in this issue

- THE CLASS OF 1966
- GLYCOGEN METABOLISM
- URINARY DIVERSION
- INDEX ISSUE
CONTENTS

COMMENCEMENT
The Class of 1966 ........................................ 334

STAFF MEETING REPORTS
Hormonal and Non-Hormonal Control of
Glycogen Metabolism
JOSEPH LARNER, M.D., and
CARLOS VILLAR-PALASI, Ph.D. .................. 356
Ileac Urinary Diversion
COLIN MARKLAND, M.D., and
RICHARD MCKINLEY, M.D. ....................... 357

INDEX TO VOLUME 37
University of Minnesota MEDICAL BULLETIN,
1965-66 ............................................. 360

ALUMNI NOTES ........................................... 369
One hundred thirty-six members of the Class of 1966 proudly received their medical degrees in commencement ceremonies held June 10-11 at the University of Minnesota. The graduation exercises climaxed an arduous academic quest of several years' duration, and provided a poignant moment in the lives of the Seniors and their families.

Mayo Auditorium was filled to capacity as the Class of 1966 filed in wearing traditional Cap and Gown attire for the Recognition Day ceremonies. The procession was led by faculty marshals Ernst Simonson and C. J. Watson, both of whom are retiring this year. Eleven student marshals from the Class of 1967 assisted.

Main speaker for the occasion was Dr. Robert Q. Marston, chief of the Division of Regional Medical Programs, N.I.H., who discussed the new federal heart, cancer, and stroke programs in a talk titled "A Time Considered."

Richard E. Carlson, president, spoke for the Class of 1966, and Gerald T. Evans, professor emeritus of laboratory medicine, administered the Declaration of Geneva.

Dr. Harry B. Hall (Med. '35), representing the Minnesota State Medical Association, presented the 1966 Distinguished Teaching Awards of the Minnesota Medical Foundation to Dr. Aldo R. Castaneda, associate professor of surgery, and Dr. Morris Smithberg, associate professor of anatomy. They were the 7th and 8th faculty members honored with citations for outstanding medical teaching and cash prizes of $1,000.00, and were chosen by a ballot involving 70% of the entire student body.
FROM MEDICAL SCHOOL

Student honors went to:
Louise A. Town and Nancy B. Beecher, who won American Medical Women's Association citations for scholastic achievement;
Louise A. Town, the Southern Minnesota Medical Association Award for proficiency in medicine and surgery;
Gerald J. Vosika, the Rollin E. Cutts Award for proficiency in surgical research;
Richard C. Strand, the Bausch & Lomb Medal of the American Society of Clinical Pathologists for meritorious research in pathology;
Russell F. Hanson, the Borden Award for significant contributions to research during the student years.

Stephen N. Haas and J. Michael Ryan, members of the Class of 1967, received the 1966 Mediclinics Scholarships of $1,000.00 each for exemplary records of scholastic and professional achievement.

Members of the James E. Moore Society, Alpha Omega Alpha honor medical fraternity, the Medical Student Council, and Student Adytum Cabinet were also recognized.

Following the exercises, the Dean's Reception and Senior Class Banquet were held in the Campus Club. Dr. Albert Sullivan spoke to the 437 guests, and Tim Howard was M.C.

The Class of 1966 was characterized by strong and mature student leadership. It was also the first class in history which sent the largest single group of its members (33%) to internships in California hospitals, rather than to Minnesota hospitals (28%). Eighty-nine graduates were married, including an intra-class wedding which occurred on graduation day. There were 10 women among the graduates.

Perhaps the Class of 1966 made its greatest contribution in its establishment of the Class of '66 Fund. Approximately 125 of the 136 graduates pledged voluntary financial support of the Fund for the next 20 years. At that time, a major class gift will be presented for the benefit of medical students at the University of Minnesota. The Minnesota Medical Foundation will serve as fund trustee. Thirty-nine members of the class received scholarship assistance from the Foundation while in Medical School.

The Class of '66 Fund is the first such project started in 75 years of Medical School history. Its initial success has astonished the faculty, administration, alumni, and the students themselves, and a powerful example has been set for Medical School classes which will follow.
Golfers argued over the winning scores in the post-tournament party held at Dr. H. O. Peterson's home near University Golf Course. Aaron Parkhurst, Tim Howard, Paul Bandt, and Phil Roy finally acceded to scorer Avvie Overbach's decision that low net honors went to Dean Gillund, Denny Reynolds, and Tony Rayer. Paul Pedersen's 74 and Dr. Louis Tobian's 82 were low gross among 43 seniors and faculty competitors, respectively.

Twenty netmen vied for honors in the concurrent tennis tournament. The champions (front), Arlen Brodin and Dr. Ben Fuller, defeated runners-up Roger Rabold and Jim Polga (rear). Prizes and refreshments were provided by the Minnesota Medical Foundation and the Minnesota Medical Alumni Association.
Coffee and cake was served in the Student Adytum by the Class of '66 "for all who helped us along the way." Enjoying the refreshments were Ron Elin and Jon Flom, and three Comprehensive Clinic staffmembers, Pat Olson, Lillian Johnson, and Roxann Gieberhain.

Checking the Recognition Day program were Tony Rayer and Dennis Reynolds.

COVER PHOTO —
It was a memorable weekend for Judy Wyatt who was married to classmate Stephen A. Smith on June 11 amid the graduation events. Among the wedding attendants were Douglas Jewson, Kenneth Shunk, and Ralph Tharp, all members of the Class of '66.

Thomas Swanson's countenance in the proces-sional seemed to say "... Almost there!"
Arnold, Neil I.

Bade, Ernest L.*

Balkins, John W.

Bande, Paul D.†

Bayers, Jon

Beecher, Nancy Burt†

Bonnell, George W.

Borken, Stuart H.
Born 7-14-41, Minneapolis, Minn.; Intern: Harbor Gen. Hosp., Torrance, Calif.; U. of Minn., B.S. '64; Married.

Brodin, Arlen G.

Buege, William B.

Buselmeier, Theodore J.*

Carlson, Bruce Martin
Born 7-11-38, Minneapolis, No internship; (Research Fellowship in Russia); Gustavus Adolphus Coll., B.A. '59; Cornell Univ., M.S. '61; U. of Minn., M.D.-Ph.D. Dec. '65; Single.

Carlson, Erik E.

Carlson, Paul Edwin†

Carlson, Richard Eugene†
Born 11-11-34, Sandstone, Minn.; Intern: U.S.P.H.S. Hosp., San Francisco; U. of Minn., B.S. '56; D.V.M. '58; Married. Class President

Chang, William

*Scholarship Awardee, Minnesota Medical Foundation
†Member, Alpha Omega Alpha Honor Medical Fraternity
DOCTOR OF MEDICINE

Christensen, Robert D.*
Born 8-24-40, St. Paul, Minn.;
B.S. '62, Married.

Colman, Larry M.
Born 5-4-41, Minneapolis, Minn.;
B.S. '64; Married.

Connor, David G.†
Born 4-22-40, Edina, Minn.;

Dahlgren, David C.*
Born 9-27-42, Washington,
B.A. '62; Married.

Daniel, James A.
Born 9-22-40, Minneapolis,

Danielson, Byron D.
Born 10-15-40, Lake Bronson, Minn.;

Dreyling, Roger A.
Born 9-23-38, St. Paul, Minn.;
Intern: San Bernardino Co. Hosp., San Bernardino, Calif.; U. of Minn., B.S. '64; Married.

Drosman, Steven R.
Born 3-29-41, Sherman Oaks, Calif.;
U. of Minn., B.A. '63, B.S. '64; Married.

Duff, Richard M.
Born 5-12-40, Excelsior, Minn.;
B.A. '62; Married.

Eastman, James W.
Born 1-10-40, Wayzata, Minn.;
Intern: San Bernardino Co. Hosp., San Bernardino, Calif.;
U. of Minn. B.A. '62; Single.

Eckman, Matthew J.
Born 1-19-40, Duluth, Minn.;
Intern: St. Mary's Hosp., Duluth, Minn.; Gustavus Adolphus Coll., B.A. '62; Single.

Elin, Ronald J.††
Born 4-14-39, Minneapolis, Minn.; No internship (Ph.D. Study in Bio-Chemistry, U. of Minn.); U. of Minn., B.A. '60;
B.S. '62; Single.

Evans, Carleton C.
Born 7-20-34, Salt Lake City, Utah; Intern: San Francisco Gen. Hosp., San Francisco, Calif.; U. of Calif., B.A. '58;
Married.

Fatemi, Hashem

Fischer, James A.*
Born 6-15-40, Linton, N.D.; Intern:
Milwaukee Co. Hosp., Milwaukee, Wis.; U. of Minn., B.S. '63; Married.

Flom, Jon O.*
Born 10-26-39, Minneapolis, Minn.;
Intern: U. of Minn. Hosp., Minneapolis, Minn.; U. of Minn., B.A. '64; Married.

*Scholarship Awardee, Minnesota Medical Foundation
†Member, Alpha Omega Alpha Honor Medical Fraternity
‡Member, James E. Moore Society
DOCTOR OF MEDICINE

Flynn, Mary Margaret
Born 1-12-42, Fairmont, Minn.;
Intern: Santa Clara Co. Hosp.,
San Jose, Calif.; U. of Minn.,
B.S. '64; Single.

Forsen, N. Rune
Born 9-18-33, Linköping, Sweden;
Intern: U. of Calif. Hosp.,
Los Angeles, Calif.; U. of Minn.,
B.S. '64; Married.

Frisch, Melvin J.
Born 9-9-41, Virginia, Minn.;
Intern: Harbor Gen. Hosp.,
Torrance, Calif.; U. of Minn.,
B.S. '64; Married.

Gillund, T. Dean†
Born 8-6-40, Preston, Minn.; No
internship; (Research Fellowship
in England); St. Olaf Coll.,
B.A. '62; Married.

Goetz, John R.†
Born 6-8-40, Minneapolis, Minn.;
Intern: Northwestern Hosp.,
Minneapolis, Minn.; U. of Minn.,
B.A. '62, B.S. '64; Married.

Gordon, James M.
Born 8-18-40, Minneapolis, Minn.;
Intern: U. of Ill. Research Hosp.,
Chicago, Ill.; U. of Minn.,
B.A. '62; Single.

Gran, Gary E.
Born 6-26-41, Erskine, Minn.;
Intern: Bethesda Hosp., St. Paul, Minn.;
U. of N.D., B.A. '64; Single.

Gustafson, Hugo F.
Born 10-28-40, Duluth, Minn.;
No internship; (Ph.D. Study in
Bio-Chemistry, U. of Minn.);
U. of Minn., B.A. '62; Married.

Gustason, Gary A.
Born 3-4-41, Minneapolis, Minn.;
Intern: San Joaquin Gen. Hosp.,
Stockton, Calif.; U. of Minn., B.S. '64; Single.

Hanson, Russell Floyd†
Born 4-1-39, Vermillion, S.D.;
Intern: U. of Minn. Hosp.,
Minneapolis, Minn.; U. of S.D.,
B.A. '62; Married.

Hanson, Stephen Lloyd
Born 7-23-40, Fargo, N.D.; Intern:
Bethesda Hosp., St. Paul, Minn.;
Gustavus Adolphus Coll.
B.S. '62, U. of N.D., B.S. '64; Married.

Heagle, C. Russell
Born 4-5-40, Buffalo, Minn.;
Intern: Broadlawns Co. Hosp.,
Des Moines, Iowa; Hamline
Univ., B.S. '62; Married.

Holm, William A.
Born 10-18-37, Minneapolis, Minn.;
Minneapolis, Minn.; U. of Minn., B.S. '65; Married.

Horrigan, Terrence P.†
Born 5-26-41, Virginia, Minn.;
Harbor Gen. Hosp., Torrance,
Calif.; U. of Minn., B.S. '64; Married.

Howard, Timothy C.
Born 6-23-34, Piedmont, Calif.;
U. of Calif., B.S. '56; Married.

Jewson, Douglas V.†
Born 5-25-40, Minneapolis, Minn.;
Intern: W. Va. Univ. Hosp.,
Morgantown, W. Va.; U. of Minn., B.A. '63; Married.

*Scholarship Awardee, Minnesota Medical Foundation
†Member, Alpha Omega Alpha Honor Medical Fraternity
‡Member, James E. Moore Society

343
DOCTOR OF MEDICINE

Johnson, Charles Loren*†

Johnson, Lowell Erik
Born 8-13-40, Bovey, Minn.; Intern: W. Va.; U. of Minn., B.A. '63; Single.

Johnson, Roger Alan

Kampen, Charles P.

Keldahl, Loren R.

Kennedy, Richard D.
Born 3-30-39, Eau Claire, Wis.; Intern: U. of Utah Affiliated Hosp., Salt Lake City, Utah; U. of Wis., B.S. '62; Married.

Kimmerle, Ross L.

Koop, LaMonte P.

Kreiser, Robert D.

Krohn, John R., Jr.†

Lamusga, David J.*
Born 7-14-41, Browerville, Minn.; Intern: St. Mary's Hosp., Duluth, Minn.; College of St. Thomas, B.S. '62; Married.

Langeberg, Charles L.

Langsten, N. Kurt*

LaPerriere, Robert J.†

Larter, Roland R.

Layer, James M.†

*Scholarship Awardee, Minnesota Medical Foundation
†Member, Alpha Omega Alpha Honor Medical Fraternity
<table>
<thead>
<tr>
<th>Name</th>
<th>Date of Birth</th>
<th>Place of Birth</th>
<th>Hospital, City, State</th>
<th>College, University, Degree</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leadholm, Benjamin C.</td>
<td>4-25-40</td>
<td>Minneapolis, Minn.</td>
<td>St. Mary's Hosp., Duluth, Minn.; Gustavus Adolphus Coll., B.A. '62</td>
<td>Married</td>
<td></td>
</tr>
<tr>
<td>Linden, Richard P.*</td>
<td>1-4-40</td>
<td>Hibbing, Minn.</td>
<td>Mary Fletcher Hosp., Burlington, Vt.; U. of Minn., B.S. '64</td>
<td>Married</td>
<td></td>
</tr>
<tr>
<td>Manahan, William D.</td>
<td>9-2-40</td>
<td>Madelia, Minn.</td>
<td>Santa Barbara Cottage Hosp., Santa Barbara, Calif.; U. of Minn., B.A. '62</td>
<td>Married</td>
<td></td>
</tr>
<tr>
<td>Martin, C. Paul</td>
<td>8-1-40</td>
<td>Minneapolis, Minn.</td>
<td>Santa Clara Co. Hosp., San Jose, Calif.; College of St. Thomas, B.S. '62</td>
<td>Single</td>
<td></td>
</tr>
<tr>
<td>McNamara, Thomas O.*††</td>
<td>7-6-41</td>
<td>Minneapolis, Minn.</td>
<td>U. of Calif. Hosp., San Francisco, Calif.; St. John's Univ., B.S. '64</td>
<td>Married</td>
<td></td>
</tr>
<tr>
<td>Nordstrom, Leonard, Jr.</td>
<td>10-17-40</td>
<td>Minneapolis, Minn.</td>
<td>Northwestern Hosp., Minneapolis, Minn.; U. of Minn., B.S. '64</td>
<td>Single</td>
<td></td>
</tr>
<tr>
<td>O'Neil, Bernard L.</td>
<td>2-4-35</td>
<td>Minneapolis, Minn.</td>
<td>St. Mary's Hosp., Minneapolis, Minn.; U. of Minn., B.A. '59, B.S. '62</td>
<td>Married</td>
<td></td>
</tr>
</tbody>
</table>

*Scholarship Awardee, Minnesota Medical Foundation
†Member, Alpha Omega Alpha Honor Medical Fraternity
‡Member, James E. Moore Society
Olsen, Terrill C.*†

Ostrow, Robert D.
Born 7-6-42, Minneapolis, Minn.; Intern: U. of Calif. Affiliated Hosp., Los Angeles, Calif.; U. of Minn., B.A. ’63, B.S. ’64; Single.

Overbach, Avrin M.*

Overgaard, Peter H.*
Born 7-3-36, Albert Lea, Minn.; Intern: U.S. Naval Hosp., Newport, R.I.; S.D. State Coll., B.S. ’57; Married.

Parkhurst, Aaron E.*††
Born 3-7-39, Albert Lea, Minn.; Intern: Parkland Memorial Hosp., Dallas, Texas; U. of Minn., B.S. ’64; Married.

Paulson, Hugo R.*

Pedersen, Paul Richard

Peet, Walter J.

Perpich, Joseph G.*†

Plimpton, David B.*†

Poland, Jerome D.

Polga, James P.*

Rabold, Roger*†

Raitz, Lee A.

