

# *The Bulletin* *of the University of* **Minnesota**

## Register of Ph.D. Degrees

Conferred by the University of Minnesota 1888 Through June 1938



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## FOREWORD

This list of the men and women who have taken the highest earned degree granted by the University of Minnesota is a simple but significant contribution to the history of the institution and to the development of scholarship in the central Northwest.

The achievements it records are not limited to those who received the degree. Behind them are the scholars on the faculty who have furnished by precept and example the instruction and inspiration that initiated these young scholars into absorbing and unending labor and a new conception of letters and science and of life itself. And behind the older scholars are those of still other and earlier ages. All together they make up the countless and often nameless generations of those who have added a thread or guided a shuttle in the weaving of the seamless web of scholarship stretching from him who first asked how and why and wherefore to the youngest neophyte.

This register is not issued on any special anniversary. Nobody has died, nobody has resigned, nobody has been appointed, no occasion has arisen for a special preface or dedication.

If I were writing a dedication it would be to the people of the commonwealth of Minnesota—to the pioneers who made it their first business in territorial days to found a state university, to the generations of plain folk who poured into the state from other lands and from the eastern seaboard of our own land. They have given generously year after year that education in its fullest and richest sense might be a benison to them and to their sons and daughters. Moreover, in the giving they have not limited their gifts by state or national lines.

The steady support of higher education is the wisest and most idealistic act in the history of democracy in the New World. Now that it has become an older and infinitely more complex world it must not fail in the continuance of that support. What was once an obligation freely assumed becomes a necessity if that same democratic society is to survive through adaptation to the inexorable demands of a world centuries removed from pioneer days. In the troublous age of adjustment whose threshold we have already passed, the obligations of leadership will rest more heavily than in the past upon the men and women whose names are entered in rosters such as this.

GUY STANTON FORD

September, 1932

In sending this second register of the holders of the Ph.D. degree to the press I see no reason to change anything but the date in my foreword to the first issue. It is for me as true and appropriate today as it was six years ago.

G.S.F.

October, 1938



## AGRICULTURE

### AGRICULTURAL BIOCHEMISTRY

1915. BLISH, MORRIS JOSLIN. B.S. '12, M.A. '13, University of Nebraska.  
Major: Agricultural Biochemistry. Minor: Soils.  
Thesis: The Chemical Constitution of Wheat Proteins and Their Relation to Baking Strength in Flour. Published 1916, Easton, Pennsylvania.  
Major Adviser: Professor R. W. Thatcher.  
Positions Held: Assistant Chemist, 1915-1916, Bureau of Chemistry, U.S.D.A.; Assistant Chemist, 1916-1922, University of Montana Agricultural Experiment Station; Lieutenant, 1918, Sanitary Corps, A.E.F.; Chemist and Professor of Agricultural Chemistry, 1922—, University of Nebraska Agricultural Experiment Station, Lincoln, Nebraska.  
Honors: President of the American Association of Cereal Chemists, 1923-1925; Thomas Burr Osborne Medalist, 1936.  
Address: University of Nebraska Agricultural Experiment Station, Lincoln, Nebraska.
1918. MILLER, EMERSON. B.S. '94, M.S. '95, University of Michigan.  
Major: Agricultural Biochemistry. Minor: Chemistry.  
Thesis: A Chemical Investigation of the Volatile Oils of Some Species of the Genus *Pycnanthemum Michx.* Published 1919, Minneapolis.  
Major Adviser: Professor R. A. Gortner.  
Positions Held: Professor of Research Chemistry, 1918-1929, Alabama Polytechnic Institute, Auburn, Alabama.  
Deceased.
1919. HOLM, GEORGE ELMER. B.S. '14, Carleton College; M.S. '15, University of Minnesota.  
Major: Agricultural Biochemistry. Minor: Organic Chemistry.  
Thesis: The Hydrolysis of Proteins in the Presence of Aldehydes. Published in part in *Journal of American Chemical Society*, 39:2477, 2736, 1917; 42: 821, 1920.  
Major Adviser: Professor R. A. Gortner.  
Positions Held: Senior Chemist, 1920—, Research Laboratories, Bureau of Dairy Industry, U.S.D.A., Washington, D.C.  
Honors: Washington Academy of Sciences.  
Address: 3513 R St. N.W., Washington, D.C.
1922. COLLATZ, FERDINAND ALBERT. B.S. '18, M.S. '20, University of Minnesota.  
Major: Agricultural Biochemistry. Minor: Plant Pathology.  
Thesis: Flour Strength as Influenced by the Addition of Diastatic Ferments. Published 1922, Chicago, as American Institute of Baking Bulletin 9.  
Major Advisers: Professors R. A. Gortner and C. H. Bailey.  
Positions Held: Chief Chemist, 1921-1925, American Diamalt Company, Cincinnati, Ohio; Chief Chemist, 1925-1929, Washburn Crosby Company; Chief Chemist, 1929—, General Mills, Inc., Minneapolis, Minnesota.  
Honors: Sigma Xi; Phi Lambda Upsilon; Gamma Sigma Delta; Gamma Alpha.  
Address: 1516 Chelmsford, St. Paul, Minnesota.

1922. PERVIER, NORVILLE CLARENCE. B.S. '16, M.S. '17, Iowa State College.

Major: Agricultural Biochemistry. Minor: Physiologic Chemistry.

Thesis: The Estimation of Pentoses. Published in *Industrial and Engineering Chemistry*, 15:1167-1169, 1255-1262.

Major Adviser: Professor R. A. Gortner.

Positions Held: Assistant Professor, 1923—, University of Minnesota.

Honors: Sigma Xi; Phi Lambda Upsilon.

Address: 4320 Lake Drive, Robbinsdale, Minnesota.

1922. RUMSEY, LOUYS ANTHONY. B.S. '12, M.S. '13, Denison University.

Major: Agricultural Biochemistry. Minor: Physical Chemistry.

Thesis: Diastatic Enzymes of Wheat Flour in Their Relation to Flour Strength. Published 1922, Chicago, as a bulletin of the American Institute of Baking.

Major Adviser: Professor C. H. Bailey.

Positions Held: Research Chemist, 1920-1923, American Institute of Baking; Campaign Director, 1923, Wheat Council of the United States; National Secretary, 1925-1928, American Bakers Association; Publicity Engineer, Editor, Round Table, Industrial Marketing, 1928—, W. E. Long Company, 155 North Clark Street, Chicago.

Honors: Sigma Xi; Phi Lambda Upsilon.

Address: 2832 Sherwin Ave., Chicago, Illinois.

1922. SHARP, PAUL FRANCIS. B.A. '17, Nebraska Wesleyan; M.S. '20, University of Minnesota.

Major: Agricultural Biochemistry. Minor: Physical Chemistry.

Thesis: Viscosity as a Measure of Hydration Capacity of Wheat Flour and Its Relation to Baking Strength. Published 1924 as University of Minnesota Agricultural Experiment Station Technical Bulletin 19.

Major Adviser: Professor R. A. Gortner.

Positions Held: Assistant Chemist, 1922-1924, Associate Chemist, 1924-1925, Montana Experiment Station; Professor of Dairy Chemistry, 1925—, New York State College of Agriculture, Cornell University.

Honors: Phi Kappa Phi.

Address: New York State College of Agriculture, Cornell University, Ithaca, New York.

1923. ANDERSON, ARTHUR VON KROGH. B.S. '13, M.S. '15, University of Minnesota.

Major: Agricultural Biochemistry. Minor: Plant Pathology.

Thesis: The Biochemistry of *Fusarium Lini*. Published 1924 in *Minnesota Studies in Plant Science, Studies in the Biological Sciences*, no. 5.

Major Adviser: Professor J. J. Williamson.

Positions Held: Associate Professor of Physiological Chemistry, 1923-1929, Professor, 1929—, Pennsylvania State College.

Honors: Sigma Xi; Gamma Sigma Delta; Phi Lambda Upsilon; Gamma Alpha; Phi Kappa Phi.

Address: 123 So. Sparks St., State College, Pennsylvania.

1923. BURR, GEORGE OSWALD. B.A. '16, Hendrix College; M.A. '20, University of Arkansas.

Major: Agricultural Biochemistry. Minor: Organic Chemistry.

Thesis: The Condensation of Indole Derivatives with Aldehydes with Especial Reference to the Humins of Protein Hydrolysis. Published in *Journal of the American Chemical Society*, 46:1224, 1924.

Major Adviser: Professor R. A. Gortner.

Positions Held: Field Assistant, summers 1923-1927, U.S.D.A.; Research Associate, 1923-1927, University of California; Assistant Professor, 1927-1929, Associate Professor, 1929-1935, Professor, 1935—, University of Minnesota; Guggenheim Fellow, 1934-1935.

Degrees Received since the Ph.D.: LL.D., Hendrix College, 1936.

Honors: Sigma Xi.

Address: 1525 East River Road, Minneapolis, Minnesota.

1923. NEWTON, ROBERT. B.S. '12, McGill University; M.S. '21, University of Minnesota.

Major: Agricultural Biochemistry. Minor: Plant Physiology.

Thesis: The Nature and Practical Measurement of Cold Resistance in Winter Wheat. Published as University of Alberta College of Agriculture Research Bulletin 1.

Major Adviser: Professor R. A. Gortner.

Positions Held: Professor of Plant Biochemistry, 1922-1924, Professor of Field Crops and Plant Biochemistry, 1924-1932, University of Alberta; Acting Director, 1928-1932, Director, 1932—, Division of Biology and Agriculture, National Research Council of Canada; commissioned by International Education Board to make survey and report on postgraduate instruction and research in agriculture in Canada, 1928; commissioned by National Research Council of Canada to make survey and report on marketing wheat by protein content in United States and Europe, 1929.

Honors: Fellow of the Royal Society of Canada.

Address: National Research Council, Ottawa, Canada.

1924. DINGWALL, ANDREW. Associate Royal Technical College, '14, Glasgow, Scotland.

Major: Agricultural Biochemistry. Minor: Bacteriology.

Thesis: Studies of the Proteins of Wheat Flours and Their Relation to Flour Strength. Not published.

Major Adviser: Professor C. H. Bailey.

Positions Held: Grain Chemist, 1921-1925, Dominion Grain Research Laboratory, Winnipeg; Research Chemist, 1925-1928, Royal Baking Powder Company; Research Associate, 1928-1934, Columbia University; Consultant, 1934—, 106 Maiden Lane, New York City.

Address: 114 Morningside Drive, New York City, N. Y.

1924. HOFFMAN, WALTER FRED. B.A. '19, Nebraska Wesleyan; M.S. '21, University of Minnesota.

Major: Agricultural Biochemistry. Minor: Plant Physiology.

Thesis: Studies on the Prolamines. Published 1925, Chemical Catalog Company, New York, in *Colloid Symposium Monograph*, 2:209-368.

Major Adviser: Professor R. A. Gortner.

Positions Held: Assistant Professor, 1924-1926, University of Minnesota; Technical Director, 1926—, Northwest Paper Company, Cloquet, Minnesota.

Address: Northwest Paper Co., Cloquet, Minnesota.

1924. JOHNSON, ARNOLD HARVEY. B.S. '21, M.S. '23, University of Minnesota.

Major: Agricultural Biochemistry. Minor: Organic Chemistry.

Thesis: A Physico-Chemical Study of Cracker Dough Fermentation. Published in *Journal of Cereal Chemistry*, 1:327-410, December 1924.

Major Adviser: Professor C. H. Bailey.

Positions Held: Assistant Professor, 1924-1925, University of Minnesota; Assistant Professor, 1925-1927, 1928-1929, Montana State College; Fellow of International Education Board of Rockefeller Foundation, 1927-1928, Carlsberg Laboratory, Copenhagen, Denmark; Chemist, Chairman Staff Committee, 1929—, Research Laboratory of National Dairy Products Corporation, Baltimore, Maryland.

Address: 1403 Eutaw Place, Baltimore, Maryland.

1925. RICHARDSON, JESSIE EMMA. B.S. '09, Carleton College.

Major: Agricultural Biochemistry. Minor: Home Economics.

Thesis: A Study of the Interrelationship of the Carriers of Vitamins A and B as Affecting the Growth and Development of the Tissues of Young Animals. Published in *American Journal of Physiology*, Vol. 83, no. 2, January 1928.

Major Adviser: Professor L. S. Palmer.

Positions Held: Head of Department of Home Economics Research, 1925—, Agricultural Experiment Station, Bozeman, Montana.

Honors: Sigma Xi; Phi Kappa Phi; Phi Beta Kappa; Iota Sigma Pi; Omicron Nu; Phi Upsilon Omicron.

Address: 916 So. Willson Ave., Bozeman, Montana.

1925. SHERWOOD, REGINALD CARTER. B.S. '14, M.S. '16, South Dakota State College.

Major: Agricultural Biochemistry. Minor: Organic Chemistry.

Thesis: The Control of Diastatic Activity in Wheat Flour. Published in *Cereal Chemistry*, 3:107-136, 163-182.

Major Adviser: Professor C. H. Bailey.

Positions Held: Director of Minnesota State Experimental Flour Mill, 1924-1929, Minnesota Department of Agriculture; Assistant Professor, 1927—, Department of Agricultural Biochemistry, University of Minnesota; Assistant Director, 1929-1933, General Manager, 1933—, Research Laboratories, General Mills, Inc., Minneapolis, Minnesota.

Honors: Sigma Xi; Managing Editor of *Cereal Chemistry*, 1927-1931; Chairman of Northwest Section of American Association of Cereal Chemists, 1928-1929, Chairman of Minnesota Section of American Chemical Society, 1930-1931.

Address: 1426 Hythe St., St. Paul, Minnesota.

1926. DAVISON, FORREST RAMON. B.A. '19, M.S. '23, University of Minnesota.

Major: Agricultural Biochemistry. Minors: Plant Physiology and Physiologic Chemistry.

Thesis: The Pectic Enzymes. Published in *Botanical Gazette*, Vol. 83, no. 4, June, 1927.

Major Adviser: Professor J. J. Willaman.

Positions Held: Head of Department of Biochemistry and Bacteriology, 1925-1927, William S. Merrel Company; Assistant Professor of Biochemistry, 1927-

- 1929, Rutgers University, New Brunswick, New Jersey; Rockefeller Fellowship for Medicine, 1929-1930, Rochester Medical School; Instructor, 1930-1931, Pharmacology Department, University of Minnesota; Medical Student, 1931-1935, University of Chicago; Assistant Professor of Pharmacology and Biochemistry, 1935-1936, Head of Department of Biochemistry and Toxicology, 1936-1937, University of West Virginia; Acting Head of Department of Pharmacology, 1937—, University of Vermont Medical School.  
Degrees Received since the Ph.D.: M.B., University of Chicago, 1935.  
Honors: Sigma Xi; Phi Lambda Upsilon; Gamma Alpha.  
Address: University of Vermont, Burlington, Vermont.
1926. GREWE, EMILY HELENE. B.A. '17, M.A. '18, University of Nebraska.  
Major: Agricultural Biochemistry. Minor: Home Economics.  
Thesis: Glutenin in Its Relation to Flour Strength. Published in *Cereal Chemistry*, 4:230-247, 261-270.  
Major Adviser: Professor C. H. Bailey.  
Positions Held: Chemist, 1927—, Bureau of Dairy Industry, U.S.D.A.  
Address: Bureau of Dairy Industry, U.S.D.A., Washington, D.C.
1926. HAAG, J. ROY. B.S. '18, M.S. '23, Pennsylvania State College.  
Major: Agricultural Biochemistry. Minor: Plant Physiology.  
Thesis: The Antagonism of Mineral Ions in Animal Nutrition. Published in *Journal of Biological Chemistry*, Vol. 76, no. 2, February 1928.  
Major Adviser: Professor L. S. Palmer.  
Positions Held: Assistant Professor of Agricultural Chemistry, 1926, Pennsylvania State College; Nutrition Chemist, 1927—, Oregon State Agricultural College.  
Address: Oregon Agricultural Experiment Station, Corvallis, Oregon.
1926. HAUGE, SIGFRED MELANCHTHON. B.A. '18, St. Olaf College; M.S. '21, University of Minnesota.  
Major: Agricultural Biochemistry. Minor: Analytical Chemistry.  
Thesis: Studies in Absorption with Carbons. Published in *Industrial and Engineering Chemistry*, Vol. 19, no. 8, p. 943, August 1927.  
Major Adviser: Professor J. J. Willaman.  
Positions Held: Assistant in Animal Nutrition, 1923-1925, Research Associate in Biochemistry, 1925—, Purdue University Agricultural Experiment Station.  
Honors: Sigma Xi; Phi Lambda Upsilon.  
Address: Purdue University Agricultural Experiment Station, Lafayette, Indiana.
1926. MARTIN, JOHN HOLMES. B.S. '14, Oregon State Agricultural College; M.S. '21, University of Maryland.  
Major: Agricultural Biochemistry. Minors: Plant Breeding and Plant Pathology.  
Thesis: Comparative Studies of Winter Hardiness in Wheat. Published in *Journal of Agricultural Research*, 35:493-535, September 15, 1927.  
Major Adviser: Professor R. A. Gortner.  
Positions Held: Senior Agronomist in Charge of Grain, Sorghum, and Broom-corn Investigations, 1925—, Bureau of Plant Industry, U.S.D.A., Washington, D.C.  
Honors: Fellow of the A.A.A.S.  
Address: Division of Cereal Crops and Diseases, B.P.I., U.S.D.A., Washington, D.C.

1926. VINSON, CARL GEORGE. B.S. '16, University of Missouri; M.S. '21, Cornell University.  
Major: Agricultural Biochemistry. Minor: Organic Chemistry.  
Thesis: Some Nitrogenous Constituents of Corn Pollen. Published in *Journal of Agricultural Research*, 35:261-277, 1927.  
Major Adviser: Professor R. A. Gortner.  
Positions Held: Biochemist, 1926-1930, Boyce-Thompson Institute for Plant Research; Professor of Horticulture, 1930—, University of Missouri.  
Honors: Sigma Xi.  
Address: Whitten Hall, Columbia, Missouri.
1927. BRIGGS, DAVID REUBEN. B.A. '21, Central College; M.A. '23, University of Missouri.  
Major: Agricultural Biochemistry. Minor: Organic Chemistry.  
Thesis: The Determination of the Zeta-Potential on Cellulose—a Method. Published in *Journal of Physical Chemistry*, 32:641-675, 1928.  
Major Adviser: Professor R. A. Gortner.  
Positions Held: National Research Council Fellowship, 1927-1928, University of Minnesota; for foreign study, 1928-1929, University of Utrecht and Kaiser Wilhelm Institut, Berlin-Dahlem; Associate Member, Assistant Professor of Chemistry, 1929-1936, Sprague Institute for Medical Research at the University of Chicago; Associate Professor in Agricultural Biochemistry, 1936—, University of Minnesota.  
Honors: Sigma Xi; Phi Lambda Upsilon.  
Address: 2120 Dudley Ave., St. Paul, Minnesota.
1927. FRANKE, KURT WALTER. B.S. '20, M.S. in Chemistry '20, University of Virginia.  
Major: Agricultural Biochemistry. Minors: Chemical Engineering and Forestry.  
Thesis: Measurement of Hydrogen-Ion Concentrations in the Control of Pulp and Paper Manufacture. Published in *Industrial and Engineering Chemistry*, 20:87, 1928.  
Major Adviser: Professor J. J. Willaman.  
Positions Held: Instructor, 1927-1929, University of Minnesota; Station Chemist, 1929-1936, South Dakota State College.  
Honors: Sigma Xi; Phi Lambda Upsilon.  
Deceased, September 16, 1936.
1927. LARMOUR, RALPH KENNETH. B.S. '23, M.S. '25, University of Saskatchewan.  
Major: Agricultural Biochemistry. Minors: Organic Chemistry and Plant Physiology.  
Thesis: A Comparative Study of Glutelins of the Cereal Grains. Published in *Journal of Agricultural Research*, 35:1091-1120, 1927, and in *Transactions of the Royal Society of Canada*, 3:349-363, 1926.  
Major Adviser: Professor R. A. Gortner.  
Positions Held: Assistant Professor, 1927-1932, Associate Professor, 1933—, Department of Chemistry, University of Saskatchewan.  
Honors: Sigma Xi.  
Address: 909 Temperance St., Saskatoon, Saskatchewan, Canada.

1927. RICHARDSON, GEORGE ARTHUR. B.S.A. '20, University of Toronto; M.S. '25, University of Minnesota.  
Major: Agricultural Biochemistry. Minor: Bacteriology.  
Thesis: Studies on the Chemical Nature of Casein and Paracasein and the Colloid Chemistry of the Cheese-Clotting Process. Published in *Journal of Physical Chemistry*, 33:557-576.  
Major Adviser: Professor L. S. Palmer.  
Positions Held: Associate in Dairy Industry, 1927-1928, Assistant Professor in Dairy Husbandry, Assistant Dairy Chemist in Experiment Station, 1928—, University of California, University Farm, Davis, California.  
Address: 321 E St., Davis, California.
1927. ST. JOHN, JAMES LEONARD. B.A. '15, Iowa State Teachers College; M.S. '18, Purdue University.  
Major: Agricultural Biochemistry. Minor: Technological Chemistry.  
Thesis: The Colloidal Behavior of Dough and the Properties of Bread as Influenced by Dry Skim Milk. Published in *Cereal Chemistry*, 6:51-59, 140-150, 1929.  
Major Adviser: Professor C. H. Bailey.  
Positions Held: Head of Division of Chemistry of Agricultural Experiment Station, State Chemist, 1921—, State College of Washington.  
Honors: Sigma Xi; Phi Lambda Upsilon; Phi Sigma.  
Address: State College of Washington, Pullman, Washington.
1927. SANDSTROM, WILLIAM MARTIN. B.A. '18, St. Olaf College; M.S. '24, University of Minnesota.  
Major: Agricultural Biochemistry. Minor: Organic Chemistry.  
Thesis: Studies on Some Globulins and Deamidized Proteins. Published in *Journal of Physical Chemistry*, 34:1070-1101, May 1930.  
Major Adviser: Professor R. A. Gortner.  
Positions Held: Instructor, 1927-1929, Assistant Professor, 1930-1936, Associate Professor, 1937—, University of Minnesota.  
Honors: Sigma Xi; Phi Lambda Upsilon.  
Address: University Farm, St. Paul, Minnesota.
1927. SWEETMAN, MARION DEYOE. B.S. '21, M.S. '22, Iowa State College.  
Major: Agricultural Biochemistry. Minor: Entomology.  
Thesis: The Nutritional Requirements of Certain Insects Infesting Cereals and Their Products. Published in *Journal of Biological Chemistry*, 77:35-52, 1928.  
Major Adviser: Professor L. S. Palmer.  
Positions Held: Professor of Home Economics, 1927—, Associate Home Economist at Experiment Station, 1930—, University of Maine.  
Honors: Sigma Xi.  
Address: University of Maine, Orono, Maine.
1927. WHITE, MOLLIE GRACE. B.A. '18, M.A. '19, University of Missouri.  
Major: Agricultural Biochemistry. Minors: Bacteriology and Physiologic Chemistry.  
Thesis: Fermentation of Pentoses by *Fusarium Lini*. Published in *Biochemical Journal* (London), Vol. 22, no. 2, 1928.  
Major Adviser: Professor J. J. Willaman.

- Positions Held: Professor of Chemistry, 1927—, Stephens College, Columbia, Missouri.  
Honors: Honorary D.Sc., 1937, Culver-Stockton College; Fellow, 1938, American Institute of Chemists.  
Address: 201 Douglas Street, Macon, Missouri.
1928. DELONG, WALTER ANTHONY. B.S.A. '20, M.S. '24, Ontario Agricultural College.  
Major: Agricultural Biochemistry. Minor: Plant Physiology.  
Thesis: Respiration of Apple Twigs in Relation to Winter Hardiness. Published in *Plant Physiology*, 5:509-534, 1930.  
Major Adviser: Professor J. J. Willaman.  
Positions Held: Research Chemist, 1928, Minnesota Valley Canning Company; Assistant Professor 1928-1930, Associate Professor, 1930-1936, Acadia University; Assistant Professor, 1936—, Macdonald College.  
Honors: Sigma Xi.  
Address: Macdonald College, Quebec, Canada.
1928. DUNN, JOSEPH AVERY. B.S. '21, Rutgers College; M.A. '27, Columbia University.  
Major: Agricultural Biochemistry. Minor: Physical Chemistry.  
Thesis: Factors Influencing Checking in Biscuits. Published in *Cereal Chemistry*, 5:395-430, September 1928.  
Major Adviser: Professor C. H. Bailey.  
Positions Held: Industrial Research Chemist, 1928-1931, Proctor and Gamble Company, Cincinnati; Assistant Manager of Canadian Branch of Wallace and Tiernan Company, 1931-1932, Toronto, Ontario; Director, Research Bakery, Lever Bros. Co., Cambridge, Massachusetts.  
Honors: Sigma Xi; Fellow of the A.A.A.S.  
Address: 109 Atwood Ave., Newtonville, Massachusetts.
1928. FERRARI, CHARLES GUIDO. B.S. '19, Pennsylvania State College.  
Major: Agricultural Biochemistry. Minor: Organic Chemistry.  
Thesis: A Study of the Carotinoid Pigments of Wheat and Flour with Special Reference to Flour Bleaching. Published in *Cereal Chemistry*, 6:218-240, 347-371, 457-482, 1929.  
Major Adviser: Professor C. H. Bailey.  
Positions Held: Research Associate, United States Manufacturers of Cream of Tartar, Inc., 1928-1929, United States Bureau of Standards; Research Chemist, 1929—, General Mills, Inc., Minneapolis, Minnesota.  
Honors: Sigma Xi; Fellow of the A.A.A.S.  
Address: 3806 Abbott Ave. So., Minneapolis, Minnesota.
1928. MALLOCH, JOHN GORDON. B.S. '24, M.S. '26, University of Alberta.  
Major: Agricultural Biochemistry. Minor: Organic Chemistry.  
Thesis: Studies on the Effect of Environment on the Diastatic Activity of Wheat. Published in *Canadian Journal of Research*, Vol. 1, no. 2, 111-147, July 1929.  
Major Adviser: Professor C. H. Bailey.



Positions Held: Research Assistant, 1927-1932, Associate Committee on Grain Research, University of Alberta; Cereal Chemist, 1932—, National Research Laboratories, Ottawa.

Address: National Research Council, Ottawa, Canada.

1928. MATHER, THOMAS HERBERT. B.S.A. '22, M.S. '24, University of Alberta.

Major: Agricultural Biochemistry. Minor: Organic Chemistry.

Thesis: The Forms of Phosphorus in Forage Crops as Influenced by Phosphorus Fertilization. Published in *Scientific Agriculture*, 10:35-63, 1929.

Major Adviser: Professor R. A. Gortner.

Positions Held: Assistant Professor of Soils, 1928-1929, University of Alberta; Soils Chemist, 1930-1935, Prairie Sales Manager, Fertilizer Division, 1936—, Consolidated Mining and Smelting Company, Toronto General Trusts Building, Calgary, Alberta.

Address: 1245 19th Ave. West, Calgary, Alberta.

1928. OLSEN, AKSEL GILKROG. B.A. '22, Nebraska Wesleyan; M.S. '23, University of Minnesota.

Major: Agricultural Biochemistry. Minor: Plant Pathology.

Thesis: A Study of the Rôle of Protective Colloids in Digestive Processes. Published in *Summaries of Ph.D. Theses*, Vol. 1, 1939, University of Minnesota.

Major Adviser: Professor R. A. Gortner.

Positions Held: Research Chemist, 1923-1933, 1936—, General Foods Corporation, Battle Creek, Michigan; Director of Research and Chief Chemist, Walter Baker Chocolate Co., 1933-1936.

Honors: Fleischmann Fellow, 1922-1923, Sigma Xi; Phi Lambda Upsilon; Phi Kappa Phi; Gamma Alpha.

Address: 143 Fremont Street, Battle Creek, Michigan.

1928. PASCOE, TRUMAN ARCHIE. B.S. '25, M.S. '26, University of Minnesota.

Major: Agricultural Biochemistry. Minor: Plant Physiology.

Thesis: A Study of the Properties of Wheat Flour as Produced by Different Milling Systems. Published in *Cereal Chemistry*, 7:195-221, 1930.

Major Adviser: Professor R. A. Gortner.

Positions Held: Instructor in Physiology, 1928-1929, Assistant Professor, 1929-1930, University of Minnesota; Technical Director, 1930-1936, Northwest Paper Co.; Technical Director, 1936—, Nekoosa Edwards Paper Co., Port Edwards, Wisconsin.

Honors: Sigma Xi.

Address: Port Edwards, Wisconsin.

1929. ARONOVSKY, SAMUEL ISAAC. B.S. in Chemical Engineering, '21, Ch.E. '22, University of Minnesota.

Major: Agricultural Biochemistry. Minor: Chemical Engineering.

Thesis: The Cooking Process. 1. The Role of Water in the Cooking of Wood. Published in *Industrial and Engineering Chemistry*, 22:264, 1930.

Major Adviser: Professor R. A. Gortner.

Positions Held: Cloquet Wood Products Fellow, 1929-1935, University of Minnesota; Northwest Paper Company Resident Fellow, 1935-1937, Institute of

- Paper Chemistry, Appleton, Wisconsin; Associate Chemist, U.S.D.A., Bureau of Chemistry and Soils, 1937—, Ames, Iowa.  
Honors: Sigma Xi; Phi Lambda Upsilon.  
Address: Agricultural By-Products Laboratory, Iowa State College, Ames, Iowa.
1929. GEDDES, WILLIAM FINDLAY. B.S.A. '18, M.A. '25, University of Toronto.  
Major: Agricultural Biochemistry. Minor: Physiologic Chemistry.  
Thesis: Chemical and Physico-Chemical Changes in Wheat and Wheat Products Induced by Elevated Temperatures. Published in *Canadian Journal of Research*, 1:528, 1929; 2:65-90, 195-213, 1930; published also as Papers 6, 7, and 8 of the Associate Committee on Grain Research of the National Research Council of Canada.  
Major Adviser: Professor C. H. Bailey.  
Positions Held: Head of Department of Agricultural Chemistry, 1925-1933, University of Manitoba; Chief Chemist, Dominion Grain Research Laboratory, 1933—, Board of Grain Commissioners for Canada.  
Honors: Sigma Xi.  
Address: 187 Baltimore Road, Winnipeg, Manitoba.
1929. MARTIN, WILLIAM McKINLEY. B.S.A. '24, M.Sc. '26, University of Alberta.  
Major: Agricultural Biochemistry. Minor: Organic Chemistry.  
Thesis: Relation of Interfacial Energy to the Molecular Structure of Organic Compounds. Published in *Journal of Physical Chemistry*, 34:1509-1539, 1929.  
Major Adviser: Professor R. A. Gortner.  
Positions Held: Assistant Chemist, 1929-1930, Assistant Professor, 1930-1931, Associate Professor, 1931-1934, Montana Agricultural Experiment Station; Supervisor of Special Investigations, 1934—, Research Department, American Can Company.  
Honors: Sigma Xi; Phi Kappa Phi; Caleb Dorr Fellow.  
Address: 1411 South 11th Avenue, Maywood, Illinois.
1929. NEAL, WAYNE MILLER. B.S. '25, Pennsylvania State College; M.S. '26, University of Minnesota.  
Major: Agricultural Biochemistry. Minor: Dairy Husbandry.  
Thesis: The Major Mineral Constituents of the Skeletal Structure of Mammals as Influenced by Age and Nutrition. Published in *Journal of Agricultural Research*, 42:107, 115, 1931.  
Major Adviser: Professor L. S. Palmer.  
Positions Held: Associate in Animal Nutrition, 1929—, Agricultural Experiment Station, University of Florida, Gainesville, Florida.  
Honors: Sigma Xi.  
Address: 690 E. Boundary St., Gainesville, Florida.
1929. SINCLAIR, WALTER BUNYAN. B.S. '22, Oglethorpe University; M.S. '25, University of Minnesota.  
Major: Agricultural Biochemistry. Minor: Plant Physiology.  
Thesis: The Effect of Inorganic Salt Solutions on Gliadin. Published in *Journal of Cereal Chemistry*, 10:171-188, 1933.  
Major Adviser: Professor R. A. Gortner.

Positions Held: Research Chemist, 1929-1930, Wilson and Company; Research Chemist, 1930-1932, National Biscuit Company, New York City; Junior Plant Physiologist, 1933—, Citrus Experiment Station and Graduate School of Tropical Agriculture, University of California.

Honors: Sigma Xi.

Address: Citrus Experiment Station, University of California, Riverside, California.

1929. STAKER, ERNEST VERNON. B.S. '23, M.A. '24, Utah Agricultural College.

Major: Agricultural Biochemistry. Minor: Plant Physiology.

Thesis: A Comparative Study of the Peptization of the Protein Complex in Various Seeds and Grains. Published in *Journal of Physical Chemistry*, 35: 1565-1605, June 1931.

Major Adviser: Professor R. A. Gortner.

Positions Held: Research Instructor, 1929-1933, Department of Agronomy, Assistant Professor of Soil Technology, 1933—, Cornell University.

Honors: Phi Kappa Phi; Sigma Xi.

Address: 221 Valley Road, Ithaca, New York.

1929. TRIEBOLD, HOWARD OLTAS. B.S. '23, M.S. '26, University of Minnesota.

Major: Agricultural Biochemistry. Minor: Organic Chemistry.

Thesis: A Chemical Study of Rancidity. Published in *Cereal Chemistry*, 8:518-532, 1931; 9:50-54, 91-106, 1932.

Major Adviser: Professor C. H. Bailey.

Positions Held: Associate Professor of Agricultural and Biological Chemistry, 1927-1936, Professor, 1936—, Pennsylvania State College.

Address: 216 So. Patterson St., State College, Pennsylvania.

1930. BULL, HENRY BOLIVAR. B.S. '27, University of South Carolina; M.S. '28, University of Minnesota.

Major: Agricultural Biochemistry. Minor: Physical Chemistry.

Thesis: On the Significance of Conditions at the Interface in Relation to the Zeta Potential. Published in *Journal of Physical Chemistry*, 35:309-330, 456-60, 700-721, 1931.

Major Adviser: Professor R. A. Gortner.

Positions Held: Instructor, 1930-1932, Division of Agricultural Biochemistry, University of Minnesota; National Research Council Fellow, 1931-1932, Kaiser Wilhelm Institut, Berlin-Dahlem, Germany (on leave of absence from University of Minnesota); Assistant Professor, 1932-1936, University of Minnesota; Assistant Professor, 1936—, Northwestern University.

Honors: Phi Beta Kappa; Sigma Xi; Omicron Delta Kappa.

Address: 303 East Chicago Ave., Chicago, Illinois.

1930. MORRIS, HAROLD PAUL. B.S. '25, University of Minnesota; M.S. '26, Kansas State Agricultural College.

Major: Agricultural Biochemistry. Minor: Zoology.

Thesis: An Experimental Study of Inheritance as a Factor Influencing Food Utilization in the Rat. Published in *Minnesota Agricultural Experiment Station Technical Bulletin* no. 92.

Major Adviser: Professor L. S. Palmer.

Positions Held: National Research Council Fellow in Biological Sciences, 1930-1931, University of Minnesota; Research Associate, 1931-1933, United States Bureau of Fisheries, Washington, D.C.; Junior Bacteriologist, 1933-1934, U. S. D. A. Bur. Home Economics; Associate Biochemist, U. S. D. A. Food and Drug Administration, 1934-1938; Chemist, 1938—, National Institute of Health, U. S. Public Health Service.

Honors: Sigma Xi.

Address: 710 Noyes Drive, Silver Spring, Maryland.

1930. ROBINSON, ALLEN DINWOODY. B.A. '25, M.A. '27, University of Saskatchewan.

Major: Agricultural Biochemistry. Minor: Plant Physiology.

Thesis: The Effect of Salts on the Paracasein-Sodium Hydronide Equilibrium. Published 1932 as Paper 1087, Journal Series, Minnesota Agricultural Experiment Station, and in *Journal of Physical Chemistry*, 36:1857-1881, July 1932.

Major Adviser: Professor R. A. Gortner.

Positions Held: Instructor, 1929-1930, University of New Hampshire; Assistant Chemist, 1929-1930, New Hampshire Experiment Station; Assistant Professor, 1930-1933, Manitoba Agricultural College, Winnipeg, Manitoba; Assistant Professor of Chemistry, 1933—, University of Manitoba.

Honors: Sigma Xi; Associate of Canadian Institute of Chemistry, 1930.

Address: University of Manitoba, Winnipeg, Manitoba.

1930. TRELOAR, ALAN EDWARD. B.S.A. '26, University of Sydney, Australia.

Major: Agricultural Biochemistry. Minor: Botany.

Thesis: A Biometric Study of the Chemical Properties of Wheat and Wheat Flour. Published 1928-1931 as a series of papers, in *Cereal Chemistry*, 5:333-351, 1928, 6:429-453, 1929, 8:95-113, 1931, and in *Journal of American Society of Agronomists*, 22:28-36, 1930; 23:558-571, 1931.

Major Advisers: Professors J. A. Harris and C. H. Bailey.

Positions Held: Assistant Professor, 1930—, University of Minnesota; Associate in Biostatistics, 1937-1938, Johns Hopkins University (on sabbatical leave from University of Minnesota).

Honors: Sigma Xi.

Address: 2456 Beverly Road, St. Paul, Minnesota.

1930. WIESE, HILDA FRIEDA. B.S. '19, M.S. '20, University of Wisconsin.

Major: Agricultural Biochemistry. Minor: Bacteriology.

Thesis: A Study of the Substances Adsorbed on the Fat Globules in Cream and Their Relations to Churning. Published in *Journal of Dairy Science*, 15:351; 16:41; 17:29.

Major Adviser: Professor L. S. Palmer.

Positions Held: Research Chemist, 1931-1938, Borden Research Laboratories, Syracuse, New York.

Address: 422 Maple Avenue, Madison, Wisconsin.

1930. ZELENY, LAWRENCE. B.A. '25, M.S. '27, University of Minnesota.

Major: Agricultural Biochemistry. Minor: Organic Chemistry.

Thesis: The Action of Formaldehyde on Amino Acids with Special Reference

to the Formation of Amines. Published in *Journal of Biological Chemistry*, Vol. 90, no. 2, pp. 427-441, February 1931.

Major Adviser: Professor R. A. Gortner.

Positions Held: Fellow of Institute of American Meat Packers, 1930, University of Minnesota; Agent, 1931-1932, Forest Service, U.S.D.A., University Farm, St. Paul, Minnesota; Chief Chemist, 1933-1935, Visual Display, Inc., Le Sueur, Minnesota; Associate Chemist, Bureau of Agricultural Economics, 1935—, U.S.D.A., Washington, D.C.

Honors: Sigma Xi; Phi Lambda Upsilon.

Address: 501 University Drive, University Park, Hyattsville, Maryland.

1931. BARNETT, HAROLD MONTGOMERY. B.A. '25, Nebraska Wesleyan University; M.S. '27, University of Minnesota.

Major: Agricultural Biochemistry. Minor: Plant Physiology.

Thesis: Studies on Leucine and Dileucine Hydrochloride and the Development of a New Method for the Isolation of Leucine from Proteins. Published in *Journal of Biological Chemistry*, 100:543-550, 1933.

Major Adviser: Professor R. A. Gortner.

Positions Held: Research Chemist, 1931-1935, S.M.A. Corporation, Cleveland, Ohio; Director, 1936—, Barnett Laboratories, Long Beach, California.

Honors: Sigma Xi.

Address: 1120 E. Artesia Boulevard, Long Beach, California.

1931. FREEMAN, MONROE EDWARD. B.S. '28, University of Minnesota.

Major: Agricultural Biochemistry. Minor: Organic Chemistry.

Thesis: The Gums of the Cereal Grains. Published in *Cereal Chemistry*, 9:506-518, 1932.

Major Adviser: Professor R. A. Gortner.

Positions Held: Assistant Professor of Biochemistry, 1931-1936, University of Maine, Orono, Maine; Research Professor of Chemistry, 1936—, Massachusetts State College.

Address: 26 Taylor Street, Amherst, Massachusetts.

1931. JENSEN, OTTO GERHARD. B.A. '27, St. Olaf College; M.S. '29, Pennsylvania State College.

Major: Agricultural Biochemistry. Minor: Physical Chemistry.

Thesis: Interfacial Energy and the Molecular Structure of Organic Compounds. Published in *Journal of Physical Chemistry*, 36:3138-3151, 1932.

Major Adviser: Professor R. A. Gortner.

Positions Held: Research Chemist, 1932-1937, General Foods Corporation, Battle Creek, Michigan; Research Chemist, 1937—, Borden Company, Bainbridge, New York.

Honors: Phi Lambda Upsilon; Sigma Xi; Gamma Sigma Delta.

Address: 16 Bixby Street, Bainbridge, New York.

1931. JONES, IVAN DUNLAVY. B.A. '26, Nebraska Wesleyan University.

Major: Agricultural Biochemistry. Minor: Plant Physiology.

Thesis: Studies on Free and Bound Water in Elastic and Non-Elastic Gels. Published 1932 in *Colloid Symposium Monograph*, Vol. 8.

- Major Adviser: Professor R. A. Gortner.  
 Positions Held: Assistant Professor of Horticulture, Horticultural Physiologist,  
 Agent, U.S.D.A., 1930—, North Carolina State College.  
 Honors: Sigma Xi.  
 Address: North Carolina State College, Raleigh, North Carolina.
1931. READ, JOHN WILLIAM. B.S.A. '07, M.S. '08, University of Missouri.  
 Major: Agricultural Biochemistry. Minor: Organic Chemistry.  
 Thesis: The Effects of Ultra-Violet Irradiation on the Chemical and Nutritive  
 Properties of Baked Products. Published in *Cereal Chemistry*, 10:99-128.  
 Major Adviser: Professor C. H. Bailey.  
 Positions Held: Chief Research Chemist, 1929—, W. E. Long Company, Chicago.  
 Address: 831 Hillside Ave., Glen Ellyn, Illinois.
1931. THOR, CLIFFORD JAMES BYRON. B.S. '28, University of Minnesota;  
 M.A. '29, Oberlin College.  
 Major: Agricultural Biochemistry. Minor: Organic Chemistry.  
 Thesis: The Effect of Alkalis upon Cystine. Published in *Journal of Biological  
 Chemistry*, 99:383-403, 1933.  
 Major Adviser: Professor R. A. Gortner.  
 Positions Held: Agent, 1931-1934, U.S.D.A. United States Pecan Research  
 Laboratory, Austin, Texas; Research Chemist, 1934—, The Visking Corpora-  
 tion, Chicago, Illinois.  
 Honors: Phi Beta Kappa; Sigma Xi; Phi Lambda Upsilon; Gamma Sigma  
 Delta.  
 Address: The Visking Corporation, 6733 W. 65th St., Chicago, Illinois.
1932. BROWN, WILLIAM REDMAN. B.S.A. '23, M.Sc. '25, University of  
 Alberta.  
 Major: Agricultural Biochemistry. Minor: Plant Pathology.  
 Thesis: Some Factors Influencing Lactose Secretion. Published in *Journal of  
 Dairy Science*, January-April 1936.  
 Major Advisers: Professors R. A. Gortner and W. E. Petersen.  
 Positions Held: Research Associate, 1930-1937, University of Minnesota; Bio-  
 chemist, 1937—, Philadelphia Institute for Medical Research.  
 Honors: Sigma Xi; Phi Lambda Upsilon; Caleb Dorr Fellow, 1929-1930, Uni-  
 versity of Minnesota.  
 Address: Wallingford, Pennsylvania.
1932. GUANZON, GETULIO AUGUSTO. B.S. '25, University of the Philip-  
 pines; M.S. '30, Louisiana State University.  
 Major: Agricultural Biochemistry. Minor: Plant Physiology and Soils.  
 Thesis: The Uronic Acid Content of the Nitrogen-free Extract of Feeding  
 Stuffs. Published in *Journal of Agricultural Research*, 55:581-586, 1937.  
 Major Adviser: Professor R. A. Gortner.  
 Positions Held: Assistant Professor, 1932—, College of Agriculture, University  
 of the Philippines.  
 Address: University of the Philippines, Los Banos, Laguna, Philippine Islands.

1932. MANGELS, CHARLES EDWIN. B.S. '14, M.A. '16, University of Missouri.  
Major: Agricultural Biochemistry. Minor: Organic Chemistry and Physical Chemistry.  
Thesis: Physico-Chemical Studies on Wheat Starches. Published in *Journal of American Chemical Society*, 55:1981, 1933.  
Major Adviser: Professor C. H. Bailey.  
Positions Held: Cereal Chemist, 1932-1936, North Dakota Agricultural Experiment Station.  
Honors: Sigma Xi.  
Deceased, 1936.
1932. WILES, HAROLD OLIVER. B.S. '27, Montana State College; M.S. '29, University of Minnesota.  
Major: Agricultural Biochemistry. Minor: Physical Chemistry.  
Thesis: The Rotatory Dispersion of Gliadin Peptized by Different Solutions. Published in *Cereal Chemistry*, 11:36, 1934.  
Major Adviser: Professor R. A. Gortner.  
Positions Held: Associate in Biochemistry, 1932-1933, Tennessee Agricultural Experiment Station; Instructor and Armour Fellow, 1934—, Department of Pathology, University of Chicago.  
Honors: Sigma Xi; Phi Lambda Upsilon.  
Address: Department of Pathology, University of Chicago, Chicago, Illinois.
1932. WILKERSON, VERNON ALEXANDER. B.A. '21, University of Kansas; M.D. '25, University of Iowa.  
Major: Agricultural Biochemistry. Minor: Physiology.  
Thesis: A Biochemical Study of Embryonic (Pig) Growth, with Special Reference to Nitrogenous Compounds. Published in *American Journal of Physiology*, Vol. 101, no. 3, 1932.  
Major Adviser: Professor R. A. Gortner.  
Positions Held: Assistant Professor, 1932-1934, Associate Professor, 1934-1936, Professor, 1936—, Head of the Department of Biochemistry, 1933—, Howard University School of Medicine.  
Honors: Sigma Xi.  
Address: 555 23rd Place, N.E., Washington, D.C.
1933. BUCKMAN, STANLEY JOSEPH. B.S. '31, University of Minnesota.  
Majors: Biochemistry and Forestry (Forest Products). Minor: Forestry (Forest Pathology).  
Thesis: A Study of Certain Factors Influencing the Movement of Liquids in Wood. Published in *Journal of Physical Chemistry*, 39:103-120, 1935.  
Major Advisers: Professors Henry Schmitz and R. A. Gortner.  
Positions Held: Research Chemist, 1934-1937, Head of Research Department, 1937—, American Creosoting Co., Louisville, Kentucky.  
Honors: Sigma Xi; Gamma Alpha; Alpha Zeta; Xi Sigma Pi; Silver Spur.  
Address: 609 Emery Road, Louisville, Kentucky.
1933. JACKSON, STANLEY McAFEE. B.S. '29, M.S. '30, University of Illinois.  
Major: Agricultural Biochemistry. Minor: Organic Chemistry.

Thesis: A Study of the Proteins of the Mammary Gland. Published in *Journal of Biological Chemistry*, 1938.

Major Adviser: Professor R. A. Gortner.

Positions Held: Chemist, 1933-1936, Research Director, 1936-1938, United Mills Co., Grafton, Ohio; Director of Nutrition Laboratories, 1938—, Loose-Wiles Biscuit Co.

Honors: Phi Lambda Upsilon; Alpha Zeta; Sigma Xi; Caleb Dorr Fellowship.

Address: Nutrition Laboratories, Loose-Wiles Biscuit Co., New York City, N. Y.

1933. LACHAT, LAWRENCE LYSLE. B.S. '29, M.S. '30, Pennsylvania State College.

Major: Agricultural Biochemistry. Minor: Animal Genetics.

Thesis: The Study of the Rachitogenic Properties of Cereals. Published in *Journal of Nutrition*, Vol. 10, no. 5, 1935.

Major Adviser: Professor L. S. Palmer.

Positions Held: Chemist, 1933-1937, Minnesota Department of Agriculture, Dairy and Food; Chemist in Charge, Feed Laboratory, 1937—, Great Atlantic and Pacific Tea Co.

Address: 2311 Pierce Ave., St. Paul, Minnesota.

1933. MASON, INEZ DORA. B.S. '14, M.S. '22, Northwestern University.

Major: Agricultural Biochemistry. Minor: Organic Chemistry.

Thesis: Studies in the Relative Utilization of Biologically Adequate and Inadequate Proteins by Animals. Published in *Journal of Nutrition*, Vol. 9, no. 4, 1935.

Major Adviser: Professor L. S. Palmer.

Positions Held: Fellowship, University of Minnesota, 1933-1934.

Honors: Sigma Xi.

Address: Box 14, Storrs, Connecticut.

1934. JEFFREY, ROBERT NEWELL. B.S. '29, M.S. '31, University of California.

Major: Agricultural Biochemistry. Minor: Plant Physiology.

Thesis: Studies on Photosynthesis. Not published.

Major Advisers: Professors G. O. Burr and R. A. Gortner.

Positions Held: Research Chemist, 1934-1936, General Foods Research Laboratories; Plant Physiologist, 1936—, Kentucky Agricultural Experiment Station.

Honors: Phi Lambda Upsilon; Gamma Alpha.

Address: 225 Shady Lane, Lexington, Kentucky.

1934. LASBY, HELEN ADAMS. B.A. '30, M.S. '31, University of Minnesota.

Major: Agricultural Biochemistry. Minor: Organic Chemistry.

Thesis: A Study of the Effect of Pasteurization on the Biological Properties of Milk. Published in *Journal of Dairy Science*, Vol. 18, no. 3, 1935.

Major Adviser: Professor L. S. Palmer.

Honors: Iota Sigma Pi.

Married Name: Mrs. Robert N. Jeffrey.

Address: 225 Shady Lane, Lexington, Kentucky.

1934. LINNER, EDWARD ROBERT. B.S. '24, University of Buffalo.

Major: Agricultural Biochemistry. Minor: Physical Chemistry.



- Thesis: Adsorbability and Organic Structure. Published in *Journal of Physical Chemistry*, Vol. 39, no. 1, 1935.  
Major Adviser: Professor R. A. Gortner.  
Positions Held: Instructor, 1934-1937, Assistant Professor, 1937—, Department of Chemistry, Vassar College.  
Honors: Sigma Xi.  
Address: Vassar College, Poughkeepsie, New York.
1934. MARKLEY, MAX CASTLEBERRY. B.S. Ch.E. 22, Ch.E. '29, University of Kansas.  
Major: Agricultural Biochemistry. Minor: Plant Genetics.  
Thesis: The Inheritance of the Carotinoid Pigments in *Triticum Vulgare* and *Triticum Durum*. Published in *Cereal Chemistry*, Vol. 12, no. 1, 1935.  
Major Adviser: Professor C. H. Bailey.  
Positions Held: Instructor, 1929-1937, University of Minnesota; Director of Laboratories, 1937—, Cargill, Inc., Minneapolis.  
Honors: Sigma Xi; Gamma Sigma Delta.  
Address: 2203 Buford Ave., St. Paul, Minnesota.
1934. NILSON, HUGO WALDEMAR. B.S. '24, University of Minnesota; M.S. '28, Iowa State College.  
Major: Agricultural Biochemistry. Minor: Animal Husbandry.  
Thesis: A Study of Certain Fundamental Factors Involved in the Stimulation of Growth by the Pituitary Hormones. Published in *American Journal of Physiology*, 111:341-351, 1935.  
Major Adviser: Professor L. S. Palmer.  
Positions Held: National Research Council Fellow, 1935-1937, Mayo Foundation; Assistant Pharmacologist, 1937—, United States Bureau of Fisheries, University of Maryland, College Park, Maryland.  
Honors: Sigma Xi; Gamma Sigma Delta.  
Address: 1107 Flower Ave., Takoma Park, Maryland.
1934. POWELL, MILTON EDWARD. B.S.A. '26, University of Illinois; M.A. '30, University of Missouri.  
Major: Agricultural Biochemistry. Minor: Dairy Husbandry.  
Thesis: Studies on the Effects of Heating Milk upon Its Coagulation with Rennin. Published in *Journal of Dairy Science*, 18:401, 1935.  
Major Adviser: Professor L. S. Palmer.  
Positions Held: Chemist in Charge of Research, 1935—, Abbotts Dairies, Inc.  
Honors: Sigma Xi.  
Address: Cameron, Wisconsin.
1934. RIMPILA, CHARLES EINAR. B.S. '29, M.S. '31, University of Minnesota.  
Major: Agricultural Biochemistry. Minor: Dairy Husbandry.  
Thesis: Factors Influencing the Composition of the Adsorption Membrane around the Fat Globules in Cream. Published in *Journal of Dairy Science*, Vol. 18, no. 12, 1935.  
Major Adviser: Professor L. S. Palmer.  
Positions Held: Research Chemist, 1935—, Frederick A. Stresen-Reuter, Inc.  
Honors: Sigma Xi; Phi Lambda Upsilon; Alpha Zeta.  
Address: % Frederick A. Stresen-Reuter, Inc., 2113 Medill Ave., Chicago, Illinois.

1935. BOHN, LEONARD JOHN. B.A.Sc. '27, M.A.Sc. '28, University of Toronto.  
 Major: Agricultural Biochemistry. Minor: Physiology.  
 Thesis: Significant Physical Properties of Flour Doughs. Published in *Cereal Chemistry*, Vol. 13, nos. 4, 5, and 6, 1936.  
 Major Adviser: Professor C. H. Bailey.  
 Positions Held: Chemist in Charge of Laboratory, 1935—, T. H. Taylor Co., Chatham, Ontario, and S. J. Cherry and Sons, Preston, Ontario.  
 Honors: Sigma Xi.  
 Address: 267 Wellington St. W., Chatham, Ontario, Canada.
1935. DAS, UPENDRA KUMAR. B.S. '27, M.S. '30, University of Hawaii.  
 Major: Agricultural Biochemistry. Minors: Plant Physiology and Biometry.  
 Thesis: The Nitrogen Nutrition of Sugar Cane. Published in *Plant Physiology*, 2:251-317, 1936.  
 Major Advisers: Professors R. A. Gortner and C. H. Bailey.  
 Positions Held: Research Associate, 1936-1937, Experiment Station, Hawaiian Sugar Planters' Association, Honolulu, Hawaii.  
 Honors: Sigma Xi.  
 Deceased, October 22, 1937.
1935. MUNZ, EMIL. B.S. '33, University of Minnesota.  
 Major: Agricultural Biochemistry. Minor: Organic Chemistry.  
 Thesis: Enzymatic Amylolysis as a Function of Temperature. Published in *Cereal Chemistry*, 13:427, 1936.  
 Major Adviser: Professor C. H. Bailey.  
 Positions Held: Mill Superintendent, 1936—, Bottighofen, Switzerland.  
 Honors: Sigma Xi.  
 Address: Untere Muhle, Bottighofen, Thurgau, Switzerland.
1935. PATTON, ALVA RAE. B.S. '30, Montana State College; M.S. '33, University of Minnesota.  
 Major: Agricultural Biochemistry. Minor: Animal Genetics.  
 Thesis: Biochemical Studies of the Influence of Diet on the Composition and Biological Properties of Eggs. Published in *Journal of Nutrition*, 11:129-134, 1936.  
 Major Adviser: Professor L. S. Palmer.  
 Positions Held: Research Instructor, 1935-1936, Cornell University; Research Assistant Professor, 1936-1938, University of Arkansas; Investigator, 1938—, Colorado State College.  
 Honors: Sigma Xi; Phi Lambda Upsilon; Phi Kappa Phi; Alpha Zeta; Phi Eta Sigma.  
 Address: Department of Poultry Husbandry, Colorado State College, Fort Collins, Colorado.
1935. SENUM, TELLEF. B.S. '27, University of North Dakota.  
 Major: Agricultural Biochemistry. Minor: Bacteriology.  
 Thesis: The Effect of Oxidizing and Reducing Agents. Not published.  
 Major Adviser: Professor W. M. Sandstrom.

- Positions Held: In Charge of Research, 1936—, Master Laboratories, Inc., Omaha, Nebraska.  
Honors: Gamma Alpha.  
Address: Fosston, Minnesota.
1935. SHELLENBERGER, JOHN ALFRED. B.S. '28, University of Washington; M.S. '30, Kansas State College.  
Major: Agricultural Biochemistry. Minor: Nutrition.  
Thesis: Biochemical Distinctions between Barley Varieties. Published in *Cereal Chemistry*, 13:631, 1936, and in *Brewers Technical Review*, 11:3-5, 1936.  
Major Adviser: Professor C. H. Bailey.  
Positions Held: Head of Products Control, 1936—, Mennel Milling Company.  
Honors: Phi Kappa Phi; Sigma Xi; Gamma Sigma Delta; Gamma Alpha.  
Address: Mennel Milling Co., P.O. Box 189, Fostoria, Ohio.
1935. SKOVHOLT, OSCAR. B.S. '21, M.S. '23, University of North Dakota.  
Major: Agricultural Biochemistry. Minor: Dairy Husbandry.  
Thesis: Effect of Plasticity and Related Physical Properties of the Substratum of Enzyme Activity. Published in *Cereal Chemistry*, 12:307-355, 1935.  
Major Adviser: Professor C. H. Bailey.  
Positions Held: American Dry Milk Institute Research Fellow, 1929-1936; Director of Laboratory, 1936—, Quality Bakers of America.  
Honors: Phi Lambda Upsilon; Sigma Xi.  
Address: Quality Bakers of America, 120 W. 42nd St., New York City.
1935. SULLIVAN, BETTY JULIA. B.S. '22, University of Minnesota.  
Major: Agricultural Biochemistry. Minor: Organic Chemistry.  
Thesis: The Lipids of the Wheat Embryo. Published in *Journal of the American Chemical Society*, 58:383-393, 1936.  
Major Adviser: Professor C. H. Bailey.  
Positions Held: Chief Chemist, 1927—, Russell Miller Milling Co.  
Honors: Sigma Xi.  
Address: 4825 Queen Avenue South, Minneapolis, Minnesota.
1936. BLICKENDORFER, PHILIP. B.S. '27, North Dakota State College; M.S. '29, University of Minnesota.  
Major: Agricultural Biochemistry. Minor: Physiology.  
Thesis: Enzyme Versus Acid Hydrolysis. Not published.  
Major Adviser: Professor W. M. Sandstrom.  
Positions Held: Assistant Chemist, 1936—, Texas Agricultural Experiment Station.  
Honors: Sigma Xi.  
Address: P.O. Box 2679, College Station, Texas.
1936. FRAMPTON, VERNON LACHONEUS. B.A. '31, University of California at Los Angeles.  
Major: Agricultural Biochemistry. Minor: Physics.  
Thesis: Electrokinetics: Studies on Charcoal. Published in *Journal of Physical Chemistry*, 41:567, 1937.  
Major Adviser: Professor R. A. Gortner.  
Positions Held: Assistant Professor, 1936—, Cornell University; National Research Council Fellow, 1936-1937.

- Honors: Sigma Xi; Phi Lambda Upsilon.  
Address: Department of Plant Pathology, Cornell University, Ithaca, New York.
1936. HARRIS, RAE HUDSON. B.S. '21, M.S. '23, University of Saskatchewan.  
Major: Agricultural Biochemistry. Minor: Biometry.  
Thesis: Wheat Flour Proteins in Their Relation to Peptization and Flour Strength. Published in *Cereal Chemistry*, 8:47-63, 113-133, 190-200, 496-509; 14:182-200.  
Major Adviser: Professor C. H. Bailey.  
Positions Held: Cereal Technologist, 1936—, North Dakota Agricultural Experiment Station.  
Address: North Dakota Agricultural Experiment Station, Fargo, North Dakota.
1936. HESSLER, LYLE EDWARD. B.Ch. '30, M.S. '31, University of Minnesota.  
Major: Agricultural Biochemistry. Minor: Bacteriology.  
Thesis: The Carbon Metabolism of *Gibberella saubinetii* (Mont.) Sacc. on Glucose. Published in *Journal of Biological Chemistry*, 119:193-200.  
Major Adviser: Professor R. A. Gortner.  
Positions Held: Assistant Chemist, 1936—, Bureau of Plant Industry, U.S.D.A.  
Address: Box 1181, Austin, Texas.
1937. CLARK, RONALD ELVYN. B.A. '33, Carleton College; M.S. '34, University of Minnesota.  
Major: Agricultural Biochemistry. Minor: Physical Chemistry.  
Thesis: Physical Chemical Studies on Starch Gelatinization. Published in *Summaries of Ph.D. Theses*, Vol. 1, 1939, University of Minnesota.  
Major Adviser: Professor R. A. Gortner.  
Positions Held: Assistant, 1937—, Wayne University.  
Address: Wayne University, Detroit, Michigan.
1937. DONALDSON, FRANK THOMAS. B.S. '30, Montana State College.  
Major: Biochemistry. Minor: Physical Chemistry.  
Thesis: A Study of the Mineral Nutrition of Wheat As Influenced by Fertilizer Combinations. Published in *Plant Physiology*, 13:737-766, 1938.  
Major Adviser: Professor R. A. Gortner.  
Positions Held: Assistant Professor, 1934—, Montana Experiment Station.  
Honors: Sigma Xi; Phi Lambda Upsilon.  
Address: Chemistry Department, Montana Experiment Station, Bozeman, Mont.
1937. ERICKSON, HARVEY DORLIN. B.S. '33, B.S. in Ed. '34, M.S. '36, University of Minnesota.  
Major: Biochemistry. Minor: Forestry (Dendrology).  
Thesis: Directional Permeability of Seasoned Woods to Water and Some Factors Which Affect It. Published in *Summaries of Ph.D. Theses*, Vol. 1, 1939, University of Minnesota.  
Major Advisers: Professors R. A. Gortner and Henry Schmitz.  
Positions Held: Assistant Professor of Forest Utilization, 1937—, West Virginia University.  
Honors: Sigma Xi; Gamma Sigma Delta; American Creosoting Fellow, 1934-1937.

Address: Division of Forestry, West Virginia University, Morgantown, West Virginia.

1937. GROSS, ROLAND ALBERT. B.S. '25, University of Illinois; M.S. '37, University of Minnesota.

Major: Agricultural Biochemistry. Minor: Analytical Chemistry.

Thesis: The Properties of Oils Extracted from Oil-Seeds by Various Technics.

Published in *Oil and Soap*, 14:260-263, 1937.

Major Adviser: Professor C. H. Bailey.

Positions Held: Medical Biochemist, 1937—, Ancker Hospital, St. Paul, Minnesota.

Address: 736 Superior St. S.E., Minneapolis, Minnesota.

1937. HILLS, CLAUDE HIBBARD. B.S. '33, Northeast Missouri State Teachers College; M.A. '35, University of Missouri.

Major: Agricultural Biochemistry. Minor: Organic Chemistry.

Thesis: The Amylases of Different Varieties of Barley. Published in *Cereal Chemistry*, 15:273-281, 351-362, 1938.

Major Adviser: Professor C. H. Bailey.

Positions Held: Research Chemist, 1937—, The Borden Co., Syracuse, New York.

Honors: Gamma Sigma Delta; Sigma Xi.

Address: The Borden Co., Syracuse, New York.

1937. KASS, JACOB PETER. B.A. '30, University of Minnesota.

Major: Biochemistry. Minor: Organic Chemistry.

Thesis: The Chemical Factors Involved in the Browning of Autoclaved Milk.

Published in *Summaries of Ph.D. Theses*, Vol. 1, 1939, University of Minnesota.

Major Adviser: Professor L. S. Palmer.

Positions Held: Assistant Professor, 1937, Milwaukee State Teachers College; Chemist, 1937—, University of Minnesota.

Honors: Sigma Xi.

Address: 2628 Fremont Ave. So., Minneapolis, Minnesota.

1937. LAUFFER, MAX AUGUSTUS, JR. B.S. '33, M.S. '34, Pennsylvania State College.

Major: Agricultural Biochemistry. Minor: Physical Chemistry.

Thesis: Electric Forces at Organic Liquid-Solid Interfaces. Published in *Summaries of Ph.D. Theses*, Vol. 1, 1939, University of Minnesota.

Major Adviser: Professor R. A. Gortner.

Positions Held: Fellow in Plant Pathology, 1937—, Rockefeller Institute for Medical Research.

Address: 120 Prospect Ave., Princeton, New Jersey.

1937. TARASSUK, NIKITA PAUL. B.S. '31, M.S. '33, University of California.

Major: Agricultural Biochemistry. Minor: Dairy Husbandry.

Thesis: Study of Physical and Chemical Properties of the Adsorption "Membrane" around the Fat Globules in Cream. Not published.

Major Adviser: Professor L. S. Palmer.

Positions Held: Instructor and Junior Dairy Chemist, 1936—, University of California.

Honors: Sigma Xi.

Address: University of California, Davis, California.

1938. CALVERLEY, CHARLES ERNEST. B.Ch. '31, M.S. '32, University of Minnesota.

Major: Agricultural Biochemistry. Minor: Zoology.

Thesis: A Study of Certain Physiological and Metabolic Factors Related to Efficiency of Food Utilization for Growth. Not published.

Major Adviser: Professor L. S. Palmer.

Positions Held: Research Chemist, 1938—, Swift and Co., Chicago, Illinois.

Honors: Sigma Xi; Phi Lambda Upsilon.

Address: 6105 South Washtenow Ave., Chicago, Illinois.

1938. MITRA, BHUPENDRA NATH. B.S. '26, M.S. '27, D.Sc. '36, University of Dacca (India).

Major: Agricultural Biochemistry. Minor: Bacteriology.

Thesis: Some Chemical Studies on Cholera Vibrios and Related Organisms. Not published.

Major Adviser: Professor R. A. Gortner.

Positions Held: Biochemist, 1937—, Indian Central Jute Committee.

Honors: Sigma Xi.

Address: Indian Central Jute Committee, 1 Council House Street, Calcutta, India.

1938. NELSON, JOHN WESLEY. B.S. '25, M.S. '31, University of Minnesota.

Major: Biochemistry. Minor: Bacteriology.

Thesis: A Study of the Nutritive Value of Fresh-water Plants. Not published.

Major Adviser: Professor L. S. Palmer.

Positions Held: Associate Chemist, 1938—, Agricultural Experiment Station, University of Minnesota.

Honors: Sigma Xi; Phi Lambda Upsilon.

Address: 1395 McKinley Ave., St. Paul, Minnesota.

1938. OLSON, FLOYD C. B.A. '29, St. Olaf College; M.S. '35, University of Minnesota.

Major: Agricultural Biochemistry. Minors: Zoology and Agronomy.

Thesis: A Comparative Study of Chemical and Biochemical Methods for Determining the Nutritive Value of Proteins for Growth. Not published.

Major Adviser: Professor L. S. Palmer.

Positions Held: Fellow, 1938, Ohio State University; Fellow in Bacteriology, 1938—, University of Minnesota.

Address: Department of Bacteriology, University of Minnesota, Minneapolis, Minnesota.

1938. SELLERS, LOIS COATES. B.S. '29, University of Manitoba; M.S. '33, University of Minnesota.

Major: Biochemistry. Minor: Physiological Chemistry.

Thesis: Properties of the Proteins Resulting from the Thermal Fractionation of Glutenin. Published in *Cereal Chemistry*, 15:801, 1938.

Major Adviser: Professor C. H. Bailey.

Married Name: Mrs. K. E. Stockelbach.

Address: 1125 Wellington Crescent, Winnipeg, Canada.

1938. STAMBERG, OLOF ERNEST. B.S. '34, University of Illinois; M.S. '36, University of Minnesota.  
Major: Agricultural Biochemistry. Minor: Organic Chemistry.  
Thesis: The Amyloses of Wheat Starch. Not published.  
Major Adviser: Professor C. H. Bailey.  
Positions Held: Associate Chemist, 1936—, University of Minnesota.  
Honors: Sigma Xi.  
Address: Biochemistry Division, University of Minnesota, Minneapolis, Minnesota.
1938. WENDER, SIMON HAROLD. B.A. '34, M.S. '35, Emory University.  
Major: Agricultural Biochemistry. Minor: Organic Chemistry.  
Thesis: The Isolation of Photosensitizing Agents from Buckwheat. Not published.  
Major Adviser: Professor R. A. Gortner.  
Positions Held: Research Fellow, 1938, Kettering Foundation, Yellow Springs, Ohio; Chemist, 1938—, Texas Agricultural Experiment Station.  
Honors: Phi Beta Kappa; Sigma Xi; Phi Lambda Upsilon.  
Address: P.O. 2754, College Station, Texas.

## AGRONOMY

1907. MACDONALD, WILLIAM. B.A. '98, D.Sc. '09, University of Minnesota.  
Major: Agriculture. Minors: Horticulture and Botany.  
Thesis: Agricultural Education in America, with a Note on the Transvaal. Published 1909, New York.  
Major Adviser: Professor A. Boss.  
Address: Pretoria, South Africa.
1914. HARLAN, HARRY VAUGHN (D.Sc.). B.S. '04, M.S. '09, Kansas Agricultural College.  
Major: Agronomy. Minor: Plant Pathology.  
Thesis: Some Distinctions in Our Cultivated Barleys with Reference to Their Use in Plant Breeding. Published 1914 as U.S.D.A. Technical Bulletin 137.  
Major Adviser: Professor A. Boss.  
Positions Held: Principal Agronomist in Charge of Barley Investigation, 1914—, U.S.D.A., Washington, D.C.  
Address: 5329 42nd Place N. W., Washington, D.C.
1922. GARBER, RALPH JOHN. B.S. '12, University of Illinois, M.S. '17, University of Minnesota.  
Major: Agronomy. Minor: Botany.  
Thesis: Inheritance and Yield with Particular Reference to Rust Resistance and Panicle Type in Oats. Published 1924 as University of Minnesota Agricultural Experiment Station Bulletin 7.  
Major Adviser: Professor H. K. Hayes.  
Positions Held: Agronomist, Geneticist, Head of Department of Agronomy and Genetics, 1922-1936, West Virginia University, Morgantown, West Virginia; Director, 1936—, United States Regional Pasture Research Laboratory.  
Honors: Sigma Xi.  
Address: 445 Ridge Avenue, State College, Pennsylvania.

1928. BOOTH, ERNEST GORDON. B.S.A. '21, M.S.A. '23, University of Saskatchewan.  
 Major: Agronomy. Minor: Botany.  
 Thesis: The Daily Growth of the Oat Kernel and the Effect of Immaturity and Controlled Freezing Temperature on Germination. Published 1930 as University of Minnesota Agricultural Experiment Station Bulletin 62.  
 Major Adviser: Professor A. C. Arny.  
 Positions Held: Agronomist, 1927-1933, Extension Division, North Dakota Agricultural College, Fargo, North Dakota; Assistant Secretary, 1933—, Federal Land Bank of St. Paul.  
 Honors: Sigma Xi.  
 Address: 2122 Princeton Ave., St. Paul, Minnesota.
1930. ROTH, WALTER JOHN. B.S. '20, M.S. '22, University of Illinois.  
 Major: Farm Management: Minor: Economics.  
 Thesis: The Evolution of Farm Accounting in Germany. Not published.  
 Major Adviser: Professor A. Boss.  
 Positions Held: Social Science Research Council Fellowship for Foreign Study, 1928-1929; Senior Agricultural Economist, 1929-1936, U.S.D.A., Washington, D.C.; In Charge, Economic Research Section, 1936—, Soil Conservation Service, U.S.D.A., Washington, D.C.  
 Honors: Alpha Zeta; Gamma Sigma Delta.  
 Address: 2146 North Ute St., Arlington, Virginia.
1931. HIGGINS, FLOYD LINVILLE. B.S. '22, University of Missouri; M.S. '24, University of Minnesota.  
 Major: Agronomy. Minors: Plant Pathology and Plant Physiology.  
 Thesis: A Study of the Drying of Legume Hay Plants to Determine the Rôle of the Leaves in Drying the Stems and the Relation of Method of Drying to Loss of Leaves and to Chemical Composition. Published as University of Minnesota Technical Bulletin, no. 83.  
 Major Adviser: Professor A. C. Arny.  
 Positions Held: Agronomist, 1928-1933, United States Experiment Station, Matanuska, Alaska; Emergency County Agent, 1933-1935, Traverse County, Minnesota; Soil Conservationist, 1935—, U.S.D.A., Beaver Creek Project, Caledonia, Minnesota.  
 Address: Caledonia, Minnesota.
1931. JOHNSON, IVER JOHANNAS. B.S. '28, M.S. '29, University of Minnesota.  
 Major: Agronomy. Minor: Agricultural Biochemistry.  
 Thesis: The Relation of Plant and Seed Characters and of Agronomic Practice to the Quantity and Quality of Oil in Flaxseed. Published in *Journal of Agricultural Research*, 45:239-255, 1932.  
 Major Advisers: Professors A. C. Arny and H. K. Hayes.  
 Positions Held: Assistant Professor, 1931—, University of Minnesota.  
 Honors: Sigma Xi; Gamma Sigma Delta; Alpha Zeta.  
 Address: 1132 Raymond Ave., St. Paul, Minnesota.
1931. TYSDAL, HEWITT MERLIN. B.S.A. '24, University of Saskatchewan; M.S. '26, Kansas State Agricultural College.  
 Major: Agronomy. Minor: Plant Physiology.



Thesis: The Influence of Light, Temperature, and Moisture on the Hardening Process in Alfalfa. Published in *Journal of Agricultural Research*, 46:483-515, 1933.

Major Adviser: Professor A. C. Arny.

Positions Held: Associate Agronomist, 1930—, Bureau of Plant Industry, U.S.D.A., Professor of Agronomy, 1936—, University of Nebraska.

Address: University of Nebraska, Lincoln, Nebraska.

1932. SALMON, SAMUEL CECIL. B.S. '07, South Dakota State College; M.S. '23, Kansas State Agricultural College.

Major: Agronomy and Plant Genetics. Minor: Plant Physiology.

Thesis: Resistance of Varieties of Winter Wheat and Rye to Low Temperature in Relation to Winter Hardiness and Adaptation. Published as Kansas Agricultural Experiment Station Technical Bulletin, no. 35.

Major Advisers: Professors A. C. Arny and H. K. Hayes.

Positions Held: Agronomist, 1932—, Division of Cereal Crops and Diseases, U.S.D.A., Washington, D.C.

Address: 1403 Vermont St. N., Arlington, Vermont.

1934. HALL, DARL MERIDETH. B.S. '22, Iowa State College; M.S. '32, University of Minnesota.

Major: Agronomy. Minor: Agricultural Education.

Thesis: The Relationship between Certain Morphological Characters and Lodging in Corn. Published as University of Minnesota Technical Bulletin no. 103.

Major Adviser: Professor H. K. Wilson.

Positions Held: Associate Agronomist, 1935-1936, Personnel Officer, 1936-1937, U.S.D.A.; Project Supervisor and Assistant to Dean of Agriculture, 1937—, University of Illinois.

Honors: Sigma Xi; Gamma Sigma Delta; Sigma Alpha.

Address: 604 S. Busey, Urbana, Illinois.

1934. RALEIGH, STEPHEN MARTIN. B.S. '27, Kansas State Agricultural College.

Major: Agronomy. Minor: Plant Physiology.

Thesis: Environmental Factors Affecting Seed Setting in Sugar Beets. Published in *Journal of American Society of Agronomy*, 28:35-51, 1936.

Major Adviser: Professor H. K. Wilson.

Positions Held: Assistant Professor of Agronomy, 1934—, University of Maine.

Honors: Sigma Xi; Alpha Zeta.

Address: Orono, Maine.

1934. SMITH, DAVID CLYDE. B.S. '26, Utah State College; M.S. '28, Oregon State College.

Major: Agronomy and Plant Genetics. Minor: Plant Pathology.

Thesis: Correlated Inheritance in Oats of Reaction to Diseases and Other Characters. Published as University of Minnesota Technical Bulletin no. 102.

Major Adviser: Professor H. K. Hayes.

Positions Held: Assistant Professor of Farm Crops, 1934-1936, Oregon State College; Agent, 1936—, Bureau of Plant Industry, U.S.D.A., Washington State College, Pullman, Washington.

Honors: Sigma Xi.

Address: 24 Hillcrest Apartments, Pullman, Washington.

1936. McMICHAEL, SCOTT CLARENCE. B.S. '30, M.S. '32, State College of Washington.

Major: Agronomy. Minor: Plant Physiology.

Thesis: A Comparative Study of Strains of Sweet Clover (*Melilotus alba* Desr.). Not published.

Major Advisers: Professors H. K. Wilson and R. B. Harvey.

Positions Held: Junior Agronomist, 1935-1937, Soil Conservation Service, Assistant Agronomist, Bureau of Plant Industry, 1937—, U.S.D.A.

Honors: Sigma Xi; Phi Kappa Phi; Phi Sigma.

Address: U. S. Field Station, Shafter, California.

1937. STEVENSON, TRUEMAN M. B.S.A. '23, M.S.A. '30, University of Saskatchewan.

Majors: Agronomy and Plant Genetics. Minor: Plant Pathology.

Thesis: Sweet Clover Studies on Habit of Growth, Seed Pigmentation and Permeability of the Seed Coat. Published in *Scientific Agriculture*, 17:10, 1937.

Major Adviser: Professor H. K. Hayes.

Positions Held: Agrostology Specialist, 1932—, Canada, Department of Agriculture.

Honors: Sigma Xi.

Address: Dominion Forage Crops Laboratory, Saskatoon, Saskatchewan, Canada.

#### ANIMAL HUSBANDRY

1932. SOMMERFELD, HOWARD BRUNO. B.S. '21, University of Wisconsin; M.S. '22, University of Saskatchewan.

Major: Animal Husbandry. Minor: Agricultural Economics.

Thesis: Farm Power in Manitoba. A Study of the Production of Horses and the Comparative Utilization of Animal and Mechanical Power. Published in Proceedings of the World's Grain Show held at Regina, Saskatchewan, Canada, in 1932.

Major Adviser: Professor W. H. Peters.

Positions Held: Farm Manager and Rural Appraiser, 1932—, Col. Finance Corporation of Canada, Limited, 460 Main St., Winnipeg.

Honors: Gamma Sigma Delta.

Address: 460 Main Street, Winnipeg, Manitoba, Canada.

1933. CLARK, RICHARD TURNBULL. B.S. '29, University of Manitoba; M.S. '31, University of Minnesota.

Majors: Animal Husbandry and Zoology. Minor: Genetics.

Thesis: Studies of the Physiology of Reproduction in the Sheep, I. Twinning and the Practice of Flushing, II. The Early Embryology of the Sheep. Published in *Anatomical Record*, Vol. 60, no. 2, 1934.

Major Advisers: Professors L. M. Winters and A. R. Ringoen.

Positions Held: Graduate School Fellow, 1933-1934, Instructor in Animal Breeding, 1934-1937, University of Minnesota; Animal Geneticist, 1937—, Montana Agricultural Experiment Station.

Honors: Sigma Xi.

Address: Montana Agricultural Experiment Station, Bozeman, Montana.

1933. JOHNSON, DONALD WAYNE. B.S. '28, Iowa State College; M.S. '29, University of Minnesota.  
Major: Animal Husbandry. Minor: Biochemistry.  
Thesis: A Study of the Nutritive Deficiencies of the Rye Grain. Published in *Journal of Agricultural Research*, 49:169, 1934.  
Major Advisers: Professors E. F. Ferrin and L. S. Palmer.  
Positions Held: Instructor, 1933-1935, Assistant Professor, 1935—, University of Minnesota.  
Honors: Sigma Xi.  
Address: University of Minnesota, Minneapolis, Minnesota.
1935. AUBEL, CLIFF ERRETT. B.S. '15, Pennsylvania State College; M.S. '17, Kansas State College.  
Major: Animal Husbandry. Minor: Agricultural Biochemistry.  
Thesis: The Requirements of Phosphorus in the Ration of Growing Pigs. Published as Kansas Experiment Station Technical Bulletin no. 41.  
Major Adviser: Professor W. H. Peters.  
Positions Held: Associate Professor, Animal Husbandry, 1932—, Kansas State College.  
Honors: Sigma Xi; Gamma Sigma Delta; Alpha Zeta; Phi Kappa Phi.  
Address: 323 N. 15th St., Manhattan, Kansas.
1937. BRADY, DANIEL ELLSWORTH. B.S. '32, University of Minnesota.  
Major: Animal Husbandry. Minor: Agricultural Biochemistry.  
Thesis: Some Histological and Chemical Factors Affecting the Texture and Tenderness of Beef. Published in *Proceedings of the American Society of Animal Production*, November 1937.  
Major Adviser: Professor W. H. Peters.  
Positions Held: Instructor, 1937-1938, Michigan State College, East Lansing, Michigan; Assistant Professor, 1938—, University of Idaho.  
Address: University of Idaho, Moscow, Idaho.

## DAIRY HUSBANDRY

1925. BECHDEL, SAMUEL IRVIN. B.S. '11, M.S. '16, Pennsylvania State College.  
Major: Dairy Husbandry. Minor: Agricultural Biochemistry.  
Thesis: The Vitamin B Requirement of the Calf. Published in *Journal of Dairy Science*, 9:409-438, 1926.  
Major Adviser: Professor C. H. Eckles.  
Positions Held: Professor of Dairy Production, 1925—, Pennsylvania State College.  
Honors: Sigma Xi; Gamma Sigma Delta; Fellow of the A.A.A.S.; Phi Kappa Phi; Gamma Alpha.  
Address: Department of Dairy Husbandry, Pennsylvania State College, State College, Pennsylvania.
1925. BECKER, RAYMOND BROWN. B.S. '16, M.S. '20, Iowa State College.  
Major: Dairy Husbandry. Minor: Agricultural Biochemistry.  
Thesis: A Mineral Deficiency in the Rations of Cattle. Published 1926 as University of Minnesota Agricultural Station Bulletin 229.

Major Adviser: Professor C. H. Eckles.

Positions Held: Associate in Dairy Husbandry, 1925-1928, Oklahoma Agricultural and Mechanical College, Stillwater, Oklahoma; Associate in Dairy Husbandry, 1929-1934, Florida Agricultural Experiment Station, Gainesville, Florida; Professor of Dairy Husbandry and Animal Nutrition, 1934—, University of Florida.

Address: Florida Agricultural Experiment Station, Gainesville, Florida.

1925. JONES, IDWAL RALPH. B.S. '20, Pennsylvania State College; M.S. 21, Rutgers College.

Major: Dairy Husbandry. Minor: Agricultural Biochemistry.

Thesis: The Rôle of Vitamin A in the Nutrition of Calves. Published in *Journal of Dairy Science*, 9:119-139, 1926.

Major Adviser: Professor C. H. Eckles.

Positions Held: Assistant Professor of Dairy Husbandry, 1925-1929, Associate Professor, 1929—, Oregon State Agricultural College.

Honors: Sigma Xi; Gamma Sigma Delta.

Address: 2759 Arnold Way, Corvallis, Oregon.

1928. COLE, HAROLD HARRISON. B.S. '20, University of Wisconsin; M.S. '25, University of California.

Major: Dairy Husbandry. Minor: Agricultural Biochemistry.

Thesis: Cyclic Changes Occurring in the Mucosa of the Genital Tract of the Cow and Correlated Changes in Other Genital Organs. Published in *American Journal of Anatomy*, 46:261-301, 1930.

Major Advisers: Professors C. H. Eckles and C. M. Jackson.

Positions Held: Instructor, 1928-1929, Assistant Professor 1929-1935, Associate Professor, 1935—, Department of Animal Husbandry, University of California.

Address: 601 E St., Davis, California.

1928. HENDERSON, HARRY ORAM. B.S. '15, M.S. '16, Pennsylvania State College.

Major: Dairy Husbandry. Minor: Agricultural Biochemistry.

Thesis: The Effect of Feeding Different Amounts of Calcium and Phosphorus upon the Growth and Development of Dairy Animals. Published Morgantown, West Virginia, as West Virginia Agricultural Experiment Station Bulletin 231, March 1930.

Major Adviser: Professor C. H. Eckles.

Positions Held: Professor of Dairy Husbandry and Dairy Husbandman, Agricultural Experiment Station, 1928—, West Virginia University.

Honors: Sigma Xi.

Address: 424 Grand St., Morgantown, West Virginia.

1928. PETERSEN, WILLIAM EARL. B.S. '16, M.S. '17, University of Minnesota.

Major: Dairy Husbandry. Minor: Agricultural Biochemistry.

Thesis: A Study of Milk Fat Synthesis and Secretion. Published in *American Journal of Physiology*, 90:573-599, 1929.

Major Advisers: Professors C. H. Eckles and L. S. Palmer.

- Positions Held: Associate Professor of Dairy Husbandry, 1929—, University of Minnesota.  
Honors: Gamma Sigma Delta; Lambda Gamma Delta; Alpha Zeta; Sigma Xi.  
Address: 1447 Chelmsford St., St. Paul, Minnesota.
1928. THURSTON, LLOYD MASSENA. B.A. '22, Michigan Agricultural College.  
Major: Dairy Husbandry. Minor: Agricultural Biochemistry.  
Thesis: The Rôle of the Antiscorbutic Vitamin in the Nutrition of Calves. Published in *Journal of Dairy Science*, Vol. 9, January, 1926, and Vol. 12, September, 1929.  
Major Adviser: Professor C. H. Eckles.  
Positions Held: Assistant Professor of Dairy Husbandry, 1929-1931, Associate Professor, 1931-1936, West Virginia University; Professor of Dairy Manufactures, 1936—, University of Florida.  
Address: 737 E. Boundary St., Gainesville, Florida.
1930. RIGOR, TOMAS VALDEZ. B.S. '26, M.S. '27, University of Minnesota.  
Major: Dairy Husbandry. Minor: Agricultural Biochemistry.  
Thesis: The Effect of Pressure on the Udder upon the Rate and Quality of Milk Secretion. Published in *Proceedings of the Society for Experimental Biology and Medicine*, 30:254, 257, 1932.  
Major Adviser: Professor C. H. Eckles.  
Positions Held: Assistant in Chemistry, 1931-1932, University of the Philippines; Farm Adviser, 1932-1934, Cullion Leper Colony, Bureau of Health; Assistant Animal Husbandman, 1934-1938, Animal Husbandman, 1938—, Bureau of Animal Industry.  
Address: Victoria, Tarlac, Philippines.
1932. RIDDELL, WILLIAM HUGH. B.S.A. '22, University of British Columbia; M.S. '24, University of Minnesota.  
Major: Dairy Husbandry. Minor: Agricultural Biochemistry.  
Thesis: The Relation of Phosphorus Deficiency to the Utilization of Feed. Published as Kansas Experiment Station Technical Bulletin, no. 36.  
Major Adviser: Professor C. H. Eckles.  
Positions Held: Associate Professor, 1932—, Kansas State College.  
Honors: Sigma Xi; Gamma Sigma Delta; Alpha Zeta.  
Address: Dairy Department, Kansas State College, Manhattan, Kansas.
1933. COULTER, SAMUEL TODD. B.S. '25, Oregon State College; M.S. '30, University of Minnesota.  
Major: Dairy Husbandry. Minor: Agricultural Biochemistry.  
Thesis: The Relation of Silage to the Composition of the Butterfat, Churning Qualities of the Cream and Keeping Qualities of the Butter. Published in *Journal of Dairy Science*, 17:543-550, 551-557, 1934.  
Major Adviser: Professor C. H. Eckles.  
Positions Held: Instructor, 1933-1935, Assistant Professor, 1935—, University of Minnesota.  
Honors: Sigma Xi.  
Address: 1416 Raymond Ave., St. Paul, Minnesota.

1933. HERREID, ERNEST OLIVER. B.S. '27, South Dakota State College.  
Major: Dairy Husbandry. Minor: Agricultural Biochemistry.  
Thesis: The Microbiology of Cheese-Like Flavors in Unsalted Butter. Published as University of Minnesota Agricultural Experiment Station Technical Bulletin, no. 97.  
Major Adviser: Professor C. H. Eckles.  
Positions Held: Instructor, 1929-1936, Dairy Husbandry, University of Minnesota; Assistant Professor, 1936-1937, Associate Professor, 1937—, Dairy Husbandry, University of Vermont.  
Honors: Alpha Zeta; Gamma Alpha; Gamma Sigma Delta; Sigma Xi.  
Address: Dairy Department, University of Vermont, Burlington, Vermont.
1933. HILL, OTTO JULIUS. B.S. '23, Washington State College; M.S. '30, Pennsylvania State College.  
Major: Dairy Husbandry. Minor: Agricultural Biochemistry.  
Thesis: A Study of the Relation of the Feed Consumed by the Cow to the Composition of Milk Fat and the Properties of Butter. Published in *Journal of Dairy Science*, 17:543-550, 1934.  
Major Advisers: Professors C. H. Eckles and L. S. Palmer.  
Positions Held: Extension Dairyman, 1933—, Washington State College.  
Honors: Sigma Xi.  
Address: Agricultural Extension Division, Washington State College, Pullman, Washington.
1933. WILLARD, HAROLD SIBLEY. B.S. '17, University of Minnesota; M.S. '27, Iowa State College.  
Major: Dairy Husbandry. Minor: Biochemistry.  
Thesis: Factors Influencing the Palatability of Hay. Published in Wyoming Agricultural Experiment Station Bulletin, no. 199, November 1933.  
Major Adviser: Professor W. E. Petersen.  
Positions Held: Associate Professor, 1933—, Associate Animal Husbandman, 1933—, University of Wyoming.  
Honors: Sigma Xi.  
Address: Animal Production Department, University of Wyoming, Laramie, Wyoming.
1934. GULLICKSON, THOR WILHELM. B.S. '18, M.S. '22, University of Minnesota.  
Major: Dairy Husbandry. Minor: Agricultural Biochemistry.  
Thesis: A Study of the Etiology of Rachitic-Like Syndrome Occurring in Beef and Dairy Calves under Farm Conditions. Published as Minnesota Agricultural Experiment Station Technical Bulletin, no. 105.  
Major Adviser: Professor L. S. Palmer.  
Positions Held: Assistant Professor in Dairy Husbandry, 1934—, University of Minnesota.  
Honors: Sigma Xi.  
Address: 1346 Raymond Ave., St. Paul, Minnesota.
1934. WALLIS, GEORGE CARROLL. B.S. '23, South Dakota State College; M.S. '31, University of Minnesota.  
Major: Dairy Husbandry. Minor: Agricultural Biochemistry.

Thesis: The Relation of Vitamin D to Calcium and Phosphorus Retention in Cattle as Shown by Balance Trials. Published in *Journal of Dairy Science*, 18:213-228, 1935.

Major Advisers: Professors C. H. Eckles and L. S. Palmer.

Positions Held: Instructor, 1934-1935, Research Assistant, 1935-1937, Assistant Professor, 1937—, Department of Dairy Husbandry, South Dakota State College.

Honors: Sigma Xi; Gamma Sigma Delta; Alpha Zeta; Pi Kappa Delta.

Address: Dairy Department, South Dakota State College, Brookings, South Dakota.

1935. ALLEN, NATHANIEL NEWTON, JR. B.S. '29, University of Missouri. Major: Dairy Husbandry. Minor: Agricultural Biochemistry.

Thesis: Blood Fat in Dairy Cattle: I. A Simple Volumetric Method for Blood Fat Determination; II. Blood Fat as Related to Various Physiological and Environmental Factors. Published in *Minnesota Agricultural Experiment Station Technical Bulletin*, no. 130.

Major Adviser: Professor W. E. Petersen.

Positions Held: Instructor, 1929—, University of Minnesota.

Honors: Sigma Xi.

Address: 3000 N. Hamline, Como Station, St. Paul, Minnesota.

1936. KELLY, PHILIP LAUREN. B.S. '30, University of Minnesota.

Major: Dairy Husbandry. Minor: Biochemistry.

Thesis: Studies on the Site of Fat Synthesis in the Mammary Gland. Not published.

Major Adviser: Professor W. E. Petersen.

Positions Held: Assistant Professor, 1936—, University of Arkansas.

Address: Department of Animal Industry, University of Arkansas, Fayetteville, Arkansas.

1937. DAHLE, CHESTER DISTAD. B.S. '20, M.S. '21, University of Minnesota.

Major: Dairy Husbandry. Minor: Agricultural Biochemistry.

Thesis: A Study of an Off-Flavor in Milk of the Tallowy Type Direct from the Individual Cow. Published as *Pennsylvania Agricultural Experiment Station Technical Bulletin* no. 347.

Major Adviser: Professor L. S. Palmer.

Positions Held: Professor of Dairy Husbandry, and Head of Dairy Manufacturing Division, 1929—, Pennsylvania State College.

Honors: Sigma Xi; Alpha Zeta; Gamma Sigma Delta.

Address: 628 Locust Lane, State College, Pennsylvania.

1937. WISE, GEORGE HERMAN. B.S. '30, Clemson Agricultural College; M.S. '32, University of Minnesota.

Major: Dairy Husbandry. Minor: Agricultural Biochemistry.

Thesis: Physiological Changes, with Special Reference to Blood Composition, Observed in Calves Fed Supplemented and Unsupplemented Whole Milk Diets. Not published.

Major Adviser: Professor W. E. Petersen.

Positions Held: Associate in Dairy Husbandry, 1937—, South Carolina Agricultural Experiment Station, Clemson, South Carolina.

Honors: Sigma Xi; Gamma Alpha; Gamma Sigma Delta; Alpha Zeta.

Address: Saluda, South Carolina.

1938. SHAW, JOSEPH CLEMENT. B.S. '30, Iowa State College; M.S. '33, Montana State College.

Major: Dairy Husbandry. Minor: Agricultural Biochemistry.

Thesis: Blood Composition and Milk Secretion. Published in *Proceedings of the Society of Biology and Medicine*, 38:579, 632, 1928.

Major Adviser: Professor W. E. Petersen.

Positions Held: Research Assistant, 1937—, Division of Dairy Husbandry, University of Minnesota.

Honors: Sigma Xi; Alpha Zeta; Pi Kappa Phi.

Address: 2089 Carter Ave., St. Paul, Minnesota.

1938. WEAVER, EARL. B.S. '13, Oklahoma Agricultural and Mechanical College; M.S. '17, Iowa State College.

Major: Dairy Husbandry. Minor: Agricultural Biochemistry.

