influence the protection afforded by pneumatic anti-g suits" (with E. H. Lambert). Journal of Aviation Medicine, 23:218-28. June, 1952.
- "Quantitation of venous-arterial shunts in congenital heart disease on the basis of dyc-dilution curves" (with H. J. C. Swan, J. Zapata-Diaz, and H. B. Burchell). (Abstract.) Proceedings of the Central Society for Clinical Research, 25:89-90. 1952; Journal of Laboratory and Clinical Medicine, 40:953-54. December, 1952.
- "Over-all experience with cardiac catheterization" (with H. B. Burchell and H. F. Helmholz, Jr.). Proceedings of the Staff Meetings of the Mayo Clinic, 28:50-57. February 11, 1953. "Special technics of value in the cardiac catheterization laboratory." Ibid., pp. 58-64.
- "The problem of isolated valvular versus infundibular pulmonic stenosis with particular reference to cardiac catheterization data and records obtained at the time of operation" (with D. C. Connolly, R. Lev, and J. W. Kirklin). *Ibid.*, pp. 65-71.
- "Pulmonary-artery wedge pressures in mitral valve disease; relationship to left atrial pressures" (with D. C. Connolly, R. G. Tompkins, R. Lev, and J. W. Kirklin). *Ibid.*, pp. 72-78.
- "Ebstein's malformation of the tricuspid valve: Report of 3 cases" (with J. C. Broadbent, H. B. Burchell, and R. L. Parker). *Ibid.*, pp. 79-88.
- "Localization of cardiac defects by dye-dilution curves recorded after injection of T-1824 at multiple sites in the heart and great vessels during cardiac catheterization" (with H. J. C. Swan). *Ibid.*, pp. 95-100. February 25, 1953.
- "Left-to-right intracardiac shunts in the presence of pulmonary stenosis" (with J. C. Broadbent and H. B. Burchell). *Ibid.*, pp. 101-106.
- "Pressure pulses in the right side of the heart in a case of amyloid disease and in a case of idiopathic heart failure simulating constrictive pericarditis" (with P. S. Hetzel and H. B. Burchell). *Ibid.*, pp. 107-12.
- "Appearance and disappearance of T-1824 in tissue after intravenous injection in man; measurement by ear oximeter" (with D. C. Connolly). (Abstract.) American Journal of Physiology, 171:715-16. December, 1952.
- "Quantitation of stroke volume changes in man from peripheral arterial pressure pulses" (with II. J. C. Swan and II. R. Warner). *Ibid.*, pp. 771-72.
- "Quantitation of rapid stroke volume changes in man from aortic pressure pulses" (with H. R. Warner and H. J. C. Swan). (Abstract.) *Ibid.*, p. 777.
- "Comparison of aortic pressure pulses recorded by strain-gauge and capacitance manometer-catheter systems in man" (with I. R. Leusen and H. R. Warner). (Abstract.) American Journal of Physiology, 171:780. December, 1952.
- "Spectrophotometric determination of T-1824 in whole hemolyzed blood" (with J. W. Nicholson, III and G. G. Nahas). Journal of Applied Physiology, 4:813-18. April, 1952.
- "Simplified calculation of cardiac output from dye dilution curves recorded by oximeter" (with H. R. Warner). *Ibid.*, 5:111-16. September, 1952.
- "Oxygen dissociation curve of arterial blood in men breathing high concentrations of oxygen" (with G. G. Nahas and E. H. Morgan), Ibid., pp. 169-79, October, 1952.

- ALEXANDER ALBERT, Ph.D., M.D., Associate Professor
- "The enterohepatic circulation of radiothyroxine." (Abstract.) Journal of Clinical Endocrinology and Metabolism, 12:942. July, 1952.
- "The metabolism of radiothyroxine in exophthalmic goiter" (with R. S. Benua and F. R. Keating, Jr.), *Ibid.*, pp. 1461-73. November, 1952.
- "Use of cortisone for congenital adrenal hyperplasia in the male: Report of case" (with C. F. Gastineau, G. B. Logan, and H. L. Mason). *Ibid.*, 13:72+29. June, 1953.
- "Thyroid gland." Annual Review of Physiology, 14:481-98. 1952.
- "The metabolism of radiothyroxine in exophthalmic goiter" (with R. S. Benua and R. F. Keating, Jr.). Transactions of the American Goiter Association, pp. 218-30. 1952.
- "The enterohepatic circulation of radiothyroxine" (with F. R. Keating, Jr.). *Ibid.*, pp. 231-38. "The role of the gastrointestinal tract, including the liver, in the metabolism of radiothyroxine" (with F. R. Keating, Jr., N. Lorenz, and E. Ford). *Endocrinology*, 51:427-43. November, 1952.
- "Gonadotropins of the pituitary gland and the urine of the adult human female" (with R. C. Bahn, N. Lorenz, and W. A. Bennett). *Ibid.*, 52:135-39. February, 1953.
- "Chorionic gonadotropin." (Editorial.) Surgery, Gynecology and Obstetrics, 96:625-28. May, 1953.
- "Distribution and metabolism of radioactive 1-triodothyronine compared with radioactive 1-thyroxine in the rat" (with F. R. Keating, Jr.). (Abstract.) Journal of Clinical Investigation, 32:580. June, 1953.

REGINALD G. BICKFORD, M.B., Ch.B., Associate Professor

- "Some observations on the mechanism of photic and photo-metrazol activation" (with C. W. Sem-Jacobsen, P. T. White, and D. Daly). Electroencephalography and Clinical Neurophysiology, 4:275-82. August, 1952.
- "Factors affecting cortical, subcortical and myoclonic responses to photic stimulation in cats" (with D. A. Johnson). (Abstract.) *Ibid.*, 5:126. February, 1953.
- "Photic and photo-metrazol activation in psychotic patients" (with C. W. Sem-Jacobsen). (Abstract.) Ibid., p. 127.
- "The electroencephalogram in cases of tumors of the posterior fossa and third ventricle" (with C. S. MacCarty, D. Daly, and J. L. Whelan), Ibid., pp. 203-16, May, 1953.
- "Some clinical and electro-encephalographic responses to sound stimulation in epileptic responses to sound stimulation in epileptic patients" (with R. M. Peet and D. Daly). Transactions of the American Neurological Association, 77:215-17, 1952.
- "Components of the photomyoclonic response in man" (with P. T. White, E. A. Rodin, and C. W. Sem-Jacobsen). (Abstract.) Federation Proceedings, 12:15-16. March, 1953.
- "Electrical rhythms recorded from the depth of the frontal lobes during operations on psychotic patients" (with A. Uihlein and M. C. Petersen). Proceedings of the Staff Meetings of the Mayo Clinic, 28:135-43. March 11, 1953.
- "Technic of depth electrography" (with H. W. Dodge, Jr., C. B. Holman, C. W. Sem-Jacobsen, and M. C. Petersen). Ibid., pp. 147-55. March 25, 1953.
- "Depth distribution of normal electroencephalographic rhythms" (with C. W. Sem-Jacobsen, M. C. Petersen, and H. W. Dodge, Jr.). *Ibid.*, pp. 156-61.
- "Some effects of barbiturate anesthesia on the depth electrogram" (with A. Faulconer, Jr., C. W. Sem-Jacobsen, M. C. Petersen, H. W. Dodge, Jr., and F. J. Schnugg). *Ibid.*, pp. 162-65.
- "Human olfactory responses recorded by depth electrography" (with C. W. Sem-Jacobsen, H. W. Dodge, Jr., and M. C. Petersen). *Ibid.*, pp. 166-70.
- "The depth electrogram in schizophrenic patients" (with M. C. Petersen, C. W. Sem-Jacobsen, and H. W. Dodge, Jr.). *Ibid.*, pp. 170-75.
- "Studies on the electrical structure and activation of an epileptogenic focus" (with H. W. Dodge, Jr., C. W. Sem-Jacobsen, and M. C. Petersen). *Ibid.*, pp. 175-80.
- "Observations on depth stimulation of the human brain through implanted electrographic leads" (with M. C. Petersen, H. W. Dodge, Jr., and C. W. Sem-Jacobsen). *Ibid.*, pp. 181-87.
- "Neurosurgical and neurologic application of depth electrography" (with H. W. Dodge, Jr., A. A. Bailey, M. C. Petersen, C. W. Sem-Jacobsen, and R. H. Miller). *Ibid.*, pp. 188-91.
- "Electroencephalographic patterns during anesthesia with cyclopropane: Correlation with concentration of cyclopropane in arterial blood" (with S. Possati, A. Faulconer, Jr., and R. C. Hunter). Current Researches in Anesthesia and Analgesia, 32:130-35. March-April, , 1953.

"Electroencephalographic findings associated with subdural hematoma. Review of forty-five cases" (with E. A. Rodin and H. J. Svien). American Medical Association Archives of Neurology and Psychiatry, 69:743-55. June, 1953.

WARD S. FOWLER, M.D., Associate Professor

"Mechanical factors in breath holding." (Abstract.) Federation Proceedings, 12:44-45. March, 1953.

Julia F. Herrick, M.A., Ph.D., Associate Professor

- "Influence of the pituitary-adrenal axis on the hemogram of febrile white rats" (with W. L. Hubler, G. M. Higgins, Mary Woods, and G. Christensen). Archives of Physical Medicine and Rehabilitation, 33:391-98. July, 1952.
- "The effect of ultrasound on the transmissible Walker rat carcinoma" (with J. D. Schroder and A. G. Karlson). *Ibid.*, pp. 660-67. November, 1952.
- "Effects of ultrasound on growing bone; an experimental study" (with R. E. DeForest, J. M. Janes, and F. H. Krusen). *Ibid.*, 34:21-34. January, 1953.
- "Effect of various procedures on the flow of lymph" (with E. C. Elkins, J. H. Grindlay, F. C. Mann, and R. E. DeForest). Ibid., pp. 31-39. January, 1953.
- "Biologic reactions to cavitation, a consideration for ultrasonic therapy" (with J. F. Lehmann). *Ibid.*, pp. 86-98, February, 1953.
- "The effects of microwave diathermy on the eye of the rabbit" (with L. Daily, Jr., K. G. Wakim, Edith M. Parkhill, and W. L. Benedict). American Journal of Ophthalmology, 35:1001-17. July, 1952.
- "An experimental study of the effect of various procedures on the flow of lymph" (with E. C. Elkins, J. H. Grindlay, F. C. Mann, and R. E. DeForest). (Abstract.) American Journal of Physiology, 171:735-36. December, 1952.
- "Temperatures produced in tissues by ultrasound: Experimental study using various technics."

 Journal of Acoustical Society of America, 25:12-16. January, 1953.

EDWARD H. LAMBERT, M.S., M.D., Ph.D. in Physiol., Associate Professor

- "Some factors which influence the protection afforded by pneumatic anti-g suits" (with E. H. Wood). Journal of Aviation Medicine, 23:218-28. June, 1952.
- "The problem of synkinesis and contracture in cases of hemifacial spasm and Bell's palsy" (with H. L. Williams and H. W. Woltman). Annals of Otolaryngology, Rhinology and Laryngology, 61:850-70. September, 1952; Transactions of the American Otolaryngological Society, 40:194-214, 1952.
- "Stage of neuromuscular paralysis in myotonia" (with C. H. Millikan and L. M. Eaton).

 American Journal of Physiology, 171:741. December, 1952.
- "Action potentials supporting the presence of specialized conduction pathways in the dog's ventricle" (with H. B. Burchell and H. E. Essex). (Abstract.) Circulation Research, 1:186-88. March, 1953.
- "Size of motor unit action potentials in neuromuscular disorders" (with R. O. McMorris). (Abstract.) Federation Proceedings, 12:81. March, 1953.

GRACE M. ROTH, Ph.D., Associate Professor

- "Pheochromocytoma from the laboratory standpoint" (with M. B. Dockerty and N. C. Hightower, Jr.). Surgical Clinics of North America, pp. 1065-77. August, 1952.
- "Evaluation of new adrenolytic drug (regitine) as test for pheochromocytoma" (with R. W. Gifford, Jr. and W. F. Kvale). Journal of the American Medical Association, 149:1628-34. August 30, 1952.
- "A method for increasing blood flow to the extremities by simple conservation of body heat:

 Preliminary report of effect of an insulated plastic boot applied to the lower extremities"

 (with K. R. Wooling, E. V. Allen, and K. G. Wakim). Proceedings of the Staff Meetings of the Mayo Clinic, 27:393-401. October 8, 1952.
- "Operative and postoperative control of blood pressure in patients with pheochromocytoma" (with N. C. Hightower, Jr. and J. T. Priestley). (Abstract.) Proceedings of the Central Society for Clinical Research, 25:41-42, 1952; Journal of Laboratory and Clinical Medicine, 40:810-11. November, 1952.
- "Autonomic pathways in the spinal cord" (with D. A. Johnson and W. McK. Craig). Journal of Neurosurgery, 9:599-605. November, 1952.
- "Physiologic effect of anterolateral chordotomy in man" (with D. A. Johnson and W. McK. Craig). Journal of Applied Physiology, 5:261-66. December, 1952.

- JOHN H. GRINDLAY, M.D., M.S. in Exp. Surg., M.S. in Surg., Assistant Professor "Effect of occlusion of vessels entering the liver on hepatic venous pressure in normal and cirrhotic dogs; a preliminary report" (with R. Thors and J. L. Bollman). American College of Surgeons, Clinical Congress. Proceedings of the Surgical Forum, 38:493-96. 1952.
- "Intrathoracic tracheal tumors: Development of surgical technics for their removal" (with O. T. Clagett and H. J. Moersch). Transactions of the American Surgical Association, 70:224-34. 1952; Annals of Surgery, 136:520-30. September, 1952.
- "Effect of ligation of the hepatic artery on oxygen content of blood from the hepatic vein in dogs" (with R. Thors and J. L. Bollman). American College of Surgeons, Clinical Congress. Proceedings of the Surgical Forum, 38:500-504. 1952.
- "Experimental constrictive pericarditis: Analysis of induced circulatory failure" (with R. J. Boucek and H. B. Burchell). American Journal of Physiology, 169:434-41. May 1, 1952.
- "Experimental constriction of inflow tracts in the heart: Analysis of circulatory failure." Ibid., pp. 442-52.
- "Measurement of renal gluconeogenesis" (with J. L. Bollman). *Ibid.*, 170:38-44. July, 1952. "An experimental study of the effect of various procedures on the flow of lymph" (with Julia F. Herrick, E. C. Elkins, F. C. Mann, and R. E. DeForest). (Abstract.) *Ibid.*, 171:735-36. December, 1952.
- "Source of a possible gastric secretory inhibitor in canine gastric juice and effects of vagotomy on its production" (with R. T. Hood, Jr. and C. F. Code). *Ibid.*, 173:270-74. May, 1953.
- "The effect of glucose on the amino acids of plasma after total hepatectomy" (with Eunice V. Flock, M. A. Block, F. C. Mann, and J. L. Bollman). *Journal of Biological Chemistry*, 198: 427-37. September, 1952.
- "Changes in free amino acids of brain and muscle after total hepatectomy" (with Eunice V. Flock, M. A. Block, F. C. Mann, and J. L. Bollman). *Ibid.*, 200:529-36. February, 1953.
- "Effects of vagotomy on pancreatic secretion in dogs with chronic pancreatic fistula" (with E. F. Routley, F. C. Mann, and J. L. Bollman). Surgery, Gynecology and Obstetrics, 95: 529-36. November, 1952.
- "The repair of tracheal defects with fascia and tantalum mesh: An experimental study" (with E. A. Swift and O. T. Clagett). Journal of Thoracic Surgery, 24:482-92. November, 1952.
- "The bronchial arteries. IV. Experimental bronchial arterial occlusion and bronchial obstruction" (with F. H. Ellis and J. E. Edwards). *Ibid.*, 25:358-65. April, 1953.
- "Effect of various procedures on the flow of lymph" (with E. C. Elkins, Julia F. Herrick, F. C. Mann, and R. E. DeForest). Archives of Physical Medicine and Rehabilitation, 34:31-39. January, 1953.
- "Effect of insulin on free amino acids after hepatectomy" (with Eunice V. Flock, J. L. Bollman, and F. C. Mann). (Abstract.) Federation Proceedings, 12:203. March, 1953.
- "Hepatic blood flow following arterial or portal vein occlusion" (with J. L. Bollman). (Abstract.) Ibid., p. 385. March, 1953.
- "Experimentally produced alterations of hepatic blood flow" (with J. L. Bollman, M. Khattab, and R. Thors). American Medical Association Archives of Surgery, 66:562-70. April, 1953.
- "The use of polyvinyl sponge plugs in the closure of large atrial septal defects created experimentally" (with D. E. Donald and J. W. Kirklin). Proceedings of the Staff Meetings of the Mayo Clinic, 28:288-95. May 20, 1953.

George A. Hallenbeck, M.D., Ph.D. in Physiol, Assistant Professor

- "The effect of vagotomy and of methantheline bromide on the diarrhea produced by celiac and superior mesenteric ganglionectomy" (with M. A. Freedman and C. F. Code). American College of Surgeons, Clinical Congress, Proceedings of the Surgical Forum, 38:481-86, 1952.
- "Effect of histamine in beeswax-sesame oil mixture of canine external pancreatic secretion and on the resistance of duodenal mucosa to trauma" (with G. L. Jordan, Jr.). American Journal of Physiology, 170:206-10. July, 1952.
- "Effect of increased secretory pressure on canine pancreatic secretion" (with G. L. Jordan, Jr.). Ibid., pp. 211-16.
- "Portal hypertension associated with sarcoidosis and with hemochromatosis: Report of 2 cases with splenectomy and splenorenal anastomosis" (with R. W. Dunlap, Jr. and D. G. Hanlon). Proceedings of the Staff Meetings of the Mayo Clinic, 27:266-72. July 2, 1952.
- "Current trends in emergency surgical treatment of appendicitis" (with G. L. Jordan). *Ibid.*, 28:5-10. January 14, 1953.
- "Cholecystoduodenal fistula associated with chronic abscess in the abdominal wall containing a gallstone" (with J. J. Berens and J. C. Cain). Ibid., pp. 337-40. June 17, 1953.
- "The surgical treatment of megacolon" (with J. M. Waugh). Surgical Clinics of North America, pp. 1203-16. August, 1952.

- "Effect of gastric operations on loss of fecal fat in the dog" (with R. B. Welbourn and J. L. Bollman). Gastroenterology, 23:441-51. March, 1953.
- "The effect of experimentally produced pancreatitis on canine external pancreatic secretion" (with G. L. Jordan, Jr. and A. H. Kelly). Surgery, Gynecology and Obstetrics, 96:714-23. June, 1953.

Experimental Physiology

HIRAM E. ESSEX, M.S., Ph.D., Professor

- "The effect of changes in concentration of cations on the electrocardiogram of the isolated perfused heart" (with W. Λ. Butcher, K. G. Wakim, R. D. Pruitt, and H. B. Burchell).

 American Heart Journal, 43:801-14, June, 1952.
- "The effect of lithium chloride on the electrocardiogram of the isolated perfused heart" (with W. A. Butcher, K. G. Wakim, and H. B. Burchell). *Ibid.*, 45:855-63. June, 1953.
- "Studies on the spread of excitation through the ventricular myocardium. II. The ventricular septum" (with H. B. Burchell and R. D. Pruitt). Circulation, 6:161-71. August, 1952.
- "Effect of hypophysectomy on size of remaining kidney after ureteroduodenostomy and contralateral nephrectomy" (with T. M. Astarabadi). Proceedings of the Society for Experimental Biology and Medicine, 81:25-28. October, 1952; American Journal of Physiology, 171:705. December, 1952.
- "Effect of epinephrine on male and female albino rats" (with T. M. Astarabadi and W. A. Meeker). American Journal of Physiology, 171:75-77. October, 1952.
- "Further observations of certain responses of tolerant and control animals to massive doses of epinephrine" (with W. A. Meeker and B. Brown). Ibid., pp. 78-86.
- "Effect of various degrees of myocardial infarction of the right ventricle on pressures within the heart and great vessels" (with D. E. Donald). (Abstract.) *Ibid.*, pp. 720-21. December,
- "Leukopenia and changes in differential leucocyte counts produced in rabbits by dextran and acacia" (with I. R. Leusen). *Ibid.*, 172:231-36. January, 1953.
- "Effects of epinephrine, nor-epinephrine and khellin on circulation through isolated perfused hearts" (with I. R. Leusen). *Ibid.*, pp. 226-30.
- "Action potentials supporting the presence of specialized conduction pathways in the dog's ventricle" (with H. B. Burchell and E. H. Lambert). (Abstract.) Circulation Research, 1:186-88. March, 1953.
- "Origin of the heart sounds (motion picture with sound recording)" (with H. L. Smith and E. J. Baldes). (Abstract.) Federation Proceedings, 12:40. March, 1953.