Rayer, Anthony L.*

Resnick, Jack S.*†

*Scholarship Awardee, Minnesota Medical Foundation
†Member, Alpha Omega Alpha Honor Medical Fraternity
‡Member, James E. Moore Society
DOCTOR OF MEDICINE

Reynolds, Dennis E.*

Rice, John D.

Rockswold, Gaylan L.†

Rolewicz, Thomas F.
Born 11-27-39, Chicago, Ill.; No internship; (Ph.D. Study in Pharmacology, U. of Minn.); St. Thomas Coll., B.S. '61; Married.

Roszell, Douglas K.*

Roy, Philemon C., Jr.

Ryan, Dennis K.

Sarnecki, Jan C.††

Schulz, Jerome E.
Born 11-8-40, Farmington, Minn.; Intern: St. Mary's Hosp., Duluth, Minn., U. of Notre Dame, B.S. '62; Married.

Shanks, James R.

Shogren, Amy Louise*

Shunk, Kenneth W.

Simo, Kathleen Kay
Born 2-29-40, Duluth, Minn.; Intern: St. Mary's Hosp., Minneapolis, Minn.; U. of Minn., B.A. '62; Single.

Smith, Stephen Addison
Born 5-25-41, Portland, Oreg.; Intern: University Hosp., Cleveland, Ohio; U. of Minn., B.A. '63, B.S. '64; Married.

Solberg, Norman S.

Sorom, Terry A.*†

*Scholarship Awardee, Minnesota Medical Foundation
†Member, Alpha Omega Alpha Honor Medical Fraternity
‡Member, James E. Moore Society

351
Minnesota Medical Foundation

ROSTER
OF
MEMBERS
1966

The following roster represents the names of those alumni and non-alumni who have contributed unrestricted funds to the work of the Minnesota Medical Foundation during the past year. For the first time, alumni members are categorized by the year of their graduation from the Medical School. No attempt has been made here to list the many individuals who made gifts through the Minnesota Medical Foundation last year for various earmarked purposes. The Medical School joins the Foundation in expressing appreciation for the many gifts for research funds, loans, scholarships, prizes and awards, made through M.M.F., and such channels as the A.M.A.E.R.F. and the Minnesota Medical Alumni Association. This roster of the Minnesota Medical Foundation possibly contains errors and omissions despite our best efforts to keep track of 3,000 members.

THE MINNESOTA MEDICAL FOUNDATION, Inc.
1342 Mayo Building — University of Minnesota
Minneapolis, Minnesota 55455

BOARD OF TRUSTEES

Vernon D. E. Smith, M.D.  Louis M. Cohen  Milton M. Hurwitz, M.D.
President
Karl W. Anderson, M.D.  Herman E. Drill, M.D.  Dennis J. Kane, M.D.
Karl W. Anderson, M.D.  Bertin C. Gamble  James E. Kelley
Vice President
N. L. Gault, Jr., M.D.  Gertrude M. Gilman  Arthur C. Kerkhof, M.D.
N. L. Gault, Jr., M.D.  Bernard Halper, M.D.  York E. Langton
Secretary-Treasurer
Eivind O. Hoff, Jr.  James C. Harris  Robert H. Monahan, Jr., M.D.
Executive Director
Ray M. Amberg  William F. Hartfiel, M.D.  T. H. Rowell, Sr.
T. Richard Anderson  Olaf M. Heiberg, M.D.  Russell O. Sather, M.D.
Mrs. Frank W. Bowman  M. E. Herz  Raymond A. Scallen
H. Mead Cavert, M.D.  Jerome A. Hilger, M.D.  Richard L. Varco, M.D.
Louis M. Cohen  Corrin H. Hodgson, M.D.  C. J. Watson, M.D.
Herman E. Drill, M.D.  Robert B. Howard, M.D.  R. S. Ylvisaker, M.D.
Minnesota Medical Foundation

1966

Membership Roster
(Through June 21, 1966)

Patron Member for Distinguished Service
Gerald T. Mullin

Patron Members

John C. Benson
Mrs. Frank W. Bowman
Otto Bremer
Mrs. Paul Brooks
Mrs. Austen S. Cargill
Homer P. Clark
Mrs. Teresa Cohen
C. D. Creevy
Rollin E. Cutts†
Bruce Dayton
Paul Dwan
Lyle A. French
Bertin C. Gamble
Mrs. Sarah Gault
Sander Genis

†Also Life Member

Anne E. Hellesen
John M. Hollern
Carl W. Jones
William J. Kay
N. Logan Levent†
Harold Lieberman
Mrs. Harold Lieberman
Samuel H. Maslon
K. W. McKee
William L. McNicol
Mrs. Helen T. Morrison
I. A. O'Shaughnessy
Jay Phillips
Lewis E. Phillips
Herman Rosenblatt

Justin L. Rosenblatt
Woodruff Rosenblatt
Paul A. Schilling
Mrs. Leland Schubert
Elmer H. Smith
Lucian C. Sprague
Mrs. George P. Tweed
Charles J. Upin
Richard L. Varco†
Archie D. Walker
Mrs. Archie Walker
Owen H. Wangensteen
Mrs. Sally Wangensteen†
Mrs. Charles A. Ward
E. W. Wylie

Sustaining Members

Hy Applebaum
H. E. Bakkila
Bentson Foundation
Carroll D. Buck*
Doris E. Dahlstrom
Harold S. Diehl
K. S. Goldenberg
Goodman Bros. Fdn.
Robert Hebbel*
Corrin H. Hodgson

L. Y. Horn
Milton M. Hurwitz
Benjamin B. Kaplan
H. J. Klein Family Fdn.
Louis Klein
Mrs. Ruth E. Lipschultz
Sylvia E. Mcclamed
J. Patrick Moran
Nathan T. Nemetz*
Ernest A. Olson*

Herschel Rifkin
Morris Rifkin
Norval Sisson
Alex Tankenoff
Gershom J. Thompson, Sr.
John C. Van Dalsen
Hildegard J. Virnig
Lloyd A. Whitesell, Sr.*

Contributing Members

C. A. Aling
Karl W. Anderson*
T. R. Anderson
W. E. Anderson
Clarence E. Arlander
William E. Bernstein
Paul S. Blake
Enoch B. Brick
Bancroft M. Brooks

Paul G. Bunker
Gerald F. Burke
Martin B. Callan
Joseph Cohen
Elizabeth Conforth
Roy B. Corwin
Robert E. Doan
Herman E. Drill
E. F. Englund

Leland L. Fairbanks
D. W. Feigal
Miles Fiterman
Flour City Press
Donald B. Franke
Morris T. Friedell
Phillip H. Gates
John S. Gillam
P. L. Halenbeck*

Two
THE MEDICAL BULLETIN

Contributing Members (continued)

William B. Halme
L. M. Hammar
D. R. Hastings*
Earl C. Henrikson*
William H. Houlton
Fritz D. Hurd
Thomas L. Huseby
Edward A. Jackson
Carl E. Johnson
Robert R. Kierland
John T. Kometani
Theodore J. Konig
William Kosiak
Clarence E. Kozarek
Kenhret R. Larson
James J. Lawton, Jr.
Carl W. Laymon
Allan R. Leider
Gilbert Gordon Lenz
J. H. Leversee
Douglas T. Lindsay
Francis T. Lytle
William F. Maloney
Satoru Matsuyama
Malcolm B. McDonald
Hazel L. McCaffey
G. W. McGregor
Giles G. Merkel
Phillip H. Meyers
H. H. Minthorn*
Allan E. Moe
John B. Moyer
Nelson A. Murray
Bernette G. Nelson*
Clayton E. J. Nelson*
Duane E. Ness
B. L. Neubeiser
E. W. Newman*
Stanley R. Norquist
Olmsted Medical Group
Elmer C. Paulson
Robert L. Pedersen
Alonzo P. Peeke*
J. C. Peteler
Carl A. Peterson
W. G. Peterson
M. K. Plasha
Leo R. Prins, Jr.
H. Robert Ransom
John H. Reitmann
Fred B. Riegel*
W. W. Rieke*
Cornelius A. Saffert
Russell O. Sather*
Harold G. Scheie*
Hildred Schuell
Alvin L. Schultz
William M. Schulze
E. Robert Schwartz
David L. Seibel
Howard R. Seidenstein
H. J. Setzer
Marvin J. Shapiro
Howard A. Shaw
Eugene H. Short
Robert J. Shragg
Sheldon C. Siegel
Melvin B. Sinykin
Wesley W. Spink*
John F. Stapp
James W. Stephan
Frederick Stepan
Richard E. Streu
W. B. Stromme
Barbara H. Subak
W. Albert Sullivan
Leon J. Tiber
Richard C. Tucker
C. L. Walker
Cecil J. Watson*
Robert G. Wohlzabe
Philip J. Worrell
Arthur J. Wyatt
John J. Yaeger
Toshio Yumibe
Mrs. Harry B. Zimmerman*

Alumni Annual Members

1896
M. A. Burns

1902
A. G. Liedloff

1904
A. D. Hoidale

1905
Albert M. Brandt
Paul F. Brown
Harold J. Rothschild
Oscar M. Smith

1906
E. M. Hammes, Sr.*
Charles G. McMahon
William W. Moir

1907
Johan C. Wiik

1908
G. B. Eusterman*

*Also Life Member

1909
Stanley R. Mazeiner, Sr.
Edward W. Ostergren

1910
Frank T. Cavanor
Justus Ohage
Theodore Satersmoen
J. H. Simons

1911
Moses Barron*
Dale T. Turnacliff

1912
Ralph T. Knight*
Henry E. Michelson*

1913
E. J. Engberg
Fred A. Love
J. C. Michael
Martin A. Nordland*
Kenneth A. Phelps*
Earle D. Quinnell

1914
Louis M. Field
Katherine A. Nye*

1915
Olga S. Hansen*
Henry Odland

1916
Solomon D. David
Harold A. Noreen
Lyle J. Roberts

1917
Harold L. Goss
Wallace W. Holley*
Charles J. Hutchinson
G. A. Larson
Morse J. Shapiro*
John W. Stahr
Chester O. Tanner

1918
Clifford T. Ekelund
Herman J. Kooiker

Three
Alumni Annual Members (continued)

1919
Donald McCarthy*  
John M. Perkins

1920
W. G. Benjamin  
Joseph F. Bicek  
C. W. Brunkow  
Asa G. Churchill  
Earl R. Crow  
Verne C. Crowl  
Harry A. Daniels  
Della C. Drips*  
Allen R. Foss  
David H. Johnson  
George M. Landrock  
Herman J. Moersch*  
J. Arthur Myers*  
E. A. Regnier*  
L. F. Richdorf

1921
A. N. Bessesen, Jr.  
Burton C. Ford  
E. F. Freymiller  
Louis A. Hauser  
Victor P. Hauser  
Leonard W. Larson*  
Paul F. Meyer*  
Robert C. Murdy  
C. L. Oppegaard*  
Percy L. Owens  
L. J. Pankow  
R. S. Rogers  
William H. Rucker  
C. Walter Rumpf*  
Georgia D. Scharff

1922
Walter C. Andrews

*Also Life Member

J. Richards Aurelius*  
Fred E. Ball*  
David H. Eisenstadt  
Aaron Friedell  
Russell Gates  
Philip Gotlieb  
K. H. Sutherland

1923
Donald W. deCarle  
George D. Eitel  
William J. Endres  
Clyde H. Fredrickson  
Royal C. Gray  
John W. Guilkson  
John E. Holt  
Gordon C. MacRae  
Marvin G. Peterson  
Joseph Sorkness  
Benjamin B. Souster  
Elmer W. Whitcomb  
H. E. Wilmot*

1924
N. J. Berkowitz  
Marby Duryea  
Frederick Eberson  
Leo W. Fink  
Louis A. Fried  
Russell H. Frost  
Alban F. Gaulas  
F. N. Groze  
William W. Heck  
J. M. Hilton*  
Herman H. Jensen  
Carl E. Johnson  
Thomas Moe  
J. A. Polzak  
Albert V. Stoesser  
George M. Tangen  
Hulda E. Thelander

1925
W. S. Beyer  
Lawrence Carlson  
John P. Craven  
J. W. Dassett  
E. P. K. Fenger  
Victor K. Funk  
M. R. Gelber  
James O. Gillespie  
William F. Hartfied  
Clarence Jacobson*  
Karl R. Lundeberg  
Hamlin Mattson  
Marcus H. Rabwin  
R. T. Soderland  
L. W. Sontag  
Orvie J. Swenson  
Henry Van Meier

1926
Harry R. Warner  
W. T. Wenner*  
Louis Winer

1927
E. C. Bagley  
Mary F. Bigler  
Morris L. Cable  
Daniel M. Clark  
Jay Conger Davis*  
Oscar M. Felland  
Walter F. Gardner*  
Marian Grimes  
Douglas P. Head  
William C. Heiam  
E. M. Kasper  
M. E. L. Lenander  
N. M. Levine*  
George X. Levitt*  
Nathaniel H. Luftin  
Elton J. Masters  
Gordon G. Nelson  
Wallace I. Nelson*  
Harold Ochsner  
R. L. Page  
John F. Regan  
Kenneth J. St. Cyr  
Wilbert W. Yaeger  
R. S. Ylvisaker*

1928
Arden L. Abraham  
Murray B. Bates  
R. H. Beiswanger  
Hubert H. Carroll  
Stanley S. Chunn  
Sumner S. Cohen  
Robert W. Cranston*  
George F. Engstrom  
H. T. Gustafson  
Percy W. Harrison  
Raymond P. Hawkins  
Meredith Hesdorffer  
N. Logan Leven†  
E. H. Lindstrom  
Orin G. Lynde  
Evelyn W. Mayman  
May I. Millbrook  
Johannes K. Moen  
M. E. Mosby  
Leslie F. Nelson  
Elmer Olesky  
Joel L. E. Peterson*  
Otto F. Ringle  
L. R. Scherer*  
C. Eugene Schuetz  
B. J. Singer  
Gilbert M. Stevenson  
Cecil A. Warren

†Also Patron Member

Four
Alumni Annual Members (continued)

1928
Francis W. Lynch*
Henry H. Michel*
Alvin J. Meyer
W. F. Nordman
L. Kenneth Onsgard
E. G. Oppen
Clarence G. Owens
A. N. Russeth
Milton H. Seifert, Sr.
John B. Simons
E. A. Smisek
Archie M. Smith
J. P. Spano
Elmer W. Wahlberg
M. L. Whalen
M. R. Williams

1929
H. A. Alexander
E. G. Barnet
Philip N. Bray
John V. Carlson
E. T. Ceder
James H. Chapple
Morris J. Chernack
A. F. Dysterheft
R. Wayne Espersen
Lloyd M. Feldman
Ferdinand Fetter
J. L. Goldenberg
H. Harvey Greene
S. T. Hersh
Hereman H. Hilleboe
C. H. Holmstrom
Elna M. Howard
Lester E. Larson*
C. E. Ledfors
Hubert W. Lee
Sam Leonard*
Alfred G. Levin

1930
Norman W. Anderson
U. Schuyler Anderson
Frank S. Bacon
A. B. Baker*
Edwin G. Benjamin
Theodore M. Berman
Harvey J. Brekke
Clyde M. Cabot
D. W. Cowan
Burr Dalton
R. G. Edwards
Gordon H. Ekblad
Kenneth F. Ernst
W. H. Ford
Reinholt O. Goehl
Jules S. Goldenberg
Max J. Goodman
David J. Halpern
Robert P. Hargreaves
John A. Haugen
C. E. Horn
W. G. Johanson
Paul N. Larson*
Paul C. Leck
Ida Levine
John J. Marren
J. C. Miller*
Walter J. Minor
Byron Mork, Jr.*
Elizabeth M. Murray
C. A. Olson
R. L. Parsons
Roy J. Popkin
Charles E. Rea*
Richard S. Rodgers
Wayne C. Rydberg
L. T. Simons
Vernon D. E. Smith*
Marvin Sukov
Cyril R. Tiffit
Maurice B. Visscher*
Howard A. L. Vogel
C. Gordon Watson
B. A. Weis
Rudolph J. Wilkowski
Viktor O. Wilson
Philip H. Woutat*
Nelson A. Youngs*

1931
Waldo P. Anderson
E. E. Barrett
M. S. Belzer
Alex G. Berger
Verl G. Borland
E. T. Conrad
O. J. Farness
Alice H. Fuller
Joseph B. Gaida
Kenneth E. Gamm
Daniel R. Goldiah
C. A. Grand
Milton Greengard
W. H. Haines
Ellis H. Harris
Elmer M. Hill
Frank W. Larsen
W. B. Light
Russell C. Lindgren*
James E. Lofstrom
Donald C. MacKinnon
B. J. Mears
N. L. Mistachkin
Marcus K. Mookerjee
Maynard C. Nelson
A. W. Nuetzman
S. C. G. Oeljen
B. F. Pearson
Leonard T. Peterson
R. H. Picha
Robert E. Priest
Ruth F. Rasmussen
Simon G. Sax
Paul C. Schmidt, Jr.
Nels N. Somesyn
W. G. L. Tanglin
E. A. Thayer
W. B. Wells*