Thesis: Physiological Factors Affecting Milk Flavor with a Consideration of the Validity of Flavor Scores. Not published.

Major Adviser: Professor W. E. Petersen.

Positions Held: Head, Department of Dairy Husbandry, 1938—, Michigan State College.

Address: Michigan State College, East Lansing, Michigan.

#### FORESTRY

1933. CHASE, WARREN WILLIAM. B.A. '26, Macalester College; M.S. '28, University of Minnesota.

Majors: Forestry and Plant Physiology. Minor: Botany.

Thesis: The Composition, Quantity and Physiological Significance of Gases in Tree Stems. Published as University of Minnesota Agricultural Experiment Station Technical Bulletin, no. 99.

Major Advisers: Professors Henry Schmitz and R. B. Harvey.

Positions Held: Instructor in Forestry, 1933-1934, University of Minnesota;

Forester, 1934-1936, Soil Conservation Service, La Crosse, Wisconsin; Biologist, 1936—, Soil Conservation Service, Des Moines, Iowa.

Honors: Xi Sigma Pi; Phi Sigma; Sigma Xi.

Address: 3000 School Street, Des Moines, Iowa.

1937. LI, YING-CHEN. B.S. '27, National Southeastern University; M.S. '37, University of Minnesota.

Major: Forestry (Silviculture). Minors: Forestry (Forest Management) and Botany.

Thesis: Comparative Studies of the Germination and Development of the Seedlings of *Pinus Banksiana* (Jack Pine) and *Pinus Resinosa* (Norway Pine) under Various Natural and Artificial Conditions. Not published.

Major Adviser: Professors E. G. Cheyney.

Positions Held: Assistant, 1937—, Bureau of Reconstruction, China.

Honors: Sigma Xi.

Address: Bureau of Reconstruction, Cheng-Tu-Chuan, China.



## HOME ECONOMICS

1932. HUNT, HOPE HILARY. B.A. '19, University of Toronto; M.S. '25, Teachers College, Columbia University.  
 Major: Home Economics. Minor: Physiology.  
 Thesis: A Study of Some Physiological Effects of Ultra Violet Irradiations on Normal Adults. Published in *Radiology*, 22:318-329, 1934.  
 Major Adviser: Professor Jane Leichsenring.  
 Positions Held: Instructor, 1932—, University of Minnesota.  
 Address: 1408 Hythe St., St. Paul, Minnesota.

## HORTICULTURE

1917. VALLEAU, WILLIAM DORNEY. B.S. '13, University of Minnesota.  
 Major: Horticulture. Minor: Plant Pathology.  
 Thesis: A Study of Sterility in the Strawberry. Published in *Journal of Agricultural Research*, Vol. 12, no. 10, 1918.  
 Major Adviser: Professor M. J. Dorsey.  
 Positions Held: Assistant in Plant Breeding, 1915-1919, University of Minnesota; Plant Pathologist and Professor of Plant Pathology, 1919—, University of Kentucky.  
 Honors: Sigma Xi.  
 Address: 1041 South Limestone, Lexington, Kentucky.
1924. KRANTZ, FRED ALFRED. B.S. '18, M.S. '21, University of Minnesota.  
 Major: Horticulture. Minor: Plant Breeding.  
 Thesis: Potato Breeding Methods. Published 1925 as University of Minnesota Agricultural Experiment Station Bulletin 25.  
 Major Adviser: Professor W. H. Alderman.  
 Positions Held: Assistant Professor of Horticulture, 1919-1935, Associate Professor, 1935-1937, Professor, 1937—, Department of Horticulture, University of Minnesota.  
 Honors: Sigma Xi; Gamma Sigma Delta.  
 Address: 132 East Langford Park Place, St. Paul, Minnesota.
1925. BEAUMONT, JOHN HERBERT. B.S. '17, University of West Virginia.  
 Major: Horticulture. Minor: Botany.  
 Thesis: The Course of Pollen-Tube Growth in the Apple. Published 1927 in *Minnesota Studies in Plant Science, Studies in the Biological Sciences*, no. 6, 373-399.  
 Major Advisers: Professors H. K. Hayes and W. H. Alderman.  
 Positions Held: Assistant Professor, 1925-1928, University of Minnesota; Professor and Head of Department of Horticulture, 1928-1932, North Carolina State College of Agriculture and Engineering, Raleigh, North Carolina; Professor and Head of Department, 1932-1936, University of Maryland; Professor and Head of Department, 1936—, University of Hawaii.  
 Address: Honolulu, Territory of Hawaii.
1925. SHOEMAKER, JAMES SHELDON. B.S.A. '21, M.S. '22, University of Toronto.  
 Major: Horticulture. Minor: Plant Physiology.

Thesis: Pollen Development in the Apple with Special Reference to Chromosome Behavior. Published in *Botanical Gazette*, 81:148-172, 1926.

Major Adviser: Professor W. H. Alderman.

Positions Held: Assistant Horticulturist, 1925-1926, Associate Horticulturist, 1926-1934, Ohio Experiment Station, Wooster, Ohio; Assistant Professor, 1929-1934, Ohio State University, Columbus, Ohio; Professor of Horticulture and Head of Department, 1934—, University of Alberta.

Address: University of Alberta, Edmonton, Alberta, Canada.

1926. HILDRETH, AUBREY CLARE. B.S. '17, West Virginia University.

Major: Horticulture. Minor: Botany.

Thesis: Determination of Hardiness in Apple Varieties and the Relation of Some Factors to Cold Resistance. Published as Minnesota Agricultural Experiment Station Technical Bulletin, no. 42.

Major Advisers: Professors W. H. Alderman and R. B. Harvey.

Positions Held: Instructor in Horticulture, 1926-1927, University of Minnesota; Associate Biologist, 1927-1930, Maine Agricultural Experiment Station, Orono, Maine; Superintendent of Cheyenne Horticultural Field Station, U.S.D.A., 1930—.

Honors: Fellow of the A.A.A.S.; Sigma Xi; Gamma Alpha; Gamma Sigma Delta.

Address: Horticultural Field Station, Cheyenne, Wyoming.

1927. TRAUB, HAMILTON PAUL. B.A. '22, M.S. '24, University of Minnesota.

Major: Horticulture. Minor: Botany (Plant Physiology).

Thesis: The Regional and Seasonal Distribution of Moisture, Carbohydrates, Nitrogen, and Ash, in 2-3 Year Portions of Apple Twigs. Published as University of Minnesota Agricultural Experiment Station Technical Bulletin no. 53.

Major Advisers: Professors W. H. Alderman and R. B. Harvey.

Positions Held: Assistant Horticulturist, 1927-1928, University of Minnesota Agricultural Experiment Station; Chief of Division of Horticulture, 1928-1930, Texas Agricultural Experiment Station; Horticulturist, 1930-1933, Senior Horticulturist, 1933-1938, Principal Horticulturist, 1938—, Bureau of Plant Industry, U.S.D.A.

Honors: Sigma Xi; Gamma Sigma Delta; Fellow of the A.A.A.S.

Address: Mira Flores, Orlando, Florida.

1931. MARSHALL, ROY EDGAR. B.S. '13, University of Nebraska; M.S. '15, Oregon Agricultural College.

Major: Horticulture. Minor: Botany.

Thesis: The Fruiting Habit of the Peach as Influenced by Pruning Practices. Published as Michigan State College Agricultural Experiment Station Bulletin no. 116.

Major Adviser: Professor W. H. Alderman.

Positions Held: Associate Professor of Horticulture, Research Associate, 1920-1934, Professor of Pomology, 1934—, Michigan State College; Professor of Horticulture and Acting Head of Department, 1935-1936, Washington State College.

Honors: Sigma Xi.

Address: Michigan State College, East Lansing, Michigan.

1933. HUTCHINS, ARTHUR EUGENE. B.S. '25, University of Minnesota.  
Major: Horticulture. Minor: Botany.  
Thesis: Morphological Relationships in the Ontogeny of the Cultivated Cucumber, *Cucumis sativus* L. Published as University of Minnesota Agricultural Experiment Station Technical Bulletin no. 96.  
Major Adviser: Professor F. A. Krantz.  
Positions Held: Instructor in Horticulture, 1928—, University of Minnesota.  
Honors: Sigma Xi; Gamma Sigma Delta; Gamma Alpha; Alpha Zeta.  
Address: 2217 Scudder Ave., St. Paul, Minnesota.
1934. ANGELO, ERNEST. B.S.A. '19, University of West Virginia; M.S. '25, Cornell University.  
Major: Horticulture. Minor: Plant Physiology.  
Thesis: Hardiness Studies of Strawberry Varieties. Not published.  
Major Advisers: Professors R. B. Harvey and W. H. Alderman.  
Positions Held: Instructor in Horticulture, 1930-1938, University of Minnesota; Agent, 1938—, U.S.D.A.  
Honors: Sigma Xi; Alpha Zeta; Gamma Alpha.  
Address: Bogalusa, Louisiana.
1937. BECKER, CATHARINE LUNT. B.S. '31, M.S. '32, University of Minnesota.  
Major: Horticulture. Minor: Botany.  
Thesis: Inheritance Studies in the Interspecific Cross *Solanum demissum* Lindl. x *S. tuberosum* L. Published in *Journal of Agricultural Research*, 1938.  
Major Advisers: Professors F. A. Krantz and W. H. Alderman.  
Positions Held: Research Assistant, 1938, Division of Horticulture, University of Minnesota; Horticulturist, 1938—, Fresno, California.  
Address: 1331 Lucerne Ave., Fresno, California.

## PLANT GENETICS

1924. GRIFFEE, FRED. B.S. '19, Kansas State Agricultural College; M.S. '20, University of Minnesota.  
Major: Plant Breeding. Minor: Plant Pathology.  
Thesis: Correlated Inheritance in Barley of Botanical Characters and Manner of Reaction to *Helminthosporium sativum*. Published in *Journal of Agricultural Research*, 30:915-935, 1925.  
Major Adviser: Professor H. K. Hayes.  
Positions Held: Assistant in Plant Breeding, 1924-1925, University of Minnesota; Professor of Plant Breeding, 1925-1928, Oklahoma Agricultural and Mechanical College, Stillwater, Oklahoma; Biologist, 1928-1931, Head of Department of Biology, 1928-1930, Assistant Director, 1930-1931, Director, 1931—, Maine Agricultural Experiment Station.  
Honors: Fellow of the A.A.A.S.; Sigma Xi; Gamma Sigma Delta; Alpha Zeta; Phi Kappa Phi; Gamma Alpha.  
Address: Maine Agricultural Experiment Station, Orono, Maine.
1924. HARRINGTON, JAMES BISHOP. B.S.A. '20, University of Saskatchewan; M.S. '22, University of Minnesota.  
Major: Plant Breeding. Minors: Plant Pathology and Plant Physiology.

- Thesis: The Inheritance of Resistance to *Puccinia graminis* in Crosses between Varieties of Durum Wheat. Published in *Scientific Agriculture*, Vol. 5, no. 9, May 1925.  
 Major Adviser: Professor H. K. Hayes.  
 Positions Held: Assistant Professor of Field Husbandry, 1924-1928, Professor, 1929—, University of Saskatchewan.  
 Honors: Sigma Xi.  
 Address: 1032 Aird St., Saskatoon, Saskatchewan.
1925. GOULDEN, CYRIL HAROLD. B.S.A. '21, M.S.A. '23, University of Saskatchewan.  
 Major: Plant Breeding. Minors: Plant Pathology and Biochemistry.  
 Thesis: A Genetic and Cytological Study of Dwarfing in Wheat and Oats. Published 1925 as University of Minnesota Agricultural Experiment Station Technical Bulletin 33.  
 Major Adviser: Professor H. K. Hayes.  
 Positions Held: Senior Cereal Specialist, 1925—, Dominion Rust Research Laboratory.  
 Address: Dominion Rust Research Laboratory, Winnipeg, Manitoba.
1926. BREWBAKER, HARVEY EDGAR. B.S. '21, University of Illinois; M.S. '23, University of Minnesota.  
 Major: Plant Breeding. Minor: Botany.  
 Thesis: Studies of Self-Fertilization in Rye. Published 1926 as University of Minnesota Agricultural Experiment Station Technical Bulletin 40.  
 Major Adviser: Professor H. K. Hayes.  
 Positions Held: Instructor, 1926-1927, Assistant Professor, 1927-1930, University of Minnesota; Associate Agronomist, 1930-1937, Sugar Plants, U.S.D.A.; Agronomist, 1937—, Great Western Sugar Company.  
 Honors: Fellow of the A.A.A.S.; Sigma Xi; Gamma Sigma Delta; Alpha Zeta.  
 Address: Route No. 2, Longmont, Colorado.
1926. STEWART, GEORGE. B.S. '13, Utah Agricultural College; M.S. '18, Cornell University.  
 Major: Plant Breeding. Minors: Agronomy and Biochemistry.  
 Thesis: Correlated Inheritance in Wheat. Published in *Journal of Agricultural Research*, Vol. 33, no. 12, December 15, 1926.  
 Major Adviser: Professor H. K. Hayes.  
 Positions Held: Professor, Head of Agronomy Department, 1919-1930, Utah Agricultural College, Logan, Utah; Agronomist in Charge, 1925-1930, Utah Agricultural Experiment Station; Senior Forest Ecologist, 1930—, Intermountain Forest and Range Experiment Station, United States Forest Service, Ogden, Utah; Collaborating Agronomist and Botanist, 1932—, Brigham Young University, Provo, Utah; Special Lecturer, 1933—, Brigham Young University; Special Lecturer, 1935—, University of Utah.  
 Honors: Sigma Xi; Alpha Zeta; Phi Kappa Phi.  
 Address: Intermountain Forest and Range Experiment Station, Ogden, Utah.
1927. AAMODT, OLAF SVERRE. B.S. '17, M.S. '22, University of Minnesota.  
 Major: Plant Breeding. Minor: Plant Pathology.

- Thesis: A Study of the Growth Habit and Rust Reaction in Crosses between Marquis, Kota, and Kanred Wheats. Published in *Phytopathology*, Vol. 17, no. 9, September 1927.
- Major Adviser: Professor H. K. Hayes.
- Positions Held: Associate Plant Pathologist, 1923-1928, Division of Cereal Crops and Diseases, U.S.D.A.; Associate Professor of Genetics and Plant Breeding, 1928-1931, Professor, 1931-1935, University of Alberta, Edmonton, Alberta; Professor, Chairman, Department of Agronomy, 1935—, University of Wisconsin.
- Honors: American Society of Naturalists; Fellow, American Society of Agronomy.
- Address: Department of Agronomy, University of Wisconsin, Madison, Wis.
1927. CLARKE, SYDNEY EDWARD. B.S.A. '20, University of Manitoba; M.S. '25, University of Minnesota.
- Major: Plant Breeding. Minor: Plant Pathology.
- Thesis: Self-Fertilization in Timothy. Published in *Scientific Agriculture*, Vol. 7, no. 11, July 1927.
- Major Adviser: Professor H. K. Hayes.
- Positions Held: Agrostologist in Charge of Range Pasture Investigations in Saskatoon and Alberta; in Charge of Pasture Studies and Forage Crops, 1926—, Dominion Range Experiment Station, Manyberries, Alberta.
- Honors: F.R.S.A., London, England.
- Address: Manyberries, Alberta, Canada.
1927. IMMER, FORREST REINHART. B.S. '24, M.S. '25, University of Minnesota.
- Major: Plant Breeding. Minors: Agronomy and Botany.
- Thesis: Inheritance of Reaction to *Ustilago Zeae* in Maize. Published 1927 as University of Minnesota Agricultural Experiment Station Technical Bulletin 51.
- Major Adviser: Professor H. K. Hayes.
- Positions Held: Instructor, 1927-1929, Assistant Professor, 1929-1930, University of Minnesota; National Research Council Fellowship for Foreign Study, 1930-1931; Associate Geneticist, U.S.D.A., 1930-1935, University Farm, St. Paul, Minnesota; Associate Professor, 1935-1937, Professor, 1937—, University of Minnesota.
- Honors: Sigma Xi; Gamma Sigma Delta.
- Address: 1298 Raymond Ave., St. Paul, Minnesota.
1927. KIRK, LAWRENCE ELDRED. B.S. '17, M.S. '22, University of Saskatchewan.
- Major: Plant Breeding. Minors: Agronomy and Plant Physiology.
- Thesis: Self-Fertilization in Relation to Forage Crop Improvement. Published in *Scientific Agriculture*, 8:1-40, September 1927.
- Major Adviser: Professor H. K. Hayes.
- Positions Held: Professor of Field Husbandry, 1927-1929, Senior Professor, 1929-1931, University of Saskatchewan; Dominion Agrostologist, 1931-1937, Division of Forage Plants, Experimental Farms Branch, Department of Agriculture, Ottawa, Ontario; Dean of Agriculture, 1937—, University of Saskatchewan.
- Address: University of Saskatchewan, Saskatoon, Saskatchewan, Canada.

1928. ROBERTSON, DAVID WIELD. B.S.A. '18, University of Manitoba; M.S. '20, University of Minnesota.  
 Major: Plant Genetics. Minors: Soils and Plant Pathology.  
 Thesis: Linkage Studies in Barley. Published in *Genetics*, 14:1-36, January 1929.  
 Major Adviser: Professor H. K. Hayes.  
 Positions Held: Associate Agronomist, 1920-1937, Agronomist, 1937—, Colorado Agricultural College.  
 Honors: Sigma Xi; Phi Kappa Phi; Fellow of the A.A.A.S.; Gamma Sigma Delta.  
 Address: Agronomy Section, Colorado Experiment Station, Fort Collins, Colo.
1929. JORGENSON, LOUIS ROBERT. B.S. '18, North Dakota Agricultural College; M.S. '27, University of Minnesota.  
 Major: Plant Genetics. Minor: Plant Pathology.  
 Thesis: Brown Midrib in Maize and Its Linkage Relations. Published as Paper 1000, Journal Series of the Minnesota Agricultural Experiment Station.  
 Major Adviser: Professor H. K. Hayes.  
 Positions Held: Assistant Agronomist, 1928-1929, U.S.D.A.; Agronomist, 1930—, Milford Canning Company, Milford, Illinois.  
 Address: Milford, Illinois.
1929. WILCOX, ARTHUR NOBLE. B.S. '19, University of Wisconsin; M.S. '22, University of Minnesota.  
 Major: Plant Genetics. Minor: Plant Physiology.  
 Thesis: Some Factors Influencing the Longevity and Viability of Pollen. Not published.  
 Major Adviser: Professor H. K. Hayes.  
 Positions Held: Assistant Professor of Horticulture, 1929—, University of Minnesota.  
 Honors: Fellow of the A.A.A.S.; Gamma Sigma Delta; National Research Fellow, 1933-1934, John Innes Horticultural Institution, London, England.  
 Address: 1399 Raymond Ave., St. Paul, Minnesota.
1930. DAANE, ADRIAN. Ph.B. '13, M.S. '14, University of Wisconsin.  
 Major: Plant Genetics. Minor: Agricultural Biochemistry.  
 Thesis: Linkage Relations in Barley. Published 1931 as University of Minnesota Agricultural Experiment Station Bulletin 78.  
 Major Adviser: Professor H. K. Hayes.  
 Positions Held: Associate Agronomist, 1930-1936, Florida Agricultural Experiment Station, Belle Glade, Florida.  
 Deceased, July 1, 1937.
1930. McINDOE, KENNETH GILLIES. B.Agr. '25, B.S. '28, M.S. '29, University of New Zealand.  
 Major: Plant Genetics. Minor: Plant Pathology.  
 Thesis: The Inheritance of the Reaction of Maize to *Gibberella Saubinettii*. Published in *Phytopathology*, Vol. 21, no 6, June 1931.  
 Major Adviser: Professor H. K. Hayes.  
 Positions Held: In Charge of Research Department, 1931—, Firestone Plantation Company, Monrovia, West Africa.  
 Honors: Sigma Xi; Gamma Sigma Delta.  
 Address: Firestone Plantation Company, Monrovia, Liberia, West Africa.

1930. QUISENBERRY, KARL SPANGLER. B.S. '21, Kansas Agricultural College; M.S. '25, University of Minnesota.  
Major: Plant Genetics. Minor: Plant Pathology.  
Thesis: Inheritance of Winter Hardiness, Growth Habit, and Stem Rust Reaction in Crosses between Minhardi Winter and H-44 Spring Wheat. Published 1931 as U.S.D.A. Technical Bulletin 218.  
Major Adviser: Professor H. K. Hayes.  
Positions Held: Associate Agronomist, 1926-1931, Agronomist, 1931-1936, U.S. D.A., Washington, D.C.; Agronomist, 1936—, Division of Cereal Crops and Diseases, U.S.D.A., Lincoln, Nebraska; Professor of Agronomy, 1937—, University of Nebraska.  
Honors: Sigma Xi; Phi Kappa Phi; Alpha Zeta; Gamma Sigma Delta.  
Address: 1241 North 41st Street, Lincoln, Nebraska.
1931. NEATBY, KENNETH WILLIAM. B.S.A. '24, M.S.A. '26, University of Saskatchewan.  
Major: Plant Genetics. Minor: Plant Pathology.  
Thesis: Factor Relations in Wheat for Resistance to Groups of Physiologic Forms of *Puccinia graminis tritici*. Published in *Scientific Agriculture*, 12: 130-154, 1931.  
Major Adviser: Professor H. K. Hayes.  
Positions Held: Cereal Specialist, 1928-1935, Dominion Rust Research Laboratory, Winnipeg, Manitoba; Fellow, National Research Council, 1933-1934, Cambridge, England; Professor of Field Crops, 1935—, University of Alberta.  
Honors: Sigma Xi.  
Address: University of Alberta, Edmonton, Alberta.
1931. POWERS, LEROY. B.S. '24, Montana State College; M.S. '26, Washington State College.  
Major: Plant Genetics. Minors: Plant Pathology and Botany.  
Theses: Cytologic and Genetic Studies of Variability of Strains of Wheat Derived from Interspecific Crosses. Published in *Journal of Agricultural Research*, 44:793-831.  
Major Adviser: Professor H. K. Hayes.  
Positions Held: Assistant Professor, 1931-1934, Associate Professor, 1934-1935, Department of Plant Genetics, University of Minnesota; Senior Geneticist, 1935—, U.S.D.A.  
Honors: Sigma Xi; Alpha Zeta; Phi Kappa Phi; Gamma Alpha; Gamma Sigma Delta.  
Address: Horticultural Field Station, Cheyenne, Wyoming.
1931. THOMAS, HORACE LEROY. B.S. '26, Michigan State College.  
Major: Plant Genetics. Minor: Botany.  
Thesis: Glossy Seedling (gl<sub>3</sub>) in Maize and Its Linkage Relations. Published in *Journal of Agricultural Research*, 44:167, 1932.  
Major Adviser: Professor H. K. Hayes.  
Positions Held: Research Assistant, 1931-1932, University of Illinois; Instructor and Research Assistant, 1932-1933, University of Minnesota; Emergency Agricultural Assistant, 1933-1935, Agricultural Adjustment Administration; Agronomist, 1935—, Soil Conservation Service.  
Honors: Sigma Xi.  
Address: Caledonia, Minnesota.

1932. AUSEMUS, ELMER REX. B.S. '23, Kansas State Agricultural College; M.S. '24, State College of Washington.  
Major: Plant Genetics. Minor: Plant Pathology.  
Thesis: Correlated Inheritance in a Triangular Wheat Cross of Reaction to Diseases and Botanical Characters. Published in *Journal of Agricultural Research*, 48:31-57, 1934.  
Major Adviser: Professor H. K. Hayes.  
Positions Held: Associate Agronomist, 1929—, U.S.D.A., University of Minnesota Farm, St. Paul, Minnesota.  
Honors: Sigma Xi; Gamma Sigma Delta.  
Address: 2201 Carter Ave., St. Paul, Minnesota.
1933. HUMPHREY, LLEWELLYN MEALEY. B.S. '28, M.S. '31, University of Minnesota.  
Major: Plant Genetics. Minor: Botany.  
Thesis: The Meiotic Divisions of Haploid, Diploid and Tetraploid Tomatoes with Special Reference to the Prophase. Published in *Cytologia*, 5:278-300, 1934.  
Major Adviser: Professor H. K. Hayes.  
Positions Held: Instructor, 1931-1935, Iowa State College; Associate Professor of Agronomy, 1935—, University of Arkansas.  
Honors: Sigma Xi.  
Address: Agronomy Department, University of Arkansas, Fayetteville, Arkansas.
1933. PETERSON, RUDOLPH FREDERICK. B.S. '30, University of Manitoba; M.S. '31, University of Minnesota.  
Major: Plant Genetics. Minor: Plant Pathology.  
Thesis: The Improvement of Rye Through Inbreeding. Published in *Scientific Agriculture*, Vol. 14, no. 12, August 1934.  
Major Adviser: Professor H. K. Hayes.  
Positions Held: Assistant, 1933-1934, Dominion Rust Research Laboratory, Winnipeg, Manitoba; Cerealist, 1934-1935, Dominion Experimental Farm, Brandon, Manitoba; Cereal Specialist, 1935-1938, Senior Assistant Agricultural Scientist, 1938—, Dominion Rust Research Laboratory, Winnipeg, Manitoba.  
Honors: Sigma Xi; Gamma Sigma Delta.  
Address: 953 Oakenwald Ave., Fort Garry, Manitoba.
1934. KULKARNI, LAXMAN GOPAL. B.S.A. '28, University of Bombay, India.  
Major: Plant Genetics. Minor: Plant Physiology.  
Thesis: Correlated Inheritance with Special Reference to Disease Resistance in Spring Wheat. Published in *Journal of American Society of Agronomy*, 26: 885, 1934.  
Major Adviser: Professor H. K. Hayes.  
Positions Held: Assistant Botanist, 1934—, Himayat Sugar Farm, India.  
Address: Himayat Sugar Farm, Hydrabad, Deccan, India.
1935. PAN, CHIEN-LIANG. B.S. '30, University of Nanking; M.S. '34, University of Minnesota.  
Major: Plant Genetics. Minor: Plant Pathology.



Thesis: A Genetic Study of Mature Plant Resistance in Spring Wheat to Black Stem Rust, *Puccinia graminis tritici*, black chaff, *Bacterium translucens*, var. *undulosum* and frit fly, *Oscinis frit*. Not published.

Major Adviser: Professor H. K. Hayes.

Positions Held: Assistant, 1935-1937, Institute for Rice and Wheat Improvement, Nanking, China; Assistant, 1937—, National Agriculture Research Bureau, China.

Address: National Agricultural Research Bureau, Kweiyang, China.

1936. DOXTATOR, CHARLES WILLIAM. B.S. '28, Manitoba Agricultural College; M.S. '30, University of Minnesota.

Major: Plant Genetics. Minors: Biochemistry and Plant Pathology.

Thesis: Studies of Quality in Canning Corn. Published in *Journal of the American Society of Agronomy*, September 1937.

Major Adviser: Professor H. K. Hayes.

Positions Held: Plant Breeder, 1936—, American Beet Seed Co.

Honors: Sigma Xi; Gamma Sigma Delta; Gamma Alpha.

Address: American Beet Seed Co., Rocky Ford, Colorado.

1936. MYERS, WILL MARTIN. B.S. '32, Kansas State College; M.S. '34, University of Minnesota.

Major: Plant Genetics. Minor: Plant Pathology.

Thesis: The Nature and Interaction of Genes Conditioning Reaction to Rust in Flax. Published in *Journal of Agricultural Research*, 55:631-666, 1937.

Major Adviser: Professor H. K. Hayes.

Positions Held: Instructor, 1936-1937, University of Minnesota; Associate Geneticist, 1937—, U.S.D.A., Bureau of Plant Industry, U. S. Regional Laboratory for Pasture Research.

Honors: Sigma Xi.

Address: U. S. Regional Pasture Research Laboratory, State College, Pennsylvania.

1936. SWENSON, STANLEY PRESCOTT. B.S. '34, M.S. '35, University of Minnesota.

Major: Plant Genetics. Minor: Plant Pathology.

Thesis: Genetic and Cytological Studies on a Brachytic Mutation in Barley. Not published.

Major Adviser: Professor F. R. Immer.

Positions Held: Assistant Professor of Agronomy, 1936, Associate Professor, 1936—, South Dakota State College.

Honors: Sigma Xi.

Address: 220 6th St., Brookings, South Dakota.

#### PLANT PATHOLOGY

1905. FREEMAN, EDWARD MONROE. B.S. '98, M.S. '99, University of Minnesota.

Major: Plant Pathology. Minors: Embryology and Chemistry.

Thesis: The Seed Fungus of *Lobium Temulentum L.* Published in *Royal Society of London Philosophical Transactions*. Series B, Vol. 196, 1-27.

Major Adviser: Professor C. McMillan.

Positions Held: Pathologist, 1905-1907, Bureau of Plant Industry; Professor of Plant Pathology and Botany, Chief of Division, 1907—, Assistant Dean of Department of Agriculture, 1913-1917, Dean of College of Agriculture, Forestry, and Home Economics, 1917—, University of Minnesota.

Honors: President of Minnesota Chapter of Sigma Xi, 1913-1914; President of American Phytopathological Society, 1918-1919; Editor of *Journal of Agricultural Research*, 1914; Member of the Agricultural Committee of National Research Council, 1917; Editor of *Phytopathology*, 1911-1914; starred man in *American Men of Science*; President, Minnesota Academy of Science, 1935-1936.

Address: 2196 Carter Ave., St. Paul, Minnesota.

1913. STAKMAN, ELVIN CHARLES. B.A. '06, M.A. '10, University of Minnesota.

Major: Plant Pathology. Minor: Plant Ecology.

Thesis: A Study in Cereal Rusts: Physiological Races. Published 1913, Minneapolis; published also as University of Minnesota Agricultural Experiment Station Bulletin 138, February 1914.

Major Adviser: Professor E. M. Freeman.

Positions Held: Assistant Professor, 1913-1916, Associate Professor, 1916-1918, Professor 1918—, Head of Division of Plant Pathology, 1913—, University of Minnesota; Collaborator, 1914-1918, Pathologist in Charge of Barberry Eradication, 1918-1919, Pathologist, Agent for Bureau of Plant Industry, 1919—, U.S.D.A.; Guest Professor, 1930-1931, University of Halle, Germany.

Honors: American Academy of Arts and Sciences; Delegate to the Pan-Pacific Science Congress, 1923; Emil C. Hansen Gold Medal and Prize, 1928; Honorary Life Member, Sydney University Agricultural Society, Sydney, Australia; Honorary Member, Sydney University Agricultural Graduates Association; Kaiserliche Deutsche, Akademie der Naturforscher, Halle; Member of Division of Biology and Agriculture, National Research Council, 1931—; Member of Committee on Breeding for Rust Resistance, International Association of Plant Breeders; President of American Phytopathological Society, 1922; Editor-in-Chief of *Phytopathology*, 1925-1929; President of Minnesota Mycological Society, 1919-1928; starred man in *American Men of Science*; Sigma Xi; Phi Beta Kappa; Commissioner in Charge of Emergency Research, War Emergency Board of American Plant Pathologists, 1917-1918; Gamma Sigma Delta; National Academy of Sciences, 1934; Vice-President Phytopathological Section, Official Delegate to National Academy of Sciences, Sixth International Botanical Congress at Amsterdam, 1935; Vice-Chairman of Division of Biology and Agriculture, 1937-1938; Chairman, Committee on Genetics of Pathogenic Organisms, 1937—, National Research Council.

Address: 1411 Hythe St., St. Paul, Minnesota.

1918. BISBY, GUY RICHARD. B.S. '12, South Dakota State College; M.A. '17, Columbia University.

Major: Plant Pathology. Minor: Agricultural Biochemistry.

Thesis: Studies on Some Fusarium Diseases of Potato and Truck Crops. Published as University of Minnesota Agricultural Experiment Station Bulletin 181.

Major Adviser: Professor E. C. Stakman.

- Positions Held: Professor and Plant Pathologist, 1920-1936, University of Manitoba; Assistant Mycologist, 1937—, Imperial Mycological Institute.  
 Honors: Sigma Xi.  
 Address: Imperial Mycological Institute, Kew, Surrey, England.
1922. DOSDALL, LOUISE. B.A. '16, M.A. '17, University of Minnesota.  
 Major: Plant Pathology. Minor: Botany.  
 Thesis: Factors Influencing the Pathogenicity of *Helminthosporium sativum* Pammel, King, and Bakke. Published 1923 as University of Minnesota Agricultural Experiment Station Bulletin 17.  
 Major Adviser: Professor E. C. Stakman.  
 Positions Held: Instructor, 1922—, University of Minnesota.  
 Honors: Sigma Xi; Fellow of the A.A.A.S.; Gamma Sigma Delta; Iota Sigma Pi.  
 Address: 1332 Dayton Ave., St. Paul, Minnesota.
1922. LEACH, JULIAN GILBERT. B.S. '17, University of Tennessee; M.S. '18, University of Minnesota.  
 Major: Plant Pathology. Minor: Agricultural Biochemistry.  
 Thesis: The Parasitism of *Colletotrichum lindemuthianum*. Published 1923 as University of Minnesota Agricultural Experiment Station Bulletin 14.  
 Major Adviser: Professor E. C. Stakman.  
 Positions Held: Assistant Professor, 1922-1928, Associate Professor, 1928-1937, Professor of Plant Pathology, 1937-1938, University of Minnesota; Fellow of International Education Board, 1927-1928, in England and Germany; Professor and Head of Department of Plant Pathology, 1938—, University of West Virginia.  
 Honors: Sigma Xi.  
 Address: University of West Virginia, Morgantown, West Virginia.
1922. NEWTON, MARGARET. B.S. '18, M.S. '19, McGill University.  
 Major: Plant Pathology. Minor: Botany.  
 Thesis: Studies in Wheat Stem Rust. Published in Proceedings and Transactions of the Royal Society of Canada, Third Series, Vol. 16, Section 5, 1922.  
 Major Adviser: Professor E. C. Stakman.  
 Positions Held: Associate Professor of Botany and Plant Pathology, 1922-1925, University of Saskatchewan; Senior Pathologist, 1925—, Dominion Rust Research Laboratory.  
 Honors: Sigma Xi; Governor General of Canada's Medal.  
 Address: Dominion Rust Research Laboratory, Winnipeg, Manitoba, Canada.
1923. BARKER, HENRY D. B.S. '15, Clemson College; M.S. '17, University of Wisconsin.  
 Major: Plant Pathology. Minor: Plant Breeding.  
 Thesis: A Study of Wilt Resistance in Flax. Published 1924 as University of Minnesota Agricultural Experiment Station Bulletin no. 20.  
 Major Adviser: Professor E. C. Stakman.  
 Positions Held: Associate Plant Pathologist, 1923-1924, Mississippi Agricultural and Mechanical College; Botanist, Plant Pathologist, 1924-1936, Director, Experiment Station, 1931-1936, Service Technique, Port au Prince, Haiti, West Indies; Pathologist, 1936—, Division of Cotton, Bureau of Plant Industry, U.S.D.A.

Honors: Decoration, Government of Haiti, 1934, "for exceptional service in agriculture."

Address: 3269 Van Hazen St. N.W., Washington, D.C.

1923. HENRY, ARTHUR WELLESLEY. B.S. '17, M.S. '20, University of Saskatchewan.

Major: Plant Pathology. Minor: Plant Physiology.

Thesis: Root Rots of Wheat. Published 1924 as University of Minnesota Agricultural Experiment Station Technical Bulletin no. 22.

Major Adviser: Professor E. C. Stakman.

Positions Held: Instructor, 1923-1924, Assistant Professor, 1924-1926, University of Minnesota; Agent, 1923-1926, U.S.D.A.; Fellow of International Education Board (Rockefeller Foundation), 1926-1927, in England and Germany, Associate Professor, 1927—, University of Alberta, Edmonton, Alberta.

Honors: Sigma Xi; Gamma Sigma Delta; Alpha Zeta.

Address: 11612 Edinboro Road, Edmonton, Alberta, Canada.

1923. HURSH, CHARLES RAYMOND. B.S. '17, University of Missouri.

Major: Plant Pathology. Minor: Agricultural Biochemistry.

Thesis: Morphological and Physiological Studies on the Resistance of Wheat to *Puccinia graminis tritici*. Published in *Journal of Agricultural Research*, 27: 381-411, 1924.

Major Adviser: Professor E. C. Stakman.

Positions Held: Instructor, 1923, University of Minnesota; Agent, 1923, U.S.D.A.; Fellow at the Pasteur Institute, Paris, 1924 (Rockefeller Foundation); National Research Council Fellow, 1925, Boyce Thompson Institute; Forest Ecologist, 1926-1936, Acting Chief, 1931-1936, Senior Forest Ecologist, 1936—, Chief of the Division of Forest Influences, Appalachian Forest Experiment Station, U. S. Forest Service.

Address: Old Stone Terrace, Route No. 3, Asheville, North Carolina.

1923. NOBLE, ROBERT JACKSON. B.S. '15, University of Sydney, Australia; M.S. '22, University of Minnesota.

Major: Plant Pathology. Minor: Plant Breeding.

Thesis: Studies on the Parasitism of *Urocystis tritici* Koern, the Organism Causing Flag Smut of Wheat. Published in *Journal of Agricultural Research*, 27: 451-487, 1924.

Major Adviser: Professor E. C. Stakman.

Positions Held: Principal Assistant Biologist, 1923-1927, Department of Agriculture, Sydney; Examiner in Dairy Bacteriology, 1927—, Gawkesbury Agricultural College, New South Wales.

Honors: Sigma Xi; Honorary Secretary, 1929-1933, President, 1934, Vice-President, 1935—, Royal Society of New South Wales; Member, 1933—, New South Wales State Committee Commonwealth of Australia Council for Scientific and Industrial Research; Corresponding Member, 1933—, Czechoslovak Academy of Agriculture; King's Jubilee Medal, 1935; President, 1936, N.S.W. Branch, Australian Institute of Agricultural Science, 1936; Coronation Medal, 1937; Honorary Life Member, Sydney University Agricultural Society, Australia.

Address: 32A Middle Harbour Road, Lindfield, New South Wales, Australia.

1924. BAILEY, DIXON LLOYD. B.A. '18, Queen's University; M.S. '21, University of Minnesota.  
 Major: Plant Pathology. Minors: Plant Physiology and Plant Breeding.  
 Thesis: Physiological Specialization in *Puccinia graminis avenae* Erikss. and Henn. Published 1925 as University of Minnesota Agricultural Experiment Station Bulletin 35.  
 Major Adviser: Professor E. C. Stakman.  
 Positions Held: Senior Pathologist in Charge, 1924-1928, Dominion Rust Research Laboratory, Winnipeg; Associate Professor, 1928—, University of Toronto.  
 Honors: Fellow Royal Society of Canada.  
 Address: Department of Botany, University of Toronto, Toronto, Ontario.
1924. LEVINE, MOSES NAPHTALI. B.S. '15, M.S. '16, University of Minnesota.  
 Major: Plant Pathology. Minor: Plant Breeding.  
 Thesis: Statistical Studies on the Variation of Biologic Forms of *Puccinia graminis tritici* and the Effect of Ecological Factors on the Susceptibility of Wheat Varieties. Published in *Phytopathology*, Vol. 18, no. 1, 7-123, January 1928.  
 Major Adviser: Professor E. C. Stakman.  
 Positions Held: Associate Pathologist, 1923-1929, Pathologist in Cereal Diseases, 1929—, U.S.D.A., University Farm, St. Paul, Minnesota.  
 Honors: Sigma Xi; Member of National Executive Committee on Science and Technology, Hebrew University in Jerusalem; Life Member of the Société Linnéenne de Lyon in France; Editor of *Phytopathology*, 1928; Gamma Sigma Delta; Fellow, A.A.A.S.; Member, Minnesota Academy of Science, American Museum of Natural History.  
 Address: 2362 Pierce Ave., St. Paul, Minnesota.
1925. CHRISTENSEN, JONAS JERGEN. B.S. '21, M.S. '22, University of Minnesota.  
 Major: Plant Pathology. Minors: Plant Physiology and Plant Breeding.  
 Thesis: Physiologic Specialization and Parasitism of *Helminthosporium sativum* P.K.B. Published 1926 as University of Minnesota Agricultural Experiment Station Technical Bulletin 37.  
 Major Adviser: Professor E. C. Stakman.  
 Positions Held: Assistant Professor, 1925-1931, Associate Professor, 1931—, University of Minnesota; Agent, 1922—, Office of Cereal Crops and Diseases, U.S.D.A., University Farm, St. Paul, Minnesota; Guggenheim Memorial Foundation Fellow, 1929-1930.  
 Honors: Sigma Xi; Associate Editor of *Phytopathology*, 1934-1937; Councilor, American Phytopathological Society, 1938-1939.  
 Address: 2116 Como Ave. W., St. Paul, Minnesota.
1925. SANFORD, GUTHRIE BROWN. B.S.A. '20, University of Alberta; M.S. '23, University of Minnesota.  
 Major: Plant Pathology. Minor: Plant Breeding.  
 Thesis: A Study of Some Factors Relative to the Pathogenicity of *Actinomyces scabies*. Published in *Phytopathology*, Vol. 16, no. 8, August 1926.  
 Major Adviser: Professor E. C. Stakman.

- Positions Held: Officer in Charge, 1926-1927, Dominion Laboratory of Plant Pathology, University of Saskatchewan; Officer in Charge, 1927—, Dominion Laboratory of Plant Pathology, University of Alberta.  
Address: Department of Plant Pathology, University of Alberta, Edmonton, Alberta.
1927. LAMBERT, EDMUND BRYAN. B.S. '20, M.S. '22, University of Minnesota.  
Major: Plant Pathology. Minor: Agronomy (Genetics).  
Thesis: The Relation of Weather to the Development of Stem Rust in the Mississippi Valley. Published in *Phytopathology*, Vol. 19, no. 1, January 1929.  
Major Adviser: Professor E. C. Stakman.  
Positions Held: Assistant Pathologist, 1926-1929, Associate Pathologist, 1929-1936, Plant Pathologist, 1936—, Bureau of Plant Industry, U.S.D.A.  
Address: Bureau of Plant Industry, U. S. Department of Agriculture, Washington, D.C.
1927. SEAL, JAMES LEWIS. B.S. '13, Clemson College; M.S. '16, Iowa State College.  
Major: Plant Pathology. Minor: Horticulture.  
Thesis: Studies on the Physiology of *Sclerotinia cinera* (Bon.) Wor. Published 1928, Gainesville, Florida, as Florida Agricultural Experiment Station Technical Bulletin 199.  
Major Adviser: Professor E. C. Stakman.  
Positions Held: Assistant Plant Pathologist, 1925-1927, Florida Plant Board; Associate Plant Pathologist, 1927-1929, Florida Experiment Station; Associate Plant Pathologist, 1929-1931, Professor of Botany and Plant Pathology, 1931—, Acting Head of Department, 1931-1932; Head of Department, 1932—, Alabama Polytechnic Institute, Auburn, Alabama.  
Address: Greenwood, South Carolina.
1928. JOHNSON, HOWARD WILFRED. B.A. '23, M.S. '24, Ohio State University.  
Major: Plant Pathology. Minor: Botany.  
Thesis: Storage Rots of the Jerusalem Artichoke. Published in *Journal of Agricultural Research*, 43:337-352, August 15, 1931.  
Major Adviser: Professor E. C. Stakman.  
Positions Held: Assistant Professor of Botany, 1928-1930, Louisiana State University; Associate Pathologist, 1930-1936, Pathologist, 1936—, Bureau of Plant Industry, U.S.D.A.  
Honors: Gamma Sigma Delta; Gamma Alpha; Phi Beta Kappa; Sigma Xi; Alpha Zeta.  
Address: Forage Crops and Diseases, Bureau of Plant Industry, U.S.D.A., Washington, D.C.
1928. RODENHISER, HERMAN ALONZO. B.S. '23, M.S. '25, University of Minnesota.  
Major: Plant Pathology. Minor: Agricultural Biochemistry.  
Thesis: Physiologic Specialization in Some of the Cereal Smuts. Published in *Phytopathology*, Vol. 18, no. 2, December 1928.  
Major Adviser: Professor E. C. Stakman.

Positions Held: Assistant Pathologist, 1928-1930, University of Minnesota; Plant Pathologist, 1930—, Office of Cereal Crops and Diseases, U.S.D.A., Washington, D.C.

Honors: Sigma Xi; Gamma Sigma Delta.

Address: 1776 N. Troy St., Arlington, Virginia.

1929. COTTER, RALPH ULYSSES. B.S. '18, Utah Agricultural College; M.S. '24, University of Minnesota.

Major: Plant Pathology. Minor: Plant Genetics.

Thesis: Factors Affecting the Development of the Aecial Stage of *Puccinia graminis* Pers. Published 1929 as Technical Bulletin of the U.S.D.A., no. 314.

Major Adviser: Professor E. C. Stakman.

Positions Held: Associate Pathologist, 1930—, U.S.D.A., University Farm, St. Paul, Minnesota.

Honors: Sigma Xi.

Address: 3216 43rd Avenue South, Minneapolis, Minnesota.

1929. FLOR, HAROLD HENRY. B.S. '22, M.S. '24, University of Minnesota.

Major: Plant Pathology. Minor: Plant Physiology.

Thesis: Some Factors Affecting the Severity of the Root-Rot Complex of Sugar Cane. Published 1930, Baton Rouge, as Louisiana Agricultural Experiment Station Bulletin 212.

Major Adviser: Professor E. C. Stakman.

Positions Held: Associate Pathologist, 1929-1931, State College of Washington, Pullman, Washington; Associate Pathologist, 1931-1935, Pathologist, 1935—, U.S.D.A.

Address: State College Station, Fargo, North Dakota.

1929. HART, HELEN. B.S. '22, M.A. '24, University of Minnesota.

Major: Plant Pathology. Minor: Botany.

Thesis: Morphological and Physiological Studies on Stem Rust Resistance in Wheat. Published 1931 as U.S.D.A. Technical Bulletin 266.

Major Adviser: Professor E. C. Stakman.

Positions Held: Instructor in Plant Pathology; 1924—, University of Minnesota; Agent, Office of Cereal Crops and Diseases, 1923-1933, U.S.D.A.; University Assistant, 1937-1938, Institut für Pflanzenbau und Pflanzenzüchtung, Universität Halle-Saale, Halle-Saale, Germany, (on leave of absence from the University of Minnesota).

Honors: Sigma Xi; Gamma Sigma Delta.

Address: 2200 Doswell, St. Paul, Minnesota.

1929. PETERSON, PAUL DONALD. B.S. '24, M.S. '26, University of Minnesota.

Major: Plant Pathology. Minor: Plant Physiology.

Thesis: Reactions of Selfed Lines of Corn to Seedling Blight Caused by *Gibberella saubinettii* (Mont.) Sacc. and *Fusarium moniliforme* Sheldon. Not published.

Major Adviser: Professor E. C. Stakman.

Positions Held: Assistant Pathologist, 1929-1930, U.S.D.A.; Plant Pathologist, 1930-1932, Koppers Research Corporation; Assistant Professor Plant Pathol-

ogy, 1932-1933, Cornell University; Research Fellow, 1933-1934, Crop Protection Institute, University of Delaware; Plant Pathologist, 1934—, Freeport Sulphur Co.

Address: Freeport Sulphur Co., 122 East 42nd St., New York City.

1929. TU, CHIH. B.S. '26, University of Minnesota.

Major: Plant Pathology. Minor: Plant Genetics.

Thesis: Physiologic Specialization in *Fusarium Spp.* Causing Headblight of Small Grains. Published 1929 in *Phytopathology*, 19:143-154, published also as University of Minnesota Agricultural Experiment Station Technical Bulletin 74.

Major Adviser: Professor E. C. Stakman.

Positions Held: Assistant Professor, 1929-1930, Lingnan University, Canton, China; Plant Pathologist in Charge, 1930-1931, Bureau of Entomology and Phytopathology, Hangchow; Associate Professor, 1931-1933, Lingnan University; Plant Pathologist, Head of Division of Plant Pathology, 1933-1935, Bureau of Agriculture and Forestry, Canton, China; Plant Pathologist, 1935—, Northwestern College of Agriculture, China.

Address: Northwestern College of Agriculture, Wukung, Shensi, China.

1929. WALLACE, JAMES MERRILL. B.S. '23, Mississippi Agricultural and Mechanical College; M.S. '27, University of Minnesota.

Major: Plant Pathology. Minor: Plant Genetics.

Thesis: Physiologic Specialization as a Factor in the Epidemiology of *Puccinia graminis tritici* Erikss. and Henn. Published in *Phytopathology*, 22:105-142, 1932.

Major Adviser: Professor E. C. Stakman.

Positions Held: Associate Pathologist, 1929—, Office of Sugar Plants, U.S.D.A.

Honors: Sigma Xi; Gamma Alpha; Alpha Zeta.

Address: 3261 Redwood Drive, Riverside, California.

1930. JOHNSON, DELIA ELIZABETH. B.S. '17, North Dakota Agricultural College.

Major: Plant Pathology. Minor: Soil Pathology.

Thesis: The Relation of the Cabbage Maggot and Other Insects to the Spread and Development of Soft Rot in Cabbage. Published in *Phytopathology*, Vol. 20, November, 1930.

Major Adviser: Professor E. C. Stakman.

Positions Held: Bacteriologist, University of Minnesota.

Honors: Sigma Xi; Gamma Sigma Delta.

Address: Department of Bacteriology, University of Minnesota, Minneapolis, Minnesota.

1930. JOHNSON, EDWARD MARSHALL. B.S. '21, M.S. '23, University of Kentucky.

Major: Plant Pathology. Minor: Agricultural Biochemistry.

Thesis: Virus Diseases of Tobacco in Kentucky. Published 1930, Lexington, as Kentucky Agricultural Experiment Station Bulletin 306.

Major Adviser: Professor E. C. Stakman.



Positions Held: Assistant Plant Pathologist, 1926—, Agronomy Department, University of Kentucky, Lexington, Kentucky.

Honors: Sigma Xi; Alpha Zeta.

Address: Experiment Station, Lexington, Kentucky.

1930. JOHNSON, THORVALDUR. B.S. '22, B.S.A. '24, University of Saskatchewan.

Major: Plant Pathology. Minor: Agricultural Biochemistry.

Thesis: A Study of the Effect of Environmental Factors on the Variability of Physiologic Forms of *Puccinia graminis tritici* Erikss. and Henn. Published as Dominion of Canada Department of Agriculture Bulletin 140, New Series.

Major Adviser: Professor E. C. Stakman.

Positions Held: Plant Pathologist, 1930—, Dominion Rust Research Laboratory, Manitoba Agricultural College.

Honors: Sigma Xi.

Address: Dominion Rust Research Laboratory, Winnipeg, Manitoba, Canada

1930. MELANDER, LEONARD WILLIAM. B.S. '21, M.S. '24, University of Minnesota.

Major: Plant Pathology. Minor: Plant Physiology.

Thesis: The Effect of Temperature and Light on the Development of the Uredinal Stage of *Puccinia graminis* Pers. Published in *Journal of Agricultural Research*, Vol. 50, no. 11, June 1, 1935.

Major Adviser: Professor E. C. Stakman.

Positions Held: Associate Pathologist, State Leader of Barberry Eradication in Minnesota, 1920—, Bureau of Plant Industry, U.S.D.A., University Farm, St. Paul, Minnesota.

Address: 1439 Hythe Street, St. Paul, Minnesota.

1930. NELSON, RALPH MELVIN. B.S. '22, M.S. '24, University of Minnesota.

Major: Plant Pathology. Minor: Botany.

Thesis: Effect of Bluestain Fungi on Southern Pines Attacked by Bark Beetles. Published in *Phytopathologische Zeitschrift*, Band 7, Heft 4, 1934.

Major Adviser: Professor E. C. Stakman.

Positions Held: Assistant Pathologist, 1930-1931, Bureau of Plant Industry, U.S.D.A.; Silviculturist, 1931-1937, Senior Silviculturist, 1937—, Appalachian Forest Experiment Station.

Address: Appalachian Forest Experiment Station, Asheville, North Carolina.

1931. GREANEY, FRANK JAMES. B.S. '22, Ontario Agricultural College; M.S. '26, University of Minnesota.

Major: Plant Pathology. Minor: Plant Genetics.

Thesis: The Prevention of Cereal Rusts by the Use of Fungicidal Dusts. Published 1932 as a Bulletin of the Dominion of Canada Department of Agriculture, no. 171, 1934.

Major Adviser: Professor E. C. Stakman.

Positions Held: Plant Pathologist, 1929—, Dominion Rust Research Laboratory, Manitoba Agricultural College, Winnipeg, Manitoba; Overseas Worker, 1934-1935, Rothamsted Experimental Station, Harpenden, England.

Honors: Sigma Xi.

Address: Dominion Rust Research Laboratory, Winnipeg, Manitoba, Canada.

1932. BROADFOOT, WILLIAM CRAIG. B.S. '24, M.S. '25, University of Minnesota.  
 Major: Plant Pathology. Minor: Plant Breeding.  
 Thesis: Studies on Foot and Root Rot of Wheat in Western Canada. Published in *Canadian Journal of Research*, 8:483-491, 545-552, 10:95-114, 115-124.  
 Major Adviser: Professor E. C. Stakman.  
 Positions Held: Plant Pathologist, 1928—, Dominion Laboratory of Plant Pathology, Edmonton, Alberta.  
 Honors: Sigma Xi; Gamma Sigma Delta.  
 Address: Dominion Laboratory of Plant Pathology, University of Alberta, Edmonton, Alberta, Canada.
1932. DICKINSON, SYDNEY. Dip. '26, Imperial College of Science and Technology (London University); M.Sc. '30, University of Wales.  
 Major: Plant Pathology. Minor: Botany.  
 Thesis: The Genetic Implications of Hyphal Fusions in Certain Fungi. Published as University of Minnesota Agricultural Experiment Station Technical Bulletin no. 88.  
 Major Adviser: Professor E. C. Stakman.  
 Positions Held: Lecturer in Botany, 1927-1933, University College, Cardiff, Wales; Research Assistant, 1933-1935, University Lecturer in Mycology, 1935—, University of Cambridge.  
 Address: Linnett Hill, 213 Huntingdon Rd., Cambridge, England.
1932. HOLTON, CHARLES STEWART. B.S. '27, Louisiana State University; M.S. '29, University of Minnesota.  
 Major: Plant Pathology. Minor: Botany.  
 Thesis: Studies in the Genetics and Cytology of *Ustilago avenae* and *Ustilago levis*. Published in University of Minnesota Technical Bulletin no. 87.  
 Major Adviser: Professor E. C. Stakman.  
 Positions Held: Associate Pathologist, 1932—, U.S.D.A., Bureau of Plant Industry.  
 Honors: Sigma Xi; Phi Kappa Phi.  
 Address: Agricultural Experiment Station, Pullman, Washington.
1932. LE CLERG, ERWIN LOUIS. B.S. '24, Colorado Agricultural College; M.S. '25, Iowa State College.  
 Major: Plant Pathology. Minor: Plant Physiology.  
 Thesis: The Parasitism of *Rhizoctonia solani* Kühn on the Sugar Beet. Published in *Journal of Agricultural Research*, 49:407-431, 1934.  
 Major Adviser: Professor E. C. Stakman.  
 Positions Held: Plant Pathologist, 1930—, U.S.D.A.  
 Honors: Sigma Xi; Fellow of the A.A.A.S. and the Iowa Academy of Science.  
 Address: Louisiana State University, Baton Rouge, Louisiana.
1932. STARR, GEORGE HERMAN. B.S. '25, South Dakota State College; M.S. '28, University of Nebraska.  
 Major: Plant Pathology. Minor: Horticulture.  
 Thesis: A Study of the Diseases of Canning Crops in Minnesota. Published as University of Minnesota Technical Bulletin no. 89.  
 Major Adviser: Professor J. G. Leach.

Positions Held: Associate Professor of Agronomy and Plant Pathologist of the Agricultural Experiment Station, 1931—, University of Wyoming.  
Address: 519 South 12th St., Laramie, Wyoming.

1933. BAMBERG, RAYBURN HOLMES. B.S. '27, Mississippi A. & M. College; M.S. '29, University of Minnesota.

Major: Plant Pathology. Minor: Plant Genetics.

Thesis: The Black Chaff Disease of Wheat. Published in *Journal of Agricultural Research*, 52:397-417, 1936.

Major Adviser: Professor E. C. Stakman.

Positions Held: Agent, 1929-1937, Division of Cereal Crops and Diseases, U.S. D.A., University Farm, St. Paul; Associate Pathologist, 1937—, Division of Cereal Crops and Diseases, U.S.D.A., Bozeman, Montana; Associate Agronomist, 1937—, Montana Agricultural Experiment Station.

Honors: Sigma Xi; Alpha Zeta; Gamma Sigma Delta.

Address: Agricultural Experiment Station, Bozeman, Montana.

1933. LOH, TA CHING. B.S. '29, Cornell University; M.S. '30, Louisiana State University.

Major: Plant Pathology. Minor: Botany.

Thesis: A Study of the Pathogenicity and Physiology of Certain Organisms of Rice. Not published.

Major Adviser: Professor E. C. Stakman.

Positions Held: Plant Pathologist, 1933—, Agricultural Experiment Station of Kwangsi, China.

Address: Agricultural Experiment Station of Kwangsi, Sa Tong, Liu Chow, Kwangsi, China.

1933. WALTER, JAMES MUNDAY, JR. B.S. '28, University of Kentucky; M.S. '31, University of Minnesota.

Major: Plant Pathology. Minor: Plant Genetics.

Thesis: Some Factors Influencing the Development of Corn Smut, *Ustilago zaeae* (Begem.) Unger. Published as University of Minnesota Agricultural Experiment Station Technical Bulletin no. 111.

Major Adviser: Professor E. C. Stakman.

Positions Held: Supervising Technician in Emergency Conservation Work, 1933-1935, Associate Pathologist, 1935—, Division of Forest Pathology, U.S.D.A.

Honors: Sigma Xi; Gamma Sigma Delta.

Address: Dutch Elm Disease Laboratory, Morristown, New Jersey.

1934. EIDE, CARL JOHN. B.S. '28, M.S. '29, University of Minnesota.

Major: Plant Pathology. Minor: Agricultural Biochemistry.

Thesis: The Pathogenicity and Genetics of *Gibberella saubinetii* (Mont.) Sacc. Published as University of Minnesota Technical Bulletin no. 106.

Major Adviser: Professor E. C. Stakman.

Positions Held: Instructor, 1934-1937, Assistant Professor, 1937—, University of Minnesota.

Honors: Sigma Xi; Phi Lambda Upsilon; Gamma Sigma Delta.

Address: Division of Plant Pathology, University Farm, St. Paul, Minnesota.

1934. SHARVELLE, ERIC GEORGE. B.S.A. '31, McGill University; M.S. '32, University of Alberta.  
 Major: Plant Pathology. Minor: Botany.  
 Thesis: The Nature of Resistance of Flax to *Melampsora lini* (pers.) Lev. Published in *Journal of Agricultural Research*, 53:81, 1936.  
 Major Adviser: Professor E. C. Stakman.  
 Positions Held: Independent Research, 1934—, Department of Plant Pathology, Cornell University.  
 Address: Department of Plant Pathology, Cornell University, Ithaca, New York.
1934. THORNBERRY, HALBERT HOUSTON. B.S. '25, M.S. '26, University of Kentucky.  
 Major: Plant Pathology. Minor: Plant Physiology.  
 Thesis: Studies on the Filtration and Ultrafiltration of Tobacco-Mosaic Virus. Published in *Phytopathology*, 25:601-617, 1935.  
 Major Adviser: Professor E. C. Stakman.  
 Positions Held: Junior Plant Pathologist, 1934-1935, University of California; Junior Plant Pathologist, 1935-1936, University of Kentucky; Pathologist, 1936-1937, Bureau of Plant Industry, U.S.D.A.; Assistant Chief in Plant Pathology, 1938—, University of Illinois.  
 Honors: Sigma Xi; Gamma Sigma Delta.  
 Address: Department of Horticulture, University of Illinois, Urbana, Illinois.
1934. TYLER, LEON JOHN. B.S. '27, M.S. '29, South Dakota State College.  
 Major: Plant Pathology. Minor: Botany.  
 Thesis: Variability in *Sphacelotheca sorghi* (Link) Clinton. Not published.  
 Major Adviser: Professor E. C. Stakman.  
 Positions Held: Research Plant Pathologist, 1934—, Cornell University.  
 Honors: Sigma Xi; Gamma Sigma Delta; Phytopathology Society.  
 Address: Department of Plant Pathology, Cornell University, Ithaca, New York.
1934. VERRALL, ARTHUR FREDERIC. B.S. '27, M.S. '28, University of Minnesota.  
 Major: Plant Pathology. Minor: Forestry.  
 Thesis: Variation in *Fomes Ignarius* Linn. ex Gill. Published as University of Minnesota Agricultural Experiment Station Technical Bulletin no. 117.  
 Major Adviser: Professor E. C. Stakman.  
 Positions Held: Assistant Pathologist, 1934-1936, Dutch Elm Disease Laboratory, U.S.D.A.; Assistant Pathologist, 1936—, Southern Forest Experiment Station, U.S.D.A.  
 Address: Southern Forest Experiment Station, 400 Union Bldg., New Orleans, Louisiana.
1935. ALLISON, CLYDE CLARENCE. B.S. '28, M.S. '30, University of Minnesota.  
 Major: Plant Pathology. Minor: Plant Breeding.  
 Thesis: Studies on the Genetics of Cytology of Smuts of Barley and Oats in Relation to Their Pathogenicity. Published as University of Minnesota Agricultural Experiment Station Technical Bulletin no. 119.  
 Major Adviser: Professor E. C. Stakman.

- Positions Held: Instructor, 1935-1936, University of Minnesota; Agent, 1936-1938, Associate Pathologist, 1938—, U.S.D.A.  
 Honors: Sigma Xi.  
 Address: Greeneville, Tennessee.
1935. FORBES, IRVIN LYNELL. B.S. '25, M.S. '28, Louisiana State University.  
 Major: Plant Pathology. Minor: Botany.  
 Thesis: Factors Affecting the Development of *Puccinia coronata* in Louisiana.  
 Not published.  
 Major Adviser: Professor E. C. Stakman.  
 Positions Held: Associate Professor of Botany and Plant Pathology, 1936—, Louisiana State University.  
 Honors: Sigma Xi.  
 Address: University of Louisiana, Baton Rouge, Louisiana.
1935. HARRAR, JACOB GEORGE. B.A. '28, Oberlin College; M.S. '29, Iowa State College.  
 Major: Plant Pathology. Minor: Botany.  
 Thesis: Factors Affecting the Pathogenicity of *Fomes lignosus* Klotzsch. Published as University of Minnesota Agricultural Experiment Station Technical Bulletin no. 123.  
 Major Adviser: Professor E. C. Stakman.  
 Positions Held: Assistant Professor of Biology, 1935-1937, Associate Professor of Biology, 1937—, Virginia Polytechnic Institute.  
 Honors: Phi Gamma Delta; Sigma Xi; Virginia Academy of Science Research Grant, 1936.  
 Address: Box 429, Blacksburg, Virginia.
1935. KAUFERT, FRANK HENRY. B.S. '29, M.S. '30, University of Minnesota.  
 Major: Plant Pathology. Minor: Forestry.  
 Thesis: The Biology of *Pleurotus corticatus* Fries. Published as University of Minnesota Agricultural Experiment Station Technical Bulletin no. 114.  
 Major Adviser: Professor E. C. Stakman.  
 Positions Held: Instructor in Forestry, 1935-1937, University of Minnesota; Pathologist, 1937—, duPont Chemical Company.  
 Honors: Senior Member, Society of American Foresters.  
 Address: Division of Pest Control Research, duPont Experiment Station, Wilmington, Delaware.
1936. CHURCHWARD, JOHN GORDON. B.Sc.Agr. '27, University of Sydney (Australia); M.S. '33, University of Minnesota.  
 Major: Plant Pathology. Minor: Plant Genetics.  
 Thesis: Studies on Physiological Specialization of the Organisms Causing Bunt in Wheat and the Genetics of Resistance to This and Certain Other Wheat Diseases. Published in *Proceedings of the Royal Society of New South Wales*, 1938.  
 Major Adviser: Professor E. C. Stakman.  
 Positions Held: Lecturer in Faculty of Agriculture, 1933—, Resident Tutor in Agriculture, Wesley College, 1933—, University of Sydney.  
 Honors: Sigma Xi; Gamma Alpha.  
 Address: 1 Hunter St., Woolwich, Sydney, N.S.W., Australia.

1936. CORMACK, MELVILLE WALLACE. B.S. '30, University of Manitoba; M.S. '31, University of Alberta.  
 Major: Plant Pathology. Minors: Botany and Plant Physiology.  
 Thesis: The Relation of *Cylindrocarpum* and *Fusarium* to Root Rot and Winter-killing of Alfalfa and Sweet Clover in Alberta. Published in *Canadian Journal of Research*, 15:403-424, 493-510, 1937.  
 Major Adviser: Professor E. C. Stakman.  
 Positions Held: Assistant Plant Pathologist, 1931—, Dominion Laboratory of Plant Pathology, University of Alberta.  
 Honors: Sigma Xi.  
 Address: Box 9, University of Alberta, Edmonton, Alberta, Canada.
1936. SYED, VAHEEDUDDIN. Graduate '28, Poona Agricultural College (India). M.S. '35, University of Minnesota.  
 Major: Plant Pathology. Minor: Botany.  
 Thesis: Studies on the Pathogenicity and Genetics of Some Sorghum Smuts. Not published.  
 Major Adviser: Professor E. C. Stakman.  
 Positions Held: Plant Pathologist, 1936—, Agricultural Department, India.  
 Honors: Sigma Xi.  
 Address: H.E.H. the Nizam's Government, Agricultural Department, Hyderabad-Deccan, India.
1937. CHRISTENSEN, CLYDE MARTIN. B.S. '29, M.S. '30, University of Minnesota.  
 Major: Plant Pathology. Minor: Plant Genetics.  
 Thesis: Studies on *Valsa sordida* Nitschke, *Cytospora chrysosperma* (Pers.) Fr. and *Valsa nivea* (Hoff.) Fr. Not published.  
 Major Adviser: Professor E. C. Stakman.  
 Positions Held: Instructor, 1937—, University of Minnesota.  
 Address: Division of Plant Pathology, University Farm, St. Paul, Minnesota.
1937. LINDGREN, RALPH MELVIN. B.S. '26, M.S. '28, University of Minnesota.  
 Major: Plant Pathology. Minor: Botany.  
 Thesis: Some Relations and Effects of Fungi Causing Blue-Stain of Wood. Not published.  
 Major Adviser: Professor E. C. Stakman.  
 Positions Held: Pathologist, 1933-1937, U.S.D.A.; Research Specialist, 1937—, A. D. Chapman and Co., Inc.  
 Honors: Sigma Xi; Xi Sigma Pi; Alpha Zeta; Gamma Alpha; Gamma Sigma Delta; Charles Lathrop Pack Fellowship in Forestry; Freshman Scholastic Prize in Forestry; Senior Member, Society of American Foresters.  
 Address: 1602 Pere Marquette Bldg., New Orleans, Louisiana.
1937. LING, LEE. B.S. '31, National Central University (China); M.S. '36, University of Minnesota.  
 Major: Plant Pathology. Minor: Plant Genetics.  
 Thesis: The Physiology and Parasitism of *Urocystis occulta* (Wallr.) Rab. Not published.  
 Major Adviser: Professor E. C. Stakman.

- Positions Held: Plant Pathologist, Bureau of Phytopathology and Entomology of Szechwan, China.  
Honors: Sigma Xi.  
Address: Bureau of Phytopathology and Entomology of Szechwan, Sa-ho-poo, Chengtu, China.
1937. PERSON, LEE HOMER, JR. B.S. '26, Mississippi Agricultural and Mechanical College; M.S. '29, University of Minnesota.  
Major: Plant Pathology. Minor: Botany.  
Thesis: Rhizoctonia and Root Rot of Beans. Not published.  
Major Adviser: Professor E. C. Stakman.  
Positions Held: Assistant Plant Pathologist, 1937—, Louisiana State University Experiment Station.  
Address: Louisiana State University, University, Louisiana.
1937. WANG, CHI-SHI. B.S. '32, Honan University; M.S. '36, University of Minnesota.  
Major: Plant Pathology. Minor: Plant Genetics.  
Thesis: The Cytology and Pathogenicity of *Ustilago crameri*. Not published.  
Major Adviser: Professor E. C. Stakman.  
Positions Held: Plant Pathologist, 1937—, College of Agriculture, Honan University, China.  
Honors: Sigma Xi.  
Address: College of Agriculture, Honan University, Chen-ping-shien, Honan, China.
1938. BONDE, REINER. B.S. '22, University of Minnesota; M.S. '26, University of Maine.  
Major: Plant Pathology. Minor: Entomology.  
Thesis: A Study of Blackleg and Seed-Piece Decay in the Irish Potato. Not published.  
Major Adviser: Professor J. G. Leach.  
Positions Held: Associate Pathologist, 1938—, University of Maine.  
Address: Department of Plant Pathology, University of Maine, Orono, Maine.
1938. CASSELL, ROBERT CALDER. B.S. '30, Iowa State College; M.S. '32, University of Idaho.  
Major: Plant Pathology. Minor: Plant Breeding.  
Thesis: Factors Affecting the Distribution of Physiologic Races of *Puccinia graminis tritici* Erikss. and Henn. Not published.  
Major Adviser: Professor E. C. Stakman.  
Positions Held: Assistant Professor of Agriculture, 1938—, Southern Illinois State Normal University.  
Address: Southern Illinois State Normal University, Carbondale, Illinois.
1938. DAVIES, FREDRICK REES PRICE. B.S. '30, M.S. '32, University of Alberta.  
Major: Plant Pathology. Minors: Genetics and Plant Breeding.  
Thesis: Studies on the Nature of Variation in Some Members of the *Fungi Imperfecti*. Not published.  
Major Adviser: Professor E. C. Stakman.

Positions Held: Industrial Mycologist, 1938—, Röhm and Haas Company.  
Address: Biological Laboratories, Röhm and Haas Company, Bristol, Pennsylvania.

## PLANT PHYSIOLOGY

1926. STEINMETZ, FERDINAND HENRY. B.S. '15, University of Illinois; M.S. '21, University of Minnesota.

Major: Plant Physiology. Minor: Plant Pathology.

Thesis: Winter Hardiness in Alfalfa Varieties. Published 1926 as University of Minnesota Agricultural Experiment Station Technical Bulletin 38.

Major Adviser: Professor R. B. Harvey.

Positions Held: Professor of Botany, 1927—, Head of Department of Botany and Entomology, 1928—, University of Maine.

Address: 38 No. Main St., Orono, Maine.

1930. REGEIMBAL, LOUIS ODILON. B.S. '20, M.S. '24, University of Minnesota.

Major: Plant Physiology. Minor: Plant Genetics.

Thesis: The Role of Iodine in Plant Nutrition. Not published.

Major Adviser: Professor R. B. Harvey.

Positions Held: Instructor in Plant Physiology, 1930, University of Minnesota; Associate Physiologist, 1930—, Bureau of Plant Industry, U.S.D.A.

Address: Bureau of Plant Industry, U.S.D.A., Washington, D.C.

1931. DUNN, STUART JAMES ROBERT. B.S. '23, University of Minnesota; M.S. '25, Iowa State College.

Major: Plant Physiology. Minor: Agricultural Biochemistry.

Thesis: The Relation of Hydrophilic Colloids to Hardiness in Cabbage, Brussels Sprouts, and Alfalfa Plants as Shown by the Dye Adsorption Test. Published in *Plant Physiology*, 8:275-286, 1933.

Major Adviser: Professor R. B. Harvey.

Positions Held: Instructor in Botany, 1926-1937, Assistant Professor of Botany, 1937—, University of New Hampshire; Assistant Botanist, 1926—, New Hampshire Agricultural Experiment Station.

Honors: Phi Kappa Phi; Fellow of the A.A.A.S.; Gamma Alpha; Phi Sigma.

Address: Durham, New Hampshire.

1932. LANDON, RAYMOND HORACE. B.A. '19, Macalester College; M.S. '22, University of Minnesota.

Major: Plant Physiology. Minor: Geology.

Thesis: The Effect of Certain Chemicals on the Rate of Catalase Activity in Plants. Published in *American Journal of Botany*, 21:583-591, 1934.

Major Adviser: Professor R. B. Harvey.

Positions Held: Instructor, 1931—, University of Minnesota.

Honors: Sigma Xi.

Address: 3121 Aldrich Ave. So., Minneapolis, Minnesota.

1935. VOGELE, ALFRED CHARLES. B.S. '18, M.S. '20, University of Illinois.

Major: Plant Physiology. Minors: Botany and Bacteriology.

Thesis: The Effect of Environmental Factors upon the Color of the Tomato and the Watermelon. Published in *Plant Physiology*, 12:929-955, 1937.



Major Adviser: Professor R. B. Harvey.

Positions Held: Assistant Professor of Botany, 1928-1936, State Teachers College, River Falls, Wisconsin; Assistant Professor of Agricultural Botany, 1936-1937, University of Minnesota; Assistant Professor and Horticulturist, 1937—, Northwest School and Station, University of Minnesota.

Honors: Sigma Xi.

Address: Northwest School and Station, Crookston, Minnesota.

1937. BEBER, ADOLPH JOSEPH. B.S. '30, Montana State College; M.S. in Ch.E. '32, University of Minnesota.

Major: Plant Physiology. Minors: Chemistry and Chemical Engineering.

Thesis: The Rôle of Chlorophyll in Photosynthesis. Published in *Summaries of Ph.D. Theses*, Vol. 1, 1939, University of Minnesota.

Major Adviser: Professor G. O. Burr.

Positions Held: Associate Professor in Biology and Chemistry, 1937—, State Teachers College, Springfield, Missouri.

Honors: Sigma Xi.

Address: 891 Normal, Springfield, Missouri.

## SOILS

1918. MORROW, CLARENCE. B.S. '06, Ohio Wesleyan University; M.A. '09, Oberlin College.

Major: Soils. Minor: Agricultural Biochemistry.

Thesis: The Organic Matter of the Soil: A Study of the Nitrogen Distribution in Different Soil Types. Not published.

Major Adviser: Professor F. J. Alway.

Positions Held: Assistant Professor, 1919-1926, University of Minnesota.

Deceased, 1926.

1918. ROST, CLAYTON ORD. B.S. '11, M.A. '12, University of Nebraska.

Major: Soils. Minor: Geology.

Thesis: Parallelism of Soils Developed on the Gray Drifts of Minnesota. Published 1918, Minneapolis.

Major Adviser: Professor F. J. Alway.

Positions Held: Assistant Professor of Soils, 1918-1923, Associate Professor, 1923-1935, Professor, 1935—, University of Minnesota.

Honors: Sigma Xi; Fellow of the A.A.A.S.; Phi Beta Kappa; Phi Lambda Epsilon; Gamma Sigma Delta; Alpha Zeta.

Address: 1421 Hythe St., St. Paul, Minnesota.

1920. HARMER, PAUL. B.S. '11, Carleton College; M.S. '15, University of Minnesota.

Major: Soils. Minors: Plant Pathology and Bacteriology.

Thesis: A Glacial Soil Study: Uniformity of the Late Gray Drift of Minnesota. Published 1920, Minneapolis.

Major Adviser: Professor F. J. Alway.

Positions Held: Assistant Professor, 1919-1921, University of Wisconsin; Research Associate, 1921—, Soils Department Michigan State College.

Honors: Sigma Xi.

Address: Soils Department, Michigan State College, East Lansing, Michigan.

1924. FIEGER, ERNEST AUGUST. B.S. '20, Ch.E. '21, University of Minnesota.  
Major: Soils. Minors: Physical Chemistry and Plant Physiology.  
Thesis: Hydrogen-Ion Concentration Studies of Minnesota Soils. Mimeographed 1925, Ann Arbor, Michigan.  
Major Adviser: Professor C. O. Rost.  
Positions Held: Assistant Professor, 1924-1932, Associate Professor, 1932-1936, Professor, 1936—, Louisiana State University.  
Honors: Phi Kappa Phi.  
Address: Louisiana State University, University, Louisiana.
1924. PINCKNEY, REUBEN MARION. B.S. '06, Nebraska Wesleyan University; M.A. '08, University of Nebraska.  
Major: Soils. Minor: Physical Chemistry.  
Thesis: The Freezing Points of Soils at the Moisture Equivalent. Mimeographed 1925, Ann Arbor, Michigan.  
Major Adviser: Professor F. J. Alway.  
Positions Held: Assistant in Division of Soils, 1925-1929, Instructor, 1929-1933, University of Minnesota; 1933—, Federal Land Bank, Resettlement Administration.  
Honors: Sigma Xi.  
Address: Badger, Minnesota.
1927. BODMAN, GEOFFREY BALDWIN. B.S.A. '19, University of Saskatchewan; M.S. '24, University of Minnesota.  
Major: Soils. Minors: Geology and Plant Physiology.  
Thesis: Some Characteristics and Criteria of the Soils of the Red Drifts of Minnesota. Mimeographed 1927, Ann Arbor, Michigan.  
Major Adviser: Professor F. J. Alway.  
Positions Held: Instructor in Soil Technology, 1927-1929, Assistant Professor, 1929-1931, Associate Professor, 1931—, University of California, Berkeley, California.  
Honors: Sigma Xi; Phi Lambda Upsilon; Gamma Sigma Delta.  
Address: Hilgard Hall, University of California, Berkeley, California.
1933. NYGARD, IVER JOHN. B.S. '24, M.S. '26, University of Minnesota.  
Major: Soils. Minor: Botany.  
Thesis: The Identification of Lime Deficient Peat Soils in Advance of Field Trials. Published May, 1933, Burgess Publishing Co., Minneapolis, Minnesota.  
Major Adviser: Professor F. J. Alway.  
Positions Held: Assistant, 1933-1935, University of Minnesota; Assistant Soil Surveyor, 1935—, Soil Conservation Service, U.S.D.A.  
Honors: Alpha Zeta; Gamma Sigma Delta; Sigma Xi; Traveling Fellow, American Scandinavian Foundation; Fellow, A.A.A.S.  
Address: 314 W. Fourth, Winona, Minnesota.
1934. YOUNGE, OTTO RUDER. B.S.A. '24, M.S. '29, University of Alberta.  
Major: Soils. Minor: Botany.  
Thesis: A Chemical Investigation of Peat Bogs in Mille Lacs and Kanabec Counties, Minnesota. Published in *Summaries of Ph.D. Theses*, Vol. 1, 1939, University of Minnesota.

Major Adviser: Professor F. J. Alway.

Positions Held: Soil Surveyor, 1935-1936, University of Minnesota; Assistant Professor of Agronomy, 1936—, University of Arkansas.

Honors: Sigma Xi; Gamma Sigma Delta.

Address: Route 2, Fayetteville, Arkansas.

1935. HIDE, JOHN CLIFFORD. B.S. '30, University of Alberta; M.S. '32, University of Minnesota.

Major: Soils. Minor: Plant Physiology.

Thesis: The Cause of Certain Unproductive Spots in the Red River Valley.

Published in *Summaries of Ph.D. Theses*, Vol. 1, 1939, University of Minnesota.

Major Adviser: Professor F. J. Alway.

Positions Held: Instructor, 1935-1937, Assistant Professor, 1937—, Kansas State College.

Honors: Gamma Sigma Delta; Sigma Xi.

Address: 1447 Anderson Ave., Manhattan, Kansas.

## BIOLOGICAL SCIENCES

### BIOMETRY

1934. GUNSTAD, BORGHILD SOLVEIG. B.S. '27, M.A. '31, University of Minnesota.  
Major: Biometry. Minor: Mathematics.  
Thesis: A Biometric Study of Physical Characters of the New-born Infant and Their Relation to Maternal Characters. Published in *Human Biology*, 8:565-580, 1936.  
Major Adviser: Professor Alan E. Treloar.  
Positions Held: Teaching Assistant, 1934-1936, Instructor in Biostatistics, 1936—, University of Minnesota.  
Honors: Pi Lambda Theta; Phi Beta Kappa; Sigma Xi.  
Address: 3245 Nicollet Avenue, Minneapolis, Minnesota.

### BOTANY

1899. RAMALEY, FRANCIS. B.S. '95, University of Minnesota.  
Major: Botany. Minors: Animal Biology and Chemistry.  
Thesis: Contributions to a Knowledge of Seedlings. Published 1899, Minneapolis, in *Minnesota Botanical Studies*, Second Series, Part 2, 69-136.  
Major Adviser: Professor C. Macmillan.  
Positions Held: Assistant Professor of Biology, 1899-1900, Professor, 1900—, Acting President, 1902, Head of Biology Department, 1919—, University of Colorado; Director of Mountain Laboratory, 1909-1919, Tolland, Colorado.  
Honors: Fellow of the A.A.A.S.; Phi Beta Kappa; Sigma Xi; starred man in *American Men of Science*.  
Address: University of Colorado, Boulder, Colorado.
1900. FINK, BRUCE. M.S. '94, University of Illinois; M.A. '96, Harvard University.  
Major: Botany. Minors: Zoology and Geology.  
Thesis: Contributions to a Knowledge of the Lichens of Minnesota. Published 1899, Minneapolis in *Minnesota Botanical Studies*, Second Series, Part 3, 277-329.  
Major Adviser: Professor C. Macmillan.  
Positions Held: Professor of Biology, 1893-1903, Upper Iowa University, Fayette, Iowa; Professor of Botany, 1903-1906, Grinnell College, Grinnell Iowa; Professor, Head of Botany Department, 1906-1927, Miami University, Miami, Florida.  
Honors: Starred man in *American Men of Science*.  
Deceased, 1927.
1903. LYON, HAROLD LLOYD. B.A. '00, M.S. '01, University of Minnesota.  
Major: Botany. Minors: Animal Biology and Geology.  
Thesis: The Embryology of Ginkgo. Published October 1904, Minneapolis in *Minnesota Botanical Studies*, 3:275-290.  
Major Adviser: Professor C. Macmillan.  
Positions Held: Instructor, 1900-1905, Assistant Professor, 1905-1907, University of Minnesota; Assistant Pathologist, 1907-1909, Pathologist, 1909-1918, in

- Charge of Department of Botany and Forestry, 1918—, Experiment Station, Hawaiian Sugar Planters' Association.  
Address: Experiment Station, Hawaiian Sugar Planters' Associations, Honolulu, Hawaii.
1914. HOFMANN, JULIUS VALENTINE. B.S. in Forestry, '11, M.F. '12, University of Minnesota.  
Major: Botany (Sylviculture). Minor: Plant Pathology.  
Thesis: The Importance of Seed Characteristics in the Natural Reproduction of Coniferous Forests. Published 1918 as University of Minnesota Studies in the Biological Sciences, no. 2.  
Major Adviser: Professor J. P. Wentling.  
Positions Held: Director, 1913-1914, Government Experiment Station, Forest Service; Assistant Director, 1924-1928, Pennsylvania State School of Forestry, Mont Alto, Pennsylvania; Head of Forestry Department, 1928-1932, Director, Division of Forestry, 1932—, North Carolina State College.  
Address: 2800 Fairview Road, Raleigh, North Carolina.
1916. WEAVER, JOHN ERNST. B.S. '09, M.A. '11, University of Nebraska.  
Major: Botany. Minor: Plant Pathology.  
Thesis: A Study of the Vegetation of Southeastern Washington and Adjacent Idaho. Published 1917, Lincoln, Nebraska, in *University Studies*, Vol. 17, no. 1.  
Major Adviser: Professor F. E. Clements.  
Positions Held: Assistant Professor of Botany, 1915-1917, Professor of Plant Ecology, 1917—, University of Nebraska.  
Honors: Fellow of the A.A.A.S.; President of the Ecological Society of America, 1930; Phi Beta Kappa; Sigma Xi, starred man in *American Men of Science*,  
Address: Station A, Lincoln, Nebraska.
1917. FOLSOM, DONALD B.A. '12, University of Nebraska; M.A. '14, University of Minnesota.  
Major: Botany. Minor: Agricultural Biochemistry.  
Thesis: The Experimental Modification of *Ranunculus* under Control. Published in *Physiological Researches*, Vol. 2, no. 5, December 1918.  
Major Adviser: Professor F. E. Clements.  
Positions Held: Agent, summer 1917, Bureau of Plant Industry, U.S.D.A.; Instructor, 1917-1918, North Carolina State College of Agriculture, Raleigh, North Carolina; Assistant Plant Pathologist, 1918-1920, Associate Plant Pathologist, 1920-1923, Plant Pathologist, 1923—, Maine Agricultural Experiment Station, Orono, Maine.  
Honors: Phi Beta Kappa; Sigma Xi; Phi Kappa Phi; Phi Sigma; Fellow of the A.A.A.S.  
Address: Maine Agricultural Experiment Station, Orono, Maine.
1917. LONG, FRANCES LOUISE. B.A. '06, University of Nebraska; B.S. '06, University of Chicago; M.A. '13, University of Minnesota.  
Major: Botany. Minor: Plant Pathology.  
Thesis: The Quantitative Determination of Photosynthate in Relation to Light in Various Species. Published in *Physiological Researches*, Vol. 2, no. 6, August 1919.

Major Adviser: Professor F. E. Clements.

Positions Held: Ecological Research, 1917—, Carnegie Institution of Washington.  
Address: 159 Las Encinas Road, Mission Canyon, Santa Barbara, California  
(September-June). Alpine Laboratory, Manitou, Colorado (June-September).

1917. STALLARD, HARVEY. Ph.B. '09, Ottawa University, Kansas.

Major: Botany. Minor: Chemistry.

Thesis: Secondary Succession in the Climax Forest Formations in Northern Minnesota. Published in *Ecology*, Vol. 10, no. 4, October 1929.

Major Adviser: Professor F. E. Clements.

Positions Held: Assistant, 1917-1918, University of Illinois; Member of California Board of Dental Examiners, 1925-1931, Vice President, 1927-1929, President, 1929-1931; Private Practice of Orthodontics, 1920—, San Diego, California.

Degrees Received since the Ph.D.: D.D.S., 1920, University of Illinois.

Honors: Sigma Xi; Omicron Kappa Upsilon.

Address: 803 Medico-Dental Building, San Diego, California.

1918. BERGMAN, HERBERT FLOYD. B.S. '05, Kansas State Agricultural College; M.S. '15, University of Minnesota.

Major: Botany. Minor: Chemistry.

Thesis: The Relation of Aeration to the Growth and Activity of Swamp Plants and Its Influence on Their Ecesis. Published in *Annals of Botany*, Vol. 34, no. 133, January 1920.

Major Adviser: Professor F. E. Clements.

Positions Held: Assistant Pathologist, 1917-1919, Bureau of Plant Industry, U.S.D.A.; Professor of Botany, 1919-1929, University of Hawaii; Exchange Professor, 1922-1923, University of Michigan; Seessel Fellow in Physiological Chemistry, 1925-1926, Yale University; Senior Pathologist, 1929—, Bureau of Plant Industry, U.S.D.A.

Honors: Sigma Xi.

Address: 244 Amity St., Amherst, Massachusetts.

1919. BAUSMAN, CLARENCE CARLETON. B.A. '16, M.S. '17, University of Minnesota.

Major: Botany. Minor: Plant Pathology.

Thesis: Studies on the Morphology of Some Australian Algae. Not published.

Major Adviser: Professor J. E. Tilden.

Positions Held: Teacher, 1919—, Minneapolis.

Address: 3332 Colfax Ave. So., Minneapolis, Minnesota.

1919. CLARK, LOIS. B.A. '07, M.A. '10, University of Washington.

Major: Botany. Minor: Micology.

Thesis: The Embryology of *Podophyllum peltatum*. Published 1923 in Minnesota Studies in Plant Science, Studies in the Biological Sciences, no. 4.

Major Adviser: Professor F. K. Butters.

Positions Held: Head of Science Department, 1919-1920, Stephens Junior College, Columbia, Missouri; in Charge of Botany, summers 1921 and 1923, University of Washington; Assistant Professor, 1923-1927, University of Idaho, Moscow, Idaho.

Address: Lakota, Washington.

1919. JOHNSON, ARTHUR MONRAD. B.A. '04, University of Minnesota.  
 Major: Botany. Minor: Entomology.  
 Thesis: A Revision of the Section *Boraphila* Eugler of the Genus *Saxifraga*.  
 Published 1923 in Minnesota Studies in Plant Science, Studies in the Biological Sciences, no. 4.  
 Major Adviser: Professor C. O. Rosendahl.  
 Positions Held: Lecturer, 1926, Boston Teachers' School of Science, Boston, Massachusetts; Lecturer, 1927, University of Wisconsin; Lecturer, 1927-1928, Assistant Professor, 1928-1937, Associate Professor, 1937—, Director of the Botanical Garden, 1937—, Chairman, Department of Botany, 1938—, University of California at Los Angeles.  
 Honors: Vice President, local chapter of the American Association of University Professors, U.C.L.A., 1930-1931; Committee on Conservation, Ecological Society of America, Pacific Division.  
 Address: 10733 Wellworth Ave., Los Angeles (Westwood), California.
1919. PEASE, VINNIE ARAH. B.S. '07, College of Puget Sound; M.S. '16, University of Washington.  
 Major: Botany. Minors: Organic Chemistry and Phyto-Chemistry.  
 Thesis: The Taxonomy and Morphology of the Ligulate Species of the Genus *Desmarestia*. Published in *Publications of the Puget Sound Biological Station*, 2:313-367, 1920.  
 Major Adviser: Professor J. E. Tilden.  
 Positions Held: Microanalyst, 1920-1924, Assistant Microanalyst, 1924-1928, Bureau of Chemistry; Associate Microscopist, 1928—, Bureau of Chemistry and Soils, U.S.D.A.  
 Honors: Sigma Xi, Secretary of the D.C. Division, 1931-1936; Fellow of the A.A.A.S.  
 Address: Bureau of Chemistry and Soils, U.S.D.A., Washington, D.C.
1921. WORK, PAUL. B.A. '07, University of Tennessee; B.S. '10, Pennsylvania State College; M.S. '13, Cornell University.  
 Major: Botany. Minor: Soils.  
 Thesis: Effects of Nitrate of Soda on the Nutrition of the Tomato. Published 1924, Cornell University.  
 Major Adviser: Professor L. I. Knight.  
 Positions Held: Professor of Vegetable Crops, 1917—, New York State College of Agriculture, Cornell University, Ithaca, New York; Editor, 1928—, *Market Growers Journal*.  
 Honors: Fellow of the A.A.A.S.; Sigma Xi; Phi Kappa Phi; Gamma Sigma Delta.  
 Address: 310 Elmwood Ave., Ithaca, New York.
1925. SOROKIN, HELEN. University of Saint Petersburg, Russia, '17.  
 Major: Botany. Minor: Plant Pathology.  
 Thesis: Cytological Investigations of the Gynodimorphic and Normal *Ranunculus Acris* L. Published in *Genetics*, 12:59-83, 1927.  
 Major Adviser: Professor C. O. Rosendahl.  
 Positions Held: Assistant Professor, 1926-1930, Hamline University, St. Paul, Minnesota; Research Associate, 1930-1931, Bussey Institution, Harvard Uni-

- versity, Cambridge, Massachusetts; Affiliated with the Harvard Biological Laboratories, 1935—.  
 Honors: Sigma Xi.  
 Address: 8 Cliff St., Winchester, Massachusetts.
1926. EATON, FRANK MORRIS. B.S. '23, M.S. '24, University of Minnesota.  
 Major: Botany. Minor: Biochemistry.  
 Thesis: The Water Requirement and Cell-Sap Concentration of Australian Salt-bush, Wheat, and Cotton. Published in *American Journal of Botany*, 14:212-216, 1927.  
 Major Adviser: Professor R. B. Harvey.  
 Positions Held: Assistant Physiologist, 1926-1928, Associate Physiologist in Charge of Rubidoux Laboratory, 1928-1935, Physiologist, 1935—, U.S.D.A.  
 Honors: Sigma Xi; Gamma Alpha; Gamma Sigma Delta.  
 Address: Rubidoux Laboratory, Riverside, California.
1929. SISTER REMBERTA WESTKAEMPER. B.A. '19, St. Benedict's College; M.S. '22, University of Minnesota.  
 Major: Botany. Minor: Agricultural Biochemistry.  
 Thesis: The Vitamin Content of Some Marine Algae. Not published.  
 Major Adviser: Professor G. O. Burr.  
 Positions Held: Professor of Biology, 1929—, College of St. Benedict.  
 Honors: Sigma Xi.  
 Address: College of St. Benedict, St. Joseph, Minnesota.
1929. STEINBAUER, GEORGE PETER. B.S. '25, M.S. '27, University of Minnesota.  
 Major: Botany. Minor: Agricultural Biochemistry.  
 Thesis: Light as a Factor in the Growth and Metabolism of Tree Seedlings. Published 1932, Lancaster, Pennsylvania.  
 Major Adviser: Professor R. B. Harvey.  
 Positions Held: Assistant Professor of Botany, 1929—, University of Maine; Seed Analyst, 1929—, Maine Agricultural Experiment Station, Orono, Maine.  
 Honors: Sigma Xi; Alpha Zeta; Phi Kappa Phi; Phi Lambda Upsilon; Phi Sigma; Gamma Sigma Delta.  
 Address: 66 College Ave., Orono, Maine.
1929. YOUNG, VERNON. B.S. '22, Utah State Agricultural College; M.S. '24, Iowa State College.  
 Major: Botany. Minor: Agricultural Biochemistry.  
 Thesis: Chemical Factors of the Soil Which Influence the Distribution of Desert Vegetation. Published in *J. Arthur Harris, Botanist and Biometrician*, by Rosendahl, Gortner and Burr, pp. 47-97, University of Minnesota Press.  
 Major Adviser: Professor J. A. Harris.  
 Positions Held: Assistant Professor of Biology, 1929-1930, Agricultural and Mechanical College of Texas; Assistant Professor, 1930-1937, New York State College of Forestry, Syracuse, New York; Professor, School of Forestry, 1937—, University of Idaho.  
 Honors: Sigma Xi; Alpha Xi Sigma; Xi Sigma Pi; Scabbard and Blade; Robin Hood.  
 Address: School of Forestry, University of Idaho, Moscow, Idaho.