RADIOLOGY

BYRL R. KIRKLIN, M.D., Professor

- "Roentgenologic diagnosis of carcinoma of the stomach" (with J. R. Hodgson). South Dakota Journal of Medicine and Pharmacy, 6:15:19. January, 1953.
- "Present-day cholecystography" (with D. B. O'Donnell). Journal of the American Medical Association, 151:261-63. January 24, 1953.

ROBERT E. FRICKE, M.D., Associate Professor

"Report of radium therapy for 1951" (with M. Van Herik). Proceedings of the Staff Meetings of the Mayo Clinic, 27:337-40. August 13, 1952.

CLARENCE A. GOOD, M.D., M.S. in Radiol., Associate Professor

- "The mediastinal shadow." (Editorial.) Surgery, Gynecology and Obstetrics, 96:246-48. February, 1953.
- "Management of the patient with a solitary mass in the lung." Chicago Medical Society Bulletin, 55:893-96. May 30, 1953.

EUGENE T. LEDDY, M.D., Associate Professor

"Roentgen therapy for ovarian dysfunction." Surgical Clinics of North America, pp. 1101-1104 August, 1952.

DAVID G. PUGH, M.D., Assistant Professor

- "The roentgenologic diagnosis of hyperparathyroidism." Surgical Clinics of North America, pp. 1017-30. August, 1952.
- "Uncomplicated isolated dextrocardia ('dextroversiocordis' type)" (with H. B. Burchell)

 American Heart Journal, 44:196-206. August, 1952.
- "Surgical treatment of coarctation of the aorta in a ten week old infant: Report of a case" (with J. W. Kirklin, H. B. Burchell, E. C. Burke, and S. D. Mills). Circulation, 6:411-14. September, 1952.
- "A neglected roentgenologic sign of coarctation of the aorta" (with A. Bruwer). Proceedings of the Staff Meetings of the Mayo Clinic, 27:377-82. September 24, 1952.
- "Double aortic arch associated with coarctation of the aorta; surgically treated patient" (with T. J. Dry, O. T. Clagett, R. F. Saxon, Jr., and J. E. Edwards). Diseases of the Chest, 23:36-42. January, 1953.

HARRY M. WEBER, M.D., Associate Professor

"Kerion caused by Trichophyton rubrum; Report of two cases" (with J. A. Ulrich). American Medical Association Archives of Dermatology and Syphilology, 66:624-26. November, 1952.

André Bruwer, Ch.B., M.S. in Radiol., Instructor

- "A neglected roentgenologic sign of coarctation of the aorta" (with D. G. Pugh). Proceedings of the Staff Meetings of the Mayo Clinic, 27:377-82. September 24, 1952.
- "Aneurysmal bone cyst" (with B. E. Besse, Jr., D. C. Dahlin, H. J. Svien, and R. K. Ghormley). Ibid., 28:249-55. May 6, 1953.
- "Intestinal obstruction in fibrocystic disease of the pancreas" (with J. R. Hodgson). American Journal of Roentgenology, 69:14-21. January, 1953.

DONALD S. CHILDS, JR., M.D., M.S. in Radiol., Instructor

"Treatment of testicular tumors" (with J. H. DeWeerd). Surgical Clinics of North America, pp. 1087-91. August, 1952.

JOHN R. HODGSON, M.D., M.S. in Radiol., Instructor

- "Roentgenologic diagnosis of carcinoma of the stomach" (with B. R. Kirklin). South Dakota Journal of Medicine and Pharmacy, 6:15-19. January, 1953.
- "Intestinal obstruction in fibrocystic disease of the pancreas" (with A. Bruwer). American Journal of Roentgenology, 69:14-21. January, 1953.

SURGERY

O. THERON CLAGETT, M.D., M.S. in Surg., Professor

- "Cysts of the adrenal glands" (with F. H. Ellis, Jr. and C. J. Dawe). Annals of Surgery, 136:217-27. August, 1952.
- "Pulmonary resection for tuberculosis: A review of 73 cases with a follow-up of one year or longer" (with T. Takaro, C. H. Hodgson, and D. T. Carr). Proceedings of the Staff Meetings of the Mayo Clinic, 27:345-50. August 27, 1952.
- "Intrathoracic tracheal tumors: Development of surgical technics for their removal" (with H. J. Moersch and J. H. Grindlay). Annals of Surgery, 136:520-30. September, 1952; Transactions of the American Surgical Association, 70:224-34. 1952.
- "Localized fibrous mesothelioma of the pleura" (with J. R. McDonald and H. W. Schmidt).

 Journal of Thoracic Surgery, 24:213-28. September, 1952.
- "Obstructive pneumonitis secondary to bronchial adenoma" (with R. P. McBurney and J. R. McDonald). Ibid., pp. 411-19. October, 1952.
- "The repair of tracheal defects with fascia and tantalum mesh: An experimental study" (with E. A. Swift and J. H. Grindlay). *Ibid.*, pp. 482-92. November, 1952.
- "Examination of pleural fluid for carcinoma cells" (with G. G. Graham, J. R. McDonald, and H. W. Schmidt). Ibid., 25:366-70. April, 1953.
- "Unusual aneurysm of a pulmonary artery: Report of case in which treatment was surgical" (with D. A. MacKenzie). Ibid., pp. 524-29. May, 1953.
- "Double aortic arch associated with coarctation of the aorta: Surgically treated patient" (with T. J. Dry, R. F. Saxon, Jr., D. G. Pugh, and J. E. Edwards). Diseases of the Chest, 23:36-42. January, 1953.

VIRGIL S. COUNSELLER, M.D., M.S. in Surg., Professor

- "The treatment of vesicovaginal and other pelvic fistulas." Vol. 1, pages 473-80 in Joe V. Meigs and Somers H. Sturgis, editors, *Progress in Gynecology*. New York: Grune and Stratton. 1946. Vol. 2, page 702-11. 1950.
- "Vaginal hysterectomy; indications, advantages, and surgical technic." Obstetrics and Gynecology, 1:84-93. January, 1953.

CLAUDE F. DIXON, M.D., M.S. in Surg., Professor

- "Treatment of acute postoperative pseudomembranous enterocolitis" (with J. R. Hilsabeck).

 American Journal of Surgery, 84:114-17, July, 1952.
- "Cholelithiasis: Familial predisposition" (with H. W. Owen). Surgical Clinics of North America, pp. 1177-80. August, 1952.
- "Diverticulitis versus carcinoma. Report of two cases" (with C. A. Pitchford, Jr. and P. H. Sebrechts). Ibid., pp. 1181-83.
- "Carcinoma of the rectosigmoid and upper part of the rectum; indications for anterior resection and anastomosis." (Editorial.) American Surgeon, 18:1028-30. October, 1952.
- "Longevity and cancer" (with C. A. Pitchford, Jr.). Western Journal of Surgery, 61:18-23. January, 1953.
- "The prognosis in carcinoma of the colon perforating into the urinary bladder" (with E. R. Taylor and M. B. Dockerty). Surgery, Gynecology and Obstetrics, 96:193-99. February, 1953.
- "Carcinoma or stone in the common bile duct; a diagnostic problem" (with S. P. McCarran). Rocky Mountain Medical Journal, 50:120-21. February, 1953.
- "Independent carcinomas of colon occurring twenty-one years apart; report of a case" (with C. A. Pitchford, Jr. and S. P. McCarran). Journal of the American Medical Association, 151:1102. March 28, 1953.

HOWARD K. GRAY, M.D., M.S. in Surg., Professor

- "The problem of jaundice in general surgery." Maryland Medical Journal, 1:322-30. July, 1952.
- "A clinical and pathological study of the significance of malignant pyloric obstruction on postresection prognosis" (with A. D. Anderson and M. B. Dockerty). Surgery, Gynecology and Obstetrics, 95:85-92. July, 1952.
- "Subphrenic abscess" (with J. J. Berens and M. B. Dockerty). *Ibid.*, 96:463-70. April, 1953. "Medically treated small gastric ulcer; five year follow-up study of four hundred fourteen
- "Medically treated small gastric ulcer; five year follow-up study of four hundred fourteen patients" (with J. C. Cain, G. L. Jordan, Jr., and M. W. Comfort). Journal of the American Medical Association, 150:781-84. October 25, 1952.
- "Annual report on surgery of the biliary system and pancreas for 1951" (with J. M. Waugh, W. Walters, and J. T. Priestley). Proceedings of the Staff Meetings of the Mayo Clinic, 27:578-84. December 31, 1952.
- "Report on surgery of the stomach and the duodenum for 1951" (with W. Walters, J. T. Priestley, and J. M. Waugh). Ibid., pp. 585-92.

STUART W. HARRINGTON, M.D., M.S. in Surg., Professor

- "Esophageal hiatus diaphragmatic hernia." Rocky Mountain Medical Journal, 49:665-73. August, 1952.
- "Fifteen-year to forty-year survival rates following radical mastectomy for cancer of the breast." Annals of Surgery, 137:843-49. June, 1953.

CHARLES W. MAYO, M.D., M.S. in Surg., Professor

- "Surgery" (with J. O. Ferguson). Pages 17-33 in Morris Fishbein, editor, 1953 Medical Progress, a Review of Medical Advances During 1952. New York: Blakiston Company, 1953.
- "Long-term survival in a case of recurrent carcinoma of the breast" (with J. O. Fergeson).

 Proceedings of the Staff Meetings of the Mayo Clinic, 27:322-24, July 30, 1952.
- "Jejunal diverticulosis. A clinical study of 87 cases" (with R. H. Baskin, Jr.). Surgical Clinics of North America, pp. 1185-96. August, 1952.
- "Hemorrhagic jejunal diverticulitis" (with R. H. Baskin, Jr. and A. B. Hagedorn). Transactions of the American Surgical Association, 70:354-62. 1952; Annals of Surgery, 136:691-99. October, 1952.
- "Gallstone obstruction of the small intestine" (with E. F. Routley). Postgraduate Medicine, 12:503-508. December, 1952.

- "Retrograde intramural spread of carcinoma of the rectum and rectosigmoid; a microscopic study" (with E. A. Quer and D. C. Dahlin). Surgery, Gynecology and Obstetrics, 96:24-30. January, 1953
- "Are certain diseases associated with specific blood groups or Rh antigens?" (with J. O. Fergeson). American Medical Association Archives of Surgery, 66:406-409. April, 1953.
- JAMES T. PRIESTLEY, M.D., M.S. in Exp. Surg., Ph.D. in Surg., Professor
- "Report on surgery of the stomach and the duodenum for 1951" (with H. K. Gray, W. Walters, and J. M. Waugh). Proceedings of the Staff Meetings of the Mayo Clinic, 27:578-84. December 31, 1952.
- "Report on surgery of the stomach and the duodenum for 1951" (with H. K. Gray, W. Walters, and J. M. Waugh). Ibid., pp. 585-92.
- "Adrenal function in surgical patients: Comparison in healthy and in chronically ill, debilitated patients" (with F. H. Ellis, Jr. and H. L. Mason). American College of Surgeons, Clinical Congress, Proceedings of the Surgical Forum, 38:564-71, 1952.
- Congress, Proceedings of the Surgical Forum, 38:564-71, 1952.

 "Lesions of the adrenal glands." Surgical Clinics of North America, pp. 1053-64. August, 1952.

 "Cancer of the stomach: Objectives and results of efforts to increase curability." Journal of the Medical Association of Georgia, 41:431-34. October, 1952.
- "Operative and postoperative control of blood pressure in patients with pheochromocytoma" (with N. C. Hightower, Jr. and Grace M. Roth). (Abstract.) Proceedings of the Central Society for Clinical Research, 25:41-42. 1952; Journal of Laboratory and Clinical Medicine, 40:810-11. November, 1952.
- "The preoperative cough." (Editorial.) Surgery, Gynecology and Obstetrics, 96:245-46. February, 1953.
- "Management of certain hyperfunctioning lesions of the adrenal cortex and medulla" (with R. G. Sprague and W. F. Kvale). Journal of the American Medical Association, 151:629-39. February 21, 1953.
- "Lesions of the adrenal glands of surgical significance" (with R. M. Salassa). Postgraduate Medicine, 13:500-506. June, 1953.
- "Hemiplegia resulting from pheochromocytoma. Report of case" (with J. E. Estes, W. H. ReMine, and M. B. Dockerty). *Journal of the American Medical Association*, 152:808-11, June 27, 1953.

WALTMAN WALTERS, M.D., M.S. in Surg., D.Sc., Professor

- "Surgical treatment of hyperfunctioning lesions of the adrenal cortex." Bulletin of the Ayer Chinical Laboratory of the Pennsylvania Hospital, 4:77-92. May, 1952.
- "Medical writing to be read." (Editorial.) American Medical Association Archives of Surgery, 65:211-12. August, 1952.
- "Subtotal adrenalectomy for Cushing's syndrome." Ibid., 66:244-52. February, 1953.
- "Surgical treatment of stricture of the common and hepatic bile ducts; a twenty-eight-year survey" (with A. H. Kelly). *Ibid.*, pp. 417-22. April, 1953.
- "Report on surgery of the stomach and the duodenum for 1951" (with H. K. Gray, J. T. Priestley, and J. M. Waugh). Proceedings of the Staff Meetings of the Mayo Clinic, 27:585-92. December 31, 1952.
- "Annual report on surgery of the biliary system and pancreas for 1951" (with J. M. Waugh, H. K. Gray, and J. T. Priestley). *Ibid.*, pp. 578-84. December 31, 1952.
- "Spontaneous internal biliary fistulas" (with D. P. Epperson). Ibid., 28:353-60. July 1, 1953.
 "Present day status of the surgical treatment of gastric and duodenal ulcers." Chicago Medical Society Bulletin, 55:694-96. March 14, 1953.
- "An improvement of 180 per cent in the five-year survival rate of patients with carcinoma of the stomach" (with J. Berkson). Annals of Surgery, 137:884-89. June, 1953.

JOHN M. WAUGH, M.D., M.S. in Surg., Professor

- "Surgical diseases of the pancreas." Vol. 7, chapter 1, pages 1-16 in Dean DeWitt Lewis, editor, Lewis' Practice of Surgery, Hagerstown, Maryland: W. F. Prior Co., Inc. 1953.
- "Carcinoma of the rectum in the female. Effect of vaginal invasion on prognosis" (with C. D. Knight and M. B. Dockerty). Surgery, Gynecology and Obstetrics, 95:220-28. August, 1952. "Islet-cell tumors of the panereas." Surgical Clinics of North America, pp. 1079-86. August, 1952.
- "The surgical treatment of megacolon" (with G. A. Hallenbeck). *Ibid.*, pp. 1203-16. August, 1952.
- "Annual report on surgery of the biliary system and pancreas for 1951" (with W. Walters, H. K. Gray, and J. T. Priestley). Proceedings of the Staff Meetings of the Mayo Clinic, 27:578-84. December 31, 1952.

- "Report on surgery of the stomach and the duodenum for 1951" (with H. K. Gray, W. Walters, and J. T. Priestley). *Ibid.*, pp. 585.92.
- B. MARDEN BLACK, M.D., M.S. in Surg., Associate Professor
- "Multiple endocrine adenomas: Report of 8 cases involving the parathyroids, pituitary and pancreas" (with L. O. Underdahl and L. B. Woolner). (Abstract.) Journal of Clinical Endocrinology and Metabolism, 12:944. July, 1952; 13:20-47. January, 1953.
- "Surgical treatment of hyperparathyroidism." Surgical Clinics of North America, pp. 1031-42.

 August, 1952.
- "Combined abdominoendorectal resection. Technical aspects and indications." American Medical Association Archives of Surgery, 65:406-16. September, 1952.
- "Tumors and hyperplasia of the parathyroid glands; a review of the pathological findings in 140 cases of primary hyperparathyroidism" (with L. B. Woolner and F. R. Keating, Jr.). Cancer, 5:1069-88. November, 1952.
- EDWARD S. JUDD, JR., M.D., M.S. in Surg., Assistant Professor
- "The surgeon's dilemma: Carcinoma or thyroiditis?" (with N. J. Bellegie and L. B. Woolner).

 Transactions of the American Goiter Association, pp. 375-83. 1952.
- "Cardiac massage for cardiac arrest during surgery" (with N. J. Bellegie and T. H. Seldon).

 Proceedings of the Staff Meetings of the Mayo Clinic, 27:305-309. July 30, 1952.
- "Regional enteritis involving the duodenum: Report of case" (with J. C. Carlisle). Ibid., pp. 569-74. December 31, 1952.
- "The role of the surgeon in thyrotoxicosis," Surgical Clinics of North America, pp. 981-89.
 August, 1952.
- "Some uncommon causes of appendiceal mucocele" (with J. R. Hilsabeck and L. B. Woolner).

 American Journal of Surgery, 84:670-74. December, 1952.
- "Carotid body tumors (chemodectomas)" (with J. R. Pettet and L. B. Woolner). Annals of Surgery, 137:465-77. April, 1953.
- JOHN W. KIRKLIN, M.D., M.S. in Surg., Assistant Professor
- "Esophagitis after esophagogastric anastomosis" (with H. R. Ripley and A. M. Olsen). Surgery, 32:1-9. July, 1952.
- "Surgical intrathoracic cardiovascular lesions." Postgraduate Medicine, 12:118-23. August, 1952. "Muscle biopsy in the diagnosis of periarteritis nodosa. An evaluation" (with S. R. Maxeiner, Jr. and J. R. McDonald). Surgical Clinics of North America, pp. 1225-33. August, 1952.
- "Surgical treatment of coarctation of the aorta in a ten week old infant: Report of a case" (with H. B. Burchell, D. G. Pugh, E. C. Burke, and S. D. Mills). *Circulation*, 6:411-14. September, 1952.
- "Biopsy of the lung and cardiac catheterization studies in patients treated surgically for mitral stenosis" (with J. E. Edwards, R. G. Tompkins, R. T. Hood, Jr., and H. B. Burchell). (Abstract.) Journal of Laboratory and Clinical Medicine, 40:795-96. November, 1952; Proceedings of the Central Society for Clinical Research, 25:26-27. 1952.
- "Surgical treatment of infundibular stenosis with intact ventricular septum: Report of a case" (with C. R. Openshaw and R. G. Tompkins). Annals of Surgery, 137:228-31. February, 1953.
- "Intrapericardial dissection in left pneumonectomy for bronchiogenic carcinoma" (with R. W. Jampolis). Journal of Thoracic Surgery, 25:280-85. March, 1953.
- "Metastasizing bronchial adenomas" (with R. P. McBurney and L. B. Woolner). Surgery, Gynecology and Obstetrics, 96:482-92. April, 1953.
- "Experimental procedures designed to increase the blood supply to the myocardium" (with D. E. Donald). Proceedings of the Staff Meetings of the Mayo Clinic, 27:351-57. August 27, 1952. "Surgical treatment of mitral stenosis." Ibid., pp. 357-60.
- "Extended radical mastectomy: A review of its concepts" (with J. M. Carey), Ibid., pp. 436-40, October 22, 1952.
- "The problem of isolated valvular versus infundibular pulmonic stenosis with particular reference to cardiac catheterization data and records obtained at the time of operation" (with D. C. Connolly, R. Lev, and E. H. Wood). *Ibid.*, 28:65-71. February 11, 1953.
- "Pulmonary-artery wedge pressures in mitral valve disease; relationship to left atrial pressures" (with D. C. Connolly, R. G. Tompkins, R. Lev, and E. H. Wood). *Ibid.*, pp. 72-78.
- "Severe crush injuries of the chest: Some problems in management" (with P. E. Bernatz and A. M. Olsen). *Ibid.*, pp. 193-99. April 8, 1953.
- "One-stage esophagogastrectomy for perforated carcinoma in the presence of mediastinitis" (with R. P. McBurney, R. T. Hood, Jr., and H. A. Andersen). *Ibid.*, pp. 281-86, May 20, 1953.

- "The use of polyvinyl sponge plugs in the closure of large atrial septal defects created experimentally" (with D. E. Donald and J. H. Grindlay). *Ibid.*, pp. 288-95.
- "Left atrial, pulmonary artery, pulmonary artery wedge and systemic pressures during mitral commissurotomy" (with R. Lev. D. C. Connolly, and R. G. Tompkins). (Abstract.) Federation Proceedings, 12:85-86. March, 1953.