1932
Dean H. Affleck
Thomas A. Angland
A. H. Baskin
Clayton T. Beecham
George S. Bergh
Reuben Berman*
C. H. Buckley
Bevan W. Bunker
R. J. Cairns
George E. Cardle
Horace DeLien
Dell F. Dullum
Ralph J. Eckman

*Also Life Member
THE MEDICAL BULLETIN

Alumni Annual Members (continued)

1933

John A. Anderson
Helen B. Barton
Harold G. Benjamin
C. J. Betlach
George Boody, Jr.*
Maurice Borkon
Earl N. Bossingham
Norvel Brink
Harold F. Buchstein*
B. H. Canfield
R. E. Curtis
Martin G. Ericsson
L. W. Foker
D. R. Gillespie
Donald L. Gillespie
Richard B. Graves
Douglas L. Johnson
Frank R. Klune
G. T. Leclercq
Carl John Lind, Jr.
E. T. Maitland
Donald E. Nealy*
Alton C. Olson
Julius Sloan
Thorsten Smith
Sam I. Stein
William A. Swedberg
Angvald Vickoren

---

1934

William L. Wall
William J. Watson

H. J. Aldrich*
Edward M. Anderson
Cordon A. Anderson
J. W. Annis
Frederick P. Arny
Russell L. Baker
James A. Blake
Kenneth F. Bray
W. D. Coddon
Thomas J. Doyle
Alvin Erickson
C. O. Erickson
Harry L. Falk
J. E. Flynn*
Moe Goldstein
C. M. Guernsey
Miles Gullickson
F. C. Hadden*
Wayne S. Hagen
Robert D. Harper
O. M. Heiberg*
Eleanor B. Iverson
Harriet D. James
Reynold A. Jensen*

1935

Nina A. Anderson
H. R. Barcks
James H. Bender
James W. Brown
Carl H. Coombs
Monroe M. Edelstein
Edwin C. Ehmske
I. Fisher
Hymer L. Friedell
Maurice Gilbert
Harry B. Hall
Percy Johnson
L. W. Johnsurd
Emil T. Keller
D. G. Mahle
Paul F. Marling
Eugene F. McElmeel
Sidney H. Medof
Alfred E. Muccilli
Donald L. Paulson
M. M. Pearson*
R. K. Poeschel*
William Rademaker
R. F. Risch
A. F. Risser
Phil C. Roy
J. E. Schroeppelet
Herman Seltz
A. F. Sether
C. G. Sheppard
Clarence Siegel
Henry Silver
Lawrence E. Sjostrom
C. S. Strathern
Roy K. Tanaka
Leonard A. Tritrud*
L. O. Underdahl
Catherine C. West
Dexter D. Whitemore
C. A. Wilmot

---

1936

George W. Aagaard, Jr.*
D. J. Almas
Karl d’A. Andresen
Wallace D. Armstrong*
Francis W. Bachnik
Paul C. Benton
Anthony S. Berlin
T. J. G. Bloedel
Albert S. Brussell
F. G. Chermack
George M. Cowan
John L. Delmore, Jr.
D. C. Deters
Amos R. Gildorf
Leslie R. Grams
George J. Halladay
Harry F. Harper

---

*Also Life Member
Alumni Annual Members (continued)

Evelyn S. Harris
W. E. Harris
Grant F. Hartmagel*
Jerome A. Hilger
James L. Jaek
George D. Kalser
Stanley Lundblad
George H. Marking
William P. Mavrels
Donovan L. McCain
J. J. McNearney
Harold E. Miller
Frank D. Naegeli
Harold H. Noran
Robert B. Potter
Sidney C. Pratt
Paul F. W. Rick
D. H. Rolig
Samuel T. Sandell
John E. Skogland
Baxter A. Smith
Frederick A. Smith
Maurice L. Straus
N. J. Sundet
Jerome D. Textor
John A. Tweedy
Richard L. Varco†
P. M. Vickers
Loren F. Wasson
Gilbert P. Wenzel
Stuart D. Whetstone
Robert Woodruff

1937
Carl W. Ahl*
John H. Aldes
George W. Anderson
Philip J. Beckjord
Louis A. Benesh
James Bratholdt
Arnett M. B. Brown
Carl G. Caspers
Byron B. Cochrane
Ephraim B. Cohen
John S. Cowan
Arnold H. Dysterheft
Raymond L. Eck
Sidney M. Falk
Edmund B. Flink*
N. A. Franzen
Harold C. Freedman
Lloyd C. Gilman
R. A. Glabe*
R. B. Grant
Leon D. Harris
Robert T. Hewitt
E. G. Holstrom
Marion D. Hurah
H. J. Jeronimus
Karl E. Johnson

*Also Life Member

Robert J. R. Kamish
Arnold J. Kremen
Robert G. Kvarnes
B. G. Lannin
J. O. Lasby
Helene W. Bane Longfellow
D. L. Martin
Frank F. McKeen
Robert L. Meller
R. W. Merrill
L. A. Moren
H. B. Nachtigall
Eldon C. Olson
John T. Pewters
Harry L. Plotke
James T. Shelden
Lloyd F. Sherman*
Bernard L. Street
Rodney F. Sturley*
Gordon H. Tesch
Benedict B. Trach
Robert B. Tudor
Francis M. Walsh
William V. Walsh
T. G. Wellman

1938
Albert I. Bahner
Solveig M. Bergh
Charles I. Binder
Leonard A. Borowicz
George E. Brown
Lorne A. Campbell, Jr.
G. B. Eaves
Charles T. Eginton
William S. Eisenstadt
Carl N. Ekman, Jr.
Philip Feinberg
David L. Fingerman
Dan L. Fink
Morris E. Freedland
Marvin J. Geib
F. E. Giles
Norman Hedemark
Myron J. Hertz
John W. Johnson
Leonard L. Kallestad
Harry A. Kaplan
C. I. Karleen
M. C. F. Lindert*
S. V. Lofness
A. E. Magnuson*
Raymond K. Minge
William F. Morrison
John H. O'Leary
Eva-Jane Larson*
R. C. Pedersen
Everett C. Ravits
Robert J. Richardson
Leonard E. Rothman

H. F. Schroeckenstein
Hanns C. Schwyzser
Edward W. Sickels
Graham G. Smith
A. C. Stahr
Edward L. Strem
Elmer H. Tofteeland
Charles B. Will
John A. Williams

1939
Nels W. Ahnlund
Charles L. Anderson
Robert J. Anderson
William M. Balfour
H. Charles Ballou
John J. Beer
Robert Blomberg
Norman Bloom
Robert N. Bowers
John P. Burton
Russell E. Carlson
Everett B. Coulter
Leonard L. Cowley
David M. Craig
Donald J. Cronin
Ivan C. Dimnick
Kenneth W. Douglas
Paul A. Dressel
G. W. Drexler
J. E. Eckdale
Murray P. Ensfield
L. Ben Franklin
Harry S. Friedman
Emily H. Gates
William P. Gjerde*
Donald O. Heckel
Wyman E. Jacobson
V. M. Johnson
Richard H. Jones
J. Jacob Kaplan
Gerhard Knutson
David B. Kuris
Walter B. Larrabee, Jr.
M. B. Llewellyn
Frederick H. Lott
D. G. MacMillan
C. Naumann McCloud
Samuel J. Megbow
H. A. Miller, Jr.
Anthony J. Mittich
John E. Minckler
B. D. Mitchell
A. S. Moe
A. Eugene Muller
Robert A. Murray
A. B. Nielfield
E. J. Palen
Robert T. Potter
William E. Proffitt
Henry J. Reif

†Also Patron Member

Seven
Alumni Annual Members (continued)

Elsie L. Renning
Charles Robb
Robert G. Rogers
Marvin J. Stewart
Walter Subby
Janet B. Sutton
Harold Thale
Edward S. Vanderhoff
Sydney J. Weisman*
Milo A. Youel

1940
L. Earle Arnow
Charles J. Beck
J. F. Boettmer, Jr.
Schuyler F. Brown
Robert F. Conant
Alfred M. Fulton
James H. Graves
Harriet S. Gregory-Bragg
D. E. Guernsey
Curtis M. Hansen
Carl A. Hanson
John F. Kelly
Fred T. Kolouch
B. L. Kreilkamp
Oliver Lundgren
Raymond D. Manchester
Frank P. Marturano
Charles P. Marvin
Brian J. McGroarty
M. Elizabeth Mussey
Lloyd S. Nelson
Stuart A. Patterson
Robert T. Petersen
Julian V. Petit
John C. Poore
E. E. Pumala
Everett Q. Rucker
Frederick W. Schilla
Everett Schmitz
Andrew Shea
B. R. Skogmo
Frederick M. Stark
G. Charles Sutch
N. E. Tostenson
Michael Wainstock
Henry J. Wegrocki
James Robert West
Howard M. Wikoff
James F. Zagaria

1941
Duane Ausman
V. M. Baich
Allan J. Benson
Robert W. Brandes
Charles F. Brigham, Jr.
Donald I. Bryan

*Also Life Member

Norman C. Carlson
James Y. Clarke, Jr.
Winfred H. Clarke
Frederick C. Closuit
Donald T. Cundy
John C. Fast
Donald W. Freeman
Bernard W. Friedland
John K. Grotting
Frederick Hafiz
Bernard Halper
Ben Heller
N. W. Howe
J. Jay Jacoby
Edward T. Jones
Laurin J. Kaasa
Bennet W. Kantola
R. F. Kendall
Frank Kiesler
Henry A. Korda
Clarence V. Kusz
C. Walton Lillehei*
D. P. McCormick
James T. McMillan
Ralph L. Olsen
John W. Peterson
Thomas G. Petrick
Harold G. Ravis
Norton D. Ritz
Robert T. Rowland
John F. Schmid
Martin A. Segal
J. H. Strickler
Gerald J. Taylor
Richard B. Tudor
F. H. Van Bergen
Richard P. Virnig
Edward F. Walsh
George T. Wilson
Earl H. Wood

1942
Howard A. Andersen
Franklin C. Anderson*
Deane W. Benton
Irving C. Bernstein
Merrill D. Chesler
Coleman J. Connolly
Robert Giebink
Jarvey Gilbert
Sewall S. Gordon
John C. Grant
A. J. Greenberg*
M. B. Gustafson
R. P. Hallin
Earl Hill
Richard C. Horns
William J. Hruza
John T. Hurley
Allen G. Janecky
J. Benjamin Lund

V. J. P. Lundquist
Warren L. Macaulay
Frank D. Mann
R. F. Michels
Robert Hugh Monahan, Jr.
Jack R. Morrison
Carl G. Nelson
Lawren B. Nester
L. J. Olson
John R. Perkins
Joseph L. Posch
John P. Remington
Francis Roach
Clarence J. Rowe
Samuel Schwartz
Everett L. Strandell
A. Boyd Thomas
R. G. Tinkham
Joseph L. Whelan

1943
William J. Alcorn
Arnold S. Anderson, Jr.
Harold C. Anderson
Harold J. Anderson
Alan M. Avrick
Maxwell B. Barr*
Sidney F. Becker
Philip L. Blumenthal
Benjamin Bofenkamp
Gaylord W. Boom
Lester W. Carlander, Jr.
Wayne A. Chadbourn
John F. Cooper
K. W. Covey*
L. W. Dale
George R. Davis
J. William Devney
John Dougherty
Sanford G. Egge
Irving F. Enquist
Ove A. Erdal
George M. Firestone
Orley W. Foster
W. B. Frey
Howard M. Frykman
Robert W. Gibbs
Betty Gilson
John S. Gibson
Erwin D. Goldenberg
Arthur M. Hall
E. K. Haugseth
John C. Hays
E. D. Henderson
Lyle S. Jacobs
C. Laurence Johnson
Frank E. Johnson
Reinald C. Johnson
George T. Joyce
Lyle W. Korum
William R. Kueffner
Alumni Annual Members (continued)

Sheldon M. Lagaard
John H. Linner
Neil N. Litman
Robert E. Litman
Paul N. Lober
Sam Mackoff
Richard Magrav
James C. Mankey
Z. R. Miller
Loran B. Morgan
Paul R. Nelson
H. L. Neuenchwander
Robert E. Nord
H. A. Norum
C. Kent Olson
Valentine O'Malley
Carrell A. Peterson
Elroy R. Peterson
Glenn L. Peterson
James H. Pulford
Henry W. Quist
Robert A. Rice
Robert W. Rieman
Philo H. Rockwood
Norton Rogen
Raymond A. Sanford
Victor Sborov
Edmund A. Schleselman
Robert D. Semsch
J. Ordie Shaffer
Alan B. Skorneck
Clyde L. Smith
Clifford D. Snyder
Donald C. Sterner
William H. Trow
Elizabeth Troxil
D. M. Ulrich
Donald J. Van Ryzin
Paul M. Walstad
P. Theodore Watson
Leslie Zieve

1944
Robert W. Aanestad
Curtis P. Ahrens
Donald S. Amatuzio
Frederick K. Amerongen
C. A. Anderson
S. Steven Barron*
Ellis S. Benson
William Bernstein*
G. E. Bourget*
Bruce Boynton, Jr.
R. O. Burmeister
Lee A. Christoferson
John I. Cote
Richard L. Cole
David D. Daly
Margaret Dowell-Gravatt
Robert N. Evert
George L. Garske
John S. Gillam
Louis Gillman
Glenn Gullickson, Jr.
Robert Guthrie
Erck Y. Hakanson
James F. Hammarsten
Mark C. L. Hanson
S. A. Hartman
George W. Haugen
Elizabeth Hauser
Claude H. Hitchcock
Robert B. Howard
J. E. Jenson
Karl E. Karlson
Thomas K. Krejewski
Bradley W. Kuske
Edward M. LaFond
W. H. Lindbloom
Robert Lindell
Charles T. Louisell
James M. Louisell
Clark M. Marshall
George R. Martin
George D. McGeeary
Elizabeth A. McGrew
Robert L. Merrick
Philip D. Pallister
Roy T. Pearson
John W. Perry
James S. Robertson
John G. Rukavina
Murray R. Salkin
Edgar L. Sather
Joseph A. Schaefer
Richard H. Schmidt
Albert J. Schroeder*
John W. Schumacher
Daniel Simon
H. R. Soboloff
K. L. Stensgaard
Harvey Stone
Norman F. Stone
Donald E. Taylor
Ira O. Wallin
Frederick H. Walter
D. E. Westover
Franklin C. Wilson
A. Cabot Wohlrabe
Robert A. Wood
Robert L. Wylie
Roy W. Dickman
Vernon A. Doms
Samuel B. Feinstein
Benjamin F. Fuller
A. C. Ghior
Stanley J. Graiewski
Melvin L. Grais
Roscoe A. Gutenkunst
Charles A. Haberle
Fred Z. Havens, Jr.
Stanton A. Hirsch
Louis C. Jensen, Jr.
Herbert W. Johnson
Allan S. Judd
Manley F. Juergens
Earl R. Kanne
Vincent C. Kelley
William D. Kelly
B. J. Kennedy
B. L. King, Jr.
L. B. Kirluk
H. A. Knocke, Jr.
Frederic J. Kottke*
R. J. Kotval*
Henry J. Krowczyk
W. J. Kucera, Jr.
Oliver E. H. Larson
Dagfinn Lie
Edward M. Littin
George B. Lund
Sheldon L. Mandel
Andrew M. Movius
John J. Muller
D. R. Nelmark
Paul A. Nelson
S. T. Nerenberg
John A. Newman
K. O. Nimlos
Eric R. Paulson
Donald J. Peik
William E. Petersen
F. J. Schnugg
Rudolph B. Skogerboe
Bernard J. Spencer
Joseph L. Sprafka
Theodore H. Sweetser, Jr.
A. M. Whiting
N. E. Wood
William H. Ylitalo

1945
Markham J. Anderson
Ray C. Anderson
Wallace R. Anderson
R. L. Andreasen
A. H. Bodelson
E. L. Brackney
Robert B. Breitenbucher
Robert E. Carter
Robert R. Cooper
J. A. Cosgriff, Jr.