1930. SISTER MARY LAMB. B.S. '19, M.S. '22, University of Chicago.  
Major: Botany. Minor: Botany (Morphology and Ecology).  
Thesis: The Genus *Cladophora*, with a Key for Use in Identifying Fresh-Water Species. Not published.  
Major Adviser: Professor J. E. Tilden.  
Positions Held: Dean, Professor of Biology, 1929—, College of St. Scholastica.  
Honors: Sigma Xi.  
Address: College of St. Scholastica, Duluth, Minnesota.
1931. GARLOUGH, LESLIE NATHAN. B.A. '16, M.A. '27, University of Minnesota.  
Major: Botany (Biometry). Minor: Zoology.  
Thesis: A Biometric Study of Pulmonary Ventilation. Published in *Summaries of Ph.D. Theses*, Vol. 1, 1939, University of Minnesota.  
Major Advisers: Professors A. J. Harris and A. E. Treloar.  
Positions Held: Professor of Biology, Head of Science Department, 1931—, Municipal University, Omaha, Nebraska.  
Honors: Sigma Xi; Fellow of A.A.A.S.; Member, Botanical Society of America, and American Society of Bacteriologists.  
Address: 4712 Chicago Street, Omaha, Nebraska.
1931. KITTREDGE, JOSEPH. B.A. '12, M.F. '13, Harvard University.  
Major: Botany (Ecology). Minor: Forestry (Silviculture).  
Thesis: The Interrelation of Habitat, Growth Rate, and Associated Vegetation in the Aspen Community of Minnesota and Wisconsin. Published in *Ecological Monographs*, Vol. 8, no. 2, 1938.  
Major Adviser: Professor W. S. Cooper.  
Positions Held: Senior Sylviculturist, 1928-1931, Lake States Forest Experiment Station, United States Forest Service; Professor, Forest Ecologist, 1932—, Division of Forestry, University of California.  
Honors: Sigma Xi.  
Address: Division of Forestry, University of California, Berkeley, California.
1931. OOSTING, HENRY J. B.A. '25, Hope College; M.S. '27, Michigan State College.  
Major: Botany (Ecology). Minor: Botany (Taxonomy).  
Thesis: A Limnological Study of Ham Lake with Special Emphasis upon the Flowering Plants. Published in *Ecological Monographs*, 3:493-533.  
Major Adviser: Professor W. S. Cooper.  
Positions Held: Instructor, 1931-1932, University of Minnesota; Instructor in Botany, 1932-1937, Assistant Professor, 1937—, Duke University; Assistant Professor in Botany, 1934 and 1935 Summer Sessions, Junaluska Summer School; Assistant Professor of Botany, 1936 Summer Session, University of Minnesota; Ecologist, 1937, Louise A. Boyd Arctic Expedition.  
Address: Department of Botany, Duke University, Durham, North Carolina.
1931. STOESZ, ABRAHAM DIETRICH. B.A. '23, Bluffton College; M.A. '28, University of Minnesota.  
Major: Botany (Ecology). Minors: Botany (Taxonomy) and Geology.  
Thesis: The Successional Role of Subterranean Organs in a Dune Environment. Not published.

- Major Adviser: Professor W. S. Cooper.  
 Positions Held: Assistant Professor of Botany, 1929-1935, North Dakota State College; Regional Nurseryman, 1935—, Soil Conservation Service, U.S.D.A.  
 Address: 1221 11th St., Rapid City, South Dakota.
1932. FOOT, HELEN. B.A. '26, M.A. '30, University of Minnesota.  
 Major: Botany. Minor: Zoology.  
 Thesis: A New Genus and Some New Species of Blue-Green Algae: A Study of a Peculiar Algal Association in a Minnesota Lake. Published in *Ecology*, 19:224, 1938.  
 Major Adviser: Professor J. E. Tilden.  
 Honors: Phi Beta Kappa; Sigma Xi.  
 Married Name: Mrs. Murray Fife Buell.  
 Address: Botany Department, State College, Raleigh, North Carolina.
1932. HORTON, ETHEL SUE. B.A. '07, Beloit College; M.A. '21, University of Wisconsin.  
 Major: Botany. Minor: Plant Pathology.  
 Thesis: Studies in the Cytology of Wheat and of a Wheat Species Cross in Hybrid. Published in *American Journal of Botany*, 23:121-129, 1936.  
 Major Adviser: Professor C. O. Rosendahl.  
 Positions Held: Assistant in Botany, 1932-1933, Beloit College; Assistant in Biology, 1934—, Central State Teachers College.  
 Honors: Phi Beta Kappa.  
 Address: Central State Teachers College, Stevens Point, Wisconsin.
1932. LAKELA, OLGA. B.S. '21, M.S. '24, University of Minnesota.  
 Major: Botany (Taxonomy). Minor: Zoology.  
 Thesis: A Revision of the *Genus Heuchera* L. Included in Monograph on *Genus Heuchera*, University of Minnesota Press, 1936; and in *Summaries of Ph.D. Theses*, Vol. 1, 1939, University of Minnesota.  
 Major Adviser: Professor C. O. Rosendahl.  
 Positions Held: Herbarium Assistant, 1930-1935, Department of Botany, University of Minnesota; Teacher, 1935—, State Teachers College, Duluth, Minnesota.  
 Honors: Sigma Xi.  
 Address: State Teachers College, Duluth, Minnesota.
1932. MILLER, ELMER SEVERN. B.S. '30, University of Minnesota.  
 Major: Botany (Plant Physiology). Minor: Organic Chemistry.  
 Thesis: A Study of Gas Exchange in Plants. Published in *Plant Physiology*, December 1932.  
 Major Adviser: Professor G. O. Burr.  
 Positions Held: National Research Fellow, 1932-1934, Research Associate and Board of Education Fellow, 1934-1935, University of Chicago; Instructor, 1935—, University of Minnesota.  
 Honors: Sigma Xi; Phi Lambda Upsilon.  
 Address: 116 Melbourne Ave. S.E., Minneapolis, Minnesota.
1933. HUMPHREY, ROBERT REGISTER. B.A. '29, M.A. '30, University of Minnesota.  
 Major: Botany (Ecology). Minors: Geology and Botany (Taxonomy).

- Thesis: A Study of *Fouquieria Splendens* and *Idria Columnaris*. Published in *American Journal of Botany*, Vol. 22, no. 2, February 1935.  
Major Adviser: Professor W. S. Cooper.  
Positions Held: Junior Range Examiner, 1933-1935, United States Forest Service; Assistant Range Examiner, 1935—, United States Soil Conservation Service.  
Honors: Gamma Alpha; Sigma Xi.  
Address: Box 1314, Albuquerque, New Mexico.
1933. MOORE, JOHN WILLIAM. B.S. '24, South Dakota State College; M.S. '26, University of Minnesota.  
Major: Botany. Minor: Geology.  
Thesis: New and Critical Plants from Raiatea. Published in *Bernice P. Bishop Museum Bulletin* 102, July 20, 1933.  
Major Adviser: Professor C. O. Rosendahl.  
Positions Held: Emergency Fellowship, 1933-1934, Department of Botany, University of Minnesota; Instructor in Botany, 1934 Summer Session, University of Iowa; Instructor in Biology, 1935, Central State Teachers College, Stevens Point, Wisconsin; Herbarium Assistant, 1935-1937, Research Assistant, 1937—, Department of Botany, University of Minnesota.  
Honors: Sigma Xi; Gamma Alpha.  
Address: Department of Botany, University of Minnesota, Minneapolis, Minn.
1933. POWELL, LOUIS HARVEY. B.S. in C.E. '24, University of Minnesota.  
Major: General Botany. Minor: Botany (Ecology).  
Thesis: A Study of the Ozarkian Faunas of Southeastern Minnesota. Published as Science Bulletin no. 1, of the Science Museum of the St. Paul Institute.  
Major Adviser: Professor C. R. Stauffer.  
Positions Held: Acting Director, 1933-1937, Director and Executive Secretary, 1937—, The Science Museum of St. Paul Institute.  
Honors: Sigma Xi.  
Address: 1581 Beechwood Ave., St. Paul, Minnesota.
1935. BUELL, MURRAY FIFE. B.A. '30, Cornell University; M.A. '34, University of Minnesota.  
Major: Botany. Minors: Geology and Botany (Plant Ecology).  
Thesis: The Embryogeny of *Acorus Calamus* L. Published in *Botanical Gazette*, March 1937.  
Major Adviser: Professor F. K. Butters.  
Positions Held: Instructor in Botany, 1935—, North Carolina State College.  
Honors: Sigma Xi.  
Address: Botany Department, North Carolina State College, Raleigh, North Carolina.
1935. DAUBENMIRE, REXFORD F. B.S. '30, Butler University; M.S. '32, University of Colorado.  
Major: Botany (Plant Ecology). Minors: Geology and Botany (Plant Taxonomy).  
Thesis: The Big Woods of Minnesota: Its Structure and Relation to Climate, Fire, and Soils. Published in *Ecological Monographs*, 6:233-268, 1936.  
Major Adviser: Professor W. S. Cooper.

Positions Held: Acting Assistant Professor in Botany, 1935, University of Tennessee; Assistant Professor of Botany, 1936—, University of Idaho; Lecturer in Botany, 1937 Summer Sessions, University of Minnesota.

Honors: Phi Kappa Phi; Sigma Xi; Research Grant from Northwestern Science Association, 1937-1938.

Address: Department of Botany, University of Idaho, Moscow, Idaho.

1935. DUDLEY, MARGARET GERTRUDE. B.S. '28, M.S. '30, University of Manitoba.

Major: Botany (Taxonomy). Minor: Zoology.

Thesis: Morphological and Cytological Studies of *Calla palustris* L. Published in *Botanical Gazette*, March 1937.

Major Adviser: Professor C. O. Rosendahl.

Positions Held: Assistant, 1935-1937, Lecturer, 1937, University of Manitoba.

Honors: Sigma Xi.

Address: Birtle, Manitoba, Canada.

1935. FERTIG, JOHN WILLIAM. B.A. '31, Ursinus College.

Major: Botany (Biometry). Minor: Plant Physiology.

Thesis: Variation in the Physico-Chemical Properties of the Tissue Fluids of Desert Plants. Not published.

Major Adviser: Professor A. E. Treloar.

Positions Held: Assistant Biometrician, 1935-1937, Worcester State Hospital, Massachusetts; Instructor in Biostatistics, 1937—, Johns Hopkins School of Hygiene and Public Health.

Address: School of Hygiene and Public Health, Johns Hopkins Hospital, Baltimore, Maryland.

1935. PHILSON, PAUL JAMES. B.S. '28, Furman University; M.A. '31, Duke University.

Major: Botany (Phycology). Minor: Zoology.

Thesis: The Freshwater Algae of North and South Carolina. Part I. Cyanophyceae. Not published.

Major Adviser: Professor J. E. Tilden.

Positions Held: Instructor in Biology, 1935—, University of South Carolina.

Honors: Sigma Xi.

Address: 2416 Monroe St., Columbia, South Carolina.

1936. GRANT, MARTIN LAWRENCE. B.A. '27, Oberlin College; M.A. '29, University of Minnesota.

Major: Botany. Minor: Zoology.

Thesis: Flora of the Society Islands. Dicotyledones: Sympetalae; Part I. Not published.

Major Adviser: Professor F. K. Butters.

Positions Held: Assistant Professor of Biology, 1936—, Iowa State Teachers College.

Honors: Phi Beta Kappa; Sigma Xi.

Address: Iowa State Teachers College, Cedar Falls, Iowa.

1936. NIELSEN, ETLAR LESTER. B.S. '28, University of Minnesota.  
Major: Botany. Minor: Geology.  
Thesis: A Taxonomic Study of the Members of the Genus *Amelanchier* Occurring in Minnesota. Not published.  
Major Adviser: Professor C. O. Rosendahl.  
Positions Held: Assistant Professor in Agronomy, 1936—, University of Arkansas.  
Honors: Sigma Xi.  
Address: 522 Storer Street, Fayetteville, Arkansas.
1936. OLTMAN, ROBERT EUGENE. B.A. '32, Oberlin College.  
Major: Botany (Plant Physiology). Minor: Organic Chemistry.  
Thesis: Studies in the Development of Chlorophyll in Plants. Not published.  
Major Adviser: Professor G. O. Burr.  
Positions Held: Research Associate, 1936-1937, Minnesota Valley Canning Co., Le Sueur, Minnesota; Director of Research, 1937—, Fine Foods of Canada Ltd., Empire Foods Corp. Ltd.  
Honors: Sigma Xi.  
Address: Room 800, 159 Bay Street, Toronto 2, Ontario, Canada.
1937. EARLE, THOMAS THERON. B.S. '28, Furman University.  
Major: Botany. Minor: Zoology.  
Thesis: Studies in the Embryology of the Ranales. Published in *Botanical Gazette*, 1938.  
Major Adviser: Professor F. K. Butters.  
Positions Held: Teaching Assistant, 1933-1938, University of Minnesota; Instructor, 1938—, Newcomb College, Tulane University.  
Honors: Sigma Xi.  
Address: Newcomb College, Tulane University, New Orleans, Louisiana.
1938. ARTIST, RUSSELL CHARLES. B.S. '32, Butler University; M.S. '34, Northwestern University.  
Major: Botany. Minor: Geology.  
Thesis: Pollen Spectrum Studies on the Anoka Sand Plain in Minnesota. Not published.  
Major Adviser: Professor W. S. Cooper.  
Positions Held: Professor in Biology, 1938—, Amarillo College.  
Honors: Sigma Xi.  
Address: Amarillo College, Amarillo, Texas.
1938. DAHL, ANTHONY ORVILLE. B.S. '32, M.S. '33, University of Minnesota.  
Major: Botany. Minor: Plant Genetics.  
Thesis: Cytological and Taxonomic Studies in the Genus *Anemone* L. Not published.  
Major Adviser: Professor C. O. Rosendahl.  
Positions Held: Instructor in Botany and Tutor in Biology, 1938—, Harvard University.  
Honors: Sigma Xi; Gamma Sigma Delta.  
Address: 3909 14th Ave. So., Minneapolis, Minnesota.

1938. NASH, ARTHUR. B.A. '22, Augsburg College.  
 Major: Botany (Phycology). Minor: Zoology.  
 Thesis: The Cyanophyceae of the Thermal Regions of Yellowstone National Park, U.S.A., and of Rotorua and Whakarewarewa, New Zealand; with Some Ecological Data. Not published.  
 Major Adviser: Professor G. O. Burr.  
 Positions Held: Instructor in Biology, 1928—, Augsburg College; Senior Ranger Naturalist, summers, 1931—, Yellowstone National Park.  
 Honors: Sigma Xi.  
 Address: 1615 11th Ave. So., Minneapolis, Minnesota.

## ENTOMOLOGY

1921. GRAHAM, SAMUEL ALEXANDER. B.S. '14, University of Minnesota; M.S. '16, Cornell University.  
 Major: Entomology. Minor: Zoology.  
 Thesis: The Influence of Physical Factors of the Environment on the Ecology of Certain Insects in Logs. Published 1921-1922 in the Nineteenth Report of the State Entomologist of Minnesota, pp. 22-30.  
 Major Adviser: Professor R. N. Chapman.  
 Positions Held: Instructor, 1921-1922, Assistant Professor, 1922-1927, University of Minnesota; Agent, 1923-1928, Bureau of Entomology, U.S.D.A.; Associate Professor of Forestry, 1928-1929, Professor of Economic Zoology, 1929—, University of Michigan.  
 Address: University of Michigan, Ann Arbor, Michigan.
1921. HERTIG, MARSHALL. B.S. '16, University of Minnesota.  
 Major: Entomology. Minor: Bacteriology.  
 Thesis: Some Phases of the Pathological Histology of the Honey Bee with Special Reference to Infection with *Nosema Apis*. Published in *Journal of Parasitology*, 9:109-140, 1923; reprinted 1923 as University of Minnesota Agricultural Experiment Station Technical Bulletin 13.  
 Major Adviser: Professor W. A. Riley.  
 Positions Held: Instructor in Animal Biology, 1921-1927, University of Minnesota; Entomologist, Kala Azar Field Studies, China Medical Board (Rockefeller Foundation), 1924-1927, Peking Union Medical College, Peking; Assistant Professor of Medical Entomology, 1927—, Harvard Medical School; Jefe del Departamento de Entomología Médica, 1937—, Instituto Nacional de Higiene y Salud Pública, Lima, Peru.  
 Address: Department of Comparative Pathology, Harvard Medical School, Boston, Massachusetts.
1922. COOK, WILLIAM CARMICHAEL, B.S. '17, Cornell University; M.S. '20, University of Minnesota.  
 Major: Entomology. Minor: Entomology.  
 Thesis: Studies in the Physical Ecology of the *Noctuidae*. Published 1924 as University of Minnesota Agricultural Experiment Station Technical Bulletin 12.  
 Major Adviser: Professor R. N. Chapman.  
 Positions Held: Assistant Entomologist, 1921-1926, Montana Experiment Station, Bozeman, Montana; Associate Professor, 1926-1927, University of Min-

nesota; Associate Entomologist, 1927-1930, Montana Experiment Station; Entomologist, 1930—, Bureau of Entomology, U.S.D.A., Davis, California.  
Address: P.O. Box 642, Modesto, California.

1923. EYER, JOHN ROBERT. B.A. '17, Cornell University; M.S. '21, Pennsylvania State College.

Major: Entomology. Minor: Plant Pathology.

Thesis: The Comparative Morphology of the Male Genitalia of the Primitive *Lepidoptera*. Published in *Annals of the Entomological Society of America*, Vol. 17, no. 3, 1924.

Major Adviser: Professor W. A. Riley.

Positions Held: Entomologist, 1924-1927, Pennsylvania Bureau of Plant Industry, Department of Agriculture; Associate Professor of Entomology, 1927—, New Mexico College of Agriculture and Mechanic Arts.

Address: State College, New Mexico.

1924. GILMER, PAUL McCULLOUGH. B.A. '08, Monmouth College; M.A. '22, University of Minnesota.

Major: Entomology. Minor: Physiology.

Thesis: A Comparative Study of the Poison Apparatus of Certain Lepidopterous Larvae. Published in *Annals of the Entomological Society of America*, Vol. 18, no. 2, June 1925.

Major Adviser: Professor W. A. Riley.

Positions Held: Station Entomologist, Professor of Zoology and Entomology, 1924-1926, New Mexico College of Agriculture and Mechanic Arts; Associate Entomologist, 1926—, Bureau of Entomology, U.S.D.A.

Honors: Sigma Xi.

Address: Georgia Coastal Plain Experiment Station, Tifton, Georgia.

1925. MICKEL, CLARENCE EUGENE. B.S. '17, University of Nebraska; M.S. '23, University of Minnesota.

Major: Entomology. Minor: Zoology.

Thesis: Biological and Taxonomic Investigations on the Mutillid Wasps (Hymenoptera). Published 1928 as United States National Museum Bulletin 143, 1-351.

Major Adviser: Professor O. W. Oestlund.

Positions Held: Assistant Professor of Entomology, 1925-1931, Associate Professor, 1931—, University of Minnesota.

Honors: Elizabeth Thompson Science Fund, 1926; Guggenheim Memorial Foundation Fellow, 1930-1931; Secretary-Treasurer, Entomological Society of America, 1936—; Sigma Xi.

Address: 2153 Scudder St., St. Paul, Minnesota.

1925. PAYNE, NELLIE MARIA. B.S. '20, M.S. '21, Kansas State Agricultural College.

Major: Entomology. Minor: Agricultural Biochemistry.

Thesis: Freezing and Survival of Insects at Low Temperatures. Published in *Quarterly Review of Biology*, Vol. 1, no. 2, April 1926.

Major Adviser: Professor R. N. Chapman.

Positions Held: National Research Fellow in Zoology, 1925-1927, University of Pennsylvania; on Scientific Staff, 1927-1930, University of Pennsylvania

- Biological Abstracts; Research Worker, 1930-1931, University of Vienna and University of Berlin; Research Worker as Guest Doctor of Philosophy in Zoology, on Scientific Staff of Biological Abstracts, 1931-1933, University of Pennsylvania, Zoological Laboratory; Lecturer in Entomology, 1933, Science Fellow, 1933-1937, University of Minnesota; Science Teacher, 1935-1937, Miss Woods Kindergarten School; Assistant Research Entomologist, 1937—, American Cyanamide Company.  
 Honors: Phi Kappa Phi; Sigma Xi; Fellow A.A.A.S.; Active Member American Society of Zoologists.  
 Address: American Cyanamide Company, Boston Post Road, Stamford, Conn.
1926. ROBINSON, WILLIAM. B.S.A. '18, University of Toronto; M.S. '24, University of Kansas.  
 Major: Entomology. Minor: Zoology.  
 Thesis: Low Temperature and Moisture as Factors in the Ecology of the Rice Weevil *Sitophilus Oryza* L. and the Granary Weevil *Sitophilus Granarius* L. Published 1926 as University of Minnesota Agricultural Experiment Station Bulletin 41.  
 Major Adviser: Professor R. N. Chapman.  
 Positions Held: Assistant Professor of Entomology, 1926-1928, University of Minnesota; Assistant Professor of Pathology, 1928-1931, University of Chicago; Senior Entomologist, 1931—, Bureau of Entomology, U.S.D.A., Washington, D.C.  
 Honors: Sigma Xi; Caleb Dorr Fellowship, 1924-1925.  
 Address: Burnt Mills Hills, Silver Spring, Maryland.
1927. HOTTES, FREDERICK CHARLES. B.S. '23, Colorado Agricultural College; M.S. '25, Iowa State College.  
 Major: Entomology. Minor: Zoology.  
 Thesis: Concerning the Structure, Function, and Origin of the Cornicles of the Family *Aphididae*. Published in *Proceedings of the Biological Society of Washington*, 41:71-84, 1928.  
 Major Adviser: Professor O. W. Oestlund.  
 Positions Held: Assistant Entomologist, Summers 1928-1930, Illinois Natural History Survey; Professor and Head of Biology Department, 1929—, James Millikin University.  
 Address: Decatur Club, Decatur, Illinois.
1927. MARCOVITCH, SIMON. B.S. '11, Cornell University; M.S. '16, University of Minnesota.  
 Major: Entomology. Minor: Agricultural Biochemistry.  
 Thesis: Studies on Toxicity of Fluorine Compounds. Published 1928 as University of Tennessee Agricultural Experiment Station Bulletin 139.  
 Major Adviser: Professor W. A. Riley.  
 Positions Held: Entomologist, 1927—, University of Tennessee.  
 Address: Agricultural Experiment Station, Knoxville, Tennessee.
1928. CARTER, WALTER. B.S. '23, University of Montana; M.S. '24, University of Minnesota.  
 Major: Entomology. Minor: Zoology.



Thesis: Ecological Studies of *Eutettix Tenellus* Baker. Published 1930 as U.S.D.A. Technical Bulletin 206.

Major Adviser: Professor R. N. Chapman.

Positions Held: Assistant Entomologist, Associate Entomologist, Entomologist, Senior Entomologist, 1925-1930, Bureau of Entomology, U.S.D.A.; Entomologist, 1930—, Experiment Station of the Pineapple Producers Cooperative Association, University of Hawaii.

Address: 3234 Woodlawn Drive, Honolulu, Hawaii.

1928. HOLDAWAY, FREDERICK GEORGE. B.S. '23, M.S. '25, University of Queensland.

Major: Entomology. Minor: Zoology.

Thesis: Humidity as a Factor in Insect Environment. Published as Ecological Monograph, Vol. 2, no. 3, 261-304; in *Australian Journal of Experimental Biology and Medicine*, 11:34-43, 1933.

Major Adviser: Professor R. N. Chapman.

Positions Held: Research Entomologist, Australian Commonwealth Council for Scientific and Industrial Research, 1928-1929, Farnham House Laboratory, England; 1929-1930, University of Toulouse, France; 1931-1937, Division of Economic Entomology, Canberra, Australia; Lecturer in Entomology, 1934-1937, Australian Forestry School; Associate Professor of Zoology, in Charge of Entomology, 1937—, Chief Entomologist, Hawaii Agricultural Experiment Station, 1937—, University of Hawaii.

Address: University of Hawaii, Honolulu, Hawaii.

1928. STRAND, AUGUST LEROY. B.S. '17, Montana State College; M.S. '25, University of Minnesota.

Major: Entomology. Minor: Agricultural Biochemistry.

Thesis: The Relation between the Permeability of Insect Respiratory Membranes and the Toxicity of Contact Insecticides. Published in *Industrial and Engineering Chemistry, Analytical Edition*, 2:4-8, 1930.

Major Adviser: Professor R. N. Chapman.

Positions Held: Assistant Professor, 1928-1931, University of Minnesota; Professor and Head of Department of Entomology, State Entomologist, 1931-1937, President, 1937—, Montana State College.

Honors: Sigma Xi; Phi Kappa Phi; Gamma Sigma Delta.

Address: 520 So. Willson Avenue, Bozeman, Montana.

1928. WADLEY, FRANCIS MARION. B.S. '16, M.S. '22, Kansas State Agricultural College.

Major: Entomology. Minor: Zoology.

Thesis: Ecology of *Toxoptera graminum* with Special Reference to Northern Outbreaks. Published in *Annals of the Entomological Society of America*, 24:325-395, 1931.

Major Adviser: Professor R. N. Chapman.

Positions Held: Assistant Entomologist, 1928, Associate Entomologist, 1929-1933, 1935—, Bureau of Entomology, U.S.D.A., Insect Pest Survey; Assistant Entomologist, 1934-1935, Emergency Conservation Works.

Honors: Secretary, Washington Entomological Society.

Address: United States Department of Agriculture, Bureau of Entomology and Plant Quarantine, Washington, D.C.

1929. DAWSON, RALPH WARD. B.S. '12, M.A. '23, University of Minnesota.  
 Major: Entomology. Minor: Zoology.  
 Thesis: Studies on the Causes of Dormancy among Insects, with Special Reference to the Polyphemus Moth. Published in *Journal of Experimental Zoology*, 59:87-131, 1931.  
 Major Adviser: Professor R. N. Chapman.  
 Positions Held: Assistant Professor, 1929—, University of Minnesota.  
 Honors: Sigma Xi.  
 Address: 1502 Raymond Ave., St. Paul, Minnesota.
1929. PARKER, JOHN ROBERT. B.S. '08, M.S. '22, Massachusetts Agricultural College.  
 Major: Entomology. Minor: Zoology.  
 Thesis: Some Effects of Temperature and Moisture upon *Melanoplus mexicanus* Saussure and *Cammula pellucida* Scudder (*Orthoptera*). Published 1930 as University of Montana Agricultural Experiment Station Bulletin 223.  
 Major Adviser: Professor R. N. Chapman.  
 Positions Held: Entomologist, 1929-1930, Montana Agricultural Experiment Station, Bozeman, Montana; Senior Entomologist, 1930—, Bureau of Entomology, U.S.D.A., United States Entomological Laboratory, Bozeman, Montana.  
 Address: 1116 So. Fifth Ave., Bozeman, Montana.
1930. PHILIP, CORNELIUS BECKER. B.S. '23, University of Nebraska; M.S. '25, University of Minnesota.  
 Major: Entomology. Minor: Zoology.  
 Thesis: The *Tabanidae* (Horseflies) of Minnesota with Special Reference to Their Biologies and Taxonomy. Published 1932 as University of Minnesota Agricultural Experiment Station Bulletin 80.  
 Major Adviser: Professor W. A. Riley.  
 Positions Held: Yellow Fever Commission (Rockefeller Foundation), 1928, West Africa; Associate Entomologist, 1930-1936, Entomologist, 1936—, Rocky Mountain Spotted Fever Laboratory, United States Public Health Service, Hamilton, Montana.  
 Honors: Phi Beta Kappa; Sigma Xi; Gamma Sigma Delta.  
 Address: Rocky Mountain Laboratory, U.S.P.H.S., Hamilton, Montana.
1930. REINHARD, EDWARD GEORGE. B.A. '22, M.A. '23, Woodstock College.  
 Major: Entomology and Botany (Phycology). Minor: Zoology.  
 Thesis: The Plankton Ecology of the Upper Mississippi (Minneapolis to Winona). Published 1931 as *Ecological Monographs*, Vol. 1, 395-464, 1931.  
 Major Advisers: Professors R. N. Chapman and J. E. Tilden.  
 Positions Held: Ranger Naturalist, summer 1930, Yellowstone National Park; Biology Editor, 1930-1933, *Compton's Pictured Encyclopedia*; Instructor in Charge, summer sessions 1936—, University of Maine Marine Laboratory; Professor of Biology, 1933—, University of Scranton.  
 Address: University of Scranton, Scranton, Pennsylvania.
1930. WALL, ROBERT EMERSON. B.S. '24, M.S. '26, University of Minnesota.  
 Major: Entomology. Minor: Zoology.  
 Thesis: A Study of the Color and Color Variations in *Aphis gossypii* Glover. Published in *Annals of the Entomological Society of America*, 26:425, 1933.

- Major Adviser: Professor R. N. Chapman.  
Positions Held: Assistant Entomologist, 1931-1933, Montana Agricultural Experiment Station, Bozeman, Montana.  
Honors: Sigma Xi.  
Deceased, 1933.
1931. STANLEY, JOHN. B.A. '27, University of British Columbia; M.A. '29, University of Minnesota.  
Major: Entomology. Minor: Mathematics.  
Thesis: The Mathematical Theory of a Single Species Insect Population. Published in *Canadian Journal of Research*, 6:632-671, 1932.  
Major Adviser: Professor R. N. Chapman.  
Positions Held: National Research Council Fellow, Ottawa, Ontario; Assistant Professor of Biology, 1931-1937, Associate Professor of Biology, 1937—, Queen's University.  
Honors: Sigma Xi.  
Address: Queen's University, Kingston, Ontario, Canada.
1934. OOSTHUIZEN, MARTINUS JACOBUS. B.S.A. '30, University of South Africa; M.S. '31, University of Minnesota.  
Major: Entomology. Minor: Biochemistry.  
Thesis: The Effects of Heat upon Insects, with Special Reference to the Control of Various Stages of Some Stored Product Pests. Published as Minnesota Technical Bulletin no. 107.  
Major Adviser: Professor H. H. Shepard.  
Positions Held: Research Officer, 1934—, School of Agriculture, Potchefstroom, South Africa.  
Honors: Sigma Xi; Gamma Sigma Delta; Gamma Alpha.  
Address: School of Agriculture, Potchefstroom, South Africa.
1935. HODSON, ALEXANDER CARLTON. B.S. '28, Massachusetts Agricultural College; M.A. '31, University of Minnesota.  
Major: Entomology. Minor: Zoology.  
Thesis: Some Aspects of the Role of Water in Insect Hibernation. Published in *Ecological Monographs*, 7:271-315, 1937.  
Major Adviser: Professor A. A. Granovsky.  
Positions Held: Instructor, 1933—, University of Minnesota.  
Honors: Sigma Xi; Gamma Sigma Delta.  
Address: Division of Entomology, University Farm, St. Paul, Minnesota.
1935. HOFFMANN, CLARENCE HOWARD. B.A. '30, M.A. '31, University of Kansas.  
Major: Entomology. Minor: Botany.  
Thesis: The Biology and Taxonomy of the Genus *Trichiotinus* (scarabaeidae-coleoptera). Published in *Entomologica Americana*, Vol. 15, no. 4, 133-209, 1935.  
Major Adviser: Professor C. E. Mickel.  
Positions Held: Junior Entomologist, 1935-1937, Assistant Entomologist, 1937—, Division of Forest Insects, U.S.D.A.

Honors: Gamma Alpha; Sigma Xi; Gamma Sigma Delta; Phi Sigma; Phi Delta Kappa.

Address: Bureau of Entomology and Plant Quarantine, 8 Whippany Road, Morristown, New Jersey.

1935. LINDGREN, DAVID LEONARD. B.S. '30, M.S. '31, University of Minnesota.

Major: Entomology. Minor: Plant Pathology.

Thesis: The Relation of Insect Infestation in Grain to Carbon Dioxide, Heat, and Moisture Production. Published as University of Minnesota Agricultural Experiment Station Technical Bulletin no. 109.

Major Adviser: Professor H. H. Shepard.

Positions Held: Junior Entomologist, 1935—, University of California, U.S.D.A.

Honors: Sigma Xi; Gamma Alpha; Gamma Sigma Delta.

Address: 4619 Sierra Street, Riverside, California.

1936. LUND, HORACE ODIN. B.A. '31, M.S. '33, University of Minnesota.

Major: Entomology. Minor: Biochemistry.

Thesis: Longevity and Productivity in *Trichogramma evanescens* Westwood (Hymenoptera, Trichogrammatidae). Published in *Journal of Agricultural Research*, 56:421, 1938.

Major Adviser: Professor C. E. Mickel.

Positions Held: Instructor of Entomology, 1936—, University of Georgia.

Honors: Phi Beta Kappa; Sigma Xi; Gamma Sigma Delta.

Address: Division of Biological Sciences, University of Georgia, Athens, Georgia.

1936. OWEN, WILLIAM BERT. B.A. '27, University of Kentucky; M.A. '29, University of Minnesota.

Major: Entomology. Minor: Zoology.

Thesis: The Mosquitoes of Minnesota with Special Reference to Their Biologies. Published as University of Minnesota Agricultural Experiment Station Technical Bulletin no. 126.

Major Adviser: Professor W. A. Riley.

Positions Held: Assistant Professor of Zoology, 1936—, University of Wyoming.

Honors: Sigma Xi; Gamma Alpha; Society of Parasitologists; Entomological Society of America.

Address: Department of Zoology, University of Wyoming, Laramie, Wyoming.

1936. SALT, REGINALD WILSON. B.S. '30, University of Alberta; M.S. '33, Montana State College.

Major: Entomology. Minor: Biochemistry.

Thesis: The Experimental Freezing of Insects. Published as University of Minnesota Agricultural Experiment Station Technical Bulletin no. 116.

Major Adviser: Professor H. H. Shepard.

Positions Held: Assistant Entomologist, 1936—, Canadian Department of Agriculture.

Honors: Sigma Xi; Caleb Dorr Fellow, 1933-1934; Royal Society of Canada Fellow, 1935-1936.

Address: 516 13th St. South, Lethbridge, Alberta, Canada.

1937. STIRRETT, GEORGE MILTON. B.S.A. '22, University of Toronto; M.S.A. '24, Purdue University.  
Major: Entomology. Minor: Zoology (Parasitology).  
Thesis: A Field Study of the Flight, Oviposition and Establishment Periods in the Life Cycle of the European Corn Borer, *Pyrausta nubilalis* Hbn., and the Physical Factors Affecting Them. Published in *Scientific Agriculture*, 5 parts, March through July, 1938, and in *Summaries of Ph.D. Theses*, Vol. 1, 1939, University of Minnesota.  
Major Adviser: Professor A. A. Granovsky.  
Positions Held: Senior Assistant Agricultural Scientist, in Charge, 1937—, Dominion Entomological Laboratory, Chatham, Ontario.  
Address: 104 Park Street, Chatham, Ontario, Canada.
1937. YEN, CHIA HSIEN. B.S. '31, University of Nanking; M.S. '33, Yenching University.  
Major: Entomology. Minor: Zoology.  
Thesis: Studies on *Dirofilaria immitis* Leidy with Special Reference to the Susceptibility of Some Minnesota Species of Mosquitoes to the Infection. Not published.  
Major Adviser: Professor W. A. Riley.  
Positions Held: Professor, 1937-1938, College of Agriculture, National Wuhan University, Wuchang, China; Entomologist, 1938—, Division of Entomology and Phytopathology, Kwangsi Agricultural Experiment Station, China.  
Honors: Sigma Xi.  
Address: Division of Entomology and Phytopathology, Kwangsi Agricultural Experiment Station, Shatong, Liuchow, Kwangsi, China.
1938. BUSH, LOUISE FULTON. B.A. '28, Friends University; M.A. '31, University of Kansas.  
Major: Entomology. Minor: Plant Pathology.  
Thesis: The Transmission of Certain Virus Diseases of Tomato by Aphids. Not published.  
Major Adviser: Professor A. A. Granovsky.  
Address: 1624 Clinton Ave., Minneapolis, Minnesota.

## ZOOLOGY

1903. HEMINGWAY, ERNEST EUGENE. Ripon College; M.A. '03, M.D. '08, University of Minnesota.  
Major: Zoology. Minors: Botany and Political Science.  
Thesis: The Leeches of Minnesota. Published 1912, Minneapolis; published also in *Geological and Natural Survey of Minnesota, Zoological Series*, no. 5.  
Major Adviser: Professor H. F. Nachtrieb.  
Positions Held: Private Practice, Seattle, Washington.  
Deceased, 1932.
1909. DOWNEY, HAL. B.A. '04, M.A. '07, University of Minnesota.  
Major: Zoology (Histology). Minors: Human Anatomy and Neurology.  
Thesis: The Lymphatic Tissue of the Kidney of *Polyodon Spathula*. Published in *Folia Haematologica* (Leipzig), Band 8, 1909.  
Major Adviser: Professor H. F. Nachtrieb.

Positions Held: Assistant Professor of Zoology, 1909-1913, Associate Professor, 1913-1917, Professor, 1917-1929, Professor of Anatomy, 1929—, University of Minnesota.

Honors: Sigma Xi.

Address: 2 Barton Ave. S.E., Minneapolis, Minnesota.

1912. JOHNSON, CHARLES EUGENE. B.A. '06, M.A. '07, University of Minnesota.

Major: Comparative Anatomy. Minors: Physiology and Ornithology.

Thesis: The Development of the Prootic Head Somites and Eye Muscle of *Chelydra Serpentina*. Published in *American Journal of Anatomy*, Vol. 14, no. 2, January 1913.

Major Adviser: Professor H. F. Nachtrieb.

Positions Held: Instructor in Comparative Anatomy and Zoology, 1912-1918, University of Minnesota; Assistant Professor of Zoology, 1919-1920, Associate Professor, 1920-1923, University of Kansas; Professor of Zoology, 1923-1926, Head of Department of Zoology, Director of Roosevelt Wild Life Forest Experiment Station, 1926-1933, New York State College of Forestry, Syracuse, New York; Lecturer in Vertebrate Zoology, summer 1931, University of California, Berkeley, California.

Honors: Phi Kappa Phi.

Deceased.

1919. ALLEN, GEORGE DELWIN. B.A. '07, Oberlin College; M.S. '10, University of Chicago.

Major: Zoology. Minor: Physiology.

Thesis: Quantitative Studies on the Rate of Respiratory Metabolism in *Planaria*. Published 1919, Baltimore.

Major Adviser: Professor H. F. Nachtrieb.

Positions Held: Instructor in Zoology, 1919-1920, University of Minnesota.

Deceased, 1920.

1919. RINGOEN, ADOLPH. B.A. '09, M.A. '13, State University of Iowa.

Major: Zoology. Minor: Anatomy.

Thesis: The Origin of the Eosinophil Leucocytes of Mammals. Published in *Folia Haematologica* (Leipzig), Vol. 27, no. 10, 1921.

Major Adviser: Professor H. Downey.

Positions Held: Instructor, 1919-1925, Assistant Professor, 1926-1929, Associate Professor, 1929—, University of Minnesota.

Honors: Sigma Xi.

Address: 1469 Grantham, St. Paul, Minnesota.

1921. CHILDS, GEORGE HENSHAW. B.A. '14, M.A. '15, University of Minnesota.

Major: Zoology. Minor: Entomology.

Thesis: Some Observations on the Digestive System of Diplopods with Special Reference to *Parajulus*. Published in *Summaries of Ph.D. Theses*, Vol. 1, 1939, University of Minnesota.

Major Adviser: Professors W. A. Riley and H. F. Nachtrieb.

Positions Held: Assistant, 1921-1923, University of Minnesota; Scientific Artist, Sculptor, Preparator, etc., 1923—, American Museum of Natural History, New York City.

Honors: Sigma Xi.

Address: 79 State St., Brooklyn, New York City.

1923. PAYNE, EMILY HELEN. B.S. '15, Macalester College; M.A. '18, University of Minnesota.

Major: Zoology. Minor: Anatomy.

Thesis: The Omentum of the Rabbit with Special Reference to Haematological Problems. Not published.

Major Adviser: Professor H. Downey.

Positions Held: Instructor, 1923-1925, Assistant, 1928-1929, University of Minnesota; WPA Supervisor, 1934-1936, Adult Education, Y.W.C.A., WPA Supervisor, 1936-1937, District 3, St. Paul.

Honors: Sigma Xi.

Married Name: Mrs. Louis A. Fried.

Address: 2366 Carter Ave., St. Paul, Minnesota.

1930. STEHR, WILLIAM CARL. B.S. '27, M.S. '28, University of Minnesota.

Major: Zoology. Minor: Botany.

Thesis: The Activating Influence of Light upon Certain Aquatic Arthropods. Published in *Journal of Experimental Zoology*, Vol. 59, no. 2, 297-335, April 1931.

Major Adviser: Professor D. E. Minnich.

Positions Held: Instructor in Zoology, 1930-1931, Assistant Professor of Entomology, 1932—, Ohio State University.

Honors: Sigma Xi.

Address: Department of Zoology, Ohio University, Athens, Ohio.

1932. WINTERS, LAWRENCE MERRIAM. B.S. '19, University of Minnesota; M.S. '20, Iowa State College.

Major: Zoology. Minor: Animal Husbandry.

Thesis: The Effects of Bilateral and Unilateral Castration of Rats on the Epididymis, with a Special Reference to the Mitochondria-Golgi Complex. Published in *Journal of Morphology*, Vol. 55, no. 2, December 5, 1933.

Major Adviser: Professor A. R. Ringoen.

Positions Held: Associate Professor, 1928-1934, Professor, 1934—, University of Minnesota.

Honors: Sigma Xi; Phi Kappa Phi; National Secretary of Gamma Sigma Delta; Alpha Zeta.

Address: 1520 Chelmsford St., St. Paul, Minnesota.

1933. CHRISTENSON, REED OSCAR. B.S. '26, Utah Agricultural College; M.A. '28, University of Minnesota.

Major: Zoology (Parasitology). Minor: Entomology.

Thesis: Studies on the Biology and Epidemiology of *Capillaria Aërophila* (Creplin, 1839), a Parasite of the Respiratory Tract of Foxes and Other Carnivores. Published in *Transactions of the Microscopical Society*, Vol. 54, no. 2, 1935.

Major Adviser: Professor W. A. Riley.

Positions Held: Instructor, 1936-1937, University of Minnesota; Assistant Professor, 1937—, Alabama Polytechnic Institute.

Honors: Phi Kappa Phi; Gamma Alpha; Sigma Xi; Executive Committee, Southeastern Conference of Biologists.

Address: Alabama Polytechnic Institute, Auburn, Alabama.

1933. KEITH, MARK MARIAM. B.S. '27, M.S. '28, University of Idaho.

Major: Zoology. Minors: Bacteriology and Pathology.

Thesis: Cytological Studies of Cellular Activities in the Ontogeny of the Chick.

Published by Burgess Publishing Company, Minneapolis, 1933.

Major Adviser: Professor J. E. Wodsedalek.

Positions Held: Professor of Biology, 1933—, State Teachers College, Mankato.

Honors: Sigma Xi; Sigma Zeta.

Address: 307 W. Lewis St., Mankato, Minnesota.

1933. WALLACE, FRANKLIN GERHARD. B.A. '28, Carleton College; M.A. '30, University of Minnesota.

Major: Zoology. Minor: Bacteriology.

Thesis: A Morphological and Biological Study of the Trematode, *Scilacotyle Mustelae*, N.G.N.Sp. Published in *Journal of Parasitology*, 21:143-164, 1935.

Major Adviser: Professor W. A. Riley.

Positions Held: Assistant Professor, 1933-1937, Lingnan University, Canton, China; Instructor in Zoology, 1937—, University of Minnesota.

Honors: Sigma Xi.

Address: 2112 2½ St. So., Minneapolis, Minnesota.

1934. CRAWFORD, WILEY WILLIAM. B.A. '25, M.A. '28, University of Missouri.

Major: Zoology. Minor: Entomology.

Thesis: Studies on the Life History of Trematodes Transmitted through Odonata.

Published in *Journal of Parasitology*, 23:389-399, 1937.

Major Adviser: Professor W. A. Riley.

Positions Held: Chairman, Department of Biology, 1934—, Blackburn College.

Honors: Sigma Xi.

Address: 340 Johnson St., Carlinville, Illinois.

1934. MACY, RALPH WILLIAM. B.A. '29, Linfield College; M.A. '31, University of Minnesota.

Major: Zoology. Minor: Entomology.

Thesis: Studies on the Taxonomy, Morphology, and Biology of *Prosthogonimus Macrochis* Macy, A Common Oviduct Fluke of Domestic Fowls in North America. Published as University of Minnesota Agricultural Experiment Station Technical Bulletin no. 98.

Major Adviser: Professor W. A. Riley.

Positions Held: Assistant Professor, 1934-1935, Professor of Biology, 1935—, College of St. Thomas, St. Paul, Minnesota.

Honors: Sigma Xi; Gamma Alpha.

Address: 3237 42nd Ave. South, Minneapolis, Minnesota.



1934. SWINYARD, CHESTER ALLAN. B.S. '28, M.S. '29, Utah State College.  
Major: Zoology. Minor: Entomology.  
Thesis: A Lymnological Study of Several Minnesota Lakes. Not published.  
Major Advisers: Professors Samuel Eddy and W. A. Riley.  
Positions Held: Teaching Fellow in Anatomy, 1933-1935, University of Minnesota Medical School; Charlton Research Fellowship in Anatomy, 1935-1936, Instructor in Anatomy, 1936-1937, Tufts College Medical School, Boston; Instructor in Anatomy, 1937—, Medical College of State of South Carolina.  
Honors: Sigma Xi.  
Address: Department of Anatomy, Medical College of the State of South Carolina, Charleston, South Carolina.
1935. BAILLIF, RALPH NORMAN. B.A. '30, St. Olaf College; M.A. '33, University of Minnesota.  
Major: Zoology. Minor: Physiology.  
Thesis: Cytological Changes in the Thyroid-Adrenal Apparatus Following Exposure to Sudden Temperature Changes, and Their Relation to the Physiology of Secretion. Published in *Summaries of Ph.D. Theses*, Vol. 1, 1939, University of Minnesota.  
Major Adviser: Professor J. E. Wodsedalek.  
Positions Held: Teaching Fellow, Department of Anatomy, 1935-1937, University of Minnesota; Instructor in Anatomy, 1937—, Louisiana State Medical Center.  
Honors: Sigma Xi.  
Address: Department of Anatomy, Louisiana State Medical Center, New Orleans, Louisiana.
1935. BOUGHTON, REX VIVIAN. B.S. '30, M.S. '32, University of Manitoba.  
Major: Zoology. Minor: Entomology.  
Thesis: Endoparasitic Infestation in Grouse, Their Pathogenicity and Correlation with Meteorotopographical Conditions. Published as University of Minnesota Agricultural Experiment Station Technical Bulletin no. 121.  
Major Adviser: Professor W. A. Riley.  
Positions Held: Master, 1935-1938, Ravenscourt School for Boys, Winnipeg, Canada; Biologist, 1938—, Fisheries Research Board of Canada.  
Address: Biological Station, Nanaimo, British Columbia, Canada.
1935. GERTSCH, WILLIS JOHN. B.A. '28, M.A. '30, University of Utah.  
Major: Zoology. Minor: Botany.  
Thesis: The Biology and Taxonomy of Nearctic Crab-Spiders (*Misumeninae*). Published in *Summaries of Ph.D. Theses*, Vol. 1, 1939, University of Minnesota.  
Major Adviser: Professor C. E. Mickel.  
Positions Held: Assistant Curator of Spiders, 1932—, American Museum of Natural History, New York City, N. Y.  
Honors: Sigma Xi.  
Address: Centre Street, Ramsey, New Jersey.
1936. DANIELSON, RAGNAR NATHANAEL. B.A. '31, M.A. '33, University of Minnesota.  
Major: Zoology. Minors: Biochemistry and Physiologic Chemistry.

- Thesis: An Experimental Study of Chromatophores and Color Change with Special Attention to Cyprinid Fishes. Published in *Physiological Zoology*, 1938; and in *Summaries of Ph.D. Theses*, Vol. 1, 1939, University of Minnesota.  
Major Adviser: Professor D. E. Minnich.  
Positions Held: Assistant Professor of Physiology, 1936—, Oklahoma Agricultural and Mechanical College.  
Honors: Phi Beta Kappa; Sigma Xi with Thos. F. Andrews Prize.  
Address: Oklahoma A. and M. College, Stillwater, Oklahoma.
1936. GATZ, ARTHUR JOHN. B.A. '31, Carleton College; M.A. '33, University of Minnesota.  
Major: Zoology. Minor: Biochemistry.  
Thesis: A Study of the Cytological Relationship between the Hypophysis and the Germinal Epithelium of the Testis in the Albino Rat. Published in *Anatomical Record*, Vol. 69, no. 4, p. 429, 1937, Vol. 70, no. 5, p. 619, 1938.  
Major Adviser: Professor J. E. Wodsdalek.  
Positions Held: Instructor, 1935—, Carleton College.  
Honors: Sigma Xi.  
Address: Box 224, Carleton College, Northfield, Minnesota.
1936. McDONALD, JEAN GILRUTH. B.S. '32, M.A. '34, University of Minnesota.  
Major: Zoology. Minors: Botany and Bacteriology.  
Thesis: Avian Bone Marrow under Experimental Conditions. Not published.  
Major Adviser: Professor A. R. Ringoen.  
Honors: Phi Beta Kappa; Sigma Xi.  
Address: 501 State St., Midland, Michigan.
1936. OLSEN, OLIVER WILFORD. B.A. '29, Brigham Young University; M.A. '31, University of Minnesota.  
Major: Zoology. Minor: Entomology.  
Thesis: A Study of the Biology and Morphology of *Haplometrana utahensis* sp. nov. and a Review of the Genera and Species of the Trematode Subfamily *Plagiorchiinae* Pratt, 1902. Published in *Journal of Parasitology*, 23:13-28, and *Transactions of American Microscopic Society*, 56:311-339, 1937.  
Major Adviser: Professor W. A. Riley.  
Positions Held: Instructor, 1937—, University of Minnesota.  
Honors: Sigma Xi.  
Address: 319 6th Ave. S.E., Minneapolis, Minnesota.
1936. OLSON, MAGNUS. B.A. '32, St. Olaf College; M.A. '34, University of Minnesota.  
Major: Zoology (Histology). Minor: Botany.  
Thesis: Ovogenesis in the Mammalian Ovary. Published in *Summaries of Ph.D. Theses*, Vol. 1, 1939, University of Minnesota.  
Major Adviser: Professor A. R. Ringoen.  
Positions Held: Research Assistant, 1936-1937, Instructor in Education and Zoology, 1937—, University of Minnesota.  
Honors: Sigma Xi; Gamma Alpha; Sigerfoos Fellowship.  
Address: 628 University Ave. S.E., Minneapolis, Minnesota.

1936. PLISKE, EDWARD CARL. B.A. '32, Oberlin College; M.A. '34, University of Minnesota.  
Major: Zoology. Minor: Anatomy.  
Thesis: Studies on the Follicular Cycle of the Female Striped Ground Squirrel (*Citellus tridecemlineatus* Mitch.). Published in *Journal of Morphology*, 63: 263-287, 1938.  
Major Adviser: Professor A. R. Ringoen.  
Positions Held: Teaching Assistant, 1936-1937, Instructor, 1937-1938, University of Minnesota; Assistant Professor, 1938—, University of North Carolina Medical School.  
Honors: Sigma Xi; Gamma Alpha.  
Address: Department of Anatomy, University of North Carolina, Chapel Hill, North Carolina.
1937. SWANSON, GUSTAV ADOLPH. B.S. '30, M.A. '32, University of Minnesota.  
Major: Zoology (Parasitology). Minor: Entomology.  
Thesis: Studies on Trematodes of the Superfamily Strigeoidea with Especial Reference to the Species from Hawks and Owls. Not published.  
Major Adviser: Professor W. A. Riley.  
Positions Held: Assistant Professor of Economic Zoology, 1937—, University of Minnesota.  
Honors: Sigma Xi.  
Address: 2251 Knapp St., St. Paul, Minnesota.
1937. WILDE, WALTER SAMUEL. B.A. '31, Miami University; M.A. '33, University of Minnesota.  
Major: Zoology. Minors: Biochemistry and Biometry.  
Thesis: An Experimental Study of the Vomeronasal Organ (of Jacobson) in the Common Garter Snake *Thamnophis sirtalis sirtalis* (Linnaeus). Published in *Journal of Experimental Zoology*, 77:445, 1938.  
Major Adviser: Professor D. E. Minnich.  
Positions Held: Fellow in Medical Physiology, 1937—, University of Rochester.  
Honors: Sigma Xi; Phi Sigma.  
Address: 569 W. Chalmers Ave., Youngstown, Ohio.

## LANGUAGES AND LITERATURE

### ANCIENT LANGUAGES

1893. CROMBIE, JOHN. B.A. '76, University of Michigan.  
Major: Latin.  
Thesis: Not completed.  
Degree granted *post obitum*.
1894. SANFORD, JOHN A. B.A. '82, Brown University.  
Major: Greek.  
Thesis: *The Stage in the Theater of the Fifth Century*. Published 1895, University of Minnesota.  
Positions Held: Teacher of Greek, Central High School, Minneapolis, Minnesota. Deceased, 1913.
1900. ELMQUIST, ANTHONY F. B.A., Gustavus Adolphus; M.A. '97, University of Minnesota.  
Major: Semitic Languages and Literature. Minors: Scandinavian and German Languages and Literature.  
Thesis: *Studies on Ezra-Nehemiah, with Special Reference to the Return of Cyrus and the Building of the Temple*. Published 1900, Minneapolis.
1904. BERGIN, ALFRED. B.A., Gustavus Adolphus; B.D. '94, Augustana; M.A. '99, University of Minnesota.  
Major: Semitic Languages.  
Thesis: *The Law of the West Goths from the Manuscripts of Aeskil, Lawman of Västergotland, Sweden, 1200 A.D.* Published 1906, Augustana Book Concern, Rock Island, Illinois.  
Major Adviser: Professor J. S. Carlson.  
Positions Held: Teacher of Ethics, Church History, and Dogmatics, 1912-1930, Bethany College, Lindsborg, Kansas; Editor, Assistant Editor, and Contributor, 1904-1929, *Lindsborgsposten*, *Ungdomsännen*, *Augustana Theological Quarterly*, *Minnesota Stats Tidning*, *Kansas Young Lutheran*, etc.; President, 1918-1923, Kansas Conference of the Augustana Synod; Pastor, 1904—, Bethany Church, Lindsborg, Kansas; Chairman, McPherson Chapter of American Red Cross, 1927—, Delegate to World Convention at Edinburgh, 1937.  
Degrees Received since the Ph.D.: D.D., 1919, Augustana Theological Seminary, Rock Island, Illinois.  
Address: Lindsborg, Kansas.
1904. LANTZ, CHARLES EMIL. B.A. '02, University of Minnesota.  
Major: Latin. Minors: Philosophy and Greek.  
Thesis: *The Development of Plots and Characters in the Comedies of Terence*.  
Major Adviser: Professor J. E. Granrud.  
Positions Held: Publisher of the *Walnut Grove Tribune*, 1905—, Walnut Grove, Minnesota.  
Address: Walnut Grove, Minnesota.

1905. DEINARD, SAMUEL N. B.A. De Pauw; M.A., University of Chicago.  
Major: Hebrew.  
Thesis: The New Year's Day and Day of Judgment of the Jewish Calendar.  
Deceased, 1921.
1928. LUSSKY, ERNEST ALFRED. B.A. '03, Concordia College, Fort Wayne;  
M.A. '18, University of Minnesota.  
Major: Latin. Minor: Greek.  
Thesis: The Appeal to the Emotions in the Judicial Speeches of Cicero. Published 1928, Minneapolis.  
Major Adviser: Professor J. B. Pike.  
Positions Held: Professor of Latin, 1928—, Concordia College.  
Address: Concordia College, St. Paul, Minnesota.

## COMPARATIVE PHILOLOGY

1902. GEISNESS, THOMAS. B.A. '97, M.A. '99, University of Minnesota.  
Major: Comparative Philology. Minors: English, Philology, and Latin.  
Thesis: Comparative Study of Words Denoting Joy and Grief in the Gothic, Old English, and Old Saxon, with Reference to Corresponding Words and Expressions in Greek and Latin. Not published.  
Major Adviser: Professor F. Klaeber.  
Positions Held: City Superintendent of Schools, 1907-1916, Port Angeles, Washington; County Superintendent of Schools, 1907-1916, Clallam County, Washington; Lawyer and Police Judge, 1926—, in Port Angeles, Washington.  
Address: 507 E. 3rd Street, Port Angeles, Washington.
1926. FRARY, LOUISE GRACE. B.A. '13, M.A. '14, Oberlin College.  
Major: Comparative Philology. Minor: German.  
Thesis: Studies in the Syntax of the Passive in the Old German Dialects, with Special Reference to the Use of *W'esan* and *W'ordan* in Old English. Published 1929, Waverley Press, Baltimore.  
Major Adviser: Professor F. Klaeber.  
Positions Held: Physician and Surgeon, 1932-1936, Minneapolis, Minnesota; Assistant in Pediatrics, 1933-1937, University of Minnesota; Practicing Physician, 1937—, Oakland, California.  
Degrees Received since the Ph.D.: M.B. '30, M.D. '31, University of Minnesota.  
Married Name: Mrs. S. E. Ormsbee.  
Address: Oakland, California.
1929. VELTEN, HARRY DE VELTHEYM. B.A. '16, Prinz Heinrichs Gymnasium; M.A. '27, University of Minnesota.  
Major: Comparative Philology. Minors: French and German.  
Thesis: Studies in the Gothic Vocabulary with Especial Reference to Models and Analogues in Latin and Greek. Published in *Journal of English and Germanic Philology*, Vol. 29, no. 3, 332-351, and no. 4, 489-509.  
Major Adviser: Professor S. Kroesch.  
Positions Held: Instructor in German, 1929-1930, University of Wisconsin; Assistant Professor of Modern Languages, 1930-1937, State College of Washington, Pullman, Washington; Associate Professor of Germanic Philology, 1937—, Indiana University.

Honors: Elected Member of the Société de Linguistique de Paris, 1932.  
Address: Kirkwood Hall, Indiana University, Bloomington, Indiana.

1931. DOWNS, LYNWOOD GIFFORD. B.A. '14, M.A. '15, Cornell University.  
Major: Comparative Philology. Minor: German.  
Thesis: Intensive Adverbs and Intensive Prefixes in the West German Dialects:  
A Lexical and Semantic Investigation. Published in *Summaries of Ph.D.  
Theses*, Vol. 1, 1939, University of Minnesota.  
Major Adviser: Professor F. Klaeber.  
Positions Held: Instructor, 1931—, University of Minnesota.  
Address: 106 Arthur Ave. S.E., Minneapolis, Minnesota.

## ENGLISH

1897. CHITTENDEN, E. PORTER. B.D. '74, Yale University; M.A. '74, Ripon  
College.  
Major: English Philology. Minors: History and Philosophy.  
Thesis: The Labial Series in English Sounds.  
Positions Held: Chaplain, 1916, St. Mary's School, Knoxville, Illinois.  
Deceased.
1900. ABBETMEYER, CHARLES D. A. F. B.A. Northwestern University.  
Major: English Literature and Philology. Minors: French and German.  
Thesis: Old English Poetical Motives Derived from the Doctrine of Sin.  
Positions Held: Concordia College, 1916, St. Paul, Minnesota.  
Deceased, 1928.
1903. JAYNE, VIOLET DELILLE. M.A. '87, University of Michigan.  
Major: English Literature and Philology. Minors: European History and  
German.  
Thesis: The Technique of George Eliot's Novels.  
Major Adviser: Professor C. McClumpha.  
Positions Held: Dean of Women and Associate Professor of English Literature,  
1897-1904, University of Illinois.  
Married Name: Mrs. Edward C. Schmidt.  
Deceased, August 1937.
1908. NORLIE, OLAF MORGAN.  
Major: English. Minors: Education and Scandinavian.  
Thesis: The Principles of Expressive Reading, a Study of the Human Voice.  
Published 1918, Richard Badger, Boston.  
Major Adviser: Professor Richard Burton.  
Positions Held: Norwegian Lutheran Clergyman, 1907-1915; Book Editor, 1915-  
1919, Augsburg Publishing House, Minneapolis; Professor of Psychology,  
1919-1928, Luther College; Dean and Professor of Religion, 1928-1932, Director,  
Graduate School, 1932-1933, Hartwick College; Professor of Psychology,  
1933—, Luther College, Decorah, Iowa.  
Degrees Received since the Ph.D.: Pd.D., 1910, Dixon College; C.S.T., 1915,  
Augustana Seminary, Rock Island, Illinois; S.T.D., 1917, Augustana Seminary;  
Litt.D., 1917, Wittenberg College, Springfield, Ohio.  
Address: 619 Center St., Decorah, Iowa.

1909. COLBERG, ERNEST JOHNSON. B.A. '06, M.A. '08, Gustavus Adolphus College.  
Major: English. Minors: Scandinavian and Latin.  
Thesis: The Development of the English Essay.  
Major Adviser: Professor Richard Burton.  
Positions Held: Professor of Swedish, 1918-1921, Fellow in Pathology, 1921-1922, University of Minnesota; Lutheran Clergyman, 1911—; Medical Missionary to China, 1924-1926; Pastor, St. Paul's Lutheran Church, Oakland, California.  
Degrees Received since the Ph.D.: B.D., 1911, Augustana Seminary, Rock Island, Illinois; M.S., 1922, M.B., 1924, M.D., 1924, University of Minnesota.  
Address: 1015 Grove St., Oakland, California.
1915. KRETZMANN, PAUL EDWARD. Concordia College, '02; M.A. '13, University of Minnesota.  
Major: English. Minor: Philology.  
Thesis: The Liturgical Element in the Earliest Forms of the Medieval Drama with Special Reference to the English and German Plays. Published 1916 as University of Minnesota Studies in Language and Literature, no. 4.  
Major Adviser: Professor Hardin Craig.  
Positions Held: Professor of Science and Mathematics, 1912-1919, Concordia College, St. Paul, Minnesota; Editor and Production Manager, 1919-1923, Concordia Publishing House, St. Louis, Missouri; Professor of Education and New Testament Interpretation, 1924—, Concordia Seminary.  
Honors: B.D., 1920, D.D., 1922, Evangelical Lutheran Seminary, Maywood, Illinois.  
Address: Concordia Seminary, St. Louis, Missouri.
1917. LYLE, MARIE CAROLINE. B.A. '11, M.A. '12, University of Minnesota.  
Major: English. Minor: Comparative Philology.  
Thesis: The Original Identity of the York and Towneley Cycles. Published 1919 as University of Minnesota Studies in Language and Literature, no. 6.  
Major Adviser: Professor Hardin Craig.  
Positions Held: Head of English Department, 1918-1920, Shorter College; Head of English Department, 1920-1921, Stout Institute, Menomonie, Wisconsin; Dean and Head of English Department, 1921—, Keuka College, Keuka Park, New York.  
Address: 4613 Wooddale Ave., Minneapolis, Minnesota.
1918. JONES, GWEN ANN. B.A. '09, M.A. '14, University of Wales.  
Major: English. Minor: Romance Languages (French).  
Thesis: Three Welsh Religious Plays. Not published.  
Major Adviser: Professor C. Brown.  
Positions Held: Assistant Professor of English, 1918-1920, Stephens College, Columbia, Missouri; Lecturer in Education, 1920—, University College of Wales.  
Address: University College of Wales, Aberystwyth, Wales.
1922. CHASE, MARY ELLEN. B.A. '09, University of Maine; M.A. '18, University of Minnesota.  
Major: English. Minors: English and Romance Languages (French).

- Thesis: A Comparative Study of Several Versions of Thomas Hardy's Novels, *The Mayor of Casterbridge*, *Tess of the D'Urbervilles*, and *Jude the Obscure*. Published 1927, University of Minnesota Press, under the title *Thomas Hardy from Serial to Novel*.
- Major Adviser: Professor J. W. Beach.
- Positions Held: Assistant Professor of English, 1922-1926, University of Minnesota; Associate Professor, 1926-1929, Professor, 1929—, Smith College.
- Honors: Litt.D., 1929, University of Maine; Litt.D., Bowdoin College, 1933; L.H.D., Colby College.
- Address: 16 Paradise Road, Northampton, Massachusetts.
1922. SCURR, HELEN MARGARET. B.A. '17, Simpson College; M.A. '20, University of Minnesota.
- Major: English. Minor: German.
- Thesis: Henry Brooke. Published 1927, Menasha, Wisconsin.
- Major Adviser: Professor C. A. Moore.
- Positions Held: Professor of English, 1922-1924, Acting Head of English Department, 1924-1925, Northern State Teachers College, Aberdeen, South Dakota; Head of English Department, 1925-1928, Dakota Wesleyan University, Mitchell, South Dakota; Head of English Department, 1928—, Junior College of Connecticut, Bridgeport, Connecticut.
- Address: 1001 Fairfield Avenue, Bridgeport, Connecticut.
1923. ROBBINS, HARRY WOLCOTT. B.A. '08, M.A. '08, Brown University.
- Major: English. Minor: Romance Languages (French).
- Thesis: Saint Edmund's *Merure de Seinte Eglise*: An Early Example of Rhythmical Prose. Published 1924, Lewisburg, Pennsylvania.
- Major Advisers: Professors C. Brown and I. C. Le Compte.
- Positions Held: Professor, Head of English Department, 1923—, Bucknell University, Lewisburg, Pennsylvania; Professor of English Literature, summer 1931, University of Tennessee.
- Honors: Phi Beta Kappa.
- Address: 124 St. George St., Lewisburg, Pennsylvania.
1925. KIERZEK, JOHN. B.A. '13, Carleton College; M.A. '17, University of Minnesota.
- Major: English. Minor: Rhetoric.
- Thesis: The American Historical Novel since the Civil War. Not published.
- Major Adviser: Professor C. A. Moore.
- Positions Held: Assistant Professor of English, 1924-1927, Associate Professor, Chairman of English Composition Staff, 1928-1937, Professor of English, 1937—, Oregon State College.
- Address: 506 N. 34th St., Corvallis, Oregon.
1929. MACLEAN, MALCOLM SHAW. B.A. '14, University of Michigan.
- Major: English. Minor: Philosophy.
- Thesis: Eighteenth-Century Theories of the Comic. Not published.
- Major Adviser: Professor C. A. Moore.
- Positions Held: Associate Professor of English, 1929-1930, Professor, 1930-1932, Chairman of English Department, 1929-1932, Assistant Director, 1931-1932,



University of Wisconsin Extension Center, Milwaukee; Director and Professor of General College, 1932—, University of Minnesota.

Honors: Inglis Lecturer on Education, 1938; Vice Chairman, Executive Board National Council of Parent Education, 1936-1938; Member, Advisory and Executive Boards, Progressive Education Association, 1934-1937.

Address: 1001 East River Road, Minneapolis, Minnesota.

1929. MALMIN, MARIE HELENE. B.A. '21, Concordia College; M.A. '23, University of Minnesota.

Major: English. Minor: Scandinavian.

Thesis: An Annotated Bibliography of the Translations and Criticisms of Norwegian, Swedish, and Danish Literature in England and America. Not published.

Major Adviser: Professor M. B. Ruud.

Positions Held: Associate Professor of English, 1929-1936, Professor, 1936—, St. Olaf College.

Married Name: Mrs. Allen L. Meyer.

Address: Northfield, Minnesota.

1935. BARNARD, ELLSWORTH. B.S. '28, Massachusetts State College; M.A. '29, University of Minnesota.

Major: English. Minor: Philosophy.

Thesis: Shelley's Religion. Published by the University of Minnesota Press, 1937.

Major Adviser: Professor J. W. Beach.

Positions Held: Assistant Professor of English, 1936-1937, University of Tampa; Instructor in English, 1937—, Williams College.

Address: 37 Glen Street, Williamstown, Massachusetts.

1935. BODDY, MARGARET PEARSE. B.A. '31, M.A. '32, University of Minnesota.

Major: English. Minor: Latin.

Thesis: The Translations of Virgil into English Verse from Douglas through Dryden. A Study in the Development of Poetic Expression. Not published.

Major Adviser: Professor J. D. Bush.

Positions Held: Dorothy Bridgman Atkinson Fellow, American Association of University Women, 1935-1936, England; Instructor, 1936-1937, Duchesne College, Omaha, Nebraska; Assistant Professor of English, 1937-1938, New Mexico State College.

Honors: Phi Beta Kappa.

Address: State College, New Mexico.

1935. FLANAGAN, JOHN THEODORE. B.A. '27, M.A. '28, University of Minnesota.

Major: English. Minor: Comparative Literature.

Thesis: Emerson and the State. Published as "Emerson and Communism," *New England Quarterly*, June 1937; and in *Summaries of Ph.D. Theses*, Vol. 1, 1939, University of Minnesota.

Major Adviser: Professor Tremaine McDowell.

Positions Held: Instructor in English, 1929—, University of Minnesota.

Honors: Phi Beta Kappa.

Address: 680 Cable Avenue, St. Paul, Minnesota.

1935. LITCHFIELD, FLORENCE LEDUC, B.A. '30, M.A. '31, University of Minnesota.

Major: English. Minor: Comparative Literature.

Thesis: The Treatment of the Theme of Mutability in the Literature of the English Renaissance: A Study of the Problem of Change between 1558 and 1660. Published in *Summaries of Ph.D. Theses*, Vol. 1, 1939, University of Minnesota.

Major Adviser: Professor J. D. Bush.

Positions Held: Instructor, 1934-1936, Eastern Illinois State Teachers College; Instructor, 1936—, Bowling Green State University.

Honors: Phi Beta Kappa; Lambda Alpha Psi.

Address: 4821 E. Lake Harriet Boulevard, Minneapolis, Minnesota.

1935. TRESSMAN, LUELLA RUTH. B.S. '23, M.A. '28, University of Minnesota.

Major: English. Minor: History.

Thesis: Early Whig-Tory Satire in England. Not published.

Major Adviser: Professor C. A. Moore.

Positions Held: Instructor, 1935-1936, State Teachers College, La Crosse, Wisconsin; Instructor in English, 1936-1937, Asheville Normal and Teachers College, Asheville, North Carolina; Instructor, 1937—, Bowling Green State University, Bowling Green, Ohio.

Address: 4612 Colfax Ave. So., Minneapolis, Minnesota.

1936. KEENAN, ANNA MARY. B.A. '31, College of St. Catherine; M.A. '32, University of Minnesota.

Major: English. Minor: History.

Thesis: The Poetry of Francis Thompson with Particular Reference to the Influences of the Metaphysical Poets, Shelley, and Patmore. Published in *Summaries of Ph.D. Theses*, Vol. 1, 1939, University of Minnesota.

Major Adviser: Professor A. von Helmholtz Phelan.

Positions Held: Professor of English, 1936—, Good Counsel College, White Plains, New York.

Honors: Lambda Alpha Psi.

Address: 1995 Summit Ave., St. Paul, Minnesota.

1937. CONKLIN, PAUL SALISBURY. B.S. '22, Northwestern University; M.A. '24, University of Wisconsin.

Major: English. Minor: Philosophy.

Thesis: A History of *Hamlet* Criticism: Part I. 1601-1800. Published in *Summaries of Ph.D. Theses*, Vol. 1, 1939, University of Minnesota.

Major Adviser: Professor E. E. Stoll.

Positions Held: Professor of English, 1937—, Hanover College, Hanover, Ind.

Address: Hanover, Indiana.

1938. SISTER MARY BRIGETTA McCARTHY. Ph.B. '22, University of Chicago.

Major: English. Minor: Romance Languages (French).

Thesis: The English Lyrics of the Fourteenth Century. Not published.  
 Major Adviser: Professor M. B. Ruud.  
 Positions Held: Head, Department of English, College of St. Scholastica.  
 Address: College of St. Scholastica, Duluth, Minnesota.

## GERMAN

1919. HUCHTHAUSEN, JOHN LUDWIG AUGUST. R.M. '92, Concordia Theological Seminary; M.A. '16, University of Minnesota.  
 Major: German. Minor: Comparative Philology.  
 Thesis: Ideas of Freethinking Protestant Pastors in Modern German Novels. Published 1920, St. Paul, Minnesota, under the title *Ideen freisinniger protestantischer Pfarrer in neueren deutschen Romanen*.  
 Major Adviser: Professor C. Schlenker.  
 Positions Held: Pastor, 1906-1927, Trinity First Lutheran Church, Minneapolis, Minnesota.  
 Deceased, 1927.
1927. ERMISCH, KARL WILHELM. '97, Real Gymnasium, Schwerin, Germany; M.A. '25, University of Minnesota.  
 Major: German. Minor: Comparative Philology.  
 Thesis: Anzengruber und der Naturalismus. Published 1928, Warsburg Publishing House, Chicago.  
 Major Adviser: Professor O. C. Burkhard.  
 Positions Held: Instructor, 1927-1929, University of Minnesota; Professor and Head of German Department, Professor of Church History, 1928—, Augsburg Seminary; Substitute Professor of Systematic Theology, 1935—, Northwest Lutheran Seminary.  
 Honors: Lambda Alpha Psi; Sacrae Theologiae Doctor.  
 Address: Augsburg Seminary, Minneapolis, Minnesota.
1931. HOWALD, ERNEST. Maturitas '94, Gymnasium Burgdorf, Berne, Switzerland; Permanent Diploma '99, University of Berne.  
 Major: German. Minor: Romance Languages (French).  
 Thesis: Gottfried Keller als Schweizer und als Deutscher. Published, 1933, G. E. Stechert and Co., New York.  
 Major Adviser: Professor F. L. Pfeiffer.  
 Positions Held: Assistant in German Department, 1931-1932, University of Minnesota; Head of the Modern Language Department, 1932-1935, Seton Hall College, South Orange, New Jersey; Head of the Modern Language Department, 1935—, St. John's University, Brooklyn.  
 Address: 84-25, 85th Road, Woodhaven, Long Island, New York.
1936. HOUSEL, HELEN HOPE. Ohio State University and National Conservatory '25 (Vienna); M.A. '31, University of Minnesota.  
 Major: German. Minor: English.  
 Thesis: Parallelisms of the English and German Folksong Revival in Romanticism. Not published.  
 Major Adviser: Professor F. L. Pfeiffer.  
 Positions Held: Associate Professor, 1938—, Oklahoma City University.  
 Honors: Lambda Alpha Psi.  
 Address: Oklahoma City University, Oklahoma City, Oklahoma.

1936. LAAS, HANS FRED. Cand. phil., University of Berlin; M.A. '32, University of Minnesota.  
 Major: German. Minor: Comparative Philology.  
 Thesis: Die Novelle bei Wilhelm Heinrich Riehl. Published June, 1938 by Interstate Printing Co., Omaha, Nebraska.  
 Major Adviser: Professor O. C. Burkhard.  
 Positions Held: Teaching Assistant in German, 1930-1937, University of Minnesota; Instructor, 1937-1938, Assistant Professor of Modern Languages, 1938—, Creighton University.  
 Address: Creighton University, Omaha, Nebraska.
1937. MUELLER, EUGEN HARTMUTH. B.A. '29, University of Kansas; M.A. '31, University of Minnesota.  
 Major: German (Literature). Minor: German (Philology).  
 Thesis: Die Sprache Paul Flemings. Not published.  
 Major Advisers: Professor Samuel Kroesch and G. F. Lussy.  
 Positions Held: Instructor in German, 1931—, Ohio University.  
 Address: 28 Poplar Avenue, Athens, Ohio.

## ROMANCE LANGUAGES

1900. FLATEN, NILS. B.A. '93, M.A. '96, University of Minnesota.  
 Major: Romance Languages. Minors: Latin and Semitic Languages.  
 Thesis: Poema del Cid. Not published.  
 Major Adviser: Professor C. Benton.  
 Positions Held: Professor of Latin, 1900-1916, Professor of Romance Languages, 1916—, St. Olaf College, Northfield, Minnesota.  
 Address: 1401 Forest Avenue, Northfield, Minnesota.
1918. HENRIQUEZ-URENA, PEDRO. Bachiller en Ciencias y Letras, '01, National University of Santo Domingo; Abogado (LL.B.) '14, National University of Mexico.  
 Major: Romance Languages (Spanish). Minor: Romance Languages (Italian).  
 Thesis: La Versificacion Irregular en la Poesia Castellana. Published 1920, Madrid.  
 Major Adviser: Professor E. W. Olmsted.  
 Positions Held: Professorial Lecturer, 1918-1919, Assistant Professor, 1920-1921, University of Minnesota; Professor, 1921-1924, Universidad Nacional de Mexico; summer 1919, University of Chicago; Professor en la Facultad de Humanidades y en el Colegio, 1924-1931, Universidad Nacional de La Plata, Argentina; Professor, 1925-1931, Instituto Nacional del Profesorado Secundario, Buenos Aires, Argentina; Secretario, 1930-1931, Instituto de Filología, de la Universidad Nacional de Buenos Aires; Superintendente, 1932—, Superintendencia General de Ensenanza, Santó Domingo.  
 Honors: Portrait painted by J. M. Lopez Mezquita for the collection of writers' portraits of the Hispania Society of America.  
 Address: Superintendencia General de Ensenanza, Santo Domingo, Dominican Republic.
1920. BUSSOM, THOMAS WAINWRIGHT. B.A. '12, Amherst College.  
 Major: Romance Languages (French). Minor: Romance Languages (Spanish).

- Thesis: The Tragedies of Pradon. Published 1922, Paris.  
Major Advisers: Professors E. W. Olmsted and Colbert Searles.  
Positions Held: Associate Professor of Romance Languages, 1920-1924, Professor, 1924—, Head of the Honors College, 1937—, Wesleyan University.  
Degrees Received since the Ph.D.: M.A. (*ad eundem*), Wesleyan University, 1924.  
Honors: Phi Eta Kappa.  
Address: 350 High St., Middletown, Connecticut.
1920. VAN ROOSBROECK, GUSTAVE LEOPOLD. A.C. '09, University of Brussels; M.A. '17, University of Minnesota.  
Major: Romance Languages (French). Minor: Philosophy.  
Thesis: A Study of Corneille's Evolution. Published 1921, Minneapolis.  
Major Adviser: Professor Colbert Searles.  
Deceased, 1936.
1926. WATTS, GEORGE BYRON. B.A. '13, Dartmouth College; M.A. '15, Harvard University.  
Major: Romance Languages (French). Minor: German.  
Thesis: The Life, Literary Quarrels, and Works of François Gacon. Not published.  
Major Adviser: Professor F. B. Barton.  
Position Held: Professor of French, 1926—, Davidson College.  
Honors: President of North Carolina Modern Language Association; Phi Beta Kappa; *Officier d'Academie*, President, North Carolina Chapter, American Association of Teachers of French; Executive Committee, South Atlantic Modern Language Association.  
Address: Davidson, North Carolina.
1928. LUNDEBERG, OLAV K. B.A. '16, St. Olaf College; M.A. '23, University of Minnesota.  
Major: Romance Languages (French). Minor: Romance Languages (Spanish).  
Thesis: Charles Collé: Life and Works. Not published.  
Major Adviser: Professor Colbert Searles.  
Positions Held: Instructor and Associate in Romance Languages, 1927-1931, University of Illinois; Associate Professor of Romance Languages, 1931—, Duke University.  
Honors: Associate Editor, *Hispania*, 1936.  
Address: Duke University, Durham, North Carolina.
1928. NISSEN, ELIZABETH. B.A. '20, M.A. '21, University of Minnesota.  
Major: Romance Languages (French). Minor: Romance Languages (Italian).  
Thesis: A Critical Edition of the Poems Attributed to Guiot de Dijon. Published 1929, Paris, as no. 59 in *Les classiques français du moyen-âge*, under the title *Les chansons attribuées à Guiot de Dijon et à Jocelin*.  
Major Adviser: I. C. Le Compte.  
Positions Held: Assistant Professor of Romance Languages, 1928—, University of Minnesota.  
Address: 2440 Blaisdell Ave., Minneapolis, Minnesota.

1931. OWENS, JOHN HENRY. B.A. '24, Franklin College; M.A. '25, University of Minnesota.  
 Major: Romance Languages (French). Minor: Romance Languages (Spanish).  
 Thesis: The Repertory of Molière and His Plays. Not published.  
 Major Adviser: Professor Colbert Searles.  
 Positions Held: Head of Modern Language Department, 1931-1932, Drury College, Springfield, Missouri; Associate Professor of French, 1934—, State Teachers College, River Falls, Wisconsin.  
 Address: 526 E. Cascade, River Falls, Wisconsin.
1931. TORRES-RIOSECO, ARTURO. B.A. '16, University of Chile; M.A. '24, University of Minnesota.  
 Major: Romance Languages (Spanish). Minor: Romance Languages (French).  
 Thesis: Rubén Darío and the *Modernista* Movement in Spanish America and Spain. Published 1931, Harvard University Press.  
 Major Adviser: Professor E. W. Olmsted.  
 Positions Held: Visiting Professor, summer 1931, Stanford University; Associate Professor of Latin-American Literature, 1928-1932, Professor of Latin-American Literature, 1932—, University of California; Lecturer to the American Seminar in Mexico City, 1935; Professor of Latin American Literature, 1936 summer session, University of California at Los Angeles.  
 Honors: Guggenheim Fellow in Latin America, 1933; Member of the Hispanic Society of America; Member of the Chilean Intellectual Cooperation Society.  
 Address: University of California, Berkeley, California.
1934. CLEFTON, HERBERT EUGENE. B.A. '17, M.A. '18, University of Minnesota.  
 Major: Romance Languages (French). Minor: Romance Languages (Spanish).  
 Thesis: The Religious Thought of Bernardin de St. Pierre. Not published.  
 Major Adviser: Professor F. B. Barton.  
 Positions Held: Assistant Professor, Romance Languages, 1923—, University of Minnesota.  
 Address: 2026 Sheridan Ave. So., Minneapolis, Minnesota.
1934. OLMSTED, RICHARD HUBBELL. B.A. '22, M.A. '32, University of Minnesota.  
 Major: Romance Languages (Spanish). Minor: Romance Languages (French).  
 Thesis: A Critical Study of the Autographed Manuscript of the Play "El Conde Don Pedro Velez y Don Sancho el Deseado" of Luis Velas de Guevara. Not published.  
 Major Adviser: Professor R. L. Grismer.  
 Positions Held: Instructor, 1934-1936, Stephens College, Columbia, Missouri; Assistant Professor, 1936—, College of Mines, El Paso, Texas.  
 Honors: Lambda Alpha Psi; Phi Sigma Iota; Sigma Delta Pi.  
 Address: College of Mines, El Paso, Texas.
1934. OWRE, JACOB RIIS. B.A. '30, Williams College; M.A. '32, University of Minnesota.  
 Major: Romance Languages (Spanish). Minor: English.

- Thesis: The Poema de Fernan Gonzalez: A Paleographic Edition of the Escorial Manuscript IV-B-21, with Notes and Etymologic Vocabulary. Published in *Summaries of Ph.D. Theses*, Vol. 1, 1939, University of Minnesota.  
Major Adviser: Professor E. W. Olmsted.  
Positions Held: Assistant, 1934-1935, University of Minnesota; Assistant Professor of Spanish, 1935—, Director of Summer Session, 1938, University of Miami.  
Honors: Phi Beta Kappa; Lambda Alpha Psi.  
Address: University of Miami, Coral Gables, Florida.
1935. HUMISTON, CLINTON COOLEY. B.S. '24, M.A. '29, University of Minnesota.  
Major: Romance Languages (French). Minor: History.  
Thesis: A Comparison of Malherbe's Metrical Technique with That of Ronsard. Not published.  
Major Adviser: Professor Colbert Searles.  
Positions Held: Assistant Professor, 1936—, University of California at Los Angeles.  
Honors: Alpha Lambda Psi; Pi Delta Phi.  
Address: 1783 Mandeville Canyon Road, Los Angeles, California.
1935. LEFORT, EMILIO CARLOS. B.A. '17, National College of Cordoba (Argentine); B.S. '23, University of Buenos Aires; M.S. '26, M.A. '27, University of Wisconsin.  
Major: Romance Languages (Spanish). Minors: Romance Languages (Italian and French).  
Thesis: Edicion Paleografica de la Comedia Del Monte Sale (Quien el Monte Quema) de Lope Felix de Vega Carpio con un Estudio de la Misma. Not published.  
Major Adviser: Professor E. W. Olmsted.  
Positions Held: Instructor, 1929-1936, Assistant Professor of Spanish, 1936—, University of Minnesota.  
Address: 34 North Mississippi River Boulevard, St. Paul, Minnesota.
1935. SUNDHEIM, BORGHILD KATHARINE. B.S. '25, M.A. '27, University of Minnesota.  
Major: Romance Languages (French). Minors: German and Romance Languages (Italian).  
Thesis: A Critical Edition of Alexandre Hardy's *Théagène et Cariclée. Journée I*. Not published.  
Major Adviser: Professor C. M. Searles.  
Positions Held: Assistant Professor, 1927-1936, Associate Professor of French, 1936—, Macalester College.  
Honors: Phi Beta Kappa; Pi Lambda Theta; Lambda Alpha Psi.  
Address: 1318 Powderhorn Terrace, Apt. 311, Minneapolis, Minnesota.
1936. BRACKNEY, EMMERT MANSON. B.A. '15, De Pauw University; M.A. '28, University of Chicago.  
Major: Romance Languages (French). Minor: Romance Languages (Italian).  
Thesis: A Critical Edition of the Poems of Dafin d'Alvernhe. Not published.

- Major Adviser: Professor I. C. LeCompte.  
 Positions Held: Instructor, 1929-1936, Assistant Professor of Romance Languages, 1936—, University of Minnesota.  
 Honors: Phi Beta Kappa.  
 Address: 152 Arthur Ave. S. E., Minneapolis, Minnesota.
1936. JORDAN, HOWARD SHELDON. B.A. '29, M.A. '30, University of Minnesota.  
 Major: Romance Languages (French). Minor: English.  
 Thesis: Saint-Evremond as a Literary Critic. Published in *Summaries of Ph.D. Theses*, Vol. 1, 1939, University of Minnesota.  
 Major Adviser: Professor C. M. Searles.  
 Positions Held: Instructor, 1929—, University of Minnesota.  
 Address: 1913 Dupont Ave. So., Minneapolis, Minnesota.
1936. SISTER MARIE PHILIP HALEY. B.A. '21, College of St. Catherine; M.A. '25, University of Minnesota.  
 Major: Romance Languages (French). Minor: Romance Languages (Italian).  
 Thesis: Racine and the Art Poétique of Boileau. Published by Johns Hopkins University Press, 1938.  
 Major Adviser: Professor C. M. Searles.  
 Positions Held: Professor, 1937—, College of St. Catherine.  
 Address: College of St. Catherine, St. Paul, Minnesota.
1936. STEVENS, LINTON COOKE. B.A. '21, M.A. '22, University of Wisconsin.  
 Major: Romance Languages (French). Minor: English.  
 Thesis: La Langue de Brantôme. Not published.  
 Major Adviser: Professor I. C. LeCompte.  
 Positions Held: Instructor, 1936—, Michigan State College.  
 Address: Department of Foreign Languages, Michigan State College, East Lansing, Michigan.
1937. NIESS, ROBERT JUDSON. B.A. '33, M.A. '34, University of Minnesota.  
 Major: Romance Languages (French). Minor: Romance Languages (Spanish).  
 Thesis: A Study of the Influence of Jean de La Fontaine on the Works of Félix Maria de Samaniego. Not published.  
 Major Adviser: Professor I. C. LeCompte.  
 Positions Held: Instructor, 1937—, Romance Languages, Washington University, St. Louis, Missouri.  
 Honors: Phi Beta Kappa; Jeanne d'Arc Medal; Albert Howard Scholarship; Phi Sigma Iota; Lambda Alpha Psi; Phoenix.  
 Address: 4849 Portland Ave. South, Minneapolis, Minnesota.

## SCANDINAVIAN LANGUAGES

1897. NILSSON, VICTOR (ALFRED). Higher Latin College, Göteborg, Sweden.  
 Major: Scandinavian. Minors: English Philology and French.  
 Thesis: Loddafnismal, an Eddic Study. Published 1898, University of Minnesota.



- Major Adviser: Professor O. J. Breda.  
 Positions Held: Head of East Side Branch, 1891-1903, Minneapolis Public Library; European Correspondent, 1897, Music Critic, 1897-1900, *Minneapolis Daily Times*; Editor and Publisher, 1906-1910, *Musiktidning*; Music Critic and Music Editor, 1907-1908, European Correspondent, 1910, Music Critic and Music Editor, 1906-1938, *Minneapolis Journal*; Music Critic, 1892—, Editor, 1906—, Owner, 1919—, the *Progress Register*, Minneapolis, Minnesota.
- Honors: Knighted by Gustav V with the Royal Order of Vasa, 1919, and with the Royal Order of the North Star, 1929; Phi Mu Alpha (Sinfonia).  
 Address: 551 Newton Ave. North, Minneapolis, Minnesota.
1905. VICKNER, EDWIN JOHAN. B.A. '00, M.A. '02, University of Minnesota.  
 Major: Swedish Literature.  
 Thesis: A Study of Romanticism and the Romantic School in Swedish Literature.  
 Major Adviser: Professor J. S. Carlson.  
 Positions Held: Professor of Modern Languages, Gustavus Adolphus College, St. Peter, Minnesota, 1903-1912; Professor of Scandinavian Languages and Comparative Philology, 1912—, University of Washington, Seattle, Washington.  
 Honors: Knighted with the Royal Order of Vasa; Phi Beta Kappa; Knight of the Order of St. Olaf.  
 Address: 5521 12th Ave. N. E., Seattle, Washington.
1906. MATTSO, PETER AUGUST. B.A. '92, Gustavus Adolphus College; B.D., Augustana Lutheran Seminary.  
 Major: Scandinavian.  
 Thesis: The Development of the Constitutional Idea in Sweden.  
 Major Adviser: Professor J. S. Carlson.  
 Positions Held: President, 1894-1911, Gustavus Adolphus College, St. Peter, Minnesota; President, 1913—, Lutheran Minnesota Conference.  
 Degrees Received since the Ph.D.: D.D., 1906, Muhlenberg College, Allentown, Pennsylvania.  
 Honors: Knighted with the Royal Order of the North Star, 1924; Commander of the Royal Order of the North Star, 1929.  
 Address: 5320 Clinton Avenue, Minneapolis, Minnesota.
1909. CARLTON, ERNEST CONRAD. B.A. '98, M.A. '00, Augustana College.  
 Major: Scandinavian. Minors: Greek and English.  
 Thesis: Oscar Levertin: A Study of Literary Development.  
 Major Adviser: Professor Richard Burton.  
 Positions Held: Head of English Department, 1909—, Gustavus Adolphus College.  
 Address: Gustavus Adolphus College, St. Peter, Minnesota.

## MEDICAL SCIENCES

### ANATOMY

1915. ALLEN, WILLIAM FITCH. B.A. '00, M.A. '02, Stanford University.  
Major: Anatomy. Minor: Zoology.  
Thesis: The Spinal Cord of *Bdellostoma*. Published in *Journal of Comparative Neurology*, Vol. 26, no. 1, 9-43, 1916.  
Major Adviser: Professor J. B. Johnston.  
Positions Held: Professor, Head of Department of Anatomy, 1916—, University of Oregon Medical Department, Portland, Oregon.  
Honors: Sigma Xi; Member of Washington Academy of Science; American Physiological Society; American Association of Anatomists; Society for Experimental Biology and Medicine; American Association for the Advancement of Science; Anat. Gessellschaft.  
Address: 3947 S. E. Salmon Street, Portland, Oregon.
1915. BAUMGARTNER, EDWIN A. B.A. '10, M.A. '11, University of Kansas.  
Major: Anatomy. Minor: Zoology.  
Thesis: Development of the Liver, Gall Bladder, and Hepatic Ducts in *Amblystoma Punctatum*. Published in *American Journal of Anatomy*, Vol. 19, no. 2, 1916.  
Major Adviser: Professor R. E. Scammon.  
Positions Held: Instructor in Anatomy, 1914-1916, Associate in Anatomy, 1916-1919, Washington University Medical School, St. Louis; Pathologist and Surgeon, 1919-1920, Halstead Hospital, Halstead, Kansas; Surgeon, 1920-1921, St. Louis; Pathologist, 1921-1934, Clifton Springs Sanitarium, New York; Pathologist, First Assistant Physician, 1934—, Newark State School.  
Degrees Received since the Ph.D.: M.D., 1919, Washington University Medical School.  
Honors: Fellow of the American College of Physicians; Sigma Xi.  
Address: Newark State School, Newark, New York.
1916. HOSKINS, ELMER RAY. B.A. '12, University of Kansas; M.A. '13, University of Minnesota.  
Major: Anatomy. Minor: Physiology.  
Thesis: The Growth of the Body and Organs of the Albino Rat as Affected by Feeding Various Ductless Glands (Thyroid, Thymus, Hypophysis, and Pineal). Published in *Journal of Experimental Zoölogy*, Vol. 21, p. 295, 1916.  
Major Adviser: Professor C. M. Jackson.  
Position Held: Assistant Professor, 1916-1920, Yale University, New Haven, Connecticut.  
Deceased, 1920.
1917. STEWART, CHESTER ARTHUR. B.A. '14, University of Missouri; M.A. '15, University of Minnesota.  
Major: Anatomy. Minor: Pathology.  
Thesis: Studies of the Effects of Inanition upon Growth in the Albino Rat. Published in *Journal of Experimental Zoölogy*, Vol. 25, no. 2, April 1918.  
Major Adviser: Professor C. M. Jackson.

Positions Held: Assistant Professor of Pediatrics, 1921-1931, Associate Professor, 1931-1936, Clinical Professor of Pediatrics, 1936—, University of Minnesota.

Honors: Sigma Xi; Delegate to 4th International Congress of Pediatrics, 1937, Rome.

Address: 227 W. 52nd St., Minneapolis, Minnesota.

1921. LATIMER, HOMER BARKER. B.A. '07, M.A. '08, University of Minnesota.

Major: Anatomy. Minor: Zoology.