J. Hyde Pratt, M.D., M.S. in Surg., Assistant Professor

- "Independent carcinoma of breast and ovary" (with E. E. Eckstam). Surgical Clinics of North America, pp. 1093-99. August, 1952.
- "Vesical neoplasm prolapsing through the urethra and suggesting primary vaginal carcinoma" (with N. B. Davis and L. F. Greene). Journal of Urology, 68:703-705. October, 1952.
- "Extramammary Paget's disease; a report of four cases in which certain features of histogenesis were exhibited" (with M. B. Dockerty). Cancer, 5:1161-69. November, 1952.
- "Selection of operable patients for Wertheim hysterectomy" (with J. O. Fergeson). Proceedings of the Staff Meetings of the Mayo Clinic, 28:257-64. May 6, 1953.

OLIVER H. BEAHRS, M.D., M.S. in Surg., Instructor

- "Bilateral radical cervical dissection for malignant lesions of the head and neck" (with G. L. Jordan, Jr.). Proceedings of the Staff Meetings of the Mayo Clinic, 27:449-54. November 5, 1952.
- "Metastatic hypernephroma of the thyroid gland" (with R. L. Ginsberg and G. E. Miller). Ibid., 28:205-209. April 8, 1953.
- "Volvulus of the cecum as a postoperative complication: Report of six cases" (with G. L. Jordan, Jr.). Annals of Surgery, 137:245-49. February, 1953.
- "Emergency surgical treatment of perforated gastric and duodenal ulcers" (with D. K. Duncan and L. A. Vadheim). Surgery, Gynecology and Obstetrics, 96:637-40. June, 1953.

F. HENRY ELLIS, JR., M.D., Ph.D. in Surg., Instructor

- "Adrenal function in surgical patients: Comparison in healthy and in chronically ill, debilitated patients" (with H. L. Mason and J. T. Priestley). American College of Surgeons, Chinical Congress. Proceedings of the Surgical Forum, 38:564-71, 1952.
- "Cysts of the adrenal glands" (with C. J. Dawe and O. T. Clagett). Annals of Surgery, 136: 217-27. August, 1952.
- "The bronchial arteries, IV. Experimental bronchial arterial occlusion and bronchial obstruction" (with J. H. Grindlay and J. E. Edwards). *Journal of Thoracic Surgery*, 25:358-65, April, 1953.

Dental Surgery

EDWARD C. STAFNE, D.D.S., Professor

- "Dental roentgenologic manifestations of systemic disease, III. Granulomatous disease, Paget's disease, acrosclerosis, and others." Radiology, 58:820-29, June, 1952.
- "Dental rocutgenologic manifestations of systemic disease: 1. Endocrine disturbances." Digest of Dental Science, 1:22-25. October, 1952.
- "Value of roentgenograms in diagnosis of tumors of the jaws." Oral Surgery, Oral Medicine and Oral Pathology, 6:82-92. January, 1953.
- "Roentgenologic manifestations of systemic disease in dentistry." Ibid., pp. 483-94. April, 1953.

STANLEY A. LOVESTEDT, D.D.S., M.S. in Dent. Surg., Assistant Professor

"The use of antibiotics by the oral surgeon." Journal of Oral Surgery, 10:187-94, July, 1952; Oral Health, 43:20-22, January, 1953.

KARL W. BRUCE, D.D.S., M.S. in Dent. Surg., Instructor

- "Multiple myeloma occurring in the jaws" (with R. Q. Royer). (Abstract.) Journal of Dental Research, 31:599-600. August, 1952.
- "Central fibromyxoma of the maxilla" (with R. Q. Royer). Oral Surgery, Oral Medicine and Oral Pathology, 5:1277-81. December, 1952.
- "Median rhomboid glossitis; report of a case" (with R. Q. Royer). Ibid., pp. 1287-90.
- "Multiple myeloma occurring in the jaws; a study of 17 cases" (with R. Q. Royer). Ibid., 6:729-44. June, 1953.

- R. QUENTIN ROYER, D.D.S., M.S. in Dent. Surg., Instructor
- "Multiple myeloma occurring in the jaws" (with K. W. Bruce). (Abstract.) Journal of Dental Research, 31:599-600. August, 1952.
- "Central fibromyxoma of the maxilla" (with K. W. Bruce). Oral Surgery, Oral Medicine and Oral Pathology, 5:1277-81. December, 1952.
- "Median rhomboid glossitis; report of a case" (with K. W. Bruce). Ibid., pp. 1287-90.
- "Multiple myeloma occurring in the jaws; a study of 17 cases" (with K. W. Bruce). Ibid., 6:729-44. June, 1953.

Experimental Surgery

Frank C. Mann, M.D., M A., D.Sc., Professor

- "Liver" (with F. D. Mann). Pages 473-92 in Victor E. Hall, editor, Annual Review of Physiology, Vol. 15. California: Annual Reviews Inc. and American Physiological Society, 1953.
- "Renal function during stimulation of renal nerves" (with M. A. Block and K. G. Wakim).

 American Journal of Physiology, 169:670-77. June, 1952.
- "Circulation through kidney during stimulation of the renal nerves" (with M. A. Block and K. G. Wakim), *Ibid.*, pp. 659-69.
- "Alkaline phosphate and amylase of plasma after hepatectomy" (with Eunice V. Flock, M. A. Block, and J. L. Bollman). *Ibid.*, 170:467-71. August, 1952.
- "Appraisal of certain factors influencing compensatory renal hypertrophy" (with M. A. Block and K. G. Wakim), Ibid., 172:60-66, January, 1953.
- "Reactions of the vessels of the rat kidney after experimental occlusion of the renal artery for various periods" (with M. A. Block and K. G. Wakim). Proceedings of the Society for Experimental Biology and Medicine, 80:465-66. July, 1952.
- "Effect of water and electrolyte restriction on pathologic changes in kidney of jaundiced rats" (with M. A. Block and K. G. Wakim). *Ibid.*, pp. 765-68. August-September, 1952.
- "The blood supply of the normal liver" (with K. G. Wakim), Proceedings of the Staff Meetings of the Mayo Clinic, 28:218-27, April 22, 1953.
- "Symposium on some aspects of the normal and abnormal circulation of the liver; concluding remarks," Ibid., p. 244.
- "The transmissible venercal tumor of dogs: Observations on forty generations of experimental transfers" (with A. G. Karlson). Annals of the New York Academy of Science, 54:1197-1213. July 10, 1952.
- "The effect of glucose on the amino acids of plasma after total hepatectomy" (with Eunice V. Flock, M. A. Block, J. H. Grindlay, and J. L. Bollman). Journal of Biological Chemistry, 198:427-37. September, 1952.
- "Changes in free amino acids of brain and muscle after total hepatectomy" (with Eunice V. Flock, M. A. Block, J. H. Grindlay, and J. L. Bollman). *Ibid.*, 200:529-36. February, 1953.
- "Renal lesions and function following prolonged experimental hypotension" (with M. A. Block, K. G. Wakim, and W. A. Bennett). Surgery, 32:551-80. September, 1952.
- "Effects of vagotoms on pancreatic secretion in dogs with chronic pancreatic fistula" (with E. F. Routley, J. L. Bollman, and J. H. Grindlay). Surgery, Gynecology and Obstetrics, 95:529-36. November, 1952.
- "Effect of severe acute hemorrhage on kidney of rat" (with M. A. Block and K. G. Wakim).

 **American Medical Association Archives of Pathology, 54:443-49. November, 1952.
- "An experimental study of the effect of various procedures on the flow of lymph" (with Julia F. Herrick, E. C. Elkins, J. H. Grindlay, and R. E. DeForest). American Journal of Physiology, 171:735-36. December, 1952; Archives of Physical Medicine and Rehabilitation, 34:31-39. January, 1953.
- "Effect of insulin on free amino acids after hepatectomy" (with Eunice V. Flock, J. L. Bollman, and J. H. Grindlay). (Abstract.) Federation Proceedings, 12:203. March, 1953.

Neurosurgery

WENDELL McK. CRAIG, M.D., M.S. in Surg., D.Sc., Professor

- "Visual hallucinations associated with tumors of the occipital lobe" (with D. Parkinson and C. W. Rucker). American Medical Association Archives of Neurology and Psychiatry, 68:66-68. July, 1952.
- "Supratentorial tumors among children" (with R. H. Miller and J. W. Kernohan). *Ibid.*, pp. 797-814. December, 1952.

- "The surgical treatment of malignant exophthalmos" (with H. W. Dodge, Jr.). Surgical Clinics of North America, pp. 991-1003. August, 1952.
- "Surgical treatment of progressive exophthalmos" (with H. W. Dodge, Jr.). Annals of Surgery, 136:366-74. September, 1952; Transactions of the American Surgical Association, 70:70-76, 1952.
- "Autonomic pathways in the spinal cord" (with D. A. Johnson and Grace M. Roth). Journal of Neurosurgery, 9:599-605. November, 1952.
- "Unusual lesions involving the optic chiasm" (with R. D. Weyand and C. W. Rucker). Proceedings of the Staff Meetings of the Mayo Clinic, 27:505-11. December 3, 1952.
- "Symposium on intracerebral electrography: Comment." Ibid., 28:192. March 25, 1953.
- "Acrylic cranioplasty: A newer rapid method for the repair of cranial defects; preliminary report" (with H. W. Dodge, Jr.). Ibid., pp. 256-57. May 6, 1953.
- "Physiologic effect of anterolateral chordotomy in man" (with Grace M. Roth and D. A. Johnson). Journal of Applied Physiology, 5:261-66. December, 1952.
- "Alfred Washington Adson, 1887-1951." (Memoir.) Transactions of the American Surgical Association, 70:424-26. 1952.
- "Ependymoma of the brain: Pathologic aspects" (with H. J. Svien, R. F. Mabon, and J. W. Kernohan). Neurology, 3:1-15. January, 1953.
- "Diagnosis of tumors of the pituitary body" (with J. Raaf). Western Journal of Surgery, 61:93-101. March, 1953.

J. GRAFTON LOVE, M.D., M.S. in Surg., Professor

- "Prefrontal lobotomy in the treatment of mental illness" (with M. C. Petersen). Pages 97-105 in Proceedings of the International Conference on Psychosurgery, Lisbon, 1949.
- "Decompression of the gasserian ganglion and its posterior root: A new treatment for trigeminal neuralgia (preliminary report)." Proceedings of the Staff Meetings of the Mayo Clinic, 27:257-58. July 2, 1952.
- "Otitic proteus meningitis with recovery: Report of case" (with R. H. Freedman and O. E. Hallberg). *Ibid.*, pp. 390-92. September 24, 1952.
- "Diagnosis and surgical treatment of pituitary tumors." Surgical Clinics of North America, pp. 1005-16. August, 1952.

GEORGE S. BAKER, M.D., M.S. in Surg., Assistant Professor

"Treatment of painful neuralgias of the head." Journal-Lancet, 72:525-29. November, 1952.

COLLIN S. MACCARTY, M.D., M.S. in Neurosurg., Assistant Professor

- "The electroencephalogram in tumors of the posterior fossa and third ventricle" (with D. Daly and J. L. Whelan). (Abstract.) Electroencephalography and Clinical Neurophysiology, 4:378. August, 1952.
- "The electroencephalogram in cases of tumors of the posterior fossa and third ventricle" (with D. Daly, J. L. Whelan, and R. G. Bickford). *Ibid.*, 5:203-16. May, 1953.
- "Chordoma; a study of fifty-nine cases" (with D. C. Dahlin). Cancer, 5:1170-78. November, 1952.

ALFRED UTHLEIN, M.D., M.S. in Surg., Assistant Professor

- "Continuous spinal anesthesia in intracranial procedures" (with J. S. Lundy). Proceedings of the Staff Meetings of the Mayo Clinic, 27:317-21. July 30, 1952.
- "Unusual intra-orbital tumors: Report of 3 cases" (with R. H. Miller), Ibid., pp. 402-407, October 8, 1952.
- "Electrical rhythms recorded from the depth of the frontal lobes during operations on psychotic patients" (with R. G. Bickford and M. C. Petersen). Ibid., 28:135-43. March 11, 1953.
- "Meningionas of anterior clinoid process as a cause of unilateral loss of vision; surgical considerations" (with R. D. Weyand). American Medical Association Archives of Ophthalmology, 49:261-70. March, 1953.

HENRY W. Dodge, Jr., M.D., M.S. in Neurosurg., Instructor

- "The surgical treatment of malignant exophthalmos" (with W. McK. Craig). Surgical Clinics of North America, pp. 991-1003. August, 1952.
- "Surgical treatment of progressive exophthalmos" (with W. McK. Craig). Transactions of the American Surgical Association, 70:70-76. 1952; Annals of Surgery, 136:366-74. September, 1952.

- "Communicating hydrocephalus from diffuse meningeal tumor. Report of two cases with increased intracranial pressure treated by use of polyethylene tube" (with A. W. Adson and J. W. Kernohan). American Medical Association Archives of Neurology and Psychiatry, 68:329-38. September, 1952.
- "Concentration of antibiotics in the brain" (with W. E. Wellman, F. R. Heilman, and M. C. Petersen). (Abstract.) Proceedings of the Central Society for Clinical Research, 25:96-97. 1952; Journal of Laboratory and Clinical Medicine, 40:960-61. December, 1952.
- "Sugar content of the cerebrospinal fluid in diffuse neoplastic involvement of the meninges" (with G. P. Sayre and H. J. Svien). Proceedings of the Staff Meetings of the Mayo Clinic, 27:259-66. July 2, 1952.
- "Technic of depth electrography" (with C. B. Holman, C. W. Sem-Jacobsen, R. G. Bickford, and M. C. Petersen), *Ibid.*, 28:147-55, March 25, 1953.
- "Depth distribution of normal electroencephalographic rhythms" (with C. W. Sem-Jacobsen, R. C. Bickford, and M. C. Petersen). *Ibid.*, pp. 156-61.
- "Some effects of barbiturate anesthesia on the depth electrogram" (with R. G. Bickford, A. Faulconer, Jr., C. W. Sem-Jacobsen, F. J. Schnugg, and M. C. Petersen). *Ibid.*, pp. 162-65.
- "Human olfactory responses recorded by depth electrography" (with C. W. Sem-Jacobsen, R. G. Bickford, and M. C. Petersen). *Ibid.*, pp. 166-70.
- "The depth electrogram in schizophrenic patients" (with M. C. Petersen, R. G. Bickford, and C. W. Sem-Jacobsen). *Ibid.*, pp. 170-75.
- "Studies on the electrical structure and activation of an epileptogenic focus" (with R. G. Bickford, C. W. Sem-Jacobsen, and M. C. Petersen). *Ibid.*, pp. 175-80. March 25, 1953.
- "Observations on depth stimulation of the human brain through implanted electrographic leads" (with R. G. Bickford, M. C. Petersen, and C. W. Sem-Jacobsen). *Ibid.*, pp. 181-87.
- "Neurosurgical and neurologic application of depth electrography" (with A. A. Bailey, R. G. Bickford, M. C. Petersen, C. W. Sem-Jacobsen, and R. H. Miller). *Ibid.*, pp. 188-91.
- "Acrylic cranioplasty: A newer rapid method for the repair of cranial defects; preliminary report" (with W. McK. Craig). *Ibid.*, pp. 256-57. May 6, 1953.

HENDRIK J. SVIEN, M.D., M.S. in Surg., Instructor

- "Relief of pain by neurosurgical procedures" (with A. W. Adson). American Medical Association Archives of Surgery, 65:139-49. July, 1952.
- "Sugar content of the cerebrospinal fluid in diffuse neoplastic involvement of the meninges" (with H. W. Dodge, Jr. and G. P. Sayre). Proceedings of the Staff Meetings of the Mayo Clinic, 27:259-66. July 2, 1952.
- "Aneurysmal bone cyst" (with B. E. Besse, Jr., D. C. Dahlin, A. Bruwer, and R. K. Ghormley). Ibid., 28:249-55. May 6, 1953.
- "Ependymoma of the brain: Pathologic aspects" (with R. F. Mabon, J. W. Kernohan, and W. McK. Craig). Neurology, 3:1-15. January, 1953.
- "Electroeucephalographic findings associated with subdural hematoma. Review of forty-five cases" (with E. A. Rodin and R. G. Bickford). American Medical Association Archives of Neurology and Psychiatry, 69:743-55. June, 1953.

Orthopedic Surgery

RALPH K. GHORMLEY, M.D., Professor

- "Traumatic dislocation of the hip" (with R. Sullivan). American Association for Surgery Trauma Papers, pp. 298-301, 1952; American Journal of Surgery, 85:298-301, March, 1953.
- "Myxoma and myxosarcoma of the soft tissues of the extremities" (with K. II. Sponsel and J. R. McDonald). Journal of Bone and Joint Surgery, 34-A:820-26. October, 1952.
- "Report of Section of Orthopaedic Surgery, 1951." Proceedings of the Staff Meetings of the Mayo Clinic, 27:574-77. December 31, 1952.
- "Aneurysmal bone cyst" (with B. E. Besse, Jr., D. C. Dahlin, A. Bruwer, and H. J. Svien).

 1bid., 28:249-55. May 6, 1953.
- "Anomalies of the posterior tibial tendon; a cause of persistent pain about the ankle" (with I. M. Spear). American Medical Association Archives of Surgery, 66:512-16. April, 1953.

WILLIAM H. BICKEL, M.S., M.D., M.S. in Ortho. Surg., Associate Professor

"Rheumatoid granulomatous nodules as destructive lesions of vertebrae" (with A. H. Baggenstoss and L. E. Ward). Journal of Bone and Joint Surgery, 34-A:601-609. July, 1952.

- "Tuberculous tenosynovitis" (with R. F. Kimbrough and D. C. Dahlin), Journal of the American Medical Association, 151:31-35, January 3, 1953.
- "Treatment of chronic hematogenous osteomyelitis by means of saucerization and bone grafting" (with J. G. Bateman and W. E. Johnson). Surgery, Gynecology and Obstetrics, 96:265-74. March, 1953.

MARKHAM B. COVENTRY, M.D., M.S. in Ortho, Surg., Associate Professor

- "Present-day treatment of burns." Minnesota Medicine, 35:409-12. May, 1952.
- "Congenital absence of the fibula" (with E. W. Johnson, Jr.). Journal of Bone and Joint Surgery, 84-A:941-55. October, 1952.
- "Problem of painful shoulder." Journal of the American Medical Association, 151:177-85.

 January 17, 1953.

H. HERMAN YOUNG, M.D., M.S. in Ortho. Surg., Associate Professor

- "Additional lesions simulating protruded intervertebral disc." Journal of the International College of Surgeons, 17:831-39. June, 1952.
- "Fracture report for 1951." Proceedings of the Staff Meetings of the Mayo Clinic, 27:577-78. December 31, 1952.

JOSEPH M. JANES, M.D., M.S. in Ortho. Surg., Assistant Professor

- "Incidence of pain in idiopathic scoliosis" (with L. F. Bender, R. O. McMorris, and E. C. Elkins). Archives of Physical Medicine and Rehabilitation, 33:406-408, July, 1952.
- "The effect of a surgically induced arteriovenous fistula on bone growth: Report of case" (with E. C. Elkins). Proceedings of the Staff Meetings of the Mayo Clinic, 27:335-37. August 13, 1952.
- "An abduction frame for the lower extremity." Ibid., 28:45-46. January 28, 1953.
- "Arteriosclerotic popliteal aneurysm: A clinical follow-up study" (with E. A. Hines, Jr. and R. W. Gifford, Jr.). (Abstract.) Circulation, 6:473. September, 1952.
- "Effects of ultrasound on growing bone; an experimental study" (with R. E. DeForest, Julia F. Herrick, and F. H. Krusen). Archives of Physical Medicine and Rehabilitation, 34:21-31. January, 1953.
- "An analysis and follow-up study of one hundred popliteal aneurysms" (with R. W. Gifford, Jr. and E. A. Hines, Jr.). Surgery, 33:284-93. February, 1953.
- "Method for treatment of fractures of the femoral neck in the dog. 1. An experimental study" (with W. D. Anderson and C. F. Schlotthauer). Journal of the American Veterinary Medical Association, 122:158-60. March, 1953.
- "Use of dextran (macrodex) in burns, II. Clinical evaluation in eight cases" (with E. V. Johnston, J. S. Lundy, and W. A. Bennett). American Journal of Surgery, 85:720-28. June, 1953.