1946
Nine
<table>
<thead>
<tr>
<th>Year</th>
<th>Names</th>
</tr>
</thead>
</table>
| 1947 | Martin A. Adson  
      Florence J. Bouthilet  
      James F. Boysen  
      William J. Buggy  
      Antoni M. Diehl  
      Edward P. Engles  
      Norman E. Fidelman  
      James B. Flinn  
      William B. Gallagher  
      Edwin S. Gomsi  
      Reuben Gull  
      LeRoy W. Hanson  
      Vernon A. Harrington  
      Paul J. Hauser  
      Darwin K. Holian  
      Wayne L. Hoesth  
      George W. Janda  
      Ruth M. Jolly  
      S. W. Kayute  
      Anne Cotter Kuhn  
      James P. Lillehei  
      Charles E. Magraw  
      Leonard W. Melander, Jr.  
      T. D. Moberg  
      William Nelson  
      Jack G. Olsen  
      Ben Owens  
      Vincent J. Paciotti  
      Philip Y. Paterson  
      Robert G. Rossing  
      Harold M. Schneidman  
      Jerome F. Smersh, Jr.  
      Arnold J. Spaniers  
      John J. Stransky  
      Ernest C. Tam  
      Charles E. Tesar  
      C. Gordon Vaughn  
      John E. Verby, Jr.  
      Stanley C. Von Drashek  
      Matthew J. Weir  
      Robert Weyrauch  
      Delbert F. Wichelman  
      John R. Ylvisaker  
      Martin L. Zucker |
| 1948 | Joseph J. Asta  
      Jesse J. Barron  
      P. D. Boekelheide  
      Alexander M. Boysen  
      Donald G. W. Brooking  
      Harold Chevien  
      Jun-Chuan Wang  
      Deno J. Wedes  
      H. A. Weente  
      C. W. Westman  
      Francis A. Wierzbinski  
      N. H. Zeller  
      Edward Zupanc |

*Also Life Member*
### Alumni Annual Members (continued)

#### 1950

<table>
<thead>
<tr>
<th>Wesley Tomhave</th>
<th>E. Dale Cumming</th>
</tr>
</thead>
<tbody>
<tr>
<td>Edwin O. Wicks</td>
<td>Richard P. Doe</td>
</tr>
<tr>
<td>Sol Austrian</td>
<td>Calvin R. Elrod</td>
</tr>
<tr>
<td>William A. Autrey</td>
<td>Virgil E. Erickson</td>
</tr>
<tr>
<td>Roger M. Berg</td>
<td>Conrad B. Frydenlund</td>
</tr>
<tr>
<td>James R. Bergquist</td>
<td>John M. Gunsolus</td>
</tr>
<tr>
<td>H. H. Billings</td>
<td>Milo L. Hansen</td>
</tr>
<tr>
<td>Frank J. Bonello</td>
<td>Curtis J. Hendricks</td>
</tr>
<tr>
<td>Roland G. Brown</td>
<td>Worth A. Hooper</td>
</tr>
<tr>
<td>H. Mead Cavert</td>
<td>Thomas S. Johnson</td>
</tr>
<tr>
<td>Henry W. Cohen</td>
<td>Roger E. Kelley</td>
</tr>
<tr>
<td>E. P. Donatelle</td>
<td>Walter E. Krafft</td>
</tr>
<tr>
<td>Malcolm M. Fifield</td>
<td>Will W. Lee</td>
</tr>
<tr>
<td>William J. Filante</td>
<td>Richard C. Lillehei</td>
</tr>
<tr>
<td>M. C. Florine</td>
<td>John W. McLinden</td>
</tr>
<tr>
<td>Joyce L. Funke</td>
<td>Gilbert T. Midboe</td>
</tr>
<tr>
<td>N. L. Gaul, Jr.</td>
<td>Herman Miller</td>
</tr>
<tr>
<td>Donald A. Gilsdorf</td>
<td>H. P. O’Neill</td>
</tr>
<tr>
<td>Leonard W. Goldman</td>
<td>W. V. Owen</td>
</tr>
<tr>
<td>Alan R. Hopeman</td>
<td>George R. Pettersen</td>
</tr>
<tr>
<td>J. E. Inobhar</td>
<td>W. L. Pew</td>
</tr>
<tr>
<td>Sherman N. Kieffer</td>
<td>Kurt Pollack</td>
</tr>
<tr>
<td>Robert D. W. Kochsiek</td>
<td>Harley J. Racer</td>
</tr>
<tr>
<td>Roger C. Larson</td>
<td>Reinert Ravenbolt</td>
</tr>
<tr>
<td>Barton L. Lewis</td>
<td>Robert H. Rosenberg</td>
</tr>
<tr>
<td>Terence B. McManus</td>
<td>Charles N. Sadoff</td>
</tr>
<tr>
<td>Robert C. Meade</td>
<td>John M. Streitz</td>
</tr>
<tr>
<td>R. F. Meinke</td>
<td>George A. Tanbara</td>
</tr>
<tr>
<td>Robert J. Meyer</td>
<td>Jack A. Vennes</td>
</tr>
<tr>
<td>V. E. Mikkelson</td>
<td>Robert K. West</td>
</tr>
<tr>
<td>Charles F. Miller</td>
<td>W. R. Weyhrach</td>
</tr>
<tr>
<td>Norman A. Nelson</td>
<td>Donald E. Wohrabe</td>
</tr>
<tr>
<td>D. D. Norman</td>
<td>Merrill B. Yeomans</td>
</tr>
<tr>
<td>John B. O’Leary</td>
<td></td>
</tr>
<tr>
<td>Neil Palm</td>
<td></td>
</tr>
<tr>
<td>Pat Rollins</td>
<td></td>
</tr>
<tr>
<td>Thomas Semba</td>
<td></td>
</tr>
<tr>
<td>Harry J. Smith</td>
<td></td>
</tr>
<tr>
<td>W. Thomas Spain</td>
<td></td>
</tr>
<tr>
<td>Michael P. Sperl, Jr.</td>
<td></td>
</tr>
<tr>
<td>Robert R. Spurzem</td>
<td></td>
</tr>
<tr>
<td>Clifford J. Stadem</td>
<td></td>
</tr>
<tr>
<td>Jack W. Strand</td>
<td></td>
</tr>
<tr>
<td>George T. Tant</td>
<td></td>
</tr>
<tr>
<td>David Webster</td>
<td></td>
</tr>
<tr>
<td>O. L. Zahrendt</td>
<td></td>
</tr>
</tbody>
</table>

#### 1951

<table>
<thead>
<tr>
<th>Richard F. Barnes</th>
<th>Mark B. Listerud</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roger W. Brockway</td>
<td>Arthur G. Litman</td>
</tr>
<tr>
<td>William J. Carr</td>
<td>Jerome G. Lommel</td>
</tr>
<tr>
<td>Frank J. Carthey</td>
<td>Ralph H. Mallinger</td>
</tr>
<tr>
<td>Jerome J. DeCosse</td>
<td>Donald M. Mayberg</td>
</tr>
<tr>
<td>James H. DeGeest</td>
<td>Bryson McHardy</td>
</tr>
<tr>
<td>Richard A. DeWall</td>
<td>Floyd F. Myrick</td>
</tr>
<tr>
<td>Norman J. Diamond</td>
<td>Richard E. Payne</td>
</tr>
<tr>
<td>Russell J. Eilers</td>
<td>Sheldon C. Reed</td>
</tr>
<tr>
<td>Vernon D. Erickson</td>
<td>Donald E. Roach</td>
</tr>
<tr>
<td>A. Sigrid Gilbertsen</td>
<td>Raymond W. Scallen</td>
</tr>
<tr>
<td>Victor A. Gilbertsen</td>
<td>L. B. Torkelson</td>
</tr>
<tr>
<td>Marvin E. Goldberg</td>
<td></td>
</tr>
<tr>
<td>William H. Grohs</td>
<td></td>
</tr>
<tr>
<td>Paul O. Gustafson</td>
<td></td>
</tr>
<tr>
<td>C. Lee Harris</td>
<td></td>
</tr>
<tr>
<td>Samuel B. Haveson</td>
<td></td>
</tr>
<tr>
<td>Duane R. Hedine</td>
<td></td>
</tr>
<tr>
<td>W. C. Heegaard</td>
<td></td>
</tr>
<tr>
<td>Carolyn A. Johnson</td>
<td></td>
</tr>
<tr>
<td>John A. Johnson</td>
<td></td>
</tr>
<tr>
<td>Marvin W. Johnson</td>
<td></td>
</tr>
<tr>
<td>Donald A. Jones</td>
<td></td>
</tr>
<tr>
<td>Rudolph W. Kallenbach</td>
<td></td>
</tr>
<tr>
<td>Donald W. Klass</td>
<td></td>
</tr>
<tr>
<td>Maurice L. Lindblom</td>
<td></td>
</tr>
</tbody>
</table>

*Also Life Member

### 1952

| R. W. Anderson       |                         |
| Jason Aronson        |                         |
| Harold P. Basinger   |                         |
| Morton Bearman       |                         |
| Arnold M. Berg       |                         |
| Valija S. Bilzen     |                         |
| D. L. Boucher        |                         |
| Ethlyn Countryman Jackson |                    |
| Ralph T. Duddles     |                         |
| Robert C. Dunn       |                         |
| Orest N. Filipovich  |                         |
| Ramon M. Fusaro      |                         |
| William R. Goodchild |                         |
| Richard D. Granquist |                         |
| W. G. Halverson      |                         |
| Seymour Handler      |                         |
| Daniel J. Hanson     |                         |
| James K. Heid        |                         |
| C. R. Heinzerling    |                         |
| C. Sherman Hoyt      |                         |
| John S. Huff         |                         |
| James R. Jude        |                         |
| Martin J. Kaplan     |                         |
| Everett E. Karon     |                         |
| James R. Kent        |                         |
| Tauno E. Keta  |                         |
| Leonard O. Langer, Jr.|                    |
| E. Russell Larson    |                         |
| R. K. Lillekov       |                         |
| Dale R. Lindall      |                         |
| Arthur M. Lindberg   |                         |
| Leonard S. Linnell   |                         |
| Robert B. Litin      |                         |
| Neil L. Macheledt    |                         |
| Aaron Louis Mark     |                         |
| Philip W. Maus       |                         |
| Donald R. McFarlane  |                         |
| James Melby          |                         |
| Harold D. Miller     |                         |
| Eldore B. Nash       |                         |
| Ralph A. Nelson      |                         |
| Albert L. Nisswandt  |                         |
| Frank S. Preston, Jr.|                         |
| R. M. Ramlow         |                         |
| Rudolph J. Ripple, Jr.|                    |
| Thomas L. Schafer    |                         |
| Nathan T. Sidley     |                         |
Alumni Annual Members (continued)

1954

J. T. Adkins
Robert C. Ahlstrom
William E. Anderson
Richard E. Anonsen
Merle C. Bah
Brian E. Briggs
James E. Brown, Jr.
J. A. Callan
Warren Christensen
James W. Decker
George C. Dorsey, Jr.
Stephen R. Dupmy
P. J. Dyrdal
W. L. Ellingson
M. G. Ettinger
William Feller
A. G. Fingerhut
R. C. Finley
Gilbert Frank
Kenneth R. Gaarder
E. R. Gamm
Robert W. Geist
Leonard H. Greene
Paul T. Grimes
Roger V. Haglund
Donald E. Halverson
Kent O. Hanson
William L. Hedrick
B. John Heetderks, Jr.
Kenneth V. Hodges
George Hottinger
Joseph R. Jannach
Kenneth J. Jernberg
Morris R. Katkov
John E. Grimes
Michael Kostak
V. G. Kuhlmann
Dorette Wheat Larson
Paul R. Leon
James B. Lindahl
James M. Little
Robert E. Lynner
R. L. McAllister
Charles J. McCarthy
Richard H. Meyer
William F. Miller
L. J. Moran
Douglas A. Nelson
Sidney Nerenberg
Richard A. Ness
Eugene C. Ott
Thomas M. Parker
C. R. Pelzl

*Also Life Member

1955

Reno E. Backus
Charles M. Binger
Henry S. Bloch
David Bloom
R. R. Boehlke
John B. Brainard
Robert E. Buckley
Robert A. Callewart
F. Richard Dion
Arndt J. Duvall, III
Garth W. Englund
Gerald H. Fink
George H. Fish
Charles N. Gamble
Leland J. Green
Lee M. Griffin
John J. Hall
William R. Hilgedick
Owen W. Holm
Lewis A. Johnson
Ray A. Johnson
Dennis J. Kane
Louis J. Karish
A. Leonard Klepp
Kenneth R. Knutson
Richard A. Kunin
Theodore G. Larson
John R. Lee
Stanley A. Leonard
William R. Loney
Donald C. Martin
Joseph S. Masse
Jerrald A. Munro
Robert J. Murtaugh
Milton G. Mutch, Jr.
Robert W. Olson
Kenneth A. Osterberg
Gordon L. Pierce
John R. S. Remington
James S. Reynolds
Robert E. Rydell
Edward L. Salovich
James R. Schuft

1956

Burton I. Abramson
Richard Anderson
Robert M. Anderson
David Bender
Kenneth N. Bredesen
Thomas H. Comfort
John H. Dahl
Richard L. Davis
Robert E. Dinsmore
Donald E. Daugherty
R. L. Engwell
Duane L. Flogstad
William A. Foley
Ronald M. Gabrielson
Stanley M. Goldberg
David I. Gottlieb
Richard A. Greenberg
Roger B. Hallgren
Eugene W. Hanson
Harlis D. Hanson
Paul R. Hartig
Royal C. Hayden, Jr.
DeLarry R. Hovde
Gordon W. Hovde
Alan C. Hyne
William C. Johnson
Harold B. Kaiser
Eevrett R. Lensink
Glenn M. Lewis, Jr.
Richard B. Lieberman
Dale C. Lindquist
James K. Matsuyoshi
Herbert M. Modelevsky
Norval Mortensen
M. D. Olmanson
Arthur R. Page
John E. Quast
Leland G. Reclus
Harold L. Remollet
Margaret G. Robinson
Mitchell J. Rosenholtz
Loren Rothstein
Frederick R. Schlichting
Emil Schulz
John M. Sheehan
Melvin E. Sigel
John E. Smith
Walter C. Stolov
H. Jerome Stulberg
Ralph B. Swanson
THE MEDICAL BULLETIN

Alumni Annual Members (continued)

George V. Tangen
Jack E. Wall
Robert M. Wright

1957
William W. Baak
LaVonne B. Bergstrom
Bancroft M. Brooks
John J. Casey
George M. Crow
Richard D. Cunningham
S. Paul Ehrlich, Jr.
LaVonne B. Bergstrom
Bancroft M. Brooks
John J. Casey
George M. Crow
Richard D. Cunningham
S. Paul Ehrlich, Jr.