Thesis: The Postnatal Growth of the Body, Systems, and Organs of the Single-Comb White Leghorn Chicken. Published in *Journal of Agricultural Research*, Vol. 29, no. 9, 363-397.

Major Adviser: Professor C. M. Jackson.

Positions Held: Professor of Anatomy, 1918-1926, University of Nebraska; Professor of Anatomy, 1926—, University of Kansas.

Honors: Sigma Xi.

Address: Department of Anatomy, University of Kansas, Lawrence, Kansas.

1921. OSTERUD, HJALMAR LAURITS. B.A. '09, M.A. '10, University of Washington.

Major: Anatomy. Minor: Zoology.

Thesis: The Postnatal Growth and Development of the Reproductive Tract in the Female Albino Rat. Published 1923 in *Papers from the Mayo Foundation and Medical School*, Vol. 2.

Major Adviser: Professor C. M. Jackson.

Positions Held: Assistant Professor of Anatomy, 1921-1922, University of Minnesota; Associate Professor, 1922-1924, Professor, 1924—, Medical College of Virginia.

Honors: Phi Beta Kappa; Sigma Xi.

Address: Medical College of Virginia, Richmond, Virginia.

1923. DUNN, HALBERT LOUIS. B.A. '17, M.A. '19, M.B. '22, University of Minnesota.

Major: Anatomy. Minor: Physiology.

Thesis: The Growth of the Cerebrum and Its Integral Parts. Not published.

Major Adviser: Professor R. E. Scammon.

Positions Held: Assistant, 1923-1924, Presbyterian Hospital, Chicago; Fellow, 1924-1925, Mayo Clinic; Associate Professor of Biometry and Vital Statistics, 1925-1929, Johns Hopkins University; Head of Department of Medical Statistics, 1929-1932, Mayo Clinic; Associate Professor of Biometry and Statistical Medicine, 1929-1932, Mayo Foundation, Rochester, Minnesota; Director, University Hospital, and Professor of Medical Statistics, 1932-1935, University of Minnesota; Chief, Division of Vital Statistics, Bureau of the Census, 1935—, Washington, D. C.

Address: Division of Vital Statistics, Bureau of the Census, Washington, D. C.

1923. MILLER, SHIRLEY PUTNAM. B.S. '03, South Dakota State College; M.A. '04, University of Minnesota.

Major: Anatomy. Minor: Zoology.

Thesis: The Effects of Inanition upon the Stomach and Intestines of Albino Rats Underfed from Birth for Various Periods. Published in *Archives of Pathology and Laboratory Medicine*, Vol. 3, 26-41, 1937.

Major Adviser: Professor C. M. Jackson.

Positions Held: Instructor, 1921-1927, Assistant Professor, 1927—, University of Minnesota.

Honors: Sigma Xi.

Address: 81 Arthur Ave. S. E., Minneapolis, Minnesota.

1923. NOBACK, GUSTAVE JOSEPH, B.S. '16, Cornell University; M.A. '20, University of Minnesota.

Major: Anatomy. Minor: Anthropology.

Thesis: A Study of the Developmental Anatomy of the Respiratory System in Man. Published in two parts in *American Journal of Diseases of Children*, Vol. 26, December, 1923; and in *American Journal of Anatomy*, Vol. 36, no. 2, November 1925.

Major Adviser: Professor R. E. Scammon.

Positions Held: Associate Professor of Anatomy, 1921-1922, Professor, 1922-1924, Medical College of Virginia, Richmond, Virginia; Assistant Professor, 1924-1926, Associate Professor, 1926-1930, Professor, 1930—, Chairman of Biological Sciences Group of Graduate School, 1931—, New York University.

Honors: Fellow of New York Academy of Medicine; Fellow of the A.A.A.S.; President of New York University Chapter of Sigma Xi; Secretary, The Society of Medical Jurisprudence.

Address: 11 Groton St., Forest Hills, Long Island, New York.

1926. COVELL, WALTER PAGE. B.S. '22, M.S. '23, Oregon State Agricultural College.

Major: Anatomy. Minor: Zoology.

Thesis: Quantitative Studies of the Human Hypophysis. Published in two parts: in *American Journal of Anatomy*, 38:379-422, 1927, and in *American Journal of Pathology*, Vol. 3, no. 1, 1927.

Major Adviser: Professor A. T. Rasmussen.

Positions Held: Assistant, 1926-1928, Rockefeller Institute for Medical Research; Research Fellow, 1928-1929, New York University and Bellevue Hospital Medical School; Assistant Professor, 1929-1933, Washington University Medical School, St. Louis, Missouri; Assistant Professor, 1933—, Hooper Foundation, University of California Medical Center.

Address: 20 Linares Ave., San Francisco, California.

1926. PEYTON, WILLIAM THOMAS. B.S. '16, M.B. '18, M.D. '19, M.A. '24, University of Minnesota.

Major: Anatomy. Minor: Pathology.

Thesis: Developmental Topographical Anatomy of the Head and Neck of the Fetus, the Newborn, the Child, and the Adult as Determined by the Orthoscopic Method. Published in *Journal of Nervous and Mental Diseases*, 78:232-249, 381-399.

Major Adviser: Professor R. E. Scammon.

- Positions Held: Teaching Fellow in Surgery, 1926-1929, Instructor in Surgery, 1929-1930, Assistant Professor of Surgery, 1930-1934, Associate Professor of Surgery, 1934—, University of Minnesota.  
 Honors: Sigma Xi.  
 Address: 64 Barton Avenue S. E., Minneapolis, Minnesota.
1926. SCOTT, GORDON HATLER. B.A. '22, Southwestern College; M.S. '25, University of Minnesota.  
 Major: Anatomy. Minor: Bacteriology.  
 Thesis: A Quantitative Study of the Growth Changes of the Parts of the Human Fetal Stomach Wall. Published in *American Journal of Anatomy*, 44:1-45, 1929, and in *Journal of Diseases of Children*, 30:147-173, 1925.  
 Major Adviser: Professor R. E. Scammon.  
 Positions Held: Assistant Professor of Anatomy, 1926-1927, Loyola University Medical School, Chicago; Assistant, 1927-1928, Rockefeller Institute for Medical Research; Assistant Professor of Cytology, 1928-1931, Associate Professor, 1931—, Washington University Medical School.  
 Honors: Sigma Xi.  
 Address: Washington University Medical School, St. Louis, Missouri.
1927. WATKINS, CHARLES HAMILTON. B.A. '24, M.A. '25, University of Minnesota.  
 Major: Anatomy. Minor: Zoology (Hematology).  
 Thesis: A Quantitative Study of the Growth of the Arterial System of the Human Fetus with Respect to Body Length, Body Weight, and Age. Not published.  
 Major Adviser: Professor R. E. Scammon.  
 Positions Held: Consulting Physician, 1929—, Associate in Medicine, 1930—, Mayo Clinic; Assistant Professor of Medicine, 1933—, Mayo Foundation.  
 Degrees Received since the Ph.D.: M.B., M.D., 1928, University of Minnesota.  
 Honors: Sigma Xi; Alpha Omega Alpha.  
 Address: 826 Fifth Street S. W., Rochester, Minnesota.
1929. DUNCAN, DONALD. B.A. '23, Carleton College; M.A. '27, University of Minnesota.  
 Major: Anatomy. Minor: Pathology.  
 Thesis: Studies of Degeneration in the Peripheral Nerves of Normal Mammals. Published in *Journal of Comparative Neurology*, 51:197-228.  
 Major Adviser: Professor A. T. Rasmussen.  
 Positions Held: Assistant Professor of Anatomy, 1929-1930, University of Utah; Assistant Professor of Anatomy, 1930-1932, University of Buffalo; Associate Professor of Anatomy, 1932—, University of Texas Medical Branch.  
 Honors: Phi Beta Kappa; Sigma Xi.  
 Address: University of Texas, Department of Anatomy, Galveston, Texas.
1929. PALMER, CARROLL EDWARDS. B.S. '25, Hamline University; M.A. '27, M.D. '28, University of Minnesota.  
 Major: Anatomy. Minor: Botany (Biometry).  
 Thesis: Studies on the Center of Gravity in the Human Body. Not published.  
 Major Adviser: Professor R. E. Scammon.

- Positions Held: National Research Council Fellowship for Research in Child Development, 1928-1930, Instructor in Biostatistics, 1930-1936, School of Hygiene and Public Health, Statistician, 1935-1936, Johns Hopkins University; Assistant Surgeon, 1936—, U. S. Public Health Service.  
 Honors: Sigma Xi; Alpha Omega Alpha.  
 Address: U. S. Public Health Service, Washington, D. C.
1929. ROE, HAROLD EWART. B.A. '23, University of California; M.A. '29, University of Minnesota.  
 Major: Anatomy. Minor: Pathology.  
 Thesis: The Prenatal Development of the Skin and *Tela-Subcutanea* in the Human Fetus. Published in *Anatomical Record*, Vol. 55, no. 2, January, 1933.  
 Major Adviser: Professor R. E. Scammon.  
 Positions Held: Intern, 1931, Research Fellow in Pediatrics, 1932, University of Minnesota Hospital; Residency, 1932-1933, Children's Memorial Hospital, Chicago; Research Associate, 1937—, University of California.  
 Degrees Received since the Ph.D.: M.B., M.D., 1930, University of Minnesota.  
 Honors: Sigma Xi.  
 Address: 957 Hilldale, Berkeley, California.
1931. FREUDENBERGER, CLAY BRISCOE. B.A. '25, Colorado College; M.A. '26, University of Colorado.  
 Major: Anatomy. Minor: Zoology.  
 Thesis: Differences between the Wistar Albino and the Long-Evans Hybrid Strains of the Norway Rat. Published in *American Journal of Anatomy*, 50:293-349, 1932.  
 Major Adviser: Professor C. M. Jackson.  
 Positions Held: Instructor, summer 1931, University of Minnesota; Associate Professor, Acting Head of Department of Anatomy, 1931-1932, Professor of Anatomy and Head of Department, 1932—, University of Utah.  
 Honors: Phi Beta Kappa; Sigma Xi; Phi Kappa Phi; Fellow of American Association for the Advancement of Science; American Association of Anatomists; Society for Experimental Biology and Medicine.  
 Address: University of Utah, Salt Lake City, Utah.
1932. BLUMENFELD, CHARLES MORRIS. B.A. '26, M.A. '28, University of Minnesota.  
 Major: Anatomy. Minor: Pathology and Pharmacology.  
 Thesis: Effects of Various Dietary Deficiencies upon the Morphology of the Suprarenal Gland. Published in *Endocrinology*, 18:367-381, 1934.  
 Major Adviser: Professor C. M. Jackson.  
 Positions Held: Associate Professor of Anatomy, 1932—, University of Utah.  
 Honors: Phi Beta Kappa; Alpha Omega Alpha; Sigma Xi; Gamma Alpha; Phi Kappa Phi.  
 Address: 1507 South 16th East Street, Salt Lake City, Utah.
1932. HALL, BYRON ELLSWORTH. B.A. '28, M.A. '29, University of Minnesota.  
 Major: Anatomy (Hematology). Minor: Pathology.  
 Thesis: Certain Phases of the Monocyte Problem. Published in *Handbook of Hematology*, Hal Downey, Editor, Paul B. Hoeber, Inc., Publishers, 1937.

Major Adviser: Professor Hal Downey.

Positions Held: Intern, 1933-1935, University of Pennsylvania Hospital; Fellow in Medicine, 1935-1937, First Assistant in Medicine, 1937, Instructor in Medicine, 1937—, Mayo Foundation, Consultant in Division of Medicine, 1937—, Mayo Clinic.

Honors: Sigma Xi.

Address: 725 Seventh Ave. S. W., Rochester, Minnesota.

1932. STEIN, SAMUEL IRVING. B.S. '29, M.S. '30, University of Minnesota.

Major: Anatomy. Minor: Pathology.

Thesis: The Effects of Pregnancy on the Hypophysis of the Albino Rat. Published in *Endocrinology*, 17:187-198, 1933.

Major Adviser: Professor A. T. Rasmussen.

Positions Held: Intern, 1934-1935, Minneapolis General Hospital; Assistant, 1935-1936, St. Elizabeth's Hospital, Washington, D.C.; Resident in Neuropsychiatry, 1936-1937, Michael Reese Hospital, Chicago; Neuropathologist, 1937—, Kankakee State Hospital.

Honors: Sigma Xi; Alpha Omega Alpha.

Degrees Received since the Ph.D.: M.D., 1934, University of Minnesota.

Address: Kankakee State Hospital, Kankakee, Illinois.

1934. JONES, RUSSELL LOWELL. B.A. '30, Westminster College; M.S. '32, St. Louis University.

Major: Anatomy. Minor: Zoology.

Thesis: The Structure of the Vagus and Glossopharyngeal Nerves. Published in *Journal of Comparative Neurology*, 67:469-482, 1937.

Major Adviser: Professor A. T. Rasmussen.

Positions Held: Instructor, 1934-1935, Georgetown University, Washington, D. C.; Instructor, 1935—, Indiana University Medical School, Bloomington, Indiana.

Honors: Sigma Xi; Phi Chi.

Address: Indiana University Medical School, Bloomington, Indiana.

1934. LAWLESS, JOHN JOSEPH. B.S. '31, M.S. '31, University of Minnesota.

Major: Anatomy. Minor: Physiology.

Thesis: Effects of Castration on Organ Weights in the Rat. Published in *Anatomical Record*, 66:455-473, 1936.

Major Adviser: Professor A. T. Rasmussen.

Positions Held: Instructor in Anatomy, 1934-1935, Georgetown University Medical School; Assistant Professor of Anatomy, 1935—, West Virginia University School of Medicine.

Honors: Sigma Xi.

Address: West Virginia University School of Medicine, Morgantown, West Virginia.

1935. JONES, OLIVER PERRY. B.A. '29, Temple University.

Major: Anatomy (Hematology). Minors: Physiologic Chemistry and Physiology.

Thesis: Erythroblasts with Special Reference to the Megaloblast. Published in *Handbook of Hematology*, Hal Downey, Editor, Paul B. Hoeber, Inc., Publishers, 1937.

Major Adviser: Professor Hal Downey.

Positions Held: Instructor of Anatomy, 1935-1937, University of Minnesota; Assistant Professor of Anatomy, 1937—, University of Buffalo Medical School.

Honors: Sigma Xi.

Address: 24 High St., Buffalo, New York.

1936. BILLETER, OSCAR ARNOLD. B.A. '30, State College of St. Gall (Switzerland); M.A. '34, University of Utah.

Major: Anatomy. Minor: Pathology.

Thesis: The Effect of Spaying and Theelin Injections on Body Growth and Organ Weights of the Albino Rat. Published in *American Journal of Anatomy*, 60:367-395, 1937.

Major Adviser: Professor C. M. Jackson.

Positions Held: Instructor, 1936-1937, Louisiana State University Medical School; Assistant Professor, 1937—, Chicago Medical School.

Honors: Sigma Xi.

Address: 5631 Drexel Ave., Chicago, Illinois.

1936. KIRSCHBAUM, ARTHUR. B.S. '31, New York University; M.A. '33, University of Minnesota.

Major: Anatomy (Hematology). Minor: Pathology.

Thesis: Blood Cell Formation in Mammalian Embryos. Published in *Anatomical Record*, May, 1937, and in *Proceedings of the Society for Experimental Biology and Medicine*, 1937.

Major Adviser: Professor Hal Downey.

Positions Held: Alexander Brown Coxe Fellow in Anatomy, 1937-1938, Yale University School of Medicine; Instructor in Anatomy, 1938—, Yale University School of Medicine.

Honors: Phi Beta Kappa; Sigma Xi.

Address: Yale University School of Medicine, New Haven, Connecticut.

1936. WALD, HERBERT. B.S. '30, University of Chicago; M.S. '33, University of Minnesota.

Major: Anatomy. Minor: Physiology.

Thesis: The Normal Variability of the Weight of the Kidneys, and the Effect of Pathological Processes upon the Distribution of the Weight of the Kidneys. Published in *Archives of Pathology*, 23:493-500, 1937.

Major Adviser: Dr. Edith Boyd.

Positions Held: Medical Student, 1936-1938, University of Chicago; Intern, 1938—, Norton Memorial Infirmary.

Honors: Sigma Xi.

Address: Norton Memorial Infirmary, Louisville, Kentucky.

1937. JONES, DAVID SMITH. B.A. '32, Westminster College; M.A. '34, St. Louis University.

Major: Anatomy. Minor: Pathology.

Thesis: The Origin of the Sympathetic Trunks in the Chick Embryo. Published in *Anatomical Record*, Vol. 70, no. 1, December 25, 1937.



Major Adviser: Professor E. A. Boyden.  
Positions Held: Instructor in Anatomy, 1937—, Loyola University Medical School.  
Honors: Sigma Xi.  
Address: 706 S. Wolcott, Chicago, Illinois.

## BACTERIOLOGY

1921. ASHBY, WINNIFRED MAYER. B.S. '03, University of Chicago; M.S. '05, University of Washington.

Major: Bacteriology (Immunology). Minor: Pathology (Hematology).

Thesis: Destruction of Transfused Blood in Normal Subjects and in Pernicious Anemia Patients. Published in *Journal of Experimental Medicine*, 34:127-166, 1921.

Major Adviser: Professor E. C. Rosenow.

Positions Held: Associate in Experimental Medicine, 1920-1924, Mayo Foundation; Medical Bacteriologist, Health Officer, rated with Senior Medical Officers, 1924—, St. Elizabeth Hospital, Washington, D. C.

Address: 305 10th St. N. E., Washington, D. C.

1928. HALVORSON, HALVOR ORIN. B.S. '22, Ch.E. '23, University of Minnesota.

Major: Bacteriology. Minor: Physical Chemistry.

Thesis: The Importance of Bacteria in the Transformations of Iron in Nature. Published in *Journal of Physical Chemistry*, 31:626-631, 1927; and in *Soil Science*, Vol. 24, no. 6, 1927, Vol. 32, no. 2, 1931.

Major Adviser: Professor R. G. Green.

Positions Held: Instructor, 1928-1929, Assistant Professor, 1929-1931, Associate Professor, 1931—, University of Minnesota.

Honors: Sigma Xi.

Address: St. Stephens and County Road B, Como Station, St. Paul, Minnesota.

1930. ZIEGLER, NEWELL RICHARD. B.S. '25, M.S. '26, University of Minnesota.

Major: Bacteriology. Minor: Agricultural Biochemistry and Physiologic Chemistry.

Thesis: A Comparison of Quantitative Methods for the Determination of Bacterial Populations. Published in *Journal of Bacteriology*, 25:101-121, 26:331-339, 559-567, 1933; 29:609-634, 1935.

Major Adviser: Professor H. O. Halvorson.

Positions Held: Assistant Professor of Bacteriology, 1930-1931, State College of Washington, Pullman, Washington; Acting Chairman of Department of Bacteriology and Preventive Medicine, 1931-1932, Chairman of Department, 1932-1937, Associate Professor, 1931—, University of Missouri.

Honors: Vice-President, 1937-1938, University of Missouri Chapter Sigma Xi.

Address: University of Missouri, Columbia, Missouri.

1931. LECK, PAUL CLIFFORD. B.A. '27, M.S. '29, M.D. '31, University of Minnesota.

Major: Bacteriology. Minor: Agricultural Biochemistry.

Thesis: The Relation of Fatty Acids and Lipoids to Neurotoxins. Published in *Summaries of Ph.D. Theses*, Vol. 1, 1939, University of Minnesota.

- Major Adviser: Professor W. P. Larson.  
 Positions Held: Intern, 1931-1932, General Hospital, Minneapolis, Minnesota;  
 Private practice, 1932—.  
 Honors: Sigma Xi; Alpha Omega Alpha.  
 Address: Austin, Minnesota.
1932. CARROLL, WILLIAM RICHARD. B.S. '22, University of Wisconsin;  
 M.S. '25, University of Illinois.  
 Major: Bacteriology. Minor: Botany (Phycology).  
 Thesis: A Study of Rhizobium Species in Relation to Nodule Formation on the  
 Roots of Florida Legumes. Published in *Soil Science*, 37:117, 227, 1934.  
 Major Adviser: Professor W. P. Larson.  
 Positions Held: Associate Professor of Bacteriology, 1935—, University of  
 Florida.  
 Honors: Sigma Xi; Phi Sigma.  
 Address: 803 Washington Street, Gainesville, Florida.
1932. GUNDERSON, MILLARD FILLMORE. B.S. '29, M.S. '30, University  
 of Minnesota.  
 Major: Bacteriology. Minor: Agricultural Biochemistry.  
 Thesis: Studies on Western Duck Sickness. Published as U. S. Government  
 Agriculture Bulletin No. 411.  
 Major Advisers: Professors R. G. Green and H. O. Halvorson.  
 Positions Held: Instructor, 1932-1935, University of Minnesota; Assistant Pro-  
 fessor, 1935—, University of Nebraska Medical School.  
 Honors: Sigma Xi.  
 Address: University of Nebraska Medical School, Omaha, Nebraska.
1932. NOVAK, MILAN. B.A. '29, Macalester College; M.S. '30, University of  
 Minnesota.  
 Major: Bacteriology. Minor: Zoology (Parasitology).  
 Thesis: Dissociation of an Actinomyces into Bacterial Forms. Published in  
*Journal of Infectious Diseases*, 52:253-267, 1933.  
 Major Adviser: Professor A. T. Henrici.  
 Positions Held: Assistant Professor of Bacteriology, 1932-1933, University of  
 Tennessee; Instructor in the General Extension Division, 1935-1938, Instructor  
 in Bacteriology, 1938—, University of Minnesota.  
 Honors: Sigma Xi.  
 Address: 312 Seymour Ave. S. E., Minneapolis, Minnesota.
1933. CADE, ARTHUR ROSSON. B.S. '15, Worcester Polytechnic Institute;  
 M.S. '17, University of Minnesota.  
 Major: Bacteriology. Minor: Organic Chemistry.  
 Thesis: A Study of Germicides. Published in *Journal of American Pharma-  
 ceutical Association*, 1937.  
 Major Adviser: Professor H. O. Halverson.  
 Positions Held: Director of Research, 1933—, Larx Co., Minneapolis, Minne-  
 sota.  
 Honors: Sigma Xi; Phi Lambda Upsilon.  
 Address: 4621 Beard Ave. S., Minneapolis, Minnesota.

1934. BAYLISS, MILWARD LEVI. B.A. '29, M.S. '31, University of Minnesota.  
Major: Bacteriology. Minor: Agricultural Biochemistry.  
Thesis: A Study of the Effect of the Constitution of Soaps upon Their Germicidal and Detoxifying Properties. Published in *Journal of Infectious Diseases*, 59:131-136, 1936.  
Major Adviser: Professor H. O. Halvorson.  
Positions Held: Bacteriologist, 1934-1935, Maryland Health Department; Instructor in Bacteriology, 1935-1938, University of Nebraska; Instructor, 1938—, Johns Hopkins University.  
Address: School of Hygiene and Public Health, Johns Hopkins University, Baltimore, Maryland.
1934. BENTON, ANNE GERTRUDE. B.A. '18, Wellesley College; M.A. '28, University of Minnesota.  
Major: Bacteriology. Minor: Agricultural Biochemistry.  
Thesis: Chitinovorous Bacteria—A Preliminary Survey. Published in *Journal of Bacteriology*, Vol. 29, no. 5, 1935.  
Major Adviser: Professor A. T. Henrici.  
Positions Held: Professor of Bacteriology, 1927-1935, Vassar College.  
Honors: Sigma Xi.  
Married Name: Mrs. Chester Riebeth.  
Address: 2421 Sheridan Avenue South, Minneapolis, Minnesota.
1934. BUGGS, CHARLES WESLEY. B.A. '28, Morehouse College; M.S. '32, University of Minnesota.  
Major: Bacteriology. Minor: Agricultural Biochemistry.  
Thesis: Cataphoretic Phenomena. Published in *Journal of Bacteriology*, Vol. 30, no 5, 1935.  
Major Adviser: Professor R. G. Green.  
Positions Held: Professor of Chemistry, 1934-1935, Bishop College, Marshall, Texas; Professor of Biology, 1935—, Dillard University, New Orleans, Louisiana.  
Honors: Sigma Xi.  
Address: Dillard University, New Orleans, Louisiana.
1934. COLIEN, FRANCIS EDWARD. B.S. '28, M.S. '30, University of Minnesota.  
Major: Bacteriology. Minor: Preventive Medicine.  
Thesis: A Study of Microbic Variation in Three Yellow Pigment-Producing Cocci. Published in *Journal of Bacteriology*, 30:301-321, 1935.  
Major Adviser: Professor W. P. Larson.  
Positions Held: Head of Department of Bacteriology, 1934-1935, Milwaukee Continuation School; Assistant Professor and Chairman of the Division of Bacteriology and Public Health and Preventive Medicine, 1935—, Creighton University.  
Honors: Sigma Xi; Phi Delta Kappa; Fellow of the American Public Health Association.  
Address: 4915 Dodge St., Omaha, Nebraska.

1934. OLSON, BYRON J. B.S. '31, M.S. '31, University of Minnesota.  
 Major: Bacteriology. Minor: Anatomy (Hematology).  
 Thesis: A Statistical Study of the Blood Picture in Atopic Conditions and Experimental Studies on the Number of Leucocytes in the Blood Stream and in the Tissues. Not published.  
 Major Adviser: Professor W. P. Larson.  
 Positions Held: Instructor, 1934-1935, University of Minnesota Medical School; Eli Lilly Research Fellow, 1935, Stanford University; Acting Assistant Professor, 1935-1937, Stanford University; Assistant Surgeon, 1937—, United States Public Health Service.  
 Degrees Received since the Ph.D.: M.D., 1935.  
 Honors: Sigma Xi; Alpha Omega Alpha.  
 Address: United States Public Health Service, Washington, D. C.
1936. ORDAL, ERLING JOSEF. B.A. '27, Luther College.  
 Major: Bacteriology. Minor: Physical Chemistry.  
 Thesis: A Study of Some Oxidations and Reductions Concerned in the Respiration of Bacteria. Not published.  
 Major Adviser: Professor H. O. Halvorson.  
 Positions Held: Instructor, 1936-1938, Assistant Professor, 1938—, Department of Bacteriology, University of Washington.  
 Address: University of Washington, Seattle, Washington.
1937. SAVAGE, GEORGE MASON. B.Ch. '33, University of Minnesota.  
 Major: Bacteriology. Minor: Physical Chemistry.  
 Thesis: The Improvement of Trickling Filter Efficiencies: Experimental Studies of Aeration and Application Rates. Published in *Sewage Works Journal*, Vol. 8, no. 6, 1936.  
 Major Adviser: Professor H. O. Halvorson.  
 Positions Held: Instructor in Bacteriology, 1937—, University of Minnesota.  
 Honors: Gamma Alpha; Sigma Xi.  
 Address: 215 Millard Hall, University of Minnesota, Minneapolis, Minnesota.

## BIOCHEMISTRY

1932. SIMONSEN, DAISY GRACE. B.S. '26, Hamline University.  
 Major: Biochemistry. Minor: Organic Chemistry.  
 Thesis: The Biological and Chemical Study of Cysteine and Cystine with Special Reference to Their Oxidation Reactions. Published in *Journal of Biological Chemistry*, 94:323-328, 1931; 101:35-43, 1933; and *Journal of American Medical Association*, 101:1937-1940, 1933.  
 Major Adviser: Professor E. C. Kendall.  
 Positions Held: Research and Control Chemist, 1933-1936, E. S. Miller Laboratories, Los Angeles; Research Chemist, 1936—, Pottenger Sanatorium and Clinic, Monrovia, California.  
 Address: Pottenger Sanatorium and Clinic, Monrovia, California.

## BIOPHYSICS

1928. CLIFTON, CHARLES EGOLF. B.A. '25, M.S. '26, Ohio State University.  
 Major: Biophysics. Minor: Organic Chemistry.

- Thesis: Potentiometric Studies of Sugar Oxidation. A Determination of "Active" Glucose. Published in *Journal of Physical Chemistry*, 34:885, 1930.  
Major Adviser: Professor J. M. Ort.  
Positions Held: Research Chemist, 1929, Eastman Kodak Company; Assistant Professor of Bacteriology and Experimental Pathology, 1929-1935, Associate Professor, 1935—, General Education Board Fellow in the Natural Sciences, 1936-1937, Cambridge, England, and Delft, Holland.  
Honors: Sigma Xi.  
Address: Department of Bacteriology, Stanford University, California.
1929. DAVIS, GEORGE EARL. B.A. '14, University of Indiana; M.S. '22, Iowa State College.  
Major: Biophysics. Minor: Mathematics.  
Thesis: Investigations on Bile Pigment by Ultra-Violet Spectrophotometry. Published in *Journal of the Optical Society of America*, 21:47-58, 1931.  
Major Adviser: Professor C. Sheard.  
Positions Held: Head of Biophysics Department, 1929-1932, Desert Sanatorium and Institute of Research, Tucson, Arizona; Visiting Research Associate, 1933-1934, Iowa State College; Coordinator of Public Works, Statistical Coordinator, 1934-1936, Iowa State Planning Board; Associate Professor of Physics, 1936—, Duquesne University.  
Honors: Sigma Xi; President of Arizona Chapter, 1932; Phi Kappa Phi; Fellow, A.A.A.S.; American Physical Society.  
Address: 1412 Gardner St., Pittsburgh, Pennsylvania.
1931. HERRICK, JULIA FRANCES. B.A. '15, M.A. '19, University of Minnesota.  
Major: Biophysics. Minors: Mathematics and Physiology.  
Thesis: Experiments on Blood-Flow by the Thermo-Stromuhr Method. Published in *Physics*, 1:407-417, 1931; and in *American Journal of Physiology*, Vol. 99, no. 3, 1932.  
Major Advisers: Professors C. Sheard and E. J. Baldes.  
Positions Held: Assistant in Physics, 1931-1934, Associate in the Division of Experimental Surgery and Pathology, Instructor in Experimental Medicine, 1934—, Mayo Foundation.  
Honors: Phi Beta Kappa; Sigma Xi.  
Address: The Mayo Foundation, Rochester, Minnesota.
1931. ROEPKE, MARTIN HENRY. B.S. '28, Kansas State Agricultural College; M.S. '29, University of Illinois.  
Major: Biophysics. Minor: Physical Chemistry.  
Thesis: The Rate of Formation of the Active Reductants from Several Sugars. Published in *Journal of Physical Chemistry*, 35:3596, 1931.  
Major Adviser: Professor J. M. Ort.  
Positions Held: Fellow in Pharmacology, 1931-1935, Lecturer in Pharmacology, 1935-1936, University of Toronto; Assistant Professor of Veterinary Medicine, 1936—, University of Minnesota.  
Honors: Phi Kappa Phi; Sigma Xi; Reeve Prize, Toronto, 1935.  
Address: Division of Veterinary Medicine, University Farm, St. Paul, Minnesota.

1931. WILLIAMS, MARVIN MARTIN DIXON. B.S. '25, Whitman College; M.S. '29, University of Pennsylvania.  
Major: Biophysics. Minor: Physiology.  
Thesis: The Effect of X-Rays on the Electrical Potentials and the Rate of Oxidation of Frog's Skin. Published in *Protoplasma*, 15:396-414, 1932.  
Major Adviser: Professor C. Sheard.  
Positions Held: Biophysicist to the Department of Radiology, 1931-1935, Peking Union Medical College, Peking, China; Research Assistant, 1935-1937, Radiological Physicist, 1938—, Mayo Clinic.  
Honors: Phi Beta Kappa; Sigma Xi.  
Address: Mayo Clinic, Rochester, Minnesota.
1933. PRATT, CAROL BURT. B.A. '29, Willamette University.  
Major: Biophysics. Minor: Pharmacology.  
Thesis: Some Biological Effects of the High Frequency Electrical Field. Published in *Protoplasma*, 23:14, 1935.  
Major Adviser: Professor Charles Sheard.  
Positions Held: Instructor in Biophysics, 1934-1935, Mayo Foundation; Private Practice, 1935—, Portland, Oregon.  
Address: 3344 N. E. 18th St., Portland, Oregon.
1934. McCracken, EARL C. B.S. '18, Drake University; M.S. '29, Iowa State College.  
Major: Biophysics. Minor: Physiology.  
Thesis: Investigations Concerning the Circulation Time of the Blood in Dogs. Published in *Proceedings of the Society for Experimental Biology and Medicine*, 36:106-110, 1937, and *American Heart Journal*, 14:51-65, 1937.  
Major Adviser: Professor Charles Sheard.  
Positions Held: Assistant Professor of Physics, 1934—, Iowa State College, Ames, Iowa.  
Honors: Sigma Xi; Kappa Delta Pi; Pi Mu Epsilon.  
Address: 2124 Storm Street, Ames, Iowa.
1938. ROEPKE, RAYMOND ROLLINS. B.S. '33, M.S. '34, Kansas State College.  
Major: Biophysics. Minor: Biochemistry.  
Thesis: A Study of the Osmotic Properties of Blood by the Thermoelectric Method. Not published.  
Major Adviser: Professor J. E. Baldes.  
Positions Held: Fellow, 1938—, Mayo Foundation.  
Honors: Sigma Xi; Phi Kappa Phi; Phi Lambda Upsilon; Gamma Sigma Delta; Shevlin Fellowship (1935-1936).  
Address: The Mayo Foundation, Rochester, Minnesota.

## DERMATOLOGY

1934. LAYMON, CARL WARREN. B.S. '29, M.D. '31, M.S. '33, University of Minnesota.  
Major: Dermatology and Syphilology. Minor: Pathology.  
Thesis: The Tuberculoid Reaction in Lymph Nodes. Published in *Archives of Dermatology and Syphilology*, 30:518-536, 1934.

Major Adviser: Professor H. E. Michelson.  
 Positions Held: Instructor in Dermatology, 1934-1937, Clinical Assistant Professor in Dermatology, 1937—, University of Minnesota; Assistant in Dermatology, 1934—, Minneapolis General Hospital.  
 Honors: Sigma Xi.  
 Address: 78 S. 9th Street, Minneapolis, Minnesota.

MEDICINE

1917. MORRIS, RALPH EDWIN. M.D. '02, University of Colorado.  
 Major: Experimental Medicine. Minor: Experimental Pharmacology.  
 Thesis: The Graphic Recording of Reflexes, Clonus, and Tremors. Published in *Minnesota Medicine*, July 1919.  
 Major Adviser: Professor S. M. White.  
 Positions Held: Instructor, 1917-1920, University of Minnesota.  
 Deceased, 1927.
1919. SANDIFORD, IRENE. B.A. '13, Radcliffe College.  
 Major: Medicine. Minor: Physiology.  
 Thesis: Clinical Metabolism. Published in *American Journal of Physiology*, 51:407-421, 1920; and in *Endocrinology*, 4:71-87, 1920.  
 Major Adviser: Professor W. M. Boothby.  
 Positions Held: Instructor, 1921-1930 (Mayo Foundation), University of Minnesota; Assistant Professor of Biological Chemistry, 1930-1934 and 1935-1938, University of Chicago.  
 Honors: Sigma Xi.  
 Address: Billings Hospital, University of Chicago.
1929. JENSEN, JULIUS. Ph.B. '18, University of Copenhagen; Licentiate '23, Royal College of Physicians, London.  
 Major: Medicine. Minor: Biochemistry.  
 Thesis: The Adrenalin Test in Hypertension. A Functional Study of the Hypertensive Heart. Published in *American Heart Journal*, Vol. 5, no. 6, August 1930.  
 Major Adviser: Professor H. Berglund.  
 Positions Held: Instructor, 1929-1938, Assistant Professor, 1938—, Washington University, St. Louis, Missouri; on staff of Barnes Hospital, St. Louis.  
 Address: 3720 Washington Ave., St. Louis, Missouri.
1933. POLLACK, HERBERT. B.A. '25, Washington and Lee University; M.D. '29, Cornell University.  
 Major: Medicine. Minor: Physiology.  
 Thesis: Muscle Metabolism. Published in *American Journal of Physiology*, 110:97-122, 1934.  
 Major Advisers: Professors F. C. Mann and R. M. Wilder.  
 Positions Held: Instructor of Clinical Medicine, 1934—, Cornell Medical School; Physician to O.P.D., 1934—, New York Hospital; Assistant in Medicine, 1934—, Acting Chief, Diabetic Service, 1938—, Mt. Sinai Hospital.  
 Honors: Sigma Xi.  
 Address: 20 E. 76th St., New York City, N. Y.

1933. WOLFF, HERMAN JULIUS. B.S. '27, M.D. '30, University of Minnesota.  
 Major: Medicine. Minor: Pathology.  
 Thesis: An Experimental Study of the Physiological Action of Toluylene-Diamine (T-d) and Its Relation to Icterogenesis in the Dog. Published in the *Journal of Pharmacology and Experimental Therapeutics*, 1:407-419, 1934.  
 Major Adviser: Professor F. C. Mann.  
 Positions Held: Private practice, 1933—, St. Paul, Minnesota.  
 Honors: Alpha Omega Alpha.  
 Address: 124 Montrose Place, St. Paul, Minnesota.
1934. LENDRUM, FREDERICK CRIST. B.A. '26, Ohio Wesleyan University.  
 M.D. '30, University of Michigan.  
 Major: Medicine. Minor: Pathology.  
 Thesis: The Anatomical Features of the Cardiac Orifice of the Stomach. Published in *Archives of Internal Medicine*, 59:474-511, 1937.  
 Major Adviser: Professor R. M. Wilder.  
 Positions Held: Associate in Research, 1935-1936, University of Wisconsin Medical School; Director of Medical Research, 1937—, Institute of the United Automobile Workers of America.  
 Honors: Phi Beta Kappa; Alpha Omega Alpha; Sigma Xi.  
 Address: Detroit, Michigan.
1935. KOELSCH, GILES ALEXANDER. B.S. '28, Pacific Union College;  
 M.D. '31, College of Medical Evangelists.  
 Major: Medicine. Minor: Pathology.  
 Thesis: The Relation of the Suprarenal Cortical Hormone to Nitrogen Metabolism in Experimental Hyperthyroidism. Published in *American Journal of Physiology*, 113:335-349, 1935.  
 Major Adviser: Professor F. C. Mann.  
 Positions Held: Instructor in Medicine, 1937—, University of Minnesota.  
 Honors: Sigma Xi.  
 Address: B-2 College Apartments, Rochester, Minnesota.
1935. KERKHOF, ARTHUR CARL. B.S. '25, M.D. '28, M.S. in Med. '31, University of Minnesota.  
 Major: Medicine. Minor: Pathology.  
 Thesis: The Osmotic Pressure of the Plasma Proteins as a Factor in the Formation of Edema. Published in *Annals of Internal Medicine*, 11:867-880, 1407-1415, 1938.  
 Major Adviser: Professor George Fahr.  
 Positions Held: Instructor in Medicine, 1935-1936, Assistant Professor in Medicine, 1936—, University of Minnesota.  
 Honors: Sigma Xi.  
 Address: 2811 Xerxes Ave. So., Minneapolis, Minnesota.

## NERVOUS AND MENTAL DISEASES

1898. HERRICK, CLARENCE LUTHER. B.A. '80, University of Minnesota.  
 Major: Neurology. Minors: Zoology and Geology.  
 No thesis.  
 Deceased, 1904.



1917. WOLTMANN, HENRY WILLIAM, (D.Sc.) B.S. '11, M.D. '13, University of Minnesota.  
Major: Neurology. Minor: Pathology.  
Thesis: The Brain Changes Associated with Pernicious Anemia. Published in *Archives of Internal Medicine*, Vol. 21, June 1918.  
Major Adviser: Professor A. S. Hamilton.  
Positions Held: Neurologist, 1917—, Mayo Clinic; Instructor in Neurology, 1918-1920, Associate Professor, 1924-1931, Professor, 1931—, Mayo Foundation, Rochester, Minnesota.  
Honors: Sigma Xi.  
Address: Rochester, Minnesota.
1921. MCKINLEY, JOHN CHARNLEY. B.S. '15, M.A. '17, M.B. '18, M.D. '19, University of Minnesota.  
Major: Nervous and Mental Diseases. Minor: Anatomy.  
Thesis: The Intra-neural Plexus of Fasciculi and Fibers in the Sciatic Nerve. Published in *Archives of Neurology and Psychiatry*, 6:377-399, October, 1921.  
Major Adviser: Professor A. S. Hamilton.  
Positions Held: Assistant Professor of Neuropathology, 1921-1925, Associate Professor, 1925-1929, Professor of Neurology, 1929—, University of Minnesota; Guggenheim Memorial Foundation Fellow, 1928-1929, Breslau and Munich; Secretary-Treasurer, 1930—, Minnesota State Board of Examiners in the Basic Sciences, University of Minnesota; Acting Head, 1932-1934, Head, 1934—, Department of Medicine, Director of Psychopathic Hospital, 1937—, University of Minnesota.  
Honors: Sigma Xi; Alpha Omega Alpha.  
Address: 1611 East River Road, Minneapolis, Minnesota.
1921. NIXON, CHARLES EDWARD. B.A. '08, Pacific Union College; M.D. '15, University of Southern California; M.S. '19, University of Minnesota.  
Major: Nervous and Mental Diseases. Minor: Pathology.  
Thesis: The Substances Concerned in the Colloid Gold Test and the Nature of the Reaction. Published in *Papers of the Mayo Foundation and the Medical School of the University of Minnesota*, 2:450-451, 1923.  
Major Adviser: Professor A. S. Hamilton.  
Positions Held: Physician, Fresno County General Hospital, Fresno, California.  
Address: Fresno County General Hospital, Fresno, California.
1929. BERKWITZ, NATHAN JOSEPH. B.A. '22, B.S. '23, M.D. '25, University of Minnesota.  
Major: Nervous and Mental Diseases. Minor: Physiology.  
Thesis: Quantitative Studies on Human Muscle Tonus. I. Description of Methods. II. An Analysis of Eighty-Two Normal and Pathological Cases. Published in *Archives of Neurology and Psychiatry*, 19:1036-1056, 1928, 28:603-622, 1932.  
Major Adviser: Professor J. C. McKinley.  
Positions Held: Assistant, 1930-1931, Instructor, 1932—, Nervous and Mental Diseases, University of Minnesota; Private practice, 1930—.  
Honors: Sigma Xi.  
Address: 300 Cecil St. S. E., Minneapolis, Minnesota.

1931. GRAY, ROYAL CLENDENNING. B.S. '22, M.B. '23, M.D. '24, M.S. '30, University of Minnesota.  
 Major: Nervous and Mental Diseases. Minor: Physiology.  
 Thesis: A Quantitative Study of Vibration Sense in Normal and Pernicious Anemia Cases. Published in *Minnesota Medicine*, 15:674, 1932.  
 Major Adviser: Professor J. C. McKinley.  
 Positions Held: Assistant, 1930-1931, Instructor, 1931-1935, Assistant Professor, 1935—, Nervous and Mental Diseases, University of Minnesota; Private practice, 1931—.  
 Honors: Sigma Xi.  
 Address: 126 Millard Hall, University of Minnesota, Minneapolis, Minnesota.

## OBSTETRICS AND GYNECOLOGY

1919. BARRY, LEE WILLIS. M.D. '11, University of Michigan.  
 Major: Obstetrics and Gynecology. Minor: Anatomy.  
 Thesis: The Effects of Inanition in the Pregnant Albino Rat with Special Reference to the Changes in the Relative Weights of the Offspring. Published 1919 as Carnegie Publication no. 53, *Contributions to Embryology*.  
 Major Adviser: Professor J. C. Litzenberg.  
 Positions Held: Assistant Professor of Obstetrics and Gynecology, 1919—, University of Minnesota; private practice, 1919—, 814 Lowry Medical Arts Building, St. Paul, Minnesota.  
 Honors: Sigma Xi.  
 Address: 2193 Sargent Ave., St. Paul, Minnesota.
1921. CALKINS, LEROY ADELBERT. M.B. '18, M.D. '19, M.S. '20, University of Minnesota.  
 Major: Obstetrics and Gynecology. Minor: Anatomy.  
 Thesis: Morphometry of the Human Fetus with Special Reference to the Obstetric Dimensions of the Head. Published in *American Journal of Obstetrics and Gynecology*, Vol. 4, no. 2, August 1922.  
 Major Advisers: Professors J. C. Litzenberg and R. E. Scammon.  
 Positions Held: Assistant Professor of Obstetrics and Gynecology, 1921-1924, University of Minnesota; Professor, 1924-1929, University of Virginia; Professor, 1929—, University of Kansas (Bell Memorial Hospital), Kansas City, Kansas.  
 Honors: Sigma Xi; Alpha Omega Alpha; American Gynecological Society.  
 Address: University of Kansas Medical School, Kansas City, Kansas.
1923. SOLHAUG, SAMUEL BERNARD. B.A. '13, Carleton College; B.S. '15, M.D. '17, University of Minnesota.  
 Major: Obstetrics and Gynecology. Minor: Anatomy.  
 Thesis: A Study of the Developmental Topography of the Pelvic Organs of the Female Fetus. Not published.  
 Major Advisers: Professors J. C. Litzenberg and R. E. Scammon.  
 Positions Held: Assistant Professor of Obstetrics and Gynecology, 1923—, University of Minnesota; Private practice, 1923—, Minneapolis, Minnesota.  
 Honors: Sigma Xi; Alpha Omega Alpha.  
 Address: 1717 Morgan Ave. So., Minneapolis, Minnesota.

1924. BELL, J. WARREN. B.A. '14, M.D. '16, University of Minnesota.  
Major: Obstetrics and Gynecology. Minor: Pathology.  
Thesis: Vital Capacity in Toxemia of Pregnancy and in Normal Pregnancy.  
Summary published by the University of Minnesota Press, 1931.  
Major Adviser: Professor F. L. Adair.  
Positions Held: Private practice, 1926-1931, Everett, Washington; Director of Bureau of Maternity, Infancy, and Child Hygiene, 1931-1936, Cattaraugus County, New York (Bartlett Memorial Community Center, Olean, New York); Director of Division of Maternity, Infancy, Child Health, 1936-1937, Nebraska State Department of Health.  
Address: 1426 So. 15th Street, Lincoln, Nebraska.
1926. SWANSON, ROY EDWIN. B.S. '15, M.D. '16, University of Minnesota.  
Major: Obstetrics and Gynecology. Minor: Anatomy.  
Thesis: The Growth of the Human Female Pelvis from Birth to Maturity; A Graphic and Quantitative Study. Not published.  
Major Advisers: Professors J. C. Litzenberg and R. E. Scammon.  
Positions Held: Instructor, 1926-1927, Assistant Professor, 1928—, University of Minnesota; Attending Obstetrician and Gynecologist at Abbott, Northwestern, Fairview, and University of Minnesota Hospitals, Minneapolis, Minnesota; Chief of Staff, 1930, Fairview Hospital.  
Honors: Alpha Omega Alpha.  
Address: 2201 Kenwood Parkway, Minneapolis, Minnesota.
1928. SOMERFIELD, HARRY ALEXANDER. B.A. '21, M.D. '25, Stanford University.  
Major: Obstetrics and Gynecology. Minor: Anatomy.  
Thesis: A Study of the Behavior of a Very Young Ovum Implanted in the Fallopian Tube. Not published.  
Major Adviser: Professor J. C. Litzenberg.  
Positions Held: Physician, 1928—, San Francisco, California.  
Address: 870 Market Street, San Francisco, California.
1929. URNER, JOHN ARNOLD. B.S. '22, M.D. '24, University of Minnesota.  
Major: Obstetrics and Gynecology. Minor: Anatomy.  
Thesis: The Effect of Vitamin E Deficiency upon Intra-Uterine Development and the Changes in the Mammary Gland of the Albino Rat. Published in two parts: in *Transactions of the Section on Obstetrics, Gynecology, and Abdominal Surgery of the American Medical Association*, 34-41, 1930, "The Changes in the Mammary Glands of the Pregnant Albino Rat Deprived of Vitamin E"; and in *Anatomical Record*, 175-187, 1931, "The Intra-Uterine Changes in the Pregnant Albino Rat (*Mus Norvegicus*) Deprived of Vitamin E."  
Major Advisers: Professors J. C. Litzenberg and C. M. Jackson.  
Positions Held: Assistant Professor of Obstetrics and Gynecology, 1929-1932, Associate Professor, 1932-1938, University of Minnesota; Obstetrician and Gynecologist-in-Chief, 1929-1938, General Hospital, Minneapolis, Minnesota.  
Honors: American Board of Obstetrics and Gynecology, May 1936.  
Deceased, July 16, 1938.

1930. TIBER, LEON JULIUS. B.S. '18, M.D. '20, University of Minnesota.  
 Major: Obstetrics and Gynecology. Minor: Anatomy.  
 Thesis: The Effects of Birth-Molding on the Child's Head. Published in *Summaries of Ph.D. Theses*, Vol. 1, 1939, University of Minnesota.  
 Major Advisers: Professors F. L. Adair and J. C. Litzenberg.  
 Positions Held: Instructor in Obstetrics and Gynecology, 1930—, College of Medical Evangelists of Los Angeles; Certified Member of the American Board of Obstetrics and Gynecology, 1932—.  
 Address: 3875 Wilshire Boulevard, Los Angeles, California.
1931. KASPER, EUGENE MITCHELL. B.S. '25, University of Minnesota.  
 Major: Obstetrics and Gynecology. Minor: Anatomy.  
 Thesis: The Genital Tract of the Rat, with Special Reference to Changes in Pregnancy and During Vitamin E Deficiency. Published in *Summaries of Ph.D. Theses*, Vol. 1, 1939, University of Minnesota.  
 Major Advisers: Professors J. C. Litzenberg and C. M. Jackson.  
 Positions Held: Obstetrician and Gynecologist, 1931—, St. Paul Clinic, Miller, St. Luke's and St. Joseph's Hospitals; Instructor in Obstetrics and Gynecology, 1931—, University of Minnesota; Obstetrician and Gynecologist, 1933—, Ancker Hospital, St. Paul.  
 Honors: St. Paul Surgical Society.  
 Address: 1975 Portland Ave., St. Paul, Minnesota.
1932. ABRAMSON, MILTON. B.S. '26, M.D. '29, University of Minnesota.  
 Major: Obstetrics and Gynecology. Minor: Anatomy.  
 Thesis: The Effect of Pregnancy on the Organ Weights of the Albino Rat. Published in the *American Journal of Obstetrics and Gynecology*, 27:492, April, 1934.  
 Major Advisers: Professors J. C. Litzenberg and C. M. Jackson.  
 Positions Held: Adjunct Physician in Obstetrics and Gynecology, Minneapolis General Hospital, Minneapolis, Minnesota; Attending Staff, Asbury Hospital; Instructor, Department of Obstetrics and Gynecology, University of Minnesota.  
 Honors: Alpha Omega Alpha; Sigma Xi.  
 Address: 4401 Portland Ave., Minneapolis, Minnesota.
1933. MEYER, ALVIN JOHN. B.A. '25, Carleton College; M.D. '30, University of Minnesota.  
 Major: Obstetrics and Gynecology. Minors: Anatomy and Pathology.  
 Thesis: Fetal Mortality in Relation to Labor. Published in *American Journal of Obstetrics and Gynecology*, 29:691, 1935.  
 Major Adviser: Professor J. C. Litzenberg.  
 Positions Held: Fellow in Obstetrics and Gynecology, 1931-1934, Minneapolis General Hospital; Practice of Medicine, 1934—, Station Hospital, Fort Snelling, Minnesota.  
 Honors: Phi Beta Kappa.  
 Address: Lake City, Minnesota.
1936. MAEDER, EDWARD CHARLES. B.S. '25, M.D. '27, University of Minnesota.  
 Major: Obstetrics and Gynecology. Minors: Anatomy and Pathology.  
 Thesis: The Effect of Fat in Simplified Diets on the Reproductive Organs of

the Female Albino Rat during Gestation. Published in *Anatomical Record*, Vol. 70, no. 1, December 25, 1937.

Major Advisers: Professors J. C. Litzenberg and G. O. Burr.

Positions Held: Instructor, 1934—, Department of Obstetrics and Gynecology, University of Minnesota.

Honors: Alpha Omega Alpha.

Address: 4001 Grand Ave. So., Minneapolis, Minnesota.

1936. SCHWEGLER, RAYMOND ALLEN. B.A. '26, University of Kansas; M.D. '31, University of Minnesota.

Major: Obstetrics and Gynecology. Minor: Anatomy.

Thesis: The Development of the Duodenal End of the Common Bile Duct in the Human Embryo and Fetus with Special Reference to the Origin of the Ampulla of Vater and the Sphincter of Oddi. Published in *Anatomical Record*, 67:441-457, 68:17-33, 193-211.

Major Advisers: Professors J. C. Litzenberg and E. A. Boyden.

Positions Held: Associate in Obstetrics and Gynecology, 1937—, University of Kansas.

Honors: Sigma Xi; Alpha Omega Alpha; Phi Sigma.

Address: 747 Massachusetts Street, Lawrence, Kansas.

## PATHOLOGY

1920. LUDEN, GEORGINE. B.A. '11, M.D. '12, University of Munich.

Major: Pathology. Minor: Physiological Chemistry.

Thesis: Metabolic Disturbances as an Etiologic Factor in Carcinoma: The Influence of Cholesterol Metabolism and Other Factors (Studies on Cholesterol VII). Not published.

Major Adviser: Professor L. B. Wilson.

Positions Held: Associate in Cancer Research, 1920-1929, Mayo Clinic; retired from medical work, 1929.

Address: 1006 St. Charles Street, Victoria, British Columbia.

1928. WATSON, CECIL JAMES. B.S. '23, M.S. '25, M.D. '26, University of Minnesota.

Major: Pathology. Minors: Medicine and Zoology.

Thesis: A Histological Study of the Spleen in Various Diseases: A Study of Fresh Spleens Fixed by the Injection Method. Published in *Folia Haematologica* (Leipzig), Band 39, Heft 1, 1929.

Major Adviser: Professor E. T. Bell.

Positions Held: 1928-1930, Minot Clinic, Minot, North Dakota; independent research, 1930-1931, Munich; National Research Council Fellow, 1931-1932, Munich; Resident in Medicine, 1932-1933, Minneapolis General Hospital; Instructor, 1933-1934, Assistant Professor, 1934-1936, Associate Professor, 1936—, Department of Medicine, University of Minnesota.

Honors: Sigma Xi.

Address: 130 Orlin Ave. S. E., Minneapolis, Minnesota.

1929. HILDING, ANDERSON CORNELIUS. B.S. '15, M.D. '19, M.A. '21, University of Minnesota.

Major: Pathology. Minor: Physiologic Chemistry.

- Thesis: Studies of the Effects of Surgical Reduction of the Renal Tissue. Published in *Archives of Internal Medicine*.  
 Major Adviser: Professor E. T. Bell.  
 Positions Held: In practice with Dr. D. L. Tilderquist of Duluth, Minnesota, 1921-1930; Assistant in Medicine and Ophthalmology, 1930-1932, Mayo Clinic, Rochester, Minnesota; Private practice, 1932—.  
 Honors: Prize of Minnesota Society of Internal Medicine, 1929; Casselberry Prize for Research in Rhinology; Sigma Xi.  
 Address: 626 Medical Arts Building, Duluth, Minnesota.
1929. MCGREGOR, LEONE. M.D. '25, University of Alberta; M.S. '27, University of Minnesota.  
 Major: Pathology. Minors: Zoology and Bacteriology.  
 Thesis: The Finer Histology of the Normal Glomerulus and the Changes That Occur in Glomerulonephritis. Published in *American Journal of Pathology*, 5:545-585, 1929.  
 Major Adviser: Professor E. T. Bell.  
 Positions Held: National Research Council Fellow in Pathology, 1929-1930, Boston City Hospital; 1930-1931, Eppendorfer Krankenhaus, Hamburg; Research Assistant in Pathology, 1931—, Radiumhemmet, Stockholm; passed Swedish Medical Licensing Examination, 1937, first foreigner allowed to take the examination.  
 Honors: Sigma Xi.  
 Married Name: Mrs. Folke Hellstedt.  
 Address: Villagatan 10, Stockholm, Sweden.
1930. GUTTMAN, PAUL HENRY. B.S. '26, M.D. '27, Washington University; M.S. '28, University of Minnesota.  
 Major: Pathology. Minor: Hematology.  
 Thesis: Addison's Disease: A Study of the Pathology and a Statistical Analysis of Five Hundred and Sixty-Five Cases. Published in *Archives of Pathology*, Vol. 10, 742-785, November 1930, and 895-935, December 1930.  
 Major Adviser: Professor E. T. Bell.  
 Positions Held: Pathologist, Director of Laboratories, 1930-1932, Grunow Memorial Clinic, St. Louis, Missouri; Assistant Professor of Pathology, 1932-1934, University of Colorado; Pathologist, 1934—, Sutter Hospital, Sacramento, California.  
 Honors: Sigma Xi; Alpha Omega Alpha.  
 Address: Rt. 5, Box 1684, Sacramento, California.
1930. KUMPF, ALBERT ERNEST. B.S. '24, M.D. '28, M.S. '29, University of Minnesota.  
 Major: Pathology. Minor: Agricultural Biochemistry.  
 Thesis: A Study of the Blood Proteins and Lipoids with Special Reference to the Changes Occurring in Renal Diseases. Published in *Archives of Pathology*, Vol. 11, 335-379, March 1931.  
 Major Advisers: Professors E. T. Bell and R. A. Gortner.  
 Positions Held: Pathologist, 1930-1931, Hot Springs Sanatorium, Hot Springs, South Dakota.  
 Deceased, 1931.

1934. BAKER, ABE BERT. B.A. '28, B.S. '29, M.D. '31, M.S. '32, University of Minnesota.  
Major: Pathology. Minor: Bacteriology.  
Thesis: Hemorrhagic Encephalitis. Published in *Archives of Pathology*, February, 1935; *American Journal of Pathology*, March, 1935.  
Major Adviser: Professor E. T. Bell.  
Positions Held: Physician, 1935-1937, University of Minnesota Health Service; Instructor, 1937—, Nervous and Mental Diseases, University of Minnesota.  
Honors: Sigma Xi; Phi Beta Kappa; Alpha Omega Alpha.  
Address: 2711 19th Ave. No., Minneapolis, Minnesota.
1934. POTTER, EDITH LOUISE. B.S. '23, M.D. '25, M.S. '32, University of Minnesota.  
Major: Pathology. Minor: Anatomy (Hematology) and Bacteriology.  
Thesis: Hodgkin's Disease with Especial Reference to Its Differentiation from Other Diseases of Lymph Nodes. Published in *Archives of Pathology*, 19:138, 1935.  
Major Adviser: Professor E. T. Bell.  
Positions Held: Associate Fellow, 1934-1936, Douglas Smith Foundation for Medical Research, University of Chicago; Instructor, 1935—, Department of Obstetrics and Gynecology, University of Chicago.  
Honors: Sigma Xi.  
Address: Chicago Lying-in Hospital, 5848 Drexel Ave., Chicago, Illinois.
1935. OLSON, CARL, JR. D.V.M. '31, Iowa State College; M.S. '34, University of Minnesota.  
Major: Comparative Pathology. Minor: Physiology.  
Thesis: The Blood of the Domestic Fowl under Normal Conditions and in Fowl Leukosis. Published in *Journal of the American Veterinary Medical Association* and in the *Cornell Veterinarian*.  
Major Adviser: Professor W. H. Feldman.  
Positions Held: Assistant Professor, 1935-1937, New York State Veterinary College, Cornell University; Research Professor in Veterinary Science, 1937—, Massachusetts State College.  
Honors: Sigma Xi.  
Address: Department of Veterinary Science, Massachusetts State College, Amherst, Massachusetts.
1938. HERTZOG, AMBROSE JOHN. B.S. '28, Springhill College; M.S. in Path. '37, University of Minnesota.  
Major: Pathology. Minors: Bacteriology and Anatomy (Hematology).  
Thesis: The Phagocytic Activity of Human Leukocytes with Special Reference to Their Type and Maturity. Published in *American Journal of Pathology*, 14:595, 1938.  
Major Adviser: Professor E. T. Bell.  
Positions Held: Pathologist, 1938—, Luther Hospital, Eau Claire, Wisconsin.  
Honors: Sigma Xi.  
Address: Luther Hospital, Eau Claire, Wisconsin.
1938. NELSON, ARTHUR ALFRED. B.S. '34, M.S. '35, M.D. '35, University of Minnesota.  
Major: Pathology. Minor: Bacteriology.

Thesis: The Histological Changes and the Variations in Weight of the Testes with Age and in Various Diseases. Not published.

Major Adviser: Professor E. T. Bell.

Positions Held: Associate Medical Pathologist, 1938—, National Institute of Health, U. S. Public Health Service.

Honors: Sigma Xi.

Address: National Institute of Health, Washington, D. C.

#### PEDIATRICS

1917. TAYLOR, ROOD. M.D. '10, University of Michigan.

Major: Pediatrics. Minor: Chemistry.

Thesis: Hunger in Infants. Published in *American Journal of Diseases of Children*, 1917.

Major Adviser: Professor J. P. Sedgwick.

Positions Held: Assistant and Associate Professor, 1919—, University of Minnesota; private practice, Minneapolis.

Honors: Sigma Xi.

Address: 1409 Willow St., Minneapolis, Minnesota.

1921. STEWART, CHESTER ARTHUR. B.A. '14, University of Missouri; M.A. '15, Ph.D. '17, University of Minnesota.

Major: Pediatrics. Minor: Anatomy.

Thesis: The Vital Capacity of the Lungs of Children in Health and Disease. Published in *American Journal of Diseases of Children*, Vol. 24, p. 451, 1922.

Major Adviser: Professor J. P. Sedgwick.

Positions Held: Assistant Professor of Pediatrics, 1921-1931, Associate Professor 1931-1936, Clinical Professor in Pediatrics, 1936—, University of Minnesota; private practice, Minneapolis, Minnesota.

Honors: Sigma Xi; Delegate to 4th International Congress of Pediatricians, 1937, Rome.

Address: 227 W. 52nd St., Minneapolis, Minnesota.

1923. LIPPMAN, HYMAN SHALIT. B.S. '17, M.B. '19, University of Minnesota.

Major Adviser: Professor R. E. Scammon.

Thesis: The Blood in the Newborn Period. Published in *American Journal of Diseases of Children*, 29:289, February, 1925.

Major Adviser: Professor R. E. Scammon.

Positions Held: Instructor in Anatomy, 1924-1927, Instructor in Pediatrics, 1923-1927, University of Minnesota; Pediatrician, 1927-1929, Institute for Child Guidance, New York City; research in Europe, 1929-1931; Psychiatrist and Director, 1931—, Amherst H. Wilder Child Guidance Clinic, St. Paul, Minnesota.

Honors: Sigma Xi.

Address: 279 Rice St., St. Paul, Minnesota.

1925. RICHDORF, LAURENCE FRANCIS. B.S. '17, University of Wisconsin; M.B. '20, M.D. '20, University of Minnesota.

Major: Pediatrics. Minor: Anatomy.



Thesis: A Quantitative Study of the Growth of the Normal Infant in the First Year. Not published.

Major Adviser: Professor R. Taylor.

Positions Held: Instructor in Pediatrics, 1924-1928, Assistant Professor in Pediatrics, 1928—, University of Minnesota Medical School; in charge of clinics for infants in Phyllis Wheatley and Margaret Barry Settlement Houses, Lymanhust Boys' Orphanage, and St. Mary's Hospital, Minneapolis, Minnesota.

Honors: Phi Beta Kappa.

Address: 3716 Blaisdell Ave., Minneapolis, Minnesota.

1929. STOEISSER, ALBERT VALENTINE. B.S. '22, M.D. '25, University of Minnesota.

Major: Pediatrics. Minor: Bacteriology.

Thesis: Further Studies Concerning the Toxin-Antitoxin Union. Published in *Journal of Infectious Diseases*, Vol. 48, 255-281 (1931).

Major Adviser: Professor F. W. Schlutz.

Positions Held: Instructor in Pediatrics, 1929-1932, Assistant Professor of Pediatrics, 1932—, University of Minnesota Medical School; Chief of Pediatric Service, 1935—, Minneapolis General Hospital; Director of Pediatric Allergy Clinics, 1932—, University of Minnesota Hospitals and Minneapolis General Hospital.

Honors: Alpha Omega Alpha; Sigma Xi.

Address: 205W Elliot Memorial Hospital, University of Minnesota, Minneapolis, Minnesota.

1934. HANSEN, ARILD EDSTEN. B.S. '23, M.D. '25, University of Minnesota.

Major: Pediatrics. Minor: Agricultural Biochemistry.

Thesis: The Influence of Irradiated Ergosterol and Parathyroid Extract on the Mineral Metabolism in Osteogenesis Imperfecta. Published in *American Journal of Diseases of Children*, 50:132-157, 1935.

Major Adviser: Professor I. McQuarrie.

Positions Held: Alexander Brown Coxé Fellow, 1934-1935, Yale University; Assistant Professor, 1935-1937, Associate Professor, 1937—, Department of Pediatrics, University of Minnesota.

Honors: Sigma Xi.

Address: 1437 East River Road, Minneapolis, Minnesota.

## PHARMACOLOGY

1924. JENSEN, HERMAN HANS. B.Ph.M. '20, B.A. '20, University of Nebraska; M.S. '21, University of Minnesota.

Major: Pharmacology. Minor: Physiology.

Thesis: An Experimental Study of Certain Benzyl Compounds with Special Attention to the Importance of Substitution in the Benzyl Nucleus and the Significance of the Side Chains. Published in *Journal of Pharmacology and Experimental Therapeutics*, Vol. 26, no. 2, p. 123 (1925).

Major Adviser: Professor A. D. Hirschfelder.

Positions Held: Instructor, 1924, Clinical Assistant in Radiology, 1937—, University of Minnesota.

Degrees Received since the Ph.D.: M.B. 1925, M.D. 1925, University of Minnesota.

Honors: Alpha Omega Alpha; Sigma Xi; Phi Beta Kappa.

Address: 3444 36th Ave. So., Minneapolis, Minnesota.

1929. BIETER, RAYMOND NICHOLAS. B.S. '21, M.D. '24, M.S. '24, University of Minnesota.

Major: Pharmacology. Minor: Internal Medicine.

Thesis: Contributions to the Physiology and Pharmacology of the Kidney. Published in *American Journal of Physiology*, Vol. 91, no. 1, December, 1929; Vol. 92, no. 2, January, 1930; and Vol. 93, no. 2, June, 1930.

Major Adviser: Professor A. D. Hirschfelder.

Positions Held: Assistant Professor of Pharmacology, 1929-1930, University of Minnesota; Associate in Physiology, 1930-1931, Johns Hopkins University; Associate Professor of Pharmacology, 1931—, University of Minnesota.

Honors: Sigma Xi.

Address: 2015 Dayton Ave., St. Paul, Minnesota.

1929. WRIGHT, HAROLD NOEL GRANT. B.S. '25, M.S. '26, University of Saskatchewan.

Major: Pharmacology. Minor: Physiology.

Thesis: Some Physico-Chemical Relationships between Dyes, Proteins, and Bacteria. Published in *Journal of Pharmacology and Experimental Therapeutics*, Vol. 38, no. 4, April, 1930.

Major Adviser: Professor A. D. Hirschfelder.

Positions Held: Instructor, 1929-1931, Assistant Professor, 1931—, University of Minnesota.

Honors: Sigma Xi; Phi Lambda Upsilon.

Address: 5437 Fremont Ave. So., Minneapolis, Minnesota.

1934. SERLES, EARL ROY. B.S. '15, M.S. '17, South Dakota State College.

Major: Pharmacology. Minor: Physiologic Chemistry.

Thesis: Certain Phases of the Pharmacology and Toxicology of Oil of Chenopodium U.S.P. Published in *Journal of Biological Chemistry*, 104:635-645, 1934.

Major Adviser: Professor A. D. Hirschfelder.

Positions Held: Dean of Division, and Professor of Pharmacy, 1923—, South Dakota State College.

Honors: Gamma Alpha; Rho Chi.

Address: South Dakota State College, Brookings, South Dakota.

1936. CUNNINGHAM, RAYMOND WESLEY. B.S. '29, M.S. '31, University of Nebraska.

Major: Pharmacology. Minor: Physiology.

Thesis: Potentiation of the Spinal Anesthetic Action of Procaine in the Rabbit by Certain Electrolytes. Not published.

Major Advisers: Professors A. D. Hirschfelder and R. N. Bieter.

Positions Held: Instructor in Pharmacology, 1936—, College of Medicine, Ohio State University.

Honors: Sigma Xi.

Address: College of Medicine, Ohio State University, Columbus, Ohio.

## PHYSIOLOGIC CHEMISTRY

1925. OSTERBERG, ARNOLD ERWIN. B.S. '16, University of Washington; M.S. '21, University of Minnesota.  
Major: Physiologic Chemistry. Minor: Physiology.  
Thesis: Chemical Nature and Physiologic Significance of Thyroxin and Related Compounds. Published in *Journal of the American Chemical Society*, 48:1384-1401, 1926; 49:538-540, 2047-2060, 1927.  
Major Adviser: Professor E. C. Kendall.  
Positions Held: Biochemist, 1925-1928, Mayo Clinic; Assistant Professor of Physiologic Chemistry, 1928-1931; Associate Professor, 1931—, Mayo Foundation; Head of the Section on Clinical Biochemistry, Mayo Clinic.  
Honors: Sigma Xi.  
Address: Mayo Clinic, Rochester, Minnesota.
1926. MULDER, ARTHUR GEORGE. B.A. '23, Hope College.  
Major: Physiologic Chemistry. Minor: Physiology.  
Thesis: The Physiologic Chemistry of Fluorine. Not published.  
Major Adviser: Professor J. F. McClendon.  
Positions Held: Professor, 1926—, Department of Physiology, University of Tennessee.  
Address: Department of Physiology, College of Medicine, University of Tennessee, Memphis, Tennessee.
1927. GREGORY, RAYMOND LESLIE. B.A. '22, M.A. '23, University of Texas.  
Major: Physiologic Chemistry. Minor: Pharmacology.  
Thesis: A Study of the Quantitative Determination of Bile Salts. Published in *Journal of Biological Chemistry*, 83:39, 1929.  
Major Adviser: Professor J. F. McClendon.  
Positions Held: Instructor in Medicine, 1933-1936, University of Iowa; Assistant Professor of Medicine, 1936-1937, Louisiana State University; Professor and Head of Department of Medicine, 1937—, Howard University.  
Honors: Sigma Xi; Alpha Omega Alpha.  
Address: 3611 Kanawha St. N. W., Washington, D. C.
1928. REMINGTON, ROE EUGENE. B.A. '05, University of Colorado; M.A. '24, University of Minnesota.  
Major: Physiologic Chemistry. Minor: Physical Chemistry.  
Thesis: Electrical Conductivity as a Measure of the Permeability of Cells of the Beet Root. Published in *Protoplasma*, 5:338-399, 1928.  
Major Adviser: Professor J. F. McClendon.  
Positions Held: Director, 1928-1931, South Carolina Food Research Commission; Professor of Nutrition, 1931-1938, Professor of Chemistry and Director of Food Research Laboratory, 1938—, Medical College of State of South Carolina.  
Honors: D.Sc. (*honoris causa*) Clemson College, May 12, 1937; Jefferson Medal, South Carolina Academy of Science, May 1, 1937.  
Address: 280 Calhoun St., Charleston, South Carolina.

1932. ARMSTRONG, WALLACE DAVID. B.A. '26, University of Texas; M.S. '28, New York University.  
Major: Physiologic Chemistry. Minor: Organic Chemistry.  
Thesis: Studies on Fluorine Analysis Materials. Published in *Industrial and Engineering Chemistry*, 5:300-302, 315-317, 1933.  
Major Adviser: Professor J. F. McClendon.  
Positions Held: Instructor, 1932-1933, Assistant, 1933-1934, Physiologic Chemistry, Instructor, 1934-1937, Assistant Professor, 1937—, Physiologic Chemistry and Dentistry, University of Minnesota.  
Honors: Sigma Xi; Alpha Omega Alpha; Southern Minnesota Medical Association Prize and Award.  
Address: 927 Fulton Street S. E., Minneapolis, Minnesota.
1932. MYERS, CHARLES SNODDY. B.S. '28, Pennsylvania State College.  
Major: Physiologic Chemistry. Minor: Organic Chemistry.  
Thesis: Derivatives of Diiodotyrosine and Thyroxine. Published in part in the *Journal of the American Chemical Society*, Vol. 54, September, 1932.  
Major Adviser: Professor E. C. Kendall.  
Positions Held: Research Assistant, 1932-1936, Mayo Clinic; Instructor in Biochemistry, 1932-1936, University of Minnesota; Research Biochemist, 1936—, Food and Drug Administration, Washington, D. C.  
Honors: Sigma Xi; Phi Lambda Upsilon.  
Address: Food and Drug Administration, U.S.D.A., Washington, D. C.
1933. HAMILTON, ROBERT HOUSTON, JR. B.A. '26, M.A. '27, University of Texas.  
Major: Physiologic Chemistry. Minor: Physiology.  
Thesis: Some Studies on Carbohydrate Metabolism. Published in *Summaries of Ph.D. Theses*, Vol. 1, 1939, University of Minnesota.  
Major Adviser: Professor J. F. McClendon.  
Positions Held: Instructor, 1933-1934, 1935-1936, University of Minnesota; Fellow in Biological Sciences, 1934-1935, National Research Council; Assistant Professor, 1936—, Temple University School of Medicine.  
Honors: Phi Beta Kappa; Sigma Xi; Alpha Omega Alpha; Southern Minnesota Medical Prize.  
Degrees Received since the Ph.D.: M.D., 1935.  
Address: Temple University School of Medicine, Philadelphia, Pennsylvania.
1934. ARNOW, LESLIE EARLE. B.S. '30, University of Florida.  
Major: Physiologic Chemistry. Minor: Biophysics.  
Thesis: Physico-Chemical Effects Produced by the Irradiation of Crystalline Egg Albumin Solutions with Alpha-Particles. Published in *Journal of Biologic Chemistry*, 110:43, 1935.  
Major Adviser: Professor K. W. Stenstrom.  
Positions Held: Instructor in Physiologic Chemistry, 1934—, University of Minnesota.  
Honors: Sigma Xi.  
Address: 529 Oak St. S. E., Minneapolis, Minnesota.
1935. ALLERS, WILLIAM DUANE. B.S. '31, M.S. '32, University of Illinois.  
Major: Physiologic Chemistry. Minor: Organic Chemistry.

Thesis: The Influence of Diet and Mineral Metabolism on Dogs after Supra-renalectomy. Published in *American Journal of Physiology*, 118:87, 1937; in *Proceedings of the Staff Meetings of the Mayo Clinic*, 11:283, 1937.

Major Adviser: Professor E. C. Kendall.

Positions Held: Instructor, 1935—, Department of Physiology and Pharmacology, Northwestern University; Chemical Research Assistant, 1935—, Armour and Company.

Honors: Sigma Xi.

Address: 601 S. Lombard Ave., Oak Park, Illinois.

1935. FLOCK, EUNICE VERNA. B.S. '26, University of Washington; M.D. '30, University of Chicago.

Major: Physiologic Chemistry. Minor: Organic Chemistry.

Thesis: A Study of the Phosphorus Compounds in the Liver of the Dog. Published in *Journal of Biologic Chemistry*, 115:179-210, 1936.

Major Adviser: Professor E. C. Kendall.

Positions Held: Instructor in Chemistry, 1936—, Mayo Clinic.

Honors: Sigma Xi.

Address: Institute of Experimental Medicine, Mayo Clinic, Rochester, Minnesota.

1935. LUNDGREN, HAROLD PALMER. B.S. '32, North Dakota State College.

Major: Physiologic Chemistry. Minor: Organic Chemistry.

Thesis: A New Chronometric Micro Method for Determination of Iodine Based on Its Catalytic Effect on an Oxidation-Reduction Reaction. Published in the *Journal of the American Chemical Society*, 59:413, 1937.

Major Adviser: Professor J. F. McClendon.

Positions Held: Rockefeller Fellow, 1935-1936, Fellow and Assistant, 1936-1937, University of Upsala; Instructor, 1937—, University of Wisconsin.

Honors: Phi Kappa Phi; Phi Lambda Upsilon; Sigma Xi.

Address: Department of Chemistry, University of Wisconsin, Madison, Wisconsin.

1936. STREET, HAROLD RICHARDSON. B.A. '30, M.S. '32, University of Minnesota.

Major: Physiologic Chemistry. Minors: Biochemistry and Physiology.

Thesis: A Study of Some Physiological Effects of Vitamin G Deficiency. Published in the *Journal of Biologic Chemistry*, 116:25, 1936; and in *Proceedings of the Society for Experimental Biology and Medicine*, 36:602, 1937.

Major Adviser: Professor J. F. McClendon.

Positions Held: Vitamin Research Fellow in Physiological Chemistry, 1936—, Yale University.

Address: 32 Edgewood Ave., New Haven, Connecticut.

## PHYSIOLOGY

1915. KANDA, SAKYO, M.A. '09, Clark University.

Major: Physiology. Minor: Psychology.

Thesis: Studies of the Geotropism of a Marine Snail, *Littorina Littorea*. Published in *Biological Bulletin*, Vol. 30, no. 1, January, 1916.

Major Adviser: Professor E. P. Lyon.

Positions Held: 1915—, Institute of Physical and Chemical Research, Tokyo, Japan.

Address: Institute of Physical and Chemical Research, Komagone, Hongo-ku, Tokyo, Japan.

1925. RUPP, ALICE. B.A. '20, M.A. '22, Wellesley College.

Major: Physiology. Minor: Anatomy.

Thesis: The Metabolism of Muscle Tonus. Not published.

Major Adviser: Professor F. H. Scott.

Positions Held: Instructor in Physiology, 1925-1927, Assistant in Pediatrics, 1927-1928, Fellow in Pediatrics, 1928-1929, Instructor, 1929-1930, University of Minnesota; private practice, 1931-1934, Minneapolis; Pediatrician, 1935-1936, State Nursery Schools; Epidemiologist, 1938—, Minnesota State Board of Health.

Degrees Received since the Ph.D.: M.B. and M.D., 1928, University of Minnesota.

Honors: Iota Sigma Pi; Alpha Omega Alpha; Sigma Xi.

Address: 2100 Garfield Ave. So., Minneapolis, Minnesota.

1925. VISSCHER, MAURICE B. B.A. '22, Hope College; M.S. '24, University of Minnesota.

Major: Physiology. Minor: Physical Chemistry.

Thesis: The Transportation and Storage of Carbohydrate in the Animal Body. Published in *American Journal of Physiology*, 76:59-68, 1926; *Journal of Biologic Chemistry*, 69:1-2, 3-7, 1926.

Major Adviser: Professor F. H. Scott.

Positions Held: National Research Council Fellow, 1925-1926, University College, London, 1926, University of Chicago; Professor of Physiology, 1927-1929, University of Tennessee; Professor of Physiology and Pharmacology, 1929-1931, University of Southern California; Professor and Head, Department of Physiology, 1931-1936, University of Illinois; Professor and Head, Department of Physiology, 1936—, University of Minnesota.

Degrees Received since the Ph.D.: M.D., University of Minnesota.

Address: 1943 E. River Road, Minneapolis, Minnesota.

1927. LOUCKS, MILO M. B.S. '24, M.S. '25, University of Minnesota.

Major: Physiology. Minor: Physiologic Chemistry.

Thesis: The Coagulation of Blood with Special Reference to Calcium, Thrombin, and Prothrombin. Published in *American Journal of Physiology*, Vol. 91, no. 1, December, 1929.

Major Adviser: Professor F. H. Scott.

Positions Held: Instructor in Physiology, 1927-1930, University of Minnesota; private practice, 1930—.

Degrees Received since the Ph.D.: M.B. M.D., University of Minnesota.

Honors: Sigma Xi.

Address: Station Hospital, Fort Crook, Nebraska.

1929. KING, JOSEPH THOMAS. B.S. '24, M.A. '24, M.D. '25, University of Minnesota.

Major: Physiology. Minor: Internal Medicine.

- Thesis: Tissue Culture Studies. Published in *Archiv für Experimentelle Zellforschung*, 9:341, 1930; 10:467, 1931.  
 Major Adviser: Professor F. H. Scott.  
 Positions Held: Assistant Professor of Physiology, 1929—, University of Minnesota.  
 Honors: Sigma Xi.  
 Address: 2267 Folwell St., University Grove, St. Paul, Minnesota.
1929. STEGGERDA, FREDERIC RUSSELL. B.A. '25, Hope College; M.A. '27, University of Minnesota.  
 Major: Physiology. Minor: Physiologic Chemistry.  
 Thesis: The Effects of Water Content on Muscular Efficiency. Published in *Summaries of Ph.D. Theses*, Vol. 1, 1939, University of Minnesota.  
 Major Adviser: Professor F. H. Scott.  
 Positions Held: Instructor in Physiology, 1929-1933, University of Tennessee, Memphis, Tennessee; 1931, Cambridge, England (on sabbatical leave from University of Tennessee); Associate, 1933-1936, Assistant Professor, 1936—, University of Illinois.  
 Honors: Sigma Xi; Gamma Alpha.  
 Address: 416 Natural History, University of Illinois, Urbana, Illinois.
1931. COLLINS, DEAN ALBERT. B.A. '26, M.A. '28, University of Minnesota.  
 Major: Physiology. Minors: Physical and Physiologic Chemistry.  
 Thesis: The Freezing Points of Serum, Corpuscles, and Whole Blood. Published in *Journal of Biological Chemistry*, 97:189-213, 1932.  
 Major Adviser: Professor F. H. Scott.  
 Positions Held: Instructor in Physiology, 1931-1937, University of Minnesota; Assistant Professor, 1937—, Department of Physiology, Temple University School of Medicine.  
 Honors: Phi Beta Kappa; Sigma Xi; Alpha Omega Alpha.  
 Address: Temple University School of Medicine, Broad at Ontario, Philadelphia, Pennsylvania.
1931. HEWITT, EARL ALBON. B.A. '14, Des Moines College; B.S. '15, D.V.M. '18, Iowa State College.  
 Major: Physiology. Minors: Pharmacology and Veterinary Medicine.  
 Thesis: Certain Morphologic and Chemical Phases of the Blood of Normal and Cholera-Infected Swine. Published in *Iowa State College Journal of Science*, Vol. 6, no. 2, January 1932.  
 Major Adviser: Professor F. H. Scott.  
 Positions Held: Associate Professor of Veterinary Physiology, 1929—, Iowa State College, Ames, Iowa.  
 Honors: Sigma Xi.  
 Address: 400 Pearson Ave., Ames, Iowa.
1934. BELLIS, CARROLL JOSEPH. B.S. '30, University of Minnesota.  
 Major: Physiology. Minor: Anatomy.  
 Thesis: The Erythrocyte and Its Relation to Plasma Proteins. Published in *Journal of Biological Chemistry*, 3:17, 1935.  
 Major Adviser: Professor F. H. Scott.

Positions Held: Intern in Surgery, 1936-1937, Teaching Fellow in Surgery, 1937—, University of Minnesota Hospitals.

Honors: Sigma Xi; Charles Lyman Greene Prize in Physiology, 1933-1934.

Address: 1185 Laurel Avenue, St. Paul, Minnesota.

1936. BOYLE, ROBERT WILLIAM. Ph.B. '30, University of Chicago; M.S. '32, College of the City of Detroit (Wayne University).

Major: Physiology. Minor: Physiologic Chemistry.

Thesis: Some Observations on the Effects of Exercise on the Blood, Lymph and Muscle in Its Relation to Muscle Soreness. Published in *American Journal of Physiology*, 122:569, 1938.

Major Adviser: Professor F. H. Scott.

Positions Held: Assistant Professor, 1936—, University of Arkansas School of Medicine.

Honors: Sigma Xi.

Address: University of Arkansas, School of Medicine, Little Rock, Arkansas.

1936. O'BRIEN, JOHN LYAL. B.A. '31, St. Thomas College.

Major: Physiology. Minors: Physical Chemistry and Biochemistry.

Thesis: The Effects of Various Diets on Certain Blood Constituents. Not published.

Major Advisers: Professors F. H. Scott and E. M. Greisheimer.

Positions Held: Medical Student, 1936—, University of Minnesota Medical School.

Honors: Sigma Xi.

Address: 2006 Ashland Ave., St. Paul, Minnesota.

1936. ROTH, GRACE MARGUERITE. B.S. '31, University of Minnesota.

Major: Physiology. Minor: Hematology.

Thesis: The Postural Effects on Blood Pressure Following the Interruption of Vasomotor Nerves by Anterior Rhizotomy or Extensive Splanchnic Nerve Resection. Published in *American Heart Journal*, 14:87-103; *Surgery*, 2:343-349, 1937.

Major Adviser: Professor F. C. Mann.

Positions Held: Assistant in Clinical Physiology, Vascular Section, 1937—, Mayo Clinic.

Honors: Sigma Xi.

Address: Mayo Clinic, Rochester, Minnesota.

#### PREVENTIVE MEDICINE AND PUBLIC HEALTH

1932. SPAULDING, VELMA VIOLET. B.S. '18, University of Idaho; M.A. '32, University of Minnesota.

Major: Preventive Medicine and Public Health. Minor: Child Welfare.

Thesis: The Height and Weight of Tuberculous Children. Published in *Tubercle*, London, October 1933.

Major Advisers: Professor H. S. Diehl and C. M. Jackson.

Positions Held: Executive Secretary, 1933—, Denver Tuberculosis Society; Instructor, part time, 1933—, University of Denver.



Honors: National Research Council Scholarship in Child Development; Chairman, 1934—, Colorado Parent Education Council; Secretary, 1934—, Denver Public Health Council.

Address: 1420 Logan, Denver, Colorado.

## SURGERY

1917. McWHORTER, GOLDER LEWIS. B.S. '11, University of Chicago; M.D. '13, Rush Medical School.

Major: Surgery. Minor: Anatomy.

Thesis: Some Clinical and Experimental Observations on Gastric Activity. Published in *American Journal of the Medical Sciences*, Vol. 155, p. 672, May 1918.

Major Advisers: Professors J. E. Moore and F. Corbett.

Positions Held: Instructor, 1917-1923, Assistant Clinical Professor in Surgery, 1923-1933, Associate Clinical Professor in Surgery, 1933—, Rush Medical School, University of Chicago; Assistant Attending Surgeon of Presbyterian Hospital, Chicago; Attending Surgeon, 1933—, Cook County Hospital, Chicago; Member of the founding group of the American Board of Surgery, 1937.

Honors: Fellow of the American College of Surgeons; Sigma Xi.

Address: 1526 West 103rd St., Chicago, Illinois.

1919. BUTSCH, JOHN LOUIS. B.S. '06, M.D. '12, M.S. '15, Johns Hopkins University.

Major: Surgery. Minor: Medicine.

Thesis: Ulcers of the Gastro-Intestinal Tract with Special Reference to Gastro-Jejunal Ulcers. Published in part, 1921, in *Papers from the Mayo Foundation and the Medical School*, Vol. 1, 58-84.

Major Adviser: Professor E. S. Judd.

Positions Held: Surgeon, Buffalo, New York.

Deceased, 1925.

1920. HEDBLUM, CARL ARTHUR. B.A. '07, M.A. '08, Colorado College; M.D. '11, Harvard University.

Major: Surgery. Minor: Pathology.

Thesis: The Treatment of Chronic Empyema. Published in *Annals of Surgery*, September 1920.

Major Advisers: Professors E. R. Judd and C. H. Mayo.

Positions Held: Assistant and Associate Professor, 1921-1924, Mayo Clinic; Professor, Head of Surgery Department, 1924-1926, University of Wisconsin; Junior Surgeon, 1926-1928, Senior Surgeon, 1928—, St. Luke's Hospital; Consulting Surgeon, 1928—, Edward Hines, Jr. Memorial Hospital; Surgeon, 1926-1931, Municipal Tuberculosis Hospital; Professor, Head of Surgery Department, 1926-1934, College of Medicine, University of Illinois, Urbana, Illinois.

Degrees Received since the Ph.D.: D.Sc., 1921, Colorado College, Colorado Springs, Colorado.

Honors: Phi Beta Kappa; Sigma Xi.

Deceased, June 1934.

1921. CAMERON, ANGUS LUVERNE. B.A. '13, University of Indiana; M.S. '14, University of Chicago.  
 Major: Surgery. Minor: Pathology.  
 Thesis: A Study of the Developmental Topography of the Organs of the Human Abdomen, with Particular Reference to Their Congenital Abnormalities and Displacements. Not published.  
 Major Adviser: Professor A. C. Strachauer.  
 Positions Held: Assistant Professor of Surgery, 1921-1924, University of Minnesota; general surgical practice, 1925-1927, Minot, North Dakota; Surgeon, 1927—, Northwest Clinic, Minot.  
 Address: Northwest Clinic, Minot, North Dakota.
1922. ZIEROLD, ARTHUR ADELBERT. B.S. '16, M.B. '18, M.D. '19, University of Minnesota.  
 Major: Surgery. Minor: Anatomy.  
 Thesis: Reaction of Bone to Various Metals. Published in *Archives of Surgery*, Vol. 9, September 1924.  
 Major Adviser: Professor A. C. Strachauer.  
 Positions Held: Instructor, 1922-1927, Assistant Professor, 1927-1930, Associate Professor, 1930-1935, Professor of Surgery, 1935—, University of Minnesota; Surgeon, 649 Medical Arts Building, Minneapolis, Minnesota.  
 Honors: Sigma Xi.  
 Address: 4621 Fremont South, Minneapolis, Minnesota.
1925. WANGENSTEEN, OWEN HARDING. B.A. '19, B.S. '20, M.B. '21, M.D. '22, University of Minnesota.  
 Major: Surgery. Minor: Pathology.  
 Thesis: The Undescended Testis, an Experimental and Clinical Study. Published in *Archives of Surgery*, Vol. 14, 663-731, March 1927.  
 Major Adviser: Professor A. C. Strachauer.  
 Positions Held: Instructor, 1926, Assistant Professor, 1927, University of Minnesota; Assistant, 1927-1928, Professor de Quervain's Clinic, Berne, Switzerland; Associate Professor, 1928-1931, Director of Department, Professor, 1931—, Department of Surgery, University of Minnesota; Surgeon-in-Chief of the University of Minnesota Hospitals, 1930—.  
 Honors: Sigma Xi; Awarded the Samuel Gross Prize in Surgery for 1935 by the Philadelphia Academy of Surgery for "The Therapeutic Problem in Bowel Obstruction."  
 Address: 145 S. E. Melbourne, Minneapolis, Minnesota.
1927. BUERMANN, WINFRED HENRY. B.S. '17, McMinnville College; M.D. '21, Columbia University.  
 Major: Surgery. Minor: Pathology.  
 Thesis: Clinical and Pathological Study of Carcinomatous Gastric Ulcer with Special Reference to the Grading of Malignancy. Published in *Western Journal of Surgery, Obstetrics, and Gynecology*, October 1930-December 1931.  
 Major Adviser: Professor D. C. Balfour.  
 Positions Held: Clinical Instructor in Surgery, 1928-1936, Clinical Associate in Surgery, 1936—, University of Oregon Medical Department; Attending Surgeon, 1928—, Doernbecker Memorial Hospital for Children, Emanuel Hospi-

- tal, Portland, Oregon; Associate Editor, 1930—, *Northwest Medicine*, Seattle, Washington.  
Address: 2865 N. W. Shenandoah Terrace, Portland, Oregon.
1929. HALDEMAN, KEENE OLIVER. B.A. '20, M.A. '24, M.D. '25, University of California.  
Major: Orthopedic Surgery. Minor: Experimental Surgery.  
Thesis: The Rôle of Bone Marrow in the Formation of Bile Pigment. Published in *Archives of Pathology*, Vol. 7, 993-1011, June 1929.  
Major Advisers: Professors M. S. Henderson and F. C. Mann.  
Positions Held: Assistant in Orthopedic Surgery, 1929-1932, Instructor, 1932-1935, Assistant Clinical Professor in Orthopedic Surgery, 1935—, University of California Medical School.  
Honors: Phi Beta Kappa; Alpha Omega Alpha; Sigma Xi.  
Address: 350 Post St., San Francisco, California.
1929. HERRMANN, SIEGFRIED FREDERICK. B.S. '15, Hamline University; M.A. '19, M.D. '20, University of Minnesota.  
Major: Surgery. Minor: Experimental Surgery.  
Thesis: Experimental Consideration of Problems in Peritonitis. Published in *Archives of Surgery*, Vol. 18, 2202-2215, May 1929.  
Major Advisers: Professors D. C. Balfour and F. C. Mann.  
Positions Held: Instructor and Medical Director, 1930—, College of Puget Sound, Tacoma, Washington.  
Address: 3716 No. Adams St., Tacoma, Washington.
1929. McCANN, JAMES COLE. B.A. '20, Georgetown University; M.D. '24, Harvard University.  
Major: Surgery. Minor: Pathology.  
Thesis: Experimental Studies on the Physiology of the Stomach. Published in two parts: in *Archives of Surgery*, Vol. 19, 600-659, October 1929, and *American Journal of Physiology*, Vol. 89, no. 3, 483-507, August 1929.  
Major Adviser: Professor F. C. Mann.  
Positions Held: Surgeon, 1929—, Fallon Clinic, St. Vincent Hospital, Worcester, Massachusetts.  
Honors: Sigma Xi.  
Address: 390 Main St., Worcester, Massachusetts.
1930. HARTWELL, SHATTUCK WELLMAN. B.S. '23, M.D. '26, University of Minnesota.  
Major: Surgery. Minor: Pathology.  
Thesis: The Rôles of the Parietal Tissues in the Healing of Human Surgical Wounds. Published in *Archives of Surgery*, Vol. 21, 76-96, July 1930.  
Major Adviser: Professor D. C. Balfour.  
Positions Held: Private practice, 1930—, Consulting Surgeon, 1932—, Hackley Hospital, Muskegon, Michigan.  
Address: 706 Hackley Union National Bank Building, Muskegon, Michigan.
1930. PEYTON, WILLIAM THOMAS. B.S. '16, M.B. '18, M.D. '19, M.A. '24, Ph.D. '26, University of Minnesota.  
Major: Surgery. Minor: Anatomy.