PAUL R. LIPSCOMB, M.D., M.S. in Ortho. Surg., Assistant Professor

- "Noninfectious trochanteric bursitis and peritendinitis" (with L. M. Spear). Surgical Clinics of North America," pp. 1217-24. August, 1952.
- "Surgical creation and repair of massive defects of the pelvis for osteomyelitis and bone tumor:

 Early results in 4 cases." Proceedings of the Staff Meetings of the Mayo Clinic, 27:441-48.

 November 5, 1952.

EDWARD D. HENDERSON, M.D., M.S. in Ortho. Surg., Instructor

"The use of hydrocortisone acetate (compound F acctate) in the treatment of posttraumatic bursitis of the knee and elbow" (with C. C. Henderson). *Minnesota Medicine*, 36:142-44. February, 1953.

JOHN C. IVINS, M.D., M.S. in Ortho, Surg., Instructor

"Fractures of the distal part of the forearm in children. Correction of deformity by growth" (with R. G. Giberson). Minnesota Medicine, 35:744-49. August, 1952.

EINER W. JOHNSON, JR., M.D., M.S. in Ortho. Surg., Instructor

"Osseous Gaucher's disease. Report of a case with pathologic fracture of the left humerus" (with F. J. Kroboth, Jr.). Survical Clinics of North America, pp. 1141-47. August, 1952,

- "Congenital absence of the fibula" (with M. B. Coventry). Journal of Bone and Joint Surgery, 34-A:941-55. October, 1952.
- "Contractures of the iliotibial band," Surgery, Gynecology and Obstetrics, 96:599-604. May, 1953.

Plastic Surgery

FRED A. FIGI, M.D., Professor

- "Tumors of the nose and throat" (with K. D. Devine). American Medical Association Archives of Otolaryngology, 56:535-55. November, 1952; pp. 644-62. December, 1952.
- "Cysts of the thyroglossal duct as a complicating factor in laryngeal operations" (with H. A. Johnson). Annals of Otolaryngology, Rhinology and Laryngology, 61:1048-52. December, 1952.

JOHN B. ERICH, M.D., M.S., D.D.S., Associate Professor

- "Fractures of the maxilla." Transactions of the American Academy of Ophthalmology, 56:556-64. Iuly-August, 1952.
- "Benign and malignant tumors of the jaws." Surgical Clinics of North America, pp. 1159-75. August, 1952.

KENNETH D. DEVINE, M.D., Instructor

"Tumors of the nose and throat" (with F. A. Figi). American Medical Association Archives of Otolaryngology, 56:535-55. November, 1952; pp. 644-62. December, 1952.

Proctology

Louis A. Buie, M.D., Professor

- "The fruit of loyal nature and of noble mind." Bulletin of the School of Medicine of the University of Maryland, 37:122-28. July, 1952.
- "Pilonidal disease" (with R. K. Curtiss). Surgical Clinics of North America, pp. 1247-59.

 August, 1952.

NEWTON D. SMITH, M.D., Associate Professor

"Proctologic facts and observations." Southern Medical Journal, 46:79-84. January, 1953.

JOHN R. HILL, M.D., M.S. in Proct., Assistant Professor

"Pain in the anorectal region." Journal of the American Medical Association, 150:579-82. October 11, 1952.

RAYMOND J. JACKMAN, M.D., M.S. in Proct., Assistant Professor

- "Rectovaginal and anovaginal fistulas: A surgical procedure for treatment of certain types."

 Journal of the lowa State Medical Society, 42:435-40, September, 1952.
- "Cancer prevention applied to carcinoma of the colon." Ibid., 43:94-95. March, 1953.
- "Painful anal lesions in intestinal disease" (with J. A. Bargen). Journal-Lancet, 72:530-32. November, 1952.

Urology

JOHN L. EMMETT, M.D., M.S. in Urol., Professor

- "Urologic abnormalities associated with congenital absence or deficiency of abdominal musculature" (with L. F. Greene, O. S. Culp, and R. L. J. Kennedy). *Journal of Urology*, 68:217-29. July, 1952.
- "Condylomato acuminata of the urethra" (with R. P. Morrow and J. R. McDonald). *Ibid.*, pp. 909-17. December, 1952.
- "Congenital absence of abdominal muscles with urologic complications: A further report" (with L. F. Greene, O. S. Culp, and R. L. J. Kennedy). Proceedings of the Staff Meetings of the Mayo Clinic, 27:325-27. July 30, 1952.
- "Clinical aspects of nephrocalcinosis" (with JD Mortensen and A. H. Baggenstoss), 1bid., 28:305-12, June 3, 1953.

"Clinical problems in prostatic disease" (with J. W. Faulkner). General Practitioner, 7:34-44. April, 1953.

Gershom J. Thompson, M.D., M.S. in Urol., Professor

- "Congenital solitary kidney" (with V. J. Longo). Journal of Urology, 68:63-68. July, 1952.
- "Unusual carcinomas involving the prostate gland" (with D. D. Albers and A. C. Broders). Ibid., 69:416-25. March, 1953.
- "Granulomateus prostatitis: A condition which clinically may be confused with carcinoma of prostate" (with D. D. Albers). *Ibid.*, pp. 530-38. April, 1953.
- "Aureomycin in infections of the urinary tract. A clinical and bacteriologic study" (with J. R. Longley). Minnesota Medicine, 35:947-48, 974. October, 1952.
- "The treatment of cancer of the urinary bladder with particular reference to choice of operation."

 Journal of the Missouri Medical Association, 49:813-17. October, 1952.
- "Some interesting tumors in the renal region." American Surgeon, 19:9-16. January, 1953.

Ormond S. Culp, M.D., Associate Professor

- "Congenital absence of abdominal muscles with urologic complications: A further report" (with L. F. Greene, J. L. Emmett, and R. L. J. Kennedy). Proceedings of the Staff Meetings of the Mayo Clinic, 27:325-27. July 30, 1952.
- "Urologic abnormalities associated with congenital absence or deficiency of abdominal musculature" (with R. L. J. Kennedy, L. F. Greene, and J. L. Emmett). *Journal of Urology*, 68:217-29. July, 1952.
- "Advantages of the Cherney incision for urologic operations" (with J. H. DeWeerd). Ibid., 69:445-53. March, 1953.

Laurence F. Greene, M.D., Ph.D. in Urol., Associate Professor

- "Terapia endocrina en el tratamiento del carcinoma de la prostata." Review de Urology, 10:51-54. May-June, 1952.
- "Congenital absence of abdominal muscles with urologic complications: a further report" (with J. L. Emmett, O. S. Culp, and R. L. J. Kennedy). Proceedings of the Staff Meetings of the Mayo Clinic, 27:325-27. July 30, 1952.
- "Urologic abnormalities associated with congenital absence or deficiency of abdominal musculature" (with J. L. Emmett, O. S. Culp, and R. L. J. Kennedy). *Journal of Urology*, 68:217-29. July, 1952.
- "Vesical neoplasm prolapsing through the urethra and suggesting primary vaginal carcinoma" (with N. B. Davis and J. H. Pratt). *Ibid.*, pp. 703-705. October, 1952.

JAMES H. DEWEERD, M.D., M.S. in Urol., Instructor

- "Treatment of testicular tumors" (with D. S. Childs, Jr.). Surgical Clinics of North America, pp. 1087-91. August, 1952.
- "Lipomatous retroperitoneal tumors" (with M. B. Dockerty). American Journal of Surgery, 84:397-407. October, 1952.
- "Advantages of the Cherney incision for urologic operations" (with O. S. Culp). Journal of Urology, 69:445-53. March, 1953.

Fellows

Talib M. Astarabadi, M.S. in Exp. Med., Fellow

- "Effect of epinephrine on male and female albino rats" (with H. E. Essex and W. A. Mecker).

 American Journal of Physiology, 171:75-77. October, 1952.
- "Effect of hypophysectomy on size of remaining kidney after ureteroduodenostomy and contralateral nephrectomy" (with H. E. Essex). Proceedings of the Society for Experimental Biology and Medicine, 81:25-28. October, 1952.
- "Effect of hypophysectomy on the size of remaining kidney after ureteroduodenostomy and contralateral nephrectomy" (with H. E. Essex). (Abstract.) American Journal of Physiology, 171:705. December, 1952.

ROBERT C. BAHN, M.D., Fellow

"Gonadotropins of the pituitary gland and the urine of the adult human female" (with N. Lorenz, W. A. Bennett, and A. Albert). Endocrinology, 52:135-39. February, 1953.

WILLIAM G. BANNON, M.D., M.S. in Med., Fellow

- "The effect of adrenolytic drugs on pheochromocytoma with functioning metastatic lesions: Report of case" (with E. V. Allen). Proceedings of the Staff Meetings of the Mayo Clinic, 27:459-64. November 5, 1952.
- "A new sympatholytic and adrenolytic drug. Clinical studies on essential hypertension." *Ibid.*, pp. 475-81. November 19, 1952.

JAMES A. BASTRON, M.D., Fellow

"Clinical pathologic conference; from the Sections of Neurology and Psychiatry, Mayo Clinic, Rochester, Minnesota" (with J. R. Brown). Neurology, 2:537-42. November-December, 1952.

DONALD L. BECKER, M.D., M.S. in Path., Fellow

"Parenchymal calcification of the kidneys in patients with duodenal ulcer" (with A. H. Baggenstoss and J. F. Weir). American Journal of Clinical Pathology, 22:843-54. September, 1952.

LEONARD F. BENDER, M.D., M.S. in Phys. Mcd. and Rehab., Fellow

"Incidence of pain in idiopathic scoliosis" (with R. O. McMorris, E. C. Elkins, and J. M. Janes). Archives of Physical Medicine and Rehabilitation, 33:406-408, July, 1952.

WALTER H. BENEDICT, M.D., M.S. in Ophth., Fellow

"The influence of cortisone on the rate of blood absorption from the eye" (with R. W. Hollenhorst). American Journal of Ophthalmology, 36:247-49. February, 1953.

RICHARD S. BENUA, M.D., M.S. in Med., Fellow

"The metabolism of radiothyroxine in exophthalmic goiter" (with A. Albert and F. R. Keating, Jr.). Journal of Clinical Endocrinology and Metabolism, 12:1461-73. November, 1952; Transactions of the American Goiter Association, pp. 218-30, 1952.

EDWARD J. BENZ, M.D., Fellow

- "The pathogenesis of atrophy of the left lobe of the liver of man" (with A. H. Baggenstoss and E. E. Wollaeger). Gastroenterology, 22:34-47. September, 1952.
- "Atrophy of the left lobe of the liver" (with A. H. Baggenstoss and E. E. Wollaeger). Proceedings of the Staff Meetings of the Mayo Clinic, 28:232-38. April 22, 1953.
- "Solitary nodules (focal cirrhosis) of liver" (with A. H. Baggenstoss). Ibid., pp. 245-47.

JAMES J. BERNES, M.D., M.S. in Surg., Fellow

- "Subphrenic abscess" (with H. K. Gray and M. B. Dockerty). Surgery, Gynecology and Obstetrics, 96:463-70. April, 1953.
- "Cholecystoduodenal fistula associated with chronic abscess in the abdominal wall containing a gallstone" (with G. A. Hallenbeck and J. C. Cain). Proceedings of the Staff Meetings of the Mayo Clinic, 28:337-40. June 17, 1953.

PHILIP E. BERNATZ, M.D., M.S. in Surg., Fellow

"Severe crush injuries of the chest: Some problems in management" (with J. W. Kirklin and A. M. Olsen). Proceedings of the Staff Meetings of the Mayo Clinic, 28:193-99. April 8, 1953.

Byron E. Besse, Jr., M.D., Fellow

"Aneurysmal bone cyst" (with D. C. Dahlin, A. Bruwer, H. J. Svien, and R. K. Ghormley).

Proceedings of the Staff Meetings of the Mayo Clinic, 28:249-55. May 6, 1953.

MELVIN A. BLOCK, M.D., Fellow

- "Circulation through kidney during stimulation of the renal nerves" (with K. G. Wakim and F. C. Mann). American Journal of Physiology, 169:659-69. June, 1952.
- "Renal function during stimulation of renal nerves" (with K. G. Wakim and F. C. Mann). Ibid., pp. 670-77.
- "Alkaline phosphate and amylase of plasma after hepatectomy" (with Eunice V. Flock, J. L. Bollman, and F. C. Mann). *Ibid.*, 170:467-71. August, 1952.

- "Appraisal of certain factors influencing compensatory renal hypertrophy" (with K. G. Wakim and F. C. Mann), Ibid., 172:60-66, January, 1953.
- "Reactions of the vessels of the rat kidney after experimental occlusion of the renal artery for various periods" (with K. G. Wakim and F. C. Mann). Proceedings of the Society for Experimental Biology and Medicine, 80:465-66. July, 1952.
- "Effect of water and electrolyte restriction on pathologic changes in kidney of jaundiced rats" (with K. G. Wakim and F. C. Mann). *Ibid.*, pp. 765-68. August-September, 1952.
- "Renal lesions and functions following prolonged experimental hypotension" (with K. G. Wakim, F. C. Mann, and W. A. Bennett). Surgery, 32:551-80. September, 1952.
- "The effect of glucose on the amino acids of plasma after total hepatectomy" (with Eunice V. Flock, F. C. Mann, J. H. Grindlay, and J. L. Bollman). Journal of Biological Chemistry, 198:427-37. September, 1952.
- "Changes in free amino acids of brain and muscle after total hepatectomy" (with Eunice V. Flock, J. H. Grindlay, F. C. Mann, and J. L. Bollman). *Ibid.*, 200:529-36. February, 1953.
- "Effect of severe acute hemorrhage on kidney of rat" (with K. G. Wakim and F. C. Mann).

 American Medical Association Archives of Pathology, 54:443-49. November, 1952.

WILLIAM J. BLOCK, JR., M.D., M.S. in Med., Fellow

- "Cardiac clinics, CXXXIX. Myxoma of the left atrium clinically simulating mitral stenosis: Report of case and pathologic studies" (with R. L. Parker and J. E. Edwards). Proceedings of the Staff Meetings of the Mayo Clinic, 27:361-71. September 10, 1952.
- "Prognosis of angina pectoris: Observations in 6,882 cases" (with E. L. Crumpacker, T. J. Dry, and R. P. Gage). Journal of the American Medical Association, 150:259-64. September 27, 1952.

JAMES C. BROADBENT, M.D., Fellow

- "Ebstein's malformation of the tricuspid vaive: Report of 3 cases" (with E. H. Wood, H. B. Burchell, and R. L. Parker). Proceedings of the Staff Meetings of the Mayo Clinic, 28:79-88. February 11, 1953.
- "Left-to-right intracardiac shunts in the presence of pulmonary stenosis" (with E. H. Wood and H. B. Burchell). *Ibid.*, pp. 101-106. February 25, 1953.

James W. Butin, M.D., M.S. in Med., Fellow

"A study of esophageal pressures in normal persons and patients with cardiospasm" (with A. M. Olsen, H. J. Moersch, and C. F. Code). Gastroenterology, 23:278-91. February, 1953.

JOHN M. CAREY, M.D., M.S. in Surg., Fellow

"Extended radical mastectomy: A review of its concepts" (with J. W. Kirklin). Proceedings of the Staff Meetings of the Mayo Clinic, 27:436-40. October 22, 1952.

JOHN C. CARLISLE, M.D., M.S. in Surg., Fellow

"Regional enteritis involving the duodenum: Report of case" (with E. S. Judd). Proceedings of the Staff Meetings of the Mayo Clinic, 27:569-74. December 31, 1952.

DANIEL C. CONNOLLY, M.D., M.R.C.P., Fellow

- "Inflammatory complications of congenital heart disease." Pages 52-57 in Lewis Thomas, editor, Symposium on Rheumatic Fever. Minneapolis: University of Minneapola Press. 1952.
- "Appearance and disappearance of T-1824 in tissue after intravenous injection in man; measurement by ear oximeter" (with E. H. Wood). (Abstract.) American Journal of Physiology, 171:715-16. December, 1952.
- "The problem of isolated valvular versus infundibular pulmonic stenosis with particular reference to cardiac catheterization data and records obtained at the time of operation" (with R. Lev, J. W. Kirklin, and E. H. Wood). Proceedings of the Staff Meetings of the Mayo Clinic, 28:65-71, February 11, 1953.
- "Pulmonary-artery wedge pressures in mitral valve disease; relationship to left atrial pressures" (with R. G. Tompkins, R. Lev, J. W. Kirklin, and E. H. Wood). *Ibid.*, pp. 72-78.
- "Left atrial, pulmonary artery, pulmonary artery wedge and systemic pressures during mitral commissurotomy" (with R. Lev, R. G. Tompkins, and J. W. Kirklin). (Abstract.) Federation Proceedings, 12:85-86. March, 1953.

ROBERT K. CURTISS, M.D., M.S. in Proct., Fellow

"Pilonidal disease" (with L. A. Buie). Surgical Clinics of North America, pp. 1247-59. August, 1952.

NEAL B. DAVIS, M.D., Fellow

"Vesical neoplasm prolapsing through the urethra and suggesting primary vaginal carcinoma" (with J. H. Pratt and L. F. Greene). Journal of Urology, 68:703-705. October, 1952.

PETER B. DEWS, M.D., Ph.D. in Physiol., Fellow

- "Lack of effect of adrenalectomy and of administration of cortisone on concentration of histamine in blood of rabbits" (with C. F. Code and G. M. Higgins). (Abstract.) American Journal of Physiology, 171:719. December, 1952.
- "Anaphylactic reactions and concentrations of antibody in rats and rabbits: Effect of adrenalectomy and of administration of cortisone" (with C. F. Code). *Journal of Immunology*, 70:199-206. March, 1953.

Casimir A. Domzalski, Jr., M.D., Fellow

"Delirious reactions secondary to thiocyanate therapy of hypertension" (with L. C. Kolb and E. A. Hines, Jr.). Proceedings of the Staff Meetings of the Mayo Clinic, 28:272-80. May 6, 1953.

DAVID E. DONALD, M.R.C.V.S., B.V.Sc., Fellow

- "Experimental procedures designed to increase the blood supply to the myocardium" (with J. W. Kirklin). Proceedings of the Staff Meetings of the Mayo Clinic, 27:351-57. August 27, 1952.
- "The use of polyvinyl sponge plugs in the closure of large atrial septal defects created experimentally" (with J. W. Kirklin and J. H. Grindlay). *Ibid.*, 28:288-95. May 20, 1953.
- "Effect of various degrees of myocardial infarction of the right ventricle on pressures within the heart and great vessels" (with H. E. Essex). (Abstract.) American Journal of Physiology, 171:720-21. December, 1952.

Douglas K. Duncan, M.D., M.S. in Surg., Fellow

"Emergency surgical treatment of perforated gastric and duodenal ulcers" (with O. II. Beahrs and L. A. Vadheim). Surgery, Gynecology and Obstetrics, 96:637-40. June, 1953.

DEAN P. EPPERSON, M.D., Fellow

"Spontaneous internal biliary fistulas" (with W. Walters). Proceedings of the Staff Meetings of the Mayo Clinic, 28:353-60. July 1, 1953.

James O. Fergeson, M.D., Fellow

- "Surgery" (with C. W. Mayo). Pages 17-33 in Morris Fishbein, editor, 1953 Medical Progress.

 A Review of Medical Advances During 1952, New York: Blakiston Company, 1953.
- "Long-term survival in a case of recurrent carcinoma of the breast" (with C. W. Mayo). Proceedings of the Staff Meetings of the Mayo Clinic, 27:322-24, July 30, 1952.
- "Selection of operable patients for Wertheim hysterectomy" (with J. H. Pratt). Ibid., 28:257-64, May 6, 1953.
- "Are certain diseases associated with specific blood groups or Rh antigens?" (with C. W. Mayo).

 *American Medical Association Archives of Surgery, 66:406-409. April, 1953.

MARTIN E. FLIPSE, M.D., Fellow

"Water-soluble contrast medium for bronchography" (with G. A. Hedberg and V. R. Krueger).

**American Medical Association Archives of Otolaryngology, 57:188-205. February, 1953.

MARSHALL A. FREEDMAN, M.D., Fellow

"The effect of vagotomy and of methantheline bromide on the diarrhea produced by celiac and superior mesenteric ganglionectomy" (with G. A. Hallenbeck and C. F. Code). American College of Surgeons, Clinical Congress, Proceedings of the Surgical Forum, 38:481-86, 1952.

ROBERT H. FREEDMAN, M.D., Fellow

"Ottic proteus meningitis with recovery: Report of case" (with J. G. Love and O. E. Hallberg).

Proceedings of the Staff Meetings of the Mayo Clinic, 27:390-92. September 24, 1952.