1958
Gordon L. Addington
Roger B. Arhelger
Louis W. Banitt
Lowell W. Barr
David A. Berman
Malcolm N. Blumenthal
Barbara Rosine Burdan
Sheldon G. Cable
Anna Mary Carpenter
Paul Davidson
Everett P. Dutil
Wendell P. Engelstad
Eric O. Feigl
Paul L. Felion

*Also Life Member

William R. Foster
Paul W. Gerster
Roland Hammer
Glen A. Hartquist
Richard D. Hovland
Leo Huzieff
Ralph Langsjoen
Donald J. Lawler
Thomas J. Lehr
John W. Leste
John I. Levitt
J. R. Mulder
Gerald T. Mullin, Jr.
Ilgvars J. Nagobads
Duane E. Ness
Robert A. Olson
Paul G. Patterson
Otto Ravenholt
Thomas F. Rokher
E. R. Salovich
Leonard D. Schlof
H. Lawrence Schochet
James A. Silver
Thomas A. Stoele
Floyd J. Swenson
Charles E. Thompson
Eugenie K. Vitos
Stuart B. Walker
Waldemar H. Wenner
G. Thomas Wier

1959
Toshio Akamatsu
Frederolph D. Anderson
Bradley Appelbaum
Frank R. Arko
Thomas B. Arlander
John W. Aughenbaugh
John D. Banovetz
Ronald N. Berry
Ausma S. Blumentals
William J. Broussard
A. D. Davidson
Michael W. Davis
Richard A. DeRemee
David K. Drill
Philip L. Eckman
Franklin Elevitch
Carl G. Evers
Sonja M. Flory
William D. Flory
Jerome C. Fluth
Bradford E. Friedrich
Kenneth Halverson
R. N. Harner
J. P. Herberg
Charlotte W. Hill
Jack O. Hubbard
James Janecek, Jr.
Helen M. Kelly
Lowell L. Kvan

Russell H. Larsen
J. S. Leighten
Thomas Litman
Richard O. Lundborg
Charles J. Marten
Raymond M. Martinson
Paul D. Mayer
Richard A. Meland
Mark A. Muesing
Rodger K. Nelson
Ronald J. Nelson
Thomas O. Nichols
David J. Nelson
Vern C. Olmanson
James J. Florde
Richard Puumula
Gerald Ratinov
John D. Riley
Lawrence R. Ringhofer
Franklin Roller
Homer Russ
Robert L. Sadoff
W. R. Schmalhorst
Darline D. Smith
William N. Spellacy
Herbert S. Straif
Thomas O. Swallen
Richard L. Swanson
Byron A. Teska
Gail W. Thompson
Alvin L. Wiens
John A. Wilson, Jr.
Elmer W. Ylitalo
John F. Zachman

1960
Paul Albrecht
John G. Albright
James R. Allen
Loren Anderson
David W. Bean
Roger Benjamin
Julian Berman
Harold R. Broman, Jr.
Thomas G. Casey
William L. Christian
C. Carlyle Clawson
Sheldon W. Damburg
Lawrence W. DeSanto
Daniel L. DeWerd
Robert A. Diamond
Dale L. Eichelberger
Harold D. Gambill
Wendell G. Geary
A. R. Gendein
Clment N. Herred
C. John Hodgson
Vincent R. Hunt
Philip C. Iverslie
Clarence A. Jenike
Elizabeth Haaland Johnson
Alumni Annual Members (continued)

Thomas P. Johnson  
E. R. Jonas  
Robert E. Kalina  
Arnold P. Kaplan  
Thomas P. Kneffick  
W. N. Kinney  
James F. Knapp  
Robert J. Knip  
John E. Larkin, Jr.  
Morris L. Lommen  
Kenneth P. Manick  
James E. Marquardt  
John M. McKeelwey  
Ronald A. Moss  
Ronald J. Nelson  
John A. Ochsner  
Barbara F. Olson  
Richard E. Olson  
Betty Osei  
Willard C. Peterson, Jr.  
Bernard Pollara  
Roger H. Princell  
George E. Reidorff  
Peter A. Schunk  
Odean M. Severselke  
David Stewart  
James D. Swenson  
Gerald Tandel  
Ronald L. Villella  
Louis A. Vontver  
Darrell T. Weinman  
Lloyd A. Whitesell, Jr.*  

1961  
David W. Anderson  
David B. Auran  
Bruce J. Bart  
Alan D. Belden, Jr.  
Robert H. Berland  
E. J. Birkemeyer  
Thomas G. Birkey  
Martin G. Bruhl  
David W. Burgan  
Richard B. Carley  
John A. Cich  
William C. Conrad  
Robert J. Cumming  
Alan D. Espellen  
David P. Folkestad  
John R. Gaertner  
Ronald Gutman  
John W. Haas  
Terrance P. Henderson  

Howard W. Higholt  
Rodney Charles Johnson  
Adrian L. Kapsner  
William J. Knipp  
Malcolm J. Lindsay, Jr.  
Peter J. Lynch  
Timothy M. Magee  
David W. McQuoid  
Gerald G. Mindrum  
James E. Monfore  
Charles Murray  
Lee K. Nelson  
S. Scott Nicholas  
Paul E. O’Brien  
Karen N. Olness  
C. H. Seecamp  
Robert J. Sieling  
Stanley J. Simons, Jr.  
Roger W. Strand  
H. Stanley Thompson  
D. J. Thyen  
Karen Olness Torjesen  
Robert G. Trahms  
Nancy Jo Engeset vander Molen  
Robert E. Wahman  
Joseph J. Westermeyer  
David M. Worthen  
Robert L. Zemke  

1962  
C. Arthur Anderson  
Lois Anselment  
Joel O. Brende  
Keith C. Burnes  
Gary A. Cowan  
Robert Flaig  
Alan Fremland  
Harriet Fremland  
Margaret L. Gunnet  
Bruce Howard  
R. J. Jackman  
Waldemar G. Johanson, Jr.  
Peter S. Koontz  
Merle Loken  
Peter N. Madden  
Donald J. Maus  
John N. Mork  
LeRoy E. Mueller  
John D. Palmer  
Phillip A. Rieson  
David George Smith  
John E. Sutherland  

*Also Life Member

Class of 1966 Fund

Neil I. Arnold  
Ernest L. Bade  
John W. Balkins  
Paul D. Bandt  
Jon H. Bayerns

Nancy B. Beecher  
George W. Bonwell  
Stuart H. Borken  
Arlen G. Brodin  
Theodore Buselmeier

Fourteen
THE MEDICAL BULLETIN

Class of 1966 Fund (continued)

Larry M. Colman
David G. Connor
David C. Dahlgren
James A. Daniel
Byron D. Danielson
Roger A. Dreiling
Steven R. Drosmann
Richard M. Duff
James W. Eastman
Matthew J. Eckman
Ronald J. Elin
Carleton C. Evans
James A. Fischer
Jon O. Flom
Mary M. Flynn
Melvin J. Frisch
T. Dean Gillund
John R. Goetz
James M. Gordon
Gary E. Gran
Hugo F. Gustafsson
Gary A. Gustason
Stephen L. Hanson
C. Russell Heagle
William A. Holm
Terrence P. Horrigan
Timothy C. Howard
Douglas V. Jewson
Lowell E. Johnson
Charlies L. Johnson
Roger A. Johnson
Charles P. Kampen
Loren R. Keldahl
Richard D. Kennedy
Ross Kimmerle
LaMonte F. Koop
Robert D. Kreizer
David J. Lamusga
Charles L. Langeberg
N. Kurt Langsten
Robert J. LaPerriere
Roland R. Larter
James M. Layer
Benjamin C. Leadholtm
Roger D. Liljemoen
Richard P. Linden
Richard E. Lund
William D. Manahan
C. Paul Martin
Marguerite H. McKay
Robert W. McKenna
Charles C. Morrison
Margaret V. Nelson
Leonard A. Nordstrom
Timothy J. O’Brien
Terrill C. Olsen
Robert D. Ostrow
Avrin M. Overbach
Peter H. Overgaard
Aaron E. Parkhurst
Hugo R. Paulson
Paul R. Pedersen
Walter J. Peet
Joseph G. Perpich
David B. Plipton
Jerome D. Poland
James F. Poliga
Roger A. Rabold
Lee A. Raatz
Anthony L. Rayer
Jack S. Resnick
Dennis E. Reynolds
John D. Rice
Gaylan L. Rockswold
Thomas F. Rolewicz
Douglas K. Roszell
Phil Roy, Jr.
Dennis K. Ryan
Jan C. Sarneeki
Jerome E. Schulz
James R. Shanks
Any L. Shogren
Kenneth W. Shunk
Kathleen K. Simo
Stephen A. Smith
Norman S. Solberg
Terry A. Sorom
Richard C. Strand
Lewis E. Struthers
David E. R. Sutherland
Thomas R. Swanson
David F. Sweet
James C. Terrian
Ephraim F. Tharp
Richard F. Thompson
Vance B. Tingey
Louise A. Town
James A. Trenman
Rachel W. Trockman
David L. Trudeau
Gary E. Underhill
Gerald J. Vosika
Jon E. Wallin
Murray A. Warnnath, Jr.
James M. Weston
Dexter D. Whitemore, Jr.
Richard G. Wicklund
Kent S. Wilson
David L. Wright
Judith R. Wyatt
Marshall Zamansky

Life Members

George W. Aagaard, Jr.*
Carl W. Ahl*
H. J. Aldrich*
Ray M. Amberg
Edward D. Anderson
Franklin C. Anderson*
Gaylord W. Anderson*
Karl W. Anderson†
Leonard S. Arling*
Wallace D. Armstrong*
A. I. Arneson
J. Richard Aurelius*
G. L. Berdez
H. M. Berg
Stanley Berglund
Reuben Berman*
W. C. Bernstein*
Anthony J. Bianco
Raymond N. Bieter
D. G. Bohn*
L. R. Boies
R. J. Boisel
Paul G. Bonham
George J. Boody, Jr.*
G. H. Boone
Marguerite Booth
Joseph F. Borg
L. R. Bouma
G. E. Bourget*
Edward A. Boyden
K. F. Bascom
Thomas F. Rolewicz
William F. Braasch
R. B. Bray
John F. Briggs*
R. J. Brini
Alex E. Brown
W. D. Brown
Harold F. Buchstein*
Carroll D. Buck§
Martin S. Buchstein
Angus Cameron
Orwood J. Campbell*
James J. Campbell*
James B. Carey, Sr.
Harold W. Carlson
Charles F. Cervenka
Jack D. Chafee
B. J. Clawson
Wallace H. Cole

Fifteen

*Also Annual Member
†Also Contributing Member
§Also Sustaining Member
Life Members (continued)

Theodore L. Cook
Lillian Cottrell
Kenneth W. Covey
Mrs. Dorothy L. Cowan
Robedt W. Cranston
Dwight E. Curry
Rollin E. Cutts
Jay C. Davis
R. D. Davis
James R. Dawson
Clarence Dennis
Randall S. Derifield
H. S. Diehl
G. A. Dinharn
A. Louis Dippel
Wendell L. Downing
Charles H. Dreneckharn
Della G. Drips
Harold J. Dvorak
James E. Dyson
George Earl
T. S. Eberley
Philip F. Eckman
C. J. Ehrenberg
L. M. Ekstrand
F. J. Elias
Edward C. Emerson
L. C. Erickson
E. W. Erickson
G. B. Eusterman
Frederick B. Exner
Louis E. Fezen
M. G. Flath
Edmund B. Flink
J. E. Flynn
William J. Focke
E. J. Fogelberg
Ward S. Fowlmer
George Friedell
T. R. Fritsche
J. H. Gammell
Walter P. Gardner
J. T. Gericek, Jr.
Siias W. Giere
Conrad Giesen
Gertrude Gilman
William P. Gjerde
Robert A. Glade
Neil F. Goltz
L. R. Gowan
Frank R. E. Gratzek
A. J. Greenberg
Paul H. Guttman
Frank C. Hadden
P. L. Halenbeck
D. K. Halvorsen
E. M. Hammes, Sr.
Erling W. Hansen
Olga S. Hansen
Malcolm B. Hanson
William A. Hanson
E. C. Hartley
Grant F. Hartnagel
H. J. Harwick
D. R. Hastings
George M. B. Hawley, II
Robert Hebbel
Frank J. Heck
G. A. Hedberg
O. M. Heiberg
Paul Heise
Earl C. Henrikson
Ambrose J. Hertzog
Mal E. Herz
Anderson C. Hilding
James M. Hilton
F. J. Hirschboeck
Wallace W. Holley
J. E. Holt
L. J. Hoyer
E. J. Huenekeins
Arthur B. Hunt
Charles Hymes
Clarence Jacobson
Reynold A. Jensen
Einer W. Johnson, Jr.
James A. Johnson
Richard S. Johnson
William E. Johnson
H. M. Juergens
Ben Karpman
Edward J. Kaufman
G. M. Kelby
Arthur C. Kerkhof
E. H. Kersten
Ancel B. Keys
Lyndol M. King, Jr.
Thomas J. Kinsella
Horace D. Klein
Milan E. Knapp
Ralph T. Knight
Herman K. Koschinzte
F. J. Kotke
R. J. Kotval
F. J. Kucera
William J. Kucera
Arthur T. Laird
Leonard A. Lang
Eva Jane Larson
Evrel A. Larson
Leonard W. Larson
Lester E. Larson
Paul N. Larson
Samuel Leonard
John A. Lepak
Nautolfi M. Levine
George X. Levitt
C. Walton Lillehei
M. C. F. Lindert
Russell C. Lindgren
H. S. Lippman
S. N. Lutman
Francis W. Lynch
W. E. Macklin, Jr.
F. H. Magney
A. E. Magnuson
J. A. Malerich
James C. Masson
Malcolm A. McCannel
Francis M. McCarten
Donald McCarthy
John L. McKe1ve
C. A. McKinlay
Paul F. Meyer
Henry H. Michel
Henry E. Michelle
Harold E. Miller
J. C. Miller
J. L. Mills
Mrs. Albert G. Minda
H. H. Minthorn
Mancel T. Mitchell
John H. Moe
F. P. Moersch
Herman J. Moersch
H. A. Molander
Harold W. Morgan
Byron Mork, Jr.
Frank E. Mork
Selma C. Mueller
G. B. Murphy
J. A. Myers
Harold D. Nagel
Donald E. Neal
Arthur A. Nelson
Bernette G. Nelson
Bernice A. Nelson
Clavron E. J. Nelson
O. L. N. Nelson
Wallace I. Nelson
Nathan Nemetz
Samuel Nesbitt
E. W. Newman
Malvina J. Nydahl
Katherine A. Nye
Lillian Nye
I. L. Oliver
E. A. Olson
Kenneth L. Olson
C. L. Oppegard
Carlton L. Ould
M. M. Pearson
Alfonso P. Peck
Harold O. Peterson
Joel L. E. Peterson
W. Henry Peterson
Kenneth A. Phelps
R. F. Pierson
J. A. Polzak
Claude R. Poston

Sixteen
THE MEDICAL BULLETIN

Life Members (continued)

John E. Power
R. K. Proeschel*
Victor S. Quale
John T. Quirk
R. B. Rathbun
Charles E. Rea*
E. A. Regnier*
Fred B. Riegel‡
W. W. Rieke‡
Leo C. Rigler
W. P. Ritchie*
Owen F. Robbins
O. W. Roberts
C. L. Roholt*
H. B. Roholt*
Grace M. Roth
Henry A. Roust
O. W. Rowe
Joseph O. Rude*
Peter S. Rudie
C. Walter Rumpf*
L. H. Rutledge
Russell O. Sather‡
W. A. Sawatzky
George E. Schaffer
Harold C. Scheid‡
L. R. Scherer*
Roland G. Scherer
Albert J. Schroeder*
Leon Seley

*Also Annual Member
§Also Sustaining Member

H. J. Setzer‡
James F. Shandorf
M. J. Shapiro*
Robert Shapiro
William P. Shepard
L. F. Sherman*
R. V. Sherman
L. O. Simenstad*
C. H. Slocumb
Arthur F. Smith
F. L. Smith
Vernon D. E. Smith*
L. L. Sogge
Joe Soiney
Karl Solner
Wesley W. Spink‡
Charles E. Stanford
L. A. Stelter
K. W. Stenstrom
Harold W. Stone*
Rodney F. Sturley*
Sheldon Sturman
Arnold O. Swenson
Leslie W. Tasche*
J. H. Tillisch*
Leonard A. Tritrud*
Charles G. Uhley
George G. Ulmer, Jr.
Alfred L. Vadheim*
Maurice B. Visscher*

W. W. Walker*
Waltman Walters
Charles T. Wangensteen*
Mrs. Owen H. Wangensteen†
Charles H. Watkins
C. J. Watson‡
C. E. Watz
Edgar A. Webb*
S. A. Weisman
Louis R. Weiss
Lewis J. Weller*
L. J. Wells
W. B. Wells*
W. T. Wenner*
Macnider Wetherby
Lloyd A. Whitesell, Sr.§
Lloyd A. Whitesell, Jr.*
George E. Whitson
W. F. Widen
Robert L. Wilder
W. W. Will
F. A. Williams
F. A. Willis
H. E. Willmot*
Phillip H. Woutat*
Harold N. Wright
R. S. Ylvisaker*
Thomas Young*
Nelson A. Youngs*
Mrs. Harry B. Zimmerman‡

Non-Alumni Members

Heino Alari
Carl S. Alexander
Kurt Amplatz
Gavlord W. Anderson*
Robert K. Anderson
Bascom Anthony
Stuart W. Arhelger
N. P. Arnold
Sidney Auerbach
J. B. Aust
Austin Clinic
Osmond J. Baggenstoss
Russell W. Bagley
Earl E. Bakken
Edward J. Baldes*
W. Compere Basom
William B. A. J. Bauer
Jacob E. Bearman
Samuel S. Beirstein
James Bellomo
Elmer Belt
Benson Clinic
Heinz Berendes
Robert W. Bernlohr

*Also Life Member

Eugene F. Bernstein
Jerome T. Bieter
O. J. Bizzozero
Samuel Blank
Goldie R. Blum
Bernhard Boecker
C. V. Bologa
Richard G. Bond
M. O. Boudry
Mrs. Samuel Bowman
S. H. Boyer, Jr.
S. Gaylen Bradley
Allyn G. Bridge
Alice Brill
Joseph J. Buckley
H. B. Burchell
E. C. Burkland
R. S. Burns
Robert P. Bush
Donald C. Campbell
Orwood J. Campbell*
Leslie Caplan
Sheldon W. Carlson
Charles W. Carr