Thesis: A Quantitative Study of the Dimensions and Growth of the Palate in the Normal Infant and in the Infant with Gross Maldevelopment of the Upper Lip and Palate. Published in *Archives of Surgery*, Vol. 22, 704-737, May 1931.

Major Adviser: Professor Strachauer.

Positions Held: Assistant Professor of Surgery, 1930-1934, Associate Professor of Surgery, 1934—, University of Minnesota.

Honors: Sigma Xi.

Address: 64 Barton Avenue S. E., Minneapolis, Minnesota.

1930. TASCHE, LESLIE WILLIAM. B.A. '21, M.S. '22, University of Wisconsin; M.D. '24, Columbia University.

Major: Surgery. Minor: Anatomy.

Thesis: Factors Bearing upon the Etiology of Femoral Hernia. Published in *Archives of Surgery*, 25:749-782, 1932.

Major Advisers: Professors O. H. Wangensteen and A. C. Strachauer.

Positions Held: Private practice, 1930—, Sheboygan, Wisconsin.

Address: 1226 No. 8, Sheboygan, Wisconsin.

1930. THOMPSON, HAROLD LINCOLN. B.A. '19, University of Iowa; M.S. '21, University of Chicago; M.D. '23, Rush Medical School.

Major: Surgery. Minor: Pathology.

Thesis: Studies on the Surgery of the Stomach. Published in *California and Western Medicine*, June 1932.

Major Adviser: Professor F. C. Mann.

Positions Held: Instructor in Surgery, 1931-1936, University of Southern California, School of Medicine; Junior Attending Surgeon, 1931—, Los Angeles County General Hospital, Assistant Professor in Surgery, 1936—, College of Medical Evangelists; Attending Surgeon, St. Vincent's Hospital and Hospital of Good Samaritan.

Honors: Sigma Xi; Research Prize, Sixty-first Annual Session of the California Medical Association.

Address: 1930 Wilshire Boulevard, Los Angeles, California.

1931. COOKE, HARRY HAMILTON. B.S. '21, M.D. '24, M.A. '29, M.S. '31, University of Minnesota.

Major: Surgery. Minor: Pathology.

Thesis: A Pathological, Experimental, and Clinical Study of Lipoid Deposits in the Gall Bladder. Published as prize winning essay in the *Journal of the New York State Medical Association*, 1933.

Major Adviser: Professor F. C. Mann.

Positions Held: Surgeon, 1931, Bellevue Hospital; Instructor in Surgery, 1931, Postgraduate Medical School, Columbia University; Chief Surgeon, 1932-1933, Lewis County General Hospital, Lowville, New York; Fellow in Neurosurgery, 1933-1935, Harvard University; practicing Neurosurgery, 1935—, Miami, Florida.

Honors: New York State Medical Association's Prize Essay, 1933.

Address: 223 Shoreland Arcade, Miami, Florida.

1931. McCAUGHAN, JOHN MILTON. B.S. '24, Washington University.  
Major: Surgery. Minor: Pathology.  
Thesis: Experimental Studies on the External Secretion of the Pancreas with Special Reference to the Effect of Its Complete Loss by Permanent Pancreatic Fistula. I. The Coincident Changes in the Chemistry of the Blood. II. The Mechanism of Death. Published in *American Journal of Physiology*, Vol. 97, 459-466, 1931.  
Major Adviser: Professor D. C. Balfour.  
Positions Held: Fellow in Surgery, Assistant 1931-1932, Mayo Clinic, Rochester, Minnesota; Senior Instructor in Surgery, 1937—, St. Louis University Medical School.  
Honors: Alpha Omega Alpha; Western Surgical Association.  
Address: 7345 Chamberlain, St. Louis, Missouri.
1932. CREEVY, CHARLES DONALD. B.S. '24, M.D. '27, M.S. '30, University of Minnesota.  
Major: Surgery. Minor: Pathology.  
Thesis: Effects of Acute Retention of the Urine: An Experimental Study. Published in *Archives of Surgery*, 29:723-740, 1934.  
Major Adviser: Professor O. H. Wangenstein.  
Positions Held: Assistant Professor of Surgery, 1932—, Assistant Director, 1934-1936, Director, 1936—, Division of Urology, Assistant Dean of Medical School, 1936—, University of Minnesota.  
Honors: Sigma Xi; Alpha Omega Alpha.  
Address: 1633 East River Road, Minneapolis, Minnesota.
1932. LARSON, LAWRENCE MYRLIN. B.S. '25, M.D. '27, M.A. '29, University of Minnesota.  
Major: Surgery. Minor: Pathology.  
Thesis: The Physiology of the Colon: An Experimental Study. Published in *Archives of Surgery*, 27:1-50, 1933.  
Major Adviser: Professor F. C. Mann.  
Positions Held: Surgeon, 1932—, Northwestern, Fairview, and General Hospitals, Minneapolis; Clinical Instructor in Surgery, 1932—, University of Minnesota.  
Honors: Sigma Xi; American Medical Association; Hennepin County Medical Society; Minnesota Pathological Society; Fellow American College of Surgeons; Medical Study Club.  
Address: 3833 Beard Avenue South, Minneapolis, Minnesota.
1932. PRIESTLEY, JAMES TAGGART. B.A. '23, M.D. '26, University of Pennsylvania; M.S. '31, University of Minnesota.  
Major: Surgery. Minor: Pathology.  
Thesis: The Detoxifying Function of the Liver with Special Reference to Strychnin: An Experimental Study. Published in *American Journal of Physiology*, 96:696, 1924.  
Major Adviser: Professor F. C. Mann.  
Positions Held: Member, Surgical Staff, 1932—, Mayo Clinic; Assistant Professor of Surgery, 1932—, Mayo Foundation.

Honors: Phi Beta Kappa; Sigma Xi; Phi Gamma Delta; Alpha Mu Pi Omega; Fellow, American College of Surgeons; J. William White Scholarship for Foreign Travel, 1935.

Address: 419 Sixth Avenue S. W., Rochester, Minnesota.

1932. PUESTOW, CHARLES BERNARD. B.S. '23, University of Wisconsin; M.D. '25, University of Pennsylvania.

Major: Surgery. Minor: Physiology.

Thesis: Observations of the Discharge of Bile into the Duodenum: An Experimental Study. Published in *Archives of Surgery*, Vol. 23, 1013-1029.

Major Adviser: Professor F. C. Mann.

Positions Held: Associate in Surgery, 1931-1933, Assistant Professor, 1933-1937, Associate Professor, 1937—, Department of Surgery, University of Illinois, College and Graduate School of Medicine; Senior Surgeon, Henrotin Hospital, John B. Murphy Hospital; Attending Surgeon, Illinois Research and Educational Hospital; Consulting Surgeon, Municipal Contagious Disease Hospital, Chicago.

Honors: Sigma Xi; President of Illinois Chapter, 1934-1935; Wm. Beaumont Prize for Gastro-Intestinal Research, 1933.

Address: 25 E. Washington Street, Chicago, Illinois.

1933. CAMPBELL, ORWOOD JACKSON. B.S. '20, University of Chicago; M.D. '22, Rush Medical College.

Major: Surgery. Minor: Pathology.

Thesis: The Relationship between Cystic Disease of the Breast and Cancer. Published in *Archives of Surgery*, 28:1001-1056, 1934.

Major Adviser: Professor O. H. Wangenstein.

Positions Held: Assistant Professor of Surgery, 1934—, University of Minnesota.

Address: 1251 Medical Arts Building, Minneapolis, Minnesota.

1933. CASTLETON, KENNETH BITNER. B.A. '23, University of Utah; M.D. '27, University of Pennsylvania.

Major: Surgery. Minor: Pathology.

Thesis: An Experimental Study of Movements of the Small Intestine. Published in *American Journal of Physiology*, 107:641-646, 1934.

Major Advisers: Professors D. C. Balfour and F. C. Mann.

Positions Held: Member of Surgical Staff, 1933—, St. Mark's Hospital; Member of Surgical Staff, 1933—, Salt Lake General Hospital.

Address: 720 Boston Building, Salt Lake City, Utah.

1933. LEVEN, NATHANIEL LOGAN. B.A. '23, Macalester College; M.D. '28, University of Minnesota.

Major: Surgery. Minor: Physiology.

Thesis: A Quantitative Study of the Growth of the Normal Palate and the Effect of Operations for Correction of the Grossly Maldeveloped Palate. Not published.

Major Adviser: Professor W. T. Peyton.

Positions Held: Instructor, 1933-1937, Assistant Professor, 1937—, Surgery Department, University of Minnesota.

Honors: Sigma Xi; Alpha Omega Alpha.

Address: 2338 Marshall Ave., St. Paul, Minnesota.

1933. WU, PATRICK PIH TSANG. M.D. '28, University of Virginia; M.S. in Exper. Surg. '32, University of Minnesota.  
Major: Experimental Surgery. Minor: Pathology.  
Thesis: Histologic Studies of Autogenous and Homogenous Kidney Transplants. Published in *Archives of Surgery*, 28:889, 1934.  
Major Adviser: Professor F. C. Mann.  
Positions Held: Surgeon, 1933-1934, Central Hospital, Nanking; Fellow, 1934-1935, Henry Lester Institute of Medical Research, Shanghai; Assistant in Surgery, 1935—, Peiping Union Medical College.  
Honors: Sigma Xi.  
Address: Peiping Union Medical College, Peiping, China.
1934. HOERNER, MILES TISCHER. B.S. '26, Dartmouth College; M.D. '29, University of Cincinnati.  
Major: Surgery. Minor: Physiology.  
Thesis: The Effect of Exclusion of the Pancreatic Juice upon the Duodenal Content: An Experimental Study. Published in *Proceedings of the Staff Meetings of Mayo Clinic*, 9:473-476, 1934; *American Journal of Digestive Diseases and Nutrition*, 2:295-305, July 1935.  
Major Adviser: Professor D. C. Balfour.  
Positions Held: Fellow in Surgery, 1931-1935, Mayo Foundation, Mayo Clinic; Surgical Staff, 1936—, Miami Valley, St. Elizabeth, and Good Samaritan Hospitals, Dayton, Ohio; Surgical Consultant, 1935—, Kettering Institute for Medical Research.  
Address: 1130 Fidelity Building, Dayton, Ohio.
1934. MAJOR, SAMUEL GLENN. B.S. '23, University of Pittsburgh; M.D. '27, Harvard University; M.A. '29, M.S. Exp. Surg. '33, University of Minnesota.  
Major: Surgery. Minor: Pathology.  
Thesis: Glycogenogenesis in Depancreatized and in Phloridzinized Animals in the Diabetic State. Published in *American Journal of Physiology*, 101:621-624, 102:409-421, 1932.  
Major Adviser: Professor F. C. Mann.  
Positions Held: Staff Surgeon, 1933—, Western Pennsylvania Hospital, Pittsburgh, Pennsylvania.  
Honors: Sigma Xi; first prize on records, F.A.C.S., 1937.  
Address: 270 Inglewood Drive, Mt. Lebanon, Pittsburgh, Pennsylvania.
1934. MANSON, MELVILLE HUSTED. B.S. '26, M.D. '28, M.S. in Surg. '31, University of Minnesota.  
Major: Surgery. Minor: Bacteriology.  
Thesis: A Consideration of Some Factors Responsible for Gas Bacillus Infections. Not published.  
Major Adviser: Professor O. H. Wangensteen.  
Positions Held: Instructor in Surgery, 1933-1937, University of Minnesota; Special Field Representative, 1937, American College of Surgeons; Associate Director, 1937—, Rural Hospital Division, The Commonwealth Fund.  
Honors: Alpha Omega Alpha; Sigma Xi; Fellow American College of Surgeons.  
Address: 41 East 57th Street, New York, N. Y.

1935. CARLSON, HERBERT AUSTIN. B.S. '21, M.D. '24, M.S. in Surg. '31, University of Minnesota.  
 Major: Surgery. Minor: Pathology.  
 Thesis: Acute Empyema Thoracis: A Study of Healing and Pulmonary Re-expansion. Published in *Journal of Thoracic Surgery*, 5:393-433, 1936.  
 Major Adviser: Professor O. H. Wangensteen.  
 Positions Held: Instructor in Surgery, 1934-1937, Assistant Professor of Surgery, 1937—, University of Minnesota; Surgeon, 1938—, Minnesota State Sanatorium.  
 Honors: Alpha Omega Alpha; Sigma Xi.  
 Address: Ah-Gwah-Ching, Minnesota.
1935. RICE, CARL OLIVER. B.S. '23, M.D. '26, M.S. in Surg. '31, University of Minnesota.  
 Major: Surgery. Minor: Pathology.  
 Thesis: Life Cycle of Thyroid in Minnesota. Published in Transactions of the American Association for the Study of Goitre, *Western Journal of Surgery, Obstetrics and Gynecology*, 1931.  
 Major Adviser: Professor O. H. Wangensteen.  
 Positions Held: In charge, Surgical Out-patient Department, 1931-1938, Active member, Surgical Staff, 1938—, Minneapolis General Hospital; Attending Surgeon, Goitre Clinic, 1931-1938, University of Minnesota Hospitals.  
 Honors: Sigma Xi; President, Minneapolis Study Club, 1937-1938; Honorable Mention, A.M.A. Study of Goitre.  
 Address: 1635 Medical Arts Building, Minneapolis, Minnesota.
1936. SPERLING, LOUIS. B.S. '28, M.D. '31, University of Minnesota.  
 Major: Surgery. Minor: Physiology.  
 Thesis: An Experimental Study of the Mechanics of Simple Intestinal Obstruction. Published in *Archives of Surgery*, 36:778-815, 1938.  
 Major Adviser: Professor O. H. Wangensteen.  
 Positions Held: Assistant, 1934-1937, Department of Surgery, University of Minnesota Hospitals.  
 Honors: Sigma Xi.  
 Address: 502 Medical Arts Building, Minneapolis, Minnesota.
1937. REA, CHARLES ETHAN. B.S. '28, M.D. '31, M.S. '32, University of Minnesota.  
 Major: Surgery. Minors: Pathology and Physiology.  
 Thesis: The Function of the Undescended Testis. Not published.  
 Major Adviser: Professor O. H. Wangensteen.  
 Positions Held: Instructor in Surgery, 1937—, University of Minnesota.  
 Address: 255 West George St., St. Paul, Minnesota.
1937. WELCH, CHARLES STUART. M.D. *cum laude* '32, Tufts Medical College; M.S. in Surg. '37, University of Minnesota.  
 Major: Surgery. Minor: Physiology.  
 Thesis: Metabolic Studies in Chronic Ulcerative Colitis. Published in *Journal of Clinical Investigation*, 16:161-168, 1937.  
 Major Adviser: Professor J. L. Bollman.



Positions Held: Assistant in Surgery, 1937—, Assistant in Anatomy, 1937—, Albany Medical College.

Honors: Sigma Xi.

Address: 286 State St., Albany, New York.

1938. CORWIN, WARREN COONS. B.A. '28, Yale University; M.D. '32, Johns Hopkins University.

Major: Experimental Surgery. Minor: Pathology.

Thesis: The Convulsions of Insulin Hypoglycemia. Not published.

Major Adviser: Professor F. C. Mann.

Positions Held: Fellow, 1935—, Mayo Foundation.

Honors: Phi Beta Kappa.

Address: Mayo Foundation, Rochester, Minnesota.

1938. PAINE, JOHN RANDOLPH. B.A. '27, Harvard College; M.D. '31, Harvard Medical College; M.S. in Surg. '35, University of Minnesota.

Major: Surgery. Minor: Physiology.

Thesis: Studies in the Elasticity of the Lungs and Emphysema. Not published.

Major Adviser: Professor O. H. Wangenstein.

Positions Held: Instructor in Surgery, 1938—, University of Minnesota.

Honors: Phi Beta Kappa; Sigma Xi.

Address: 41 Clarence Ave. S. E., Minneapolis, Minnesota.

## UROLOGY

1934. ALLEN, RAYMOND BERNARD. B.S. '24, M.A. '25, M.D. '28, University of Minnesota.

Major: Urology. Minor: Anatomy and Experimental Surgery.

Thesis: Experiments on the Physiology and Cause of Compensatory Renal Hypertrophy. Published in *Archives of Pathology*, 19:341-363, 1935.

Major Adviser: Professor W. F. Braasch.

Positions Held: Associate Dean, College of Physicians and Surgeons, in charge of Graduate Studies, 1933-1936, Columbia University; Associate Director, 1933-1936, New York Post Graduate School and Hospital; Dean, 1936—, Wayne University College of Medicine.

Address: 1512 St. Antoine Street, Detroit, Michigan.

## PHILOSOPHY, PSYCHOLOGY, EDUCATION, AND CHILD WELFARE

### CHILD WELFARE

1928. MCGINNIS, ESTHER. B.S. '15, Ohio State University; M.S. '23, Columbia University.

Major: Child Welfare. Minor: Home Economics (Nutrition).

Thesis: The Acquisition and Interference of Motor Habits in Young Children.

Published in *Genetic Psychology Monographs*, 6:203-310, 1929.

Major Adviser: Professor J. E. Anderson.

Positions Held: Professor and Head of Department of Parent Education, 1928-1937, Institute of Child Welfare, University of Minnesota; Field Worker in Child Development and Parent Education, 1931-1932, American Home Economics Association, Washington, D. C. (on leave of absence from University of Minnesota); Professor of Family Life, 1938—, State Teachers College, Buffalo.

Honors: Psi Chi.

Address: State Teachers College, Buffalo, New York.

1929. DAY, ELLA JEANETTE. B.S. '21, Cornell University; M.A. '25, University of Michigan.

Major: Child Welfare. Minor: Educational Psychology.

Thesis: The Development of Language in Twins. Published in *Child Development*, 3:179-199, 298-316, 1932.

Positions Held: Professor of Home Economics, 1929-1938, Head, Department of Child Development, 1938—, University of Tennessee.

Address: Nursery School, University of Tennessee, Knoxville, Tennessee.

1929. JUSTIN, FLORENCE. B.S. '22, Kansas State Agricultural College; M.A. '23, University of Chicago.

Major: Child Welfare. Minor: Sociology.

Thesis: A Genetic Study of Laughter-Provoking Stimuli. Published in *Child Development*, 3:117, 1932.

Major Adviser: Professor J. E. Anderson.

Positions Held: Associate Professor of Home Economics, 1930—, Ohio University.

Honors: Omicron Nu Child Development Research Grant, 1930-1932.

Address: Ohio University, Athens, Ohio.

1930. STAPLES, RUTH. B.S. '22, University of Minnesota; M.A. '26, Columbia University.

Major: Child Welfare. Minor: Educational Psychology.

Thesis: The Responses of Infants to Color. Published in *Psychological Bulletin*, 28:297, 1931; *Journal of Experimental Psychology*, 15:119, 1932.

Major Adviser: Professor J. E. Anderson.

Positions Held: Assistant Professor of Home Economics, in charge of Child Development, 1926-1933, Associate Professor, 1933—, University of Nebraska.

Address: 3836 Dudley St., Lincoln, Nebraska.

1932. MATTSON, MARION LOUISE. B.A. '20, University of Minnesota; M.A. '22, Columbia University.  
Major: Child Welfare. Minor: Psychology.  
Thesis: The Relation between the Complexity of the Habit to be Acquired and the Form of the Learning Curve in Young Children. Published in *Genetic Psychology Monographs*, 13:299-399, 1933.  
Major Adviser: Professor J. E. Anderson.  
Positions Held: Head of Nursery School, Teacher and Instructor, Institute of Child Welfare, 1931—, University of Minnesota.  
Address: Oak Grove Hotel, Minneapolis, Minnesota.
1932. WIEG, ELLA LYDIA. Ph.B. '25, Ph.M., '29, University of Wisconsin.  
Major: Child Welfare. Minor: Educational Psychology.  
Thesis: Bi-lateral Transfer in the Motor Learning of Young Children and Adults. Published in *Child Development*, 3:247-268, 1932.  
Major Advisers: Professors F. L. Goodenough and J. E. Anderson.  
Positions Held: Field Secretary for P.T.A., 1933, for C.W.A., 1934, Parent Education, 1934, National Council of Parent Education; Supervisor of Nursery School and Parent Education, 1934—, WERA and WPA.  
Address: 600 S. Brearly St., Madison, Wisconsin.
1934. HOWARD, RUTH WINIFRED. B.S. '21, M.S. '28, Simmons College.  
Major: Child Welfare. Minor: Educational Psychology.  
Thesis: A Study of the Development of Triplets. Published in *University of Minnesota Child Welfare Bulletin*, July 1934.  
Major Adviser: Professor J. E. Anderson.  
Positions Held: Intern Clinical Psychologist, 1935-1936, Illinois Institute for Juvenile Research; Psychologist, 1935-1937, Provident Hospital, University of Chicago Clinics; Director, 1937—, Health Education Program, National Youth Administration of Illinois.  
Married Name: Mrs. Albert S. Beckham.  
Address: 5938 South Park Avenue, Chicago, Illinois.
1935. HERRING, AMANDA. B.A. '28, M.A. '29, University of Texas.  
Major: Child Welfare. Minor: Educational Psychology.  
Thesis: An Experimental Study of the Reliability and Prediction Value of the Buhler Baby Tests with Critical Notes on Factors Affecting the Constancy of Test Ratings. Published in *Journal of Experimental Education*, December 1937.  
Major Adviser: Professor F. L. Goodenough.  
Positions Held: Psychologist, 1935—, Division of Examination and Classification, State Board of Control.  
Honors: Phi Beta Kappa; Pi Lambda Theta.  
Address: State Board of Control, St. Paul, Minnesota.
1935. LEAHY, ALICE MARY. B.A. '14, University of Minnesota; M.A. '24, Columbia University.  
Major: Child Welfare. Minor: Sociology.  
Thesis: The Minnesota Index of Environmental Status. A Scale for Measuring Urban Home Conditions. Published by *University of Minnesota Press*, 1936.

Major Adviser: Professor J. E. Anderson.  
 Positions Held: Associate Professor, 1935-1936, Catholic University of America;  
 Associate Professor, 1936—, University of Minnesota.  
 Honors: Sigma Xi.  
 Married Name: Mrs. Andrew B. Shea.  
 Address: 5031 So. Fremont, Minneapolis, Minnesota.

1935. McCONNON, KATHLEEN BERRY. B.A. '29, Vassar College.  
 Major: Child Welfare. Minor: Psychology.  
 Thesis: The Situational Factor in the Language Responses of Nursery School  
 Children: A Contribution to Short-Sample Methodology. Not published.  
 Major Adviser: Professor F. L. Goodenough.  
 Positions Held: Instructor and Research Counselor, 1935-1936, General College,  
 University of Minnesota; Teacher of Psychology, 1936-1937, Y. W. C. A.  
 Honors: Phi Beta Kappa; Pi Lambda Theta.  
 Married Name: Mrs. John G. Darley.  
 Address: University of Minnesota, Minneapolis, Minnesota.

1935. MARQUIS, JEAN LILIAN. B.A. '31, M.A. '32, Stanford University.  
 Major: Child Welfare. Minor: Psychology.  
 Thesis: Nature and Development of Children's Concepts of Causal Relations.  
 Published in *Child Welfare Monograph Series*, No. 13, 1937.  
 Major Adviser: Professor J. E. Anderson.  
 Positions Held: Psychologist, 1935-1936, Child Study Department, Board of  
 Education, Minneapolis, Minnesota; Consultant Psychologist, 1935-1937, Wash-  
 burn Home, Minneapolis; Consultant Psychologist, 1935—, Family Welfare,  
 Minneapolis; Research Assistant, General College, 1937, University of Minne-  
 sota; Psychologist, Children's Bureau, 1937—, Department of Labor.  
 Honors: Phi Beta Kappa; Sigma Xi.  
 Married Name: Mrs. William R. Deutsche.  
 Address: 2649 Toledo Ave., St. Louis Park Station, Minneapolis, Minnesota.

1936. DAVIS, EDITH ATWOOD. B.A. '10, M.A. '14, Middlebury College.  
 Major: Child Welfare. Minor: Psychology.  
 Thesis: The Development of Linguistic Skill from Five to Ten Years in Twins,  
 Singletons, and Only Children. Published by University of Minnesota Press,  
 1937.  
 Major Adviser: Professor J. E. Anderson.  
 Positions Held: Lecturer, 1937, University of Minnesota.  
 Honors: Phi Beta Kappa.  
 Married Name: Mrs. Ralph Davis.  
 Address: U. S. Veterans Hospital, Boise, Idaho.

1936. HURD, ETHLYN VIRGINIA. B.A. '32, University of Utah; M.S. in  
 Psychometrics '33, University of Minnesota.  
 Major: Child Welfare. Minor: Psychology.  
 Thesis: Color Blindness in Preschool Children: An Adaptation of the Ishihara  
 Test. Not published.  
 Major Adviser: Professor F. L. Goodenough.  
 Positions Held: Training Supervisor, 1937, WPA Nursery School.  
 Honors: Phi Kappa Phi.

Married Name: Mrs. George M. Haslerud.  
Address: 2115 Brooks Road, Knoxville, Tennessee.

1936. MORGAN, WINONA LOUISE. B.A. '29, M.A. '30, University of Illinois.  
Major: Child Welfare. Minor: Psychology.

Thesis: Changes in Socio-Economic Status and Family Relationships Occurring within a Highly Selected Group during the Period from 1927 to 1933. Not published.

Major Adviser: Professor F. L. Goodenough.

Positions Held: Assistant Professor, 1935-1937, Associate Professor of Home Economics, 1937—, Ohio State University.

Address: Campbell Hall, Ohio State University, Columbus, Ohio.

1936. WOLF, THETA HOLMES. B.A. '27, M.A. '29, Brown University.

Major: Child Welfare. Minor: Psychology.

Thesis: An Exploratory Study of Persisting Behavior and Its Relation to Incentives among Five-Year-Old Children. Not published.

Major Adviser: Professor F. L. Goodenough.

Positions Held: Instructor, 1938, Stephens College.

Honors: Phi Beta Kappa; Sigma Xi.

Married Name: Mrs. John B. Wolf.

Address: 7 Willis Avenue, Columbia, Missouri.

1937. KATZ, EVELYN. B.A. '31, M.A. '33, Western Reserve University.

Major: Child Welfare. Minor: Psychology.

Thesis: The Effect of Certain Factors upon the Frequency of Resumption of Interrupted Activities. Published in *Summaries of Ph.D. Theses*, Vol. 1, 1939, University of Minnesota.

Major Adviser: Professor F. L. Goodenough.

Positions Held: Associate in Psychology, 1937—, Developmental Health Inquiry, Western Reserve University; Director of Student Personnel, 1937—, Cleveland College.

Address: 2725 Hampshire Road, Cleveland Heights, Ohio.

1938. GATES, LOUISE WARD. B.A. '28, Wellesley College; M.A. '31, Brown University.

Major: Child Welfare. Minor: Psychology.

Thesis: An Experimental Study of the Relationship between So-called Trial and Error and Rational Methods of Learning in Children, and the Genetic Development of These Methods with Age and Learning Ability. Not published.

Major Adviser: Professor F. L. Goodenough.

Positions Held: Assistant in Psychology, 1938—, Wellesley College.

Honors: Sigma Xi; American Psychological Association.

Address: 215 Washington St., Wellesley Hills, Massachusetts.

## EDUCATION

1917. BORAAS, JULIUS. B.L. '95, M.L. '98, University of Minnesota.

Major: Education. Minor: Psychology.

Thesis: Formal English Grammar and the Practical Mastery of English. Published as Chapter 5, *You and the Art of Thinking*, in *Social Studies*, edited by William McAndrew, by Little, Brown, and Co., 1935.

- Major Adviser: Professor M. E. Haggerty.  
 Positions Held: Head of Department of Education, 1917—, St. Olaf College, Northfield, Minnesota; Lecturer in Education, summers, 1920-1932, State University of Iowa; Board of Education, 1918—, Northfield, Minnesota; State Board of Education, 1919—.  
 Honors: Phi Delta Kappa; Cited on the Teachers Honor Roll for 1937 by the *Social Frontier*.  
 Address: Northfield, Minnesota.
1919. JOHNSON, WILLIS ERNEST. Ph.B. '00, Illinois Wesleyan University; M.A. '09, University of Chicago; B.A. '18, M.A. '18, University of Minnesota.  
 Major: Education. Minor: Sociology.  
 Thesis: The Formation of Standards of Educational Achievement for a State. Published 1920, Minneapolis.  
 Major Adviser: Professor L. D. Coffman.  
 Positions Held: President, 1919-1923, South Dakota State College, Brookings, South Dakota; Professorial Lecturer, 1923-1924, University of Minnesota; Dean of Education, 1924-1930, San Diego State Teachers College; Dean of Education, 1930—, Milton College.  
 Degrees Received since the Ph.D.: D.Sc., South Dakota State College; LL.D., Dakota Wesleyan University; Ed.D., Milton College, 1936.  
 Address: Milton, Wisconsin.
1919. JORDAN, RIVERDA HARDING. B.A. '93, M.A. '13, Yale University.  
 Major: Education. Minor: Educational Psychology.  
 Thesis: The Relationship between Nationality and School Progress. Published 1921, Bloomington, Illinois.  
 Major Adviser: Professor L. D. Coffman.  
 Positions Held: Professor of Education, 1919-1921, Dartmouth College; Professor of Education, Director of Summer Session, 1921—, Cornell University, Ithaca, New York.  
 Degrees Received since the Ph.D.: M.A., Dartmouth College.  
 Honors: Fellow of the A.A.A.S.; Phi Kappa Phi.  
 Address: 252 Goldwin Smith Hall, Ithaca, New York.
1921. JOHNSON, OSCAR JULIUS. B.A. '17, M.A. '18, State University of Iowa.  
 Major: Education. Minor: Psychology.  
 Thesis: The St. Paul Non-Verbal Intelligence Examination for Primary Pupils. Published in *Journal of Applied Psychology*, March 1923.  
 Major Adviser: Professor M. E. Haggerty.  
 Positions Held: Assistant Director of Research, St. Paul Public Schools, St. Paul, Minnesota.  
 Deceased, 1925.
1922. WHITNEY, FREDERICK LAMSON. Ph.B. '06, M.A. '14, University of Chicago.  
 Major: Educational Administration. Minor: Educational Psychology.  
 Thesis: The Administration of Practice Teaching in Normal Schools. Published by Public School Publishing Co., Bloomington, Illinois.  
 Major Adviser: Professor L. V. Koos.

Positions Held: Director of Training School, 1922-1924, Moorhead State Teachers College, Moorhead, Minnesota; Director of Educational Research, 1924-1933, Director of the Graduate School, 1933—, Colorado State College of Education.

Address: Faculty Club, Greeley, Colorado.

1923. CARREON, MANUEL LINGAD. B.A. '20, University of Nebraska; M.A. '21, University of Minnesota.

Major: Educational Psychology. Minor: Educational Administration.

Thesis: The Determination of the Degree of Applicability of Educational Measurements and Psychological Tests in America to the Philippines. Published 1926, Yonkers-on-Hudson, New York.

Major Adviser: Professor M. E. Haggerty.

Positions Held: Director of Psychological Clinic and Instructor in Education and Psychology, 1923-1924, Philippine Normal School, Manila, Philippine Islands; Professorial Lecturer in Psychology, 1924-1926, University of the Philippines; Research Associate, 1925, Monroe Educational Survey Commission, Manila; Superintendent of Academic Division, Chief of Measurement and Research Department, 1924-1931, Bureau of Education, Manila; Superintendent, 1931, Baguio Professional Classes for Principals and Supervisors; Member, 1936-1937, Sub-Committee, Commonwealth Anniversary; Director's Representative, 1936—, National Relief Board, Department of Interior, Manila; Acting Chairman, 1936—, Government Advisory Committee on Community Assemblies; Acting Chief, Curriculum Department, 1931-1936, Acting Director of Education, 1936—, Bureau of Education, Manila.

Honors: Phi Beta Kappa; Fellow of the A.A.A.S.; Member of the Philippine Academy of Social Science; Charter Member and Secretary, National Research Council of the Philippines; President, the Philippine Council on Education and Philippine Association of Science Teachers; Secretary, National Council of Education; Member, the National Education Association; Member, National Association of State Directors of Educational Research; Member, Institute of Pacific Relations.

Address: 272 Inverness, Manila, Philippines.

1923. DVORAK, AUGUST. B.A. '20, University of Minnesota.

Major: Educational Psychology. Minor: Psychology.

Thesis: A Study of Achievement and Subject Matter in General Science. Published in *General Science Quarterly*, Vol. 10, nos. 1, 2, 3, 4, November 1925, January, March, and May 1926.

Major Adviser: Professor W. S. Miller.

Positions Held: Assistant Professor of Education, 1923-1929, Associate Professor of Education, 1929-1937, Professor, 1937—, University of Washington, Seattle, Washington; Lecturer in Education, summer 1925, University of Texas; Visiting Professor, summer 1928, University of Michigan.

Honors: Sigma Xi Research Prize; Phi Delta Kappa; Sigma Delta Psi; Two Research Grants from Carnegie Foundation for the Advancement of Teaching.

Address: 5532 34th N. E., Seattle, Washington.

1923. POWERS, SAMUEL RALPH. B.A. '12, University of Illinois; M.A. '19, University of Minnesota.

Major: Education. Minor: Chemistry.

Thesis: A Diagnostic Study of the Subject Matter of High School Chemistry and the Construction of Scales for the Measurement of Achievement in Chemistry. Published 1924, Teachers College, Columbia University, Contributions to Education, no. 149.

Major Adviser: Professor M. E. Haggerty.

Positions Held: Associate Professor of Natural Science, 1923-1928, Professor of Natural Science, and Head of Department, 1928—, Teachers College, Columbia University.

Address: 106 Morningside Drive, New York City, N. Y.

1924. HUGHES, JAMES MONROE. B.A. '16, University of Indiana; M.A. '22, Columbia University.

Major: Educational Administration. Minor: Educational Psychology.

Thesis: A Study of Certain Factors of Achievement in High School Physics. Published in *School Review*, Vol. 38, nos. 3 and 4, "The Use of Tests in the Evaluation of Factors Which Condition the Achievement of Pupils in High School Physics"; and in *Journal of Educational Psychology*, April 1925, "The Hughes Physics Scales."

Major Adviser: Professor L. V. Koos.

Positions Held: Assistant Professor of Education, 1924-1926, Associate Professor, 1926-1927, Professor, 1927—, Northwestern University.

Address: 2035 Sherman Ave., Evanston, Illinois.

1924. SAUPE, WALTER JULIUS. B.S. '20, M.A. '21, University of Missouri.

Major: Educational Administration. Minor: Educational Psychology.

Thesis: Financial Accounting Practice in American City Schools in Cities over 10,000. Published in *Summaries of Ph.D. Theses*, Vol. 1, 1939, University of Minnesota.

Major Adviser: Professor F. H. Swift.

Positions Held: Assistant Professor of Education, 1924-1928, Associate Professor, 1928-1931, Professor, 1931—, University of Missouri.

Address: 123 Edgewood, Columbia, Missouri.

1925. HUTSON, PERCIVAL W. B.A. '13, Beloit College; M.A. '23, University of Minnesota.

Major: Educational Administration. Minor: Educational Psychology.

Thesis: The Specialized Preparation of High School Teachers for the Subjects They Teach. Published 1927, MacMillan Company, New York, under the title *The Scholarship of Teachers in Secondary Schools*, with another paper of the same title by E. A. Fitzpatrick; the Sachs Prize Essay for 1926.

Major Adviser: Professor L. V. Koos.

Positions Held: Assistant Professor of Secondary Education, 1925-1928, Associate Professor, 1928—, University of Pittsburgh; summer 1926, University of California; summer 1930, Northwestern University.

Address: University of Pittsburgh, Pittsburgh, Pennsylvania.

1925. POWERS, J. ORIN. B.A. '17, M.A. '18, University of Illinois.

Major: Educational Administration. Minor: Educational Psychology.

Thesis: A Comparative Study of Instructional Outcomes in Academic Subjects in Non-Junior and Junior High Schools of Minneapolis. Published 1927, University of Minnesota Press, under the title *The Junior High School*.



Major Adviser: Professor L. V. Koos.

Positions Held: Assistant Professor of Education, 1925-1927, Associate Professor, 1927-1936, George Washington University, Washington, D. C.; summer 1926, University of Minnesota; summer 1929, Northwestern University; Specialist, School Administration, 1937—, President's Advisory Committee on Education.

Honors: President of the Educational Association of the District of Columbia, 1930-1932; Secretary, 1937, Chairman, 1938, Committee on Resolutions of the NEA.

Address: 822 Emerson St. N. W., Washington, D. C.

1925. REEVE, WILLIAM DAVID. B.S. '09, University of Chicago.

Major: Education. Minor: Mathematics.

Thesis: A Diagnostic Study of the Teaching Problems in High School Mathematics. Published 1926, Ginn and Company, New York.

Major Adviser: Professor M. E. Haggerty.

Positions Held: Associate Professor, 1924-1928, Professor, 1928—, Teachers College, Columbia University.

Honors: Phi Beta Kappa.

Address: 445 Riverside Drive, New York City, N. Y.

1926. BOHAN, JOHN EMLIN. B.S. '23, M.S. '24, University of Minnesota.

Major: Educational Psychology. Minor: Educational Administration.

Thesis: Students' Marks in University Courses. Published 1931, University of Minnesota Press.

Major Adviser: Professor W. S. Miller.

Positions Held: Associate Professor of Education, 1926-1930, Professor, 1931-1935, West Virginia University, Morgantown, West Virginia.

Deceased, 1935.

1926. DICKINSON, SHERMAN. B.S. '13, Iowa State College; M.A. '20, University of Minnesota.

Major: Education. Minor: Agricultural Education.

Thesis: Determination of the Content of the Curriculum in Dairy Husbandry in the Secondary School. Published 1929, Columbia, as University of Missouri Bulletin, Vol. 29, no. 42, Education Series, no. 26.

Major Adviser: Professor M. E. Haggerty.

Positions Held: Professor, Head of Department of Agricultural Education, 1924—, University of Missouri.

Honors: Kappa Delta Pi.

Address: 5 So. Glenwood Ave., Columbia, Missouri.

1926. DISTAD, HJALMAR WILLIAM. B.S. '23, M.A. '24, University of Minnesota.

Major: Educational Administration. Minor: Educational Psychology.

Thesis: A Study of the Reading Performance of Pupils under Different Conditions on Different Types of Material. Published in *Journal of Educational Psychology*, April 1927.

Major Adviser: Professor L. J. Brueckner.

Positions Held: Assistant Professor of Education, 1926-1928, Emory University, Atlanta, Georgia; Head of Department of Education, 1928-1934, Acting

- Dean, 1929, 1930-31, New Mexico State Teachers College, Silver City, New Mexico; Assistant Professor, 1934-1937, Associate Professor of Elementary Education, 1937—, University of Akron.  
Address: 269 Grand Ave., Akron, Ohio.
1926. OLSON, WILLARD CLIFFORD. B.A. '20, M.A. '24, University of Minnesota.  
Major: Educational Psychology. Minor: Educational Administration.  
Thesis: The Measurement and Incidence of Behavior Problem Tendencies in Children. Published 1930, University of Minnesota Press.  
Major Adviser: Professor M. E. Haggerty.  
Positions Held: National Research Council Fellow, 1926-1927, Assistant Professor of Educational Psychology, 1927-1929, University of Minnesota; Director of Research in Child Development, Associate Professor of Education, 1929-1935, Professor, 1935—, University of Michigan.  
Honors: Sigma Xi; President, 1935-1936, American Orthopsychiatric Association; Secretary, 1937—, American Psychological Association.  
Address: Barton Hills, Ann Arbor, Michigan.
1926. SMITH, HOMER JOHN. Ph.B. '15, University of Wisconsin; M.A. '22, University of Minnesota.  
Major: Educational Administration. Minor: Educational Psychology.  
Thesis: The Administration and Supervision of Vocational Education in Cities with Particular Reference to Industrial Education. Published 1927, Century Company, New York, under the title *Industrial Education; Administration and Supervision*.  
Major Adviser: Professor L. V. Koos.  
Positions Held: Associate Professor of Industrial Education, 1926-1930, Professor, 1930—, University of Minnesota.  
Honors: Epsilon Pi Tau, National Policies Committee of Epsilon Pi Tau; Honorary Member, Fort Collins Chapter, Iota Lambda Sigma; Member, U. S. Office of Education Committee on Industrial Arts; Secretary-Treasurer, National Association of Industrial Teacher Trainers; Member, Board of Directors, Horace Mann League of the United States.  
Address: 2748 West River Road, Minneapolis, Minnesota.
1926. TROXEL, OLIVER LEONARD. B.S. '14, Northwestern University; M.A. '22, University of Minnesota.  
Major: Educational Administration. Minor: Educational Psychology.  
Thesis: A Study of Certain Phases of State Control of Secondary Education. Published 1928, Warwick and York, Baltimore.  
Major Adviser: Professor L. V. Koos.  
Positions Held: Lecturer, summer 1926, University of Pittsburgh; Dean of College of Education, 1926-1929, Municipal University of Wichita, Wichita, Kansas; Professor of Education, 1929—, Colorado State College of Education  
Honors: President, 1937, Colorado Education Association.  
Address: Colorado State College of Education, Greeley, Colorado.
1927. TIEGS, ERNEST WALTER. B.A. '16, Lawrence College; M.A. '21, University of Minnesota.  
Major: Educational Administration. Minor: Educational Psychology.

- Thesis: An Evaluation of Technique of Teacher Selection. Published 1928, Bloomington, Illinois, Public School Publishing Company.  
 Major Advisers: Professors L. V. Koos and L. J. Brueckner.  
 Positions Held: Acting Dean of University College, Associate Professor of Education, 1927-1928, Dean of University College, Professor of Education, 1928—, University of Southern California.  
 Honors: Phi Beta Kappa; Phi Delta Kappa; Tau Kappa Alpha.  
 Address: 1432 Ethel Street, Glendale, California.
1927. VON BORGERSRODE, FRED REINHOLD. B.S. '22, University of Minnesota.  
 Major: Educational Administration. Minor: Educational Psychology.  
 Thesis: The Relation of Class Size to the Effectiveness of University Instruction as Expressed through a Direct Measure of Student Achievement. Published 1929, Minneapolis.  
 Major Adviser: Professor Earl Hudelson.  
 Positions Held: Professor of Education, 1927-1929, University of North Dakota; Professor of Education, 1929-1935, University of Missouri; Editor, 1935-1937, Laidlaw Bros., Chicago; Lecturer in Education, 1937—, University of Minnesota Extension Division.  
 Address: 2638 Aldrich Ave. No., Minneapolis, Minnesota.
1927. WEERSING, FREDERICK J. B.A. '15, University of Minnesota; M.A. '23, Columbia University.  
 Major: Educational Administration. Minor: Educational Psychology.  
 Thesis: A Study of Certain Aspects of Commercial Education in Public High Schools of Minnesota. Published 1929, Minneapolis.  
 Major Adviser: Professor L. V. Koos.  
 Positions Held: Professor of Education, 1927—, University of Southern California.  
 Address: 285 Glen Summer Rd., Pasadena, California.
1928. GOLDTHORPE, JOHN HAROLD. B.A. '20, Hamline University; M.A. '24, University of Minnesota.  
 Major: Educational Administration. Minor: Educational Psychology.  
 Thesis: The Evaluation of Building Standards as Employed in the Construction of Composite School Buildings. Not published.  
 Major Adviser: Professor F. Engelhardt.  
 Positions Held: Assistant Professor of Education, 1928-1931, University of Buffalo; Assistant Professor of Education, 1931-1933, Professor of Education, 1933-1937, University of Rochester; Post-doctoral Research, 1937-1938, Research Associate, 1938—, Teachers College, Columbia University.  
 Address: 16 East 6th Street, Duluth, Minnesota.
1928. HURD, ARCHER WILLIS. Ph.B. '06, Hamline University; M.S. '24, University of Minnesota.  
 Major: Education. Minor: Educational Administration.  
 Thesis: Evaluation of Certain Methods of Procedures in the Teaching of Science at the College Level. Published 1929, University of Minnesota Press.  
 Major Adviser: Professor M. E. Haggerty.

Positions Held: Assistant Director of Bureau of Educational Research, 1928-1929, University of Minnesota; Associate in Research, 1929-1934, Institute of School Experimentation, Teachers College, Columbia University, New York City; Research Associate, 1934-1935, University of Minnesota; Associate Professor of Education, 1935-1936, University of Montana, North Montana College; Professor of Education and Head of Department, 1937—, Hamline University; Summer session, 1935, University of Missouri; 1936-1937, West Virginia University.

Honors: President, 1935, National Association for Research in Science Teaching.  
Address: 1528 W. Minnehaha St., St. Paul, Minnesota.

1928. JOHNSON, PALMER OLIVER. B.S. '21, M.A. '26, University of Minnesota.

Major: Educational Administration. Minor: Educational Psychology.

Thesis: An Evaluation of the Courses in Elementary Botany as Projected in Sequent Courses in the College of Agriculture and Forestry. Published 1930, University of Minnesota Press, under the title *Curriculum Problems in Science at the College Level*.

Major Adviser: Professor Earl Hudelson.

Positions Held: Assistant Professor, 1928-1934, Associate Professor, 1934-1936, Professor of Education, 1936—, University of Minnesota.

Honors: Sigma Xi; Fellow of the A.A.A.S.

Address: 221 Melbourne Ave. S. E., Minneapolis, Minnesota.

1928. KEFAUVER, GRAYSON NEIKIRK. B.A. '21, University of Arizona; M.A. '25, Stanford University.

Major: Educational Administration. Minor: Educational Psychology.

Thesis: The Relationship of Certain Factors to the Content of the Curriculum in Literature in the Secondary Schools. Published in *Summaries of Ph.D. Theses*, Vol. 1, 1939, University of Minnesota.

Major Adviser: Professor L. V. Koos.

Positions Held: Assistant Professor of Education, 1928-1929, Associate Professor, 1929-1932, Teachers College, Columbia University, New York City; Acting Professor, 1932-1933, Professor and Dean of Education, 1933—, Stanford University.

Address: Stanford University, California.

1928. MELBY, ERNEST OSCAR. B.A. '13, St. Olaf College; M.A. '26, University of Minnesota.

Major: Educational Administration. Minor: Educational Psychology.

Thesis: The Organization and Administration of Supervision in Cities Having a Population of 10,000 to 20,000. Published 1929, Bloomington, Illinois; published also in *Northwestern University Contributions to Education*, School of Education Series.

Major Adviser: Professor L. J. Brueckner.

Positions Held: Assistant Professor, 1928-1929, Associate Professor, 1929-1930, Professor, 1930—, Dean, School of Education, 1934—, Northwestern University.

Address: 2412 Central Park Ave., Evanston, Illinois.

1928. PEIK, WESLEY E. B.A. '11, University of Minnesota; M.A. '24, Columbia University.  
Major: Education. Minor: Educational Psychology.  
Thesis: An Analysis and Evaluation of the Prescribed Course in Education for the University Teacher's Certificate in a Secondary School Subject. Published 1930, University of Minnesota Press.  
Major Adviser: Professor M. E. Haggerty.  
Positions Held: Professorial Lecturer, 1928-1929, Assistant Professor of Education, 1929-1931, Associate Professor, 1931-1934, Professor, 1934—, Acting Dean, 1937-1938, Dean, 1938—, College of Education, University of Minnesota.  
Honors: Principal Specialist in Curriculum Research for the National Survey of the Education of Teachers, 1931-1933; on survey staff for the University of Chicago Curriculum Survey, 1931; American Educational Research Association, 1929.  
Address: 1620 East River Terrace, Minneapolis, Minnesota.
1928. SMITH, DORA VALENTINE. B.A. '16, M.A. '19, University of Minnesota.  
Major: Education (Theory and Practice of Teaching). Minor: English.  
Thesis: A Study of the Effect of the Size of the Class upon the Efficiency of Instruction in Ninth-Grade English. Published 1931, University of Minnesota Press.  
Major Adviser: Professor Earl Hudelson.  
Positions Held: Assistant Professor of Education, 1928-1932, Associate Professor, 1932-1937, Professor of Education, 1937—, University of Minnesota.  
Honors: Phi Beta Kappa; Pi Lambda Theta; Consulting Specialist in English to the National Survey of Secondary Education by the Bureau of Education, Washington, D. C., and to the Regents' Inquiry into the Character and Cost of Education in New York; President, National Council of Teachers of English, 1935-1936.  
Address: 611 Fifth Street, S. E., Minneapolis, Minnesota.
1928. SORENSON, HERBERT. B.S. '24, M.A. '25, University of Minnesota.  
Major: Educational Psychology. Minor: Educational Administration.  
Thesis: Evaluation of Some Methods and Factors for the Control of Junior High School Pupils. Not published.  
Major Adviser: Professor M. E. Haggerty.  
Positions Held: Assistant Professor of Educational Psychology, 1928-1937, Associate Professor, 1937-1938, University of Minnesota; President, 1938—, Duluth State Teachers College.  
Honors: Sigma Xi.  
Address: Duluth State Teachers College, Duluth, Minnesota.
1928. WISEMAN, CLINTON RAYMOND. B.S. '15, M.S. '23, University of Wisconsin.  
Major: Agricultural Education. Minor: Education.  
Thesis: Factors of Establishment and Discontinuance of Departments of Agriculture in Public High Schools of Minnesota. Published 1930, Minneapolis.  
Major Adviser: Professor A. V. Storm.  
Positions Held: Associate Professor of Education in charge of Agricultural Education, 1928-1933, Head of Department of Education, 1933—, South Da-

- kota State College; Instructor in Education, summer, 1932, Montana State University.  
 Honors: Phi Delta Kappa.  
 Address: Department of Education, South Dakota State College, Brookings, South Dakota.
1929. ALM, OSCAR WILLIAM. B.A. '17, University of Nebraska; M.A. '18, Columbia University.  
 Major: Educational Psychology. Minor: Educational Administration.  
 Thesis: The Effect of Habit-Interference upon Performance in Maze Learning. Published November-December 1931 in Genetic Psychology Monograph Series.  
 Major Advisers: Professors J. S. Rockwell and M. E. Haggerty.  
 Positions Held: Associate Professor of Psychology, 1929-1932, Professor, 1932—, Kansas State College.  
 Honors: Phi Beta Kappa; Sigma Xi.  
 Address: Kansas State College, Manhattan, Kansas.
1929. ATKINS, RUTH ELLEN. B.A. '07, Hamline University; M.A. '25, University of Minnesota.  
 Major: Educational Psychology. Minor: Education.  
 Thesis: The Object-Fitting Test: A Strictly Non-Language Intelligence Test for Pre-School Children. Published 1931, University of Minnesota Press, Institute of Child Welfare Monograph Series, no. 5.  
 Major Adviser: Professor W. S. Miller.  
 Positions Held: Instructor in Technique of Teaching (part time), 1931—, State Teachers College, St. Cloud, Minnesota.  
 Address: 723 Third Ave. So., St. Cloud, Minnesota.
1929. BRADLEY, RAYMOND J. B.S. '12, Cornell College.  
 Major: Educational Administration. Minor: Educational Psychology.  
 Thesis: A Study of Programs of Study in Use in American High Schools. Published in *Summaries of Ph.D. Theses*, Vol. 1, 1939, University of Minnesota.  
 Major Adviser: Professor L. V. Koos.  
 Positions Held: Professor of Education and Psychology and Head of Department, 1929-1932, Parsons College, Fairfield, Iowa; Professor of Education and Head, Department of Psychology, 1932—, Macalester College.  
 Honors: Phi Kappa Phi.  
 Address: Macalester College, St. Paul, Minnesota.
1929. EURICH, ALVIN CHRISTIAN. B.A. '24, Northwestern College; B.A. '25, University of Michigan; M.A. '26, University of Maine.  
 Major: Educational Psychology. Minor: Psychology.  
 Thesis: An Experimental Study of the Reading Abilities and Disabilities of College Students. Published 1931, University of Minnesota Press.  
 Major Adviser: Professor M. E. Haggerty.  
 Positions Held: Assistant Professor of Educational Psychology and Assistant Director of Educational Research, 1929-1935, Assistant to the President, Associate Professor, 1935-1936, Assistant Dean of the College of Education, Professor of Educational Psychology, 1936-1937, University of Minnesota;

Professor of Education, 1937-1938, Northwestern University; Professor of Education, 1938—, Stanford University; Visiting Professor, summer session, 1931, Michigan, 1933, West Virginia, 1934, Stanford; 1936, Northwestern. Honors: Sigma Xi.  
Address: Stanford University, California.

1929. GRAHAM, HUGH. B.A. '07, Royal University of Ireland; M.A. '19, University of Minnesota.  
Major: Education. Minor: History of Education.  
Thesis: The History of Secondary Education in Minnesota. Not published.  
Major Adviser: Professor A. C. Krey.  
Positions Held: Assistant Professor of Education, Supervisor of Student Teaching, 1929-1930, St. Louis University; Professor of Education, Director of Department, Director of Teacher Training, 1930—, John Carroll University.  
Address: John Carroll University, Cleveland, Ohio.

1929. NOLL, VICTOR HERBERT. B.S. '22, Pennsylvania State College; M.A. '27, University of Minnesota.  
Major: Educational Psychology. Minor: Education (Theory and Practice of Teaching).  
Thesis: The Influence of Individual Laboratory Work and Other Factors upon Achievement in General Inorganic Chemistry. Published 1930, University of Minnesota Press.  
Major Adviser: Professor W. S. Miller.  
Positions Held: Instructor in Educational Psychology, 1929-1930, University of Minnesota; Specialist in School Organization, National Survey of Secondary Education, 1930-1932, United States Office of Education, Washington, D. C.; Lecturer in Education, summer 1931, George Washington University; Research Associate, 1932-1934, Institute of School Experimentation; Professor of Education and Psychology, Head of Department, 1934—, Rhode Island State College; Visiting Professor of Education, summer sessions, 1934-1938, West Virginia University.  
Honors: Fellow, A.A.A.S.; American Men of Science; Leaders in Education.  
Address: Rhode Island State College, Kingston, Rhode Island.

1929. STOKES, CLAUDE NEWTON. B.A. '13, McKendrie College; M.A. '14, University of Illinois.  
Major: Education (Theory and Practice of Teaching). Minor: Educational Psychology.  
Thesis: A Comparison of a Certain Individual Method and a Certain Group Method of Instruction in Ninth-Grade Mathematics. Published 1931, Henry Holt and Company, New York.  
Major Adviser: Professor Earl Hudelson.  
Positions Held: Assistant Professor of Education, 1929-1932, University of Minnesota; Associate Professor of Mathematics, 1932—, Temple University.  
Address: 6416 N. Camae St., Philadelphia, Pennsylvania.

1929. TURNEY, AUSTIN HENRY. B.S. '24, M.A. '25, University of Minnesota.  
Major: Educational Psychology. Minor: Psychology.

Thesis: Factors Other than Intelligence That Affect Success in High School as Indicated by Teachers' Marks. Published 1930, University of Minnesota Press.

Major Adviser: Professor W. S. Miller.

Positions Held: Assistant Professor of Education, 1928-1933, Associate Professor, 1933—, University of Kansas.

Address: School of Education, University of Kansas, Lawrence, Kansas.

1930. JOHNSON, BYRON LAMAR. B.S. '25, M.A. '28, University of Minnesota.

Major: Educational Administration. Minor: Educational Psychology.

Thesis: An Investigation of Reading Interests and Habits at Various Age, Educational, and Occupational Levels. Published in *School Review*, 40:33, 257, 1932.

Major Adviser: Professor Earl Hudelson.

Positions Held: Instructor, 1930, State Teachers College, Montclair, New Jersey; Specialist in Secondary Education, National Survey of Secondary Education, 1931, United States Office of Education, Washington, D. C.; Librarian and Dean of Instruction, 1931—, Stephens College; research, 1931-1932, at the University of Michigan (on leave of absence from Stephens College).

Address: Stephens College, Columbia, Missouri.

1930. OVERN, ALFRED VICTOR. B.A. '15, M.S. '26, University of Minnesota.

Major: Educational Administration. Minor: Educational Psychology.

Thesis: Indices of Supply and Demand of Teachers in Minnesota. Published 1932, University of Minnesota Press.

Major Adviser: Professor F. Engelhardt.

Positions Held: Professor of Education, 1930—, University of North Dakota, Visiting Professor of Education, summer session, 1938, Duke University.

Honors: Chairman of the State Science Committee, North Dakota; Secretary of Higher Education Section, N.D.E.A., 1931.

Address: Box 294, University Station, North Dakota.

1930. UMSTATTD, JAMES GREENLEAF. B.S. '18, M.A. '24, University of Missouri.

Major: Educational Administration. Minor: Educational Psychology.

Thesis: Student Self-Support at the College Level. Published 1932, University of Minnesota Press.

Major Adviser: Professor F. Engelhardt.

Positions Held: Assistant Professor of Education, 1930-1936, University of Minnesota; Associate Professor of Education, 1936-1938, Wayne University; Supervisor in Secondary Education, 1936-1938, Detroit Public Schools; Professor of Secondary Education, 1938—, University of Texas.

Address: University of Texas, Austin, Texas.

1931. FLOYD, OLIVER REED. B.A. '25, M.A. '28, University of Pittsburgh.

Major: Educational Administration. Minor: Educational Psychology.

Thesis: An Evaluation of the Preparation, Selection, and Certification of



- Junior High School Teachers. Published as United States Education Bulletin No. 20.  
 Major Adviser: Professor F. Engelhardt.  
 Positions Held: Assistant Professor of Education, 1930-1937, University of Minnesota, Principal, 1930-1937, University of Minnesota High School; Professor, 1937—, University of Wisconsin.  
 Address: University of Wisconsin, Madison, Wisconsin.
1931. JACKSON, LYMAN EDSON. B.S. '21, M.S. '25, University of Wisconsin.  
 Major: Agricultural Education. Minor: Education.  
 Thesis: An Investigation of the Factors Relating to the Higher Education of Men Students Enrolling in the University of Minnesota from Farms. Published 1932. New Concord, Ohio.  
 Major Adviser: Professor A. V. Storm.  
 Positions Held: Assistant Professor of Agricultural Education, 1931-1935, Junior Dean, College of Agriculture, 1936—, Ohio State University; Specialist in Information, 1935-1936, U.S.D.A., Agriculture Adjustment Administration.  
 Address: College of Agriculture, Ohio State University, Columbus, Ohio.
1931. KINNEY, LUCIEN BLAIR. B.S. '23, M.A. '25, University of Minnesota.  
 Major: Educational Psychology. Minor: Education.  
 Thesis: The Mathematical Requirements of Commercial Positions Open to High School Commercial Graduates. Published in *Journal of Business Education*, 1931.  
 Major Adviser: Professor M. J. Van Wagenen.  
 Positions Held: Instructor, Carnegie Research Fellow, 1931-1937, University of Minnesota; Professor, 1937—, Oswego State Normal School.  
 Address: Oswego State Normal School, Oswego, New York.
1931. NILSON, KENNETH. B.A. '13, University of Minnesota; M.A. '20, Columbia University.  
 Major: Educational Administration. Minor: Educational Psychology.  
 Thesis: Physically Disabled Persons in Minnesota, and an Analysis of Certain Factors in Their Education and Vocational Rehabilitation. Published in *Hospital Social Service*, 25:468, 1932; *Journal of Educational Research*, March, 1933; *Educational Administration and Supervision*, January, 1933; *Elementary School Journal*, 33:122, 1932; *Rehabilitation Review*, Vol. 6, no. 6, 1932.  
 Major Adviser: Professor F. Engelhardt.  
 Positions Held: Assistant Director of Re-Education, Director of Special Classes for Defectives, 1927-1935, State Department of Education, St. Paul, Minnesota; Case Worker, 1935-1936, Ramsey County Welfare Board, St. Paul; Supervisor of Educational Research, 1936—, State Planning Board, Aberdeen, South Dakota.  
 Address: Canby, Minnesota.
1931. OTTO, HENRY JOHN. B.A. '23, Carleton College; M.A. '27, University of Minnesota.  
 Major: Educational Administration. Minor: Educational Psychology.

- Thesis: *Current Practices in the Organization of Elementary Schools*. Published by Department of Education, Northwestern University.  
 Major Adviser: Professor F. Engelhardt.  
 Positions Held: Assistant Professor, 1930-1934, Northwestern University; Consultant in Education, W. K. Kellogg Foundation, and Lecturer in Education, 1934—, University of Michigan and Northwestern University.  
 Address: 55 E. Merwood Drive, Battle Creek, Michigan.
1931. RULON, PHILLIP JUSTIN. B.A. '26, M.A. '28, Stanford University.  
 Major: Educational Psychology. Minor: Mathematics.  
 Thesis: *A Statistical Study of the Strong Vocational Interest Blank*. Not published.  
 Major Adviser: Professor M. E. Haggerty.  
 Positions Held: Instructor, 1930-1935, Assistant Professor, 1935—, Harvard Graduate School of Education, Cambridge, Massachusetts.  
 Address: 409 Pleasant St., Belmont, Massachusetts.
1932. BLAZIER, FLORENCE EMMA. Ph.B. '18, University of Chicago; M.A. '24, University of Indiana.  
 Major: Education. Minor: Home Economics.  
 Thesis: *Home Economics Education Courses in the Seventy-two Institutions Approved for Teacher Training by the Federal Board for Vocational Education*. Published as U. S. Vocational Education Bulletin No. 287.  
 Major Advisers: Professors Clara M. Brown and Harl R. Douglass.  
 Positions Held: Professor of Home Economics Education, 1924—, Oregon State College.  
 Honors: Phi Kappa Phi.  
 Address: 151 N. 13th St., Corvallis, Oregon.
1932. FINCH, FRANK HERSCHEL. B.S. '28, University of Missouri; M.A. '30, Washington University.  
 Major: Educational Psychology. Minor: Education.  
 Thesis: *A Study of the Relation of Age Interval to the Degree of Resemblance of Siblings in Intelligence*. Published in *Journal of Genetic Psychology*, 43:389-404, 1933.  
 Major Adviser: Professor W. S. Miller.  
 Positions Held: Instructor in Education, 1932-1935, University of Minnesota; Director, Vocational Rehabilitation and Special Education, 1935—, State Department of Education.  
 Address: 163 Orlin Avenue S. E., Minneapolis, Minnesota.
1932. TAYLOR, LESLIE OWEN. B.A. '17, West Virginia University; M.A. '22, University of Chicago.  
 Major: Educational Administration. Minor: Educational Psychology.  
 Thesis: *Possibilities and Limitations of the Six-Year High School as a Type of Secondary School Organization for the Small Community*. Not published.  
 Major Adviser: Professor Harl Douglass.  
 Positions Held: Assistant Professor of Education, 1932-1935, Associate Professor of Education and Head of Department, 1935—, Municipal University of Omaha.  
 Address: Municipal University of Omaha, Omaha, Nebraska.

1933. FRYKLUND, VERNE CHARLES. B.A. '23, Colorado Teachers College. M.A. '27, University of Missouri.  
Major: Education. Minor: Educational Psychology.  
Thesis: *The Selection and Training of Modern Factory Workers*. Published by University of Minnesota Press, April 1934.  
Major Adviser: Professor H. J. Smith.  
Positions Held: Instructor, 1930-1934, Assistant Professor of Industrial Education, 1935-1937, University of Minnesota; Associate Professor of Industrial Education, 1937—, Wayne University.  
Honors: Laureate, Epsilon Pi Tau.  
Address: Wayne University, Detroit, Michigan.
1933. SELKE, ERICH CHRISTIAN. B.A. '16, M.A. '22, University of Minnesota.  
Major: Educational Administration. Minor: Educational Psychology.  
Thesis: *An Analysis and Evaluation of the Courses in Elementary School Supervision Offered in Colleges, Normal Schools and Universities*. Published by Burgess Publishing Co., Minneapolis, 1933.  
Major Adviser: Professor L. J. Brueckner.  
Positions Held: Professor of Education, 1936—, University of North Dakota; Director of Teacher Training, State Teachers College, Mayville, North Dakota.  
Address: 1710 University Avenue, Grand Forks, North Dakota.
1934. HOOD, GRACE GORDON. B.S. '12, M.A. '13, Columbia University.  
Major: Education. Minor: Home Economics.  
Thesis: *A Study of the Content of Prerequisite Chemistry Courses in Relation to the Content of Undergraduate Courses in Home Economics*. Published by Burgess Publishing Co., Minneapolis, 1934.  
Major Advisers: Professors H. R. Douglass and Clara M. Brown.  
Positions Held: Itinerant Teacher Trainer for Home Economics for Adults, 1934-1935, University of Minnesota; Director of Home Economics, 1935—, University of Manitoba; Professor of Home Economics Education, summer, 1938, University of Colorado.  
Honors: Pi Lambda Theta; Omicron Phi Upsilon.  
Address: University of Manitoba, Winnipeg, Manitoba.
1935. BENT, RUDYARD KIPLING. B.A. '28, M.A. '30, West Virginia University.  
Major: Educational Administration. Minor: Educational Psychology.  
Thesis: *Relationships between Qualifying Examinations, Various Other Factors, and Student Teaching Performance*. Published in *School and Society*, 45:726-727, 1937; *Journal of Experimental Education*, March, 1937; *Bulletin of American Association of Collegiate Registrars*, April, 1937.  
Major Adviser: Professor Harl R. Douglass.  
Positions Held: Assistant Professor of Education, 1935—, University of Arkansas.  
Honors: Phi Beta Kappa; Kappa Delta Pi.  
Address: 410 Washington Ave., Fayetteville, Arkansas.

1935. EDWARDS, MARCIA. B.A. '25, College of Puget Sound; M.A. '31, University of Minnesota.  
 Major: Educational Psychology. Minor: Education.  
 Thesis: The Accreditation of Colleges on the Basis of the Success of Their Graduates in the Graduate Schools. Published in *Summaries of Ph.D. Theses*, Vol. 1, 1939, University of Minnesota.  
 Major Adviser: Professor M. E. Haggerty.  
 Positions Held: Assistant Professor, 1935—, University of Minnesota.  
 Address: 206 Burton Hall, University of Minnesota, Minneapolis, Minnesota.
1935. GRAYBEAL, SUSAN ELIZABETH. Ph.B. '28, University of Chicago; M.A. '32, University of Minnesota.  
 Major: Education. Minor: Educational Administration.  
 Thesis: Measurement in Physical Education for Women, University of Minnesota. Published by University of Minnesota Press, Minneapolis, 1937.  
 Major Adviser: Professor Harl Douglass.  
 Positions Held: Head of Department of Physical Education, 1933—, Duluth State Teachers College.  
 Honors: Pi Lambda Theta; Delta Kappa Gamma.  
 Address: State Teachers College, Duluth, Minnesota.
1935. HARMON, HENRY GADD. B.A. '24, Cotner College; M.A. '25, Transylvania College.  
 Major: Education. Minor: Educational Psychology.  
 Thesis: A Technique for the Analysis of Course Content and Articulation Applied to Certain Courses in Public School Administration and Supervision at the University of Minnesota. Not published.  
 Major Advisers: Professors M. E. Haggerty and W. E. Peik.  
 Positions Held: President, 1934—, William Woods College.  
 Address: Fulton, Missouri.
1935. KRONENBERG, HENRY HAROLD. B.A. '26, Illinois College.  
 Major: Education. Minor: Educational Psychology.  
 Thesis: The Validity of Curriculum Requirements for Admission to the General College of the University of Minnesota. Published in *Minnesota Studies in Articulation*, 1937.  
 Major Adviser: Professor C. W. Boardman.  
 Positions Held: Assistant Professor in Education, 1934—, University of Arkansas.  
 Honors: Kappa Delta Pi; Phi Delta Kappa; Smith Prize in Mathematics.  
 Address: College of Education, University of Arkansas, Fayetteville, Arkansas.
1935. LUKER, LEONARD J. B.S. '27, Eastern State Teachers College; M.A. '31, University of South Dakota.  
 Major: Educational Administration. Minor: Educational Psychology.  
 Thesis: The Relation of Certain Factors to Success in the Law School at the University of Minnesota. Published in *School and Society*, 45:383-384, 1937; *Journal of Educational Research*, 31:283-288, 1937.  
 Major Adviser: Professor H. R. Douglass.

- Positions Held: Instructor, 1935-1936, Assistant Professor of Education, 1936-1937, University of Toledo; Assistant Professor of Education, 1937—, Michigan State College.  
Address: Department of Education, Michigan State College, East Lansing, Michigan.
1935. NORTHBY, ARWOOD STANLEY. B.S. '24, M.A. '30, University of Minnesota.  
Major: Education. Minor: Educational Psychology.  
Thesis: A Study of the Entrance Requirements to the College of Engineering. Published in *Minnesota Studies in Articulation*, University of Minnesota Press, 1937.  
Major Adviser: Professor C. W. Boardman.  
Positions Held: Instructor in Education and Assistant to the Dean, 1935-1936, University of Minnesota; Assistant Professor of Education, 1936—, University of Buffalo.  
Address: 601 Kenmore Ave., Kenmore, New York.
1936. BOARDMAN, ANNE CAWLEY. B.A. '21, West Virginia University. M.A. '30, Ohio State University.  
Major: Education. Minor: English.  
Thesis: A Study of the Proficiency of College Freshmen and Graduating High School Seniors in Certain Elements of English Composition. Published in *Summaries of Ph.D. Theses*, Vol. 1, 1939, University of Minnesota.  
Major Adviser: Professor Dora V. Smith.  
Honors: Phi Beta Kappa; Pi Lambda Theta; Mortar Board; Delta Sigma Rho.  
Married Name: Mrs. Charles W. Boardman.  
Address: 4500 Upton Avenue South, Minneapolis, Minnesota.
1936. DUEL, HENRY WARD. B.A. '10, Ripon College; M.A. '27, University of Minnesota.  
Major: Educational Psychology. Minor: Educational Administration.  
Thesis: Measurement of Some of the Outcomes of Laboratory Work in College Physics. Published in *Bulletin of the American Association of Collegiate Registrars*, pp. 202-206, 1936; and in *Summaries of Ph.D. Theses*, Vol. 1, 1939, University of Minnesota.  
Major Adviser: Professor W. S. Miller.  
Positions Held: School Psychologist, 1936—, West High School, Minneapolis.  
Address: 4247 Alden Drive, Minneapolis, Minnesota.
1936. LOOP, OMER LESLIE. B.A. '14, Indiana University; M.A. '27, University of Wisconsin.  
Major: Education. Minor: Political Science.  
Thesis: Financing Teacher Education in Wisconsin. Published in *Summaries of Ph.D. Theses*, Vol. 1, 1939, University of Minnesota.  
Major Adviser: Professor F. Engelhardt.  
Positions Held: Teacher, 1919—, Superior State Teachers College.  
Address: State Teachers College, Superior, Wisconsin.

1936. LOVEGREN, LEVI ALTON. B.S. '10, University of Washington.  
 Major: Educational Psychology. Minor: Education.  
 Thesis: The Relative Difficulty of Various Academic Fields for Students Whose Scores Are in the Lowest Decile on the Miller Analogies Test, with Some Notes on Small Sample Analysis. Not published.  
 Major Adviser: Professor W. S. Miller.  
 Positions Held: Instructor, 1936-1937, Assistant, 1937, Instructor, 1937—, University of Minnesota.  
 Honors: Psi Chi.  
 Address: 1095 13th Ave. S. E., Minneapolis, Minnesota.
1936. LUND, SVEN ELIZUR TORSTEN. B.A. '25, Gustavus Adolphus College; M.A. '30, University of Minnesota.  
 Major: Educational Administration. Minor: Educational Psychology.  
 Thesis: The Preparation in Subject-Matter of Science Teachers in Minnesota High Schools, 1934-1935. Published in *Summaries of Ph.D. Theses*, Vol. 1, 1939, University of Minnesota.  
 Major Adviser: Professor H. R. Douglass.  
 Positions Held: Instructor, 1936 summer, University of Maryland; Associate Professor of Education, 1936—, University of Tennessee.  
 Address: University of Tennessee, Knoxville, Tennessee.
1936. PATTERSON, DALE O. B.A. '24, M.A. '25, Colorado State Teachers College.  
 Major: Education. Minor: Mathematics.  
 Thesis: The Relationship between Certain Factors and Scholastic Success in the College of Education, University of Minnesota. Not published.  
 Major Adviser: Professor H. R. Douglass.  
 Positions Held: Instructor, College of Education, 1936-1938, University of Minnesota; Instructor, 1938—, University of South Dakota.  
 Address: University of South Dakota, Vermillion, South Dakota.
1936. SODERQUIST, HAROLD OLIVER. B.A. '24, M.A. '32, University of Minnesota.  
 Major: Educational Administration. Minor: Educational Psychology.  
 Thesis: Evaluating Social Traits of High School Pupils by the Method of Rating by Associates. Published in *Journal of Educational Research*, September, 1937.  
 Major Adviser: Professor L. J. Brueckner.  
 Positions Held: Assistant Professor of Education, 1937—, Wayne University.  
 Honors: Phi Beta Kappa; Phi Delta Kappa.  
 Address: Wayne University, Detroit, Michigan.
1937. CARSTATER, EUGENE DEBS. B.A. '26, M.A. '30, Bucknell University.  
 Major: Education. Minor: Educational Psychology.  
 Thesis: The Contribution of Social-Concept Materials in a Comprehensive Examination in the Social Sciences at the College Level. Not published.  
 Major Adviser: Professor M. E. Haggerty.  
 Positions Held: Counselor, 1935—, Division of Vocational Rehabilitation, State Department of Education.  
 Address: 715 Fifth St. S. E., Minneapolis, Minnesota.

1937. FAULKNER, RAY NELSON. B.A. '27, University of Michigan; M.L.A. '29, Harvard University.  
 Major: Educational Psychology. Minor: Architecture (Landscape).  
 Thesis: An Experimental Investigation Designed to Develop Tests to Measure Art Understanding and Appreciation. Published in *Summaries of Ph.D. Theses*, Vol. 1, 1939. University of Minnesota.  
 Major Adviser: Professor M. E. Haggerty.  
 Positions Held: Instructor, 1932—, University of Minnesota.  
 Honors: Delta Phi Delta; Phi Delta Kappa.  
 Address: University of Minnesota, Minneapolis, Minnesota.
1937. MERRILL, RUTH ATHERTON. B.A. *cum laude* '15, Radcliffe College. M.Ed. '25, Harvard University.  
 Major: Educational Psychology. Minor: Education.  
 Thesis: An Evaluation of Criteria for the Selection of Students in the School of Nursing of the University of Minnesota. Published in *Summaries of Ph.D. Theses*, Vol. 1, 1939, University of Minnesota.  
 Major Advisers: Professors M. E. Haggerty and Harl Douglass.  
 Positions Held: Director of Cutter Union, Social Adviser for Women, Chairman of Dormitories, Assistant Professor, 1933—, University of Rochester, Rochester, New York.  
 Address: 73 Cherry Street, Gardner, Massachusetts.
1937. NEMZEK, CLAUDE LAWRENCE. B.E. '28, Moorhead State Teachers College; M.A. '29, University of Iowa.  
 Major: Educational Psychology. Minor: Educational Administration.  
 Thesis: The Value of Intelligence Quotients, Personality, and Other Factors for Differential Prediction of Scholastic Success in High School. Published in *Summaries of Ph.D. Theses*, Vol. 1, 1939, University of Minnesota.  
 Major Adviser: Professor W. S. Miller.  
 Positions Held: Head of Education Department, 1935—, University of Detroit.  
 Address: 15339 Normandy, Detroit, Michigan.
1937. NYLIN, VICTOR EMANUEL. B.S. '18, M.S. '25, University of Minnesota.  
 Major: Agricultural Education. Minor: Education.  
 Thesis: An Evaluation of Certain Factors That Influence the Occupational Choices of Rural Boys. Published in *Summaries of Ph.D. Theses*, Vol. 1, 1939, University of Minnesota.  
 Major Adviser: Professor A. M. Field.  
 Positions Held: Instructor in Agricultural Education, 1922-1938, University of Minnesota; Head of Department of Horticulture and Animal Husbandry, 1938—, State Teachers College, Platteville, Wisconsin.  
 Address: Platteville, Wisconsin.
1937. PACE, CHARLES ROBERT. B.A. '33, De Pauw University; M.A. '35, University of Minnesota.  
 Major: Educational Psychology. Minor: Psychology.  
 Thesis: The Relation of Liberal-Conservative Attitude to Knowledge of Current Affairs. Not published.  
 Major Adviser: Professor A. C. Eurich.  
 Positions Held: Instructor, 1937—, General College, University of Minnesota.

- Honors: Phi Beta Kappa; Phi Delta Kappa; American Psychological Association; Psychometric Society.  
Address: 214 Oak Grove St., Minneapolis, Minnesota.
1937. RYANS, DAVID GARRIOTT. B.A. '32, De Pauw University; M.A. '33, University of Minnesota.  
Major: Educational Psychology. Minor: Psychology.  
Thesis: An Experimental Investigation of Persistent Behavior. Not published.  
Major Adviser: Professor W. S. Miller.  
Positions Held: Dean of Faculty, 1937—, William Woods College.  
Honors: Phi Beta Kappa.  
Address: 835 Nichols Street, Fulton, Missouri.
1938. HOFF, ARTHUR GERHARD. B.E. '28, Superior State Teachers College; M.A. '30, State University of Iowa.  
Major: Educational Administration. Minor: Educational Psychology.  
Thesis: A Critical Study of the Adequacy and Effectiveness of Five Teachers' Retirement Systems Operating in the States of Minnesota and Wisconsin.  
Published in *Educational Administration and Supervision*, September, 1938.  
Major Adviser: Professor M. G. Neale.  
Positions Held: Teacher, 1937—, La Crosse State Teachers College.  
Address: La Crosse State Teachers College, La Crosse, Wisconsin.
1938. MAASKE, ROBEN JOHNE. B.A. '27, University of Nebraska; M.A. '36, University of Oregon.  
Major: Educational Administration. Minor: Educational Psychology.  
Thesis: Factors in the Prognosis of Scholastic Success in the University of Minnesota School of Business Administration. Not published.  
Major Adviser: Professor H. R. Douglass.  
Positions Held: Professor of Education, 1937—, University of North Carolina.  
Honors: Phi Delta Kappa; Kappa Delta Pi.  
Address: Pittsboro Road, Chapel Hill, North Carolina.
1938. McCULLOUGH, CONSTANCE MARY. B.A. '32, Vassar College; M.A. '33, Butler University.  
Major: Education. Minors: Mathematics and Biometry.  
Thesis: Prediction of Success in the School of Dentistry at the University of Minnesota by Means of Tests and Certain Other Factors. Not published.  
Major Adviser: Professor H. R. Douglass.  
Positions Held: Assistant, 1937-1938, Co-operative Test Service, New York City; Research Assistant on Reading, 1938—, Hiram College.  
Address: Hiram College, Hiram, Ohio.

## PHILOSOPHY

1892. BREWSTER, HENRY WEBB. B.A. '87, University of Minnesota.  
Major: Philosophy. Minor: Psychology.  
Thesis: Sensation and Intellection, Their Character and Their Function in the Cognition of the Real and the Ideal. Published 1893, University of Minnesota.  
Positions Held: Loan and real estate business, Tampa, Florida.  
Deceased, 1923.



1894. MERRILL, JOHN ERNEST, B.A. '91, University of Minnesota.  
 Major: Ethics.  
 Thesis: Ideals and Institutions, Their Parallel Development. Published, 1894, Hartford Seminary Press, Hartford, Connecticut.  
 Major Adviser: Professor W. Hough.  
 Positions Held: John S. Welles Fellowship from Hartford Theological Seminary, 1896-1897 in Berlin, 1897-1898 in Halle; Director, 1898-1905, Acting President, 1905-1906, President, 1906-1936, Central Turkey College, Aintab, Turkey (now named Aleppo College and located at Aleppo, Syria).  
 Address: 2117 Foster Avenue, Brooklyn, New York.
1898. PEITHMAN, ERNEST CHRISTIAN. Bonn University.  
 Major: Philosophy. Minors: Pedagogy and French.  
 Thesis: Investigations on Kant's Conception of Experience. Published in *Archiv für Geschichte der Philosophie*, Berlin, Germany.  
 Address: Webster, South Dakota.
1899. MOTT, ALICE J. M.A., University of Iowa.  
 Major: Philosophy. Minors: Anthropology and French.  
 Thesis: Ninth Year of a Deaf Child's Life. Published 1900, Faribault, Minnesota.  
 Positions Held: Principal, University of Minnesota High School.  
 Deceased, 1924.

## PSYCHOLOGY

1893. MAGNUSSON, PETER MAGNUS. B.A. '90, Gustavus Adolphus College.  
 Major: Psychology.  
 Thesis: Some Applications of Logical and Psychological Principles of Grammar. Published 1893, University of Minnesota.  
 Major Adviser: Professor W. S. Hough.  
 Positions Held: Professor of Psychology and Education, 1893-1894, North Dakota State Normal School; Professor of Psychology and Sociology, 1894-1905, 1907-1919, Minnesota State Teachers College; President, 1905-1906, Minnesota College, Minneapolis.  
 Degrees Received since the Ph.D.: LL.B., 1906, LL.M., 1910, University of Minnesota.  
 Address: Garden Grove, California.
1918. DODSON, JOHN DILLINGHAM. B.A. '01, M.A. '08, Harvard University.  
 Major: Psychology. Minor: Education.  
 Thesis: An Experimental Study of the Relative Values of Reward and Punishment in Habit Formation. Published in *Psychobiology*, Vol. 1, no. 3, November 1917.  
 Major Adviser: Professor K. S. Lashley.  
 Positions Held: Head of Department of Psychology, College of Commerce, 1932—, Bowling Green Business University, Bowling Green, Kentucky.  
 Address: 943 Covington Avenue, Bowling Green, Kentucky.

1919. LOWELL, FRANCES ERMA. B.A. '15, M.A. '17, University of Minnesota.

Major: Psychology. Minor: Education.

Thesis: A Group Intelligence Scale for Primary Grades. Published in *Journal of Applied Psychology*, Vol. 3, 215-247 (1919).

Major Adviser: Professor H. Woodrow.

Positions Held: Instructor, 1919-1920, University of Minnesota; Director of Experiment in Placement of School Children According to Mental Age, 1920-1921, Board of Education, Rochester, New York; Head of Department of Psychology, 1921-1922, Indianapolis Normal School; Associate Professor of Psychology, 1922-1925, De Pauw University, Greencastle, Indiana; Clinical Psychologist, 1925—, Board of Education Psychological Clinic, Cleveland, Ohio.

Honors: Pi Gamma Mu; Fellow of the A.A.A.S.

Address: 9732 Logan Ct., Cleveland, Ohio.

1921. FILTER, RAYMOND OTTO. B.A. '14, Baldwin-Wallace College; M.A. '16, University of Wisconsin.

Major: Psychology. Minor: Education.

Thesis: An Experimental Study of Character Traits. Published in *Journal of Applied Psychology*, Vol. 5, December 1921.

Major Adviser: Professor W. S. Foster.

Positions Held: Assistant Professor of Psychology, 1921-1922, University of Utah; Assistant Professor, 1922-1924, Extension Division, University of Minnesota; Assistant Professor, 1924-1931, University of Pittsburgh; Technical Assistant, 1937—, Division of Standards and Research, U. S. Employment Service.

Address: 3255 14th Ave. So., Minneapolis, Minnesota.

1921. STONE, CALVIN PERRY. B.A. '15, M.A. '16, University of Indiana.

Major: Psychology. Minor: Anatomy.

Thesis: An Experimental Analysis of the Congenital Sexual Behavior of the Male Albino Rat. Published in *Journal of Comparative Psychology*, Vol. 2, no. 2, 1922.

Major Adviser: Professor K. S. Ashley.

Positions Held: Instructor, 1921-1922, University of Minnesota; Assistant Professor, 1922-1925, Associate Professor, 1925-1928, Professor, 1928—, Acting Head, 1936-1937, Department of Psychology, Stanford University.

Honors: Fellow of the National Academy of Science; President, 1931-1932, Western Psychological Association; Vice-President, 1938-1939, Section I, A.A.A.S.

Address: Stanford University, California.

1922. KINCAID, MARGARET. B.A. '17, Vassar College; M.A. '18, Cornell University.

Major: Psychology. Minor: Experimental Psychology.

Thesis: An Experimental Study of Variability in Learning. Published in *Psychological Review*, 32:34-54, 1925.

Major Adviser: Professor R. M. Elliot.

Positions Held: Assistant Professor of Psychology, 1922-1926, Smith College; Assistant Professor, 1926-1927, Wittenberg College; Project Head, Social Sur-

- vey, 1936-1937, City Planning Commission, Philadelphia; Office Manager, 1937—, Pension Fund for the Blind, Philadelphia.  
 Honors: Phi Beta Kappa.  
 Married Name: Mrs. Homer G. Bishop.  
 Address: 6366 Sherman St., Germantown, Philadelphia, Pennsylvania.
1924. ARTHUR, MARY GRACE. B.S. '17, Hamline University; M.A. '19, University of Minnesota.  
 Major: Psychology. Minor: Educational Psychology.  
 Thesis: A Group Point Scale for the Measurement of Intelligence: A Further Study in Method. Published in *Journal of Applied Psychology*, 10:228-244, 1926, and in *Educational Psychology*, November 1923.  
 Major Adviser: Professor H. Woodrow.  
 Positions Held: Psychologist, 1924—, Child Guidance Clinic, 279 Rice Street, St. Paul, Minnesota.  
 Address: 35 North Grotto, St. Paul, Minnesota.
1924. LANDIS, CARNEY. B.A. '21, Ohio State University; M.A. '22, Dartmouth College.  
 Major: Psychology. Minor: Zoology.  
 Thesis: Studies of Emotional Reactions. Published in *Journal of Comparative Psychology*, Vol. 4, nos. 5 and 6, 1924.  
 Major Adviser: Professor K. S. Lashley.  
 Positions Held: National Research Council Fellow, 1924-1925, University of Minnesota; National Research Council Fellow, 1925-1926, University of London; Research Fellow, 1926, Mellon Institute of Industrial Research, Pittsburgh; Assistant Professor, 1926-1928, Associate Professor, 1928-1930, Wesleyan University; Research Psychologist, 1929—, Behavior Research Fund; Research Associate, 1930—, New York Psychiatric Institute; Lecturer, 1930-1931, Assistant Professor, 1931-1938, Associate Professor, 1938—, Columbia University.  
 Honors: Phi Beta Kappa; Sigma Xi; Starred man in *American Men of Science*, 1938.  
 Address: 722 W. 168th St., New York, N. Y.
1927. HUBBARD, RUTH MARILLA. B.A. '24, Oberlin College; M.A. '25, University of Minnesota.  
 Major: Psychology. Minor: Educational Psychology.  
 Thesis: Quantitative Studies of Mechanical Interests. Published in *Pedagogical Seminary and Journal of Genetic Psychology*, 35:229-254, 1928.  
 Major Adviser: Professor D. G. Paterson.  
 Positions Held: Rockefeller Fellowship for Study of Child Development, 1927-1928, Teachers College, Columbia University; Psychologist, 1928-1930, Child Guidance Clinic, Cleveland, Ohio; Psychologist, 1930-1934, Child Guidance Clinic, Strong Memorial Hospital, Rochester, New York; Psychologist, 1934-1935, Kalamazoo State Hospital, Kalamazoo, Michigan; Psychologist, 1935—, Consultation Bureau, Detroit, Michigan.  
 Honors: Phi Beta Kappa; Sigma Xi; Pi Lambda Theta.  
 Address: 125 Woodland Ave., Oberlin, Ohio.

1927. SHIRLEY, MARY MARGARET. B.A. '22, University of Indiana; M.A. '25, University of Minnesota.  
 Major: Psychology. Minor: Physiology.  
 Thesis: Factors Influencing the Activities of the Rat. Published in *Journal of Comparative Psychology* 8:23-38, 159-186, 187-195, and in *American Journal of Physiology*, 83:377-383.  
 Major Advisers: Professors K. S. Lashley and J. E. Anderson.  
 Positions Held: Instructor, 1927-1929, Instructor in Research, Institute of Child Welfare, 1927-1929, Assistant Professor, Institute of Child Welfare, 1929-1932, University of Minnesota; Professor, 1932-1933, Randolph-Macon Woman's College, Lynchburg, Virginia; Fellow, 1933-1934, National Council of Parent Education, New York; Research Fellow in Child Hygiene, 1934—, Harvard School of Public Health; Assistant Supervisor of Research, summer 1938, Smith College School of Social Work.  
 Honors: Phi Beta Kappa, Sigma Xi; Pi Gamma Mu.  
 Address: 316 Longwood, Boston, Massachusetts.
1928. FATERSON, HANNA FAY. B.A. '25, Smith College.  
 Major: Psychology. Minor: Educational Psychology.  
 Thesis: Interrelation between Some Temperamental Traits: Some Implications of the Normal Inferiority Complex. Published in *Journal of Social Psychology*, 1:463-493, 1930; 2:87-101, 1931.  
 Major Adviser: Professor D. G. Paterson.  
 Positions Held: Instructor in Psychology, 1928-1930, Assistant Professor, 1931—, Smith College.  
 Address: Smith College, Northampton, Massachusetts.
1928. JACOBSEN, CARLYLE FERDINAND. B.A. '24, University of Minnesota.  
 Major: Psychology. Minor: Anatomy.  
 Thesis: A Study of Cerebral Function in Learning. Published in *Journal of Comparative Neurology*, Vol. 52, no. 2, April 1931.  
 Major Adviser: Professor J. E. Anderson.  
 Positions Held: National Research Council Fellow in Biological Science, 1928-1929, Institute for Juvenile Research, 1929-1930, University of Chicago; Sterling Fellow in Psychology, 1930-1931, Research Assistant in Physiology, 1931-1933, Assistant Professor, 1933-1937, Yale School of Medicine; Fellow, General Education Board in Neurophysiology, 1936-1937, Harvard University; Assistant Professor of Psychology, 1937-1938, Cornell Medical College; Professor of Medical Psychology, 1938—, Washington University School of Medicine.  
 Honors: Sigma Xi.  
 Address: Washington University, St. Louis, Missouri.
1928. JACOBSEN, MARION MYER. B.A. '24, University of Minnesota.  
 Major: Psychology. Minor: Educational Psychology.  
 Thesis: The Quantitative Determination of Scholastic Interests among College Students. Not published.  
 Major Adviser: Professor D. G. Paterson.  
 Positions Held: Psychologist, 1928, Psychopathic Hospital, Chicago; Assistant Professor, 1929, West Virginia University; Instructor, summer 1929, Uni-

versity of Minnesota; Nursery School Psychologist and Nursery School Teacher, 1929-1930, University of Chicago; observation of behavior development of infant chimpanzee, 1930-1931, Anthropoid Experiment Station, Orange Park, Florida; Lecturer, 1931-1938, Y.M.C.A., and Y.W.C.A., New Haven, Connecticut; Clinical Psychologist, 1935-1938, Connecticut Mental Hygiene Society.

Address: Washington University, St. Louis, Missouri.

1928. McCARTHY, DOROTHEA AGNES. B.A. '25, University of Minnesota.

Major: Psychology. Minor: Educational Psychology.

Thesis: The Language Development of the Pre-School Child, with Special Reference to Sentence Formation. Published 1930, University of Minnesota Press, Institute of Child Welfare Monograph Series, no. 4.

Major Adviser: Professor J. E. Anderson.

Positions Held: National Research Council Fellowship for Study of Child Development, 1928-1929, University of Minnesota; Clinical Psychologist, 1929-1930, California Bureau of Juvenile Research; Child Psychologist at Nursery School, 1930-1931, Director of Nursery School, 1931-1932, Georgia State College of Agriculture, Athens, Georgia; Associate Professor of Educational Psychology, 1932—, Graduate School, Fordham University.

Honors: Pi Lambda Theta; Member, American Psychological Association; Fellow A.A.A.S.; Fellow, S.R.C.D.

Married Name: Mrs. Robert T. Rock, Jr.

Address: 111 Montclair Ave., Montclair, New Jersey.

1929. LANGLIE, THEOS ALVIN. B.A. '24, University of Minnesota.

Major: Psychology. Minor: Educational Psychology.

Thesis: The Use of the Graphic Rating Scale Method to Predict University Scholarship. Published in *Journal of Genetic Psychology*, 50:339-359, 401-426.

Major Adviser: Professor D. G. Paterson.

Positions Held: Assistant Professor, 1929-1936, Associate Professor of Psychology, 1936—, Wesleyan University.

Honors: Sigma Xi.

Address: Wesleyan Station, Middletown, Connecticut.

1929. McALLISTER, WALTER GINDER. B.A. '23, Gettysburg College.

Major: Psychology. Minor: Educational Psychology.

Thesis: A Further Study of the Delayed Reaction in the Albino Rat. Published 1932 as *Comparative Psychology Monographs*, Vol. 8, no. 2, Serial no. 37, January 1932.

Major Adviser: Professor W. T. Heron.

Positions Held: Instructor in Psychology, 1929-1930, Associate in Psychology, 1930—, University of Illinois.

Honors: Phi Beta Kappa.

Address: Department of Psychology, University of Illinois, Urbana, Illinois.

1929. SWARD, KEITH. B.A. '26, University of Minnesota.

Major: Psychology. Minor: Educational Psychology.

Thesis: An Experimental Study of Leadership. Published in part in *Journal of Social Psychology*, September 1931.