RAYMOND G. GIBERSON, M.C.C.M., M.S. in Surg., Fellow

"Fractures of the distal part of the forearm in children. Correction of deformity by growth" (with J. C. Ivins). Minnesota Medicine, 35:744-49. August, 1952.

OSCAR K. GILJE, M.D., Ph.D. in Med., Fellow

"Capillary microscopic examination in skin diseases" (with P. A. O'Leary and E. J. Baldes), Proceedings of the Staff Meetings of the Mayo Clinic, 28:287. May 20, 1953.

ROBERT L. GINSBERG, M.D., M.S. in Physiol., Fellow

"Metastatic hypernephrona of the thyroid gland" (with O. H. Beahrs and G. E. Miller),

Proceedings of the Staff Meetings of the Mayo Clinic, 28:205-209, April 8, 1953.

GEORGE G. GRAHAM, M.D., M.S. in Surg., Fellow

"Examination of pleural fluid for carcinoma cells" (with J. R. McDonald, O. T. Clagett, and H. W. Schmidt). Journal of Thoracic Surgery, 25:366-70. April, 1953.

YRIO K. J. GRONQVIST, M.D., Fellow

"Cerebral anoxia during anesthesia; prognostic significance of electroencephalographic changes" (with T. H. Seldon and A. Faulconer, Jr.). Annales Chirurgiae et Gynaecologiae Fenniae, 41:149-59, 1952.

CHARLES C. HENDERSON, M.D., Fellow

"The use of hydrocortisone acetate (compound F acetate) in the treatment of posttraumatic bursitis of the knee and elbow" (with E. D. Henderson). Minnesota Medicine, 36:142-44. February, 1953.

NORMAN G. HEPPER, M.D., Fellow

"Effect of cortisone on healing of experimentally produced myocardial infarction in dogs" (with R. D. Pruitt and J. E. Edwards). (Abstract.) Federation Proceedings, 12:391. March, 1953.

PETER S. HETZEL, M.B., Fellow

"Pressure pulses in the right side of the heart in a case of amyloid disease and in a case of idiopathic heart failure simulating constrictive pericarditis" (with E. H. Wood and H. B. Burchell). Proceedings of the Staff Meetings of the Mayo Clinic, 28:107-12. February 25, 1052

"Comparison of arterial dilution curves following central and peripheral injections of dye" (with H. J. C. Swan). (Abstract.) Federation Proceedings, 12:66. March, 1953.

NICHOLAS C. HIGHTOWER, JR., M.D., M.S. in Med., Ph.D. in Physiol., Fellow

"Operative and postoperative control of blood pressure in patients with pheochromocytoma" (with Grace M. Roth and J. T. Priestley). (Abstract.) Proceedings of the Central Society for Clinical Research, 25:41-42, 1952; Journal of Laboratory and Clinical Medicine, 40:810-11, November, 1952.

"Pheochromocytoma from the laboratory standpoint" (with Grace M. Roth and M. B. Dockerty).

Surgical Clinics of North America, pp. 1065-77. August, 1952.

"Motility of the alimentary canal in man: Review of recent studies" (with C. F. Code and C. G. Morlock). American Journal of Medicine, 13:328-51. September, 1952.

"The effects of banthine on pain and antral gastric motility in patients with duodenal ulcer" (with E. E. Gambill). Gastroenterology, 23:244-51. February, 1953.

ROBERT T. HOOD, JR., M.D., Ph.D. in Surg., Fellow

"Biopsy of the lung and cardiac catheterization studies in patients treated surgically for mitral stenosis" (with J. E. Edwards, R. G. Tompkins, J. W. Kirklin, and H. B. Burchell). (Abstract.) Proceedings of the Central Society for Clinical Research, 25:26-27, 1952; Journal of Laboratory and Clinical Medicine, 40:795-96. November, 1952.

- "One-stage esophagogastrectomy for perforated carcinoma in the presence of mediastinitis" (with R. P. McBurney, J. W. Kirklin, and H. A. Andersen). Proceedings of the Staff Meetings of the Mayo Clinic, 28:281-86. May 20, 1953.
- "Infarction of the greater omentum simulating acute cholecystitis: Report of a case" (with J. E. Geraci). *Ibid.*, pp. 296-98.
- "Source of a possible gastric secretory inhibitor in canine gastric juice and effects of vagotomy on its production" (with C. F. Code and J. H. Grindlay). American Journal of Physiology, 173:270-74. May, 1953.

YUJIRO IKEMI, M.D., Fellow

"Effect of isonicotinic acid hydrazide (isoniazid) on survival time of mice infected with tubercle bacilli resistant to the drug in vitro" (with A. G. Karlson). Proceedings of the Staff Meetings of the Mayo Clinic, 27:373-76. September 10, 1953.

RICHARD L. JACKSON, M.D., Fellow

"Some observations on the pressor effect of an oxytocic agent used intravenously" (with D. G. Decker). Proceedings of the Staff Meetings of the Mayo Clinic, 28:20-24. January 14, 1953.

ROBERT W. JAMPOLIS, M.D., M.S. in Surg., Fellow

"Intrapericardial dissection in left pneumonectomy for bronchiogenic carcinoma" (with J. W. Kirklin). Journal of Thoracic Surgery, 25:280-85. March, 1953.

DAVID S. JOHNSEN, M.D., Fellow

"Congenital dermoid cyst." American Journal of Surgery, 85:104-107. January, 1953.

Donald A. Johnson, M.D., Ph.D. in Neurosurg., Fellow

- "Autonomic pathways in the spinal cord" (with Grace M. Roth and W. McK. Craig). Journal of Neurosurgery, 9:599-605. November, 1952.
- "Physiologic effect of anterolateral chordotomy in man" (with Grace M. Roth and W. McK. Craig). Journal of Applied Physiology, 5:261-66. December, 1952.
- "Factors affecting cortical, subcortical and myoclonic responses to photic stimulation in cats" (with R. G. Bickford). (Abstract.) Electroencephalography and Clinical Neurophysiology, 5:126. February, 1953.

Hugh A. Johnson, M.D., M.S. in Plastic Surg., Fellow

"Cysts of the thyroglossal duct as a complicating factor in laryngeal operations" (with F. A. Figi). Annals of Otolaryngology, Rhinology and Laryngology, 61:1048-52. December, 1952.

WILLIAM E. JOHNSON, M.D., Fellow

"Treatment of chronic hematogenous osteomyclitis by means of saucerization and bone grafting" (with W. H. Bickel and J. G. Bateman). Surgery, Gynecology and Obstetrics, 96:265-74. March, 1953.

EDWARD V. JOHNSTON, M.S. in Anatomy, M.D., Fellow

"Use of Dextran (Macrodex) in Burns"

- "I. Review of the physiology of dextran" (with J. S. Lundy). American Journal of Surgery, 85:713-19. June, 1953.
- "II. Clinical evaluation in eight cases" (with J. S. Lundy, W. A. Bennett, and J. M. Janes). Ibid., pp. 720-28.

WILLIAM V. KAPLAN, D.D.S., M.S. in Dent. Surg., Fellow

"The effects of varied dosages of X-ray irradiation on the forming dentition of the ten-day-old Syrian hamster." (Abstract.) Journal of Dental Research, 31:600. August, 1952.

ANTHONY H. KELLY, M.D., M.S. in Surg., Fellow

"Surgical treatment of stricture of the common and hepatic bile ducts; a twenty-eight-year survey" (with W. Walters). American Medical Association Archives of Surgery, 66:417-22. April, 1953.

"The effect of experimentally produced pancreatitis on canine external pancreatic secretion" (with G. A. Hallenbeck and G. L. Jordan, Jr.). Survery, Gynecology and Obstetrics, 96:714-23. June, 1953.

JOSEPH M. KIELY, M.D., M.S. in Physiol., Fellow

"Agranulocytosis caused by phenylbutazone and 4-amino-antipyrine" (with J. M. Stickney).

Proceedings of the Staff Meetings of the Mayo Clinic, 28:341-43. June 17, 1953.

RALPH A. KILBY, M.D., Fellow

"The pituitary gland in patients treated with cortisone and ACTH" (with W. A. Bennett). (Abstract.) American Journal of Pathology, 29:586-87. May-June, 1953.

MARTIN S. KLECKNER, JR., M.D., M.S. in Med., Fellow

- "Pseudomembranous enterocolitis: Clinicopathologic study of fourteen cases in which the disease was not preceded by an operation" (with J. A. Bargen and A. H. Baggenstoss), Gastroenterology, 21:212-23, June, 1952.
- "Hepatic lesions in the living patient with chronic ulcerative colitis as demonstrated by needle biopsy" (with M. H. Stauffer, J. A. Bargen, and M. B. Dockerty). *Ibid.*, 22:13-33. September, 1952.
- "Acute pseudomembranous enterocolitis" (with J. A. Bargen and A. H. Baggenstoss). Proceedings of the Staff Meetings of the Mayo Clinic, 28:313-19. June 3, 1953.

FRANK J. KROBOTH, JR., M.D., Fellow

"Osseous Gaucher's disease. Report of a case with pathologic fracture of the left humerus" (with E. W. Johnson, Jr.). Surgical Clinics of North America, pp. 1141-47. August, 1952.

CLYDE B. LAMP, JR., M.D., M.S. in Otolar, and Rhin., Fellow

"Reduction of postfenestration vertigo by use of isothermal isotonic irrigation technic." Proceedings of the Staff Meetings of the Mayo Clinic, 27:565-68. December 17, 1952.

Justus F. K. Lehmann, M.D., Fellow

- "The biophysical mode of action of biologic and therapeutic ultrasonic reactions." Journal of Acoustical Society of America, 25:17-25. January, 1953.
- "Biologic reactions to cavitation, a consideration for ultrasonic therapy" (with Julia F. Herrick). Archives of Physical Medicine and Rehabilitation, 34:86-98. February, 1953.
- "The biophysical basis of biologic ultrasonic reactions with special reference to ultrasonic therapy." *Ibid.*, pp. 139-52, March, 1953.

ISIDOOR R. LEUSEN, M.D., Fellow

- "Comparison of aortic pressure pulses recorded by strain-gauge and capacitance manometercatheter systems in man" (with E. H. Wood and H. R. Warner). (Abstract.) American Journal of Physiology, 171:780. December, 1952.
- "Effects of epinephrine, nor-epinephrine and khellin on circulation through isolated perfused hearts" (with H. E. Essex). *Ibid.*, 172:226-30. January, 1953.
- "Leukopenia and changes in differential leucocyte counts produced in rabbits by dextran and acacia" (with H. E. Essex). *Ibid.*, pp. 231-36.

RALPH LEV. M.D., Fellow

- "The problem of isolated valvular versus infundibular pulmonic stenosis with particular reference to cardias catheterization data and records obtained at the time of operation" (with D. C. Connolly, J. W. Kirklin, and E. H. Wood). Proceedings of the Staff Meetings of the Mayo Clinic, 28:65-71. February 11, 1953.
- "Pulmonary-artery wedge pressures in mitral valve disease; relationship to left atrial pressures" (with D. C. Connolly, R. G. Tompkins, J. W. Kirklin, and E. H. Wood). *Ibid.*, pp. 72-78.
- "Left atrial, pulmonary artery, pulmonary artery wedge and systemic pressures during mitral commissurotomy" (with D. C. Connolly, R. G. Tompkins, and J. W. Kirklin). (Abstract.) Federation Proceedings, pp. 85-86. March, 1953.

HENRY B. LOCKHART, M.D., Fellow

"Angiomas of interest to the otolaryngologist" (with F. Z. Havens). Annals of Otolaryngology, Rhinology and Laryngology, 62:36-50. March, 1953.

JAY R. LONGLEY, M.D., M.S. in Urol., Fellow

"Aureomycin in infections of the urinary tract; a clinical and bacteriologic study" (with G. J. Thompson). Minnesota Medicine, 35:947-48, 974. October, 1952.

VINCENT J. LONGO, M.D., M.S. in Urol., Fellow

"Congenital solitary kidney" (with G. J. Thompson). Journal of Urology, 68:63-68. July, 1952.

DONALD A. MACKENZIE, M.D., M.S. in Surg., Fellow

"Unusual aneurysm of a pulmonary artery; report of case in which treatment was surgical" (with O. T. Clagett). Journal of Thoracic Surgery, 25:524-29. May, 1953.

HAROLD T. MANKIN, M.D., Fellow

"Arterial dilution curves of T-1824 during rest and exercise" (with H. J. C. Swan). (Abstract.) Federation Proceedings, 12:93. March, 1953.

JOSEPH D. MANN, M.D., Fellow

"The vasculature of the human liver: A study by the injection-cast method" (with K. G. Wakim and A. H. Baggenstoss). Proceedings of the Staff Meetings of the Mayo Clinic, 28:227-32. April 22, 1953.

RICHARD H. MANN, M.D., M.S. in Med., Fellow

"Premature ventricular contractions and exercise" (with H. B. Burchell). Proceedings of the Staff Meetings of the Mayo Clinic, 27:383-89. September 24, 1952.

Phil R. Manning, M.D., Fellow

"Antibiotic therapy in bacterial endocarditis. III. Penicillin O and hypoallergenic penicillins in treatment of subacute bacterial endocarditis" (with J. E. Geraci). Minnesota Medicine, 36:466-70. May, 1953.

WILLIAM J. MARTIN, M.D., M.S. in Med., Fellow

"Diagnostic helps in rheumatic diseases." Medical Annals of the District of Columbia, 21:661-64. December, 1952.

"Some notes on antibiotics and chemotherapy in infectious diseases." *Ibid.*, 22:283-88, 337. June, 1953.

STANLEY R. MAXEINER, JR., M.D., M.S. in Surg., Fellow

"Muscle biopsy in the diagnosis of periarteritis nodosa. An evaluation" (with J. R. McDonald and J. W. Kirklin). Surgical Clinics of North America, pp. 1225-33. August, 1952.

ROBERT P. McBurney, M.D., M.S. in Surg., Fellow

"Obstructive pneumonitis secondary to bronchial adenoma" (with O. T. Clagett and J. R. McDonald). Journal of Thoracic Surgery, 24:411-19. October, 1952.

"Metastasizing bronchial adenomas" (with J. W. Kirklin and L. B. Woolner). Surgery, Gynecology and Obstetrics, 96: 482-92, April, 1953.

"One-stage esophagogastrectomy for perforated carcinoma in the presence of mediastinitis" (with J. W. Kirklin, R. T. Hood, Jr., and H. A. Andersen). Proceedings of the Staff Meetings of the Mayo Clinic, 28:281-86. May 20, 1953.

SAMUEL P. McCARRAN, M.D., Fellow

"Carcinoma or stone in the common bile duct: a diagnostic problem" (with C. F. Dixon). Rocky Mountain Medical Journal, 50:120-21. February, 1953.

"Independent carcinomas of colon occurring twenty-one years apart; report of a case" (with C. F. Dixon and C. A. Pitchford, Jr.). Journal of the American Medical Association, 151:1102. March 28, 1953.

WARREN A. McGuckin, M.D., Fellow

- "Steroids Derived from Bile Acids"
 - "XVII. Dehydrobromination of 3-keto-4-bromosteroids with 2,4-dinitrophenylhydrazine" (with E. C. Kendall). Journal of the American Chemical Society, 74:3951. August 5, 1952.
 - "XVIII. Introduction of the 4,5-double bond of cortisone^{1,2}" (with E. C. Kendall). *Ibid.*, pp. 5811-13. December 5, 1952.
 - "XIX. Barbier-Wieland degradation in the 11-keto series" (with R. B. Turner, V. R. Mattox, and E. C. Kendall). Ibid., pp. 5814-17.
 - "XX. Degradation of 3a, 9a-epoxy-11-ketonorcholanic acid to 3a, 9a-epoxy-11-ketoetio-cholanic acid" (with V. R. Mattox, R. B. Turner, Edith J. H. Chu, and E. C. Kendall). *Ibid.*, pp. 5818-19.

REX O. McMorris, M.D., Fellow

- "Incidence of pain in idiopathic scoliosis" (with L. F. Bender, E. C. Elkins, and J. M. Janes).

 Archives of Physical Medicine and Rehabilitation, 33:406-408, July, 1952.
- "Size of motor unit action potentials in neuromuscular disorders" (with E. H. Lambert).
 (Abstract.) Federation Proceedings, 12:81. March, 1953.

GEORGE E. MILLER, M.D., Fellow

"Metastatic hypernephroma of the thyroid gland" (with O. H. Beahrs and R. L. Ginsberg).

Proceedings of the Staff Meetings of the Mayo Clinic, 28:205-209. April 8, 1953.

Ross H. Miller, M.D., M.S. in Neurosurg., Fellow

- "Unusual intra-orbital tumors: Report of 3 cases" (with A. Uihlein). Proceedings of the Staff Meetings of the Mayo Clinic, 27:402-407. October 8, 1952.
- "Neurosurgical and neurologic application of depth electrography" (with H. W. Dodge, Jr., A. A. Bailey, R. G. Bickford, M. C. Petersen, and C. W. Sem-Jacobsen). *Ibid.*, 28:188-91. March 25, 1953.
- "Supratentorial tumors among children" (with W. McK. Craig and J. W. Kernohan). American Medical Association Archives of Neurology and Psychiatry, 68:797-814. December, 1952.

JD Mortensen, M.D., Fellow

- "A study of masses in the right lower quadrant of the abdomen" (with J. A. Bargen). Minnesota Medicine, 36:481-85. May, 1953.
- "Clinical aspects of nephrocalcinosis" (with J. L. Emmett and A. H. Baggenstoss). Proceedings of the Staff Meetings of the Mayo Clinic, 28:305-12. June 3, 1953.

DANIEL B. O'DONNELL, M.B., B.Ch., B.A.O., Fellow

"Present-day cholecystography" (with B. R. Kirklin). Journal of the American Medical Association, 151:261-63. January 24, 1953.

JOHN T. OLIVE, JR., M.D., M.S. in Ped., Fellow

"Dextran for nephrotic edema: Clinical experience" (with S. D. Mills and J. S. Lundy).

Proceedings of the Staff Meetings of the Mayo Clinic, 28:199-204. April 8, 1953.

CALVIN R. OPENSHAW, M.D., M.S. in Surg., Fellow

"Surgical treatment of infundibular stenosis with intact ventricular septum: Report of a case" (with J. W. Kirklin and R. G. Tompkins). Annals of Surgery, 137:228-31. February, 1953.

HOWARD W. OWEN, M.D., M.S. in Surg., Fellow

"Cholelithiasis: Familial predisposition" (with C. F. Dixon). Surgical Clinics of North America, pp. 1177-80, August, 1952.

ROBERT M. PEET, M.S. in Neurol., Fellow

"Some clinical and electro-encephalographic responses to sound stimulation in epileptic patients" (with D. Daly and R. G. Bickford). Transactions of the American Neurological Association. 77:215-17. 1952.

ALBERT H. PEMBERTON, M.D., M.S. in Surg., Fellow

"The results of the surgical treatment of complete rectal prolapse, with particular reference to the suspension-fixation operation" (with P. C. Kiernan and J. deJ. Pemberton). Annals of Surgery, 137:478-81. April, 1953.

JOHN R. PETTET, M.D., Fellow

"Carotid body tumors (chemodectomas)" (with L. B. Woolner and E. S. Judd). Annals of Surgery, 137:465-77. April, 1953.

WALTER S. PHARES, M.D., M.S. in Med., Fellow

"Cardiac aneurysms: Clinicopathologic studies" (with J. E. Edwards and H. B. Burchell).

Proceedings of the Staff Meetings of the Mayo Clinic, 28:264-71. May 6, 1953.

CLYDE A. PITCHFORD, JR., M.D., Fellow

- "Diverticulitis versus carcinoma. Report of two cases" (with C. F. Dixon and P. H. Sebrechts).

 Surgical Clinics of North America, pp. 1181-83. August, 1952.
- "Longevity and cancer" (with C. F. Dixon). Western Journal of Surgery, 61:18-23. January, 1953.
- "Independent carcinomas of colon occurring twenty-one years apart; report of a case" (with C. F. Dixon and S. P. McCarran). Journal of the American Medical Association, 151:1102. March 28, 1953.

ERICH A. QUER, M.D., M.S. in Surg., Fellow

"Retrograde intramural spread of carcinoma of the rectum and rectosigmoid; a microscopic study" (with D. C. Dahlin and C. W. Mayo). Surgery, Gynecology and Obstetrics, 96:24-30. 1953.