Dick Cason
H. D. Caylar
K. K. N. Charyulu
C. C. Chatterton
Tague C. Chisholm
Daniel P. Clifford
Charles F. Code
Mrs. Jacob G. Cohen
Maynard M. Cohen
Theodore M. Cole
Milton Cooper
Mark B. Coventry
Elizabeth M. Cranston
Frederick S. Cross
William P. Crowley, Jr.
R. C. Cullen
Ormond S. Culp
R. K. Curtis
Helen Dahlstrom
William D. Davidson
Edward C. Defoe, Jr.
B. J. Desai
Raymond H. Dick
David E. Dines

Seventeen
<table>
<thead>
<tr>
<th>Name</th>
<th>Name</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jaime W. Dixon</td>
<td>John E. Harris</td>
<td>Richard G. Lester</td>
</tr>
<tr>
<td>E. M. Doherty</td>
<td>Lewis R. Harris</td>
<td>Jules D. Levin</td>
</tr>
<tr>
<td>John R. Earl</td>
<td>C. B. Hatfield</td>
<td>I. L. Lichtenstein</td>
</tr>
<tr>
<td>Ronald Edstrom</td>
<td>S. R. Hathaway</td>
<td>Nathan Lifson</td>
</tr>
<tr>
<td>Charles Edwards</td>
<td>Erhard Haus</td>
<td>Esten O. Lindset</td>
</tr>
<tr>
<td>Jesse E. Edwards</td>
<td>Gordon T. Heistad</td>
<td>Theodor J. Litman</td>
</tr>
<tr>
<td>Vera M. Eiden</td>
<td>Richard M. Hewitt</td>
<td>John Logothetis</td>
</tr>
<tr>
<td>L. M. E. Frand*</td>
<td>Hill Family Foundation</td>
<td>Victor J. Lorber</td>
</tr>
<tr>
<td>Marian L. Ellison</td>
<td>Lerner B. Hinshaw</td>
<td>Elizabeth C. Lowry</td>
</tr>
<tr>
<td>Karl W. Emanuel</td>
<td>L. Floyd Hobbs</td>
<td>Thomas Lowry</td>
</tr>
<tr>
<td>Rudolph Engel</td>
<td>Lucien R. Hodges</td>
<td>Robert Luedeke</td>
</tr>
<tr>
<td>Stephen Epstein</td>
<td>Jesse W. Hofer</td>
<td>W. Bruce Lundeen</td>
</tr>
<tr>
<td>Edward T. Evans</td>
<td>Norman O. Holte</td>
<td>Edgar L. Makekowki</td>
</tr>
<tr>
<td>Gerald T. Evans</td>
<td>Gertrude D. Honig</td>
<td>Webster C. Martin</td>
</tr>
<tr>
<td>E. Franklin</td>
<td>Emerson E. Hoppes</td>
<td>Catherine Martinez</td>
</tr>
<tr>
<td>Edwin Falk</td>
<td>Ruth F. Hovde</td>
<td>Elmer J. Martinson</td>
</tr>
<tr>
<td>Davitt A. Felder</td>
<td>C. E. Howard</td>
<td>Yosh Maruyama</td>
</tr>
<tr>
<td>M. Fording Fellows</td>
<td>Carter W. Howell</td>
<td>Charles W. Mayo</td>
</tr>
<tr>
<td>Allan L. Ferrin</td>
<td>E. J. Hueneke*</td>
<td>William F. Mazzitello</td>
</tr>
<tr>
<td>William R. Fifer</td>
<td>K. O. Husebye</td>
<td>Malcolm A. McCannel*</td>
</tr>
<tr>
<td>Z. Willard Finberg</td>
<td>Walter Indeck</td>
<td>R. James McClellan</td>
</tr>
<tr>
<td>J. S. Finku</td>
<td>E. Carly Jacc</td>
<td>Richard B. McHugh</td>
</tr>
<tr>
<td>William A. Fischer</td>
<td>Charles E. Jacobson, Jr.</td>
<td>Charles H. McKenzie</td>
</tr>
<tr>
<td>Charles G. Fitch</td>
<td>Manuel O. Jaffe</td>
<td>C. A. McKinlay*</td>
</tr>
<tr>
<td>A. J. Floersch</td>
<td>Martin E. Janssen</td>
<td>F. S. McKinney</td>
</tr>
<tr>
<td>Robert S. Flom</td>
<td>Alan R. Jay</td>
<td>Sara McKinney</td>
</tr>
<tr>
<td>Harry Foreman</td>
<td>Nathan K. Jensen</td>
<td>Leroy C. McLaren</td>
</tr>
<tr>
<td>W. L. Fowlks</td>
<td>Henry A. Johnson</td>
<td>George G. McPartlin</td>
</tr>
<tr>
<td>J. J. Fox</td>
<td>Eugene A. Johnson</td>
<td>Frederick B. Mears</td>
</tr>
<tr>
<td>Ivian D. Frantz, Jr.</td>
<td>James A. Johnson*</td>
<td>Paul E. Meier</td>
</tr>
<tr>
<td>Robert E. Frickie</td>
<td>Fred Kane</td>
<td>George T. Mellinger</td>
</tr>
<tr>
<td>Bernard F. Garey</td>
<td>William J. Kane</td>
<td>Joe Mendez</td>
</tr>
<tr>
<td>Eugene F. Gerdung</td>
<td>Bernard J. Kaplan</td>
<td>T. B. Merner</td>
</tr>
<tr>
<td>J. T. Giercicke, Jr.*</td>
<td>Donald L. Kegaries</td>
<td>Fernando Meyer</td>
</tr>
<tr>
<td>Conrad Giesen*</td>
<td>James E. Kelley</td>
<td>Duane D. Miller</td>
</tr>
<tr>
<td>Randolph R. Gillum</td>
<td>Ancel Keys*</td>
<td>Fletcher A. Miller</td>
</tr>
<tr>
<td>Gertrude M. Gilman*</td>
<td>Ilmar O. Kiesel</td>
<td>R. Drew Miller</td>
</tr>
<tr>
<td>Frederick C. Goetz</td>
<td>Arthur Kimber</td>
<td>Mrs. Albert G. Minda*</td>
</tr>
<tr>
<td>Meyer Z. Goldner</td>
<td>Archibald D. Kincaid</td>
<td>Mpls. Neuropsychiatric Clinic</td>
</tr>
<tr>
<td>Norman P. Goldstein</td>
<td>Jack Kinnard</td>
<td>Albert G. Moat</td>
</tr>
<tr>
<td>Lorraine M. Gonyea</td>
<td>Lloyd H. Klefstad</td>
<td>Gordon K. Moe*</td>
</tr>
<tr>
<td>S. L. Governale</td>
<td>Horace D. Klein*</td>
<td>John H. Moe*</td>
</tr>
<tr>
<td>Ian Gregory</td>
<td>James F. Koerner</td>
<td>Dom Mosser</td>
</tr>
<tr>
<td>Eugene Grim</td>
<td>Carl D. Koutsky</td>
<td>Marion I. Murphy</td>
</tr>
<tr>
<td>Claude O. Grizzle</td>
<td>George F. Kowallis</td>
<td>Thomas O. Murphy</td>
</tr>
<tr>
<td>John L. Grosch</td>
<td>William Krivit</td>
<td>M. J. Murray</td>
</tr>
<tr>
<td>Robert P. Gruninger</td>
<td>W. G. Kubicek</td>
<td>Louis H. Muschel</td>
</tr>
<tr>
<td>Samuel F. Haines</td>
<td>Warren L. Kump</td>
<td>James Myhre</td>
</tr>
<tr>
<td>Franz Halber</td>
<td>Roswell E. Lade</td>
<td>Arnold E. Nageli</td>
</tr>
<tr>
<td>Daniel Halpern</td>
<td>John S. LaDue</td>
<td>V. George Nagobads</td>
</tr>
<tr>
<td>Barnard Hall</td>
<td>Mrs. Albina Phillips Lambert</td>
<td>W. S. Neff</td>
</tr>
<tr>
<td>D. K. Halvorsen</td>
<td>George E. Langsjoen</td>
<td>E. N. Nelson</td>
</tr>
<tr>
<td>James A. Hamilton Library</td>
<td>K. E. Latterell</td>
<td>Ceci J. Newall</td>
</tr>
<tr>
<td>Ernest M. Hammes, Jr.</td>
<td>John F. Laws</td>
<td>Lillian Nye*</td>
</tr>
<tr>
<td>Borghild Hansen</td>
<td>Arnold Lazarow</td>
<td>Dean D. Nywall</td>
</tr>
<tr>
<td>Harold B. Hanson</td>
<td>J. S. Lee</td>
<td>Orville O. Ockuly</td>
</tr>
<tr>
<td>Reuel D. Harmon</td>
<td>William C. Lee</td>
<td>Ruth E. Olson</td>
</tr>
<tr>
<td>James C. Harris</td>
<td>J. Paul Leonard</td>
<td>Ruth O'Neal</td>
</tr>
</tbody>
</table>

*Also Life Member

Eighteen
Non-Alumni Members (continued)

A. J. Ouellette
Carlton L. Ould*
C. A. Owen, Jr.
A. A. Papernos
Charles W. Parker
Robert L. Parker
Louis Pelner
Salvatore Perrelli
John F. Perry, Jr.
Helen Peterson
Richard A. Pfohl
R. F. Pierson*
John K. Pike
N. C. Plimpton
Robert F. Premer
James T. Priestley
Raymond D. Pruitt
Philip H. F. Pugh
Richard L. Purple
Quain & Ramstad Clinic
Robert Quesenberry
Paul C. Quit
Richard H. Quinlin
John J. Raich
Richard B. Raile
James R. Ralph
D. E. Ralston
Otto Raths
S. Augie Ratner
Verna Rusch
Philip L. Ray
Paul D. Redleaf
Richard E. Reiley
Milton P. Reiser
C. L. E. Remington, Sr.
F. J. Riethbrock
Wallace T. Ritchie*
Dean K. Rizer
Gilbert S. Ross
T. H. Rowell
J. G. Rushton
Mrs. Earl Sadoff

Burtrum C. Schielle
William Schofield
Edward Schons
Inge Schultze-Mork
Irwin Schulz
Leonard M. Schuman
Edward P. Schwartz
Arnold C. Schwyzer
S. J. Shanoksi
Irving Shapiro
Sidney K. Shapiro
Frederick E. Shideman
David L. Sigal
Stella H. Sikkema
L. O. Simenstad*
Werner Simon
Ernst Simonson
J. Singer
Abbott Skinner
Helen Skowlund
Arthur C. Smid
Ralph E. Smiley
Howard R. Snider
Mrs. Esther H. Snow
Juan Solar
John R. Spannuth
Mitchell W. Spellman
Kenath H. Spensel
R. G. Sprague
Loret A. Stapley
David State
Henry P. Staub
Burton R. Stein
J. M. Stickney
G. Keith Stillwell
Paul Strangford
Gordon J. Strwler
Joo Ho Sung
William R. Swaim
T. H. Sweetser, Sr.
Leslie W. Tasche*
Henry L. Taylor
William S. Terry
Carlo A. Terzuolo
A. Theologides
Arthur Thompson
Stewart C. Thomson
Louis Tobian, Jr.
Lyle Tonen
Louis M. Tredici
William W. Trousdale
Alfred Uihlein
Frank Ungar
David G. Utz
A. L. Vadheim*
Homer D. Ventsers
Robert L. Vernier
Richard W. Von Korff
Walter W. Walker*
Yang Wang
Charles T. Wangensteen*
Lewis W. Wannamaker
Herbert E. Warden
Alex M. Watson
Kenneth W. Watson
Edgar A. Webb*
Lowell W. Weber
Mary G. Weisensee
Lewis J. Weller*
Arthur H. Wells
John P. Wendland
Staney P. Wesolowski
Walter M. Whitaker
George E. Williams
W. Lane Williams
H. A. Williamson
Frederic B. Wilson
C. Paul Winchell
Winona Clinic
Robert B. Winter
Bernard Zimmerman
Horace H. Zimmener
Norbert H. Zweber

*Also Life Member

Resident Members

Yossef Aelony
Robert E. Anderson
Perry B. Bach
David W. Bean
Donovan L. Beckman
Thomas G. Bieter
John B. Campbell
Leo W. Cheng
Daniel B. Collin
Thomas J. Crowley
Francis J. Eason
Gary M. Eidovsky
David R. Foreman
Dennis C. Frisbie
Gary E. Garvis

Mark D. Hafermann
Beverly Hallquist
Robert C. Hauck
Robert D. Hilgers
Warren F. Hoffman
James House
John R. Huberty
Alec L. Janes
Robert Lee Johnson
Katsutoshi Kaneko
Harvey Kelman
David Kettleman
Toni M. Kiesel
Severin H. Koop
Klaus K. A. Kuehn

Carol Ann Larson
Donn S. Leaf
John B. Leary
Eugene S. Matsuyama
John D. McArthur
Byron C. McGregor
Douglas D. Maier
Robert F. Mack
Deane C. Manollos
Leonard I. Mastbaum
Paul E. Mertens
Melvin E. Meyer
Robert M. Morse
Audrey M. Nelson

Nineteen
Membership in the Minnesota Medical Foundation is open to anyone interested in medical education and research at the University of Minnesota.

Annual dues, which are tax-deductible, as as follows:

- **Patron Member** .................................. $1,000.00 total
- **Sustaining Member** ............................... 100.00 per year
- **Contributing Member** ............................ 25.00 per year
- **Alumni Annual Member** .......................... 10.00 per year
- **Resident Member** ................................. 3.00 per year
- **Intern and Student** .............................. 1.00 per year
- **Life Member** ................................... (no longer offered)
- **Non-Alumni Member** ............................. 10.00 per year

Twent
Strand, Richard C.*†
Born 3-10-41, Bayport, Minn.;

Struthers, Lewis E.*
Born 2-16-40, Red Lake Falls, Minn.; Intern: St. Mary’s Hosp., Duluth, Minn.; Gustavus Adolphus Coll., B.A. '63; Married.

Sutherland, David E. R.*†

Swanson, Thomas Raymond

Sweet, David

Terrian, James

Tharp, Ralph P., II
Born 8-2-36, Alamosa, Colo.;

Thompson, Richard Frank
Born 9-14-40, Rochester, Minn.;

Tingey, Vance B.
Born 12-7-37, Logan, Utah; Intern: Thomas D. Dess Memorial Hosp., Ogden, Utah; Utah State Univ., B.S. '63; Married.

Town, Louise Ann†

Tremann, James A.

Trockman, Rachel W.
Born 1-22-42, Minneapolis, Minn.; Intern: Cincinnati Gen. Hosp., Cincinnati, Ohio; St. Mary’s Coll., B.A. '62, B.S. '64; Married.

Trudeau, David L.*

Underhill, Gary E.
Born 5-8-40, Minnetonka Village, Minn.; Intern: St. Luke’s Hosp., Duluth, Minn.; Dartmouth Coll., U. of Minn., B.S. '64; Married.

Van Keulen, Leo J.

Vosika, Gerald J.
Born 7-9-42, Minneapolis, Minn.; Intern: U. of Minn. Hosp., Minneapolis, Minn.; U. of Minn., B.S. '64; Single.

*Scholarship Awardee, Minnesota Medical Foundation
†Member, Alpha Omega Alpha Honor Medical Fraternity
DOCTOR OF MEDICINE

Wallestad, Jon E.*
Born 2-23-41, Amboy, Minn.;
Intern: U.S. Naval Hosp., San
Diego, Calif.; U. of Minn., B.S.
'64; Married.

Warmath, Murray A., Jr.
Born 7-25-40, Columbus, Miss.;
Intern: Orange Co. Gen. Hosp.,
Orange, Calif.; U. of Minn.,
B.S. '64; Married.

Weston, David M.
Born 1-21-35, Minneapolis,
Minn.; Intern: Lancaster Gen.
Hosp., Lancaster, Pa.; U. of
Minn., B.S. '64; Married.

Whittemore, Dexter D., Jr.
Born 4-21-41, Bemidji, Minn.;
Intern: San Bernardino Co.
Hosp., San Bernardino, Calif.;
U. of Minn., B.A. '62; Single.

Wicklund, Richard G.
Born 4-20-40, Minneapolis,
Hosp., Orange, Calif.; U. of
Minn., B.A. '64; Married.

Wilson, Kent S.‡
Born 9-11-41, Bemidji, Minn.;
Intern: Denver Gen. Hosp.,
Denver, Colo.; U. of Minn.,
B.S. '63; Married.

Wright, David L.
Born 9-11-36, Byron, Minn.;
Intern: U.S.P.H.S. Hosp., Seat-
tle, Wash.; U. of Minn., B.S.
'59; M.D.-Ph.D. '66; Married.

Wyatt, Judith Rae
Born 8-23-40, Minneapolis,
Minn.; Intern: Mount Sinai
Hosp., Cleveland, Ohio; U. of
Ill., B.S. '62, U. of Minn., B.S.
'64; Married.