- Major Adviser: Professor C. Bird.  
 Positions Held: Social Science Research Council Fellow, 1929-1930, Stanford University; Assistant Professor, 1931-1932, Western Reserve University; Professor and Head of Department of Psychology, 1932—, Pennsylvania College for Women, Pittsburgh.  
 Address: Box 217, Renton, Pennsylvania.
1930. BURLINGAME, EDITH MILDRED. B.A. '25, M.A. '27, Stanford University.  
 Major: Psychology. Minor: Educational Psychology.  
 Thesis: A Comparison of Human and Rat Maze-Learning Ability. Published in *Summaries of Ph.D. Theses*, Vol. 1, 1939, University of Minnesota.  
 Major Adviser: Professor W. T. Heron.  
 Positions Held: Assistant Professor, 1930-1938, Florida State College for Women; Assistant Professor of Psychology, 1938—, San Diego State College.  
 Address: San Diego State College, San Diego, California.
1930. CARTER, HAROLD DEAN. B.A. '26, M.A. '27, University of Minnesota.  
 Major: Psychology. Minors: Mathematics and Biometry.  
 Thesis: Family Resemblances in Verbal and Numerical Abilities. Published in *Genetic Psychology Monographs*, Vol. 12, no. 1, 1932.  
 Major Adviser: Professor D. G. Paterson.  
 Positions Held: Social Science Research Council Fellow, 1930-1932, Instructor in Psychology, 1934-1935, Stanford University; Research Associate, Institute of Child Welfare, 1932-1938, Lecturer in Psychology, Department of Psychology and Education, 1937—, University of California.  
 Honors: Phi Beta Kappa; Sigma Xi; Phi Delta Kappa.  
 Address: Wadena, Minnesota. (Parents' home).
1930. GARVEY, CHESTER ROY. B.A. '25, M.A. '27, University of Kansas.  
 Major: Psychology. Minor: Anatomy.  
 Thesis: The Activity of Young Children during Sleep. Not published.  
 Major Adviser: Professor J. E. Anderson.  
 Positions Held: Research Instructor in Psychology, 1930-1931, National Research Council Fellow in Biological Sciences, 1931-1937, Yale University Institute of Human Relations, New Haven, Connecticut.  
 Honors: Sigma Xi.  
 Deceased, January 1937.
1930. LOUCKS, ROGER BROWN. B.S. '27, University of Minnesota.  
 Major: Psychology. Minor: Physiology.  
 Thesis: Efficacy of the Rat's Motor Cortex in Delayed Alternation. Published in *Journal of Comparative Neurology*, Vol. 53, no. 3, Supplement, December, 1931.  
 Major Adviser: Professor W. T. Heron.  
 Positions Held: National Research Council Fellow, 1930—, Phipps Clinic, Johns Hopkins Hospital; Instructor in Psychology, 1931—, University of Washington.  
 Address: University of Washington, Seattle, Washington.

1930. PAULSEN, GAIGE BRUE. B.A. '27, University of Minnesota.  
Major: Psychology. Minor: Medicine (Neurology).  
Thesis: The Measurement of Motor Control with Special Reference to Individual Variability, Reliability, and Practical Implications. Published in *Journal of Applied Psychology*, 19:29-42, 166-179, 1935.  
Major Adviser: Professor D. G. Paterson.  
Positions Held: Assistant Professor, 1930—, Ohio State University, Athens, Ohio.  
Address: Ohio University, Athens, Ohio.
1930. SCHELLENBERG, PETER EDIGER. B.A. '23, Tabor College; M.A. '26, University of Kansas.  
Major: Psychology. Minor: Educational Psychology.  
Thesis: A Group Free Association Test for College Students. Not published.  
Major Adviser: Professor D. G. Paterson.  
Positions Held: Professor of Psychology, 1930-1931, Tabor College; Professor, Director of Tests and Measurements, 1931—, Bethel College.  
Address: 1002 East Broadway, Newton, Kansas.
1931. DRAKE, LEWIS ETHELBERT. B.A. '28, University of Minnesota.  
Major: Psychology. Minor: Anatomy.  
Thesis: Studies of the Proprioceptive Functions in the Rat. Not published.  
Major Adviser: Professor W. T. Heron.  
Positions Held: Chairman of Counseling and Guidance, Head of Psychology Department, 1931—, University of Wisconsin Extension Center.  
Address: University of Wisconsin Extension Center, Milwaukee, Wisconsin.
1931. LONGSTAFF, HOWARD PORTER. B.A. '23, B.S. '25, M.A. '27, Ohio State University.  
Major: Psychology. Minor: Educational Psychology.  
Thesis: Analysis of Factors Conditioning Learning in General Psychology. Published in *Journal of Applied Psychology*, Vol. 16, nos. 1 and 2, 9-48 and 131-166, February and April 1932.  
Major Adviser: Professor D. G. Paterson.  
Positions Held: Lecturer, 1931-1936, Assistant Professor, 1936—, University of Minnesota.  
Honors: Sigma Xi; Fellow American Association for Applied Psychology.  
Address: 517 Oak Street S. E., Minneapolis, Minnesota.
1931. WILLIAMSON, EDMUND GRIFFITH. B.A. '25, University of Illinois.  
Major: Psychology. Minor: Educational Psychology.  
Thesis: Counseling College Students. Not published.  
Major Adviser: Professor D. G. Paterson.  
Positions Held: Assistant Professor, 1931-1937, Associate Professor 1937—, University of Minnesota.  
Honors: Sigma Xi.  
Address: 1833 Franklin Avenue S. E., Minneapolis, Minnesota.
1932. FRANDBSEN, ARDEN. B.S. '27, M.S. '30, University of Utah.  
Major: Psychology. Minor: Educational Psychology.

Thesis: An Eye Movement Study of Objective Examination Questions. Published in *Genetic Psychology Monographs*, August 1932.

Major Adviser: Professor M. A. Tinker.

Positions Held: Psychologist, 1932-1933, Department of Public Institutions, Minnesota; Assistant Professor of Education, 1933-1936, University of Utah; Associate Professor of Psychology, 1936-1937, Professor and Head of Department of Psychology, 1937—, Utah State Agricultural College.

Honors: Phi Beta Kappa.

Address: Utah State Agricultural College, Logan, Utah.

1932. HATHAWAY, STARKE ROSECRANS. B.A. '27, M.A. '28, Ohio State University.

Major: Psychology. Minor: Neurology.

Thesis: An Action Potential Study of Neuromuscular Relations during the Simple Reaction. Published in *Journal of Experimental Psychology*, 18:285-298, 1935.

Major Adviser: Professor R. M. Elliott.

Positions Held: Lecturer in Psychology, 1930-1937, University of Minnesota; Assistant Professor of Psychology and Clinical Psychologist, 1937—, University of Minnesota Hospitals.

Honors: Sigma Xi.

Address: University of Minnesota, Minneapolis, Minnesota.

1932. RUNDQUIST, EDWARD ALFRED. B.A. '28, University of Minnesota.

Major: Psychology. Minor: Neurology.

Thesis: The Inheritance of Spontaneous Activity in the Rat. Published in *Journal of Comparative Psychology*, 16:415-438, 1933.

Major Adviser: Professor W. T. Heron.

Positions Held: Psychologist, 1932-1933, Child Guidance Clinic, Minneapolis Public Schools; Research Fellow, 1933-1934, Institute of Child Welfare, University of Minnesota; Chief Psychologist, 1934-1935, Child Study Department, Minneapolis Public Schools; Assistant Director, 1935—, Psychological Laboratory, Cincinnati Public Schools.

Honors: Sigma Xi.

Address: 1623 Grantwood Ave., Cincinnati, Ohio.

1932. TURTELTAUB, DAVID. B.A. '27, M.A. '28, University of Oregon.

Major: Psychology. Minor: Educational Psychology.

Thesis: The Influence of Suggested Majority Opinion upon Attitudes toward Prohibition and Militarism. Not published.

Major Adviser: Professor Charles Bird.

Positions Held: Supervisor, 1933-1934, Relief Administration, Tacoma, Washington; Case Worker, 1935—, Jewish Social Service Association, New York.

Honors: Phi Beta Kappa.

Address: 3554 Rochambeau Ave., New York City, New York.

1933. HOLMES, GRACE MARIE. B.A. '29, College of St. Catherine; M.A. '30, University of Minnesota.

Major: Psychology. Minor: Educational Psychology.

Thesis: A Study in Work Decrement. Published in *Summaries of Ph.D. Theses*, Vol. 1, 1939, University of Minnesota.

Major Advisers: Professors Edna Heidbreder and J. G. Rockwell.



Positions Held: Instructor in Psychology, 1933-1935, University of Minnesota; Vocational Counselor, 1935—, Department of Education.

Honors: Sigma Xi.

Married Name: Grace Holmes Carlson.

Address: 1887 Roblyn Ave., St. Paul, Minnesota.

1933. KNOWER, FRANKLIN HAYWARD. B.A. '25, Northwestern University; M.A. '28, Syracuse University.

Major: Psychology. Minor: Speech.

Thesis: An Experimental Study of the Effect of Argument on Changes of Attitude. Published in *Journal of Social Psychology*, 6:315-347, 1935; *Journal of Abnormal and Social Psychology*, 30:522-532, 1936; *Journal of Applied Psychology*, 20:114-127, 1936.

Major Adviser: Professor Charles Bird.

Positions Held: Instructor, 1933-1936, Assistant Professor, 1936—, University of Minnesota.

Honors: Sigma Xi; President, 1938, Central States Association of Teachers of Speech.

Address: University of Minnesota, Minneapolis, Minnesota.

1933. TAYLOR, CORNELIA DECAMP. B.A. '29, (*summa cum laude*), M.A. '30, University of Minnesota.

Major: Psychology. Minor: Child Welfare.

Thesis: The Legibility of Black and White Print. Published in *Journal of Educational Psychology*, 25:561-578, 1934.

Major Adviser: Professor M. A. Tinker.

Positions Held: Instructor in Psychology, 1933-1936, University of Rochester; Instructor and Research Counsellor, 1936—, General College, University of Minnesota.

Honors: Phi Beta Kappa; Sigma Xi; Pi Lambda Theta.

Married Name: Mrs. B. H. Williams.

Address: 707 University Ave. S. E., Minneapolis, Minnesota.

1934. DVORAK, BEATRICE JEANNE. B.A. '29, M.A. '30, University of Minnesota.

Major: Psychology. Minor: Economics.

Thesis: Differential Occupational Ability Patterns. Published by University of Minnesota Press, 1935.

Major Adviser: Professor D. G. Paterson.

Positions Held: Occupational Examiner, 1934-1935, Research Assistant, 1935-1936, Testing Supervisor, 1936-1937, U. S. Employment Service, Department of Labor; Chief, Test Research Unit, 1937—, Division of Standards and Research, Worker-Analysis Section, U. S. Employment Service.

Honors: Phi Beta Kappa.

Address: Dupont Circle Apartments, Washington, D. C.

1934. HASLERUD, GEORGE MARTIN. B.A. '30, University of Minnesota.

Major: Psychology. Minor: Biometry.

Thesis: A Comparison of Free and Prescribed Maze Patterns of the Rat. Not published.

Major Adviser: Professor W. T. Heron.

Positions Held: Assistant in Research, 1934-1935, Yale University; Instructor, 1935—, University of Tennessee.

Honors: Phi Beta Kappa; Sigma Xi.

Address: University of Tennessee, Knoxville, Tennessee.

1934. LANDIS, AGNES THORSON. B.S. '23, M.S. '24, University of Minnesota.

Major: Psychology. Minor: Educational Psychology.

Thesis: An Investigation of Perseverance in the Pre-School Child. Not published.

Major Adviser: Professor D. G. Paterson.

Positions Held: Special Investigator in Psychology, 1934-1937, New York State Psychiatric Institute.

Honors: Sigma Xi.

Address: 414 Conrad Road, Englewood, New Jersey.

1935. ANDREW, DOROTHY MABEL. B.A. '30, M.A. '31, University of Minnesota.

Major: Psychology. Minor: Educational Psychology.

Thesis: An Analysis of the Minnesota Vocational Test for Clerical Workers. Published in *Journal of Applied Psychology*, 21:18-47, 130-172, 1937.

Major Adviser: Professor D. G. Paterson.

Positions Held: Instructor in Psychology, 1935-1937, Assistant Professor in Psychology, 1937—, Pennsylvania College for Women.

Honors: Sigma Xi; Pi Lambda Theta.

Address: College Club, 143 No. Craig St., Pittsburgh, Pennsylvania.

1935. CHASE, WILTON PERRY. B.A. '30, Syracuse University; M.A. '32, Dartmouth College.

Major: Psychology. Minor: Child Welfare.

Thesis: Color Vision in Infants. Published in *Journal of Experimental Psychology*, 20:203-222, 1937.

Major Adviser: Professor J. E. Anderson.

Positions Held: Instructor, 1935-1937, University of Alabama; Assistant Professor, 1937—, Woman's College, University of North Carolina.

Address: Department of Psychology, The Woman's College of the University of North Carolina, Greensboro, North Carolina.

1935. GILKINSON, HOWARD. B.A. '23, Carleton College; M.A. '29, University of Iowa.

Major: Psychology. Minor: Speech.

Thesis: Masculine Temperament and Secondary Sex Characteristics: A Study of the Relationship between Psychological and Physical Measures of Masculinity. Published in *Genetic Psychology Monographs*, Vol. 19, 1937.

Major Adviser: Professor D. G. Paterson.

Positions Held: Assistant Professor of Speech, 1935—, University of Minnesota.

Honors: Sigma Xi.

Address: 315 11th Avenue S. E., Minneapolis, Minnesota.

1936. SISSON, EARL DONALD. B.A. '31, M.A. '32, Wesleyan University.

Major: Psychology. Minor: Educational Psychology.

Thesis: The Role of Habit in the Eye-Movements of Reading. Published in

- Psychological Record*, 1:159-168, 1937; *Journal of Educational Psychology*, 28:437-450, 1937; *Journal of Educational Research*, 32:35-41, 1938.  
Major Adviser: Professor M. A. Tinker.  
Positions Held: Teaching Fellow, 1935-1936, Instructor, 1936—, Wesleyan University.  
Honors: Phi Beta Kappa; Sigma Xi.  
Address: 25 Bretton Road, Middletown, Connecticut.
1937. DARLEY, JOHN GORDON. B.A. '31, Wesleyan University; M.A. '32, University of Minnesota.  
Major: Psychology. Minors: Educational Psychology and Biometry.  
Thesis: An Analysis of Attitude and Adjustment Tests, with Special Reference to Conditions of Change in Attitudes and Adjustments. Published in *Journal of Applied Psychology*, 21:485-493, 632-642, 1937.  
Major Adviser: Professor D. G. Paterson.  
Positions Held: Assistant Professor and Research Counselor, 1937—, General College, University of Minnesota.  
Honors: Phi Beta Kappa; Sigma Xi.  
Address: 702 5th Ave. S. E., Minneapolis, Minnesota.
1937. ERICKSON, RALPH WALDO. B.A. '22, M.A. '28, University of Minnesota.  
Major: Psychology. Minor: Philosophy.  
Thesis: The Concept of Consciousness Since William James. Not published.  
Major Adviser: Professor R. M. Elliott.  
Positions Held: Instructor in Psychology, 1930—, Hibbing Junior College.  
Address: Hibbing, Minnesota.
1937. RASKIN, EVELYN. B.A. '32, Barnard College; M.A. '33, University of Minnesota.  
Major: Psychology. Minor: Educational Psychology.  
Thesis: The Interrelations of Speed of Response Measured on Levels of Varying Difficulty. Published in *Summaries of Ph.D. Theses*, Vol. 1, 1939, University of Minnesota.  
Major Adviser: Professor M. A. Tinker.  
Positions Held: Instructor, 1937—, Randolph-Macon Woman's College.  
Honors: Phi Beta Kappa; Sigma Xi; Phi Lambda Theta.  
Address: 50 Lincoln Road, Brooklyn, New York.
1937. STROMBERG, ELEROY LEONARD. B.A. '32, Nebraska Wesleyan University; M.A. '34, University of Oregon.  
Major: Psychology. Minor: Educational Psychology.  
Thesis: Visual Characteristics of Good and Poor Readers among College Students. Published in *American Journal of Optometry*, November, 1937; *Journal of Applied Psychology*, February, 1938; *Journal of General Psychology*, April 1938.  
Major Adviser: Professor M. A. Tinker.  
Positions Held: Assistant Professor of Psychology, 1937—, Oklahoma A. and M. College; Instructor in Psychology, summer 1937, University of Minnesota.  
Honors: Phi Kappa Phi; Sigma Xi.  
Address: Department of Psychology, Oklahoma Agricultural and Mechanical College, Stillwater, Oklahoma.

1938. CARLSON, WILLIAM SAMUEL. B.A. '32, Macalester College.  
 Major: Psychology. Minor: Educational Psychology.  
 Thesis: Further Studies in Expressive Movement. Published in *Psychological Record*, 2:310, 1938.  
 Major Adviser: Professor D. G. Paterson.  
 Positions Held: Instructor, 1938—, Department of Psychology, University of Minnesota.  
 Address: 570 So. Fairview, St. Paul, Minnesota.
1938. COOK, STUART WELLFORD. B.A. '34, M.A. '35, University of Richmond.  
 Major: Psychology. Minor: Zoology.  
 Thesis: The Production of "Experimental Neurosis" in the White Rat. Not published.  
 Major Adviser: Professor W. T. Heron.  
 Positions Held: Instructor, 1938—, University of Minnesota.  
 Honors: Phi Beta Kappa; Omicron Delta Kappa; Tau Kappa Alpha; Psi Chi; Sigma Xi.  
 Address: Station 60, University Hospital, University of Minnesota, Minneapolis, Minnesota.
1938. GRAVES, ELIZABETH ANNE. B.A. '34, M.A. '34, University of Minnesota.  
 Major: Psychology. Minor: Zoology.  
 Thesis: The Genetic Basis of Activity in the Albino Rat. Not published.  
 Major Adviser: Professor W. T. Heron.  
 Honors: Sigma Xi; Psi Chi.  
 Address: 4337 Colfax Ave. So., Minneapolis, Minnesota.
1938. HACKMAN, ROY BAMFORD. B.A. '33, M.A. '34, University of Nebraska.  
 Major: Psychology. Minor: Educational Psychology.  
 Thesis: An Analysis of Certain Factors Operating in the Reaction of the Eye to Suddenly Appearing Peripheral Stimuli. Not published.  
 Major Adviser: Professor M. A. Tinker.  
 Positions Held: Instructor in Psychology, 1938—, Temple University.  
 Honors: Sigma Xi; Psi Chi; Member, American Psychological Association.  
 Address: Department of Psychology, Temple University, Philadelphia, Pennsylvania.
1938. WELCH, ALFRED COTTER. B.A. '34, M.A. '35, University of Minnesota.  
 Major: Psychology. Minor: Economics.  
 Thesis: Consumer Attitude Criteria of Advertising Effectiveness. Not published.  
 Major Adviser: Professor D. G. Paterson.  
 Positions Held: Instructor, 1938-1939, Department of Marketing, Wharton School of Finance and Commerce, University of Pennsylvania.  
 Honors: Phi Beta Kappa.  
 Address: Wharton School of Finance and Commerce, University of Pennsylvania, Philadelphia, Pennsylvania.

## PHYSICAL SCIENCES, MATHEMATICS, AND ENGINEERING

### ASTRONOMY

1910. BURNS, KEIVIN. B.A. '03, University of Minnesota.  
Major: Astronomy. Minors: Mathematics and Physics.  
Thesis: Photographic Study of the Region of the Great Nebula in Orion.  
Published 1910, Minneapolis.  
Major Adviser: Professor F. P. Leavenworth.  
Positions Held: Assistant, 1910-1911, Kellogg Fellow, 1911-1913, Lick Observa-  
tory; Associate Physicist and Physicist, 1913-1919, Bureau of Standards;  
Astronomer, 1920—, Assistant Director, 1931—, Allegheny Observatory,  
Pittsburgh; Professor, 1931—, University of Pittsburgh; Visiting Scientist,  
summer 1931, University of Michigan.  
Honors: Starred man in *American Men of Science*; Sigma Xi.  
Address: University of Pittsburgh, Pittsburgh, Pennsylvania.

### CHEMISTRY

1902. GLASOE, PAUL MAURICE. B.A. '97, M.S. '98, University of Minne-  
sota.  
Major: Chemistry. Minors: Physics and Mineralogy.  
Thesis: A Study of Camphoroxine.  
Major Adviser: Professor G. B. Frankforter.  
Positions Held: Professor of Chemistry and Physics, 1903-1907, St. Olaf  
College, Northfield, Minnesota; President, 1907-1910, Spokane College;  
Professor of Chemistry, 1910-1916, St. Olaf College; President, 1916-1918,  
Augustana College, Canton, South Dakota; Professor of Chemistry, Vice-  
President, 1918—, St. Olaf College, Northfield, Minnesota.  
Honors: Sigma Xi.  
Address: 804 St. Olaf Ave., Northfield, Minnesota.
1912. FRARY, FRANCIS COWLES. B.S. '05, M.S. '06, University of Minne-  
sota.  
Major: Chemistry. Minors: Electrical Engineering and Electrochemistry.  
Thesis: Equilibria in Systems Containing Alcohols, Salts, and Water, Includ-  
ing a New Method of Alcohol Analysis. Published 1912, University of Min-  
nesota.  
Major Adviser: Professor G. B. Frankforter.  
Positions Held: Assistant Professor of Chemistry, 1911-1915, University of  
Minnesota; Research Chemist, 1915-1917, Oldbury Electrochemical Com-  
pany; Captain, Ordnance O.R.C., Major, C.W.S., 1918, United States Army;  
Director of Research, 1919—, Aluminum Company of America, Pittsburgh,  
Pennsylvania.  
Honors: Starred man in *American Men of Science*; Sigma Xi; Pittsburgh  
Award, 1938.  
Address: c/o Aluminum Co. of America, New Kensington, Pennsylvania.

1913. COHEN, LILLIAN. B.S. '00, M.S. '01, University of Minnesota.  
Major: Chemistry. Minor: Physics.  
Thesis: Equilibria in Systems of Acetone, Water, and Salts. Published 1914, Easton, Pennsylvania.  
Major Adviser: Professor G. B. Frankforter.  
Positions Held: Instructor in Chemistry, 1913-1918, Assistant Professor, 1918-1927, Associate Professor, 1927—, University of Minnesota.  
Honors: Sigma Xi.  
Address: 2521 Humboldt Ave. South, Minneapolis, Minnesota.
1914. BROWN, HAROLD HIRAM. B.A. '09, M.A. '10, Syracuse University.  
Major: Chemistry. Minor: Mineralogy.  
Thesis: Contributions to Our Knowledge of the Chemistry of Wood; Douglas Fir and Its Resins. Not published.  
Major Adviser: Professor G. B. Frankforter.  
Positions Held: Chemist, 1914—, United States Bureau of Chemistry.  
Address: United States Bureau of Chemistry, Washington, D. C.
1915. TEMPLE, STERLING NELSON. Ph.B. '05, M.A. '06, Hamline University.  
Major: Chemistry. Minor: Physics.  
Thesis: Equilibria in Systems of the Higher Alcohols, Water, and Salts. Published 1915, Easton, Pennsylvania.  
Major Adviser: Professor G. B. Frankforter.  
Positions Held: Assistant Professor of Chemistry, 1915-1917, University of Minnesota; Captain and Major, 1918-1919, C.W.S., United States Army; Chemist, 1919-1930, Chemical Director, 1930—, R. & H. Chemicals Division, E. I. du Pont de Nemours and Co.  
Honors: Sc.D., 1935; Sigma Xi; Schaeilkopf Medal, 1938.  
Address: R. & H. Chemicals Division, E. I. du Pont de Nemours and Co., Niagara Falls, N. Y.
1916. BRINTON, PAUL HENRY MALLET-PREVOST. B.S. '12, M.S. '13, University of Minnesota.  
Major: Inorganic Chemistry. Minor: Metallography.  
Thesis: Contributions to the Chemistry of Beryllium. Published in part in *Journal of the American Chemical Society*, Vol. 38, p. 2361 (1916).  
Major Adviser: Professor G. B. Frankforter.  
Positions Held: Professor of Chemistry, 1916-1920, University of Arizona; Captain, Chief of Research Analytical Section, Offense Division, C.W.S., United States Army; Professor, Head of Division of Analytical Chemistry, 1921-1926, University of Minnesota; private research, 1926—; Professor of Analytical Chemistry, University of California.  
Honors: Fellow of the A.A.A.S.; Phi Kappa Phi; Sigma Xi.  
Address: University of California, Berkeley, California.
1916. KOKATNUR, VAMAN RAMCHANDRA. B.S. '12, University of Bombay; M.S. '14, University of Minnesota.  
Major: Organic Chemistry. Minor: Geology.  
Thesis: The Action of Trioxymethylene on the Various Organic Compounds in the Presence of Aluminum Chloride. Published 1916, Minneapolis.

Major Adviser: Professor G. B. Frankforter.

Positions Held: Research and Teaching Assistant, 1916-1917, University of Minnesota; Research Chemist, 1917-1918, Mathieson Alkali Works, Niagara Falls, New York; Chief of Research Department, 1918-1920, Niagara Alkali Works; Assistant Chief of Vat Dye Group, 1920-1921, National Anilin and Chemical Company, Buffalo, New York; Temporary Research and Operating Chemist, 1921-1922, By-Products Steel Corporation and E. I. du Pont de Nemours Company; Consulting Chemist (associated with Dr. W. M. Grosvenor, 1922-1926); General Manager, 1930-1931, Shri-Shakti Alkali Works, Dhrangathra, India; Consulting Chemist, 1931-1932, Bombay, India; Technical Director, 1932-1933, Koproan Chemical Co. Ltd., Bombay, India; Research Director, 1934—, Antoxygen Inc., New York City.

Honors: Fellow of the A.A.A.S.; Sigma Xi; Shevlin Fellow in Chemistry, 1914-1915.

Address: The Chemists' Club, New York City.

1917. DANIELS, ELMER ANSON. B.S. '12, M.S. '13, University of Minnesota.

Major: Organic Chemistry. Minor: Bacteriology.

Thesis: The Action of Butyl Chloral on Benzene and Its Homologs in the Presence of Aluminum Chloride. Not published.

Major Adviser: Professor G. B. Frankforter.

Positions Held: Development Engineer, 1917-1928, Western Electric Company; Consulting Chemist, 1928-1930; Development Engineer, 1930—, Mariner and Hoskins, Inc., Hinsdale, Illinois.

Address: 258 N. Garfield Avenue, Hinsdale, Illinois.

1918. PETTIJOHN, EARL. B.A. '06, B.S. '10, M.S. '12, University of Minnesota.

Major: Chemistry. Minor: Physics.

Thesis: Studies in Adsorption. Published 1919, Minneapolis.

Major Adviser: Professor I. H. Derby.

Positions Held: Chief Chemist, 1918-1925, Firestone Tire and Rubber Company; Professor of Chemistry, 1925-1935, Acting Dean, 1935-1937, Dean, 1937—, Missouri Valley College.

Honors: Sigma Xi.

Address: 417 E. College St., Marshall, Missouri.

1918. STERNBERG, WOLDEMAR MARCOVITCH. B.S. in Chemical Engineering '08, Institute of Technology, St. Petersburg.

Major: Physical Chemistry. Minor: Analytical Chemistry.

Thesis: Equilibria in Systems Containing Paraldehyde, Salts, and Water. Not published.

Major Adviser: Professor G. B. Frankforter.

Positions Held: Vice-President, The Luminous Laboratories, 6 E. Lake St., Chicago, Illinois.

Address: 593 Swain Ave., Elmhurst, Illinois.

1918. WOOLLETT, GUY HAINES. B.S. '10, M.S. '16, University of Minnesota.

Major: Chemistry. Minor: Physics.

- Thesis: Further Studies on Catalytic Decompositions of Phenol Salts.  
lished 1921, Easton, Pennsylvania.  
Major Adviser: Professor W. H. Hunter.  
Positions Held: Instructor in Chemistry, 1918-1920, University of Minnesota; Associate Professor, 1920-1927, Professor of Physiologic Chemistry, 1927-1930, Head of Chemistry Department, 1930-1932, Professor, Organic and Physiological Chemistry, 1932-1937, Head of Chemistry Department, 1937—, University of Mississippi.  
Honors: Vice President, 1930—, Mississippi Academy of Science.  
Address: Box 474, University, Mississippi.
1922. HARTSHORN, ELDEN BENNETT. B.S. '12, Dartmouth College.  
Major: Chemistry. Minor: Physics.  
Thesis: Some Substituted Aryldialkylamine Oxides. Published 1924, Easton, Pennsylvania.  
Major Adviser: Professor L. W. Jones.  
Positions Held: Assistant Professor of Chemistry, 1923-1929, Professor, 1929—, Chairman of Chemistry Department, Dartmouth College; Student, 1930-1931, University of Munich.  
Address: Dartmouth College, Hanover, New Hampshire.
1923. LEVINE, ARTHUR. B.A. '16, Augustana College.  
Major: Organic Chemistry. Minor: Physical Chemistry.  
Thesis: The Oxidation of the Halogenated 1, 3 Dimethyl Ethers of Pyrogallol. Published in *Journal of the American Chemical Society*, Vol. 48, June 1926.  
Major Adviser: Professor W. H. Hunter.  
Positions Held: Assistant Professor of Organic Chemistry, 1923-1930, State College of Washington, Pullman, Washington; Research Supervisor, 1930—, Roessler and Hasslacher Chemical Company, Niagara Falls, New York.  
Address: 212 83 St., Niagara Falls, New York.
1924. FUSON, REYNOLD CLAYTON. B.A. '20, University of Montana; M.A. '21, University of California.  
Major: Organic Chemistry. Minor: Physical Chemistry.  
Thesis: Naphthalene and the Centroid Structure. Published 1925, Easton, Pennsylvania.  
Major Adviser: Professor W. H. Hunter.  
Positions Held: National Research Council Fellow, 1924-1926, Instructor in Chemistry, 1926-1927, Harvard University; Associate, 1927-1928, Assistant Professor, 1928-1930, Associate Professor, 1930-1932, Professor, 1932—, University of Illinois.  
Address: 1207 West Oregon St., Urbana, Illinois.
1924. KOHLHASE, ARTHUR HUBERT. B.S. '19, M.S. '21, University of Minnesota.  
Major: Organic Chemistry. Minor: Physical Chemistry.  
Thesis: Studies in Aromatic Sulphur Compounds. Published in *Journal of the American Chemical Society*, Vol. 54, p. 2425, 1932.  
Major Adviser: Professor W. H. Hunter.  
Positions Held: Research Chemist, 1924-1928, Roessler and Hasslacher Chemical Company, Niagara Falls, New York; Salesman, 1930-1931, Flexlume South-



- west Neon Sign Corporation, Phoenix, Arizona; Senior Chemist, 1937—, General Finishes, Inc.  
Honors: Phi Lambda Upsilon; Member, American Chemical Society.  
Address: 1951 University Ave., St. Paul, Minnesota.
1924. KRACEK, FRANK CARL. B.S. '20, University of Minnesota.  
Major: Physical Chemistry. Minor: Physics.  
Thesis: The Separation of Radium and Barium as Chromates. Published in *Journal of the American Chemical Society*, Vol. 49, March 1927.  
Major Adviser: Professor L. M. Henderson.  
Positions Held: Assistant Physical Chemist, 1923-1929, Physical Chemist, 1929—, Geophysical Laboratory of the Carnegie Institute of Washington.  
Address: 4411 Elm St., Chevy Chase, Maryland.
1924. LAUER, WALTER McLELLAN. B.A. '13, Ursinus College; M.S. '17, University of Minnesota.  
Major: Organic Chemistry. Minor: Physical Chemistry.  
Thesis: I. The Action of Bromine on the Sodium Salt of Tribromophenol. II. The Constitution of Tribromophenolbromide and Its Congeners. Published in *Journal of the American Chemical Society*, Vol. 48, February 1926.  
Major Adviser: Professor W. H. Hunter.  
Positions Held: Instructor, 1924-1925, Assistant Professor of Organic Chemistry, 1925-1934, University of Minnesota; Student, 1931-1932, Munich; Associate Professor, 1935—, University of Minnesota.  
Honors: Sigma Xi.  
Address: Chemistry Department, University of Minnesota, Minneapolis, Minnesota.
1924. SARVER, LANDON ARNDALE. B.A. '15, Randolph-Macon College; M.A. '19, Lafayette College.  
Major: Analytical Chemistry. Minor: Physical Chemistry.  
Thesis: The Solubility Relations of the Rare Earth Oxalates. Published 1926, Minneapolis; and in *Journal of the American Chemical Society*, 49:943-958, (1927).  
Major Adviser: Professor P. Brinton.  
Positions Held: Chief Chemist, 1925, United States Lighthouse Depot, New York City; Assistant Professor of Chemistry, 1925—, University of Minnesota.  
Honors: Sigma Xi.  
Address: King Cole Hotel, Minneapolis, Minnesota.
1924. STOPPEL, ARTHUR EDWARD. B.S. '20, Ch.E. '21, University of Minnesota.  
Major: Analytical Chemistry. Minor: Physical Chemistry.  
Thesis: Studies in the Analytical Chemistry of Molybdenum and Vanadium. Published 1924, Minneapolis; in *Journal of the American Chemical Society*, 46:2448, 1924, 49:2454, 1924; and in *Chemical News*, 130:353, 1925.  
Major Adviser: Professor P. Brinton.  
Positions Held: Instructor in Chemistry, 1924-1926, Assistant Professor, 1926—, University of Minnesota.  
Honors: Sigma Xi.  
Address: 5225 16th Ave. So., Minneapolis, Minnesota.

1924. WEBER, LUDWIG JOSEPH. B.S. '20, Ch.E. '21, University of Minnesota.  
Major: Inorganic Chemistry. Minors: Physical and Technological Chemistry.  
Thesis: The Detection of Osmium, Ruthenium, Rhodium, and Iridium. Published in *Summaries of Ph.D. Theses*, Vol. 1, 1939, University of Minnesota.  
Major Adviser: Professor M. C. Sneed.  
Positions Held: Instructor in Chemistry, 1923-1927, University of Minnesota; Assistant Metallurgist, 1927—, Aluminum Company of America, Pittsburgh, Pennsylvania.  
Honors: Sigma Xi.  
Address: 1032 Parkview Ave., New Kensington, Pennsylvania.
1925. DOBROVOLNY, FRANK J. B.A. '20, Dakota Wesleyan; M.S. '24, University of Minnesota.  
Major: Organic Chemistry. Minor: Physical Chemistry.  
Thesis: The Action of Sodium Malonic Ester on Duroquinone. Published 1926, Easton, Pennsylvania.  
Major Adviser: Professor L. I. Smith.  
Positions Held: Librarian, Technical Personnel Manager, 1926—, Head of Service Division, 1931—, Research Supervisor, Roessler and Hasslacher Chemical Company, Niagara Falls, New York.  
Address: Lower Mountain Rd., Ransomville, New York.
1925. HARRIS, ELWIN E. B.S. '21, Hamline University; M.S. '22, University of Minnesota.  
Major: Organic Chemistry. Minors: Physical and Inorganic Chemistry.  
Thesis: Chloral and Bromal with Phenolic Ethers in the Presence of Aluminum Chloride. Published in *Journal of the American Chemical Society*, Vol. 48, no. 12, December 1926.  
Major Adviser: Professor G. B. Frankforter.  
Positions Held: Assistant and Associate Professor, 1923-1930, University of North Dakota; Associate Chemist, 1930-1935, Chemist, 1935—, Forest Products Laboratory; Lecturer in Forest Products Chemistry, 1934—, University of Wisconsin.  
Honors: Sigma Xi; A.C.S. Member.  
Address: Forest Products Laboratory, Madison, Wisconsin.
1925. MORSE, MINERVA. B.A. '15, M.S. '20, University of Minnesota.  
Major: Organic Chemistry. Minor: Physics.  
Thesis: The Oxidation of Trichlorophenol. Published in *Journal of the American Chemical Society*, 48:1615-1624, 1926.  
Major Adviser: Professor W. H. Hunter.  
Positions Held: Instructor in Chemistry, 1925-1926, Assistant Professor, 1926-1929, Smith College; Research Fellow, 1929-1930, University of Minnesota; Research Associate, 1930—, University of Chicago.  
Address: 5525 Kimbark Ave., Chicago, Illinois.
1926. BARBER, HERVEY HUBBARD. B.A. '18, University of Cincinnati.  
Major: Inorganic Chemistry. Minor: Organic Chemistry.

Thesis: Separation of the Copper-Arsenic Group with Especial Reference to the Degree of Solubility of Certain Sulphides. Published in *Journal of Chemical Education*, 16:77, 1939.

Major Adviser: Professor M. C. Sneed.

Positions Held: Instructor in Chemistry, 1918-1930, Assistant Professor in Chemistry, 1930—, University of Minnesota.

Honors: Sigma Xi; Phi Lambda Upsilon.

Address: 1571 Vincent St., St. Paul, Minnesota.

1926. MORRIS, VLON NEILAN. B.S. in Chemical Engineering '22, M.S. '24, Purdue University.

Major: Physical Chemistry. Minor: Organic Chemistry.

Thesis: The Catalytic Activity of Metallized Silica Gels. I. The Hydrogenation of Ethylene. II. The Hydrogenation of Acetylene. Published in *Journal of Physical Chemistry*, Vol. 31, pp. 1220, 1332 (1927).

Major Adviser: Professor L. H. Reyerson.

Positions Held: Research Chemist, 1926-1927, Fixed Nitrogen Research Laboratory; Research Chemist, 1927-1935, Firestone Tire and Rubber Company, Akron, Ohio; Research Supervisor, 1935—, Resinous Products and Chemical Co., Philadelphia, Pennsylvania.

Honors: Sigma Xi; Tau Beta Pi; Phi Lambda Upsilon.

Address: Crestmont Farms, Torresdale, Philadelphia, Pennsylvania.

1926. SWEARINGEN, LLOYD EDWARD. B.S. '20, M.S. '21, University of Minnesota.

Major: Physical Chemistry. Minor: Metallography.

Thesis: The Adsorptive Properties of Metallized Silica Gels and Their Catalytic Activity in Some Simple Oxidation Reactions. Published in *Journal of Physical Chemistry*, 30:1623, 1926; 31:88, 1927; 32:113, 192, 1928.

Major Adviser: Professor L. H. Reyerson.

Positions Held: Associate Professor of Chemistry, 1926-1927, Professor, 1927—, University of Oklahoma.

Honors: Phi Beta Kappa; Sigma Xi; Fellow, Oklahoma Academy of Science; Phi Lambda Upsilon; Gamma Alpha.

Address: Faculty Exchange, University of Oklahoma, Norman, Oklahoma.

1927. CRAWFORD, H(ELEN) MARJORIE. B.A. '20, Miami University; M.S. '22, Iowa State College.

Major: Organic Chemistry. Minor: Physical Chemistry.

Thesis: The Reaction between Duroquinone and the Grignard Reagents. Published in *Journal of the American Chemical Society*, Vol. 50, p. 869 (1928).

Major Adviser: Professor L. I. Smith.

Positions Held: Instructor in Chemistry, 1927-1930, Assistant Professor, 1930-1934, Associate Professor, 1934—, Vassar College; Honorary Fellow, 1938, University of Minnesota.

Honors: Sigma Xi; Iota Sigma Pi.

Address: Vassar College, Poughkeepsie, New York.

1927. EDGAR, DONALD EDWARDS. B.S. in Chemical Engineering '26, University of Minnesota.

Major: Organic Chemistry. Minor: Chemical Engineering.

- Thesis: Carbon Tetrabromide as a Brominating Agent. Published in *Journal of the American Chemical Society*, 54:2025, 1932.  
Major Adviser: Professor W. H. Hunter.  
Positions Held: Chemist, 1927—, E. I. du Pont de Nemours and Company.  
Address: 4605 Chester Ave., Philadelphia, Pennsylvania.
1927. PAGEL, HERBERT ARMIN. B.A. '22, M.S. '23, University of Minnesota.  
Major: Inorganic Chemistry. Minors: Physical Chemistry and Metallography.  
Thesis: The Stability Ranges of Certain Rare Earth Oxides. Published in *Journal of the American Chemical Society*, 51:42-54, 1929, with P. Brinton.  
Major Adviser: Professor P. Brinton.  
Positions Held: Instructor in Chemistry, 1927-1933, Assistant Professor in Chemistry, 1933—, University of Nebraska.  
Honors: Sigma Xi.  
Address: 3620 C. St., Lincoln, Nebraska.
1927. SLY, CARYL. B.S. '23, M.S. '24, University of Nebraska.  
Major: Organic Chemistry. Minor: Physical Chemistry.  
Thesis: Hexabromoazobenzene and Hexabromohydrobenzene. Published in *Journal of the American Chemical Society*, 54:3348, 1932.  
Major Adviser: Professor W. H. Hunter.  
Positions Held: Research Chemist, 1927—, E. I. du Pont de Nemours and Company, Wilmington, Delaware.  
Address: 803 W. 32nd St., Wilmington, Delaware.
1927. SORENSON, BEN EDMUND. B.S. '23, M.S. '24, University of Minnesota.  
Major: Organic Chemistry. Minor: Chemical Engineering.  
Thesis: Studies on the Reduction of Sulfonic Acids. Published in *Journal of the American Chemical Society*, 54:3364, 1932.  
Major Adviser: Professor W. H. Hunter.  
Positions Held: Research Chemist, 1927—, E. I. du Pont de Nemours and Company, 3500 Grays Ferry Road, Philadelphia, Pennsylvania.  
Honors: Sigma Xi.  
Address: 41 Decatur Rd., Upper Darby, Pennsylvania.
1927. STONE, LESLIE FIELD. B.S. '22, Ch.E. '24, University of Minnesota.  
Major: Organic Chemistry. Minor: Industrial Chemistry.  
Thesis: Studies on Organic Depolarizers. Published in *Journal of Physical Chemistry*, 39:1134, 1935.  
Major Adviser: Professor W. H. Hunter.  
Positions Held: Chemist, 1927—, E. I. du Pont de Nemours and Company.  
Honors: Sigma Xi; Alpha Chi Sigma.  
Address: 2420 Charleston Ave., Toledo, Ohio.
1927. WERNLUND, CHRISTIAN JOHN. Ph.B. '13, Hamline University; M.S. '16, Northwestern University.  
Major: Organic Chemistry. Minor: Metallography.  
Thesis: Studies on Organic Depolarizers. Not published.

- Major Adviser: Professor W. H. Hunter.  
Positions Held: Research Chemist, 1921—, Roessler and Hasslacher Chemical Company, Niagara Falls, New York; Research Chemist, 1930—, R. & H. Chemicals Department, E. I. du Pont de Nemours and Co., Inc., Niagara Falls, N. Y.  
Honors: Sigma Xi.  
Address: 190 Christiana St., North Tonawanda, New York.
1927. WHITNEY, ROBERT BYRON. B.A. '24, University of Minnesota.  
Major: Organic Chemistry. Minor: Physical Chemistry.  
Thesis: A Study of the Intermediate Compounds in the Catalytic Decomposition of Halogenated Phenol Salts. Published in *Journal of the American Chemical Society*, Vol. 54, March 1932.  
Major Adviser: Professor W. H. Hunter.  
Positions Held: Instructor in Chemistry, summer 1928, Northwestern University; Instructor, 1928-1930, Harvard University; Instructor, 1930-1933, Assistant Professor, 1933-1936, 1937—, Amherst College; Sherman Pratt Fellow, 1936-1937, University of Heidelberg and University of Halle.  
Honors: Phi Beta Kappa; Sigma Xi; Phi Lambda Upsilon.  
Address: 86 College St., Amherst, Massachusetts.
1928. BEARD, RALPH FINNEY. B.S. '17, North Dakota State Agricultural College.  
Major: Physical Chemistry. Minor: Organic Chemistry.  
Thesis: The Kinetics of the Oxidation of Iodide Ion by Acid Dichromate Solutions in Presence of a Neutral Salt. Published in *Journal of the American Chemical Society*, 51:1973-1985, July 1929.  
Major Advisers: Professors F. H. MacDougall and N. W. Taylor.  
Positions Held: Research Chemist, 1929-1934, Mellon Institute; Research Chemist, 1934-1935, Plant Manager, 1935-1936, Assistant to Production Manager, 1936—, Canada Dry Ginger Ale, Inc.  
Honors: Sigma Xi.  
Address: 3705 Jackson Heights, New York City, N. Y.
1928. BREWER, RALPH EMMET. B.A. '17, Simpson College; M.S. '20, Purdue University.  
Major: Industrial Chemistry. Minor: Organic Chemistry.  
Thesis: Colorimetric and Electrometric Measurements of Hydrogen Ion Concentration in Acid Commercial Plating Baths. Published in *Transactions of the American Electrochemical Society*, 55:357-382, 1929.  
Major Advisers: Professors C. A. Mann and G. H. Montillon.  
Positions Held: Instructor in Chemistry, 1928-1929, University of Minnesota; General Superintendent, 1929-1930, Lehigh Briquetting Company; Inspector of Materials, summers 1930 and 1931, Minnesota State Highway Department; Instructor, 1930-1931, Assistant Professor, 1931-1932, Research Associate, 1932-1935, University of Minnesota; Associate Chemical Engineer, 1935—, U. S. Bureau of Mines.  
Honors: Sigma Xi; *American Men of Science*; Fellow, A.A.A.S.  
Address: U. S. Bureau of Mines, Central Experiment Station, 4800 Forbes Street, Pittsburgh, Pennsylvania.

1928. BUDROW, THEODORE THOMPSON. B.S. '23, Washington State College.  
Major: Organic Chemistry. Minors: Physical and Industrial Chemistry.  
Thesis: The Action of Iodine on Anhydrous Sodium Phenolate. Published in *Journal of American Chemical Society*, 55:2122-2125, 1933.  
Major Adviser: Professor W. H. Hunter.  
Positions Held: Librarian, 1928-1931, Patent Division, 1931-1933, Roessler and Hasslacher Chemical Co., Niagara Falls, N. Y.; Patent Division, 1933-1937, Assistant Director of Patent Division, 1937—, E. I. du Pont de Nemours and Co., Inc.  
Address: Ridge Road, Lewiston, New York.
1928. DAHLEN, MILES AUGUSTUS. B.S. in Chemical Engineering '24, University of Minnesota.  
Major: Organic Chemistry. Minors: Physical and Inorganic Chemistry.  
Thesis: Some Derivatives of Diphenylether. Published in *Journal of the American Chemical Society*, 54:2456-2463, 1932.  
Major Adviser: Professor W. H. Hunter.  
Positions Held: Research Chemist, 1928-1932, Head, Intermediate Division, 1932-1934, Head, Miscellaneous Dyes Division, 1934—, E. I. du Pont de Nemours and Co., Jackson Laboratory, Wilmington, Delaware.  
Address: Milton Drive and Channing Road, Brandywine Hills, Wilmington, Delaware.
1928. SPRUNG, MURRAY MONROE. B.S. in Chemical Engineering '25, University of Minnesota.  
Major: Organic Chemistry. Minor: Physical Chemistry.  
Thesis: A Study of the Piria Reaction. Published in *Journal of the American Chemical Society*, 53:700, 1432, 1443, 1931.  
Major Adviser: Professor W. H. Hunter.  
Positions Held: Assistant Professor, 1931-1932, University of Minnesota; Research Associate, 1932-1933, Princeton University; Research Chemist, 1933—, General Electric Company.  
Honors: Sigma Xi.  
Address: Research Laboratory, General Electric Co., Schenectady, New York.
1929. DUSCHAK, ALICE DAY. B.A. '16, Vassar College; M.A. '17, University of Minnesota.  
Major: Inorganic Chemistry. Minor: Physical Chemistry.  
Thesis: The Systematic Analysis of the Anions. Published in *Journal of Chemical Education*, Vol. 8, nos. 6 and 7, 1931.  
Major Adviser: Professor M. C. Sneed.  
Positions Held: Assistant Professor, 1929-1933, Alabama College, Montevallo, Alabama; Technical Librarian, 1934—, The Carborundum Co., Niagara Falls, New York.  
Honors: Phi Beta Kappa.  
Address: 140 Linwood Ave., Buffalo, New York.
1929. ELLESTAD, REUBEN B. B.S. '22, University of Minnesota.  
Major: Analytical Chemistry. Minor: Physical Chemistry.  
Thesis: Compressibility of Argon, Neon, and Helium at Zero Degrees Centigrade, between Zero and One Atmospheric Pressure. Not published.

- Major Adviser: Professor P. Brinton.  
Positions Held: Chemist, 1929—, Rock Analysis Laboratory, Instructor, 1932—, University of Minnesota.  
Honors: Sigma Xi; Phi Lambda Upsilon.  
Address: Department of Geology, University of Minnesota, Minneapolis, Minnesota.
1929. JACKMAN, ROSCOE ELMER. B.A. '21, University of Montana.  
Major: Organic Chemistry. Minors: Physical and Inorganic Chemistry.  
Thesis: Experiments on 1, 3-Diketo Hydrindene and Certain Derivatives. Not published.  
Major Adviser: Professor W. H. Hunter.  
Positions Held: Research Chemist, 1929-1931, Roessler and Hasslacher Chemical Company, Niagara Falls, New York; 1931—, Jackman's Floral Villa, Missoula, Montana.  
Address: Box 528, Missoula, Montana.
1929. MARKS, BARNARD MITCHEL. B.S. '26, Ch.E. '27, University of Missouri.  
Major: Physical Chemistry. Minor: Organic Chemistry.  
Thesis: Some Gaseous Reactions under the Influence of Ionizing Agents. Published in *Journal of Physical Chemistry*, 33:381-383, 1929; and in *Transactions of the American Electrochemical Society*, 49:157, 1931.  
Major Adviser: Professor S. C. Lind.  
Positions Held: Research Chemist, 1929-1930, Du Pont Ammonia Company; Research Chemist, 1930-1937, Du Pont Viscoloid Co.; Research Chemist, 1937—, E. I. du Pont de Nemours and Co., Plastics Division.  
Address: 167 McCook Rd., Upper Montclair, New Jersey.
1929. MORSE, MARY LOUISE. B.S. '19, M.S. '20, University of Michigan.  
Major: Organic Chemistry. Minor: Physical Chemistry.  
Thesis: The Oxidation of 2, 4, 6 Tri-Iodo Phenol. Published in *Journal of the American Chemical Society*, 55:3701, 1933.  
Major Adviser: Professor W. H. Hunter.  
Positions Held: Instructor in Chemistry, 1929-1933, University of Nebraska; Associate Professor of Chemistry, 1933-1937, Duchesne College; Associate Professor of Chemistry, 1937—, Nebraska State Teachers College at Kearney.  
Honors: Sigma Xi; Shevlin Fellow in Chemistry, 1925-1926; Iota Sigma Pi, National Editor, 1930-1936.  
Address: 311 West 27th St., Kearney, Nebraska.
1930. BYRKIT, GORDON DEAN. B.A. '26, University of Kansas; M.S. '27, University of Washington.  
Major: Organic Chemistry. Minors: Physical and Inorganic Chemistry.  
Thesis: A Critical Study of Certain Reported Abnormal Ammonium Salts. Published in *Journal of the American Chemical Society*, 54:1948, 1932.  
Major Adviser: Professor W. H. Hunter.  
Positions Held: Chemist, 1930-1931, Eastman Kodak Company; Research Assistant, 1931-1934, University of Minnesota; Research Chemist, 1934—, Continental Oil Co.  
Honors: Sigma Xi; Phi Lambda Upsilon.  
Address: Continental Oil Company, Ponca City, Oklahoma.

1930. CHANEY, ALBERT LAURENCE. B.A. '20, M.S. '25, University of Minnesota.

Major: Industrial Chemistry. Minor: Physical Chemistry.

Thesis: The Electrolysis of Perchlorates in Non-Aqueous Solutions. Published in *Journal of Physical Chemistry*, Vol. 35, 2289-2314, August 1931.

Major Adviser: Professor C. A. Mann.

Positions Held: Chemist, 1930—, Los Angeles General Hospital, Los Angeles, California.

Honors: Phi Lambda Upsilon.

Address: 1347 Andenes Drive, Glendale, California.

1930. DE LEON, ANTONIO IGNACIO. B.S. '20, M.S. '22, University of the Philippines.

Major: Inorganic Chemistry. Minor: Chemical Engineering.

Thesis: A Study of the Properties of the Hydrazinates of the Metals. Published in *Natural and Applied Science Bulletin*, 6:1, March, 1938.

Major Adviser: Professor M. C. Sneed.

Positions Held: Instructor, 1930-1933, University of the Philippines; Associate Professor, 1933—, College of Agriculture, University of the Philippines.

Address: College of Agriculture, University of the Philippines, Laguna, Philippine Islands.

1930. ELMQUIST, RUTH ESTELLA. B.A. '21, M.S. '24, University of Minnesota.

Major: Analytical Chemistry. Minor: Organic Chemistry.

Thesis: The Quantitative Determination of Lanthanum and Some Properties of Its Compounds. Published in *Journal of the American Chemical Society*, Vol. 53, 1217-1236.

Major Adviser: Professor I. M. Kolthoff.

Positions Held: Assistant Textile Chemist, 1929-1935, Associate Textile Chemist, 1935—, Bureau of Home Economics, Washington, D. C.

Honors: Sigma Xi.

Married Name: Mrs. Wilbur Rogers.

Address: 2121 New York Ave. N. W., Washington, D. C.

1930. ERNST, ROBERT CRAIG. B.S. '21, North Carolina State College; M.S. '23, University of Minnesota.

Major: Chemical Engineering. Minor: Physical Chemistry.

Thesis: The Electro-Deposited System Copper-Cadmium-Zinc. Published in *Transactions of the American Electrochemical Society*, 61:363, 1932.

Major Adviser: Professor C. A. Mann.

Positions Held: Assistant Professor of Chemical Engineering, 1926-1932, Professor, Head of Department of Chemical Engineering, 1933—, Speed Scientific School, University of Louisville.

Honors: Sigma Tau.

Address: University of Louisville, Louisville, Kentucky.

1930. KAMEDA, TOHRU. Certificate, '15, Tokio Technical College.

Major: Analytical Chemistry. Minors: Metallography and Engineering.

Thesis: I. Determination of the Hydrogen-Ion Concentration in Unbuffered Solutions. II. The Hydrolysis of Zinc Sulfate, Solubility Product of Hydrous



Zinc Oxide, and the Composition of the Latter Oxide Precipitated from Zinc Sulfate Solution. III. Conductometric Titration of Sulfate and Barium. Published in *Journal of the American Chemical Society*, 51:2888, 1929, 53:821, 825, 832, 1931, and in *Industrial and Engineering Chemistry*, Analytical Edition, 3:129, 1931.

Major Adviser: Professor I. M. Kolthoff.

Positions Held: Chemist, 1930-1932, Rockefeller Foundation Rock Laboratory, University of Minnesota; 1932—, Showa Steel Works, Manchoukou.

Honors: Sigma Xi; Phi Lambda Upsilon.

Name changed to Tohru Abbe.

Address: Showa Steel Works, Anzan, Manchoukou, Asia.

1930. KOBE, KENNETH ALBERT. B.S. in Chemical Engineering '26, M.S. '28, University of Minnesota.

Major: Physical Chemistry. Minor: Organic Chemistry.

Thesis: Carbon Suboxide and Its Catalytic Hydrogenation. Published in *Journal of Physical Chemistry*, Vol. 35, 3025-3035, October 1931.

Major Adviser: Professor L. H. Reyerson.

Positions Held: Research Chemist, 1930, Du Pont Ammonia Company; Instructor in Chemical Engineering, 1931-1934, Assistant Professor, 1934—, University of Washington.

Address: Department of Chemical Engineering, University of Washington, Seattle, Washington.

1930. LAVINE, IRVIN. B.S. in Chemical Engineering '24, University of Minnesota.

Major: Chemical Engineering. Minors: Physical and Inorganic Chemistry.

Thesis: Studies in the Development of North Dakota Lignite. I. The Aqueous Tension of Lignite. II. The Drying of Lignite without Distintegration. Published in *Industrial and Engineering Chemistry*, 22:1347, 1930.

Major Adviser: Professor C. A. Mann.

Positions Held: Assistant Professor of Chemical Engineering, 1930-1931, Associate Professor, 1931-1933, Professor and Head of Department of Chemical Engineering, 1933—, University of North Dakota; Consultant, 1935—, National Resources Committee, Washington, D. C.; Consultant, 1935—, North Dakota State Planning Board.

Honors: Sigma Xi; Phi Lambda Upsilon; Sigma Tau.

Address: University of North Dakota, Grand Forks, North Dakota.

1930. NORTHEY, ELMORE HATHAWAY. B.A. '27, University of Minnesota.

Major: Organic Chemistry. Minor: Physical Chemistry.

Thesis: The Absorption Spectra of a Series of Organic Molecular Compounds. Published in *Journal of Physical Chemistry*, 37:875, 1933.

Major Adviser: Professor W. H. Hunter.

Positions Held: Research Chemist, 1930-1932, Explosives Department, E. I. du Pont de Nemours and Company; Divisional Chemist, Pharmaceuticals Department, 1932—, Calco Chemical Co.

Honors: Sigma Xi; Phi Lambda Upsilon.

Address: Shepherd Ave., Bound Brook, New Jersey.

1930. OGG, EARL FRANCIS. B.A. '23, Carleton College; M.A. '27, University of Wisconsin.  
Major: Physical Chemistry. Minors: Inorganic and Analytical Chemistry.  
Thesis: A Study of the Hydrogen-Bromine Reaction under the Influence of Alpha Particles from Radon. Not published. A review printed in *Zeitschrift für physikalische Chemie*, August 1931.  
Major Adviser: Professor S. C. Lind.  
Positions Held: Professor of Physical Sciences, 1930-1932, Union College; Assistant Chemist, 1934—, Tennessee Valley Authority.  
Address: Wilson Dam, Alabama.
1931. BLUMER, DONALD ROBERT. B.A. '27, University of South Dakota.  
Major: Physical Chemistry. Minor: Physics.  
Thesis: The Activities of Each Component of a Sulfuric Acid, Acetic Acid, and Water System. Published in *Journal of the American Chemical Society*, 55:2236-2240, 1933.  
Major Adviser: Professor F. H. MacDougall.  
Positions Held: Chemist, 1931-1933, General Electric Company; Research Assistant and Associate in Natural Gas, 1933-1937, School of Mineral Industries Experiment Station, Pennsylvania State College; Senior Chemist, 1937—, Methane Conversion, Research Laboratory, Phillips Petroleum Co.  
Honors: Phi Beta Kappa; Sigma Xi; Phi Lambda Upsilon; Clark M. Young Prize, Warden of Nelson Shield, University of South Dakota.  
Address: Research Laboratory, Phillips Petroleum Company, Bartlesville, Oklahoma.
1931. CASS, OLIVER WILFRED. B.S. '23, Hamline University; M.S. '27, University of Chicago.  
Major: Organic Chemistry. Minor: Physical Chemistry.  
Thesis: Studies on the Polymethyl Benzenes: I. The Separation of Isomeric Trimethyl Benzenes. II. The Separation of the Isomeric Tetramethyl Benzenes. III. The Jacobson Reaction. Published in *Journal of the American Chemical Society*, 54:1609, 1932.  
Major Adviser: Professor L. I. Smith.  
Positions Held: Associate Professor of Chemistry, 1931-1933, Oklahoma City University; Research Chemist, 1933—, R. and H. Chemicals Department, E. I. du Pont de Nemours and Co.  
Address: R. and H. Chemicals Department, E. I. du Pont de Nemours and Co., Niagara Falls, New York.
1931. FRECHE, HERTHA RUMSCH. B.A. '19, M.S. '25, University of Minnesota.  
Major: Inorganic Chemistry. Minors: Metallography and Physical Chemistry.  
Thesis: The Chemical Action of Ammonium Hydroxide upon Mercurous Chloride. Published in *Journal of the American Chemical Society*, 60:518, 1938.  
Major Adviser: Professor M. C. Sneed.  
Positions Held: Research Metallurgist, 1929—, Research Laboratory, Aluminum Company of America, New Kensington, Pennsylvania.  
Honors: Sigma Xi.  
Address: 917 North Street, New Kensington, Pennsylvania.

1931. KVALNES, DONOVAN ERB. B.A. '27, University of Montana.  
Major: Organic Chemistry. Minor: Physical Chemistry.  
Thesis: The Oxidizing Power of a Series of Hydroquinone-Quinone Systems.  
Published in *Journal of American Chemical Society*, 54:2869, 1932.  
Major Adviser: Professor W. H. Hunter.  
Positions Held: Instructor in Organic Chemistry, 1931-1932, University of Minnesota; National Research Fellow in Chemistry, 1932-1934, Harvard University; Research Chemist, 1934—, E. I. du Pont de Nemours and Co.  
Honors: Sigma Xi.  
Address: 10 Ziegler Tract, Penn's Grove, New Jersey.
1931. LAUER, BYRON ELMER. B.S. '29, Oregon State Agricultural College; M.A. '29, University of Minnesota.  
Major: Chemical Engineering. Minor: Physical Chemistry.  
Thesis: A Study of the Action of Organic Nitrogen Bases in Inhibiting the Corrosion of Iron and Steel in Acids. Published in *Journal of Industrial and Engineering Chemistry*, 28:1048, 1936.  
Major Adviser: Professor C. A. Mann.  
Positions Held: Research Chemical Engineer, 1931-1934, Northern Paper Mills; Research Chemical Engineer, 1934-1935, Crown-Willamette Paper Co.; Assistant Professor of Chemical Engineering, 1935-1938, Associate Professor, 1938—, North Carolina State College.  
Honors: Gamma Sigma Epsilon.  
Address: Department of Chemical Engineering, North Carolina State College, Raleigh, North Carolina.
1931. McMILLEN, ELLIOTT LEE. B.S. '23, University of Minnesota.  
Major: Chemical Engineering. Minor: Physical Chemistry.  
Thesis: Thixotropy, Its Measurement and Relation to Plasticity. Published in *Journal of Rheology*, (now combined with *Physics*) 3:75, 163, 179, 1932.  
Major Adviser: Professor C. A. Mann.  
Positions Held: Instructor in Chemical Engineering, 1932-1935, University of Minnesota; Assistant Professor in Chemical Engineering, 1935—, Iowa State College.  
Honors: Sigma Xi.  
Address: 1119 Curtiss Ave., Ames, Iowa.
1931. PEARSON, ELMER ALEXANDER. B.S. '20, M.S. in Chemical Engineering '21, University of Minnesota.  
Major: Analytical Chemistry. Minor: Organic Chemistry.  
Thesis: I. The Promoting Effect of Copper Sulfide on the Speed of Precipitation of Zinc Sulfide. II. Analytical Studies of Potassium Ferrocyanide. Published in *Industrial and Engineering Chemistry*, 3:381, 1931.  
Major Adviser: Professor I. M. Kolthoff.  
Positions Held: Junior Food and Drug Inspector, 1931-1937, Department of Agriculture, New York City.  
Address: Box 877, Proctor, Minnesota.
1931. ROSENBLUM, CHARLES. B.S. '27, University of Rochester.  
Major: Chemistry. Minor: Physics.

- Thesis: The Effect of Radon on the Carbon Monoxide Oxidation. The Catalytic Effect of Carbon Dioxide Formed. Published in *Proceedings of the National Academy of Science*, Vol. 18, no. 5, 374-386, May, 1932.  
Major Adviser: Professor S. C. Lind.  
Positions Held: Research Associate, 1931-1935, University of Minnesota; Fellow, C.R.B. Education Foundation, Inc., 1935-1937, University of Louvain, Belgium; Instructor, 1937—, Princeton University.  
Honors: Sigma Xi; Phi Lambda Upsilon.  
Address: Frick Chemical Laboratory, Princeton University, Princeton, New Jersey.
1931. RUTH, BURRELL FRANKLIN. B.S. '23, M.S. '25, Michigan State College.  
Major: Chemical Engineering. Minor: Physical Chemistry.  
Thesis: Studies in Filtration. Published in *Industrial and Engineering Chemistry*, 27:76, 153, 1933; 27:708, 806, 1935.  
Major Advisers: Professors G. H. Montillon and R. E. Montonna.  
Positions Held: Instructor in Chemical Engineering, 1926-1937, University of Minnesota; Professor in Chemical Engineering, 1937—, A. and M. College of Texas.  
Honors: Sigma Xi.  
Address: 202 E. 28th St., Bryan, Texas.
1931. TRUESDALE, EDWARD CUSHMAN. B.A. '22, Carleton College; M.A. '27, Harvard University.  
Major: Physical Chemistry. Minor: Physics.  
Thesis: Chemical Effects Produced by Alpha Particles from Radon on the System: Hydrogen-Sulfur-Hydrogen Sulfide. Published in *Journal of the American Chemical Society*, Vol. 53, December 1931, with S. C. Lind.  
Major Adviser: Professor S. C. Lind.  
Positions Held: Investigator, 1931—, Research Division, New Jersey Zinc Company, Palmerton, Pennsylvania.  
Honors: Phi Beta Kappa; Sigma Xi; Phi Lambda Upsilon.  
Address: 231 Princeton Avenue, Palmerton, Pennsylvania.
1931. YOHE, ROBERT VERNON. B.A. '27, Drake University.  
Major: Organic Chemistry. Minor: Physical Chemistry.  
Thesis: The Polymerization of Some Unsaturated Hydrocarbons: A Study of the Catalytic Action of Aluminum Chloride. Published in *Journal of the American Chemical Society*, 55:1248, 1933.  
Major Adviser: Professor W. H. Hunter.  
Positions Held: Research Chemist, 1931-1935, Compounding Chemist, 1935-1936, Manager, General Chemical Laboratories, 1936—, B. F. Goodrich Co.  
Honors: Phi Beta Kappa.  
Address: The B. F. Goodrich Co., Akron, Ohio.
1932. CAMERON, ANGUS EWAN. B.A. '18, Oberlin College.  
Major: Physical Chemistry. Minor: Physics.  
Thesis: The Sorption of Bromide and of Iodine Vapor by Highly Activated Silica Gel and Coconut Charcoal. Published in *Journal of Physical Chemistry*, 40:233, 1936.

- Major Adviser: Professor L. H. Reyerson.  
Positions Held: Research Fellow in Chemistry, 1932-1933, National Research Council, Institute of Applied Optics, University of Rochester; Research Chemist, 1933-1938, E. K. Co., Rochester, New York; Research Chemist, 1938—, Eisendrath Memorial Laboratory.  
Honors: Phi Beta Kappa; Sigma Xi.  
Address: Eisendrath Memorial Laboratory, Racine, Wisconsin.
1932. CORNELL, LEW WALLACE. B.S. in Ch.E. '27, University of Minnesota.  
Major: Chemical Engineering. Minor: Bacteriology and Agricultural Biochemistry.  
Thesis: Studies in Distillation. Published in *Industrial and Engineering Chemistry*, 25:1331, 1933.  
Major Adviser: Professor R. E. Montonna.  
Positions Held: Research Assistant, 1932-1935, University of Minnesota; Research Chemical Engineer, 1935-1936, Northern Paper Mills, Green Bay, Wisconsin; Instructor in Chemical Engineering, 1936-1937, State University of Iowa; Research Chemical Engineer, 1937—, Minnesota Mining and Manufacturing Co.  
Honors: Sigma Xi; Tau Beta Pi; Phi Lambda Upsilon.  
Address: 2028 Jefferson Ave., St. Paul, Minnesota.
1932. GILMORE, KEREN ELIZABETH. B.A. '25, Western College; M.A. '27, Smith College.  
Major: Physical Chemistry. Minor: Physics and Organic Chemistry.  
Thesis: Effects Produced by Radon on the System: Hydrogen-Iodine-Hydrogen Iodide. Published in *Journal of Physical Chemistry*, 42:617, 1938.  
Major Adviser: Professor S. C. Lind.  
Positions Held: Instructor, 1932-1935, Wheaton College, Norton, Massachusetts.  
Married Name: Mrs. Walter H. Brattain.  
Address: 270 West 11th St., New York City, N. Y.
1932. LARIAN, MAURICE GREGOR. B.S. '26, M.S. '28, Iowa State College.  
Major: Chemical Engineering. Minor: Metallography.  
Thesis: Studies in the Drying of Gel Zeolite. Published in *Industrial and Engineering Chemistry*, 28:196, 1936.  
Major Adviser: Professor Charles A. Mann.  
Positions Held: Research Assistant, 1933-1934, Research Associate, Northwest Research Foundation, 1935-1936, University of Minnesota; Assistant Professor of Chemical Engineering, 1936—, Michigan State College.  
Honors: Sigma Xi.  
Address: Michigan State College, East Lansing, Michigan.
1932. MITCHELL, WILLIAM JAMES. B.S. in Ch.E. '29, M.S. in Ch.E. '31, University of Minnesota.  
Major: Chemical Engineering. Minor: Physical Chemistry.  
Thesis: Studies of the Effect of Light on Cellulose and Cellulose Derivatives. Not published.  
Major Adviser: Professor R. E. Montonna.

- Positions Held: Chemical Engineer, Northwest Research Foundation, 1932-1933, University of Minnesota; Chemical Engineer, 1933-1934, C. E. English Company, Minneapolis, Minnesota; Chemical Engineer, 1934-1936, National Aniline and Chemical Co., Buffalo, New York; Chemical Engineer, 1936—, R. and H. Division of du Pont de Nemours and Co., Niagara Falls, N. Y.  
 Honors: Sigma Xi; Phi Lambda Upsilon.  
 Address: 500 Ashland Avenue, Buffalo, New York.
1932. SANDELL, ERNEST BIRGER. B.S. '28, M.S. '29, University of Minnesota.  
 Major: Analytical Chemistry. Minor: Physical Chemistry.  
 Thesis: A Study of Coprecipitation Phenomena in the Formation of Calcium Oxalate. Published in *Journal of Physical Chemistry*, 37:153, 443, 459, 723, 1933.  
 Major Adviser: Professor I. M. Kolthoff.  
 Positions Held: Instructor in Chemistry, 1932-1937, Assistant Professor, 1937—, University of Minnesota.  
 Honors: Sigma Xi.  
 Address: 4424 Victory Ave., Minneapolis, Minnesota.
1932. SMITH, GRANT WARREN. B.A. '28, Grinnell College.  
 Major: Physical Chemistry. Minor: Physics.  
 Thesis: The Zeta Potential of Thin Metal Films. Published in *Journal of Physical Chemistry*, 38:133, 1934.  
 Major Adviser: Professor L. H. Reyerson.  
 Positions Held: Instructor in Chemistry, 1932-1934, Itasca Junior College; Instructor in Chemistry, 1934-1935, Grinnell College; Assistant Professor of Chemistry, 1935—, University of Kansas City.  
 Honors: Phi Beta Kappa; Sigma Xi; Phi Lambda Upsilon.  
 Address: University of Kansas City, Kansas City, Missouri.
1932. STROMBERG, HANS BERNHARD SEVERIN. B.Ch.E. '29, M.S. in Chemical Engineering '29, University of Minnesota.  
 Majors: Biochemistry and Chemical Engineering. Minor: Bacteriology.  
 Thesis: A Biochemical Survey of the Rochester Sewage Disposal Plant and the Zumbro River. Not published.  
 Major Advisers: Professors E. C. Kendall and C. A. Mann.  
 Positions Held: Assistant Sanitary Engineer, 1932-1933, Minnesota State Board of Health; Process Foreman, 1933-1935, Assistant Chemical Supervisor, 1935-1938, Soap Making Supervisor, 1938—, Procter and Gamble Co.  
 Honors: Sigma Xi; Phi Lambda Upsilon.  
 Address: Procter and Gamble Co., Ivorydale, Ohio.
1933. FULLER, DONALD LEASK. B.Ch.E. '29, University of Minnesota.  
 Major: Physical Chemistry. Minors: Mathematics and Physics.  
 Thesis: The Solubility of Various Gases in Various Liquids at High Pressures. I. The System Hydrogen Chloride-Propane. Published in *Journal of Chemical Physics*, 1:703, 709, 714, 1933.  
 Major Adviser: Professor George Glockler.  
 Positions Held: Research Fellow in Chemistry, 1933-1935, University of Minnesota; Research Chemist, 1935—, American Cyanamid Co.

- Honors: Sigma Xi; Phi Lambda Upsilon; Shevlin Fellow in Chemistry, 1932-1933.  
Address: American Cyanamid Co., Research Laboratories, 1937 W. Main St., Stamford, Connecticut.
1933. REHNER, JOHN, JR. B.S.E. '29, M.A. '30, University of Missouri.  
Major: Physical Chemistry. Minor: Physics.  
Thesis: The Activity of Silver Acetate and Similar Salts in the Presence of Electrolytes. Published in *Journal of American Chemical Society*, 56:368, 1934.  
Major Adviser: Professor F. H. MacDougall.  
Positions Held: Research Chemist, 1933—, B. F. Goodrich Co., Akron, Ohio; 1938, Malayan Research Laboratories, Kuala Lumpur, Federated Malay States.  
Honors: Sigma Xi; Phi Lambda Upsilon; Tau Beta Pi; Fellow of the A.A.A.S.  
Address: Chemical Research Laboratories, B. F. Goodrich Co., Akron, Ohio.
1933. ROE, CHARLES PARKER. B.Ch. '29, University of Minnesota.  
Major: Physical Chemistry. Minor: Mathematics and Physics.  
Thesis: The Solubilities of Various Gases in Various Liquids at High Pressures. II. The System Hydrogen Chloride-Krypton. Published in *Journal of Chemical Physics*, 1:703, 1935.  
Major Adviser: Professor George Glockler.  
Positions Held: Research Chemist, 1934—, U. S. Rubber Products Co., Inc.  
Honors: Sigma Xi; Phi Lambda Upsilon.  
Address: 283 Chestnut Street, Nutley, New Jersey.
1933. SHIFLETT, CHESTER HINES. B.A. '21, Kingfisher College; M.A. '23, Clark University.  
Major: Physical Chemistry. Minor: Inorganic Chemistry.  
Thesis: The Temperature Coefficient of the Combination of Hydrogen and Oxygen under Alpha Radiation. Published in *Journal of Physical Chemistry*, 38:327, 1933.  
Major Adviser: Professor S. C. Lind.  
Positions Held: Professor of Chemistry, 1929—, Macalester College.  
Honors: Sigma Xi.  
Address: 1797 Stanford, St. Paul, Minnesota.
1933. SPIELMAN, MARVIN ANDREW. B.S. '29, North Dakota Agricultural College.  
Major: Organic Chemistry. Minor: Agricultural Biochemistry.  
Thesis: A Study of the Molecular Rearrangements of the Alpha, Beta-Unsaturated Ethers. Published in *Journal of the American Chemical Society*, 55:4089, 4923, 1933.  
Major Adviser: Professor W. M. Lauer.  
Positions Held: National Research Council Fellow, 1933-1934, Yale University; National Research Council Fellow, 1934-1935, University of Illinois; Research Fellow in Zoology, 1935-1936, Assistant Professor of Chemistry, 1936—, University of Wisconsin.  
Honors: Sigma Xi.  
Address: Department of Chemistry, University of Wisconsin, Madison, Wisconsin.

1933. STENGER, VERNON ARTHUR. B.S.Ch.E. '29, M.S. '30, University of Denver.  
Major: Analytical Chemistry. Minor: Physical Chemistry.  
Thesis: The Adsorption of Cations from Ammoniacal Solutions by Silica Gel. Published in *Journal of Physical Chemistry*, 36:2113, 1932; 38:249, 475, 639, 1934.  
Major Adviser: Professor I. M. Kolthoff.  
Positions Held: Analytical Chemist, 1933-1935, Northwest Institute of Research, University of Minnesota; Analytical Research Chemist, 1935—, Dow Chemical Company.  
Honors: Sigma Xi.  
Address: 1112 E. Park Drive, Midland, Michigan.
1933. STODOLA, FRANK HAROLD. B.S. Ch.E. '28, University of Minnesota.  
Major: Organic Chemistry. Minor: Physical Chemistry.  
Thesis: The Addition of Bromide to Pentene-2. Published in *Journal of American Chemical Society*, 56:1215, 1934.  
Major Adviser: Professor W. M. Lauer.  
Positions Held: National Tuberculosis Association Fellow, 1934-1937, Yale University; Research Chemist, 1938—, Biochemistry Laboratory, Mayo Clinic, Rochester.  
Honors: Sigma Xi; Phi Lambda Upsilon.  
Address: 314 9th Ave. North, Hopkins, Minnesota.
1933. WILLMAN, AUGUST. B.A. '16, Reed College; M.A. '27, University of Minnesota.  
Major: Analytical Chemistry. Minor: Physical Chemistry.  
Thesis: Glacial Acetic Acid as a Solvent for Acids and Bases. Published in *Journal of American Chemical Society*, 56:1007, 1934.  
Major Adviser: Professor I. M. Kolthoff.  
Positions Held: Instructor, 1933-1936, Rock Analysis Laboratory, University of Minnesota; Instructor, 1936—, Itasca Junior College.  
Honors: Sigma Xi; Phi Lambda Upsilon.  
Address: Coleraine, Minnesota.
1933. WILSON, JOHN LEWIS. B.A. '20, B.S. '25, Jamestown College; M.A. '24, University of Michigan; M.S. '27, University of Oregon.  
Major: Physical Chemistry. Minor: Physics.  
Thesis: The Activation of Molecular Oxygen by Electron Impact. Published in *Journal of American Chemical Society*, 54:4544-4558, 1932.  
Major Adviser: Professor George Glockler.  
Positions Held: Director of Research, 1932—, Economics Laboratory, Inc., 622 Globe Building, St. Paul, Minnesota.  
Honors: Sigma Xi.  
Address: 1242 Lafond Street, St. Paul, Minnesota.
1934. BEAL, JOHN LINDEN. B.S. '27, M.S. '29, University of Minnesota.  
Major: Chemical Engineering. Minor: Physical Chemistry.  
Thesis: Studies in the Electrolysis of Non-Aqueous Solutions. Published in *Journal of Physical Chemistry*, Vol. 42, February, 1938.  
Major Adviser: Professor Charles A. Mann.



Positions Held: Instructor in Chemical Engineering, 1934-1936, University of Iowa; Assistant Professor of Chemical Engineering, 1936-1937, Associate Professor, 1937—, Montana State College.

Honors: Sigma Xi; Phi Lambda Upsilon.

Address: Montana State College, Bozeman, Montana.

1934. DAVIS, HENRY MAUZEE. B.S. '29, M.S. '30, University of Oklahoma. Major: Physical Chemistry. Minor: Physics.

Thesis: Studies of the Raman Effect and Molecular Structure. The Acetylenic Bond. Published in *Journal of Chemical Physics*, 2:881, 1934.

Major Adviser: Professor G. Glockler.

Positions Held: Head, Department of Chemistry, 1934-1936, Itasca Junior College; Research Assistant in Ceramics, 1936-1937, Research Associate, 1937—, School of Mineral Industries, Pennsylvania State College.

Honors: Sigma Xi.

Address: School of Mineral Industries, Pennsylvania State College, State College, Pennsylvania.

1934. FAUST, CHARLES LAWSON. B.S. Ch.E. '30, M.S. '31, Washington University.

Major: Chemical Engineering. Minor: Physical Chemistry.

Thesis: The Electrodeposition of Copper, Nickel and Zinc Alloys from Cyanide Solutions. Published in *Transactions of Electrochemical Society*, 65:361, 1934; 67:281, 1935.

Major Adviser: Professor G. H. Montillon.

Positions Held: Chemical Engineer, 1934—, Battelle Memorial Institute.

Honors: Sigma Xi; Tau Beta Pi; Phi Lambda Upsilon; Member, American Chemical Society; Electrochemical Society.

Address: Battelle Memorial Institute, Columbus, Ohio.

1934. FILBERT, WILLIAM FREDERICK. B.S. '28, Dakota Wesleyan University; M.S. '33, University of Minnesota.

Major: Organic Chemistry. Minors: Inorganic and Physical Chemistry.

Thesis: Studies in the Alpha-Gamma Transposition. Published in *Journal of American Chemical Society*, 58:1388, 1936.

Major Adviser: Professor L. I. Smith.

Positions Held: Research Chemist, 1935—, Eastern Laboratory, E. I. du Pont de Nemours and Co.

Honors: Sigma Xi.

Address: Eastern Laboratory, E. I. du Pont de Nemours and Co., Gibbstown, New Jersey.

1934. JURGENSEN, DELBERT FREDERICK, JR. B.Ch.E. '31, M.S. in Ch.E. '32, University of Minnesota.

Major: Chemical Engineering. Minor: Physical Chemistry.

Thesis: Heat Transfer Coefficients on Inclined Tubes. Published in *Industrial and Engineering Chemistry*, 27:1466, 1935.

Major Adviser: Professor G. H. Montillon.

Positions Held: Chemist, 1934-1935, Pure Oil Co.; Research Engineer, 1935—, U. S. Gypsum Co., Chicago.

Honors: Sigma Xi; Phi Lambda Upsilon.

Address: 7722 N. Ashland Ave., Chicago, Illinois.

1934. LANGKAMMERER, CARL MARTIN. B.S. Ch.E. '29, University of Minnesota.  
Major: Organic Chemistry. Minor: Physical Chemistry.  
Thesis: The Mechanism of the Piria Reaction. Published in *Journal of American Chemical Society*, 58:225-228, 1936.  
Major Adviser: Professor W. M. Lauer.  
Positions Held: Professor of Chemistry, 1934-1936, Concordia College, Moorhead, Minnesota; Research Chemist, 1936—, E. I. du Pont de Nemours Co., Wilmington, Delaware.  
Honors: Sigma Xi; Phi Lambda Upsilon.  
Address: 113 Winston Ave., Elmhurst, Delaware.
1934. LITKENHOUS, EDWARD EARL. B.S. Ch.E. '30, M.S. '31, University of Louisville.  
Major: Chemical Engineering. Minor: Physical Chemistry.  
Thesis: The Hydrogenation of Nickel Carbonyl. Published in *Industrial and Engineering Chemistry*, 29:934, 1937.  
Major Adviser: Professor C. A. Mann.  
Positions Held: Assistant Professor, 1936-1938, Associate Professor, 1938—, Department of Chemical Engineering, University of Louisville.  
Honors: Sigma Xi; Theta Chi Delta; Phi Lambda Upsilon; Omega Chi Epsilon; Sigma Tau.  
Address: University of Louisville, Louisville, Kentucky.
1934. MILLER, SIDNEY EDWARD. B.S. '28, M.S. '30, University of Oklahoma.  
Major: Organic Chemistry. Minor: Physical Chemistry.  
Thesis: The Structure of Certain Azo Dyes and Related Compounds. Published in *Journal of American Chemical Society*, 57:520, 1935.  
Major Adviser: Professor W. M. Lauer.  
Positions Held: Research Chemist, 1934—, General Mills, Inc.  
Honors: Sigma Xi; Phi Lambda Upsilon.  
Address: 801 East River Road, Minneapolis, Minnesota.
1934. TOMSICEK, WILLIAM JOSEPH. B.S. '22, M.S. '27, University of Michigan.  
Major: Analytical Chemistry. Minor: Inorganic and Physical Chemistry.  
Thesis: Oxidation Reduction Potentials of Ferro and Molybdocyanide Systems. Published in *Journal of Physical Chemistry*, 39:945, 1935.  
Major Adviser: Professor I. M. Kolthoff.  
Positions Held: Professor of Chemistry, 1931—, Chairman of Science Department, 1933—, College of St. Thomas, St. Paul, Minnesota.  
Honors: Sigma Xi; Phi Lambda Upsilon.  
Address: 2129 Grand Ave., St. Paul, Minnesota.
1934. YUSTER, SAMUEL. B.S. '26, North Dakota State College.  
Major: Physical Chemistry. Minor: Organic Chemistry.  
Thesis: The Catalytic Chlorination of Propane. Published in *Journal of Physical Chemistry*, 39:859, 1935.  
Major Adviser: Professor L. H. Reyerson.  
Positions Held: Assistant Professor of Petroleum and Natural Gas Engineering, 1934—, Pennsylvania State College.

- Honors: Phi Lambda Upsilon; Phi Kappa Phi; Sigma Xi; Shevlin Fellow in Chemistry, 1931-1932, University of Minnesota.  
Address: Pennsylvania State College, State College, Pennsylvania.
1935. BARTSCH, CHARLES EDWARD. B.A. '31, Lawrence College.  
Major: Physical Chemistry. Minors: Analytical and Organic Chemistry.  
Thesis: The Solubility and Activity Coefficients of Silver Acetate in Mixed Solvents. Published in *Journal of Physical Chemistry*, 40:649-660, 1936.  
Major Adviser: Professor F. H. MacDougall.  
Positions Held: Research Chemist, 1935—, E. I. du Pont de Nemours and Co.  
Honors: Sigma Xi; Phi Lambda Upsilon.  
Address: E. I. du Pont de Nemours and Co., Parlin, New Jersey.
1935. BUNGER, HAROLD ALAN. B.S. in Ch.E. '26, University of Minnesota.  
Major: Chemical Engineering. Minor: Organic Chemistry.  
Thesis: A Study of the Effect of Ultra Violet Light on the Viscosity of Cellulose Nitrate Solutions. Not published.  
Major Adviser: Professor R. E. Montonna.  
Positions Held: Associate Professor, 1935-1936, Professor and Chief of Division of Chemical Engineering, 1936—, Georgia School of Technology.  
Honors: Sigma Xi; Tau Beta Pi.  
Address: Georgia School of Technology, Atlanta, Georgia.
1935. CALVIN, MELVIN. B.S. in Ch. '31, Michigan College of Mining and Technology.  
Major: Physical Chemistry. Minors: Physics and Mathematics.  
Thesis: The Use of Electrons in the Study of Atomic and Molecular Structure. I. The Electron Affinity of Iodine. II. The Ionization Efficiency of Iodine. III. The Accommodation Coefficient of Positive Ions. Published in *Journal of Chemical Physics*, 3:771, December 1935.  
Major Adviser: Professor George Glockler.  
Positions Held: Honorary Research Student, 1935-1936, Honorary Research Fellow, 1936-1937, University of Manchester, England; Instructor, 1937—, Department of Chemistry, University of California.  
Address: Department of Chemistry, University of California, Berkeley, California.
1935. DENYES, RUSSELL OWENS. B.A. '31, Lawrence College.  
Major: Organic Chemistry. Minor: Physical Chemistry.  
Thesis: Studies on the Addition of Malonic Ester to Duroquinone. Published in *Journal of the American Chemical Society* 58:304, 1936.  
Major Adviser: Professor L. I. Smith.  
Positions Held: Junior Research Associate, 1935-1936, Stanford University; Industrial Fellow, 1936—, Mellon Institute of Industrial Research.  
Honors: Phi Beta Kappa; Sigma Xi; Phi Lambda Upsilon.  
Address: 210 West St., Wilkesburg, Pennsylvania.
1935. GERNES, DONALD CONSTANT. B.S. in Ch.E. '31, M.S. in Ch.E. '32, University of Minnesota.  
Major: Chemical Engineering. Minor: Physical Chemistry.

- Thesis: Studies on the Electrodeposition of Metals and Binary Alloys from Thiosulphate Baths. Not published.  
Major Adviser: Professor G. H. Montillon.  
Positions Held: Associate Chemical Engineer, 1935—, Northwest Research Institute, University of Minnesota.  
Honors: Phi Lambda Upsilon; Alpha Chi Sigma Sophomore Prize.  
Address: 500 7th St. S. E., Minneapolis, Minnesota.
1935. GRAVES, HAROLD EDWARD. B.Ch.E. '32, M.S. in Ch.E. '32, University of Minnesota.  
Major: Chemical Engineering. Minor: Organic Chemistry.  
Thesis: A Study of the Pyrolysis of Phenyl Benzoate. Not published.  
Major Adviser: Professor R. E. Montonna.  
Positions Held: Research Chemist, 1935-1936, Calco Chemical Co., Inc.; Associate Professor of Chemical Engineering, 1936—, Mississippi State College.  
Honors: Sigma Xi; Alpha Chi Sigma.  
Address: State College, Mississippi.
1935. HAC, LUCILE ROSE. B.A. '30, M.S. '31, University of Nebraska.  
Major: Organic Chemistry. Minor: Bacteriology.  
Thesis: The Addition of Cyclopentadiene to Ortho-Benzoquinones. Published in *Journal of American Chemical Society*, 56:477, 1934, 58:229, 1936.  
Major Adviser: Professor L. I. Smith.  
Positions Held: Associate Bacteriologist, 1935-1936, Maryland State Department of Health, Baltimore; Research Assistant, 1936-1937, Department of Obstetrics and Gynecology, University of Chicago; Instructor, 1937—, Department of Obstetrics and Gynecology, University of Chicago A. B. Kuppenheimer Fund.  
Honors: Phi Beta Kappa; Sigma Xi.  
Address: Department of Obstetrics and Gynecology, University of Chicago, Chicago, Illinois.
1935. HOFFMAN, EVERETT JOHN. B.Ch.E. '31, University of Minnesota.  
Major: Physical Chemistry. Minors: Physics and Organic Chemistry.  
Thesis: The Solubility of Lead Bromate and Its Activity Coefficients in Aqueous Solutions of Electrolytes. Published in *Journal of Physical Chemistry*, 40:317-331, 1936.  
Major Adviser: Professor F. H. MacDougall.  
Positions Held: Research Chemist, 1935—, Armour and Co.  
Honors: Sigma Xi; Phi Lambda Upsilon.  
Address: Research Laboratory, Armour and Co., Union Stock Yards, Chicago, Illinois.
1935. KILBURN, ELSIE INEZ. B.A. '24, M.S. '27, University of Minnesota.  
Major: Organic Chemistry. Minors: Physical and Inorganic Chemistry.  
Thesis: The Rearrangement of Some Beta-Allyloxy-Crotonic-Esters. Published in *Journal of American Chemical Society*, 59:2586, 1937.  
Major Adviser: Professor W. M. Lauer.  
Positions Held: Librarian, 1935—, National Aniline and Chemical Co., Buffalo, New York.  
Honors: Sigma Xi; Iota Sigma Pi.  
Address: 225 Elmwood Ave., Buffalo, New York.

1935. LORENZ, GEORGE ALFRED. B.S. in Ch.E. '31, University of Illinois.  
Major: Chemical Engineering. Minor: Physical Chemistry.  
Thesis: The Single Metal and Ternary Alloy Deposition of Copper, Nickel and Zinc from Thiosulfate Solutions. Not published.  
Major Adviser: Professor G. H. Montillon.  
Positions Held: Junior Research Chemist, 1935-1936, Head Pilot Plant Research, 1936—, Shell Petroleum Corporation.  
Honors: Sigma Xi; Phi Lambda Upsilon; Beta Alpha; Omega Chi Epsilon.  
Address: 324 M St., Edwardsville, Illinois.
1935. MACMULLEN, CLINTON WILLIAM. B.Ch.E. '30, University of Minnesota.  
Major: Organic Chemistry. Minor: Chemical Engineering.  
Thesis: The Addition of Acetoacetic Ester to Pseudocumquinone. Published in *Journal of American Chemical Society*, 58:629, 1936.  
Major Adviser: Professor L. I. Smith.  
Positions Held: Research Organic Chemist, 1935—, Röhm and Haas Co.  
Honors: Sigma Xi.  
Address: 4904 Penn St., Frankford, Philadelphia, Pennsylvania.
1935. MOLTZAU, DANIEL ROMUND. B.A. '31, University of Montana.  
Major: Physical Chemistry. Minor: Analytical Chemistry.  
Thesis: The Promoting Effect of Mercuric Sulfide on the Precipitation of Zinc Sulfide with Further Studies Regarding the Properties of These Two Sulfides. Published in *Chemical Review*, 17:293-325, 1935.  
Major Adviser: Professor I. M. Kolthoff.  
Positions Held: Research Assistant and Instructor, 1931—, Institute of Paper Chemistry.  
Honors: Sigma Xi.  
Address: Fergus, Montana.
1935. MORRELL, CHARLES EUGENE. B.S. '31, M.S. '32, University of Kentucky.  
Major: Physical Chemistry. Minor: Physics.  
Thesis: Studies of the Raman Spectra and Molecular Structure of Acetylene and Some of Its Derivatives. Published in *Journal of Chemical Physics*, 4:15-22, 1936.  
Major Adviser: Professor George Glockler.  
Positions Held: Chemist, 1935—, Standard Oil Research Development Corporation.  
Address: Standard Oil Research Development Corporation, Elizabeth, New Jersey.
1935. MOYLE, CLARENCE LLEWELLYN. B.S. '30, M.S. '32, University of Minnesota.  
Major: Organic Chemistry. Minor: Inorganic Chemistry.  
Thesis: The Jacobsen Reaction. Published in *Journal of American Chemical Society*, 58:1, 1936; *Journal of Organic Chemistry*, 1937.  
Major Adviser: Professor L. I. Smith.  
Positions Held: Senior Chemist, 1935, Minnesota State Highway Department; Research Chemist, 1935—, Dow Chemical Co.

- Honors: Sigma Xi.  
Address: Dow Chemical Co., Midland, Michigan.
1935. SWENSON, OSCAR JOSEPH. B.Ch.E. '31, University of Minnesota.  
Major: Chemical Engineering. Minor: Mechanical Engineering.  
Thesis: Lignite Producer Gas as a Possible Tractor Fuel in the Northwest.  
Not published.  
Major Adviser: Professor G. H. Montillon.  
Positions Held: Industrial Engineer, 1935—, E. I. du Pont de Nemours and Co.  
Honors: Sigma Xi.  
Address: Industrial Engineering Division, E. I. du Pont de Nemours and Co.,  
Wilmington, Delaware.
1935. TAYLOR, FRED LOWELL. B.S. '30, University of Wisconsin.  
Major: Organic Chemistry. Minors: Physical and Inorganic Chemistry.  
Thesis: Mercury Compounds of the Polymethylbenzenes and Their Use in Syn-  
thesis. Published in *Journal of American Chemical Society*, 57:2370, 2460,  
1935.  
Major Adviser: Professor L. I. Smith.  
Positions Held: Research Chemist, 1935-1937, Monsanto Chemical Co., Thomas  
and Hochwalt Division, Dayton, Ohio; Research Chemist, 1937—, The Dow  
Chemical Co., Midland, Michigan.  
Honors: Sigma Xi.  
Address: 510 McDonald St., Midland, Michigan.
1935. THOMAS, LLOYD BREWSTER. B.A. '30, University of Minnesota.  
Major: Physical Chemistry. Minor: Physics.  
Thesis: Use of Electrons in Study of Electron Activated Reactions. Published  
in *Journal of American Chemical Society*, 57:2352, 1935.  
Major Adviser: Professor George Glockler.  
Positions Held: Instructor, 1935—, University of Missouri.  
Address: 804 Virginia Avenue, Columbia, Missouri.
1935. WINDING, CHARLES CALVERT. B.Ch.E. '31, University of Minne-  
sota.  
Major: Chemical Engineering. Minor: Organic Chemistry.  
Thesis: The Effect of Light on Cellulose Acetate. Not published.  
Major Adviser: Professor R. E. Montonna.  
Positions Held: Instructor, 1935-1938, Assistant Professor, 1938—, School of  
Chemical Engineering, Cornell University.  
Honors: Sigma Xi.  
Address: School of Chemical Engineering, Cornell University, Ithaca, New  
York.
1936. BECKEL, ARTHUR CHARLES. B.S. '19, University of Minnesota.  
Major: Organic Chemistry. Minor: Geology.  
Thesis: The Relation of the Decomposition of a Series of Triarylacetic Acids  
to the Stability of the Corresponding Triarylmethyls. Not published.  
Major Adviser: Professor W. M. Lauer.