ERNST A. RODIN, M.D., Fellow

- "Investigation of a bacterial pyrogen as a therapeutic agent in neurologic disorders" (with A. A. Bailey and E. D. Rooke). Proceedings of the Staff Meetings of the Mayo Clinic, 27:340-43. August 13, 1952.
- "Components of the photomyoclonic response in man" (with R. G. Bickford, P. T. White, and C. W. Sem-Jacobsen). (Abstract.) Federation Proceedings, 12:15-16. March, 1953.
- "Electroencephalographic findings associated with subdural hematoma. Review of forty-five cases" (with R. G. Bickford and H. J. Svien). American Medical Association Archives of Neurology and Psychiatry, 69:743-55. June, 1953.

Arnold G. Rogers, M.D., Fellow

"Problems of a patient with ileac stoma; report of a case with successful adjustment" (with J. A. Bargen). Journal of the American Medical Association, 151:815-17, March 7, 1953.

ERIC F. ROUTLEY, M.D., M.S. in Surg., Fellow

- "Effects of vagotomy on pancreatic secretion in dogs with chronic pancreatic fistula" (with F. C. Mann, J. L. Bollman, and J. H. Grindlay). Surgery, Gynecology and Obstetrics, 95:529-36. November, 1952.
- "Gallstone obstruction of the small intestine" (with C. W. Mayo). Postgraduate Medicine, 12:503-508. December, 1952.

IAN E. RUSTED, M.D.C.M., M.S., Fellow

"Studies of the mitral valve. I. Anatomic features of the normal mitral valve and associated structures" (with C. H. Scheifley and J. E. Edwards). Circulation, 6:825-31. December, 1952.

Francis J. Schnugg, M.D., Fellow

"Some effects of barbiturate anesthesia on the depth electrogram" (with R. G. Bickford, A. Faulconer, Jr., C. W. Sem-Jacobsen, M. C. Petersen, and H. W. Dodge, Jr.). Proceedings of the Staff Meetings of the Mayo Clinic, 28:162-65. March 25, 1953.

JOSEPH B. SEAGLE, M.D., M.S. in Ped., Fellow

"Irradiated antituberculosis vaccine, including comparison with BCG in experimentally infected guinea pigs" (with A. G. Karlson and W. H. Feldman). American Review of Tuberculosis, 67:341-53. March, 1953.

PAUL H. SEBRECHTS, M.D., Fellow

"Diverticulitis versus carcinoma. Report of two cases" (with C. F. Dixon and C. A. Pitchford, Jr.). Surgical Clinics of North America, pp. 1181-83. August, 1952.

CARL W. SEM-JACOBSEN, M.D., Fellow

- "Some observations on the mechanism of photic and photo-metrazol activation" (with R. G. Bickford, P. T. White, and D. Daly). Electroencephalography and Clinical Neurophysiology, 4:275-82. August, 1952.
- "Photic and photo-metrazol activation in psychotic patients" (with R. G. Bickford). (Abstract.) Ibid., 5:127. February, 1953.
- "Technic of depth electrography" (with H. W. Dodge, Jr., C. B. Holman, R. G. Bickford, and M. C. Petersen). Proceedings of the Staff Meetings of the Mayo Clinic, 28:147-55. March 25, 1953.
- "Depth distribution of normal electroencephalographic rhythms" (with R. G. Bickford, M. C. Petersen, and H. W. Dodge, Jr.). Ibid., pp. 156-61.
- "Some effects of barbiturate anesthesia on the depth electrogram" (with R. G. Bickford, A. Faulconer, Jr., M. C. Petersen, H. W. Dodge, Jr., and F. J. Schnugg). Ibid., pp. 162-65.
- "Human olfactory responses recorded by depth electrography" (with R. G. Bickford, H. W. Dodge, Jr., and M. C. Petersen). *Ibid.*, pp. 166-70.
- "The depth electrogram in schizophrenic patients" (with M. C. Petersen, R. G. Bickford, and H. W. Dodge, Jr.). *Ibid.*, pp. 170-75.
- "Studies on the electrical structure and activation of an epileptogenic focus" (with R. G. Bickford, H. W. Dodge, Jr., and M. C. Petersen). *Ibid.*, pp. 175-80.
- "Observations on depth stimulation of the human brain through implanted electrographic leads" (with R. G. Bickford, H. W. Dodge, Jr., and M. C. Petersen). *Ibid.*, pp. 181-87.
- "Neurosurgical and neurologic application of depth electrography" (with H. W. Dodge, Jr., A. A. Bailey, R. G. Bickford, M. C. Petersen, and R. H. Miller). *Ibid.*, pp. 188-91.
- "Components of the photomyoclonic response in man" (with R. G. Bickford, P. T. White, and E. A. Rodin). (Abstract.) Federation Proceedings, 12:15-16. March, 1953.

WILBOURN C. SHANDS, M.D., M.S. in Surg., Fellow

"Multiple primary carcinomas occurring in the stomach and colon" (with J. deJ. Pemberton).

**Surgical Clinics of North America, pp. 1197-1202. August, 1952.

PIERCE T. SLOSS, M.D., Fellow

"A method for the removal of parotid glandular tissue at necropsy" (with L. B. Thomas and J. E. Edwards). American Journal of Clinical Pathology, 23:228-31. March, 1953.

ELIZABETH B. SMITH, M.Sc., Fellow

"Tolerance to nasogastric tube feedings: A comparative clinical study of two dietary formulas" (with E. E. Wollaeger and Sister Mary Victor). American Medical Association Archives of Internal Medicine, 91:721-28. June, 1953.

IVAN M. SPEAR, M.D.C.M., M.S. in Ortho, Surg., Fellow

- "Noninfectious trochanteric bursitis and peritendinitis" (with P. R. Lipscomb). Surgical Clinics of North America, pp. 1217-24. August, 1952.
- "Anomalies of the posterior tibial tendon; a cause of persistent pain about the ankle" (with R. K. Ghormley). American Medical Association Archives of Surgery, 66:512-16. April, 1953.

ROBERT P. STEVENS, M.D., Fellow

"A method for producing tuberculous meningitis in guinea pigs by lumbar intrathecal inoculation" (with A. G. Karlson and W. H. Feldman). American Review of Tuberculosis, 66:722-31. December, 1952.

KENNETH A. STORSTEEN, M.D., M.S. in Surg., Fellow

"Rupture of the spleen with splenic implants: Splenosis; review of the literature and report of a case" (with W. H. ReMine). Annals of Surgery, 137:551-57. April, 1953.

EDWARD A. H. SWIFT, M.D., M.S. in Surg., Fellow

"The repair of tracheal defects with fascia and tantalum mesh: An experimental study" (with J. H. Grindlay and O. T. Clagett). Journal of Thoracic Surgery, 24:482-92. November, 1952.

RICHARD THORS, M.D., Fellow

- "Effect of occlusion of vessels entering the liver on hepatic venous pressure in normal and cirrhotic dogs; a preliminary report" (with J. H. Grindlay and J. L. Bollman). American College of Surgeons, Clinical Congress. Proceedings of the Surgical Forum, 38:493-96. 1952.
- "Effect of ligation of the hepatic artery on oxygen content of blood from the hepatic vein in dogs" (with J. H. Grindlay and J. L. Bollman). *Ibid.*, pp. 500-504, 1952.
- "Experimentally produced alterations of hepatic blood flow" (with J. L. Bollman, M. Khattab, and J. H. Grindlay). American Medical Association Archives of Surgery, 66:562-70. April, 1953.

ROBERT G. TOMPKINS, M.D., Fellow

- "Biopsy of the lung and cardiac catheterization studies in patients treated surgically for mitral stenosis" (with J. E. Edwards, R. T. Hood, Jr., J. W. Kirklin, and H. B. Burchell). (Abstract.) Proceedings of the Central Society for Clinical Research, 25:26-27. 1952; Journal of Laboratory and Clinical Medicine, 40:795-96. November, 1952.
- "Left atrial, pulmonary artery, pulmonary artery wedge and systemic pressures during mitral commissurotomy" (with R. Lev, D. C. Connolly, and J. W. Kirklin). (Abstract.) Federation Proceedings, 12:85-86. March, 1953.
- "Pulmonary-artery wedge pressures in mitral valve disease; relationship to left atrial pressures" (with D. C. Connolly, R. Lev, J. W. Kirklin, and E. H. Wood). Proceedings of the Staff Meetings of the Mayo Clinic, 28:72-78. February 11, 1953.
- "Surgical treatment of infundibular stenosis with intact ventricular septum: Report of a case" (with J. W. Kirklin and C. R. Openshaw). Annals of Surgery, 137:228-31. February, 1953.

Homer R. Warner, M.D., Fellow

- "Quantitation of stroke volume changes in man from peripheral arterial pressure pulses" (with H. J. C. Swan and E. H. Wood). (Abstract.) American Journal of Physiology, 171:771-72. December, 1952.
- "Quantitation of rapid stroke volume changes in man from aortic pressure pulses" (with H. J. C. Swan and E. H. Wood). (Abstract.) *Ibid.*, p. 777.
- "Comparison of aortic pressure pulses recorded by strain-gauge and capacitance manometercatheter systems in man" (with E. H. Wood and I. R. Leusen). (Abstract.) Ibid., p. 780.
- "Simplified calculation of cardiac output from dye dilution curves recorded by oximeter" (with E. H. Wood). Journal of Applied Physiology, 5:111-16. September, 1952.
- "Quantitation of beat-to-beat changes in stroke volume from the aortic pulse contour in man" (with H. J. C. Swan, D. C. Connolly, R. G. Tompkins, and E. H. Wood). *Ibid.*, pp. 495-507. March, 1953.

ROBERT D. WEYAND, M.D., M.S. in Neur., Fellow

- "Unusual lesions involving the optic chiasm" (with W. McK. Craig and C. W. Rucker).

 Proceedings of the Staff Meetings of the Mayo Clinic, 27:505-11. December 3, 1952.
- "Meningiomas of anterior clinoid process as a cause of unilateral loss of vision; surgical considerations" (with A. Uihlein). American Medical Association Archives of Ophthalmology, 49:261-70. March, 1953.

PHILIP T. WHITE, M.D., Fellow

- "Some observations on the mechanism of photic and photo-metrazol activation" (with R. G. Bickford, C. W. Sem-Jacobsen, and D. Daly). Electroencephalography and Clinical Neurophysiology, 4:275-82. August, 1952.
- "Components of the photomyoclonic response in man" (with R. G. Bickford, C. W. Sem-Jacobsen, and E. A. Rodin). (Abstract.) Federation Proceedings, 12:15-16. March, 1953.

JOHN H. WUEST, JR., M.D., Fellow

"The degree of coronary atherosclerosis in bilaterally oophorectomized women" (with J. E. Edwards). (Abstract.) Proceedings of the Central Society for Clinical Research, 25:99, 1952; (with T. J. Dry and J. E. Edwards), Circulation, 6:461-62. September, 1952; (with J. E. Edwards), Journal of Laboratory and Clinical Medicine, 40:963. December, 1952.

FREDERICK E. ZIMMER, M.D., M.S. in Med., Fellow

"The effect of blood coagulation on L. E. cell formation" (with M. M. Hargraves). Proceedings of the Staff Meetings of the Mayo Clinic, 27:424-30. October 22, 1952.

SCHOOL OF BUSINESS ADMINISTRATION

RICHARD L. KOZELKA, Ph.D., LL.D., Dean and Professor

"Professional education for business administration." Higher Education (Semimonthly Publication of the U. S. Department of Health, Education, and Welfare, Office of Education), 9:181-91. April, 1953.

Francis M. Boddy, Ph.D., Professor

"Economic mobilization in the West." Pages 12-19 in *The Garrison State—Its Human Problems*.

Minneapolis: University of Minnesota Social Science Research Center of the Graduate School. 1953.

Co-editor, Savings in the Modern Economy. Minneapolis: University of Minnesota Press. 1953.

OSWALD H. BROWNLEE, Ph.D., Professor

"Some features of Minnesota's economic growth, 1929-51" (with S. M. Guy). Business News Notes, 8:1-4. March, 1953.

HELEN G. CANOYER, Ph.D., Professor

- "Some observations concerning economics of consumption." Pages 29-45 in Schuyler F. Otteson, editor, Marketing: Current Problems and Theories. Indiana Business Report, No. 16. Bloomington: University of Indiana. December, 1952.
- "Consumer cooperatives in Minnesota" (with E. F. Cheit). Business News Notes, 5:1-4. November, 1952.
- "The marketing system and the consumer." Proceedings of the 24th Annual Boston Conference on Distribution, pp. 91-95. 1952.
- "What's behind consumer persuasion?" Sales Story for the Appliance Dealer, Vol. 6, No. 2, pp. 9-12. February, 1953.
- Dollars and Sense for the Homemaker. Distributed to workers in the Economic Conference for Women. April 7-May 5, 1953. 5 pages.
- Today's Horizons. Distributed at the Second Finance Forum of the American National Bank of St. Paul. October 7, 1952. 12 pages.

GEORGE FILIPETTI, Ph.D., Professor

Industrial Management in Transition. (Second edition.) New York: Richard D. Irwin, Inc. 1953, 350 pages.

Walter W. Heller, Ph.D., Professor

- "Fiscal policies for underdeveloped countries." Pages 12-35 in Report on the Technical Assistance Conference on Comparative Fiscal Administration, United Nations Economic and Social Council. New York: United Nations (E/CCN.8/67). December 5, 1952.
- "Taxation." Pages 942-43 in the American Peoples Encyclopedia Yearbook. Chicago. 1953.
- "An economist's reflections on the revenue act of 1951." Minnesota Law Review, 36:864-73.

 Tune, 1952.
- "How high can taxes go?" Commercial and Financial Chronicle, 176:1227, 1240-41. 1952; Proceedings of the Forty-fifth Annual Conference of the National Tax Association, pp. 243-54. 1953.
- Co-editor, Savings in the Modern Economy. Minneapolis: University of Minnesota Press. 1953.

LEONID HURWICZ, LL.M., Professor

- "Economics 2070. Decentralized resource allocation." Pages 1-14, 2.1-2.6 in Cowles Commission Discussion Papers. March, 1953.
- "Economics 2070A. Decentralized resource allocation." Ibid., pp. 1-23.
- "Mathematics: 418. Lagrangian saddle points in banach spaces (summary of results)." *Ibid.*, pp. 1-7.
- "Mathematics: 420. Maximality ('efficiency') and lagrangian saddle points." Ibid., pp. 1-6.
- "What has happened to the theory of games." American Economic Review, 43:398-405. May, 1953.

CARL L. NELSON, Ph.D., Professor

"Use of accounting data in national income estimation." The Accounting Review, 28:186-90, 1953.

Co-editor, Savings in the Modern Economy. Minneapolis: University of Minnesota Press. 1953.

Edmund A. Nightingale, Ph.D., Professor

Aviation in Minnesota (with A. M. Borak, W. D. Durfee, R. J. Holloway, and R. S. Vaile).

Minneapolis: University of Minnesota, School of Business Administration. 1952. 176 pages.

Factors Pertaining to the Choice of Efficient and Economical Public Transportation Vehicles— Second Report of the Mayor's Citizens Advisory Committee on Streetcar and Bus Matters (with C. Morrison). Minneapolis. 1952. 31 pages.

Regulation of Public Mass Transportation in the Twin City Metropolitan Area -Third Report of the Mayor's Citizens Advisory Committee on Streetcar and Bus Matters (with C. Morrison). Minneapolis. 1953. 29 pages.

"Uniform freight classification and uniform class rates." Interstate Commerce Commission Practitioners' Journal, 20:171-95. December, 1952.

Andreas G. Papandreou, Ph.D., Professor

Personality, Work, Community: An Introduction to Social Science (with D. W. Calhoun, A. Naftalin, B. N. Nelson, and M. Q. Sibley). New York: J. B. Lippincott Company, 1953, 3 vols, 1129 pages.

"Some basic problems in the theory of the firm." Pages 183-219 in Bernard F. Haley, editor,
A Survey of Contemporary Economics. Vol. 2. Chicago: Richard D. Irwin, Inc. 1952.

Reviews of

G. Hurff, Social Aspects of Enterprise in the Large Corporation in American Economic Review, 62:666-67. September, 1952.

Theodore Surányi-Unger, Private Enterprise and Governmental Planning in Econometrica, 20:698-99. October, 1952.

An Experimental Test of an Axiom in the Theory of Choice. December, 1952. Mimcographed.

ARTHUR R. UPGREN, Ph.D., Professor

Economics for You and Me (with S. Edmunds). New York: The Macmillan Company, 1953, 246 pages.

ROLAND S. VAILE, M.A., Professor

Aviation in Minnesota (with A. M. Borak, W. D. Durfee, R. J. Holloway, and E. A. Nightingale). Minneapolis: University of Minnesota, School of Business Administration. 1952. 176 pages.

Reviews of

- T. Harvey Hull, Built of Men: The Story of Indiana Cooperatives in The Annals, 284: 191-92. November, 1952.
- D. J. Luck and H. G. Wales, Marketing Research in Journal of Marketing, 27:211-13, October, 1952.

Dale Yoder, Ph.D., Professor. See Industrial Relations Center.

ARTHUR M. BORAK, Ph.D., Associate Professor

Aviation in Minnesota (with W. D. Durfee, R. J. Holloway, E. A. Nightingale, and R. S. Vaile). Minneapolis: University of Minnesota, School of Business Administration. 1952, 176 pages.

"Comparison of taxes and costs of government in Minnesota and ten other states." Business News Notes, 9:1-8. June, 1953.

HERBERT G. HENEMAN, Ph.D., Associate Professor, See Industrial Relations Center.

EDWIN H. LEWIS, Ph.D., Associate Professor

Wholesaling in the Twin Cities, Part I. The Wholesale Structure of the Twin Cities, Part II.

Hardware Wholesaling in the Twin Cities. Studies in Economics and Business, No. 15.

Minneapolis: University of Minnesota Press, 1952, 48 pages.

Minnesota's Interstate Trade. Studies in Economics and Business, No. 16. Minneapolis: University of Minnesota Press, 1953, 46 pages.

JOHN G. TURNBULL, Ph.D., Associate Professor

Personnel Administration and Labor Relations, A Book of Readings (with H. G. Heneman). New York: Prentice-Hall, Inc. 1952, 434 pages.

"Conciliation and mediation in Minnesota" (with C. Kanum), Labor Law Journal, 3:677-84, October, 1952.

"The novel in the study of the American labor movement" (with K. H. McCartney). Journal of Higher Education, 24:5-12. January, 1953.

"An economic appraisal of collective bargaining" (with L. Ulman). Labor Law Journal, 4:125-30. February, 1953.

Review of D. B. Hertz, editor, Selection, Training and Use of Personnel in Industrial Research in Industrial and Labor Relations Review, 6:264. January, 1953.

LLOYD ULMAN, Ph.D., Associate Professor

"An economic appraisal of collective bargaining" (with J. G. Turnbull). Labor Law Review, 4:125-30. February, 1953.

"The growth of the national union in the United States." Proceedings of the Industrial Relations Research Association, 5:158-69. December, 1952.

JOHN T. WHEELER, Ph.D., Associate Professor

"External economies and the supply curve" (with R. W. Adams). The Review of Economic Studies, 20:24-39, 1952-53.

"Education for business budgeting," Technical Notes, National Society for Business Budgeting, Pages 2-5, April, 1953.

STEPHEN G. ALLEN, M.A., Assistant Professor

"An example of loss of efficiency in structural estimation." Pages 213-20 in William C. Hood and Tjalling C. Koopmans, editors. Studies in Econometric Method. Cowles Commission Monograph No. 14. New York: John Wiley & Sons. 1953.

"A class of minimax tests for one-sided composite hypotheses." Annals of Mathematical Statistics. Vol. 24, No. 2, pp. 295-98. June, 1953.

ROBERT J. HOLLOWAY, Ph.D., Assistant Professor

Aviation in Minnesota (with A. M. Borak, W. D. Durfee, E. A. Nightingale, and R. S. Vaile). Minneapolis: University of Minnesota, School of Business Administration, 1952, 176 pages.

"Aviation in Minnesota" (with W. D. Durfee). Business News Notes, 6:1-6. January, 1953. "Marketing research is more than surveys." Journal of Marketing, 17:298-300. January, 1953. Stock Ownership in Minnesota. 4 mimeographed pages. 1952-53.

NAOMI M. PETERSON, M.A., Assistant Professor

Winning Ways with Patients (with C. Towner). American Medical Association, 1952, 19 pages.

HARLAN M. SMITH, Ph.D., Assistant Professor

"The savings problem: a survey." Pages 3-25 in Walter W. Heller, Francis M. Boddy, and Carl L. Nelson, editors, Savings in the Modern Economy. Minneapolis: University of Minnesota Press. 1953.