Zamansky, Marshall J.
Born 7-16-41, St. Paul, Minn.;
Intern: Montefiore Hosp., New
York City, N.Y.; U. of Minn.,
B.S. '63; Single.

*Scholarship Awardee, Minnesota Medical Foundation
‡Member, James E. Moore Society

THE LIGHTER SIDE

Comedian Bob Hope, in accepting the honorary degree of Doctor of Humane Letters from PMC Colleges (Pa.) in March:

This is the sixth time I've been honored this way, which is pretty good for a comedian. I've received so many doctor's degrees that lately I'm beginning to resent Medicare.
Hormonal and Non-Hormonal Control of Glycogen Metabolism*

Joseph Larner, M.D.† and Carlos Villar-Palasi, Ph.D.‡

Both the synthesis and the breakdown of glycogen which are catalyzed by the enzymes UDPG glycogen transferase and phosphorylase, respectively, are finely controlled steps in metabolism. Several hormones act specifically to regulate these reactions in an integrated manner, including insulin and epinephrine. Amplification in these enzyme systems can be visualized in terms of a cascading series of reactions. The mediating agent in the case of epinephrine has been identified as the nucleotide 3′5′ cyclic adenylic acid. The mediating agent in the case of insulin, if indeed there be one, is unknown. 3′5′ cyclic adenylic acid acts in a manner so as to enhance the effectiveness of certain phosphoprotein phosphorylation reactions in these cascades of reactions. In the presence of the cyclic nucleotide the association constant of the metal Mg++ to the enzyme as an activator is displaced in favor of the complex. The cyclic nucleotide duplicates the effects of the hormone on the sensitive enzyme systems, and is maximally effective at concentrations which are very low, of the order of 10⁻⁷ M.

Certain key metabolites, which themselves are not necessarily substrates, act as non-hormonal controls. The concentrations required for control in vitro are those at which these metabolites are present within the cells in vivo, which is compatible with a physiologic role. These metabolites include glycogen itself, glucose-6-phosphate and adenylic acid. The super-position of the hormonal and non-hormonal controls has been demonstrated in the case of glycogen transferase (and phosphorylase).

A number of inborn errors of metabolism result from an absence or deficiency of the enzymes of glycogen synthesis and

*From a report to the Staff Meeting of University Hospitals on June 3, 1966
†Hill Professor of Metabolic Enzymology, Department of Biochemistry
‡Assistant Professor, Department of Biochemistry

356
degradation. The absence of these enzymes may lead to an increased accumulation of glycogen or on the other hand to an absence of glycogen in tissues. Glycogen deposition may also result from the absence of certain enzymes which are related in a metabolic sense to those enzymes directly involved in glycogen metabolism, e.g., glucose-6-phosphate phosphatase, phosphofructokinase, and perhaps others. In these latter cases the absence of the enzyme leads indirectly to an increased storage of glycogen. In some instances the absence of enzymes of glycogen branch point synthesis or degradation may lead to the accumulation of abnormal glycogen structures within the cell. In other instances the glycogen may accumulate in abnormal locations within the cell. In general these genetic diseases considered as human experiments have given important unique insights into normal metabolism and its control. Some small progress has been made in the therapeutic management of these diseases.

Ileac Urinary Diversion*

Colin Markland, M.D.† and Richard McKinley, M.D.‡

Since 1950 an isolated segment of ileum, acting as an ileac conduit, has been regarded as the most satisfactory permanent way to divert the urinary stream.

The procedure is acceptable to both patient and doctor. Renal function is preserved, the urine is sterile, and the small, neat, esthetic collection devices allow the child or adult an unrestricted life with normal activities.

Current operative indications are widening. For example, with neurologic vesical dysfunction, once the detrusor muscle shows irreversible damage, early diversion should be considered. In this way there will be freedom from catheters, medications, and cysto-urethral complications. Simple appliance care aids rehabilitation; particularly important for children before school age.

*From a report to the Staff Meeting of University Hospitals, June 10, 1966
†Associate Professor, Division of Urology
‡Medical Fellow, Division of Urology
### EVALUATION OF ILEAC URINARY DIVERSIONS 1964-PRESENT

<table>
<thead>
<tr>
<th>Indications</th>
<th>No. of patients</th>
<th>Sex M/F</th>
<th>Normal pre and post op.</th>
<th>Improved post op.</th>
<th>Abnormality unchanged</th>
<th>Worse</th>
<th>% Sterile urine</th>
<th>% Operative complications Immediate</th>
<th>Late</th>
<th>Post operative</th>
<th>Deaths From disease</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neurologic bladder disease</td>
<td>21</td>
<td>11/10</td>
<td>6 (29%)</td>
<td>14 (66%)</td>
<td>1 (5%)</td>
<td>0</td>
<td>85%</td>
<td>1 (5%)</td>
<td>5 (24%)</td>
<td>1 (5%)</td>
<td>1 (5%)</td>
</tr>
<tr>
<td>Malignant disease (curative operations)</td>
<td>19</td>
<td>13/6</td>
<td>12 (63%)</td>
<td>6 (32%)</td>
<td>0</td>
<td>1 (5%)</td>
<td>75%</td>
<td>3 (16%)</td>
<td>2 (11%)</td>
<td>3 (16%)</td>
<td>5 (27%)</td>
</tr>
<tr>
<td>Malignant disease (palliative operations)</td>
<td>5</td>
<td>2/3</td>
<td>1 (20%)</td>
<td>3 (53%)</td>
<td>0</td>
<td>1 (20%)</td>
<td>20%</td>
<td>1 (20%)</td>
<td>0</td>
<td>0</td>
<td>3 (60%)</td>
</tr>
<tr>
<td>Congenital GU anomalies</td>
<td>7</td>
<td>3/4</td>
<td>4 (57%)</td>
<td>0</td>
<td>3 (43%)</td>
<td>0</td>
<td>71%</td>
<td>0</td>
<td>1 (14%)</td>
<td>1 (14%)</td>
<td>1 (14%)</td>
</tr>
<tr>
<td>With renal transplantation</td>
<td>9</td>
<td>3/6</td>
<td>0</td>
<td>4/7 (57%)</td>
<td>0</td>
<td>0</td>
<td>71%</td>
<td>2 (22%)</td>
<td>1 (11%)</td>
<td>2 (22%)</td>
<td>4 (44%)</td>
</tr>
<tr>
<td>Other</td>
<td>3</td>
<td>1/2</td>
<td>2 (66%)</td>
<td>1 (33%)</td>
<td>0</td>
<td>0</td>
<td>100%</td>
<td>1 (33%)</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Totals (with average)</td>
<td>64</td>
<td>33/31</td>
<td>40%</td>
<td>47%</td>
<td>9%</td>
<td>4%</td>
<td>77%</td>
<td>13%</td>
<td>15%</td>
<td>11%</td>
<td>20%</td>
</tr>
</tbody>
</table>
The Medical Bulletin

When operable malignant disease involves the lower urinary tract the ileac conduit is particularly valuable for it diverts the urine from the pelvis, frequently a site for later irradiation, or tumor recurrence. As a palliative procedure the operation frequently offers the chance for immediate relief from the distress of extensive pelvic disease.

Recently ileac diversion has been used in conjunction with renal homotransplantation. The transplanted kidney drains into a healthy peristaltic conduit, rather than a destroyed urinary tract.

Severe urinary dysfunction due to reflux and ureteral disease may call for a “high” pyelo-ileac type of diversion. Optimal results require a meticulous operative technique, with particular attention paid to making all anastomoses water tight, fashioning a short and straight conduit, and making an adequate “rose-bud” stoma.

Regular follow-up care emphasizes proper appliance management, regular pyelographic X-ray studies, and renal function tests.

Urine sterility is to be expected since urine transmission through the loop is rapid; similarly, electrolyte imbalance is not a problem, as the absence of urinary stasis results in negligible residual urine.

Review of current practice at the University Hospitals since 1964 shows 64 patients underwent this procedure for five main types of disorder (See table).

Neurologic bladder disease includes both congenital and acquired dysfunction such as traumatic paralysis, multiple sclerosis, and meningomyelocele. Congenital GU anomalies include problems such as bladder extrophy, ureteral dysfunction, and urethral valves. Other diseases comprise interstitial cystitis and tuberculosis.

Normal or improved upper tracts were seen in 85% of all patients. Sterile urine was found in 77%, particularly gratifying since there is always difficulty in obtaining a urine sample free from surface contamination. Immediate complications were due principally to minor stomal problems or found after curative radical pelvic surgery. Late complications included continuing severe bladder infection, particularly with “high cord” neurological disease (5 patients), and adhesive bowel obstruction in 2 patients. There were no problems due to urinary leakage. One child developed a uretero-ileal stricture, requiring subsequent lysis, but this was possibly related to previous retroperitoneal radiotherapy. Postoperative deaths were seen in connection with either extensive cancer surgery or after operations on azotemic anephric patients awaiting transplantation.
INDEX FOR VOLUME 37, 1965-66

UNIVERSITY OF MINNESOTA MEDICAL BULLETIN

Addiction, see Thompson, Travis, 37:281
Alexander, Paul J., see Strandjord, Paul E., et al., 37:85
Alumni Survey: The Class of 1935, 37:305
Alumni Survey: The Class of 1945, 37:206
Alumni Survey: The Class of 1950, 37:69
Alumni Survey: The Class of 1955, 37:106
Amebiasis by William C. Bernstein, 37:256
Amniotic Fluid Pigments in Rh-Sensitized Pregnancy by William D. Cohen, 37:126
Auditory Process, see Hilger, Jerome A., 37:186
Automation, see Strandjord, Paul E., et al., 37:85
Baker, Annie Laurie — Medical Care From Tax Sources, 37:284
Bearman, Jacob E.; Berryman, George H.; Brown, Byron W., Jr.; and Chan, Yick-Kwong — Myocardial Infarction: Two Cooperative Clinical Studies of Therapy, 37:289
Bell, E. T., see Medical School History — Part IV, 37:202
Bernstein, William C. — Amebiasis, 37:256
Berryman, George H., see Bearman, Jacob E., et al., 37:289
Bilirubin, see Howe and Pinto, 37:324
Biochemical Studies on the Pancreatic Islet Tissue Using the Microdissected Rat Islets by Padmakar K. Dixit, 37:128
Biology of Gram-Negative Bacterial Endotoxins by Dennis W. Watson and Yoon Berim Kim, 37:151
Biophysical Problems of Space Radiation by Vaughn C. Moore and Baruch S. Jacobson, 37:230
Brown, Byron W., Jr., see Bearman, Jacob E., et al., 37:289
Cafruny, Edward J. — Site and Mechanism of Action of Ethacrynic Acid, 37:232
Chan, Yick-Kwong, see Bearman, Jacob E., et al., 37:289
Coagulation, see White, James G., 37:83
Cole, Theodore M.; Kottke, Frederic J.; and Olson, Mildred E. — Alterations in Cardiovascular Control in High Spinal Myelomalacia, 37:287
Cohen, William D. — Amniotic Fluid Pigments in Rh-Sensitized Pregnancy, 37:126
Community Services Project by Robert Soll, 37:51
Comparative Hemodynamic and Humoral Responses of Puppies and Adult Dogs to Endotoxin by Jack L. Reddin, 37:124


Cowling, Dr. Donald J. - A tribute, 37:158

Defoe, Edward C. - The University Medical Center and the Community, 37:49

Diabetic Retinopathy: Effects of Pituitary Ablation and Retinal Photocoagulation by F. Thomas Ellingson and John E. Harris, 37:227

Dixit, Padmakar K. - Biochemical Studies on the Pancreatic Islet Tissue Using the Microdissected Rat Islets, 37:128

Edlich, Richard F., see Leonard, Arnold S., 37:241

Eilers, Vincent E., see Winter, Robert B., et al., 37:153

Ellingson, F. Thomas and Harris, John E. - Diabetic Retinopathy: Effects of Pituitary Ablation and Retinal Photocoagulation, 37:227

Endotoxin, see Reddin, Jack L., 37:124

Endotoxins, see Watson and Kim, 37:151

Erythropoietic Protoporphyria (A Cause of Sunlight Sensitivity) by Edward S. Peterka, Ramon M. Fusaro, Walter J. Runge, Manuel O. Jaffe, and Cecil J. Watson, 37:81

Ethacrynic Acid, see Cafruny, Edward J., 37:232

Expanding Vistas of Medical Education by Victor Johnson, 37:273

Experimental Addiction in Monkeys: Chronic Morphine Self-administration, by Travis Thompson, 37:281

Faculty Roster - College of Medical Sciences, 37:33

Flexner Report, see Medical School History - Part V, 37:238

Freier, Esther E., see Strandjord, Paul E., et al., 37:85

Fuller, Benjamin F. - Quantity and Quality in Medical Education and Patient Care, 37:320

Fusaro, Ramon M., see Peterka, Edward S., et al., 37:81


Glycogen Metabolism, see Larner and Villar-Palasi, 37:356

Harris, John E., see Ellingson, F. Thomas, 37:227

Hilger, Jerome A. - Objective Studies of the Auditory Process, 37:186

Hormonal and Non-Hormonal Control of Glycogen Metabolism by Joseph Larner and Carlos Villar-Palasi, 37:356

Howe, Robert B. and Pinto, Sergio De Tezanos - Studies on Ether-soluble Bilirubin, 37:324

Ileac Urinary Diversion by Colin Markland and Richard McKinley, 37:357

Intestinal Obstruction, see Leonard and Edlich, 37:241

Intrathoracic Manifestation of Malignant Lymphoma by John A. Tobin, 37:244

Impact of Automation on Laboratory Medicine by Paul E. Strandjord, Esther E. Freier, and Paul J. Alexander, 37:85

361
Jackson, Clarence M., see Medical School History—Part VI, 37:270
Jacobson, Baruch S., see Moore, Vaughn C., 37:230
Jaffe, Manuel O., see Peterka, Edward S., et al., 37:81
Johnson, Victor—Expanding Vis­tas of Medical Education, 37:273
Kim, Yoon Berm, see Watson, Dennis W., 37:151
Larner, Joseph and Villar-Palasi, Carlos—Hormonal and Non-Hormonal Control of Glycogen Metabolism, 37:356
Lymphoma, see Tobin, John A., 37:244
Malawi Mission: Medicine on the Frontier by Gaylan L. Rockswo­ld, 37:173
Markland, Colin, and McKinley, Richard—Ileac Urinary Diversion, 37:357
McKinley, Richard, see Mark­land, Colin, 37:357
McQuarrie, Irvine, see Medical School History—Part III, 37:170
Medical Care from Tax Sources by Annie Laurie Baker, 37:284
Medical Education, see Fuller, Benjamin F., 37:320
Medical Education, see Johnson, Victor, 37:273
Medical School History—Part I, The Beginning, 37:66
Medical School History—Part II, A Drastic Reorganization, 37:102
Medical School History—Part III, James E. Moore and Irvine McQuarrie, 37:170
Medical School History—Part IV, E. T. Bell and S. Marx White, 37:202
Medical School History—Part V, The Flexner Report, 37:238
Medical School History—Part VI, Clarence M. Jackson and Henry L. Ulrich, 37:270
Medical School History—Part VII, University Hospitals—1931, 37:302
Médicine Camerounaise by David M. Thompson, 37:138
Medicine on the Frontier, see Rockswold, Gaylan L., 37:173
Meier, Manfred J. and Resch, Joseph A.—Prediction of Neu­rological Change in Cerebrovascular Disease with Psycho­logical Tests, 37:250
Moe, John H., see Winter, Robert B., et al., 37:153
Moore, James E., see Medical School History—Part III, 37:170
Moore, Vaughn C., and Jacob­son, Baruch S.—Biophysical Problems of Space Radiation, 37:230
Myelomalacia, see Cole, Theodore M., et al., 37:287
Myocardial Infarction: Two Co­operative Clinical Studies of Therapy, by Jacob E. Bear­man, George H. Berryman, Byron W. Brown, Jr., and Yick-Kwong Chan, 37:289
Neuropathological Evidence of Vitamin E. Deficiency in Man by Joo Ho Sung, 37:247
Objective Studies of Auditory Process by Jerome A. Hilger, 37:186

Olson, Mildred E., see Cole, Theodore M., et al., 37:287

Pancreatic Islet Tissue, see Dixit, Padmakar K., 37:128


Pinto, Sergio De Tezanos, see Howe, Robert B., 37:324

Pituitary Ablation, see Ellingson and Harris, 37:227

Platelet Ultrastructure in the Chemistry of Coagulation by James G. White, 37:83

Prediction of Neurological Change in Cerebrovascular Disease with Psychological Tests by Manfred J. Meier and Joseph A. Resch, 37:250