Positions Held: Professor, 1936-1937, Long Island University, Brooklyn, New York; Chemist, 1937—, U.S.D.A., Soy Bean Laboratory, University of Illinois.

Address: Soy Bean Laboratory, U. S. Department of Agriculture, University of Illinois, Urbana, Illinois.

1936. DORN, JOHN EMIL, JR. B.S. '31, M.S. '32, Northwestern University. Major: Physical Chemistry. Minor: Physics.

Thesis: Study by X-Ray of the Structure of Crystals at High Temperatures. Published in *Review of Scientific Instruments*, 7:319, 389, 1936; *Journal of Physical Chemistry*, 41:497, 1937.

Major Adviser: Professor George Glockler.

Positions Held: Research Associate, 1936-1938, Battelle Memorial Institute; Assistant Professor, 1938—, University of California.

Honors: Sigma Xi.

Address: 1178 Euclid Ave., Berkeley, California.

1936. LANNING, FRANCIS CHOWNING. B.S. in Ch.E. '30, M.S. '31, University of Denver.

Major: Physical Chemistry. Minor: Agricultural Biochemistry.

Thesis: Chemical Reactions Produced by the Radiation of Aqueous Solutions with Alpha Particles from Radon. Published in *Journal of Physical Chemistry*, May 1938.

Major Adviser: Professor S. C. Lind.

Positions Held: Junior Analytical Chemist, 1936—, Minnesota State Highway Department.

Address: 1102 16th Ave. S. E., Minneapolis, Minnesota.

1936. LARSON, WILLIAM DAY. B.A. '29, University of Minnesota; M.S. '31, Michigan State College.

Major: Physical Chemistry. Minors: Inorganic and Analytical Chemistry.

Thesis: The Solubility of Silver Acetate in Mixed Solvents. Published in *Journal of Physical Chemistry*, 41:417, 1937.

Major Adviser: Professor F. H. MacDougall.

Positions Held: Professor of Chemistry, 1932—, College of St. Thomas.

Honors: Sigma Xi; Phi Lambda Upsilon.

Address: 957 Hague Ave., St. Paul, Minnesota.

1936. MACNEVIN, WILLIAM MARSHALL. B.S. '27, Mt. Allison University; M.A. '30, Harvard University.

Major: Analytical Chemistry. Minor: Physical Chemistry.

Thesis: The Kinetics of the Adsorption of Thorium B on Barium Sulfate and the Adsorbent Properties of the Latter. Published in *Journal of American Chemical Society*, 58:499, 1936.

Major Adviser: Professor I. M. Kolthoff.

Positions Held: Instructor, 1936—, Ohio State University.

Honors: Sigma Xi; Phi Lambda Upsilon.

Address: 125 West Blake Ave., Columbus, Ohio.

1936. MOSKOVITZ, BENJAMIN. B.A. *summa cum laude* '32, University of Minnesota.  
Major: Analytical Chemistry. Minor: Physical Chemistry.  
Thesis: The Aging of Hydrrous Ferric Oxide. Published in *Journal of American Chemical Society*, 56:812, 1934.  
Major Adviser: Professor I. M. Kolthoff.  
Honors: Sigma Xi; Phi Lambda Upsilon.  
Degree conferred *post obitum*.  
Deceased, October 17, 1935.
1936. NOPONEN, GEORGE EDWARD. B.Ch. '32, University of Minnesota.  
Major: Physical Chemistry. Minor: Analytical Chemistry.  
Thesis: The Aging of Barium Sulfate as Followed by the Rate of Formation of Mixed Crystals and Its Adsorptive Properties. Published in *Journal of American Chemical Society*, 59:1237, 1937, 60:39, 197, 499, 505, 508, 1938; *Journal of Physical Chemistry*, 42:237, 1938.  
Major Adviser: Professor I. M. Kolthoff.  
Positions Held: Research Chemist, 1936-1937, Eastman Kodak Co., Rochester, N. Y.; Research Chemist, 1937—, Michigan Alkali Co., Wyandotte, Michigan.  
Honors: Sigma Xi; Phi Lambda Upsilon.  
Address: Michigan Alkali Co., Wyandotte, Michigan.
1936. PECK, RALPH E. B.Ch.E. '32, University of Minnesota.  
Major: Physical Chemistry. Minors: Mathematics and Physics.  
Thesis: Study of the Electrical Conductivity of Liquids under Pressure. Published in *Journal of Chemical Physics*, 4:658, 1936.  
Major Adviser: Professor G. B. Glockler.  
Positions Held: Instructor, 1936—, Department of Chemical Engineering, Drexel Institute.  
Honors: Tau Beta Pi.  
Address: Drexel Institute, Philadelphia, Pennsylvania.
1936. PINGS, WILBUR BENNETT. B.A. '32, University of Illinois.  
Major: Organic Chemistry. Minor: Physical Chemistry.  
Thesis: The Addition of Diazomethane to Duroquinone. Published in *Journal of Organic Chemistry*, 2:95-111, 1937.  
Major Adviser: Professor L. I. Smith.  
Positions Held: Chemist, 1936—, E. I. du Pont de Nemours and Co.  
Honors: Phi Beta Kappa; Sigma Xi.  
Address: Rd. No. 3, Wilmington, Delaware.
1936. ROSENWALD, ROBERT HENRY. B.A. '32, North Central College; M.A. '34, University of Minnesota.  
Major: Organic Chemistry. Minor: Analytical Chemistry.  
Thesis: The Action of Alkali Metals on 1, 1, 3, 3, 3-Pentaphenylpropylene. Published in *Journal of the American Chemical Society*, 59:2166, 1937; and in *Journal of Organic Chemistry*, 3:462, 1938.  
Major Adviser: Professor C. F. Koelsch.  
Positions Held: Chemist, 1936—, Universal Oil Products, Riverside, Illinois.  
Honors: Sigma Xi; Phi Lambda Upsilon.  
Address: 56 Forest Ave., Riverside, Illinois.



1936. SCHMIDT, LAWRENCE DELOS. B.S. '23, Massachusetts Institute of Technology.  
Major: Physical Chemistry. Minor: Physics.  
Thesis: The Heat of Wetting of Cellulose. Not published.  
Major Advisers: Professor L. H. Reyerson and Professor R. E. Montonna.  
Positions Held: Associate Chemist, 1936—, U. S. Bureau of Mines.  
Honors: Sigma Xi; Phi Lambda Upsilon.  
Address: U. S. Bureau of Mines, Pittsburgh, Pennsylvania.
1936. TENENBAUM, DAVID. B.A. '32, M.S. '34, University of Minnesota.  
Major: Organic Chemistry. Minors: Inorganic Chemistry and Biochemistry.  
Thesis: The Addition of Sodium Enolates to Duroquinone (III) Addition of Sodium Acetoacetic Ester. Published in *Journal of American Chemical Society*, 59:667, 1937.  
Major Adviser: Professor L. I. Smith.  
Positions Held: Research Chemist, 1936—, Raymond Laboratories, St. Paul; Consulting Chemist, 1937-1938, A. J. Krank Co.; Consulting Chemist, 1937-1938, Raymonds, Inc.; Consulting Chemist, 1937—, Noma, Inc., St. Paul.  
Honors: Sigma Xi; Phi Lambda Upsilon.  
Address: 369 W. Central Ave., St. Paul, Minnesota.
1936. WEBSTER, ISABELLA MARGARET. B.A. '32, University of Minnesota.  
Major: Organic Chemistry. Minor: Analytical Chemistry.  
Thesis: Reaction between Substituted Quinones and Sodium Enolates V. Reaction between 2, 3-Dimethyl Naphthoquinone and Sodium Malonic Ester. Published in *Journal of American Chemical Society*, 59:662, 1937.  
Major Adviser: Professor L. I. Smith.  
Positions Held: Instructor in Organic Chemistry, 1936-1937, University of Minnesota; Society of Catholic Medical Missionaries, 1937—.  
Honors: Phi Beta Kappa; Sigma Xi; Iota Sigma Pi.  
Address: Society of Catholic Medical Missionaries, Brookland, D. C., Box 4405.
1936. YUTZY, HENRY CLAY. B.Ch. '32, University of Minnesota.  
Major: Physical Chemistry. Minor: Analytical Chemistry.  
Thesis: The Aging of Silver Chloride: The Formation of Mixed Crystals of Silver Chloride and Silver Bromide. Published in *Industrial and Engineering Chemistry*, 9:75, 1937; *Journal of American Chemical Society*, 59:916, 1215, 1634, 2029, 1937.  
Positions Held: Research Chemist, 1936—, Eastman Kodak Co.  
Honors: Sigma Xi; Phi Lambda Upsilon; Shevlin Fellow, University of Minnesota, 1934-1935.  
Address: Kodak Park, Rochester, New York.
1937. AGRE, COURTLAND LE VERNE. B.Ch.E. '34, University of Minnesota.  
Major: Organic Chemistry. Minors: Physical Chemistry and Chemical Engineering.  
Thesis: A Study of the Action of Diazoacetic Ester on Prehnitene and of the Addition of Diphenyl Ketene to Unsaturated Hydrocarbons. Published in the *Journal of the American Chemical Society*, March 1938.  
Major Adviser: Professor L. I. Smith.

- Positions Held: Research Chemist, 1937—, Experimental Station, E. I. du Pont de Nemours and Co.  
Address: Experimental Station, E. I. du Pont de Nemours and Co., Wilmington, Delaware.
1937. COPELAND, CHARLES SALLAZ. B.S. '30, University of Wisconsin.  
Major: Physical Chemistry. Minors: Physics and Mathematics.  
Thesis: Neutrons by Alpha Ray Bombardment of Light Elements. Published in *Journal of Physical Chemistry*, 42:567-574, 1938.  
Major Adviser: Professor S. C. Lind.  
Positions Held: Instructor in Chemistry, 1937-1938, University of Southern California; Instructor in Chemistry, 1938—, Carleton College.  
Honors: Sigma Xi; Gamma Alpha; Phi Lambda Upsilon.  
Address: Department of Chemistry, Carleton College, Northfield, Minnesota.
1937. GEISSMAN, THEODORE ALBERT. B.S. in Ch.E. '30, University of Wisconsin.  
Major: Organic Chemistry. Minor: Physical Chemistry.  
Thesis: A Study of Alpha-Diketones of the Cyclopentene Series. Published in *Journal of Organic Chemistry*, 3:480, 1938.  
Major Adviser: Professor C. F. Koelsch.  
Positions Held: Post-doctorate Fellow, 1937-1939, University of Illinois.  
Honors: Sigma Xi.  
Address: Chemistry Department, University of Illinois, Urbana, Illinois.
1937. GILLESPIE, BRUCE GRAHAM. B.Ch.E. '33, M.S. '36, University of Minnesota.  
Major: Organic Chemistry. Minor: Physical Chemistry.  
Thesis: A Study of the Mechanism of Rearrangement of O-Acyl Derivatives and of Acylations of Beta-Dicarbonyl Compounds. Not published.  
Major Adviser: Professor W. M. Lauer.  
Positions Held: Research Chemist, 1937—, Standard Oil Development Co.  
Honors: Phi Lambda Upsilon.  
Address: 620 Wyoming Ave., Elizabeth, New Jersey.
1937. GRIFFITH, FRANK SHOEMAKER. B.A. with honors '29, University of Montana; M.S. '31, Tulane University.  
Major: Analytical Chemistry. Minor: Physical Chemistry.  
Thesis: Postprecipitation Phenomena in the Separation of Metals as Sulfides. Published in *Journal of Physical Chemistry*, 42:531, 541, 1938.  
Major Adviser: Professor I. M. Kolthoff.  
Positions Held: Chemist, 1937—, New Jersey Zinc Co. of Pennsylvania.  
Honors: Sigma Xi; Phi Lambda Upsilon.  
Address: 448 Lafayette Ave., Palmerton, Pennsylvania.
1937. JILK, LAWRENCE TIMOTHY. B.Ch.E. '34, University of Minnesota.  
Major: Chemical Engineering. Minor: Organic Chemistry.  
Thesis: The Effect of Light on Cellulose Nitrate. A. The Relation between Viscosity and Apparent Molecular Weight as Determined by Osmotic Pressure Measurements. Not published.  
Major Adviser: Professor R. E. Montonna.

- Positions Held: Research Chemist, 1937—, E. I. du Pont de Nemours and Co.; Instructor, 1938—, Kanawha College.  
Address: 313½ Duffy St., Charleston, West Virginia.
1937. JOHNSON, KENNETH CARL. B.Ch.E. '32, University of Minnesota.  
Major: Organic Chemistry. Minor: Physical Chemistry.  
Thesis: The Reaction between Substituted Quinones and Sodium Enolates. VII. Bromopseudocumquinone and Sodium Malonic Ester. Published in *Journal of the American Chemical Society*, 59:673, 1937.  
Major Adviser: Professor L. I. Smith.  
Positions Held: Research Chemist, 1937—, E. I. du Pont de Nemours and Co.  
Honors: Tau Beta Pi; Phi Lambda Upsilon.  
Address: 24 N. Main Street, Woodstown, New Jersey.
1937. PIRET, EDGAR LAMBERT. B.Ch.E. '32, University of Minnesota; Docteur de l'Université de Lyon '36.  
Major: Chemical Engineering. Minor: Bacteriology (Industrial).  
Thesis: Study of the Aerodynamics of the Tricking Filter. Not published.  
Major Advisers: Professors C. A. Mann and H. O. Halvorson.  
Positions Held: Instructor in Chemical Engineering, 1937—, University of Minnesota; Consulting Engineer, 1937—, Minnesota Mining and Manufacturing Co.  
Honors: Tau Beta Pi; Phi Lambda Upsilon; Sigma Xi.  
Address: 477 Edmund St., St. Paul, Minnesota.
1937. RICHTER, HENRY JOHN. B.S. *cum laude* '33, Hamline University; M.S. '36, University of Minnesota.  
Major: Organic Chemistry. Minor: Agricultural Biochemistry.  
Thesis: A Study of Compounds Containing the Bisindene Nucleus and of Certain Fulgenic Anhydrides. Not published.  
Major Adviser: Professor C. F. Koelsch.  
Positions Held: Chemist, 1937—, E. I. du Pont de Nemours and Co.  
Address: E. I. du Pont de Nemours and Co., Experimental Station, Wilmington, Delaware.
1937. SUNDE, CONRAD JULIUS. B.S. '22, Northern Normal and Industrial School; M.S. '26, University of Minnesota.  
Major: Organic Chemistry. Minor: Biochemistry and Chemical Engineering.  
Thesis: A Study of the Bandrowski Base. Published in *Journal of Organic Chemistry*, 3:261, 1938.  
Major Adviser: Professor W. M. Lauer.  
Positions Held: Associate Professor, 1937—, North Dakota Agricultural College.  
Address: Department of Chemistry, North Dakota Agricultural College, Fargo, North Dakota.
1937. VON FISCHER, WILLIAM. B.Ch. '32, M.S. '33, University of Minnesota.  
Major: Analytical Chemistry. Minor: Physical Chemistry.  
Thesis: Studies on the Aging of Lead Sulfate Precipitates. Published in the *Journal of the American Chemical Society*, 61:191, 1939.

Major Adviser: Professor I. M. Kolthoff.

Positions Held: Instructor in Chemistry, 1937—, Case School of Applied Science.

Honors: Sigma Xi; Phi Lambda Upsilon.

Address: Case School of Applied Science, Cleveland, Ohio.

1937. WALL, FREDERICK THEODORE. B.Ch. '33, University of Minnesota.

Major: Physical Chemistry. Minor: Physics.

Thesis: Studies in Molecular Structure. Published in *Journal of Chemical Physics*, 5:813, 1937; *Journal of Physical Chemistry*, 41:143, 1937; *Physical Review*, 51:529, 1937..

Major Adviser: Professor George Glockler.

Positions Held: Instructor in Physical Chemistry, 1937—, University of Illinois.

Honors: Phi Lambda Upsilon; Sigma Xi.

Address: 621 11th Ave S. E., Minneapolis, Minnesota.

1937. WISHART, ARTHUR WILLIAM. B.Ch. '33, University of Minnesota.

Major: Physical Chemistry. Minor: Physics.

Thesis: The Sorption of Chlorine by Highly Activated Silica Gel and Coconut Charcoal. Published in *Journal of Physical Chemistry*, 41:943, 1937.

Major Adviser: Professor L. H. Reyerson.

Positions Held: Research Chemist, 1937—, Brown Company.

Honors: Phi Lambda Upsilon.

Address: Brown Co., Berlin, New Hampshire.

1938. DYER, WALTER SHERMAN. B.S. '24, University of Arkansas; M.S. '25, University of Minnesota.

Major: Organic Chemistry. Minor: Physical Chemistry.

Thesis: The Oxidation of Benzophenone Oxime. Not published.

Major Adviser: Professor W. M. Lauer.

Positions Held: Assistant Professor of Chemistry, 1938—, University of Arkansas.

Honors: Sigma Xi; Phi Lambda Upsilon.

Address: 231 Buchannan Ave., Fayetteville, Arkansas.

1938. GOLDNER, KARL JOHN. B.S. in Pharm. '30, M.S. '32, University of Minnesota.

Major: Pharmaceutical Chemistry. Minor: Organic Chemistry.

Thesis: The Preparation of the Mannonic Lactones from the Seeds of the Date Palm (*Phoenix dactylifera*) and a Study of Their Action and That of New Derivatives upon Gastric Mucin Smears. Not published.

Major Adviser: Professor C. H. Rogers.

Positions Held: Instructor in Pharmacy, 1938—, University of Wisconsin.

Address: University of Wisconsin, Madison, Wisconsin.

1938. GUSS, LESTER SAMUEL. B.S. '23, M.S. '25, University of North Dakota.

Major: Physical Chemistry. Minor: Analytical Chemistry.

Thesis: Acid-Base Indicators in Methanol. Published in *Journal of American Chemical Society*, 60:2516, 1938; 61:16, 1939.

Major Adviser: Professor I. M. Kolthoff.

- Positions Held: Associate Professor of Chemistry, 1938—, South Dakota State College.  
Honors: Sigma Xi.  
Address: State College Station, Brookings, South Dakota.
1938. HANSEN, LOUIS INGVALD. B.A. '28, Augsburg College; M.S. '35, University of Minnesota.  
Major: Organic Chemistry. Minor: Biochemistry.  
Thesis: The Synthesis of Alpha-(Ortho and Para-Methoxyphenyl)-Propionic Acids and Related Compounds. Not published.  
Major Adviser: Professor W. M. Lauer.  
Positions Held: Chemist, 1938—, Sinclair Oil Company.  
Address: 1535 Davis Street, Whiting, Indiana.
1938. LINGANE, JAMES JOSEPH. B.Ch. '35, University of Minnesota.  
Major: Physical Chemistry. Minor: Analytical Chemistry.  
Thesis: A Study of the Fundamental Principles of Electrolysis with the Dropping Mercury Electrode. Not published.  
Major Adviser: Professor I. M. Kolthoff.  
Positions Held: Research Chemist, 1938, Cancer Institute, Instructor in Physical Chemistry, 1938-1939, University of Minnesota.  
Honors: Sigma Xi; Phi Lambda Upsilon; Member, American Chemical Society; J. T. Baker Chemical Co., Fellow in Analytical Chemistry, 1937-1938.  
Address: 1880 Grand Ave., Apt. A., St. Paul, Minnesota.
1938. MARTIN, FRANCIS WILLIS. B.Ch. with distinction '33, University of Minnesota.  
Major: Physical Chemistry. Minor: Physics.  
Thesis: A Study of the Polymerization of Acetylene by Slow Electrons of Controlled Energy. Not published.  
Major Adviser: Professor G. B. Glockler.  
Positions Held: Junior Chemist, Co-operative Asphalt Investigation, 1937—, U. S. Bureau of Public Roads, Minnesota State Highway Department, University of Minnesota.  
Honors: Phi Lambda Upsilon; Sigma Xi.  
Address: 2939 Taylor St. N. E., Minneapolis, Minnesota.
1938. MAYNARD, JULIAN LEWIS. B.A. '23, University of Cincinnati; M.S. '31, University of Minnesota.  
Major: Inorganic Chemistry. Minor: Organic Chemistry.  
Thesis: A Qualitative Procedure for the Analysis of Group II. Published in *Journal of Chemical Education*, 16:77, 1939.  
Major Adviser: Professor M. C. Sneed.  
Positions Held: Assistant Professor of Chemistry, 1938-1939, University of Minnesota.  
Honors: Sigma Xi; Phi Lambda Upsilon.  
Address: School of Chemistry, University of Minnesota, Minneapolis, Minnesota.
1938. O'BRIEN, ALBERT STEPHEN. B.S. '33, Wheaton College.  
Major: Analytical Chemistry. Minor: Physical Chemistry.

- Thesis: The Aging of Freshly Precipitated Silver Bromide. Not published.  
 Major Adviser: Professor I. M. Kolthoff.  
 Positions Held: Instructor in Chemistry, 1938—, Wheaton College.  
 Honors: Sigma Xi.  
 Address: Wheaton College, Wheaton, Illinois.
1938. OVERHOLSER, LYLE GROFF. B.S. *cum laude* '33, Jamestown College; M.S. '35, University of Minnesota.  
 Major: Analytical Chemistry. Minor: Physical Chemistry.  
 Thesis: The Adsorption of Metallic Ions on and Coprecipitation with Hydrous Ferric Oxide; Aging of Hydrous Ferric Oxide. Not published.  
 Major Adviser: Professor I. M. Kolthoff.  
 Positions Held: Research Assistant, 1938—, University of Virginia.  
 Honors: Sigma Xi; Phi Lambda Upsilon.  
 Address: Butte, North Dakota.
1938. RENFREW, MALCOLM MacKENZIE. B.S. '32, M.S. '34, University of Idaho.  
 Major: Physical Chemistry. Minor: Organic Chemistry.  
 Thesis: A Study of Molecular Structure by the Raman Method. Published in *Journal of Chemical Physics*, 6:170, 295, 340, 1938.  
 Major Adviser: Professor G. B. Glockler.  
 Positions Held: Research Chemist, 1938—, Plastics Division, E. I. du Pont de Nemours and Co., Arlington, New Jersey.  
 Honors: Sigma Xi.  
 Address: c/o E. E. Renfrew, 824 Hastings Ave., Coeur d'Alene, Idaho.

## ENGINEERING

1937. BRUNETTI, CLEDO. B.E.E. '32, University of Minnesota.  
 Major: Electrical Engineering. Minor: Mathematics.  
 Thesis: The Clarification of Average Negative Resistance with Extensions of Its Use. Published in *Proceedings of Institute of Radio Engineers*, 25:1595-1616, 1937.  
 Major Adviser: Professor H. E. Hartig.  
 Positions Held: Instructor in Electrical Engineering, 1937—, Lehigh University.  
 Honors: Sigma Xi; Tau Beta Pi; Eta Kappa Nu; Pi Tau Pi Sigma; Scabard and Blade; Chi Rho; Presented with National Italian American Civic League Scholarship Key, October 1937.  
 Address: 119 1st St. No., Virginia, Minnesota.

## GEOLOGY

1897. BERKEY, CHARLES PETER. B.S. '92, M.S. '93, University of Minnesota.  
 Major: Geology and Mineralogy. Minor: Chemistry.  
 Thesis: Geology of the St. Croix Dalles. Published in *American Geologist*, Vols. 20 and 21, 1897-1898.  
 Major Adviser: Professor C. W. Hall.

Positions Held: Instructor, 1894-1903, University of Minnesota; Assistant and Field Geologist, 1893-1908, Geological Surveys of Minnesota, Wisconsin, and New York; Tutor in Geology, 1903-1907, Instructor, 1907-1910, Assistant Professor, 1910-1914, Associate Professor, 1914-1916, Professor, and Executive Officer of Department of Geology, 1916-1937, Newberry Professor of Geology, 1929—, Columbia University; Chief Geologist, 1922 and 1925, Central Asiatic Expeditions of American Museum of Natural History; Research Associate, 1923—, American Museum of Natural History; Executive Secretary, 1922—, Geological Society of America; Geologist, 1906—, New York Board of Water Supply; Geologist, 1927—, Port of New York Authority; Geologist, 1926—, Metropolitan District Water Supply of Massachusetts; Geologist, 1930—, New Jersey State Water Policy Commission; Secretary, 1928—, Colorado River Board; Member of Consulting Board, 1929—, California State Department of Public Works.

Honors: D.Sc., 1929, Columbia University; starred man in *American Men of Science*; Pi Beta Nu; Sigma Xi; Phi Beta Kappa; Tau Beta Pi.

Address: 1076 Cumbermede Road, Palisade, New Jersey.

1898. ELFTMAN, ARTHUR HUGO. B.Lit. '92, M.S. '93, University of Minnesota.

Major: Lithological Geology. Minors: Chemistry and Physics and Mineralogy. Thesis: Some Points on the Structure and Composition of Igneous Rocks of Northeastern Minnesota. Published in *American Geologist*, 1898-1899.

Positions Held: Mining and Petroleum Geologist and Engineer, 1898—.

Honors: Sigma Xi; Fellow, of the A.A.A.S.; Member, American Institute of Mining and Metallurgy.

Address: 1607 83rd Ave., Oakland, California.

1917. BRODERICK, THOMAS MONTEITH. B.A. '13, University of Minnesota; M.S. '14, University of Wisconsin.

Major: Geology. Minor: Analytical Chemistry.

Thesis: The Relation of the Iron Ores in Northeastern Minnesota to the Duluth Gabbro. Published in *Economic Geology*, Vol. 12, no. 8, December 1917.

Major Adviser: Professor F. F. Grout.

Positions Held: Assistant Professor of Geology, 1917-1920, University of Minnesota; Assistant Geologist, 1920-1924, Chief Geologist, 1924—, Calumet and Hecla Copper Company, Calumet, Michigan; Research Professor, 1931—, Michigan College of Mines, Houghton, Michigan.

Honors: Sigma Xi.

Address: Calumet and Hecla Consolidated Copper Company, Calumet, Michigan.

1917. SOPER, EDGAR KIRKE. B.A. '08, M.A. '14, Stanford University.

Major: Economic Geology. Minor: Geology.

Thesis: The Origin, Occurrence, and Uses of Minnesota Peat. Published 1923 as Minnesota Geological Survey Bulletin 16.

Major Adviser: Professor W. H. Emmons.

Positions Held: Dean and Professor of Geology, 1917-1919, Oregon Agricultural College, School of Mines; Petroleum Geologist, 1919-1920, S. Pearson and Son, Ltd., London; Manager in Alabama, 1920, Representative in Trinidad, Albania, Italy, and other foreign countries, 1921-1926, Sinclair

- Consolidated Oil Corporation; Associate Professor of Geology, 1927—, University of California at Los Angeles; Consulting Geologist, 1927—, Los Angeles, California.  
 Honors: Theta Tau Theta; Sigma Tau; Sigma Xi.  
 Address: 405 Hilgard Ave., Los Angeles, California.
1920. TIEJE, ARTHUR JERROLD. B.A. '05, M.A. '08, Cornell University; Ph.D. '12, University of Illinois.  
 Major: Geology. Minor: Paleontology.  
 Thesis: Cambrian Sedimentation in the Big Horn Mountains. Published in *Summaries of Ph.D. Theses*, Vol. 1, 1939, University of Minnesota.  
 Major Adviser: Professor C. R. Stauffer.  
 Positions Held: Assistant Professor, 1920-1922, University of Colorado; Consulting Geologist and Paleontologist, 1923—, Los Angeles, California; Professor of Geology, University of Southern California.  
 Address: Department of Geology, University of Southern California, Los Angeles, California.
1922. GRUNER, JOHN WALTER. B.A. '17, University of New Mexico; M.A. '19, University of Minnesota.  
 Major: Geology. Minor: Chemistry and Petrology.  
 Thesis: Organic Matter and the Origin of the Biwabik Iron-Bearing Formation of the Mesabi Range. Published in *Economic Geology*, Vol. 17, no. 6, September 1922.  
 Major Adviser: Professor W. H. Emmons.  
 Positions Held: Instructor in Geology, 1922-1923, Assistant Professor, 1923-1929, Associate Professor, 1929—, University of Minnesota.  
 Honors: Sigma Xi.  
 Address: 527 7th St. S. E., Minneapolis, Minnesota.
1923. SCHWARTZ, GEORGE MELVIN. B.A. '15, M.A. '16, University of Wisconsin.  
 Major: Geology. Minor: Paleontology.  
 Thesis: The Contrast in the Effect of Granite and Gabbro Intrusions on the Ely Greenstone. Published in *Journal of Geology*, 32:89-138, 1924.  
 Major Adviser: Professor F. F. Grout.  
 Positions Held: Assistant Professor, 1923-1929, Associate Professor of Geology, 1929—, University of Minnesota.  
 Honors: Sigma Xi.  
 Address: 237 Bedford St. S. E., Minneapolis, Minnesota.
1923. THIEL, GEORGE ALFRED. B.A. '17, M.A. '20, University of Minnesota.  
 Major: Geology. Minor: Paleontology.  
 Thesis: The Manganese Minerals: Their Identification and Paragenesis, with Special Reference to the Manganese Ores of the Cuyuna Range. Published in *Economic Geology*, Vol. 19, no. 2, March 1924.  
 Major Adviser: Professor W. H. Emmons.  
 Positions Held: Assistant Professor of Geology, 1924-1927, Associate Professor, 1927—, University of Minnesota; Field Geologist, 1924—, Minnesota Geological Survey.



- Honors: Sigma Xi; Phi Beta Kappa; Fellow of the Geological Society of America.  
Address: University of Minnesota, Minneapolis, Minnesota.
1924. ALLISON, IRA SHIMMIN. B.A. '17, Hanover College.  
Major: Geology. Minor: Petrography.  
Thesis: The Giants Range Batholith of Minnesota. Published in *Journal of Geology*, 1925.  
Major Adviser: Professor F. F. Grout.  
Positions Held: Instructor in Geology, 1924-1927, Assistant Professor, 1927-1928, University of Minnesota; Professor of Geology, 1928—, Oregon State Agricultural College.  
Honors: Sigma Xi; Fellow of the A.A.A.S.; Fellow of the Geological Society of America.  
Address: 2210 Van Buren St., Corvallis, Oregon.
1924. BROWN, WILLIAM HORATIO. B.S. '20, Virginia Polytechnic Institute; E.M. '21, Colorado School of Mines.  
Major: Geology. Minor: Metallurgy.  
Thesis: The Mineral Zones of the White Cross District and Neighboring Deposits in Hinsdale County, Colorado. Published in *Colorado School of Mines Magazine*, Vol. 15, no. 11, March 1926.  
Major Adviser: Professor W. H. Emmons.  
Positions Held: Scout, 1924-1925, Cia Minerales del Pacifico; Geologist, Rico Argentine Mine, 1924-1925; Instructor in Geology, 1925-1927, Assistant Professor, 1927-1929, University of Arizona; Chief of Geological Department, 1929-1934, Bertha Mineral Company, Austinville, Virginia; Geologist, 1934—, Empire Zinc Co., Gilman, Colorado.  
Honors: Sigma Xi; Member, Geological Society of America; Member, Society of Economic Geologists.  
Address: 1004 Floyd Ave., Richmond, Virginia.
1924. LOVERING, THOMAS SEWARD. E.M. in Geology '22, University of Minnesota.  
Major: Geology. Minor: Metallurgy.  
Thesis: A Report of the New World Mining District, Park County, Montana. Published in U. S. Geological Survey Bulletin no. 811, 1925.  
Major Adviser: Professor W. H. Emmons.  
Positions Held: Instructor in Geology, 1924-1925, University of Arizona; Junior Geologist, 1925-1926, Assistant Geologist, 1926-1928, Associate Geologist, 1928—, United States Geological Survey, Washington, D. C.; Associate Professor of Economic Geology, 1934-1937, Professor, 1937—, University of Michigan.  
Honors: Sigma Xi; Tau Beta Pi.  
Address: University of Michigan, Ann Arbor, Michigan.
1925. DeLURY, JUSTIN SARFIELD. B.A. '05, University of Toronto.  
Major: Geology. Minor: Petrology.  
Thesis: Geology, Topography, and Resources of the Wapawekka and Deschambault Lake Area of Saskatchewan. Published 1926, Minneapolis.  
Major Adviser: Professor F. F. Grout.

Positions Held: Assistant Professor of Geology, 1925-1927, University of Manitoba; Professor and Head of Geology Department, 1927-1928, University of Saskatchewan; Professor and Head of Geology Department, 1928—, University of Manitoba; Commissioner of Mines and Natural Resources, 1928-1930, Provincial Geologist, 1930—, Manitoba.

Honors: Fellow of the Royal Society of Canada; President of Canadian Institute of Mining and Metallurgy, 1930-1931.

Address: Department of Geology, University of Manitoba, Winnipeg, Canada.

1926. LEONARD, RAYMOND JACKSON. B.S. '23, Oregon State Agricultural College.

Major: Mineralogy. Minors: Paleontology and Geology.

Thesis: The Hydrothermal Alteration of Certain Silicate Minerals. Published in *Economic Geology*, Vol. 22, no. 1, January-February 1927.

Major Adviser: Professor F. F. Grout.

Positions Held: Assistant Professor of Geology, 1926-1928, Associate Professor, 1928-1930, Professor, 1930-1933, Dean of Graduate College, 1934-1938, University of Arizona, Tucson, Arizona.

Honors: Sigma Xi; Tau Beta Pi; Phi Kappa Phi.

Deceased, 1938.

1926. SCHMITT, HARRISON ASHLEY. B.A. '21, M.S. '22, University of Minnesota.

Major: Geology. Minor: Petrology.

Thesis: Contributions to the Geology and Ore Deposits of Southern Chihuahua and Northern Durango. Published in two parts: in *Engineering and Mining Journal*, September 15, 1928, and as American Institute of Mining and Metallurgical Engineering Technical Publication no. 304, 1930.

Major Adviser: Professor W. H. Emmons.

Positions Held: Geologist, 1924-1926, American Smelting and Refining Company; Geologist, 1926-1930, New Jersey Zinc Company; Consulting Geologist, 1931—, 1215 Los Angeles Street, El Paso, Texas; Assistant Manager, 1937—, Peru Mining Co., Hanover, New Mexico.

Honors: Sigma Xi; Gamma Alpha; Fellow of the A.A.A.S.; Fellow of the Geological Society of America.

Address: 1923 Yucca Drive, Silver City, New Mexico.

1926. SHENON, PHILIP JOHN. B.S. '22, University of California; M.S. '24, University of Idaho.

Major: Geology. Minors: Petrology and Metallurgy.

Thesis: The Geology and Ore Deposits of the Bannack District, Beaverhead County, Montana. Published 1931, Butte, as Montana Bureau of Mines and Geology Bulletin 6.

Major Adviser: Professor W. H. Emmons.

Positions Held: Mining Geologist, 1926-1927, San Francisco Mines of Mexico; Assistant Professor of Geology, 1928-1929, Montana School of Mines, Butte, Montana; Geologist, 1930-1938, United States Geological Survey; Exploration Geologist, 1938—, International Nickel Company.

Honors: Sigma Xi.

Address: Geological Department, International Nickel Co., Copper Cliff, Ontario, Canada.

1927. GRAHAM, WILLIAM ARMSTRONG PATTERSON. B.A. '23, M.S. '24, University of Minnesota.  
Major: Geology. Minor: Paleontology.  
Thesis: A Textural and Petrographic Study of the Cambrian Sandstones of Minnesota and Wisconsin. Published in *Journal of Geology*, Vol. 38, no. 8, November-December 1930.  
Major Adviser: Professor F. F. Grout.  
Positions Held: Associate Professor, 1927-1928, Texas Technological College, Lubbock, Texas; Assistant Professor of Geology, 1928-1934, Ohio State University, Columbus, Ohio.  
Deceased, August 1934.
1927. GRAY, (FREDERICK) ANTON. B.S. '21, University of Arizona.  
Major: Geology. Minor: Physical Chemistry.  
Thesis: Ore Deposits of the Mineral Hill District, Lemhi County, Idaho. Published in *Summaries of Ph.D. Theses*, Vol. 1, 1939, University of Minnesota.  
Major Adviser: Professor W. H. Emmons.  
Positions Held: Chief Geologist, Rhodesian Selection Trust Ltd.; Chief Geologist, Mufulira Copper Mines, Ltd.; Chief Geologist, 1931—, Selection Trust Limited.  
Honors: Sigma Xi; Royal Societies Club, London.  
Address: Selection Trust Building, Mason's Avenue, Coleman Street, London, E.C. 2, England.
1927. PETERSON, EUNICE. B.A. '22, M.A. '24, University of Minnesota.  
Major: Geology. Minor: Paleontology.  
Thesis: The Dresbach Formation of Minnesota. Published 1929, Buffalo, New York, as *Bulletin of Buffalo Society of Natural Sciences*, Vol. 14, no. 2.  
Major Adviser: Professor C. R. Stauffer.  
Positions Held: Research Librarian and Assistant Curator of Paleontology, 1928, Buffalo Museum of Science; Demonstrator in Geology, 1929-1930, Bryn Mawr College; Paleontologist, 1931-1938, Scientific Staff, *Biological Abstracts*; Editor, 1938—, Academy of Natural Sciences of Philadelphia.  
Married Name: Mrs. Milan Wayne Garrett.  
Address: 336 N. Princeton Ave., Swarthmore, Pennsylvania.
1928. BROWNELL, GEORGE McLEOD. B.S. '23, M.S. '25, University of Manitoba.  
Major: Economic Geology. Minor: Petrology.  
Thesis: The Geology of the Lyndhurst Area, Ontario. Published in *Summaries of Ph.D. Theses*, Vol. 1, 1939, University of Minnesota.  
Major Adviser: Professor W. H. Emmons.  
Positions Held: Assistant Professor of Geology, 1928—, University of Manitoba, Winnipeg; Geologist, 1928—, Manitoba Department of Mines.  
Honors: Awarded Barlow Memorial Prize by Canadian Institute of Mining and Metallurgy, 1936, for paper on "The Flin Flon Mine, Geology and Paragenesis of the Ore Deposit."  
Address: Geology Department, University of Manitoba, Winnipeg, Canada.

1928. DAVIDSON, DONALD MINER. B.A. '25, M.S. '26, University of Minnesota.  
Major: Petrology. Minor: Economic Geology.  
Thesis: Geology and Petrology of the Mineral Hill Mining District, Lemhi County, Idaho. Published in *Summaries of Ph.D. Theses*, Vol. 1, 1939, University of Minnesota.  
Major Adviser: Professor F. F. Grout.  
Positions Held: Geologist, 1928—, Selection Trust Limited.  
Address: Selection Trust Building, Mason's Avenue, Coleman Street, London, E.C. 2.
1928. WARD, GEORGE WILLIAM. B.S. '25, M.S. '26, University of Manitoba.  
Major: Petrology. Minor: Economic Geology.  
Thesis: A Chemical and Optical Study of the Black Tourmalines. Published in *American Mineralogist*, Vol. 16, no. 4, April 1931.  
Major Adviser: Professor F. F. Grout.  
Positions Held: Student Assistant, summer 1928, Canadian Geological Survey; Research Chemist, 1928-1929, University of Minnesota; Geologist, 1929-1930, Chief Chemist, 1930—, Portland Cement Association; Associate Professor in Chemical Microscopy, 1933-1934, University of Chicago.  
Honors: Sigma Xi.  
Address: 33 West Grand Ave., Chicago, Illinois.
1928. WELLS, FRANCIS GARRITT. B.S. '22, Massachusetts Institute of Technology.  
Major: Economic Geology. Minor: Petrography.  
Thesis: The Hydrothermal Alteration of Some Ferromagnesian Silicates Olivine. Published in *American Journal of Science*, 18:35-52, 1929.  
Major Adviser: Professor J. W. Gruner.  
Positions Held: Junior Geologist, 1928-1929, Assistant Geologist, 1929—, United States Geological Survey, Washington, D. C.  
Address: United States Geological Survey, Washington, D. C.
1929. FOREMAN, FRED. B.A. '24, B.S. '26, University of Manitoba.  
Major: Geology. Minors: Petrology and Chemistry.  
Thesis: Hydrothermal Experiments on Solubility, Hydrolysis, and Oxidation of Iron and Copper Sulphides. Published in *Economic Geology*, Vol. 24, no. 8, December 1929.  
Major Adviser: Professor J. W. Gruner.  
Positions Held: Instructor in Geology, 1929-1931, Assistant Professor, 1931—, Oberlin College.  
Honors: Sigma Xi.  
Address: Oberlin College, Oberlin, Ohio.
1930. PETTIJOHN, FRANCIS JOHN. B.A. '24, M.A. '25, University of Minnesota.  
Major: Petrography. Minor: Paleontology.  
Thesis: A Field and Laboratory Study of a Series of Pre-Cambrian Sedimentary Rocks near Sioux Lookout, Ontario: Their Petrography, Structure, and Geologic Significance. Published in *Bulletin of the Geological Society of America*, Vol. 45, 1934.

- Major Adviser: Professor F. F. Grout.  
Positions Held: Instructor in Geology, 1930-1932, Assistant Professor, 1932—,  
University of Chicago.  
Address: Department of Geology, University of Chicago, Chicago, Illinois.
1931. ALEXANDER, HUGH STEWART. B.A. '99, Macalester College; M.A. '05, University of Minnesota.  
Major: Geology. Minor: Paleontology.  
Thesis: Potholes. Published in *Journal of Geology*, Vol. 40, no. 4, 1932.  
Major Adviser: Professor C. R. Stauffer.  
Positions Held: Professor of Geology, 1907—, Macalester College, St. Paul.  
Address: 1710 Portland Ave., St. Paul, Minnesota.
1931. DUTTON, CARL EVANS. B.A. '26, De Pauw University; M.A. '28, University of Illinois.  
Major: Economic Geology. Minors: Petrography and Metallurgy.  
Thesis: The Conglomerates and Structure of the Ensign Lake Area. Not published.  
Major Adviser: Professor J. W. Gruner.  
Positions Held: Instructor, 1928-1936, University of Minnesota; Assistant Professor, 1936—, Wayne University.  
Honors: Sigma Xi.  
Address: Wayne University, Detroit, Michigan.
1931. PARK, CHARLES FREDERICK. B.S. in M.E. '26, New Mexico School of Mines; M.S. '29, University of Arizona.  
Major: Economic Geology. Minor: Mineralogy.  
Thesis: Hydrothermal Experiments with Copper Compounds. Published in *Economic Geology*, December 15, 1931.  
Major Adviser: Professor J. W. Gruner.  
Positions Held: Associate Geologist, 1931—, United States Geological Survey, Washington, D. C.  
Honors: Sigma Xi.  
Address: United States Geological Survey, Washington, D. C.
1932. ANDREWS, THOMAS GAYLEON. B.A. '25, M.A. '27, Vanderbilt University.  
Major: Economic Geology. Minors: Petrology and Paleontology.  
Thesis: Insoluble Residues as an Aid in Stratigraphic Studies of Limestones of Central Tennessee. Not published.  
Major Adviser: Professor F. F. Grout.  
Positions Held: Instructor in Geology, 1932-1934, Assistant Professor, 1934—, University of Alabama; Assistant Geologist, 1937—, U. S. Geological Survey.  
Honors: Sigma Xi.  
Address: Geology Department, University of Alabama, University, Alabama.
1932. HICKS, HAROLD SMITH. B.S. '29, University of Manitoba; M.S. '30, University of Alberta.  
Major: General Geology. Minor: Petrology.  
Thesis: The Geology of the Fitzgerald and Northern Portion of the Chipwyan Map Areas, Northern Alberta, Canada. Published in *Summaries of Ph.D. Theses*, Vol. 1, 1939, University of Minnesota.

- Major Adviser: Professor F. F. Grout.  
 Positions Held: Mining Geologist, 1932-1934, Minefinders, Ltd., Toronto; Manager, 1934-1936, Sol d'Or Gold Mines, Narrow Lake, Ontario; Geologist, 1937—, McKenzie Red Lake Gold Mines, Ltd.; Field Manager, 1937—, Prospectors Airways, Toronto, Ontario.  
 Honors: Sigma Xi.  
 Address: 505 Home St., Winnipeg, Manitoba, Canada.
1932. MATHESON, ARCHIE FARQUHAR. B.S. '27, University of Manitoba; M.A. '29, Queen's University.  
 Major: Economic Geology. Minor: Petrography.  
 Thesis: The Geology of Michipicoten River Area, District of Algoma, Ontario, Canada. Published in Canadian Geological Survey Report, 1932.  
 Major Adviser: Professor F. F. Grout.  
 Positions Held: Consulting Geologist, 1932—, Ontario, Canada.  
 Honors: Sigma Xi.  
 Address: Geraldton, Ontario.
1933. BACKMAN, OLEN LESLIE. B.Sc. '27, University of Saskatchewan.  
 Major: Petrology. Minor: Economic Geology.  
 Thesis: Makamik Area, Abitibi District, Quebec. Not published.  
 Major Adviser: Professor F. F. Grout.  
 Address unknown.
1933. GORMAN, WILLIAM ALBERT. B.A. '28, University of Minnesota.  
 Major: Economic Geology. Minor: Petrography and Metallurgy.  
 Thesis: The Geology of the Lower Seine River Area, Rainy River District, Ontario. Not published.  
 Major Adviser: Professor W. H. Emmons.  
 Positions Held: Consulting Geologist, 1933-1936; Geologist, 1936-1938, Cities Service Oil Co.; Geologist, 1938—, Skelly Oil Company.  
 Honors: Sigma Xi.  
 Address: Skelly Oil Company, 1301 Esperson Bldg., Houston, Texas.
1934. FETZER, WALLACE GORDEN. E.M. in Geol. '29, University of Minnesota.  
 Major: Geology. Minor: Physical Chemistry.  
 Thesis: Humic Acids and True Organic Acids as Mineral Solvents. Published in *Mineria*, October, 1938.  
 Major Adviser: Professor J. W. Gruner.  
 Positions Held: Geologist, 1934—, Colombia.  
 Address: Sucre 50-40, Medellin, Colombia, South America.
1934. GIBSON, GEORGE RANDALL. B.A. '30, University of Minnesota.  
 Major: General Geology. Minor: Petrology and Geography.  
 Thesis: The Stratigraphy and Structure of the Snowbank Lake Area. Not published.  
 Major Advisers: Professors F. F. Grout and J. W. Gruner.  
 Positions Held: Instructor, 1934-1938, Carleton College; Geologist, 1938—, Socony-Vacuum Oil Co.  
 Honors: Sigma Xi.  
 Address: c/o Socony-Vacuum Oil Co., Cairo, Egypt.

1934. KRISTOFFERSON, OLE HERMAN. B.A. '30, University of Minnesota.  
Major: Economic Geology. Minor: Metallurgy and Micropaleontology.  
Thesis: Hydrothermal Experiments with Lead and Zinc Minerals. Published in *Economic Geology*, 31:185-204, 1936.  
Major Adviser: Professor J. W. Gruner.  
Positions Held: Geologist and Geophysicist, 1934—, Indian Territory Illuminating Oil Co.  
Honors: Sigma Xi.  
Address: Box 1251, Bartlesville, Oklahoma.
1934. McMURCHY, ROBERT CONNELL. B.S. '30, University of Manitoba.  
Major: General Geology. Minor: Petrology.  
Thesis: The Crystal Structure of the Chlorite Minerals. Published in *Zeitschrift für Krystallographie*, 88:420-432, 1934.  
Major Adviser: Professor J. W. Gruner.  
Positions Held: Lecturer, 1934-1935, University of Manitoba; Assistant Geologist, 1935—, Geological Survey of Canada.  
Honors: Sigma Xi; Gamma Alpha.  
Address: Geological Survey, Ottawa, Canada.
1934. OGRYZLO, STEPHEN PETER. B.S. '30, University of Manitoba.  
Major: General Geology. Minor: Petrology.  
Thesis: Hydrothermal Experiments with Gold. Published in *Economic Geology*, 30:400-424, 1935.  
Major Adviser: Professor J. W. Gruner.  
Positions Held: Geologist, 1934—, Toburn Gold Mines Limited.  
Honors: Sigma Xi.  
Address: Kirkland Lake, Ontario, Canada, c/o Toburn Gold Mines Limited.
1934. STEPHENS, MAYNARD MOODY. B.A. '30, M.A. '31, University of Minnesota.  
Major: Geology. Minor: Metallurgy.  
Thesis: Microscopic Effects of a Carbon Arc Beam on the Polished Surfaces of Minerals. Published in *Economic Geology*, 30:604-629, 1935.  
Major Adviser: Professor G. M. Schwartz.  
Positions Held: Director, 1934-1936, Minneapolis Museum of Natural Science; Assistant, 1934-1936, Department of Geology, University of Minnesota; Supervisor, 1936—, Petroleum Production, Natural Gas Engineering and Refining Extension, Pennsylvania State College.  
Honors: Sigma Xi.  
Address: 812 W. Beaver Ave., State College, Pennsylvania.
1934. TRENGOVE, STANLEY ALVIN. E.M. '28, University of Minnesota.  
Major: General Geology. Minor: Petrology and Metallography.  
Thesis: The Hydrothermal Oxidation of Manganese Minerals. Published in *Economic Geology*, 31:29-47, 1936.  
Major Adviser: Professor J. W. Gruner.  
Positions Held: Instructor, 1934-1936, Assistant Professor, 1936-1937, Mining and Petroleum Engineering, University of Minnesota; Production Engineer, 1937—, Oliver Iron Mining Co., Hibbing, Minnesota.  
Honors: Sigma Xi.  
Address: 1928 8th Ave., Hibbing, Minnesota.

1935. DOWNS, GEORGE REED. B.A. '25, University of Minnesota.  
 Major: Geology. Minors: Geology (Paleontology) and Zoology.  
 Thesis: The Geology of the Lukasashi Rift Valley, Northern Rhodesia. Not published.  
 Major Adviser: Professor C. R. Stauffer.  
 Positions Held: Consulting Geologist, 1933—.  
 Honors: Sigma Xi.  
 Address: Shelby, Montana.
1935. GARDNER, WILLIAM IRVING. B.S. '27, University of California.  
 Major: Geology. Minors: Geology (Paleontology) and Metallography.  
 Thesis: Structural Study of the Merrimac Batholith, Sierra Nevada, California. Not published.  
 Major Adviser: Professor W. H. Emmons.  
 Positions Held: Assistant Geologist, 1936—, U. S. Bureau of Reclamation.  
 Honors: Sigma Xi.  
 Address: U. S. Bureau of Reclamation, Redding, California.
1936. GOLDICH, SAMUEL S. B.A. '29, University of Minnesota; M.A. '30, Syracuse University.  
 Major: Geology. Minors: Geology (Petrology) and Analytical Chemistry.  
 Thesis: A Study in Rock-Weathering. Published in *Journal of Geology*, Vol. 46, no. 1, 1938.  
 Major Advisers: Professors F. F. Grout and G. A. Thiel.  
 Positions Held: Instructor, 1936—, Agricultural and Mechanical College of Texas.  
 Honors: Phi Beta Kappa; Sigma Xi.  
 Address: Department of Geology, Agricultural and Mechanical College of Texas, College Station, Texas.
1937. ARMSTRONG, LEE CHARLES. E.M. (Geol.) '27, University of Minnesota.  
 Major: Geology. Minors: Metallurgy and Physical Chemistry.  
 Thesis: Decomposition and Alteration of Microcline, Albite, and Kunzite (Spodumene) by Water. Not published.  
 Major Advisers: Professors J. W. Gruner and F. F. Grout.  
 Positions Held: Geologist, 1938—, Socony-Vacuum Oil Company.  
 Honors: Sigma Xi.  
 Address: Socony-Vacuum Oil Company, Caracas, Venezuela, South America.
1937. HEWITT, ROBERT LEIGH. B.Sc. '34, University of Alberta. M.A. '35, Queen's University.  
 Major: General Geology. Minors: Paleontology and Metallurgy.  
 Thesis: Experiments Bearing on the Relation of Pyrrhotite to Other Sulphides. Not published.  
 Major Adviser: Professor F. F. Grout.  
 Positions Held: Geologist, 1938—, Standard Oil Company of California.  
 Address: 2245 Brighton Avenue, Victoria, British Columbia, Canada.
1937. LINDNER, JOSEPH LEICHT. E.M. (Geol.) '30, University of Minnesota.  
 Major: Economic Geology. Minor: Metallography.



- Thesis: Hydrothermal Experiments with Alkali Sulphide Solutions. Not published.
- Major Adviser: Professor J. W. Gruner.
- Positions Held: Geologist, 1937—, Shell Petroleum Corporation.
- Honors: Sigma Xi.
- Address: Shell Petroleum Corporation, Mayo Building, Tulsa, Oklahoma.
1937. LONGLEY, WILLIAM WARREN. B.S. '31, Acadia University. M.S. '37, University of Minnesota.
- Major: Geology. Minor: Metallurgy.
- Thesis: The Geology of the Kamshigama Map Area, Abitibi District, Quebec. Published in Quebec Bureau of Mines Annual Report, 1936, Part B.
- Major Adviser: Professor F. F. Grout.
- Positions Held: Instructor, 1935—, Dartmouth College.
- Address: Dartmouth College, Hanover, New Hampshire.
1937. McCONNELL, DUNCAN. B.S. '31, Washington and Lee University; M.S. '32, Cornell University.
- Major: Geology (Mineralogy). Minors: Economic Geology and Analytical Chemistry.
- Thesis: A Structural Investigation of the Isomorphism of the Apatite Group. Published in *American Mineralogist*, 22:977-986, 1937, 23:1-18, 1938.
- Major Adviser: Professor J. W. Gruner.
- Positions Held: Instructor in Mineralogy, 1937—, University of Texas.
- Honors: Sigma Xi.
- Address: Department of Geology, University of Texas, Austin, Texas.
1937. PAGE, LINCOLN RIDLER. B.A. '31, Dartmouth College; M.A. '32, University of Minnesota.
- Major: Geology. Minor: Metallurgy and Petrography.
- Thesis: The Geology of the Rumney Quadrangle, New Hampshire. Published in *Summaries of Ph.D. Theses*, Vol. 1, 1939, University of Minnesota.
- Major Adviser: Professor F. F. Grout.
- Positions Held: Assistant Geologist, 1937-1938, Standard Oil Co. of Texas; Assistant Professor in Geology, 1938—, University of Colorado.
- Honors: Sigma Xi.
- Address: Pike, New Hampshire.
1937. SUNDEEN, STANLEY WILFORD. B.A. '31, University of Minnesota.
- Major: Geology (Petrology). Minors: Metallurgy and Geology (Paleontology).
- Thesis: A Petrographic Study of the Basic Dikes of the Saganaga and Snowbank Lake Intrusives and a General Review of the Literature on Lamprophyres. Not published.
- Major Adviser: Professor F. F. Grout.
- Positions Held: Assistant Geologist, 1937—, Cleveland-Cliffs Iron Company, Ishpeming, Michigan.
- Honors: Phi Beta Kappa; Sigma Xi.
- Address: 709 N. Main St., Ishpeming, Michigan.
1937. WRIGHT, WILLIS ISAAC. B.S. '30, Acadia University.
- Major: Geology. Minors: Mining and Metallurgy.

Thesis: The Compositions and Occurrences of Garnets. Published in *American Mineralogist*, 23:436-449, 1938.

Major Adviser: Professor F. F. Grout.

Positions Held: Geologist, 1937—, Century Mining Co., Montreal, Canada.

Honors: Sigma Xi; Gamma Alpha.

Address: 204 Lombard Building, Winnipeg, Canada.

#### MATHEMATICS

1924. CARLSON, S(ALLY) ELIZABETH. B.A. '17, M.A. '18, University of Minnesota.

Major: Mathematics. Minor: Physics.

Thesis: On the Convergence of Certain Methods of Closest Approximation. Published in *Transactions of the American Mathematical Society*, April, 1924 and July, 1926; and in *American Mathematical Society Bulletin*, November 1926.

Major Adviser: Professor Dunham Jackson.

Positions Held: Instructor, 1924-1928, Assistant Professor, 1928—, University of Minnesota.

Honors: Phi Beta Kappa; Sigma Xi.

Address: 3024 14th Ave. So., Minneapolis, Minnesota.

1924. JENSEN, CAREY MORGAN. B.A. '18, M.A. '20, University of Minnesota.

Major: Mathematics. Minor: Physics.

Thesis: Some Problems in the Approximate Representation of a Function by a Sturm-Interpolating Formula. Published 1927, Menasha, Wisconsin, and New York.

Major Adviser: Professor Dunham Jackson.

Positions Held: Instructor, 1923-1926, University of Wisconsin; Assistant Professor, 1926-1932, 1935-1936, Macalester College; Instructor, 1935, University of Minnesota; Associate Professor, 1936—, Kansas Wesleyan University, Salina, Kansas.

Address: 3315 17th Ave. So., Minneapolis, Minnesota.

1928. EARL, JAMES MAYBERRY. B.A. '19, M.A. '26, University of Minnesota.

Major: Mathematics. Minor: Physics.

Thesis: Polynomials of Best Approximation on an Infinite Interval. Published in *Transactions of the American Mathematical Society*, Vol. 32, no. 4, October 1930.

Major Adviser: Professor Dunham Jackson.

Positions Held: Instructor, 1928-1929, University of Minnesota; Instructor, 1929-1930, Associate Professor, 1930-1931, University of Iowa; Associate Professor, 1931-1932, Professor and Head of Department of Mathematics, 1932—, Municipal University of Omaha, Nebraska.

Address: 528 South 53rd St., Omaha, Nebraska.

1928. PHIPPS, CECIL GLENN. B.A. '21, University of Montana; M.A. '24, University of Minnesota.

Major: Mathematics. Minor: Physics.

Thesis: Problems in Approximation by Functions of Given Continuity. Not published.

Major Adviser: Professor Dunham Jackson.

Positions Held: Associate Professor, 1928—, University of Florida.

Address: 1210 Margaret St., Gainesville, Florida.

1928. RISSELMAN, WILLIAM CHARLES. M.A. '23, Indiana State Normal School; M.A. '25, University of Minnesota.

Major: Mathematics. Minor: Physics.

Thesis: Approximation to a Given Function by Means of Polynomials in Another Given Function. Not published.

Major Adviser: Professor Dunham Jackson.

Positions Held: Assistant Professor, 1928-1929, University of Pittsburgh Junior College at Uniontown, Pennsylvania; Professor, Head of Department of Mathematics, 1929-1937, Arizona State Teachers College, Flagstaff, Arizona; Instructor, 1937, University of California.

Honors: Fellow, A.A.A.S.

Address: c/o Clifford Bell, 10514 Rochester Ave., Los Angeles, California.

1929. MICKELSON, EARL LEWIS. B.A. '23, M.A. '24, University of Minnesota.

Major: Mathematics. Minor: Physics.

Thesis: On the Approximate Representation of a Function of Two Variables. Published in *Transactions of the American Mathematical Society*, Vol. 33, no. 3, 759-781.

Major Adviser: Professor Dunham Jackson.

Positions Held: Professor, Head of Department of Physics and Mathematics, 1929-1933, New Mexico State Teachers College, Silver City, New Mexico; Captain, 1933-1935, U.S.A., Fort Bliss Texas; 1935—, Fox Construction Company, Tucson and Silver City; Member, Board of Directors, 1934—, Western Underwriters Company, Santa Fe, and Western American Life Insurance Company, Albuquerque; Vice-President, 1938—, Western American Life Insurance Company.

Honors: Mortar and Ball; U. S. Coast Artillery Association; Mathematics Association of America; American Mathematical Society; Sigma Xi; Phi Beta Kappa.

Address: Silver City, New Mexico.

1930. McEWEN, WILLIAM HAYWARD. B.S. '21, M.S. '22, University of Saskatchewan; M.A. '24, University of Minnesota.

Major: Mathematics. Minor: Physics.

Thesis: Problems of Closest Approximation Connected with the Solution of Linear Differential Equations. Published in *Transactions of the American Mathematical Society*, Vol. 33, no. 4, 979-997.

Major Adviser: Professor Dunham Jackson.

Positions Held: Professor, 1930—, Head of Department of Mathematics, 1934—, Mount Allison University.

Address: Mount Allison University, Sackville, New Brunswick, Canada.

1931. SCHERBERG, MAX GOY. B.S. '25, Washington University.

Major: Mathematics. Minor: Physics.

Thesis: The Degree of Convergence of a Series of Bessel Functions. Published in *Transactions of the American Mathematical Society*, 1932.

Major Adviser: Professor Dunham Jackson.

Positions Held: Instructor, 1930—, University of Minnesota.

Honors: Sigma Xi.

Address: 55 Melbourne S. E., Minneapolis, Minnesota.

1933. HOEL, PAUL GERHARD. B.A. '26, Luther College. M.A. '29, University of Minnesota.

Major: Mathematics. Minor: Physics.

Thesis: Certain Problems in the Theory of Closest Approximation. Published in *American Journal of Mathematics*, 57:891-901, 1935.

Major Adviser: Professor Dunham Jackson.

Positions Held: Instructor, 1933-1935, Assistant Professor, 1935-1936, Rose Polytechnic Institute; Fellow of American-Scandinavian Foundation, 1936-1937; Instructor, 1937—, Oregon State College.

Address: Oregon State College, Department of Mathematics, Corvallis, Oregon.

1933. WILDER, MARIAN AUGUSTA. B.A. '27, M.A. '30, University of Minnesota.

Major: Mathematics. Minor: Biometry.

Thesis: Some Problems in Closest Approximation over a Discrete Set of Points. Not published.

Major Adviser: Professor Dunham Jackson.

Positions Held: Graduate Fellow, 1933-1934, University of Minnesota; Statistician, 1934-1935, Mayo Clinic; Statistician and Instructor, 1935—, University of Minnesota.

Honors: Phi Beta Kappa; Sigma Xi; Pi Lambda Theta.

Address: 67 Bedford S.E., Minneapolis, Minnesota.

1935. OBERG, EDWIN NATHANIEL. B.A. '29, *magna cum laude*, M.A. '32, University of Minnesota.

Major: Mathematics. Minor: Physics.

Thesis: Approximate Solutions of Integral Equations. Published in *Bulletin of American Mathematical Society*, 1935.

Major Adviser: Professor Dunham Jackson.

Positions Held: Instructor, 1935-1937, Rochester Junior College; Instructor, 1937—, University of Iowa.

Honors: Phi Beta Kappa; Sigma Xi.

Address: 208-B Physics Building, University of Iowa, Iowa City, Iowa.

1938. PEEBLES, GLENN HAROLD. B.S. '25, M.S. '28, Northwestern University.

Major: Mathematics. Minor: Physics.

Thesis: Some Generalizations of the Theory of Orthogonal Polynomials. Not published.

Major Adviser: Professor Dunham Jackson.

Positions Held: Instructor, 1928—, University of Minnesota.

Honors: Sigma Xi.

Address: 2410 Irving Ave. So., Minneapolis, Minnesota.

## METALLOGRAPHY

1926. DOWDELL, RALPH LEWIS. Metallurgical Engineer '18, M.S. '21, University of Minnesota.  
Major: Metallography. Minors: Industrial Chemistry and Geology.  
Thesis: Study of the Decomposition of the Austenitic Structure in Hardened Steels. Published in *Transactions of the American Society for Steel Treating*, Cleveland, Ohio, 1927, now American Society for Metals.  
Major Adviser: Professor O. E. Harder.  
Positions Held: Assistant Professor of Metallography, 1926-1928, University of Minnesota; Chief Metallurgist, 1928-1930, United States Bureau of Standards; Professor of Metallography, 1930—, University of Minnesota.  
Honors: Henry Marion Howe Medal of the American Society for Steel Treating; Sigma Xi; Phi Lambda Upsilon.  
Address: 1466 Como Ave. W., St. Paul, Minnesota.
1933. NIELSEN, HERLUF PETER. B.S. in M.E. '24, University of Nebraska; M.M.E. '25, Rensselaer Polytechnic Institute.  
Major: Metallography. Minor: Metallurgy.  
Thesis: Stresses in Heat Treated Steel. Published in the *Transactions of the American Society for Metals*, September, 1934.  
Major Adviser: Professor R. L. Dowdell.  
Positions Held: Assistant Professor, 1934-1935, New Mexico State College; Assistant Professor, 1935—, Iowa State College.  
Honors: Sigma Xi.  
Address: Iowa State College, Ames, Iowa.
1936. JONES, KELYTH GLYNNE. B.Aero.E. '32, M.S. in Aero. Eng. '33, University of Minnesota.  
Major: Metallography. Minor: Aeronautical Engineering.  
Thesis: Magnesium Base Alloys. Published in *Summaries of Ph.D. Theses*, Vol. 1, 1939, University of Minnesota.  
Major Adviser: Professor R. L. Dowdell.  
Positions Held: Metallurgist, 1936—, Du Pont Ammonia Corporation.  
Address: 1625 Quarrier St., Charleston, West Virginia.
1936. QUENEAU, BERNARD RUSSELL. B.S. '32, Met.E. '33, Columbia University.  
Major: Metallography. Minors: Physics and Chemistry.  
Thesis: Decomposition Rates of Austenite. Published in the *Transactions of the American Society for Metals*, 1937.  
Major Adviser: Professor R. L. Dowdell.  
Positions Held: Assistant, 1936-1937, U. S. Steel Research Laboratory, Kearney, New Jersey; General Foreman, 1937—, Metallurgical Department, Duquesne Works, Carnegie-Illinois Steel Corporation.  
Honors: Sigma Xi.  
Address: 4041 Bigelow Boulevard, Pittsburgh, Pennsylvania.
1937. FORSYTH, ARTHUR C. Met.E. '24, M.S. '29, University of Minnesota.  
Major: Metallography and Metallurgy. Minor: Geology.  
Thesis: Cobalt-Nickel-Silicon System. Not published.  
Major Adviser: Professor R. L. Dowdell.

Positions Held: Instructor, 1937—, University of Minnesota.

Honors: Sigma Xi.

Address: 106 Bedford St. S. E., Minneapolis, Minnesota.

1937. JERABEK, HENRY SAMUEL. B.S. '26, M.S. '29, University of Minnesota.

Major: Metallography. Minor: Chemistry.

Thesis: Precipitation Phenomena in Iron Alloys. Published in *Summaries of Ph.D. Theses*, Vol. 1, 1939, University of Minnesota.

Major Adviser: Professor R. L. Dowdell.

Positions Held: Assistant Professor of Metallography, 1937—, University of Minnesota.

Honors: Sigma Xi; Tau Beta Pi; Phi Lambda Upsilon.

Address: 850 21st Ave. S. E., Minneapolis, Minnesota.

1937. PETERSON, EARL VERNER. B.Ch.E. '30, M.S. in Ch.E. '32, University of Minnesota.

Major: Metallography. Minor: Chemical Engineering.

Thesis: The Cobalt-Nickel-Aluminum System. Published in *Summaries of Ph.D. Theses*, Vol. 1, 1939, University of Minnesota.

Major Adviser: Professor R. L. Dowdell.

Positions Held: Laboratorian, 1937—, American Steel and Wire Co., North Works, Worcester, Massachusetts.

Honors: Tau Beta Pi; Sigma Xi.

Address: 766 Main St., Worcester, Massachusetts.

#### PHYSICS

1906. ZELENY, JOHN. B.S. '92, University of Minnesota; B.A. '99, Cambridge University, England.

Major: Physics. Minor: Mathematics.

Thesis: The Velocity of the Ions Produced by Roentgen Rays. Published in *Royal Society of London Philosophical Transactions*, Series A, Vol. 195 (1907).

Major Adviser: Professor H. T. Eddy.

Positions Held: Assistant Professor of Physics, 1896-1900, Associate Professor, 1900-1908, Professor, 1908-1915, University of Minnesota; Professor of Physics, Chairman of Department, Director of Graduate Studies in Physics, 1915—, Yale University, New Haven, Connecticut.

Honors: M.A., 1915, Yale University; Fellow of the American Philosophical Society; Fellow of American Academy of Arts and Sciences; starred man in *American Men of Science*; Phi Beta Kappa; Sigma Xi; Aurelian Honor Society; Berzelius.

Address: 44 Cold Spring St., New Haven, Connecticut.

1907. ZELENY, ANTHONY. B.S. '92, M.S. '93, University of Minnesota.

Major: Physics. Minors: Mathematics and Chemistry.

Thesis: The Capacity of the Mica Condenser and Its Application as a Standard for the Comparison of Electrical Quantities. Published in *Physical Review* under the titles "The Capacity of Mica Condensers" (Vol. 22, 65-79) and "On Precision Measurements with the Moving Coil Ballistic Galvanometer" (Vol. 23, 399-421).

Major Advisers: Professors H. T. Eddy and F. S. Jones.  
Positions Held: Assistant Professor, 1906-1909, Professor, 1909-1938, Professor Emeritus, 1938—, University of Minnesota.  
Honors: Foreign Member Masaryk Academy; Sigma Xi; Vice-President (Section B) of the A.A.A.S.; starred man in *American Men of Science*.  
Address: 1933 East River Terrace, Minneapolis, Minnesota.

1908. ERIKSON, HENRY ANTON. B.E.E. '96, University of Minnesota.  
Major: Physics. Minors: Physics and Mathematics.  
Thesis: The Ionization of Gases at High Pressures. Published 1910, University of Minnesota.  
Major Adviser: Professor H. T. Eddy.  
Positions Held: Assistant Professor of Physics, 1906-1914, Associate Professor, 1914-1915, Professor, Chairman of Department, 1915-1938, Professor Emeritus, 1938—, University of Minnesota.  
Honors: Ph.D., 1931, University of Oslo, Norway; Fellow of the A.A.A.S.; Tau Beta Pi; Sigma Xi; National President, 1930-1931; starred man in *American Men of Science*; President, local chapter, Tau Beta Pi, 1930-1931.  
Address: 424 Harvard St. S. E., Minneapolis, Minnesota.

1909. KOVARIK, ALOIS FRANCIS. B.A. '04, M.A. '07, University of Minnesota.  
Major: Experimental Physics. Minors: Mathematical Physics and Mechanics.  
Thesis: The Effect of Changes in the Pressure and Temperature of a Gas upon the Velocity of the Negative Ions Produced by Ultra-Violet Light. Published in *Physical Review*, 1910.  
Major Adviser: Professor J. Zeleny.  
Positions Held: John Harling Fellow, 1910-1911, Victoria University, Manchester, England; Instructor, 1911-1912, Assistant Professor, 1912-1915, Associate Professor, 1915-1916, University of Minnesota; Assistant Professor, 1916-1922, Associate Professor, 1922-1925, Professor, 1925—, Yale University, New Haven, Connecticut; Lecturer, 1925, Karlova University, Prague, Czechoslovakia.  
Degrees Received since the Ph.D.: Sc.D., 1916, Victoria University; Doctor *Rerum Naturalium, honoris causa*, Karlova University, Praha, 1932; Honorary M.A., Yale University.  
Honors: Fellow of the A.A.A.S.; Honorary Member of the Société des Mathématiciens et des Physiciens of Czechoslovakia; Phi Beta Kappa; Sigma Xi; Memorial Medal, 1925, Karlova University; starred man in *American Men of Science*; President, 1937-1938, Yale Chapter of Sigma Xi.  
Address: Sloane Physics Laboratory, Yale University, New Haven, Connecticut.

1911. McKEEHAN, LOUIS WILLIAMS. B.E. '08, University of Minnesota.  
Major: Physics. Minors: Mathematics and Astronomy.  
Thesis: The Terminal Velocity of Fall of Small Spheres in Air at Reduced Pressures. Published in *Physical Review*, 33:153-174, 1911.  
Major Adviser: Professor J. Zeleny.  
Positions Held: Instructor, 1911-1915, Assistant Professor, 1915-1918, Associate Professor, 1918-1919, University of Minnesota; Technician, 1919-1921, Bureau of Ordnance, United States Navy; Research Physicist, 1921-1925,

Western Electric Company; Research Physicist, 1925-1927, Bell Telephone Laboratories; Professor of Physics, Director of the Sloane Physics Laboratory, 1927—, Yale University, New Haven, Connecticut.

Honors: Fellow of the A.A.A.S.; Member of the Washington Academy of Sciences; Institute of Medals, London; Sigma Xi; starred man in *American Men of Science*.

Degrees Received since Ph.D.: Honorary M.A., 1927, Yale University.

Address: Sloane Physics Laboratory, Yale University, New Haven, Connecticut.

1916. KLOPSTEG, PAUL ERNEST. B.S. '11, M.A. '13, University of Minnesota.

Major: Physics. Minor: Mathematics.

Thesis: A Critical Study of the Theory and Development of Methods of Application of the Open Moving-Coil Galvanometer. Published in *Physical Review*, Vol. 7, no. 6, June 1916, and Vol. 8, no. 2, August 1916.

Major Advisers: Professors H. A. Erikson and A. Zeleny.

Positions Held: Instructor, 1916-1917, University of Minnesota; Research Physicist, 1917-1918, Ordnance Department, United States Army; Physicist, 1918-1921, Leeds and Northrup Company; Manager of Development and Manufacturing, 1921-1922, Director in charge of Development and Manufacturing, 1922-1930, President, 1930—, Central Scientific Company, Chicago.

Address: 1700 Irving Park Boulevard, Chicago, Illinois.

1917. FOOTE, PAUL DARWIN. B.A. '09, M.A. '11, Western Reserve University.

Major: Physics. Minor: Mathematics.

Thesis: Some Characteristics of the Marvin Pyrheliometer. Published in *Scientific Papers of the Bureau of Standards*, 1917.

Major Adviser: Professor H. A. Erikson.

Positions Held: Physicist, 1911-1927, Bureau of Standards; Director, 1927—, Gulf Research Laboratory; Executive, Vice-President and Director, 1933—, Gulf Research Development Co.

Honors: Member of the Washington Academy of Sciences; Member of the German Physical Society; Phi Beta Kappa; Sigma Xi; Sigma Pi Sigma.

Address: P. O. Box 2038, Pittsburgh, Pennsylvania.

1920. DOWNEY, KATHERINE MELVINA. B.A. '10, M.A. '13, University of Minnesota.

Major: Physics. Minor: Mathematics.

Thesis: The Variation of the Residual Ionization of the Air with Pressure. Published 1920, Lancaster, Pennsylvania.

Major Adviser: Professor W. F. G. Swann.

Address: Wheaton, Minnesota.

1921. FRAYNE, JOHN GEORGE. B.A. '17, Ripon College.

Major: Physics. Minor: Mathematics.

Thesis: The Unilateral Dynamic Characteristics of Three-Electrode Thermionic Amplifiers. Published in *Physical Review*, Vol. 19, no. 6, June 1922.

Major Adviser: Professor W. F. G. Swann.



Positions Held: Instructor, 1921-1922, University of Minnesota; Professor, 1922-1928, Antioch College; National Research Council Fellow, 1928-1929, California Institute of Technology; Consulting Engineer, 1929—, Electrical Research Products, Inc., Pasadena, California.

Honors: Fellow of the A.A.A.S.; Sigma Xi.

Address: 1580 La Loma Road, Pasadena, California.

1921. JOHNSON, ADA FRANCES. B.A. '17, Bryn Mawr College; M.A. '18, University of Minnesota.

Major: Physics. Minors: Mathematics and Chemistry.

Thesis: An Investigation of the Method of Measuring Ionic Mobilities by Observations on the Self-Repulsion of Ions. Published 1922, University of Minnesota.

Major Adviser: Professor W. F. G. Swann.

Positions Held: Professor of Physics, 1922-1923, Professor of Physics and Mathematics, 1924-1926, Constantinople College, Istanbul, Turkey; Professor of Physics, 1927-1928, Professor of Physics and Mathematics 1928—, Rockford College, Rockford, Illinois; Fellow in Biophysics, summers 1927-1929, Mayo Foundation, Rochester, Minnesota.

Address: Rockford College, Rockford, Illinois.

1921. VALASEK, JOSEPH. B.S. '17, Case School of Applied Science; M.A. '20, University of Minnesota.

Major: Physics. Minor: Mathematics.

Thesis: Piezo-Electric Activity of Rochelle Salts under Various Conditions. Published in *Physical Review*, Vol. 19, no. 5, 475-491, May 1922.

Major Adviser: Professor W. F. G. Swann.

Positions Held: National Research Council Fellow, 1921-1922, Assistant Professor, 1922-1927, Associate Professor, 1928—, University of Minnesota; 1928-1929, University of Upsala, Sweden (on sabbatical leave from University of Minnesota).

Honors: Sigma Xi; Tau Beta Pi.

Address: 300 Seymour Ave. S. E., Minneapolis, Minnesota.

1922. POWER, ARCHIE DAYTON. B.S. '11, Baker University; M.A. '12, University of Kansas.

Major: Physics. Minor: Physical Chemistry.

Thesis: The Coefficient of Recombination of the Natural Ions in Atmospheric Air, and Allied Phenomena Associated with Weak Atmospheric Ionization. Published in *Journal of the Franklin Institute*, Vol. 196, 327-352, September 1923.

Major Adviser: Professor W. F. G. Swann.

Positions Held: Instructor, 1922-1924, University of Minnesota; Professor, 1924-1929, Lawrence College, Appleton, Wisconsin; research, 1929-1930, Westinghouse Lamp Company; research, 1930—, R. C. A. Manufacturing Company, Inc., Harrison, New Jersey.

Honors: Sigma Xi.

Address: R. C. A. Manufacturing Company, Inc., Harrison, New Jersey.

1922. ROGNLEY, OSWALD. B.A. '15, St. Olaf College; M.A. '17, University of Minnesota.

Major: Physics. Minor: Mathematics.

Thesis: The Motions of Ions in the Atmosphere.

Major Adviser: Professor W. F. G. Swann.

Degree conferred *post obitum*. Deceased 1922.

1923. CHA, CHIEN. B.A. '19, Nanking University; M.A. '21, University of Minnesota.

Major: Physics. Minor: Mathematics.

Thesis: On the Incident and Anergent Velocities of Photo-Electrons Emitted from Thin Platinum Films. Published in *Philosophical Magazine* (London), Vol. 49, January 1925.

Major Adviser: Professor W. F. G. Swann.

Positions Held: Professor, Department of Physics, Wu-Hang University, China.

Address: Department of Physics, Wu-Hang University, Wuchang, Huper, China.

1923. MAIZLISH, I(SRAEL). B.S. '18, M.S. '19, Massachusetts Institute of Technology.

Major: Physics. Minor: Mathematics.

Thesis: The Scattering of X-Rays. Published in *Journal of the Franklin Institute*, May 1924.

Major Adviser: Professor W. F. G. Swann.

Positions Held: 1923-1924, Lehigh University, Bethlehem, Pennsylvania; Professor of Physics and Mathematics, Head of Department of Physics, 1925-1935, Centenary College of Louisiana; Director of Public Relations, 1936—, Tanner-Gray Line Sightseeing Co., Los Angeles, California.

Honors: Sigma Xi.

Address: 320½ North Kingsley Drive, Los Angeles, California.

1923. ZANSTRA, HERMAN. Ch.E. '17, Technical University, Delft, Holland.

Major: Physics. Minor: Mathematics.

Thesis: A Study on Relative Motion in Connection with Classical Mechanics. Published in *Physical Review*, Vol. 23, p. 528.

Major Adviser: Professor W. F. G. Swann.

Positions Held: National Research Council Fellow, 1923-1924, University of Chicago; 1924-1925, University of Hamburg; 1925-1926, California Institute of Technology; Assistant Professor of Astronomy and Mathematics, 1926-1928, University of Washington; Assistant Professor of Mathematics, 1928-1929, Imperial College of Science and Technology, London; Assistant in Physics, 1931-1937, University of Amsterdam; Radcliffe Travelling Fellow in Astronomy, 1937—, University Observatory, Oxford, and Radcliffe Observatory, Pretoria, South Africa.

Honors: Sigma Xi.

Address: Radcliffe Observatory, Pretoria, South Africa.

1924. HARTIG, HENRY EDWARD. B.S. in Engineering '18, University of Minnesota.

Major: Physics. Minor: Mathematics.

Thesis: The Apparent Transmission of Low-Velocity Electrons through Aluminum Foil. Published in *Physical Review*, August 1924.

Major Adviser: Professor J. T. Tate.

- Positions Held: Assistant Professor of Mathematics and Mechanics, 1924-1928, Assistant Professor of Telephone and Telegraph Engineering, 1928-1929, Associate Professor, 1929—, University of Minnesota.  
Honors: Sigma Xi; Tau Beta Pi; Eta Kappa Nu.  
Address: 3940 Lake Curve Ave., Robbinsdale, Minnesota.
1925. BUCHTA, J. WILLIAM. B.S. in Electrical Engineering '20, M.A. '21, University of Nebraska.  
Major: Physics. Minor: Mathematics.  
Thesis: A Low-Voltage Electron-Beam Oscillograph. Published in *Journal of the Optical Society and Review of Scientific Instruments*, 10:581, 1925.  
Major Adviser: Professor J. T. Tate.  
Positions Held: Instructor, 1925-1927, Assistant Professor of Physics, 1927-1929, Associate Professor 1929-1938, Professor, and Head of Department of Physics, 1938—, University of Minnesota.  
Honors: Sigma Xi.  
Address: 2271 Hoyt Ave. W., St. Paul, Minnesota.
1925. NIELSEN, WALTER McKINLEY. B.S. in Electrical Engineering '22, University of Minnesota.  
Major: Physics. Minor: Mathematics.  
Thesis: The Negative Ions of Mercury Vapor. Published in *Physical Review*, Vol. 27, no. 6, June 1926.  
Major Adviser: Professor J. T. Tate.  
Positions Held: Instructor, 1925-1928, Assistant Professor, 1928-1929, Duke University, Durham, North Carolina; National Research Council Fellow, 1929-1931, Franklin Institute, Philadelphia; Assistant Professor, 1931-1937, Professor of Physics, 1937—, Chairman, Department of Physics, 1937—, Duke University.  
Address: Physics Department, Duke University, Durham, North Carolina.
1926. BROXON, JAMES WILLIAM. B.A. '19, Wabash College; M.A. '20, University of Minnesota.  
Major: Physics. Minor: Mathematics.  
Thesis: Natural Ionization in Gases. Published in *Physical Review*, Vol. 27, no. 5, p. 542 (1926) and Vol. 28, p. 1071 (1926).  
Major Adviser: Professor W. F. G. Swann.  
Positions Held: Assistant Professor of Physics, 1926-1927, Associate Professor, 1927-1929, Professor, 1929—, University of Colorado, Boulder, Colorado.  
Honors: Fellow of the A.A.A.S.  
Address: 945 Fourteenth St., Boulder, Colorado.
1926. HUTCHISSON, ELMER. B.S. '23, Case School of Applied Science; M.S. '24, Massachusetts Institute of Technology.  
Major: Physics. Minor: Mathematics.  
Thesis: The Energy of the Crossed-Orbit Model of the Hydrogen Molecule and the Theory of the Temperature Variation of the Specific Heat of Hydrogen. Published in *Physical Review*, Vol. 28, no. 5, November 1926, and Vol. 29, no. 2, February 1927.  
Major Adviser: Professor J. H. Van Vleck.

Positions Held: Instructor, 1926-1927, Assistant Professor, 1927-1936, University of Pittsburgh, Pittsburgh, Pennsylvania; 1929-1930, University of Berlin, Germany (on leave of absence from University of Pittsburgh); Assistant Director, 1936-1937, American Institute of Physics; Professor and Head of Department of Physics, 1937—, University of Pittsburgh.

Honors: Sigma Xi; Tau Beta Pi; Gamma Alpha; Sigma Pi Sigma.

Address: 107 Fairfax Road, Forest Hills, Wilkensburg, Pennsylvania.

1927. MAXWELL, LOUIS RIGSBY. B.A. '23, Cornell College.

Major: Physics. Minor: Mathematics.

Thesis: The Mean Free Path of Electrons in Mercury Vapor. Published in *Proceedings of the National Academy of Sciences*, Vol. 12, no. 8, August 1926.

Major Adviser: Professor J. T. Tate.

Positions Held: National Research Council Fellow, 1927-1929, Bartol Research Fellow, 1929-1931, Bartol Research Laboratory; Physicist, 1931—, Bureau of Chemistry and Soils, U. S. D. A., Washington, D. C.

Honors: Sigma Xi.

Address: 7245 Wisconsin Ave., Bethesda, Maryland.

1928. HILL, EDWARD LEE. B.S. in Electrical Engineering '25, University of Minnesota.

Major: Physics. Minor: Mathematics.

Thesis: Quantum Mechanics of the Rotational Distortion of Spin Multiplets in Molecular Spectra. Published in *Physical Review*, Vol. 32, no. 2, August 1928, with J. H. Van Vleck.

Major Adviser: Professor J. H. Van Vleck.

Positions Held: National Research Council Fellow, 1928-1930, Harvard University; Assistant Professor of Theoretical Physics, 1931-1937, Associate Professor, 1937—, University of Minnesota; Research Physicist, 1934-1935, Physics-Technical Institute, Leningrad, (on leave of absence from the University of Minnesota).

Honors: Sigma Xi; Tau Beta Pi.

Address: Department of Physics, University of Minnesota, Minneapolis, Minnesota.

1928. NEWBURY, KIRSTEN LARSEN. B.S. '19, M.S. '24, University of Washington.

Major: Physics. Minor: Mathematics.

Thesis: The Effect of Light on the Electron Emission from Oxide-Coated Filaments. Published in *Physical Review*, Vol. 34, December 1929.

Major Adviser: Professor J. T. Tate.

Positions Held: Instructor, 1928-1932, University of Washington, Seattle, Washington.

Deceased, 1932.

1928. ROJANSKY, VLADIMIR BORISOVICH. B.S. '24, Whitman College; M.A. '26, University of Oregon.

Major: Physics. Minor: Mathematics.

Thesis: The Stark Effect of Hydrogenic Atoms in the New Quantum Mechanics. Published in *Physical Review*, Vol. 33, no. 1, January 1929.

- Major Adviser: Professor J. H. Van Vleck.  
 Positions Held: Instructor, 1928-1930, Washington University, St. Louis; National Research Council Fellow, 1931-1932, Princeton University; Associate Professor, 1930-1937, Professor, 1937—, Union College.  
 Address: Union College, Schenectady, New York.
1929. BRATTAIN, WALTER HAUSER. B.S. '24, Whitman College; M.A. '26, University of Oregon.  
 Major: Physics. Minor: Mathematics.  
 Thesis: Efficiency of Excitation by Electron Impact and Anomalous Scattering in Mercury Vapor. Published in *Physical Review*, 34:474, 1929.  
 Major Adviser: Professor J. T. Tate.  
 Positions Held: Assistant Physicist, 1928-1929, Bureau of Standards; Technical Staff, 1929—, Bell Telephone Laboratory.  
 Honors: Sigma Xi.  
 Address: Bell Telephone Laboratory, Inc., 463 West St., New York City, N. Y.
1929. HAMMER, SIGMUND. B.A. '24, St. Olaf College.  
 Major: Physics. Minor: Mathematics.  
 Thesis: The Mean Free Path of Mercury Ions in Mercury Vapor. Not published.  
 Major Adviser: Professor J. T. Tate.  
 Positions Held: Physicist in Geophysics Division, 1929—, Gulf Research Laboratory, 327 Craft Avenue, Pittsburgh, Pennsylvania.  
 Honors: Sigma Xi.  
 Address: P. O. Box 2038, Pittsburgh, Pennsylvania.
1929. HEMINGWAY, ALLAN. B.A. '25, University of British Columbia.  
 Major: Physics. Minor: Mathematics.  
 Thesis: Thermal Effects of Diathermy. Published in *Radiology*, Vol. 14, February 1930.  
 Major Adviser: Professor W. K. Stenstrom.  
 Positions Held: Instructor in Physiology, 1929-1930, Assistant Professor, 1930—, University of Minnesota; Sterling Fellow, 1936-1937, Yale University.  
 Honors: Sigma Xi.  
 Address: 241 Cecil Street S. E., Minneapolis, Minnesota.
1930. BLEAKNEY, WALKER. B.S. '24, M.S. '27, University of Washington.  
 Major: Physics. Minor: Mathematics.  
 Thesis: A New Method of Positive Ray Analysis and Its Application to the Measurement of Ionization Potentials in Mercury Vapor. Published in *Physical Review*, Vol. 34, no. 1, July 1929, and Vol. 35, no. 2, January 1930.  
 Major Adviser: Professor J. T. Tate.  
 Positions Held: National Research Council Fellow, 1930-1932; Instructor in Physics, 1932-1935, Assistant Professor, 1935-1938, Associate Professor, 1938—, Princeton University.  
 Honors: Invited speaker at Harvard Tercentenary.  
 Address: Princeton, New Jersey.
1930. OSTENSEN, FLOYD CLIFFORD. B.S. '22, M.S. '27, University of Washington.  
 Major: Physics. Minor: Mathematics.

Thesis: A New Method for the Study of Voltage-Intensity Relations and Its Application to the Mercury 2537A Line. Published in *Physical Review*, Vol. 34, no. 10, November 1929, and Vol. 35, no. 3, February 1930.

Major Adviser: Professor J. T. Tate.

Positions Held: Instructor, 1930, University of Wisconsin; Laboratory Worker, 1930-1931, General Electric Company; Assistant Physicist in Light and Sound, 1931-1934, United States Signal Corps Laboratories, Oceanport, New Jersey.

Deceased, May, 1934.

1931. AHEARN, ARTHUR JOHN. B.A. '23, Ripon College.

Major: Physics. Minor: Mathematics.

Thesis: The Emission of Secondary Electrons from Tungsten. Published in *Physical Review*, 38:1858-1870, 1931.

Major Adviser: Professor J. T. Tate.

Positions Held: Member of Technical Staff, 1929—, Bell Telephone Laboratories, 463 West Street, New York City.

Address: 861 Hillside Ave., Westfield, New Jersey.

1931. LOZIER, WILLIAM WALLACE. B.A. '28, De Pauw University.

Major: Physics. Minor: Mathematics.

Thesis: Study of the Ionization of Molecules by Electron Impact. Published in *Physical Review*, Vol. 36, no. 8, October 1930.

Major Adviser: Professor J. T. Tate.

Positions Held: National Research Council Fellow, 1931-1933, Research Assistant, 1933-1935, Princeton University; Instructor, 1935, Rensselaer Polytechnic Institute; Research Assistant, 1935-1936, Columbia University; Physicist, 1936—, National Carbon Co.

Honors: Phi Beta Kappa; Sigma Xi; Fellow, American Physical Society.

Address: National Carbon Co., Fostoria, Ohio.

1931. PALMER, RALPH RONALD. B.A. '26, Macalester College.

Major: Physics. Minor: Mathematics.

Thesis: The Effect of Resolving Power on Measurements of the Absorption Coefficient of Electrons in Gases. Published in *Physical Review*, Vol. 37, no. 1, January 1931.

Major Adviser: Professor J. T. Tate.

Positions Held: Part-time Instructor, Research Associate, 1931-1932, University of Minnesota; Instructor and Assistant Professor of Physics, 1932-1937, Associate Professor, 1937—, Milliken University.

Honors: Sigma Xi.

Address: 384 S. McClellan, Decatur, Illinois.

1931. SISTER MAGNA WERTH. B.A. '14, St. John's University; M.A. '15, Catholic University of America.

Major: Physics. Minor: Mathematics.

Thesis: The Relative Efficiency of Some of the Mercury-Arc Lines in Exciting the Raman Spectrum of Benzol. Published in *Physical Review*, Vol. 39, no. 2, 1932.

Major Adviser: Professor J. Valasek.

Positions Held: Professor, Head of Division of Physical Sciences and Mathematics, 1931—, College of St. Benedict, St. Joseph, Minnesota.

Address: College of St. Benedict, St. Joseph, Minnesota.

1931. SMITH, PHILIP THUMAN. B.A. '27, University of Minnesota.  
Major: Physics. Minor: Mathematics.  
Thesis: Ionization of Gases by Electron Impact. Published in *Physical Review*, Vol. 36, no. 8, 1930, and in Vol. 37, no. 7, 1931.  
Major Adviser: Professor J. T. Tate.  
Positions Held: Research Assistant in Physics, 1931-1933, University of Minnesota; National Research Fellow, 1933-1934, Princeton University; Instructor in Physics, 1934-1937, Massachusetts Institute of Technology; Research Physicist, 1937—, R. C. A. Manufacturing Co.  
Honors: Sigma Xi; Gamma Alpha.  
Address: 376 Park Ave., East Orange, New Jersey.
1932. NURNBERGER, CARL ELROY. B.A. '23, Wabash College; M.A. '25, University of Minnesota.  
Major: Physics. Minor: Mathematics.  
Thesis: Effects of Alpha Rays in Water and in Aqueous Solutions of Ferrous Sulphate. Published in *Journal of Physical Chemistry*, 38:47, 1934.  
Major Adviser: Professor K. W. Stenstrom.  
Positions Held: Research Assistant in Biophysics, 1926-1936, University of Minnesota; Professor of Radiology, 1936-1938, Peiping Union Medical School.  
Address: Redmon, Illinois.
1933. JONES, ERNEST JOSEPH. B.S. '20, Ch.E. '21, University of Minnesota.  
Major: Physics. Minor: Physical Chemistry.  
Thesis: Positive Ion Excitation of Mercury Vapor. Published in *Physical Review*, 44:707, 1933.  
Major Adviser: Professor J. T. Tate.  
Positions Held: Assistant Physicist, 1933—, U.S.D.A. Bureau of Chemistry and Soils.  
Address: Bureau of Chemistry and Soils, U.S.D.A., Washington, D. C.
1933. WETZEL, WILFRED WOLF. B.A. '28, University of Minnesota.  
Major: Physics. Minor: Mathematics.  
Thesis: The Quantum Mechanical Effective Cross Section for Ionization of Helium by Electron Impact. Published in *Physical Review*, 44:25-30, 1933.  
Major Adviser: Professor J. T. Tate.  
Positions Held: Instructor, 1933-1936, Colgate University; Student, 1936-1937, Massachusetts Institute of Technology; Assistant Professor of Geophysics, 1937—, University of Minnesota; Lecturer, 1937—, University of Chicago.  
Honors: Sigma Xi.  
Address: Little Falls, Minnesota.
1934. LISKA, JOHN WILLIAM. B.A. '28, Ripon College.  
Major: Physics. Minor: Mathematics.  
Thesis: Efficiencies of Ionization of Helium and Mercury by Electron Impact at High Voltages. Published in *Physical Review*, 46:169, 1934.  
Major Adviser: Professor J. T. Tate.  
Positions Held: Research Physicist, 1934—, Firestone Tire and Rubber Co.  
Honors: Sigma Xi; Gamma Alpha.  
Address: 475 Bacon Ave., Akron, Ohio.