Review of R. Dorfman, Application of Linear Programming to the Theory of the Firm-Including an Analysis of Monopolistic Firms by Non-Linear Programming in American Economic Review, 63:167-69. March, 1953.

BEN B. SUTTON, Ph.D., Assistant Professor

"Planning your savings program." Minnesota, Voice of the Alumni, pp. 3-5. November, 1952.
 "Investments for chemists." Minnesota Chemist, Vol. 4, No. 5, pp. 7-11. November-December, 1952.

C. ARTHUR WILLIAMS, Ph.D., Assistant Professor

"The deductible in major medical expense insurance." Journal of the American Association of University Teachers of Insurance, 20:107-16. March, 1953.

Major Medical Expense Insurance. Report distributed to members of University of Minnesota AAUP chapter, January, 1953, 6 pages.

Major Medical Expense Insurance Rates. Report distributed to members of University of Minnesota AAUP chapter. June, 1953. 5 pages.

BEN W. PALMER, M.A., LL.B., LL.D., Lecturer

- "Are you 'lawyer' or 'attorney'?" American Bar Association Journal, 38:564-66. July, 1952.
- "Fees-prohibited and elusive." Ibid., pp. 1003-1005. December, 1952.
- "Self-advertising by lawyers." Ibid., 39:301-303. April, 1953.
- "Codes and the rain of law." Ibid., pp. 576-78, 610. July, 1953.

Reviews of

Isaac Klein, Code of Maimonides, Book 12, in American Bar Association Journal, 38:686-88.
August, 1952.

M. M. Chambers, Colleges and the Courts in Catholic Historical Review, pp. 487. January, 1953.

MAURICE C. BENEWITZ, M.A., Instructor

"Theoretical effect of income averaging for tax purposes on investment incentives." National Tax Journal, Vol. 6, No. 2, pp. 194-96. June, 1953.

EARL F. CHEIT, LL.B., Instructor

"Consumer cooperatives in Minnesota" (with H. G. Canoyer). Business News Notes, 5:1-4. November, 1952.

Effects of Selected Workman's Compensation Benefits. October, 1952. 95 mimeographed pages.

WAITE D. DURFEF, M.A., Instructor

Aviation in Minnesota (with A. M. Borak, R. J. Holloway, E. A. Nightingale, and R. S. Vaile).
 Minneapolis: University of Minnesota, School of Business Administration. 1952. 176 pages.
 "Aviation in Minnesota" (with R. J. Holloway). Business News Notes, 6:1-6. January, 1953.

KENNETH H. McCartney, M.A., Instructor

"The novel in the study of the American labor movement" (with J. G. Turnbull). Journal of Higher Education, 24:5-12. January, 1953.

Industrial Relations Center

Dale Yoder, Ph.D., Professor

Personnel Principles and Policies. New York: Prentice-Hall, Inc. 1952. 602 pages.

Manpower Blueprint for a Free Economy (with H. G. Heneman, Jr.). Staff report to the Subcommittee on Labor and Labor-Management Relations of the Committee on Labor and Public Welfare, U. S. Senate. Washington, D.C.: U. S. Government Printing Office. 1953. 44 pages.

"How to make up the personnel budget." Pages 40-63 in Personnel Series No. 151: Making Personnel Practices and Programs Pay Off. New York: American Management Association, 1953.

- "Triple-auditing employer-employee relations." Business News Notes, 2:1-4. March, 1952.
- "Trends in personnel ratios and salaries" (with L. P. N. Wilson). Personnel, 29:5-12. July, 1952.
- "Employment relations functions and budgets" (with L. P. N. Wilson), Ibid., pp. 218-26. November, 1952.
- "Personnel management's future." Personnel Journal, 31:412-16. April, 1953.
- Discussion of "The adjustment of patterns of utilization to the requirements of high employment and of full mobilization." Pages 209-12 in The Proceedings of the Fifth Annual Meeting of the Industrial Relations Research Association. December, 1952.

Reviews of

- Vidkunn Ulriksson, The Scope, Functions, and Limitations of University Workers' Education Programs in Industrial and Labor Relations Review, 5:230-34. January, 1952.
- L. P. Adams, Wartime Manpower Mobilization in Journal of Political Economy, 60: 366-67, August, 1952.
- D. Katz, N. Maccoby, G. Gurin, and L. G. Floor, Productivity, Supervision and Morale Among Railroad Workers in Journal of the American Statistical Association, 47:573-74. September, 1952.
- A. E. Benn, The Management Dictionary in Management Review, 42:110, February, 1953.
- DONALD G. PATERSON, M.A., Professor. Scc College of Science, Literature, and the Arts, Department of Psychology.

HERBERT G. HENEMAN, Ph.D., Associate Professor

- Personnel Administration and Labor Relations, a Book of Readings (with J. G. Turnbull). New York: Prentice-Hall, Inc. 1952, 434 pages.
- Manpower Blucprint for a Free Economy (with D. Yoder). Staff report to the Subcommittee on Labor and Labor-Management Relations of the Committee on Labor and Public Welfare, U. S. Senate. Washington, D.C.: U. S. Government Printing Office. 1953. 44 pages.
- Review of G. P. Shultz, Pressures on Wage Decisions: A Case Study in the Shoe Industry in Industrial and Labor Relations Review, 5:4. July, 1952.
- JOHN G. TURNBULL, Ph.D., Associate Professor. See School of Business Administration.

MARVIN D. DUNNETTE, M.A., Research Fellow

- "Use older engineers." Personnel Journal, Vol. 31, No. 6, pp. 213-17. November, 1952.
- "Factorial analysis of the original and simplified Flesch Reading Ease Formulas." Journal of Applied Psychology, Vol. 37, No. 2, pp. 107-110. April, 1953.
- "The Minnesota Engineering Analogies test." Ibid., No. 3, pp. 170-75. June, 1953.
- "Utilization of older employees in Minnesota" (with W. K. Kirchner). Business News Notes, 7:1-4. February, 1953.

HARLAND G. Fox, M.A., Research Fellow

"Validity of readability formulas" (with C. E. Swanson). Journal of Applied Psychology, 37: 114-18. April, 1953.

THOMAS A. MAHONEY, M.A., Research Fellow

- "Factors in union meeting attendance." Labor and Nation, Vol. 8, No. 1, pp. 41-44. January-March, 1952.
- "Some firms do employ older people" (with T. R. Lindbom). Journal of Gerontology, Vol. 8, No. 2, pp. 202-206. April, 1953.
- "What's happening to the older employee in industry?" Labor Law Journal, Vol. 4, No. 5, pp. 329-33. May, 1953.

LEIBERT B. WALLERSTEIN, M.A., Research Fellow

"Psychological-socio-economic causes of group failure." Alpha Kappa Deltan (Minneapolis: Hamline University), Vol. 23, No. 3, pp. 9-15. 1953.

GENERAL COLLEGE

HORACE T. MORSE, Ph.D., Dean and Professor

"Social studies teachers for college programs of general education." Chapter 4, pages 82-112 in Jack Allen, editor, National Council for the Social Studies Twenty-Third Yearbook, the Teacher of the Social Studies. Washington, D.C.: National Council for the Social Studies. 1952.

"General College." Minnesota, Voice of the Alumni, Vol. 52, p. 12. April, 1953.

Review of B. Lamar Johnson, General Education in Action, and John P. Wynne, General Education in Theory and Practice in Saturday Review, Vol. 35, No. 37, pp. 20-21, 36. September 13, 1952.

GEORGE H. McCune, Ph.D., Professor

"The general education program." Pages 128-29 in Chapter 8, Teacher Education at the University of Minnesota, Curriculum Trends and Teacher Education, 32nd Yearbook, Association for Student Teaching. Lock Haven, Pa.: Association for Student Teaching. 1953.

Review of Francis Prucha, Broadax and Bayonet in Minnesota History, Vol. 33, No. 6, p. 262. Summer, 1953.

History of Teacher Certification (with Jean K. Alexander, F. E. Ellis, A. Woestehoff, and P. R. Grim). Washington, D.C.: National Commission on Teacher Education and Professional Standards, National Education Association. 1953. 21 mimeographed pages.

HENRY BOROW, Ph.D., Associate Professor

"Evaluation of a technique of group orientation for vocational counseling" (with H. Richardson).

Educational and Psychological Measurements, 12:587-97. Winter, 1952.

MERRILL P. RASSWEILER, Ph.D., Associate Professor

Fundamental Procedures of Financial Mathematics (with Irene Rassweiler). New York: Macmillan. 1952, 250 pages.

J. Merle Harris, M.A., Assistant Professor

"Geology of St. Croix State Park." Conservation Volunteer, Vol. 15, No. 88, pp. 41-46. July-August, 1952.

"Notes on field work in the copper-nickel prospect area" (with G. M. Schwartz). Summary Report No. 6, Minnesota Geological Survey, November, 1952, 8 mimeographed pages.

Louis T. Safer, M.A., Assistant Professor

Oil paintings, "Europa and Bull" and "Late Return" in annual show Minneapolis Institute of Arts. October, 1952.

Prints, "Roosters," "Madonna and Child," and "Morning Flutter" in Christmas show Walker Art Center. December, 1952.

DOROTHY L. SHELDON, M.A., Assistant Professor

A Summary Report of the 1952 Conference on Problems of High School-University Transition (with J. I. Brown, R. B. Page, and others). Minneapolis: University of Minnesota, 1952. "Make your words tell who you are." Casket and Sunnyside, 82:17. August, 1952.

Report on the 1953 Spring Meeting of the Conference on College Composition and Communication at Chicago (with members of the General College Writing Laboratory staff and others). Leon Reisman, editor. Minneapolis: General College, 1953. 37 pages.

LEON REISMAN, M.A., Lecturer

Editor, Report on the 1953 Spring Meeting of the Conference on College Composition and Communication at Chicago. Minneapolis: General College. 1953. 37 pages.

MORTON J. CRONIN, M.A., Instructor

"Currier and Ives: a content analysis." American Quarterly, 4:317-30. Winter, 1952.

Douglas M. Dearden, M.A., Instructor

"Modifiers of tumorous head genes in natural populations and laboratory stocks of Drosophila melanogaster" (with E. J. Gardner and G. H. Stott). Genetics, 37:451-56. September, 1952.

NINA E. DRAXTEN, M.A., Instructor

Report on the 1953 Spring Meeting of the Conference on College Composition and Communication at Chicago (with members of the General College Writing Laboratory staff and others). Leon Reisman, editor. Minneapolis: General College. 1953. 37 pages.

"Report on group 4-curriculum" in A Summary Report of the 1953 Conference on Problems of High School University Transition. Minneapolis: University of Minnesota. 1953.

DONALD E. McCoy, Ph.D., Instructor

Robert Frost: The Reception and Development of His Poetry. Urbana, Illinois: University of Illinois Doctoral Dissertation in English, 1952. 315 pages.

Report on the 1953 Spring Meeting of the Conference on College Composition and Communication at Chicago (with members of the General College Writing Laboratory staff and others). Leon Reisman, editor. Minneapolis: General College, 1953. 37 pages.

Abstract of Report, Robert Frost: The Reception and Development of His Poetry in Dissertation Abstracts, Vol. 13, No. 1, 1953.

Report on the Thorndike-Barnhart Comprehensive Desk Dictionary. Minneapolis: University of Minnesota Minneapolis Department, 1952.

Report on Porter Perrin's Writer's Guide and Index to English. Minneapolis: University of Minnesota Mineograph Department. 1953.

GEORGE J. McCutcheon, M.A., Instructor

Editor, Minnesota State Examinations in Mathematics 1953. Educational Test Bureau, Minneapolis.

Lyle M. Eakins, Mathematics III.

Emil Berger, Plane Geometry.

Emil Berger, Solid Geometry.

W. M. Bernard, Advanced Algebra.

BERNARD S. AARONSON, B.A., Teaching Assistant

"On a relation between Bender-Gestalt recall and Shipley-Hartford scores" (with S. E. Nelson and Shirley Holt). Journal of Clinical Psychology, 9:88, 1953.

HUAN PAO KUANG, M.A., Teaching Assistant

"A critical evaluation of the relative efficiency of three techniques in item analysis." Educational and Psychological Measurement, Vol. 12, No. 2, pp. 248-66. July, 1952.

INSTITUTE OF CHILD WELFARE

JOHN E. ANDERSON, Ph.D., LL.D., Director and Professor

Understanding the Teen Age. University of Minnesota Agricultural Extension Service, U. S. Department of Agriculture Extension Pamphlet 188. February, 1953. 4 pages.

"Relation of attitude to adjustment." Education, 73:210-18. 1952.

"Learning about children." N.E.A. Journal, 42:139-41. 1953.

"Development and guidance." Journal of the National Association of Deans of Women, 16:95-101, 1953.

"N.P.T. quiz program." National Parent Teacher, 47:24-26. 1953.

Editorial Committee, Annual Review of Psychology, Vol. 4. 1953.

"The assessment of children's adjustment." Mimeographed article distributed by State Department of Public Welfare, State of Wisconsin. 1953.

"Stimulating environments and child growth: The improvement of institutions for children."

Mimeographed article distributed by State Department of Public Welfare, State of Wisconsin. 1953.

DALE B. HARRIS, Ph.D., Professor

"Intellective functions: children." Pages 26-45 in D. Brower and L. E. Abt, editors, *Progress in Clinical Psychology*, Vol. 1. New York: Grune and Stratton. 1952.

"Child psychology." Pages 1-30 in C. P. Stone, editor, Annual Review of Psychology, Vol. 4. Stanford, California: Stanford University Press. 1953.

MERRILL F. ROFF, Ph.D., Professor

A Factorial Study of Tests in the Perceptual Area. Psychometric Society. Psychometric Monograph No. 8, 1952, v + 41 pages.

The Pilot Candidate Selection Research Program. V. A. Factorial Study of the Motor Aptitudes Area. U.S.A.F. School of Aviation Medicine, Project No. 21-29-008, Report No. 5. (Contract No. AF 41 (128)-160). March, 1953. ii + 25 pages.

"Appearance and choice status during adolescence" (with D. S. Brody). Journal of Psychology, 36:347-56, 1953.

MILDRED C. TEMPLIN, Ph.D., Associate Professor

"Speech development in the young child: 3. The development of certain language skills in children." Journal of Speech and Hearing Disorders, 17:280-85. September, 1952.

HARRIET E. BLODGETT, Ph.D., Instructor

"Psychology points the way." The Crippled Child, 31:19-20. 1953.

Frances A. Upson, B.A., B.S., Instructor

Summer Suggestions for Parents of University Village Nursery School Children. Institute of Child Welfare. 1952-53. 8 mimeographed pages.

PHYSICAL EDUCATION AND ATHLETICS

Louis F. Keller, Ph.D., Professor and Assistant Director

"The midwest." Pages 27-28 in Official Ice Hockey Guide, 1953, of the National Collegiate Athletic Association. New York: The National Collegiate Athletic Bureau. 1952.

CARL L. NORDLY, Ph.D., Professor

"The evaluation and accreditation of institutions engaged in professional preparation in health education, physical education and recreation." Pages 42-48 in Proceedings of the College Physical Education Association, 1952.

"Our number one challenge -cooperation in the improvement of professional preparation and standards in health education, physical education and recreation." Pages 35-36 in Proceedings of the American Association for Health, Physical Education and Recreation. 1952.

"A state evaluates teacher education." Journal of the American Association for Health, Physical Education and Recreation, 24:4, 27, 58. April, 1953.

RALPH A. PIPER, Ed.D., Professor

"News from Minnesota." Square-'N-Round, Vol. 1, No. 1, p. 22. January, 1953; No. 3, p. 35. March, 1953.

"Teachable dances." Physical Educator, Vol. 10, No. 2, pp. 57-59. May, 1953.

Associate editor, American Squares. 1952-53.

Associate editor, Square-'N-Round. 1953.

"Folk dance notes revised, 1952." Mimeographed outline of 138 dances. 35 pages.

"Leadership of mixers and circle games, 1952." 8 mimeographed pages.

"Selected methods of teaching the waltz, 1953." 4 mimeographed pages.

GERALD B. FITZGERALD, M.A., Re.D., Lecturer

"Recreation in American life." Part 1, pp. 9-26 in Recreation for Community Living—Guiding Principles. Chicago: The Athletic Institute. 1952.

"Graduate study in recreation." Recreation, 46:483-84. January, 1953.

"My philosophy of recreation." Ibid., 47:509. February, 1953.

- "The president's message." American Recreation Society Quarterly Bulletin, 4:3-4. August, 1952.
- "Selection of recreation personnel." Ibid., pp. 9-11.
- "Recreation and the library." Minnesota Libraries, 17:133-35. March, 1953.
- "Recreation as your career." Journal of the American Association for Health, Physical Education and Recreation, 23:27, 47, 55. November, 1952.
- "Resort recreation." Northland Resorts, 4:8-9. March, 1953.
- "Nature recreation for the crippled child" (with C. Wenell). The Crippled Child, 30:14, 15, 28. June, 1952.

PHYSICAL EDUCATION FOR WOMEN

GERTRUDE M. BAKER, Ed.D., Director and Professor

- "Supervision of physical education in the elementary school" (with Elsie Annis and Jean Bontz).

 Research Quarterly of the American Association for Health, Physical Education and Recreation, Pt. 1, 23:379-90. December, 1952.
- Editorial Chairman, Report of the Symposium, Physical Education for Women in Modern Times, Wellesley College, June, 1952.

MARGARET PATAKY, M.A., Instructor

"Curling." Winter Sports and Outing Activities Guide. 1953-55.

DULUTH BRANCH

PROFESSIONAL EDUCATION

Education, Industrial Education, Home Economics, and Psychology

LEONARD B. WHEAT, Ph.D., Associate Professor In-Service Needs of Teachers in Northeastern Minnesota. 1952. 35 mimeographed pages.

WILLARD O. STIBAL, Ph.D., Lecturer, See Admissions and Records

Laboratory School

HARRY C. JOHNSON, Ph.D., Professor

"These are the pupils." Minnesota Journal of Education, 33:32-33. October, 1952.

Review of J. H. Murdock, Teaching of Mathematics in Post-Primary Schools in Journal of Educational Research, 46:378. January, 1953.

HUMANITIES

Art

ARTHUR E. SMITH, Ed.D., Associate Professor and Head

"How does your school score in public relations?" Exchange, 3:36-37. April, 1953.

"Foreword." Ibid., p. 6.

Co-editor, Exchange. April-May. 1953.

ROBERT E. WOOD, M.F.A., Lecturer Exhibitions 1952-53

Stueland—Wood exhibition, Tweed Gallery. One-man exhibition, Norshor Theatre.

California Water Society exhibition.

HAROLD A. STUELAND, M.F.A., Instructor

Exhibitions in Stueland-Wood-Stueland Show. Tweed Gallery. November, 1952.

Fred J. Triplett, M.A., Instructor

"Art must be seen." Exchange, 3:25-27. May, 1953.

Co-editor, Exchange. May-June, 1953.

Language, Literature, and Philosophy

ELLEN A. FROGNER, Ph.D., Associate Professor

Review of National Council of Teachers of English, Curriculum Commission, The English Language Arts in Journal of Educational Research, 46:376-77. January, 1953.

WENDELL P. GLICK, Ph.D., Assistant Professor

"'Civil disobedience,' Thoreau's attack upon relativism." Western Humanities Review, 7:35-42. Winter, 1952.

"Expediency and absolute morality in Billy Budd." Publications of the Modern Language Association of America, 68:103-10. March, 1953.

CLARENCE ANDERSON, B.A., Instructor

"Art and public relations." Exchange, 3:7-9. April, 1953.

Music

Addison M. Alspach, Ph.D., Associate Professor and Head

Symphony, 1945. Performance by Duluth Symphony Orchestra on March 27, 1953.

ALBERT G. HESS, Ph.D., Assistant Professor

"Observations on The Lamenting Voice of the Hidden Love." Journal of the American Musicological Society, 6:211-23. Spring, 1953.

ELMER P. MAGNELL, Ed.D., Assistant Professor

Graded Solos for Cornet, French Horn, and Trombone. 18 mimeographed pages. 1952-53.

A Compendium of Brass Literature Instruction Methods. 12 mimeographed pages. 1952-53.

ROBERT E. BEVERLEY, M.M., Instructor

Manuscripts

"Children Quarreling at Play" from Pictures at an Exhibition by Moussorgsky. (Transcription for wind quintet.) 1952-53.