Pregnancy, see Cohen, William D., 37:126

Quantity and Quality in Medical Education and Patient Care by Benjamin F. Fuller, 37:320

Radioautographic Studies of Synthetic Patterns for Tissues Labeled in Vitro by Bertram F. Woolfrey, 37:184

Reddin, Jack L. – Comparative Hemodynamic and Humoral Responses of Puppies and Adult Dogs to Endotoxin, 37:124

Resch, Joseph A., see Meier, Manfred J., 37:250

Retinal Photocoagulation, see Ellingson and Harris, 37:227


Runge, Walter J., see Peterka, Edward S., et al., 37:81

Scoliosis and Kyphosis, see Winter, Robert B., et al., 37:151

Seventy-Fifth Anniversary Symposium, 37:156

Site and Mechanism of Action of Ethacrynic Acid by Edward J. Cafruny, 37:232

Soll, Robert – A Community Services Project, 37:51

Space Radiation, see Moore and Jacobson, 37:230

Strandjord, Paul E.; Freier, Esther E.; and Alexander, Paul J. – The Impact of Automation on Laboratory Medicine, 37:85

Studies on Ether-soluble Bilirubin by Robert B. Howe and Sergio De Tezanos Pinto, 37:324

Sung, Joo Ho – Neuropathological Evidence of Vitamin E Deficiency in Man, 37:247

Sunlight Sensitivity, see Peterka, Edward S., et al., 37:81

Thompson, David M. – Médicine Camerounaise, 37:138

Thompson, Travis–Experimental Addiction in Monkeys: Chronomorphine Self-Administration, 37:281

Tobin, John A. – Intrathoracic Manifestations of Malignant Lymphoma, 37:244

Ulrich, Henry L., see Medical School History – Part VI, 37:270

University Hospitals, see Medical School History – Part VII, 37:302

University Medical Center and the Community by Edward C. Defoe, 37:49

363
Urinary Diversion, see Markland and McKinley, 37:357
Villar-Palasi, Carlos, see Larner, Joseph, 37:356
Vitamin E, see Sung, Joo Ho, 37:247
Watson, Cecil J., see Peterka, Edward S., et al., 37:81
Watson, Dennis W., and Kim, Yoon Bern — The Biology of Gram-Negative Bacterial Endotoxins, 37:151
White, James G. — Platelet Ultrastructure in the Chemistry of Coagulation, 37:83
White, S. Marx, see Medical School History — Part IV, 37:202
Winter, Robert B.; Moe, John H.; and Eilers, Vincent E. — Congenital Scoliosis and Kyphosis, 37:153
Woolfrey, Bertram F. — Radiographic Studies of Synthetic Patterns for Tissue Labeled in Vitro, 37:184

Remember the Minnesota Medical Foundation in Your Will
Medical School News

Six senior class members are spending 25 weeks at the Mayo Clinic in Rochester as half of their final year of the Medical School’s Comprehensive Clinic program. The new, cooperative program began June 13, 1966 under sponsorship of the Medical School and the Mayo Graduate School of Medicine.

Now at Rochester are seniors John Cheng, Dea Halverson, Bernard Kliks, Andre Nelson, Robert P. Newman, and Bruce Zimmerman. Under the program they will work with patients under the direction of Mayo Clinic physicians who are also faculty members of the Mayo Graduate School.

The program will be conducted on a one-year trial basis as a collaborative venture between Rochester and Minneapolis staff members of the University of Minnesota. A second group of seniors will enter the program in December. The entire program will be reviewed after these two groups have completed their studies.

Harold O. Peterson Elected First Chief of Hospitals Staff

Dr. Harold O. Peterson, professor and head of the department of Radiology, has been elected first chief of staff at the University Hospitals.

He fills a new post created under the revised constitution of the College of Medical Sciences, which was adopted earlier this year by the University of Minnesota’s Board of Regents. As chief of staff, Dr. Peterson is concerned with policy matters relating to all aspects of University Hospitals, including patient care in every department, student-staff relationships, and continuing operational procedures.

Dr. Peterson joined the faculty at Minnesota in 1936 as an instructor in radiology, and succeeded Dr. Leo Rigler as head of the department in 1957. He is a 1934 graduate of the Medical School.
Dr. Owen H. Wangensteen, professor and head of the Department of Surgery, was among five University of Minnesota professors granted the new title of Regents' Professor in ceremonies held June 11, 1966.

The honor was created by the University's Board of Regents for bestowal upon faculty members of "outstanding academic distinction judged on the scope and quality of their scholarly or artistic contributions, the quality of their teaching, and their contributions to the public good." It is the highest recognition granted to faculty members by the University of Minnesota, and consists of the title, a silver medallion, and a cash honorarium of $5,000.00 from the University of Minnesota Foundation.

Dr. Wangensteen has been chairman of the Department of Surgery at Minnesota since 1930. He is a 1922 graduate of the Medical School, and holds the B.A., M.D., and Ph.D. degrees from Minnesota, as well as a host of prizes, medals, awards, and honorary degree from other institutions. He is a native of Lake Park, Minn.

STUDENT NEWS

Kenneth Heithoff, 22, Verndale, Minn., has won the 1966 Rural Medical Scholarship of the Minnesota State Medical Association. He has just completed his freshman year at the Medical School, and will receive the $4,000.00 scholarship in return for his promise to spend at least five years in future medical practice in a Minnesota community of less than 5,000 population which needs a physician. William J. Norberg, Jr., Barnum, and David A. Pope, Lafayette, are other current MSMA scholars at the Medical School. Another scholarship holder, Roland R. Larter, Lancaster, is a member of the 1966 graduating class.

DERMATOLOGY

Dr. Ramon M. Fusaro, associate professor, is spending a single quarter sabbatical leave this summer in Copenhagen, Denmark. His project is an extension of his studies on glucose and glycogen metabolism of human skin.
Present and former staff members of the School of Public Health raised a fund and commissioned the above portrait of Dr. Gaylord W. Anderson, Mayo Professor and Director of the School, which was unveiled at a social hour May 26th. The artist, shown with Dr. Anderson, is Mr. Edward Brewer of St. Paul, Minn. Dr. Anderson was born near the University Campus, and was appointed head of the Department of Preventive Medicine and Public Health in 1937. Under his direction, the Department became the School of Public Health, a separate school within the College of Medical Sciences after World War II.

MEDICINE

Dr. Ivan D. Frantz, Jr., who holds the George S. Clark Research Professorship at the Medical School, was recently elected president of the Minnesota Heart Association.

Dr. Wesley W. Spink, professor, has been elected president of the Harvard Medical Alumni Association.

PEDIATRICS

Dr. Lewis W. Wannamaker, professor, has received a fellowship from the John Simon Guggenheim Memorial Foundation, and will spend the coming year working in two laboratories near London, England. Beginning July 1, 1966 his address will be Central Public Health Laboratory, Colindale Ave., London, N.W. 9, England. His family will spend the year in England with him.
Eight students who will begin freshman year studies at the Medical School in September have been named winners of $500.00 Minnesota Medical Foundation scholarships for 1966-67.

Awards are based on scholastic achievement in pre-medical studies and, to a lesser extent, on financial need. Presentation will be made Sept. 26.

Winners are Thomas M. Cosgriff, Moorhead; Kent D. Molde, Milan; Sandra Kay Niemi, Staples; William D. Berg, Bemidji; Robert D. Jacobson, Nevis; James C. Strom, Rochester; Wesley E. Brugger, Austin; and Milton C. Hanson, Bay City, Wis.

The Scholarship Fund of the Foundation is supported by the gifts and memberships of more than 3,000 alumni, physicians, and friends of the Medical School. Since 1949, the Fund has provided 510 scholarships worth a total of $268,020.

**RESEARCH GRANTS**

Ralph R. Grams, third year undergraduate medical student at the University of Minnesota, was awarded a grant of $1,500.00 by the Minnesota Medical Foundation recently for continuing computer study of hydrogen exchange properties of protein in solution. He will use the grant to purchase component parts for a computer which he will construct and use to analyze the complex kinetic data of the exchange of hydrogen.

Dr. Robert Gilsdorf, fellow in Surgery, was granted $2,000 for his project, “Ex-Vivo Perfusion of Organs Utilizing Artificial Apparatus.”

Dr. Mary Ann South, research fellow in Pediatrics, was awarded a $500.00 grant to continue her “Studies in Salivary Gamma Globulin.”

Research grants are offered by the Foundation from special earmarked funds contributed for research purposes, and are reserved for the benefit of younger medical investigators at the University of Minnesota.
Alumni Notes

♦ 1916
B. T. Bottolfson, 320 Center Ave., Moorhead, Minn., was among the Minnesota physicians honored this year by the Minnesota State Medical Association for 50 years of medical service.

♦ 1923
Clifford R. Myre, Paynesville, Minn., has retired from practice after 41 years in that community.

♦ 1925
Glen W. Tuttle writes from the Congo that he will be retiring in September after 34 years of missionary service in Africa. His future address will be 3336 Garfield Ave., Carmichael, Calif.

♦ 1938
G. Howard Hall, Fargo surgeon, has been elected president of the medical staff of St. Luke’s Hospital, Fargo, N.D.

♦ 1944
Elizabeth A. McGrew’s photo was spotted recently in a University of Illinois publication. She’s a professor of pathology at the College of Medicine’s Research and Educational Hospitals, and lives at 1853 Pork St., Evanston, Ill. She writes: “I live with a little old dog in a little old house and enjoy reading about my illustrious classmates in the MEDICAL BULLETIN – Bob Howard, John Coe, and Phil Pallister!”

♦ 1945
Sheldon C. Mandel writes: “The Feb. 1966 BULLETIN was in error in not listing my name in the Class of 1945. You inadvertently inserted the name of Sheldon L. Mandel, who was in the class behind me. We had similar problems in the past.” Sincerely yours, Sheldon C. Mandel.

Editor’s note: Will the real Sheldon Mandel please stand up?

♦ 1959
Dale L. Anderson arrives home in Austin, Minn. this summer after a year’s service with the Peace Corps in Ethiopia. His next assignment will be with the USPHS Indian Hospital in Gallup, New Mexico. Dale completed a surgical fellowship at the Mayo Graduate School before entering the Peace Corps.

Richard A. DeRemee is a newly appointed consultant in internal medicine at the Mayo Clinic. He completed a fellow-
THE MEDICAL BULLETIN

ship at Mayo Graduate School 1962-66, following military service.

* 1961

Rodney C. Johnson is finishing his first year of practice as a psychiatrist with the Sheboygan, Wis. Clinic. He and his wife, Dolyce, have three children. The latest “addition” is a sloop which Rod likes to race on Lake Michigan.

Roger R. Lundblad missed the Class of ’61 Roundup published last month but sends the following: “I’m starting my last year of urology residency with a rotation to Children’s Hospital, Columbus, O., although headquarters has been Minneapolis V.A. Hospital.” Roger and his wife, Jo, are parents of Eric, 6, and Ann, 4, and live at 4605 Wooddale Ave., Minneapolis 55424. He plans to enter private practice in Minneapolis in the future.

Thomas G. Ochsner starts two years of service under the Berry Plan at the Great Lakes, Ill., Naval Hospital on July 1st, having completed a urology residency at St. Paul-Ramsey Hospital. Tom remarks: “It will be a real change for I have been enrolled as a student at the University since graduation from high school in 1954. I’m proud to be a University of Minnesota product!” Tom’s family now includes his wife, Kay, and three pre-school children.

* 1962

Joel O. Brende is now in practice at Littlefork, Minn.

Tom Hart writes that he has begun an OB-GYN residency at UCLA School of Medicine. In scouting several possible locations “everyone I interviewed with was quite favorably impressed with Minnesota’s Medical School,” he writes. Tom lives at 14804 Dickens St., Sherman Oaks, Calif.

Paul E. Mertens is packing up this summer after a year’s pediatric residency at the University of Missouri Medical Center to return to Africa as a Lutheran medical missionary. Paul and his family will be at the mission hospital, Zorzor, Liberia, where he expects to practice general medicine as the only physician for 60,000 outpatients and 2,000 inpatients yearly. His address will be: Box 1046, c/o Lutheran Church in Liberia, Monrovia, Liberia.

* 1963

John D. Anderson is returning to Minnesota this summer to begin general practice at the Chisago Lakes Clinic, Lindstrom,
Minn. He has been serving with U.S.P.H.S. in Norfolk, Va., and Savannah, Ga. His wife and two daughters are with him.

1964

Capt. John A. Reichert writes from Korea: “I’m presently stationed with the Army near the demilitarized zone between North and South Korea, where 3 of us physicians look after 100 GI’s, Korean civilians, and orphans. Charles Koski is stationed just north of us in a front line unit. We get together at journal club each month.” John says he met classmate Bill Fritsche in Japan recently when Bill’s coast guard cutter arrived after a prolonged Pacific crossing, in which the medical officer was seasick. John’s address is c/o 2nd Medical Battalion, APO 96224, San Francisco, Calif.

PEDiatrics is part of Navy Lt. Randall L. Johnson’s Vietnam practice, while on assignment to the 2,000-man unit of U.S. Marines in the turbulent city of Da Nang. Randall (Med. ’64) makes regular trips to Vietnamese villages to treat civilians, in company with interpreters and Marine riflemen. He has been in Vietnam since last November, and is engaged to marry Miss Patricia Nourse, a nurse he met while an intern at St. Luke’s Hospital, Duluth, Minn. Mail will reach Randall c/o Med. Dept., 1st M.A.W., FMF, P.A.C., FPO San Francisco, Calif. 99602.

1965

Larry Brettingen enters the USPHS in July and is assigned to a 31-bed Indian Hospital at Harlem, Mont. He congratulates the editors of the MEDICAL BULLETIN, and expresses his “pleasure in reading each issue.” Larry also writes that he appreciates the work of the Minnesota Medical Foundation.
Alumni Deaths

♦ 1905
♦ 1907
♦ 1922
Dr. Albert J. Herbolsheimer, Minneapolis, Minn. Died June 4, 1966 at the age of 79 years. He practiced in Minneapolis until 1940, after which he was associated with Civil Aeronautics Authority in Washington, D.C., and Chicago, Ill. He had lived in Minneapolis in retirement since 1954.
♦ 1925
Dr. William R. R. Loney, Tulsa, Okla. Died May 2, 1966. He was 65 years old and a native of Willmar, Minn. He had practiced in Tulsa since 1933 with the specialty of obstetrics and gynecology.
♦ 1933
Dr. Armer H. Stolpestad, St. Paul, Minn. Died May 31, 1966, age 57 years. He had been in ill health. The family prefers memorials to the Minnesota Medical Foundation, Box 193, University Hospitals, for the Armer H. Stolpestad Scholarship Fund.

MEMORIALS

The Minnesota Medical Foundation acknowledges with gratitude recent contributions made in memory of:

Nickolas E. Carpenter
Cannon Falls, Minn.

Dr. Malcolm R. Johnson
Minneapolis, Minn.

Mrs. Marie Drage
Minneapolis, Minn.

Harry C. Miller
Winona, Minn.

Mrs. Helen Nelson Drake
Minneapolis, Minn.

Mrs. Lenore O'Connell
Minneapolis, Minn.

Christ Gunderson
Alexandria, Minn.

Dr. A. H. Stolpestad
St. Paul, Minn.

Dr. John Williams
Minneapolis, Minn.

This is the concluding issue of Volume XXXVII, University of Minnesota MEDICAL BULLETIN, which has been published monthly from September through June of the 1965-66 academic year. No issues are published in July and August. Publication of Volume XXXVIII will begin in September, 1966.

372
CONTINUATION COURSES FOR PHYSICIANS

1966

June 1 - 3 .......................... Anesthesiology
June 16 - 18 ........................ Hypnosis in Medicine
September 20 - 22 ............... Pediatrics
September 29 - October 1 ....... Nuclear Medicine
October 6 - 8 ....................... Obstetrics
October 10 - 15 ................... Vectorcardiography
October 20 - 22 ................... Dermatology
October 31 - November 4 ...... Radiology (Angiography)

The University of Minnesota reserves the right to change this schedule without notification.

Courses are held at the Center for Continuation Study or the Mayo Memorial Auditorium on the campus of the University of Minnesota. Usual tuition fees are $50 for a two-day course, $60 for a 2½-day course, $70 for a three-day course, and $100 for a one-week course. Specific announcements are sent out about two months prior to each course to all members of the Minnesota State Medical Association and to any physicians who request information for a specific course. For further information write to:

DIRECTOR
DEPARTMENT OF CONTINUATION MEDICAL EDUCATION
THE MEDICAL CENTER (Box 193)
UNIVERSITY OF MINNESOTA
MINNEAPOLIS, MINNESOTA 55455