1934. VAUGHAN, ALFRED LELAND. B.A. '29, DePauw University.  
 Major: Physics. Minor: Mathematics.  
 Thesis: Mass Spectrograph Analyses, and Critical Potentials for the Production of Ions by Electron Impact, in Nitrogen and Carbon Monoxide. Published in *Physical Review*, 38:1687-1695, 1931, 48:525-531, 1935.  
 Major Adviser: Professor John T. Tate.  
 Positions Held: Co-ordinator of Physical Science, Instructor, 1935—, General College, University of Minnesota.  
 Honors: Phi Beta Kappa; Sigma Xi.  
 Address: University of Minnesota, Minneapolis, Minnesota.
1935. NERGAARD, LEON SEVERIN. B.S. in E.E. '27, University of Minnesota; M.S. in E.E. '30, Union College.  
 Major: Physics. Minor: Mathematics.  
 Thesis: Measurement Technique for Voltage, Current, Power, Resistance and Reactance in the Ultra-short Wave Region Below Two Meters. Published in *Proceedings of the Institute of Radio Engineers*, 24:1204, 1936.  
 Major Adviser: Professor J. T. Tate.  
 Positions Held: Research Physicist, 1933—, R. C. A. Manufacturing Company.  
 Honors: Sigma Xi.  
 Address: R. C. A. Manufacturing Company, Harrison, New Jersey.
1935. SULLIVAN, ROY RICHARD. B.S. '28, University of Arkansas; M.A. '30, University of Missouri.  
 Major: Physics. Minor: Mathematics.  
 Thesis: A Study of the First Spark Spectrum of Caesium as Excited by Electron Impact. Published in *Physical Review*, 49:912-916, 1936.  
 Major Adviser: Professor J. T. Tate.  
 Positions Held: Head, Department of Physics, 1935-1937, Moberly Junior College; Instructor in Physics, 1937—, Research Assistant, University Experiment Station, 1938, University of Tennessee.  
 Honors: Sigma Xi; Gamma Alpha; Member, American Physical Society; Member, American Association of Physics Teachers.  
 Address: Harris, Arkansas.
1935. VIGNESS, CARL IRWIN. B.E.E. '29, M.S. in E.E. '31, University of Minnesota.  
 Major: Physics. Minor: Mathematics.  
 Thesis: Inverse Piezoelectric Properties of Rochelle Salt. Published in *Physical Review*, 46:255, 1934, 48:198, 1935.  
 Major Adviser: Professor Joseph Valasek.  
 Positions Held: Instructor, 1935—, Biophysics Department, University of Minnesota.  
 Honors: Sigma Xi; Tau Beta Pi; Gamma Alpha; Eta Kappa Nu.  
 Address: 707 University Ave., Minneapolis, Minnesota.
1936. GOODRICH, MAX. B.A. '27, Westminster College.  
 Major: Physics. Minor: Mathematics.  
 Thesis: An Experimental Study of the Scattering of Electrons after Ionizing Collisions in Helium Gas. Published in *Physical Review*, 52:259, 1937.  
 Major Adviser: Professor J. T. Tate.



- Positions Held: Instructor in Physics, 1936—, Louisiana State University.  
Honors: Sigma Xi.  
Address: Department of Physics, Louisiana State University, Baton Rouge, Louisiana.
1936. HANSON, ELMO ERNEST. B.A. '29, St. Olaf College.  
Major: Physics. Minor: Mathematics.  
Thesis: A Study of Kinetic Energies of Ions Formed by Electron Impact in Nitric Oxide and Hydrogen Chloride. Published in the *Physical Review*, 51:86, 1937.  
Major Adviser: Professor John T. Tate.  
Positions Held: Technical Physicist, 1935—, Mines Experiment Station, University of Minnesota.  
Honors: Sigma Xi.  
Address: 622 5th St. S. E., Minneapolis, Minnesota.
1936. McDONALD, JOHN CHARLES. B.A. '32, Ripon College; M.A. '34, University of Minnesota.  
Major: Physics. Minor: Mathematics.  
Thesis: Effects of Chemical Combination on the K Beta Lines of  $^{26}\text{Fe}$ - $^{30}\text{Zn}$ . Published in *Physical Review*, 50:694, 1936.  
Major Adviser: Professor Joseph Valasek.  
Positions Held: Research Physicist, 1936—, The Dow Chemical Co.  
Address: The Dow Chemical Co., Midland, Michigan.
1936. NIER, ALFRED OTTO CARL. B.E.E. '31, M.S. in E.E. '33, University of Minnesota.  
Major: Physics. Minor: Mathematics.  
Thesis: A Mass Spectrographic Study of the Isotopes of Argon, Potassium, Rubidium, Zinc, and Cadmium. Published in *Physical Review*, 50:1041, 1936.  
Major Adviser: Professor J. T. Tate.  
Positions Held: National Research Fellow, 1936-1938, Harvard University; Assistant Professor, 1938—, University of Minnesota.  
Honors: Tau Beta Pi; Eta Kappa Nu; Sigma Xi.  
Address: Department of Physics, University of Minnesota, Minneapolis, Minnesota.
1936. NORGORDEN, OSCAR. B.E.E. '31, University of Minnesota.  
Major: Physics. Minor: Mathematics.  
Thesis: The Inverse Piezo-Electrical Properties of Rochelle Salt at Audio Frequencies. Published in *Physical Review*, 49:820, 1936.  
Major Advisers: Professors Anthony Zeleny and Joseph Valasek.  
Positions Held: Assistant Radio Engineer, 1936—, Naval Research Laboratory.  
Honors: Sigma Xi; Tau Beta Pi; Eta Kappa Nu.  
Address: Naval Research Laboratory, Washington, D. C.
1937. ARIYAMA, KYOZO. B.A. *cum laude* '34, M.A. '36, University of Minnesota.  
Major: Physics. Minor: Mathematics.

Thesis: Theory of Adsorption of Soluble Substances. Published in *Journal of Chemical Physics*, 5:467, 1937; and in *Bulletin of the Chemical Society of Japan*, 11:687-691, 12:44-51, 109-113.

Major Adviser: Professor H. A. Erikson.

Positions Held: Chief of the Testing Department and Research Laboratory, 1937—, Tomioka Optical Instrument Co.; Research Assistant, 1937—, Physics Department, Kogyo Daigaku, Tokyo, Japan.

Honors: Sigma Xi.

Address: Kazo-Machi, Saitama-Ken, Japan.

1937. HUSTRULID, ANDREW. B.E.E. '31, University of Minnesota.

Major: Physics. Minor: Mathematics.

Thesis: The Development of a High Intensity, High Resolving Power Mass Spectrograph and a Study with It of the Dissociation Products of the Benzene Molecule under Electron Impact. Published in *Physical Review*, 54:1037, 1938.

Major Adviser: Professor J. T. Tate.

Positions Held: Assistant Professor, 1937—, University of Minnesota.

Honors: Eta Kappa Nu; Tau Beta Pi; Sigma Xi.

Address: Division of Agricultural Engineering, University of Minnesota, St. Paul, Minnesota.

1937. SHEPHERD, WILLIAM GERALD. B.E.E. '33, University of Minnesota.

Major: Physics. Minor: Mathematics.

Thesis: The Disintegration of Lithium under Bombardment by Low Energy Deuterons. Published in *Physical Review*, 52:390, 1937.

Major Adviser: Professor J. T. Tate.

Positions Held: Research Assistant, 1937—, Bell Telephone Laboratories.

Honors: Tau Beta Pi; Eta Kappa Nu; Sigma Xi.

Address: 42-25 Layton St., Elmhurst, L. I., New York.

1938. LANDSHOFF, ROLF KARL MICHAEL. Dipl. Ing. '34, Dr. Ing. '36, Technische Hochschule (Berlin).

Major: Physics. Minor: Mathematics.

Thesis: The Influence of Chemical Binding and Crystal Structure on X-ray Absorption Edges. Published in *Physical Review*, 55:631, 1939.

Major Adviser: Professor E. L. Hill.

Honors: Sigma Xi.

Address: 915 University Ave. S. E., Minneapolis, Minnesota.

## SOCIAL SCIENCES

### ANTHROPOLOGY

1916. WILSON, GILBERT LIVINGSTONE. B.A. '96, M.A. '99, Wittenberg College.

Major: Anthropology. Minor: Spanish.

Thesis: The Agriculture of Hidatsa Indians, An Indian Interpretation. Published as University of Minnesota Studies in Social Science, no. 9, 1917.

Major Adviser: Professor A. E. Jenks.

Positions Held: Associate Professor of Anthropology, 1920-1925, Macalester College, St. Paul, Minnesota; Pastor, Lexington Parkway Presbyterian Church, St. Paul, Minnesota.

Deceased, 1930.

### AGRICULTURAL ECONOMICS

1920. BROSSARD, EDGAR BERNARD. B.S. '11, Utah Agricultural College; M.S. '17, University of Minnesota.

Major: Agricultural Economics. Minor: Farm Management.

Thesis: Types of Irrigation Farming. Published 1920, Logan, Utah.

Major Adviser: Professor J. D. Black.

Positions Held: Professor, Head of Department of Agricultural Economics and Farm Management, in charge of Agricultural Research for Agricultural Experiment Station, 1919-1923, Utah Agricultural College, Logan, Utah; Economist, 1923-1925, Member of Commission, 1925—, United States Tariff Commission, Washington, D. C.

Honors: Phi Kappa Phi; Cosmos Club, Washington, D. C.

Address: U. S. Tariff Commission, Washington, D. C.

1924. WAITE, WARREN C. B.S. '19, M.A. '21, University of Minnesota.

Major: Agricultural Economics. Minor: Economics.

Thesis: The Price-Making Mechanism of the Central Markets. Published in *Journal of Farm Economics*, October 1924.

Major Adviser: Professor J. D. Black.

Positions Held: Assistant Professor, 1924-1927, Associate Professor, 1927-1928, Professor, 1930—, University of Minnesota; Senior Agricultural Economist, 1928-1930, Bureau of Agricultural Economics, Washington, D. C.

Address: 2352 Bourne Ave., St. Paul, Minnesota.

1925. GAUMNITZ, EDWIN WILLIAM. B.S. '21, M.A. '22, University of Minnesota.

Major: Agricultural Economics. Minor: Economics.

Thesis: Central Market Price Quoting, Especially in the Minneapolis-St. Paul Market. Not published.

Major Advisers: Professors J. D. Black and H. B. Price.

Positions Held: Extension Specialist, 1928-1930, California Department of Agriculture; Senior Agricultural Economist, 1931-1933, Bureau of Agricultural Economics, U.S.D.A.; Assistant Chief, 1933-1935, Chief, 1935—, Dairy Section, A.A.A., U. S. Department of Agriculture.

Honors: Gamma Sigma Delta.

Address: 4010 North 25th Street, Arlington, Virginia.

1925. ZIMMERMAN, CARLE CLARK. B.A. '20, University of Missouri; M.S. '21, North Carolina State College.  
 Major: Agricultural Economics. Minor: Sociology.  
 Thesis: Farmers' Market Attitudes. Published as University of Minnesota Technical Bulletin No. 45.  
 Major Adviser: Professor John D. Black.  
 Positions Held: Assistant Professor, 1925-1928, Associate Professor, 1928-1931, University of Minnesota; Adviser on Agrarian Problems, 1930-1931, Siamese Government (on leave from University of Minnesota); Associate Professor, 1931—, Harvard University.  
 Honors: Gamma Sigma Delta; Fellow, A.A.A.S.; Fellow, International Institut de Sociologie; Honorary Member, Italian Institute for Population Studies.  
 Address: 6 Cliff Street, Winchester, Massachusetts.
1926. METZGER, HUTZEL. B.S. '20, M.S. '23, North Dakota Agricultural College.  
 Major: Agricultural Economics. Minor: Farm Management.  
 Thesis: The Economic Aspect of Local Elevator Organizations. Published as University of Minnesota Agricultural Experiment Station Bulletin 251.  
 Major Advisers: Professors J. D. Black and H. B. Price.  
 Positions Held: Social Science Research Council Fellow, 1925-1926; Senior Economist, 1926-1929, Bureau of Agricultural Economics, U.S.D.A.; Assistant Chief of Division, 1929-1932, Division of Co-operative Marketing, Federal Farm Board, Washington, D. C.; Regional Representative, 1932-1933, Western States Division, Federal Farm Board; President, 1933—, St. Paul Bank for Co-operatives.  
 Honors: Phi Kappa Phi; Alpha Zeta; Gamma Sigma Delta.  
 Address: St. Paul Bank for Co-operatives, St. Paul, Minnesota.
1926. RAUCHENSTEIN, EMIL. B.S. '11, University of Wisconsin; M.S. '23, University of Illinois.  
 Major: Agricultural Economics. Minor: Economics.  
 Thesis: Factors Affecting the Milk Supply in the Twin City Area. Published 1931 as a mimeographed report of the United States Bureau of Agricultural Economics and in *Summaries of Ph.D. Theses*, Vol. 1, 1939, University of Minnesota.  
 Major Adviser: Professor J. D. Black.  
 Positions Held: Associate in Agricultural Economics, 1926-1928, University of California; Senior Agricultural Economist, 1928—, United States Bureau of Agricultural Economics, Washington, D. C.  
 Address: 1800 N. Harvard St., Arlington, Virginia.
1927. BLACK, ALBERT GAIN. B.S. '15, University of Illinois; M.S. '25, University of Minnesota.  
 Major: Agricultural Economics. Minor: Economics.  
 Thesis: The Wealth and Income of the Farmers of the United States. Published 1930 as University of Minnesota Agricultural Experiment Station Technical Bulletin 72.  
 Major Adviser: Professor J. D. Black.  
 Positions Held: Assistant Professor, 1927-1929, University of Minnesota; Head, Department of Agricultural Economics, 1929-1935, Iowa State College of

- Agriculture; Chief, Corn Hog Section, 1933-1935, Agricultural Adjustment Administration (on leave from Iowa State College); Chief, Bureau of Agricultural Economics, 1935—, U. S. Department of Agriculture.  
Honors: Gamma Sigma Delta; Phi Kappa Phi.  
Address: South Building, U. S. Department of Agriculture, Washington, D. C.
1927. CHURCHILL, OMAR ORLANDO. B.S. '03, Michigan Agricultural College; M.S. '23, North Dakota Agricultural College.  
Major: Agricultural Economics. Minor: Economics.  
Thesis: The Economics of Flaxseed Production. Not published.  
Major Adviser: Professor J. D. Black.  
Positions Held: Professor of Crops and Genetics, 1916—, North Dakota Agricultural College, Fargo, North Dakota.  
Honors: Phi Kappa Phi; Blue Key, Fellow of the A.A.A.S.  
Address: 1001 College St., Fargo, North Dakota.
1927. GILE, BUEFORD MONROE. B.S. '13, University of Wisconsin.  
Major: Agricultural Economics. Minor: Economics.  
Thesis: The Agricultural Credit Situation in Minnesota. Published as University of Minnesota Agricultural Experiment Station Technical Bulletin 55.  
Major Adviser: Professor J. D. Black.  
Positions Held: Associate Professor of Economics, 1927-1930; Professor, 1931-1935, University of Arkansas; Instructor, summer 1930, Extension Division of U.S.D.A., Nashville, Tennessee; Instructor, summer 1931, Alabama Polytechnic Institute, Auburn, Alabama; Director of Farm Land Program, 1935—, Region VI, U. S. Department of Agriculture.  
Honors: Alpha Zeta.  
Address: 5005 Kavanaugh Blvd., Little Rock, Arkansas.
1927. PETERSON, GEORGE MARTIN. B.S. '21, M.S. '23, University of Minnesota.  
Major: Agricultural Economics. Minor: Economics.  
Thesis: The Problem of the Agricultural Surplus in the United States. Not published.  
Major Adviser: Professor W. C. Waite.  
Positions Held: Economic Adviser, 1927-1928, Federated Societies on Planning and Parks, Washington, D. C.; Senior Economist, 1928-1930, Section of Financial and Economic Research, Treasury Department, Washington, D. C.; Associate Professor of Agricultural Economics, Associate Economist in Experiment Station, Associate Economist on Giannini Foundation, 1930—, University of California, Berkeley, California.  
Honors: Vice-President, 1935-1936, President, 1936-1937, Western Farm Economics Association.  
Address: 1609 Spruce Street, Berkeley, California.
1927. STITTS, THOMAS GREGORY. B.S. '15, Cornell University.  
Major: Agricultural Economics. Minor: Economics.  
Thesis: Economic Factors Affecting the Price of Butter. Not published.  
Major Adviser: Professor J. D. Black.  
Positions Held: Instructor and Assistant Professor, 1924-1927, University of Minnesota; 1927-1929, Division of Cooperative Marketing, U.S.D.A.; in

charge of Dairy Section, 1929-1933, Federal Farm Board; Economist, 1933—, in charge of Dairy Section, Farm Credit Administration.  
Address: 6022 Utah Ave., Washington, D. C.

1928. HENDEL, JULIUS. B.S. '21, Cornell University.

Major: Agricultural Economics. Minor: Agricultural Biochemistry.

Thesis: Relationship between the Price of Cash Hard Red Spring Wheat and Future in the Minneapolis Market. Published in *Summaries of Ph.D. Theses*, Vol. 1, 1939, University of Minnesota.

Major Advisers: Professors H. B. Price and J. D. Black.

Positions Held: Director of Research and Merchandizing Department, 1928-1932, Director, 1932-1937, Vice-President, 1936-1937, Cargill Elevator Company; Vice-President and Director, 1937—, Cargill, Incorporated.

Address: Crystal Bay, Lake Minnetonka, Minnesota.

1928. JESNESS, OSCAR BERNARD. B.S. '12, M.S. '24, University of Minnesota.

Major: Agricultural Economics. Minor: Economics.

Thesis: Marketing of Tobacco. Published 1928, Lexington, as Kentucky Agricultural Experiment Station Bulletins 287 and 288.

Major Advisers: Professors J. D. Black and H. B. Price.

Positions Held: Head of Department of Markets and Rural Finance, 1920-1928, University of Kentucky; Professor and Chief of Division of Agricultural Economics, 1928—, University of Minnesota.

Address: 1427 Chelmsford St., St. Paul, Minnesota.

1928. TINLEY, JAMES MADDISON. B.S. '23, University of South Africa.

Major: Agricultural Economics. Minor: Economics.

Thesis: Marketing Flue-Cured Tobacco, with Special Reference to the Operations of the Tobacco Growers Cooperative Association. Published 1929, Washington, D. C., as Circular 100 of the U.S.D.A.

Major Advisers: Professors J. D. Black and H. B. Price.

Positions Held: Economist, 1928-1930, Division of Agricultural Economics and Markets, Department of Agriculture, Union of South Africa; Associate in Agricultural Economics and Associate on Giannini Foundation, 1930—, Associate Professor of Agricultural Economics, State College of Agriculture Experiment Station, 1935—, University of California; Principal Agricultural Economist, 1934, Agricultural Adjustment Administration (on leave from University of California).

Address: 90 Avenida Drive, Berkeley, California.

1929. GRINDLEY, THOMAS WILLIAM. B.S. '23, B.S.A. '25, University of Alberta; M.A. '27, University of Minnesota.

Major: Agricultural Economics. Minor: Economics.

Thesis: The Economic Aspects of Single-Cropping in Western Canada. Not published.

Major Advisers: Professors J. D. Black and O. B. Jesness.

Positions Held: Head Statistical Clerk, General Statistics Branch, 1929-1930, Chief of Agricultural Branch, 1930—, Dominion Bureau of Statistics, Department of Trade and Commerce, Ottawa, Ontario; On leave and seconded as Secretary, Royal Grain Inquiry Commission, 1936-1938.

Address: 54 Park Road, Rockcliffe Park, Ontario.

1929. JOHNSON, EDWIN CHARLES. B.S. '20, University of Minnesota.  
Major: Agricultural Economics. Minor: Economics.  
Thesis: The Agricultural Credit Situation in Kentucky. Published in part, Lexington, as Kentucky Agricultural Experiment Station Bulletin 311.  
Major Advisers: Professors J. D. Black and H. B. Price.  
Positions Held: Assistant Professor in Marketing, 1925-1929, University of Kentucky; Associate Professor of Agricultural Economics, 1929-1933, 1936-1937, University of Minnesota; Vice-President, 1933-1935, Production Credit Corporation, St. Paul; Chief Economist, 1937—, Farm Credit Administration, Washington, D. C.  
Address: 303 Birch St., Alexandria, Virginia.
1929. THOMPSON, ROY LELAND. B.S. '22, M.S. '24, University of Wisconsin.  
Major: Agricultural Economics. Minor: Economics.  
Thesis: The Agricultural Credit Situation in Louisiana. Published 1930, Baton Rouge, as Louisiana Agricultural Station Bulletin 208.  
Major Adviser: Professor O. B. Jesness.  
Positions Held: Associate Professor of Economics, 1929-1930, Head of Department of Research in Farm Economics, Agricultural Experiment Station, 1930-1933, Louisiana State University; Field Organizer, 1933-1934, F.C.A. Prod. Cred. Div., Washington, D. C.; Deputy General Agent, 1934-1935, General Agent, 1935—, Farm Credit Administration of New Orleans; President, 1938—, Federal Land Bank of New Orleans.  
Address: 340 Audubon Boulevard, New Orleans, Louisiana.
1930. CLARKE, GEORGE BUCHANAN. B.A. '17, University of Minnesota.  
Major: Agricultural Economics. Minor: Economics.  
Thesis: A Study of the Minnesota System of Agricultural Taxation with Special Reference to the Distribution of the Tax Burden. Published as Minnesota Agricultural Experiment Station Bulletin No. 277.  
Major Adviser: Professor O. B. Jesness.  
Positions Held: Assistant Economist in Research and Extension, 1930-1935, Associate Professor of Agricultural Economics, 1936—, Connecticut State College.  
Address: Connecticut State College, Storrs, Connecticut.
1930. HAMMAR, CONRAD HAROLD. B.S. '24, University of Minnesota.  
Major: Agricultural Economics. Minor: Economics.  
Thesis: Farm Incomes and Land Values in the Cut-Over Region of the Great Lakes States. Published in *Summaries of Ph.D. Theses*, Vol. 1, 1939, University of Minnesota.  
Major Advisers: Professors J. D. Black and O. B. Jesness.  
Positions Held: Assistant Professor, 1929-1936, Associate Professor, 1936—, Department of Agricultural Economics, University of Missouri.  
Honors: Gamma Sigma Delta; Alpha Pi Zeta.  
Address: Department of Agricultural Economics, University of Missouri, Columbia, Missouri.
1930. HOWE, CHARLES BENNETT. B.A. '21, University of Washington; M.A. '23, University of Minnesota.  
Major: Agricultural Economics. Minor: Economics.

Thesis: A Method of Analyzing the Behavior of Prices in Local Markets.  
Not published.

Major Advisers: Professors J. D. Black and O. B. Jesness.

Positions Held: Associate Professor, 1930-1933, New Jersey Experiment Station, Rutgers University; Senior Economic Expert, 1930-1933, Federal Farm Board, Washington, D. C.; Assistant Chief, 1933-1936, Rice Section, AAA, U.S.D.A.; Economist in Charge, 1936—, Range Conservation Program AAA, U.S.D.A.

Address: 6404 31st Place N. W., Washington, D. C.

1930. WARD, GORDON HUGH. B.S. '19, M.S. '20, University of Wisconsin. Major: Agricultural Economics. Minor: Economics.

Thesis: A Statistical Analysis of the Price-Making Forces in the New York Egg Market. Published in *Journal of Farm Economics*, Vol. 12, no. 3, July 1930, and Vol. 13, no. 1, January 1931.

Major Adviser: Professor O. B. Jesness.

Positions Held: Associate Agricultural Economist, 1930-1937, Agricultural Economist, 1937—, Virginia Polytechnic Institute.

Honors: Phi Kappa Phi; Social Science Research Council Fellow in Agricultural Economics, 1929-1930.

Address: Blacksburg, Virginia.

1931. ARMENTROUT, WALTER WORDLAW. B.S. '16, University of Tennessee; M.S. '25, University of Wisconsin.

Major: Agricultural Economics. Minor: Economics.

Thesis: The Efficiency of Cooperative Livestock-Shipping Associations in West Virginia. Published 1932 as a bulletin of the West Virginia Agricultural Experiment Station.

Major Advisers: Professors H. B. Price and O. B. Jesness.

Positions Held: Assistant Professor, 1924-1931, Associate Professor, 1931-1935, Acting Head of Department, 1934-1935, Professor and Head of Department, 1935—, Department of Agricultural Economics, West Virginia University.

Address: Morgantown, West Virginia.

1931. BALLINGER, ROY ARTHUR. B.A. '99, Macalester College; M.A. '05, University of Minnesota.

Major: Agricultural Economics. Minor: Economics.

Thesis: An Analysis of the Present Tax Situation in Virginia Relative to Agriculture. Published as a bulletin of the Virginia Agricultural Experiment Station, Virginia Polytechnic Institute.

Major Advisers: Professors O. B. Jesness and R. G. Blakey.

Positions Held: Professor of Agricultural Economics, 1932-1935, Oklahoma Agricultural and Mechanical College; Associate Agricultural Economist, 1936—, Louisiana State University.

Address: 201 Cornell Ave., Baton Rouge, Louisiana.

1931. LONGLEY, WILLARD VICTOR. B.S.A. '11, University of Toronto; M.S. '26, University of Minnesota.

Major: Agricultural Economics. Minor: Economics.

Thesis: Some Economic Aspects of the Apple Industry in Nova Scotia. Published as Nova Scotia Department of Agriculture Bulletin No. 113.



Major Advisers: Professors H. B. Price and O. B. Jesness.

Positions Held: Director of Extension, 1927—, Nova Scotia Department of Agriculture, Truro, Nova Scotia; Former President, Canadian Council on Boys' and Girls' Club Work.

Honors: Gamma Sigma Delta; Former President and Secretary of Canadian Society of Agricultural Economists.

Address: Agricultural College, Truro, Nova Scotia.

1931. MORTENSON, WILLIAM PETER. B.S. '21, M.S. '23, North Dakota Agricultural College.

Major: Agricultural Economics. Minor: Economics.

Thesis: An Economic Study of the Milwaukee Milk Market. Published 1931 as a University of Wisconsin Agricultural Experiment Station Research Bulletin.

Major Adviser: Professor O. B. Jesness.

Positions Held: Assistant Professor of Agricultural Economics, 1931-1936, Associate Professor, 1936—, University of Wisconsin.

Address: 4234 Wanda Place, Madison, Wisconsin.

1931. VAN DER MERWE, WILLEM HERMANUS. B.S.A. '26, University of Stellenbosch, South Africa.

Major: Agricultural Economics. Minor: Economics.

Thesis: Competitive Cotton Production: I. International. II. Inter-Regional, Domestic. Not published.

Major Adviser: Professor A. Boss.

Positions Held: Economist, 1931—, Department of Agriculture and Forestry, Union of South Africa.

Address: Department of Agriculture and Forestry, Union of South Africa, Union Building, Pretoria, South Africa.

1932. DOWELL, AUSTIN ALLYN. B.S. '15, Iowa State College; M.S. '25, University of Minnesota.

Major: Agricultural Economics. Minor: Animal Husbandry.

Thesis: An Evaluation of the Advantages and Disadvantages of Minnesota Agriculture in World Competition. Published by University of Minnesota Press, 1934.

Major Adviser: Professor O. B. Jesness.

Positions Held: Professor and Superintendent, 1927-1937, University of Minnesota Northwest School and Experiment Station, Crookston, Minnesota; In charge of Special Study in Livestock Marketing, 1933-1934, Bureau of Agricultural Economics, U.S.D.A., Washington, D. C.; Professor of Agricultural Economics, 1937—, University of Minnesota.

Honors: Phi Kappa Phi; Gamma Sigma Delta; Alpha Zeta; Member, American Farm Economics Association; Secretary, Minnesota Statistical Association.

Address: 1485 Grantham St., St. Paul, Minnesota.

1932. MURRAY, WILLIAM GORDON. B.A. '24, Coe College; M.A. '25, Harvard University.

Major: Agricultural Economics. Minor: General Economics.

- Thesis: An Economic Analysis of Farm Mortgages in Story County, Iowa, from 1854 to 1930. Published as Iowa State College Agricultural Experiment Station Research Bulletin No. 156.  
 Major Adviser: Professor O. B. Jesness.  
 Positions Held: Associate Professor, 1931-1937, Professor, 1937—, Iowa State College; Chief Economist, 1935-1936, Farm Credit Administration, Washington, D. C.  
 Address: 3207 Oakland St., Ames, Iowa.
1932. NICKELL, PAULENA. B.S. '23, University of Minnesota; M.A. '27, Columbia University.  
 Major: Agricultural Economics. Minor: Home Economics.  
 Thesis: Rural Housing: A Study of the Housing of 316 Master Farm Homemakers with Special Reference to Adequacy. Not published.  
 Major Adviser: Professor W. C. Waite.  
 Positions Held: Associate Professor, 1932-1936, University of Illinois; Professor and Head of Home Management Department, 1936—, Iowa State College.  
 Address: Home Economics Division, Iowa State College, Ames, Iowa.
1933. MIGHELL, ALBERT THOMAS. B.S. '22, M.S. '24, Iowa State College.  
 Major: Agricultural Economics. Minor: General Economics.  
 Thesis: The Application of Economic Analysis to the Management Problems of the Individual Farmer. Published as Iowa Agricultural Experiment Station Bulletin, April 1938.  
 Major Adviser: Professor O. B. Jesness.  
 Positions Held: Assistant, 1933-1935, Iowa Agricultural Experiment Station; Observer, 1935, Brookings Institution, Washington, D. C.; Economist, 1935—, Agricultural Adjustment Administration.  
 Address: 7137 7th St. N. W., Washington, D. C.
1934. COWAN, DONALD ROSS GRANT. B.A. '17, Queen's University; M.A. '18, University of Toronto.  
 Major: Agricultural Economics. Minor: General Economics.  
 Thesis: Some Economic Analyses for Planning the Sales Program Analysis of the Factors Determining the Territorial Distribution. Published under title *Sales Analysis from the Management Standpoint*, University of Chicago Press, 1938.  
 Major Adviser: Professor O. B. Jesness.  
 Positions Held: Research Economist, 1925-1935, Chief Statistician, 1935—, Commercial Research Department, Swift and Co., Chicago; Lecturer in Marketing and Market Analysis, 1936—, Northwestern University.  
 Address: 4537 Greenwood Avenue, Chicago, Illinois.
1934. FILLEY, HORACE CLYDE. B.A. '03, M.A. '11, University of Nebraska.  
 Major: Agricultural Economics. Minor: Economics.  
 Thesis: Effects of Inflation and Deflation upon Nebraska Agriculture, 1914 to 1932. Published as Nebraska Experiment Station Research Bulletin No. 71.  
 Major Adviser: Professor O. B. Jesness.  
 Positions Held: Professor of Rural Economics, 1911—, Chairman of Department, 1914—, University of Nebraska.  
 Address: College of Agriculture, University of Nebraska, Lincoln, Nebraska.

1934. MALITSKY, VALENTINE SERGE. Graduate of Law Faculty, '29, Harbin, China; M.S. '31, University of Minnesota.  
Major: Agricultural Economics. Minor: General Economics.  
Thesis: Economic Effects of Recent Changes in Russian Agriculture. Not published.  
Major Adviser: Professor O. B. Jesness.  
Positions Held: Student, 1935-1936, Scientific Institute, Russia; Teacher, 1936, Moscow High School; Economist, 1936—, American Embassy, Russia.  
Address unknown.
1934. QUINTUS, PAUL ELMER. B.A. '28, Coe College; M.S. '31, Iowa State College.  
Major: Agricultural Economics. Minor: General Economics.  
Thesis: An Economic Analysis of the Twin City Milk Market. Published as University of Minnesota Agricultural Experiment Station Bulletin No. 331.  
Major Adviser: Professor O. B. Jesness.  
Positions Held: Instructor, 1935-1937, Iowa State College; Agricultural Economist, 1938—, Farm Credit Administration.  
Honors: Alpha Zeta; Gamma Sigma Delta.  
Address: Farm Credit Administration, Washington, D. C.
1935. HINRICHS, ARNOLD FREDERICK. B.S. '22, University of Minnesota.  
Major: Agricultural Economics. Minor: Economics.  
Thesis: An Economic Study of Farmers' Elevators in Indiana. Published as Purdue University Agricultural Bulletin No. 403.  
Major Adviser: Professor O. B. Jesness.  
Positions Held: Associate Professor, 1935-1936, Purdue University; Senior Agricultural Economist, 1936-1937, National Research Project, Philadelphia. Deceased, 1936.
1936. DANKERS, WILLIAM HENRY. B.S. '29, M.S. '31, University of Minnesota.  
Major: Agricultural Economics. Minor: Animal Husbandry.  
Thesis: An Economic Analysis of the Cost and Utilization of Power Supplied by Horses on Minnesota Farms. Published in *Summaries of Ph.D Theses*, Vol. 1, 1939, University of Minnesota.  
Major Adviser: Professor G. A. Pond.  
Positions Held: Instructor and Project Supervisor, 1936-1937, Assistant Professor and Project Supervisor, 1937-1938, School of Agriculture, University of Minnesota; Assistant Professor, 1938—, Agricultural Extension Division, University of Minnesota.  
Honors: President of School of Agriculture Alumni, 1932-1939; Alpha Zeta; Minnesota Academy of Science.  
Address: 1388 Raymond Avenue, St. Paul, Minnesota.
1938. FLEMING, FRANK LEROY. B.S. '14, Kansas State College; M.S. '28, University of Wyoming.  
Major: Agricultural Economics. Minor: Economics.  
Thesis: Economic Aspects of Soil Conservation and Production Control in the Corn Belt. Not published.  
Major Adviser: Professor O. B. Jesness.  
Address: 1328 Keston St., St. Paul, Minnesota, or Route 2, Hartford, Kansas.

1938. SNYDER, LLOYD BERTRAM. B.S. '15, M.S. '29, Iowa State College.  
 Major: Agricultural Economics. Minor: Economics.  
 Thesis: The Tax System of Nebraska with Special Reference to Its Relation to Agriculture. Published as University of Nebraska Agricultural Experiment Station Bulletin, no. 105, October 1938.  
 Major Adviser: Professor O. B. Jesness.  
 Positions Held: Assistant Professor in Rural Economics, 1938—, University of Nebraska.  
 Address: University of Nebraska, Lincoln, Nebraska.
1938. THOMPSON, SAMUEL HOLLISTON. B.S. '14, University of Minnesota; M.S. '23, Iowa State College.  
 Major: Agricultural Economics. Minor: Economics.  
 Thesis: Economic Trends in the Marketing of Iowa Livestock. Not published.  
 Major Adviser: Professor O. B. Jesness.  
 Positions Held: Extension Economist in Marketing, 1938—, Iowa State College.  
 Address: Iowa State College, Ames, Iowa.

## GENERAL ECONOMICS

1899. SEWALL, HANNAH ROBIE. B.A. '84, University of Minnesota; M.A., University of Michigan.  
 Major: Economics and Politics. Minor: History.  
 Thesis: Theory and Value before Adam Smith. Published 1901 in *Papers and Proceedings of the American Economic Association*, Vol. II, no. 3.  
 Positions Held: Department of Labor, Washington, D. C.; Children's Aid Society, Boston.  
 Married Name: Mrs. John Belling, Huntington, New York.  
 Deceased, 1926.
1901. RACHIE, ELIAS. B.S. '96, M.A. '97, University of Minnesota.  
 Major: Economics. Minors: English and Philology.  
 Thesis: Taxation of Quasi-Public Corporations in Minnesota, Including Transportation and Transmission Companies.  
 Major Adviser: Professor W. W. Folwell.  
 Positions Held: Member of the Minnesota Legislature, 1905-1909; Attorney, 924 Metropolitan Bank Building, Minneapolis, Minnesota; Author.  
 Degree Received since the Ph.D.: LL.B., 1902, University of Minnesota.  
 Address: 4905 Portland Ave., Minneapolis, Minnesota.
1909. BROHOUGH, GUSTAVUS O. B.S. '89, LL.B., '93, University of Minnesota; M.A. '06, University of Wisconsin.  
 Major: Economics. Minors: Public Finance and Sociology.  
 Thesis: The Minnesota Pine Lands.  
 Positions Held: Professor of History and Economics, Red Wing College and Seminary, Red Wing, Minnesota.  
 Deceased, 1928.
1924. KUHLMANN, CHARLES BYRON. B.A. '06, University of Wisconsin; M.A. '20, University of Minnesota.  
 Major: Economics. Minor: History.

- Thesis: The Development of Flour Milling in the United States with Special Reference to the Industry in Minneapolis. Published 1929, Houghton Mifflin Company, Boston; Hart Schaffner Marx Prize Essay in Economics.  
Major Adviser: Professor N. S. B. Gras.  
Positions Held: Professor of Economics and Business Administrations, 1922—, Hamline University, St. Paul, Minnesota; Exchange Professor of Economics, 1930, Boston University; Professorial Lecturer in Economic History, 1929, 1931-1932, University of Minnesota.  
Address: 4026 Vincent Ave. So., Minneapolis, Minnesota.
1926. STEAD, WILLIAM HENRY. B.A. '20, Beloit College; M.A. '23, University of Chicago.  
Major: Economics. Minor: Psychology.  
Thesis: A Survey of Promotion and Training Practices in Representative Industries in the Twin Cities and Milwaukee, and in Certain Selected Industries in the United States. Published in *Summaries of Ph.D. Theses*, Vol. 1, 1939, University of Minnesota.  
Major Adviser: Professor A. H. Hansen.  
Positions Held: Assistant Professor of Economics, 1923-1933, University of Minnesota; Executive Secretary, 1931-1933, Tri-City Employment Stabilization Committee; Associate Director, 1933—, United States Employment Service, U. S. Department of Labor.  
Honors: Member of U. S. delegation to International Labor Conference, Geneva, Switzerland, 1933.  
Address: 6632 32nd Place, N. W., Washington, D. C.
1927. O'HARA, JAY LESLIE. B.A. '15, University of Michigan.  
Major: Economics. Minor: Economic History.  
Thesis: Some Economic Aspects of Workmen's Compensation in Minnesota. Not published.  
Major Adviser: Professor A. H. Hansen.  
Positions Held: Lecturer in Economics, 1927-1929, University of Minnesota; Dean, 1929-1933, James Milliken University, Decatur, Illinois.  
Address unknown.
1928. TAYLOR, WILLIAM BAYARD. B.A. '18, Beloit College, M.A. '23, University of Minnesota.  
Major: Economics. Minor: Agricultural Economics.  
Thesis: Labor Banks. Not published.  
Major Adviser: Professor A. H. Hansen.  
Positions Held: Associate Professor of Finance, 1928-1929, Professor, 1929-1930, University of Kansas; Associate Professor, 1930-1931, Western Reserve University, Cleveland, Ohio; Associate Professor of Finance, 1931-1937, Professor, 1937—, University of Wisconsin.  
Address: 4154 Cherokee Drive, Madison, Wisconsin.
1929. BORAK, ARTHUR. B.S. '23, M.A. '25, University of Minnesota.  
Major: Economics. Minor: Agricultural Economics.  
Thesis: The Financial History of the Chicago, Milwaukee, and St. Paul Railway Company. Published in *Journal of Economic and Business History*, November 1930.

Major Adviser: Professor J. W. Stehman.

Positions Held: Instructor, 1929-1930, Assistant Professor, 1930—, University of Minnesota.

Address: 1708 Brook Ave. S. E., Minneapolis, Minnesota.

1930. McCracken, Duane. B.A. '18, Pennsylvania State College; M.A. '20, University of Wisconsin.

Major: Economics. Minor: Political Science.

Thesis: Courts and Injunctions in Industrial Disputes. Published 1931, University of North Carolina Press, Chapel Hill.

Major Adviser: Professor A. H. Hansen.

Positions Held: Professor of Economics, 1927-1931, Guilford College, North Carolina; Research Assistant, summer 1931, University of North Carolina; Proprietor, 1935—, Unique Variety Store, Minneapolis.

Address: 2310 West 50th Street, Minneapolis, Minnesota.

1930. SLAGSVOLD, PETER L. B.S. '26, M.A. '27, University of Minnesota.

Major: Economics. Minor: Agricultural Economics.

Thesis: Development and Present Status of Merchandising in the Northwest with Special Reference to the Twin Cities. Not published.

Major Adviser: Professor R. S. Vaile.

Positions Held: Assistant Professor, 1930-1931, Associate Professor, 1932-1934, Professor, 1934—, Department of Economics and Agricultural Economics, Montana State College.

Honors: Beta Gamma Sigma; Gamma Sigma Delta; Phi Kappa Phi.

Address: Montana State College, Bozeman, Montana.

1931. KOZELKA, RICHARD LOUIS. B.A. '21, Beloit College; M.A. '26, University of Chicago.

Major: Economics. Minor: Agricultural Economics.

Thesis: Business Indicators for the Ninth Federal Reserve District with a Tentative Combined Index. Published 1932, University of Minnesota Press, as University of Minnesota Employment Stabilization Research Bulletin 4.

Major Adviser: Professor B. D. Mudgett.

Positions Held: Assistant Professor of Economics and Statistics, 1931-1937, Associate Professor, 1937—, University of Minnesota; Fellow, 1934-1935, Social Science Research Council.

Address: 83 Bedford St. S. E., Minneapolis, Minnesota.

1934. SHUMAN, RONALD BUSWELL. B.A. *magna cum laude*, '28, Hamline University; M.A. '29, University of Minnesota.

Major: Economics. Minor: Psychology.

Thesis: Some Aspects of Commerce in the Central Northwest. Published in *Summaries of Ph.D. Theses*, Vol. 1, 1939, University of Minnesota.

Major Adviser: Professor R. S. Vaile.

Positions Held: Visiting Assistant Professor of Marketing, 1934-1935, University of Washington; Professor of Marketing, 1936-1937, summer session, University of Denver; Assistant Professor of Business Management, 1935—, University of Oklahoma.

Address: College of Business Administration, University of Oklahoma, Norman, Oklahoma.

1935. GAUMNITZ, ERWIN ALFRED. B.B.A. '29, M.A. '34, University of Minnesota.  
Major: Economics. Minor: Agricultural Economics.  
Thesis: The Measurement of Living Costs as Related to Family Budgets and Cost of Living Index Numbers. Not published.  
Major Adviser: Professor B. D. Mudgett.  
Positions Held: Professor of Economics and Business Administration, 1935-1937, College of St. Thomas; Director of Research, 1937-1938, Minnesota State Employment Service; Assistant Professor of Economics, 1938—, University of Wisconsin.  
Honors: Beta Alpha Psi.  
Address: University of Wisconsin, Madison, Wisconsin.
1936. ALM, INGVALD WALFRED. B.S. '26, University of Minnesota.  
Major: Economics. Minor: Economic History.  
Thesis: The Sources of Funds Obtained by Industrial Corporations and Their Uses, 1927-1932, with Special Reference to the Business Cycle. Not published.  
Major Adviser: Professor Arthur Borak.  
Positions Held: Assistant Professor, 1936—, Indiana University.  
Honors: Beta Gamma Sigma.  
Address: Bloomington, Indiana, Route 3.
1936. NIELSEN, OSWALD. Ph.B. '29, University of Chicago.  
Major: Economics. Minor: Economic History.  
Thesis: Depreciation as a Function of Revenue. Published in *Accounting Review*, 13:265, 1938.  
Major Adviser: Professor A. H. Hansen.  
Positions Held: Associate Economic Analyst, 1936—, Department of Commerce, Washington, D. C.  
Address: 4612 Highland Avenue, Bethesda, Maryland.
1936. SOGGE, TILLMAN MORRIS. B.A. '24, St. Olaf College; M.A. '31, University of Minnesota.  
Major: Economics. Minor: Psychology.  
Thesis: Age Distribution and Occupational Changes in the United States and Their Economic Consequences. Not published.  
Major Adviser: Professor A. H. Hansen.  
Positions Held: Associate Statistician, 1936-1938, Economic Statistician, 1938—, Social Security Board.  
Address: 4612 Highland Ave., Bethesda, Maryland.
1937. ALLEN, EDWARD DOUGLASS. B.A. '30, Grinnell College; M.A. '34, University of Minnesota.  
Major: Economics. Minor: Agricultural Economics.  
Thesis: An Historical and Analytical Study of American Management Investment Companies, 1929-1936. Not published.  
Major Adviser: Professor J. W. Stehman.  
Positions Held: Assistant Professor of Economics, 1937—, Iowa State College.  
Honors: Phi Beta Kappa.  
Address: 209 Welch Avenue, Ames, Iowa.

1937. FRAINE, HAROLD GEORGE. Com.E. '26, University of Cincinnati.  
Major: Economics. Minor: Economic History.  
Thesis: A Study of Yields and Investment Performance of Bonds, 1927 to 1936.  
Published in *Annalist*, October 1, 1937, New York Times Publishing Company, New York.  
Major Adviser: Professor J. W. Stehman.  
Positions Held: Assistant Professor of Business Administration, 1937—, Indiana University.  
Honors: Beta Gamma Sigma; Beta Alpha Psi.  
Address: 419 E. 7th St., Bloomington, Indiana.
1937. HESKIN, OSCAR EDWARD. B.A. '22, Luther College; M.A. '25, University of Minnesota.  
Major: Economics. Minor: Economic History.  
Thesis: Economic Aspects of the History of Banking in North Dakota. Published in *Summaries of Ph.D. Theses*, Vol. 1, 1939, University of Minnesota.  
Major Adviser: Professor A. W. Marget.  
Positions Held: Instructor in Economics, 1937-1938, University of Minnesota; Assistant Professor in Economics and Marketing, 1938—, University of Florida.  
Address: 539 N. Washington St., Gainesville, Florida.
1937. UPGREN, ARTHUR REINHOLD. B.A. '20, University of Wisconsin.  
Major: Economics. Minor: Agricultural Economics.  
Thesis: Price and Output As Guides to Monetary Policy: The Relative Influence of Price Changes and Output Changes in Depression and Recovery, 1929-1936. Published in *Summaries of Ph.D. Theses*, Vol. 1, 1939, University of Minnesota.  
Major Adviser: Professor Alvin H. Hansen.  
Positions Held: Associate Professor of Economics, 1937—, University of Minnesota; Economic Counsel, 1937—, Government of Manitoba, Parliament Building, Winnipeg.  
Address: 1625 East River Road, Minneapolis, Minnesota.
1938. KOLLER, EDWARD FREDERICK. B.A. '29, *summa cum laude*, Augustana College; M.A. '33, University of Minnesota.  
Major: Economics. Minor: Agricultural Economics.  
Thesis: A Study of the Economic Factors Affecting the Efficiency of Minnesota Creameries with Suggestions for Readjustment of the Creamery Industry. Not published.  
Major Adviser: Professor J. W. Stehman.  
Positions Held: Assistant Professor in Agricultural Economics, 1938—, University of Minnesota.  
Address: 2124 Como Ave., St. Paul, Minnesota.

## HISTORY

1888. ELLIOTT, CHARLES BURKE. LL.B. '81, Iowa State University.  
Major: History. Minors: Political Science, Roman Law, and International Law.  
Thesis: United States and the Northwestern Fisheries: A History of the Fisheries Question. Published 1887, University of Minnesota.



- Major Adviser: Professor H. P. Judson.  
 Positions Held: Lecturer on International Law, University of Minnesota;  
 Professorial Lecturer on Constitutional Law, University of the Philippines;  
 Justice of the Supreme Court of Minnesota; Justice of the Federal Court  
 of the Philippines; other federal positions.  
 Honors: LL.D., 1895, Iowa State University; LL.D., 1904, Marietta College,  
 Marietta, Ohio.  
 The first Doctor of Philosophy degree granted by the University of Minnesota.  
 Deceased, September 1935.
1895. AVERY, ELIZABETH HUNTINGTON. M.A. '93, Iowa College.  
 Major: History. Minor: Political Science.  
 Thesis: Influence of French Immigration on the Political History of the United  
 States. Published 189—, Redfield, South Dakota.  
 Major Adviser: Professor W. M. West.  
 Positions Held: Professor of History and English, 1895-1919, Redfield Col-  
 lege, Redfield, South Dakota.  
 Deceased, October 1931.
1916. RELF, HELEN FRANCES. B.A. '11, M.A. '12, University of Minne-  
 sota.  
 Major: History. Minor: English.  
 Thesis: An Interpretation of that Part of the Petition of Right Pertaining  
 to Imprisonment, with a Narrative of the Passage of the Petition through  
 Parliament, and a Discussion of Its Nature as Finally Answered by the  
 King. Published 1917 as University of Minnesota Studies in the Social  
 Sciences, no. 8.  
 Major Adviser: Professor W. Notestein.  
 Positions Held: Professor of History, 1918-1921, Lake Erie College, Paines-  
 ville, Ohio; Heckscher Foundation Research Fellow, 1921-1923, Cornell  
 University; Professor of History, 1923—, Wells College.  
 Honors: Fellow of the Royal Historical Society.  
 Address: Wells College, Aurora, New York.
1919. SHORTRIDGE, WILSON PORTER. B.A. '07, University of Indiana;  
 M.A. '11, University of Wisconsin.  
 Major: History. Minor: Economics.  
 Thesis: The Life of Henry Hastings Sibley. Published 1922, Menasha, Wis-  
 consin.  
 Major Adviser: Professor S. J. Buck.  
 Positions Held: Professor, Head of Department, 1919-1922, University of  
 Louisville; Professor of History, 1922—, Dean of College of Arts and Sci-  
 ences, 1929—, West Virginia University.  
 Honors: Phi Beta Kappa.  
 Address: 151 Wagner Road, Morgantown, West Virginia.
1922. DROITCOUR, GEORGINA TALBOT. B.A. '18, M.A. '20, University of  
 Minnesota.  
 Major: History. Minor: Political Science.

Thesis: The English Manorial Group with Special Reference to the Bishopric of Winchester in the Thirteenth Century. Published in *Summaries of Ph.D. Theses*, Vol. 1, 1939, University of Minnesota.

Major Adviser: Professor N. S. B. Gras.

Positions Held: Counselor, 1926—, Berkeley Public Schools, Berkeley, California.

Address: 2720 College Ave., Berkeley, California.

1923. THOMPSON, FAITH. B.A. '17, M.A. '19, University of Minnesota.

Major: History. Minor: Political Science.

Thesis: The First Century of the Magna Carta: Why It Persisted as a Document. Published 1925 as Research Publication of the University of Minnesota, Studies in Social Science, no. 16.

Major Adviser: Professor A. B. White.

Positions Held: Instructor in History, 1923-1927, Assistant Professor, 1927—, University of Minnesota.

Honors: Guggenheim Fellowship, 1938-1939.

Address: Belmont Hotel, Minneapolis, Minnesota.

1924. HARTSOUGH, MILDRED LUCILE. B.A. '19, M.A. '21, University of Minnesota.

Major: History. Minor: Economics.

Thesis: The Development of the Twin Cities as a Metropolitan Market. Published as Social Science Monograph no. 18, 1925, University of Minnesota.

Major Adviser: Professor N. S. B. Gras.

Positions Held: Instructor in History, 1924-1925, University of Minnesota; Instructor in Economics and Sociology, 1925-1927, Assistant Professor, 1928-1929, Smith College; Social Science Research Council Fellow, 1927-1928; Research Associate, 1929-1934, Harvard University; Special Assistant, 1934-1935, Committee on Government Statistics; Assistant in Research, 1935-1936, Housing Division, PWA; Assistant in Research, 1936-1937, Population Committee, National Resources Committee; Assistant in Research, 1937—, Urban Study of Consumer Purchases, Bureau of Labor Statistics.

Honors: Phi Beta Kappa.

Married Name: Mrs. David Novick.

Address: 2245 North Wakefield St., Arlington, Virginia.

1925. BLEGEN, THEODORE CHRISTIAN. B.A. '10, Augsburg Seminary, '12, University of Minnesota; M.A. '15, University of Minnesota.

Major: History. Minor: Political Science.

Thesis: Norwegian Immigration before the Civil War. Published 1931, Norwegian-American Historical Association, Northfield, Minnesota.

Major Adviser: Professor Solon J. Buck.

Positions Held: Professor of History, Head of Department, 1925-1927, Hamline University, St. Paul, Minnesota; Professorial Lecturer in History, 1927-1929, Associate Professor, 1929-1937, Professor, 1937—, University of Minnesota; Guggenheim Memorial Foundation Fellow, 1928-1929, for study in Norway; Assistant Superintendent, 1925-1931, Superintendent, 1931—, Minnesota Historical Society, St. Paul, Minnesota.

Address: 1757 W. Minnehaha Street, St. Paul, Minnesota.

1926. TOHILL, LOUIS ARTHUR. B.A. '12, University of Illinois; M.A. '14, University of Chicago, '16, Columbia University.  
Major: History. Minor: Education.  
Thesis: Robert Dickson, British Fur Trader on the Upper Mississippi: A Story of War, Trade, and Diplomacy. Mimeographed 1927, Ann Arbor, Michigan.  
Major Adviser: Professor Solon J. Buck.  
Positions Held: Teacher of History, 1926-1929, University of Minnesota High School; Teacher of History, 1929-1931, State Teachers College, Aberdeen, South Dakota; Professor of History, 1931—, Kent State College.  
Honors: Phi Beta Kappa.  
Address: Kent State College, Kent, Ohio.
1927. TYLER, ALICE FELT. B.A. '13, Knox College; M.A. '18, University of Minnesota.  
Major: History. Minor: Political Science.  
Thesis: The Foreign Policy of James G. Blaine. Published 1928, University of Minnesota Press.  
Major Adviser: Professor L. B. Shippee.  
Positions Held: Instructor, 1927-1929, Assistant Professor, 1929—, University of Minnesota.  
Address: 1583 Vincent St., University Grove, St. Paul, Minnesota.
1930. ANDERS, JOHN OLAF OLSON. B.A. '15, M.A. '18, University of South Dakota.  
Major: History. Minor: Sociology.  
Thesis: The Origin and History of Swedish Religious Organizations in Minnesota. Not published.  
Major Adviser: Professor G. M. Stephenson.  
Positions Held: Professor of History and Political Science, 1929-1936, Bethany College; 1936-1937, Freshman College and Adult Education; 1937—, Kansas Historical Records Survey.  
Address: Lindsborg, Kansas.
1931. DOXEY, GERTRUDE. B.A. '27, M.A. '28, University of Minnesota.  
Major: History. Minor: English.  
Thesis: Peter the Venerable and the Place of Cluny in the Renaissance of the Twelfth Century. Not published.  
Major Adviser: Professor A. C. Krey.  
Positions Held: Instructor, 1931-1934, University of Minnesota; Instructor, 1934—, University of Chicago.  
Honors: Phi Beta Kappa.  
Married Name: Mrs. Leonard N. Conklin.  
Address: 5645 Blackstone Ave., Chicago, Illinois.
1931. HILL, JAMES DANIEL. B.A. '22, Baylor University; M.A. '24, University of Colorado.  
Major: History. Minor: Political Science.  
Thesis: Maritime Operations and Texan Independence. Published under title, *The Texas Navy*, University of Chicago Press.

- Major Adviser: Professor L. B. Shippee.  
 Positions Held: President, 1931—, State Teachers College, Superior, Wisconsin.  
 Address: 1512 North 17th Street, Superior, Wisconsin.
1933. MUELDER, HERMANN RICHARD. B.S. '27, Knox College; M.A. '28, University of Minnesota.  
 Major: History. Minor: English.  
 Thesis: Jacksonian Democracy in Religious Organizations. Published in *Summaries of Ph.D. Theses*, Vol. 1, 1939, University of Minnesota.  
 Major Adviser: Professor L. B. Shippee.  
 Positions Held: Instructor, 1934-1937, Assistant Professor, 1937—, Knox College.  
 Honors: Phi Beta Kappa.  
 Address: Knox College, Galesburg, Illinois.
1933. WOLF, JOHN BAPTIST. B.A. '29, M.A. '30, University of Colorado.  
 Major: History. Minor: Political Science.  
 Thesis: The Diplomatic History of the Bagdad Railroad. Published in *University of Missouri Studies*.  
 Major Adviser: Professor L. D. Steefel.  
 Positions Held: Historical Technician, 1933-1934, National Park Service; Instructor in History, 1934—, University of Missouri.  
 Address: 7 Willis Ave., Columbia, Missouri.
1934. ADAMS, NORMA. B.A. '26, M.A. '30, Mount Holyoke College.  
 Major: History. Minor: Political Science.  
 Thesis: Prohibition to Court Christian. Not published.  
 Major Adviser: Professor A. B. White.  
 Positions Held: Sterling Fellow, 1934-1935, Yale University; Instructor, 1935—, Monticello College.  
 Address: 95 Colberg Ave., Roslindale, Massachusetts.
1934. GATES, CHARLES MARVIN. B.A. '26, Yale University; M.A. '28, Harvard University.  
 Major: History. Minor: Political Science.  
 Thesis: The Peace Negotiations between Great Britain and the United States, 1812-1814. Published in *Summaries of Ph.D. Theses*, Vol. 1, 1939, University of Minnesota.  
 Major Adviser: Professor L. B. Shippee.  
 Positions Held: Acting Curator of Manuscripts, 1934-1935, Minnesota Historical Society; Regional Historian, 1935-1936, National Park Service; Instructor of History, 1936—, University of Washington.  
 Address: Department of History, University of Washington, Seattle, Washington.
1934. NEATBY, HILDA MARION. B.A. '24, M.A. '28, University of Saskatchewan, Canada.  
 Major: History. Minor: Political Science.  
 Thesis: The Administration of Justice under the Quebec Act. Published by the University of Minnesota Press, 1937.  
 Major Adviser: Professor A. L. Burt.

- Positions Held: Instructor in History, 1934-1936, Assistant Professor, 1936—, Regina College, University of Saskatchewan.  
Address: Regina College, Regina, Saskatchewan, Canada.
1935. ENNIS, THOMAS EDSON. B.A. '23, M.A. '24, University of North Dakota.  
Major: History. Minor: English.  
Thesis: *The French Administration and Problems in Indochina*. Published by University of Chicago Press, 1937.  
Major Adviser: Professor L. D. Steefel.  
Positions Held: Assistant Professor, 1935—, West Virginia University.  
Honors: Sigma Delta Chi.  
Address: Department of History, West Virginia University, Morgantown, West Virginia.
1935. JORGENSON, JORGEN THEODORE. B.A. '23, St. Olaf College.  
Major: History. Minor: Scandinavian.  
Thesis: *Norway's Relation to Scandinavian Unionism, 1815-1871*. Published by St. Olaf College Press 1936; and in *Summaries of Ph.D. Theses*, Vol. 1, 1939, University of Minnesota.  
Major Adviser: Professor L. D. Steefel.  
Positions Held: Professor and Head of the Department of Norwegian Literature and History, 1935—, St. Olaf College, Northfield, Minnesota.  
Address: St. Olaf College, Northfield, Minnesota.
1935. MAUELSHAGEN, CARL. B.S. '06, University of Tennessee; M.A. '17, University of Chicago.  
Major: History. Minor: Political Science.  
Thesis: *The Effect of German Immigration upon the Lutheran Church in America, 1820-1870*. Published by University of Georgia Press.  
Major Adviser: Professor G. M. Stephenson.  
Positions Held: Head of Division of Social Sciences, 1935—, University System of Georgia Evening College.  
Address: 1830 Peachtree Road, Atlanta, Georgia.
1935. TONNING, OLE. B.A. '04, Luther College; M.A. '06, University of Michigan.  
Major: History. Minor: Sociology.  
Thesis: *Trade and Commerce on the North Atlantic from 850 to 1350 Including Ireland, Scotland, Iceland, Greenland, England and Norway*. Published by Burgess Publishing Co., Minneapolis, 1936.  
Major Advisers: Professors A. C. Krey and Herbert Heaton.  
Positions Held: Head, Department of History, 1928—, Augustana College.  
Address: Augustana College, Sioux Falls, South Dakota.
1937. COLE, HUGH MARSHALL. B.S. '31, Wheaton College; M.A. '33, University of Minnesota.  
Major: History. Minor: Political Science.  
Thesis: *The Organization of the Prussian Army under Frederick William I*. Published in *Summaries of Ph.D. Theses*, Vol. 1, 1939, University of Minnesota.

Major Adviser: Professor L. D. Steefel.  
 Positions Held: Instructor in History, 1936—, University of Chicago.  
 Address: Faculty Exchange, University of Chicago, Chicago, Illinois.

1937. YLVISAKER, HEDVIG. B.A. '23, Concordia College; M.A. '28, University of Chicago.

Major: History. Minor: Political Science.  
 Thesis: The Baltic-North Sea Agreements of 1908. Not published.  
 Major Adviser: Professor L. D. Steefel.  
 Positions Held: Instructor and Co-ordinator in Social Studies, 1937—, General College, University of Minnesota.  
 Honors: Pi Lambda Theta.  
 Address: 3331 Elliot Ave., Minneapolis, Minnesota.

1938. LARSEN, ARTHUR JAMES. B.S. '26, M.A. '31, University of Minnesota.

Major: History. Minor: Economics.  
 Thesis: The Development of the Minnesota Road System. Not published.  
 Major Adviser: Professor T. C. Blegen.  
 Positions Held: Head of Newspaper Department, 1929—, Minnesota Historical Society, St. Paul, Minnesota.  
 Address: 1814 Palace Street, St. Paul, Minnesota.

1938. LOEHR, RODNEY COURTNEY. B.A. *magna cum laude* '30, M.A. '31, University of Minnesota.

Major: History. Minor: Political Science.  
 Thesis: The Influence of English Agriculture upon American Agriculture, 1775-1825. Not published.  
 Major Adviser: Professor Herbert Heaton.  
 Positions Held: Teaching Assistant, 1936—, Department of History, University of Minnesota.  
 Honors: Phi Alpha Theta.  
 Address: 92 N. St. Albans, St. Paul, Minnesota.

#### INTERNATIONAL LAW

1899. DANNER, HARRY ROSE. B.A. '91, M.A. '93, Rutgers University; LL.B. '93, LL.M. '94, M.A. '96, University of Minnesota.

Major: International Law.  
 Thesis: Legal Status of the Indian Tribes.  
 Major Adviser: Professor W. W. Folwell.  
 Positions Held: Legal and commercial work in New York City and Indianapolis, Indiana; President, 1927—, Wm. B. Burford Printing Co.  
 Address: 1030 West 42 St., Indianapolis, Indiana.

#### POLITICAL SCIENCE

1901. ELIASON, ADOLPH OSCAR. B.L. '96, University of Minnesota; B.A. '97, M.A. '97, Harvard University.

Major: Political Science. Minors: Law and History.

- Thesis: Rise of Commercial Banking Institutions in the United States. Published 1901, University of Minnesota.  
Major Adviser: Professor W. A. Schaper.  
Address: 568 Grand Ave., St. Paul, Minnesota.
1908. MILLER, FREDERICK CASPER. B.A. '03, M.A. '05, University of Minnesota.  
Major: Political Science. Minors: History and Geology.  
Thesis: History, Organization, and Methods of the Police.  
Major Adviser: Professor W. A. Schaper.  
Positions Held: Teacher of Physiography, 1908-1936, Central High School, St. Paul, Minnesota; Retired, 1936.  
Address: Edward Apartments, St. Paul, Minnesota.
1913. ORFIELD, MATTHIAS NORDBERG OLSON. B.A. '08, M.A. '09, LL.B. *cum laude*, '12, University of Minnesota.  
Major: Political Science. Minor: Law.  
Thesis: Federal Land Grants to the States. Published 1915 as a bulletin of the University of Minnesota.  
Major Adviser: Professor W. A. Schaper.  
Positions Held: Instructor in Political Science, 1913-1914, Lecturer in Political Science, 1918-1919, University of Minnesota; Attorney; Assistant Attorney General, 1933-1936; Deputy Attorney General, 1937—.  
Honors: Phi Beta Kappa; Delta Sigma Rho; Albert Howard Scholarship; Alumni Weekly Gold Medal.  
Address: 3144 Park Ave., Minneapolis, Minnesota.
1926. TOLLEFSON, AXEL MARTIN. B.A. '16, St. Olaf College; M.A. '17, University of North Dakota; LL.B. '21, University of Minnesota.  
Major: Political Science. Minor: Law.  
Thesis: Judicial Review of Administration Decisions by the Federal Courts. Published in *Minnesota Law Review*, Vol. 11, 389-414, 504-531; *Wisconsin Law Review*, October, 1927; *Michigan Law Review*, May, 1931.  
Major Adviser: Professor J. S. Young.  
Positions Held: Professor of Law, 1926—, Acting Dean, 1937—, Drake University Law School; On leave, 1935-1936, Brandeis Research Fellowship, Harvard Law School.  
Address: 1243 34 Street, Des Moines, Iowa.
1928. WALKER, HARVEY. B.A. '23, University of Kansas; M.A. '27, University of Minnesota.  
Major: Political Science. Minors: Sociology and Economics.  
Thesis: Limitations upon the Municipal Ordinance-Making Power under the Constitution of the United States. Published 1929, Ohio State University Press.  
Major Adviser: Professor William Anderson.  
Positions Held: Assistant Professor, 1928-1931, Associate Professor, 1931-1934, Professor of Political Science, 1934—, Ohio State University; Fellow, 1932-1933, Social Science Research Council.  
Honors: Phi Beta Kappa; National President, 1937-1938, National Secretary, 1931-1937, Pi Sigma Alpha.  
Address: 195 East Lane Ave., Columbus, Ohio.

1930. STARR, JOSEPH RANKIN. B.S. '26, University of Nebraska; M.A. '27, University of Minnesota.  
 Major: Political Science. Minor: History.  
 Thesis: The Development of Modes of Communication between the Two Houses of the English Parliament. Not published.  
 Major Adviser: Professor William Anderson.  
 Positions Held: Social Science Research Council Fellow, 1930-1931; Assistant Professor, 1931—, University of Minnesota.  
 Honors: Phi Beta Kappa.  
 Address: Department of Political Science, University of Minnesota.
1931. POLLARD, ROBERT THOMAS. B.A. '22, M.A. '23, Ohio State University.  
 Major: Political Science. Minor: History.  
 Thesis: Some Aspects of China's Foreign Relations with Particular Reference to the Revision of Her Treaties with Foreign Powers. Published under title, *China's Foreign Relations, 1917-1931*, Macmillan Co., New York, 1933.  
 Major Adviser: Professor H. S. Quigley.  
 Positions Held: Assistant Professor of Oriental Studies, 1931-1934, Associate Professor, 1934-1937, Professor, 1937—, University of Washington; Executive Officer, 1932—, Department of Oriental Studies, University of Washington; Visiting Professor, summer, 1938, Ohio State University.  
 Honors: Phi Beta Kappa; American Historical Association George L. Beer prize, 1933.  
 Address: Department of Oriental Studies, University of Washington, Seattle, Washington.
1931. STENE, EDWIN OTTO. B.A. '23, M.A. '29, University of Minnesota.  
 Major: Political Science. Minor: Economics.  
 Thesis: Provisions for American Public Employees and Officers Disabled in the Course of Duty, and for Their Dependents in Case of Death. Not published.  
 Major Adviser: Professor William Anderson.  
 Positions Held: Instructor, 1931-1934, University of Cincinnati; Assistant Professor, 1934—, Department of Political Science, University of Kansas.  
 Honors: Pi Gamma Mu; Pi Sigma Alpha.  
 Address: 1432 Louisiana St., Lawrence, Kansas.
1932. DAWLEY, JOHN MURDOCH. B.A. '26, LL.B. '28, M.A. '30, University of Minnesota.  
 Major: Political Science. Minor: Economics.  
 Thesis: The Constitutional Power of the Governor to Appoint and Remove State and Local Officers. Published in *Minnesota Law Review*, March 1938.  
 Major Adviser: Professor O. P. Field.  
 Positions Held: Professor, 1932—, The Stout Institute.  
 Address: 909 Seventh St., Menomonie, Wisconsin.
1933. JOHNSON, ALVIN WALTER. B.A. '20, M.A. '23, University of Michigan.  
 Major: Political Science. Minor: History.



Thesis: The Present Status of Church and State as Related to the Public School of the United States. Published by University of Minnesota Press, 1934.

Major Adviser: Professor O. P. Field.

Positions Held: Executive Dean and Head of Department, 1932-1936, Union College; Head of Department of History and Political Science, 1936-1938, Business Manager, 1938—, Pacific Union College.

Address: Pacific Union College, Angwin, California.

1933. SHUMATE, ROGER VERNON. B.A. '28, M.A. '29, University of California.

Major: Political Science. Minor: History.

Thesis: The Reaction Against Representative Government in the United States. Not published.

Major Adviser: Professor William Anderson.

Positions Held: Instructor in Political Science, 1934-1937, University of Pittsburgh; Associate Professor, 1937—, University of Nebraska; Research Director, 1937—, Nebraska Legislative Council.

Honors: Phi Beta Kappa.

Address: 2633 Garfield St., Lincoln, Nebraska.

1934. NOREM, RALPH AUGUSTINE. B.A. '21, M.A. '28, University of Minnesota.

Major: Political Science. Minor: History.

Thesis: The Acquisition, Status, and Administration of Kiachow Leased Territory. Published under the title *Kiachow Leased Territory*, University of California Press, 1936.

Major Adviser: Professor H. S. Quigley.

Positions Held: Instructor, 1933-1936, University of California at Los Angeles; Teacher, 1936—, Superior State Teachers College.

Address: 919 Belknap, Superior, Wisconsin.

#### SOCIOLOGY

1902. WILKIN, GEORGE FRANCIS. B.A. '71, Rochester.

Major: Sociology. Minors: Philosophy and History.

Thesis: Control in Evolution.

Deceased, 1924.

1903. COPELAND, JOHN. M.A., Princeton University.

Major: Sociology. Minors: History of Philosophy and Economics.

No thesis.

Deceased, 1931.

1922. BOETTIGER, LOUIS ANGELO. B.A. '14, University of Illinois; M.A. '18, University of Minnesota.

Major: Sociology. Minor: Economics.

Thesis: Historical Development of Employers' Welfare Work as a Phase of Industrial Relations. Published 1923, Ronald Press, New York, under the title *Employee Welfare Work*.

Major Advisers: Professors A. J. Todd and M. C. Elmer.

Positions Held: Assistant Professor of Sociology, summer 1923, Professorial Lecturer, summer 1927, University of Minnesota; Professor of Sociology, 1922—, Chairman of Department of Economics and Sociology, 1930—, Lawrence College, Appleton, Wisconsin.

Honors: Fellow of the Royal Economic Society; Pi Gamma Mu; Scabbard and Blade.

Address: 20 Bellaire Court, Appleton, Wisconsin.

1924. PERIGORD, PAUL. B.A. '02, College of Toulouse; M.A. '12, University of Chicago.

Major: Sociology. Minor: Philosophy.

Thesis: The International Labor Organization of the League of Nations. Published 1926, D. Appleton Company, New York and London.

Major Adviser: Professor F. S. Chapin.

Positions Held: Professor of Economics and History, 1920-1926, California Institute of Technology; Professor of French Civilization, 1926—, Acting Deana of College of Science and Letters, 1932-1933, University of California at Los Angeles, California.

Honors: Phi Beta Kappa; Officer of the Legion of Honor (France), Honorary President and Founder, 1924—, Salon Français, Hollywood, and Alliance Française, Pasadena.

Address: 1761 No. Harvard Boulevard, Hollywood, California.

1925. HOFFER, CHARLES RUSSELL. B.S.A. '18, Purdue University; M.S. '21, Iowa State College.

Major: Sociology. Minor: Agricultural Economics.

Thesis: Commodity Distribution in Rural Communities as a Form of Community Service. Published 1928 as University of Minnesota Agricultural Experiment Station Bulletin 249.

Major Adviser: Professor F. S. Chapin.

Positions Held: Associate Professor of Sociology, 1925—, Michigan State College.

Address: 500 Haslett St., East Lansing, Michigan.

1925. LUNDBERG, GEORGE ANDREW. B.A. '20, University of North Dakota.

Major: Sociology. Minor: Economics.

Thesis: Poor Relief Legislation in Minnesota. Published in *Summaries of Ph.D. Theses*, Vol. 1, 1939, University of Minnesota.

Major Adviser: Professor F. S. Chapin.

Positions Held: Instructor in Sociology, 1924-1925, Assistant Professor, 1925-1926, University of Washington; Assistant Professor, 1926-1927, Wells College, Aurora, New York; Associate Professor, 1927-1929, University of Pittsburgh; Associate Professor, 1930, University of Minnesota; Director, 1930-1931, Bureau of Social Research, Pittsburgh; Director of Research, 1930-1932, Columbia University; Research Supervisor, 1932-1933, FERA, Washington, D. C.; Professor of Sociology, 1933—, Bennington College.

Honors: Fellow of the A.A.A.S.

Address: Bennington College, Bennington, Vermont.

1925. PHELPS, HAROLD AUGUSTUS. B.A. '20, Brown University; M.A. '22, George Washington University.  
 Major: Sociology. Minor: Economics.  
 Thesis: Social and Economic Factors Influencing the Organizability of Labor: A Comparative Study of Unionism in Rhode Island and Minnesota. Published in *Summaries of Ph.D. Theses*, Vol. 1, 1939, University of Minnesota.  
 Major Adviser: Professor F. S. Chapin.  
 Positions Held: Assistant Professor of Sociology, 1925-1931, Brown University; Professor of Sociology, Associate Director of Graduate Training in Social Work, 1931—, University of Pittsburgh, Pittsburgh, Pennsylvania.  
 Honors: Phi Beta Kappa.  
 Address: 633 Olympia Road, Chatham Village, Pittsburgh, Pennsylvania.
1927. MARKEY, JOHN FORDYCE. B.A. '21, University of Southern California.  
 Major: Sociology. Minor: Psychology.  
 Thesis: The Symbolic Process and Its Integration in Children. Published 1928, Kegan Paul, Trench, Trubner and Company, London, and Harcourt, Brace, and Company, New York.  
 Major Adviser: Professor F. S. Chapin.  
 Positions Held: Research Professor and Head of Department of Sociology, 1927-1929, Wheaton College, Wheaton, Illinois; Research, 1931-1937, Labor Research Association, Inc.; Travel abroad, 1931-1933; Education Director, 1937—, Transport Workers Union, CIO.  
 Address: 9 West 103 St., New York, N. Y.
1927. MURCHIE, ROBERT WELCH. M.A. '06, University of Glasgow.  
 Major: Sociology. Minor: Economics.  
 Thesis: Unused Lands of Manitoba. Published 1927, Winnipeg, Manitoba, as a Manitoba Government Bulletin.  
 Major Adviser: Professor F. S. Chapin.  
 Positions Held: Professor of Economics and Sociology, 1927-1931, Manitoba Agricultural College; Professor of Sociology, 1931-1937, University of Minnesota.  
 Deceased, April 20, 1937.
1928. GARY, DOROTHY PAGE. B.A. '18, University of Richmond; M.A. '20, Columbia University.  
 Major: Sociology. Minors: Psychology and Economics.  
 Thesis: Some Behavior Patterns of Carolina Textile Workers. Not published.  
 Major Adviser: Professor F. S. Chapin.  
 Positions Held: Associate Professor of Sociology, 1928-1931, Wheaton College; Author.  
 Married Name: Mrs. John F. Markey.  
 Address: 6110 Huntington Ave., Newport News, Virginia. c/o Dr. B. R. Gary.
1929. FREY, FRED CHARLES. B.A. '21, Louisiana State University.  
 Major: Sociology. Minor: Economics.  
 Thesis: Some Selective Phases of Rural-Urban Migration Based on a Study of University of Minnesota Matriculation Statistics and Achievement Rec-

- ords. Published in *Summaries of Ph.D. Theses*, Vol. 1, 1939, University of Minnesota.
- Major Adviser: Professor P. A. Sorokin.
- Positions Held: Professor of Sociology, Head of Department, 1929-1930, Dean of Men and Professor of Sociology, 1930-1931, Dean of College of Arts and Sciences and Head of Department of Sociology, 1931—, Louisiana State University, Baton Rouge, Louisiana.
- Address: University, Louisiana.
1929. PARTEN, MILDRED BERNICE. B.A. '23, University of Minnesota.
- Major: Sociology. Minors: Economics and Psychology.
- Thesis: An Analysis of Social Participation, Leadership, and Other Factors in Pre-School Play Groups. Published in *Journal of Abnormal and Social Psychology*, 27:243, 430, 1933.
- Major Adviser: Professor P. A. Sorokin.
- Positions Held: Fellow, 1931-1932, Social Science Research Council; Research Assistant, 1932-1933, Research Associate, 1933-1936, Assistant Professor, 1932-1936, Yale University, Institute of Human Relations; Associate Director, 1936—, Urban Study of Consumer Purchases, U. S. Bureau of Labor Statistics.
- Address: 1214 St. Matthews Court, N. W., Washington, D. C.
1929. WINSTON, SANFORD RICHARD. B.A. '25, Western Reserve University.
- Major: Sociology. Minor: Psychology.
- Thesis: A Study of Illiteracy in the United States and Its Relationship to Other Social Factors. Published 1931, University of North Carolina Press, Chapel Hill.
- Major Adviser: Professor P. A. Sorokin.
- Positions Held: Assistant Professor, 1929-1930, Associate Professor, 1930-1931, Professor of Sociology, 1931—, North Carolina State College.
- Honors: Phi Gamma Mu; Sigma Pi Alpha.
- Address: 120 Forest Road, Raleigh, North Carolina.
1930. HARRIS, FRANK. B.A. '17, Clark College; M.A. '22, Columbia University.
- Major: Sociology. Minor: Anthropology.
- Thesis: The Presentation of Crime in the Newspaper. Published 1932, Sociological Press, Hanover, New Hampshire.
- Major Adviser: Professor M. M. Willey.
- Positions Held: Associate Professor of Sociology, 1930—, Elmira College.
- Address: Elmira College, Elmira, New York.
1930. VOLD, GEORGE BRYAN. B.S. '21, South Dakota State College; M.A. '24, University of Chicago.
- Major: Sociology. Minor: Psychology.
- Thesis: Prediction Methods and Parole: A Study of Factors Involved in the Violation or Non-Violation of Parole of a Group of Minnesota Adult Males. Published 1931, Sociological Press, Hanover, New Hampshire.
- Major Advisers: Professors M. M. Willey and E. H. Sutherland.

Positions Held: Social Science Research Council Fellow, 1931-1932, Cambridge, Massachusetts; Assistant Professor, 1930-1931, Associate Professor, 1932-1937, Professor, 1937—, Department of Sociology, University of Minnesota.  
Address: 95 Bedford Street, S. E., Minneapolis, Minnesota.

1931. LIVELY, CHARLES ELSON. B.A. '17, M.A. '18, University of Nebraska.

Major: Sociology. Minor: Agricultural Economics.

Thesis: Family Living on Selected Ohio Farms. Published in two parts: as Ohio Agricultural Experiment Station Bulletin 468, 1930, *Family Living Expenditures on Ohio Farms*; and as Ohio Agricultural Experiment Station Mimeograph Bulletin 36, 1931, *Some Relationships of the Variable Cash Expenditures for Family Living*.

Major Advisers: Professors F. S. Chapin and M. M. Willey.

Positions Held: Assistant Professor of Rural Sociology, 1921-1931, Associate Professor, 1931-1937, Professor, 1937-1938, Ohio State University; Research Analyst, 1934-1935, FERA (on leave); Professor and Head of Department of Rural Sociology, 1938—, University of Missouri.

Honors: Phi Delta Kappa; Gamma Sigma Delta; Alpha Kappa Delta.

Address: Department of Rural Sociology, University of Missouri, Columbia, Missouri.

1931. MONACHESI, ELIO DAVID. B.A. '27, M.A. '28, University of Missouri.

Major: Sociology. Minor: Political Science.

Thesis: The Predictability of Outcome of Probation: A Study of 1,515 Probation Cases of Ramsey County, Minnesota for the Years 1923-1925 Inclusive. Published 1932, Sociological Press, Hanover, New Hampshire.

Major Advisers: Professors G. B. Vold and M. M. Willey.

Positions Held: Instructor in Sociology, 1931-1932, Assistant Professor of Sociology, 1934—, University of Minnesota; Fellow, 1932-1934, Social Science Research Council.

Honors: Alpha Pi Zeta; Alpha Kappa Delta.

Address: Department of Sociology, University of Minnesota, Minneapolis, Minnesota.

1931. TAEUBER, CONRAD FERDINAND. B.A. '27, M.A. '29, University of Minnesota.

Major: Sociology. Minor: Psychology.

Thesis: Migration to and from Selected German Cities, an Analysis of the Data of the Official Registration System (*Meldewesen*) for 1900-1927. Published in *Proceedings of the International Congress on Population Problems* (Rome, Italy), 1932. (Conference held in Rome in September 1931.)

Major Adviser: Professor F. S. Chapin.

Positions Held: Assistant Professor of Sociology, 1931-1934, Mount Holyoke College; Research Supervisor, 1934-1935, Federal Emergency Relief Administration; Statistician, 1935, Works Progress Administration; Agricultural Economist, 1935—, Bureau of Agricultural Economics.

Address: 201 Jackson Avenue, Hyattsville, Maryland.

1931. TAEUBER, IRENE BARNES. B.A. '27, University of Missouri; M.A. '28, Northwestern University.  
 Major: Sociology. Minor: Economics.  
 Thesis: Changes in the Content and Presentation of Reading Matter in Minnesota Weekly Newspapers, 1860-1929. Published in *Journalism Quarterly*, 9:281-289, 1932.  
 Major Adviser: Professor M. M. Willey.  
 Positions Held: Instructor in Sociology, 1931-1934, Mount Holyoke College; Research Assistant, 1934, Division of Research Statistics and Finance, FERA; Co-Editor, Population Literature, 1935-1936, Population Association of America; Co-Editor, Population Index, 1936—, Office of Population Research, Princeton University.  
 Honors: Phi Beta Kappa.  
 Address: 201 Jackson Avenue, Hyattsville, Maryland.
1931. ZELNY, LESLIE DAY. B.S. '22, University of Minnesota; M.A. '23, Columbia University.  
 Major: Sociology. Minor: Education.  
 Thesis: A Comparative Study of the Investigations of the Intelligence of Criminals (1911-1930). Published in *American Journal of Sociology*, Vol. 38, no. 4, 1933.  
 Major Advisers: Professors M. M. Willey and G. B. Vold.  
 Positions Held: Professor of Sociology, 1923—, State Teachers College, St. Cloud, Minnesota.  
 Honors: Phi Delta Kappa; Kappa Delta Pi; Pi Gamma Mu; Scholarship, 1922-1923, Teachers College, Columbia University.  
 Address: State Teachers College, St. Cloud, Minnesota.
1932. ANDERSON, CHARLES ARNOLD. B.A. '27, M.A. '28, University of Minnesota.  
 Major: Sociology. Minor: Psychology.  
 Thesis: Assortative Mating, with Special Reference to Age in England, 1858-1925. Published in *Proceedings of the 1932 Italian Population Congress*.  
 Major Advisers: Professors F. S. Chapin and A. E. Treloar.  
 Positions Held: Tutor, 1931-1935, Instructor, 1933-1935, Faculty Instructor, 1935-1936, Harvard University; Assistant Professor, 1936—, Iowa State College.  
 Honors: Phi Beta Kappa; Sigma Xi.  
 Address: Department of Sociology, Iowa State College, Ames, Iowa.
1932. SMITH, THOMAS LYNN. B.S. '28, Brigham Young University; M.A. '29, University of Minnesota.  
 Major: Sociology. Minor: Agricultural Economics.  
 Thesis: An Analysis of the Changes in Social Organization of the American Agricultural Village from 1900 to 1930. Published in *Summaries of Ph.D. Theses*, Vol. 1, 1939, University of Minnesota.  
 Major Advisers: Professors F. S. Chapin and R. W. Murchie.  
 Positions Held: Assistant Professor, 1931-1933, Associate Professor, 1934-1936, Professor, 1936-1937, Head of Department of Sociology, 1937—, Louisiana State University.  
 Honors: Fellow of the Social Science Research Council.  
 Address: 1160 University Ave., Baton Rouge, Louisiana.

1933. LANDIS, PAUL HENRY. B.A. '26, Greenville College; M.A. '27, University of Michigan.  
Major: Sociology. Minor: Psychology.  
Thesis: Cultural Change in the Mining Town. A Sociological Study of Three Mesabi Iron Range Towns: Eveleth, Hibbing and Virginia. Published by Edwards Brothers, Ann Arbor, Michigan.  
Major Adviser: Professor F. S. Chapin.  
Positions Held: Assistant Professor of Sociology, 1933-1934, South Dakota State College; Associate Consultant, 1934-1935, National Resources Board; Associate Professor of Sociology, 1935—, The State College of Washington.  
Address: 302 Oak St., Pullman, Washington.
1934. BOWERS, RAYMOND VICTOR. B.A. '27, University of Kansas; M.A. '30, Northwestern University.  
Major: Sociology. Minor: Anthropology.  
Thesis: A Genetic Study of Institutional Growth and Cultural Diffusion in Contemporary American Civilization. An Analysis in Terms of Amateur Radio. Published in *American Sociological Review*, 3:21, 1938.  
Major Adviser: Professor M. M. Willey.  
Positions Held: Fellow, 1934-1935, Social Science Research Council Post-Doctoral Fellowship; Instructor in Sociology, 1935-1936, Assistant Professor, 1936—, University of Rochester.  
Honors: Phi Beta Kappa.  
Address: University of Rochester, Rochester, New York.
1934. CRALLE, WALTER ODRÓ. B.A. '15, M.A. '25, University of Oklahoma.  
Major: Sociology. Minor: Economics.  
Thesis: Social Change and Isolation in the Ozark Mountain Region of Missouri. Published in *American Journal of Sociology*, 41:435-446, 1936.  
Major Adviser: Professor M. M. Willey.  
Positions Held: Professor of Sociology, 1925—, State Teachers College, Springfield.  
Address: 1527 Phelps Grove Drive, Springfield, Missouri.
1936. SLETTÓ, RAYMOND FRANKLIN. B.S. '26, M.A. '32, University of Minnesota.  
Major: Sociology. Minor: Economics.  
Thesis: Construction of Personality Scales by the Criterion of Internal Consistency. Published by Sociological Press, 1937.  
Major Adviser: Professor F. S. Chapin.  
Positions Held: Assistant Professor, 1936—, University of Minnesota.  
Address: 4417 Grand Ave., Minneapolis, Minnesota.
1936. STEPHAN, ANTHONY STEPHEN. B.A. '26, University of Richmond; M.A. '30, University of Chicago.  
Major: Sociology. Minor: Economics.  
Thesis: Trends in University Extension: A Study of the Adult Education Activities of the General Extension Division of the University of Minnesota. Published in *Learning in Leisure*, by Minnesota State Department of Education, 1937.  
Major Adviser: Professor F. S. Chapin.

Positions Held: Supervisor, 1936-1937, Educational Materials Project, Minnesota State Department of Education; Senior Research Associate, 1937—, Bureau of Social Research, Minneapolis Council of Social Agencies.  
Address: 535 Marshall Avenue, St. Paul, Minnesota.

1937. WALKER, MARJORIE JEAN. Ph.B. '24, University of Chicago.  
Major: Sociology. Minors: Psychology and Child Welfare.  
Thesis: The Social Interaction of Young Children with Special Reference to the Domination and Subordination of the Individual Child. Published in *Summaries of Ph.D. Theses*, Vol. 1, 1939, University of Minnesota.  
Major Advisers: Professors F. S. Chapin and F. L. Goodenough.  
Positions Held: Professor, 1938—, Drake University.  
Honors: Phi Beta Kappa.  
Address: Victoria Hotel, Des Moines, Iowa.
1938. WASSON, CHESTER REYNOLDS. B.A. '29, University of Pittsburgh; M.A. '31, Oberlin College.  
Major: Sociology. Minor: Economics.  
Thesis: Socio-Economic Factors in the Rural Distress of St. Louis County, Minnesota. Not published.  
Major Adviser: Professor Lowry Nelson.  
Positions Held: Instructor, 1938—, Department of Sociology, Virginia Polytechnic Institute.  
Honors: Alpha Kappa Delta.  
Address: Box 508, Blacksburg, Virginia.



## TABLES

### TABLE I

DISTRIBUTION OF PH.D. DEGREES GRANTED, UNIVERSITY OF MINNESOTA  
1888 THROUGH JUNE, 1938

Date	No.
1888 .....	1
1889-1893 .....	3
1894-1898 .....	9
1899-1903 .....	17
1904-1908 .....	12
1909-1913 .....	12
1914-1918 .....	42
1919-1923 .....	83
1924-1928 .....	193
1929-1933 .....	346
1934-1938 .....	403
	<hr/>
	1,121

Of the 1,121 Ph.D. degrees granted in this fifty-one-year period, 749, or approximately two thirds, were granted since 1928; and 1,025 or more than nine tenths of them, since 1918.

More than two fifths, of the Ph.D. degrees granted during the half century have been granted since the first edition of this directory in 1932.

TABLE II

PH.D. DEGREES GROUPED BY DEPARTMENTS AND ACCORDING TO LOCALITY  
IN WHICH BACHELOR'S DEGREE WAS RECEIVED, 1888-1938

STATE OR COUNTRY	AGR.	BIOL. SCI.	LANG. AND LIT.	MED.	PHILOS., PSY., EDUC. AND CHILD WEL.	PHYS. SCI. AND MATH.	SOC. SCI.	TOTAL
Alabama				1				1
Arizona					1			2
Arkansas						1		3
California	3			6	3	3		17
Colorado	1	1		4	2	2	1	11
Connecticut			1	1	3		2	7
Delaware								
District of Columbia				1				1
Florida				1				1
Georgia	2			1				3
Idaho		1		1		1		3
Illinois	10	3	3	6	14	6		51
Indiana		2	4	2	6	8	2	24
Iowa	8	1	1	4	3	6	9	32
Kansas	8	6	1	5	3	2	3	28
Kentucky	3	1				2		6
Louisiana	2						1	3
Maine			1					1
Maryland		1		1				2
Massachusetts		2	3	7	5	4	2	23
Michigan	3	1	3	5	1	4	3	20
Minnesota	75	38	28	72	58	137	45	383
Mississippi	3							3
Missouri	9	1		6	3	5	2	26
Montana	5	2			6	6		13
Nebraska	10	5		2	6	4	3	30
Nevada								
New Hampshire			1	1		1		3
New Jersey	1						1	2
New Mexico						2		2
New York State	2	4	1	2	8	6	3	26
North Carolina						1	1	2
North Dakota	5			1		4	4	14
Ohio	4	6	2	2	7	8	4	33
Oklahoma	1					3	1	5
Oregon	3	1		3	1	3		11
Pennsylvania	9	1		4	4	2	2	22
Rhode Island			2		1		1	4
South Carolina	4	2						6
South Dakota	7	1	1	2	1	7	2	21
Tennessee	1	1				1	2	5
Texas				4	1		1	6
Utah	3	5		1	2		2	13
Vermont					1			1
Virginia	1			1	1	3		8
Washington	3	2		4	2	6	1	18
West Virginia	3			4	3			10
Wisconsin	5	2	1		7	9	9	33
Wyoming								
Africa		1					2	3
Argentina			1					1
Australia	3	1						4
Belgium			1					1
Canada	40	6		2		15	4	67
Chile			1					1
China	4	1		1				6
Denmark				1				1
Dominican Republic			1					1
England	1						1	1
France							1	1
Germany			3	1		1		5
Hawaiian Islands	1							1
Holland						1		1
India	3					1		4
Ireland					1			1
Japan	1					1		1
New Zealand	1							1
Philippine Islands	1					1	1	3
Russia		1					1	2
Scotland	1							1
Sweden				1				1
Switzerland				1				2
Wales				1				1
Totals	250	100	63	161	148	270	129	1,121

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Allen, G. D., Zool.	78	Bent, R. K., Educ.	155
Allen, N. N., Dai. Hus.	31	Benton, A. G., Bact.	107
Allen, R. B., Urol.	137	Bergin, A., Anc. Lang.	84
Allen, W. F., Anat.	98	Bergman, H. F., Bot.	62
Allers, W. D., Physiol. Chem.	124	Berkey, C. P., Geol.	206
Allison, C. C., Pl. Path.	52	Berkwitz, N. J., Neur.	113
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Arthur, M. G., Psy.	163	Boettiger, L. A., Soc.	257
Artist, R. C., Bot.	69	Bohan, J. E., Educ.	145
Ashby, W. M., Bact.	105	Bohn, L. J., Biochem.	18
Atkins, R. E., Educ.	150	Bonde, R., Pl. Path.	55
Aubel, C. E., An. Hus.	27	Booth, E. G., Agron.	24
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		Boughton, R. V., Zool.	81
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Bailey, D. L., Pl. Path.	45	Boyle, R. W., Physiol.	128
Baillif, R. N., Zool.	81	Brackney, E. M., Rom. Lang.	95
Baker, A. B., Path.	119	Bradley, R. J., Educ.	150
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Baumgartner, E. A., Anat.	98	Broadfoot, W. C., Pl. Path.	50
Bausman, C. C., Bot.	62	Brodrick, T. M., Geol.	207
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