"The Little Shepherd" from *The Children's Corner* Suite by Claude Debussy. (Transcription for woodwind quintet.) 1952-53.

C. Lindsley Edson, M.A., Instructor

Introduction to Music 21-22-23 (handbook). Duluth Branch: Duplicating Department. 1952. 61 pages.

Science and Mathematics

Biology

OLGA LAKELA, Ph.D., Professor

- "Birds of the Quetico-Superior wilderness research area." Flicker, 24:129-31. September, 1952.
- "A check-list of birds from Northeastern Minnesota based on observations made mostly in the Duluth area." *Ibid.*, 25:30-35. March, 1953.
- "Wildflowers are vital to wilderness charm." (Vacation, travel and outing guide.) Duluth News-Tribune, June 7, 1953.
- Abstract of N. A. Wakefield, New Species of Pomaderris in Biological Abstracts, Vol. 27, No. 3, 1953.
- Abstract of J. H. Willis, Aroids Foul and Fragrant. Ibid., No. 4.

HUAI C. CHIANG, Ph.D., Instructor

- "Leaf injury caused by first-generation corn borer in field corn" (with A. C. Hodson). Journal of Economic Entomology, 46:68-73. February, 1953.
- "The importance of some biological characteristics of European corn borer on timing of application of insecticides" (with L. K. Cutkomp). *Ibid.*, pp. 277-87. April, 1953.

HELEN E. HEINO, M.S., Instructor

Laboratory Manual of General and Medical Microbiology for Nurses. Minneapolis: Burgess Publishing Co. 1952, 80 pages.

PERSITING B. HOFSLUND, M.S., Instructor

- "Winter wrens nesting at Solon Springs, Wisconsin." Passenger Pigeon, 14:82. 1952.
- "The president's page." Flicker, 25:1. March, 1953.
- "The birds of the Nortondale tract." Ibid., pp. 4-9.
- "The 1952 Christmas count." Ibid., pp. 24-27.
- Editor, The Flicker, 1952-53.

Abstracts in Biological Abstracts, Vol. 27, 1953. Nos. 14915, 14922, 14931, 14933, 14942, 14943, 14954, 14955.

Physics

Elliot H. Weinberg, Ph.D., Assistant Professor

"Creep of zinc single crystals under direct shear." Journal of Applied Physics, 23:1277. November, 1952.

SOCIAL STUDIES

LYDA C. BELTHUIS, Ph.D., Associate Professor

- "Toward better social studies with geography." Bulletin of the Minnesota Council for Social Studies, 15:9-10. March, 1953.
- "The role of geography in eleventh grade social studies in Minnesota." Ibid., pp. 12-13. May, 1953.
- "Geography films useful for social studies teaching." Minnesota Council for Social Studies, Special Bulletin. April, 1953, 29 mimeographed pages.

James F. Maclear, Ph.D., Assistant Professor

"The making of the key tradition." Journal of Religion, 33:113-36, April, 1953.

Review of H. M. Colvin. The White Canons in England in Journal of Religion, 33:145. April, 1953.

CECIL H. MEYERS, Ph.D., Assistant Professor

"The savings bond program: a review of its objectives and its problems," Current Economic Comment, Vol. 14, No. 3, pp. 61-73. August, 1952.

GENERAL EXTENSION DIVISION

MUNICIPAL REFERENCE BUREAU

CLARENCE C. LUDWIG, M.A., Professor and Director

"Annual report of League activities, 1951-52." Minnesota Municipalities, 37:169-71, 1952. Editor, Minnesota Municipalities, 1952-53.

Radio Broadcasting

BURTON PAULU, Ph.D., Manager of KUOM

- "The Smith-Mundt Act: A Legislative History," Journalism Quarterly, pp. 300-14, Summer, 1952.
- "Televising the Minneapolis Symphony Orchestra," Quarterly of Film, Radio, and Television, pp. 157-71. Winter, 1953.
- Organizer and producer. Nine Minneapolis Symphony Orchestra telecasts over WCCO-TV. January through April, 1953.
- Lincoln Lodge Seminar on Educational Television Proceedings. National Association of Educational Broadcasters, Urbana, 1953. Page $v \neq 109$. (Editor.)
- Review of Broadcasting Yearbook, Telecasting Yearbook, and Television Factbook in Journalism Quarterly, pp. 227-28. Spring, 1952.
- "The challenge of the 242 Channels—Part I." Quarterly of Film, Radio, and Television, Vol. 7, No. 1, pp. 1-12. Fall, 1952; Part II, pp. 140-49. Winter, 1952.
- A Radio and Television Bibliography, Books and Magazine Articles on the Non-Technical Aspects of Broadcasting Published Between January 1, 1949 and June 30, 1952. National Association of Educational Broadcasters, Urbana, 1952. Page vii + 129.

STATE ORGANIZATION SERVICE

WILLIAM C. ROGERS, Ph.D., Assistant Professor and Director

Editor, Proceedings of the Institute on Military Factors in Foreign Policy, 1953.

Editor, Guide to the Study of World Affairs, 1952. Minneapolis Star.

Editor, World Affairs Teacher, 1952-53, Minucapolis Star.

OFFICE OF THE DEAN OF STUDENTS

EDMUND G. WILLIAMSON, Ph.D., Dean of Students and Professor

- "Connseling: Therapy and diagnosis." Pages 343-60 in Calvin P. Stone, editor, Annual Review of Psychology, Vol. 4. Stanford, California: Annual Reviews, Inc. 1953.
- "The increased importance of the high school counselor in this time of emergency." Pages 2-6 in *The Potsdam Guidance Conference*. Potsdam State Teachers College, Potsdam, New York, August 20-22, 1952.
- "The improvement of counseling and teaching." Pages 71-80 in Proceedings of the Association of Governing Boards of State Universities and Allied Institutions. College Station, Texas, October 9-14, 1952.
- "Foreword," Page iii in Student Personnel Programs in Transition. American Council on Education Studies. Series VI, Vol. 16, No. 16. Washington, D.C. October, 1952.
- "Foreword." Page iii in *Personnel Principles in the Chapter House*. American Council on Education Studies, Series VI, Vol. 17, No. 17, Washington, D.C. March, 1953.
- "Foreword," Page iii in Students and Staff in a Social Context. American Council on Education Studies, Series V1, Vol. 17, No. 18, Washington, D.C. March, 1953.
- "Needed research in student personnel work." Pages 30-45 in Report of Southern College Personnel Association Work Conference, Warren Wilson College, Swannanoa, North Carolina, August 11-15, 1952.

- "Essentials of professional training for student personnel workers in the south." Ibid., pp. 40-45.
- "A program of research on the characteristics of scientists." Pages 6-14 in Proceedings of the Second Conference on Scientific Manpower. National Science Foundation, Washington, D.C. December, 1952.
- "Evaluation aids." Pages 146-73 in *Proceedings*, 35th Anniversary Conference, NASPA. East Lansing, Michigan, April 6-9, 1953.
- "What kinds of college students become disciplinary cases?" (with W. Jorve and Barbara Lagerstedt-Knudson). Educational and Psychological Measurement, 12:608-19. Winter, 1952.

Student Activities Bureau

ROBERT C. BECKER, Student Personnel Worker

Measuring the Effectiveness of Industrial Communications. New York: American Management Association, 1952, 6 pages.

Student Counseling Bureau

RALPH F. BERDIE, Ph.D., Professor and Director

Student Personnel Programs in Transition (with A. J. Brumbaugh), Washington: American Council on Education Studies, 1952, 43 pages,

Using Tests in Counseling (with W. L. Layton and T. Hagenah). Minneapolis: University of Minnesota Student Counseling Bureau, 1953, 85 pages.

"Predicting success in Law School" (with W. L. Layton). Journal of Applied Psychology, 36:257-60. August, 1952.

"State-wide testing programs." Bulletin of the Minnesota Association of Secondary School Principals, 17:23-26. May, 1953.

"Why don't they go to college?" Personnel and Guidance Journal, 31:352-56. March, 1953.

Reviews of

Differential Aptitude Tests in Fourth Mental Measurements Yearbook, pp. 679-80. Highland Park: Gryphon Press. 1953.

Primary Mental Abilities Tests. Ibid., pp. 703-704.

Annual Survey of Scholastic Aptitude in High Schools and Colleges of Minnesota (with W. L. Layton). Minneapolis: University of Minnesota Mineapolis: University of Minnesota Counseling Inventory (with W. L. Layton). Minneapolis: University of Minnesota Press. 1953. 12 pages.

WILBUR L. LAYTON, Ph.D., Assistant Professor and Assistant Director

Using Tests in Counseling (with R. F. Berdie and T. Hagenah). Minneapolis, University of Minnesota Student Counseling Bureau. 1953. 86 pages.

Minnesota Counseling Inventory (with R. F. Berdie). Minneapolis: University of Minnesota Press. 1953. 12 pages.

"Predicting success in Law School" (with R. F. Berdie). Journal of Applied Psychology, 36: 257-60. August, 1952.

"Predicting the success of students in veterinary medicine." Ibid., pp. 312-15. October, 1952.

"The variability of individuals' scores upon successive testings on the M.M.P.I. paper delivered at A.P.A. meetings, September, 1952." (Abstract.) American Psychologist, 7:384. July, 1952. Reviews of

Melvin H. Marks, editor. Psychological Theory: Contemporary Readings in Personnel Psychologist, 5:370-74. Winter, 1952.

Oscar K. Buros, editor, Guilford-Schneidman-Zimmerman Interest Inventory in Fourth Mental Measurements Yearbook, p. 739. Highland Park: Gryphon Press, 1953.

Oscar K. Buros, editor, Henderson Analysis of Interest Inventory. Ibid., p. 740.

Annual Survey of Scholastic Aptitude in High Schools and Colleges of Minnesota (with R. F. Berdie). University of Minnesota Student Counseling Bureau. 1952. 17 mimeographed pages.

BEN WILLERMAN, Ph.D., Assistant Professor and Senior Student Personnel Worker

"An ecological determinant of differential amounts of sociometric choices within college sororities" (with L. Swanson). Sociometry, 15:326-29. August-November, 1952.

- "Group prestige in voluntary organizations: A study of college sororities" (with L. Swanson). Human Relations, 6:57-77. 1953.
- A Further Study of the Attitudes of Medical Fraternities (with C. Dicken). 20 mimeographed pages. February, 1953.
- Progress Report of the Study of Security of Individuals in Groups (with J. Torrey). 17 mimeographed pages. February, 1953.

THEDA HAGENAH, Ph.D., Instructor and Assistant Director

- Using Tests in Counseling (with R. F. Berdie and W. L. Layton). Minneapolis: University of Minnesota Student Counseling Bureau. 1953. 85 pages.
- "Writing for professional publication," Proceedings of the 1953 annual convention of the American College Personnel Association. Personnel-O-Gram, Vol. 7, No. 4, pp. 21-22. May,

EARLE R. SINNETT, Ph.D., Instructor and Senior Student Personnel Worker

"A psychological study of peptic ulcer patients" (with Dorothy P. Marquis and W. D. Winter). Journal of Clinical Psychology, Vol. 8, No. 3, pp. 266-72. July, 1952.

Francis C. Gamelin, M.A., Senior Student Personnel Worker and Instructor

- "Teacher's personality is vital to students." School Health News, Vol. 6, No. 4, p. 6. 1952. "Mental hygiene in the schools." Everybody's Health, Vol. 38, No. 4, p. 11f. 1953.
- Mental Health Films. Minnesota State Department of Health, 1952. 2 mimeographed pages.
- Mental Health: Goals of a Preventive Program. Minnesota State Department of Health, 1952. 6 mimeographed pages.
- Mental Health in Later Maturity (with Betty Wells). Minnesota State Department of Health, 1953, 6 mimeographed pages.
- Mental Health Pamphlets. Minnesota State Department of Health, 1952, 2 mimeographed pages, "Mental hygiene in our schools" in Report of the Minnesota School Health Workshop. Minnesota State Department of Health, 1952, 10 mimeographed pages.

EMANUEL M. BERGER, Ph.D., Senior Student Personnel Worker

"The relation between expressed acceptance of self and expressed acceptance of others." Journal of Abnormal and Social Psychology, 47:778-82. October, 1952.

ROBIN J. CLYDE, M.S., Student Personnel Worker

"The criterion in counseling. I. Individual personality and behavior in a social group" (with H. B. Pepinsky, B. A. Olesen, and E. L. Van Atta). Educational and Psychological Measurement, Vol. 12, No. 2, pp. 178-93. Summer, 1952.

Student Housing Bureau

MABELLE G. McCullough, M.A., Principal Student Personnel Worker

"The housing of foreign students" (with L. II. Draper). Journal of Higher Education, 24:35-38. January, 1953.

MARGARET N. SPACE, M.A., Student Personnel Worker

"A mural comes to life in song" (with Stella M. Dickerman). Grade Teacher, 70:50-52, 58. January, 1953.

Speech and Hearing Clinic

- PAUL H. PTACEK, Ph.D. Senior Student Personnel Worker, Instructor and Assist-
- "Possible deterrents to a closer integration of personality development and speech therapy." Western Speech, 17:11-14. January, 1953.

GORDON M. Low, M.S., Senior Student Personnel Worker

"Possible personality changes as a result of speech therapy." Western Speech, 17:5-7. January, 1953.

Students' Religious Activities

HENRY E. ALLEN, Ph.D., Professor and Coordinator

"Practices of land-grant colleges and state universities affecting religious matters." School and Society, 76:359-63. December 6, 1952.

Bureau of Veterans' Affairs

HENRY M. ROBERTSON, M.A., Senior Student Personnel Worker Editor, Directory of University Student Personnel Agencies and Staffs. September, 1952,

ADMISSIONS AND RECORDS

CLARA H. KOENIG, B.A., Assistant to the Dean of Admissions and Records

"The scholastic performance of foreign students in the United States." College and University, 28:189-96. January, 1953.

WILLARD O. STIBAL, Ph.D., Administrative Fellow

"A comparison of two different methods of calculating the length of time required for student graduation in selected colleges at the University of Minnesota." College and University, Vol. 28, No. 2, pp. 257-62. January, 1953.

LIBRARY

HAROLD G. RUSSELL, B.L.S., Associate Professor and Assistant Director

Review of Constance Winchell, Guide to Reference Books (seventh edition) in College and Research Libraries, 13,273-74. July, 1952.

DAVID R. WATKINS, B.A., B.S. in L.S., Principal Librarian

"Some comments on Minnesota college library statistics." Minnesota Libraries, 17:49-51. June, 1952.

ROBERT H. ROHLF, B.S. in L.S., M.A., Senior Librarian

"The Freshman-Sophomore library at Minnesota," College and Research Libraries, Vol. 14, No. 2, pp. 164-66, 1953.

LIBRARY INSTRUCTION

RAYMOND H. SHOVE, M.A. in L.S., Associate Professor

"Disposal of unneeded publications in a public library." Minnesota Libraries, 17:67-76. September, 1952.

"Disposal of unneeded publications." Antiquarian Bookman, 10:1791-96. December 20, 1952 Compiler, Directory of the Association of American Library Schools. (Third edition.) Minneapolis, University of Minnesota, Division of Library Instruction, 1953, 45 multilified pages.

HARALD OSTVOLD, B.L.S., M.A., Librarian of the Agriculture Library and Assistant Professor

"The University of Minnesota Agricultural Library." Minnesota Libraries, 17:101-103. December, 1952.

MUSEUM OF NATURAL HISTORY

Walter J. Breckenridge, Ph.D., Director and Associate Professor

President's page. Wilson Bulletin, 64;66, 130, 194, 1952; 65;4, 1953.

- "Night rafting of American Golden-eyes on the Mississippi River." The Auk, 70:201-204. 1953.
- "M.O.U. cooperative bird studies" (with H. L. Gunderson and D. W. Warner). The Flicker, 25:28-29. March, 1953.

HARVEY L. GUNDERSON, M.S., Assistant Scientist

- "Winter season, western Great Lakes region." Audubon Field Notes, 6:196-97. June, 1952.
- "Spring migration, western Great Lakes region." Ibid., pp. 246-48. August, 1952.
- "Nesting season, western Great Lakes region." Ibid., pp. 282-84. October, 1952.
- "Fall migration, western Great Lakes region." Ibid., 7:17-18. February, 1953.
- "Red-backed vole with a tick attached near eyeball," Journal of Mammalogy, 33:495. November, 1952.
- "Curb the litter bug." Minnesota Naturalist, 3:26-27. December, 1952.
- "M.O.U. cooperative bird studies" (with W. J. Breekenridge and D. W. Warner). Flicker, 25:28-29. March, 1953.

ALUMNI RELATIONS

EDWIN L. HAISLET, Ed.D., Director Alumni Relations and Professor

- "Are college graduates spectator citizens?" Minnesota, Voice of the Alumni, 52:3. July-August, 1952.
- "Educational television: now or never." Ibid., p. 3. October, 1952.
- "Free, unencumbered balance-\$3,758.07." Ibid., p. 3. November, 1952.
- "A surprising football season," Ibid., p. 3. December, 1952.
- "No more roses." Ibid., p. 4. January, 1953.
- "Needed: a new tax structure." Ibid., p. 3. February, 1953.
- "Should Minnesota football be televised?" Ibid., p. 3. March, 1953.
- "Is the university too big?" Ibid., p. 3. April, 1953.
- "Cut, according to plan." Ibid., p. 4. May-June, 1953.
- Managing editor, Minnesota, Voice of the Alumni, 1952-53.

STUDENTS' HEALTH SERVICE

RUTH E. BOYNTON, M.S., M.D., Professor and Director

"The development of student health services." Student Medicine, 1:4-8. October, 1952.

ROBERT G. HINCKLEY, M.D., M.S., Associate Professor and Mental Hygienist

"College mental hygiene and group therapy," International Journal of Group Psychotherapy, 3:88-96, 1953.

Lydia M. Hermann, B.A., M.A., Assistant Professor and Social Worker *Emotional First Aid*. Minneapolis Board of Education, 1953, 425 pages.

JAMES R. Fox, M.D., Physician and Instructor

- "The incidence of diabetes mellitus and glycosuria in 19,358 college students." Journal-Lancet, 72:479-82. October, 1952.
- "Medicine in Great Britain." Ibid., 73:41. February, 1953.
- "Socialized medicine in Great Britain," St. Paul Dispatch, August 22, 1952; Minneapolis Star, August 22, 1952.
- "The panel system in Great Britain." Bulletin of the Hennerin County Medical Society, 73:11. November, 1952.
- "Inside the British health plan." Minnesota Medicine, 36:125-27. February, 1953.
- "Is banthine the answer for peptic ulcer?" Proceedings of Continuation Medicine. University of Minnesota Center for Continuation Study. March 3, 1953.

MELVIN J. KIRKEENG, M.D., Clinic Ophthalmologist

"Retinal detachment." Bulletin of the University of Minnesota Hospitals and Minnesota Medical Foundation, 24:488-94. April 10, 1953.

STELLA H. SIKKEMA, M.D., Physician

"Prevalence of heart disease in university students" (with Margery C. Shearer and L. W. Holden). American Journal of Public Health, 42:1103-10. September, 1952.

HOMER R. WARNER, M.D., Physician, See Mayo Foundation Fellows

UNIVERSITY PRESS

HELEN B. CLAPESATTLE, M.A., Senior Editor

"Principal events in Minnesota, 1952." Pages 449-50 in Americana Annual, 1953. New York: Americana Corporation. 1953.

JANE E. McCarthy, B.S., Production Manager

Review of Alvin Lustig, Paul Rand, Will Burtin, H. Creston Donner, Herbert Bayer, Bernard Rudofsky, and Egbert Jacobson, editors, Seven Designers Look at Trademark Design in Everyday Art Quarterly, No. 28, p. 24. 1953.

JANET E. SALISBURY, B.A., Editor

Reviews of

Dorothy Lee Burgess, Dream and Deed: The Story of Katharine Lee Bates in Minneapolis Sunday Tribune, July 20, 1952.

John F. Leeming, The Natives Are Friendly. Ibid., July 27, 1952.

Claude M. Fuess, Joseph B. Eastman: Servant of the People. Ibid., September 14, 1952.

AUDIO-VISUAL EDUCATION SERVICE

HELGE E. HANSEN, M.S., Director

Planning Schools for Use of Audio Visual Materials. No. 2—Auditoriums (with Buildings and Equipment Committee). Department of Audio-Visual Instruction of the National Education Association. February, 1953. 36 pages.

Review of Carroll V. Newsom, editor, A Television Policy for Education in Nation's Schools, 51:84-86. June, 1953.

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