

Transactions of the
Philadelphia
Academy of Surgery

VOLUME XXXIII

1976-1980



100th Anniversary Edition

Transactions of the
Philadelphia
Academy of Surgery

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1976-1980

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NOTICE

The thirty-third volume of the TRANSACTIONS OF THE PHILADELPHIA ACADEMY OF SURGERY covers the 5 years from 1976 to 1980 inclusive.

Elmer L. Grimes, M.D.

Recorder

Library of Congress

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Constitution

ARTICLE I

The name of the Society shall be "THE PHILADELPHIA ACADEMY OF SURGERY."

ARTICLE II

The objects of the Academy shall be the Cultivation and Improvement of the Science and Art of Surgery, the Elevation of the Medical Profession, the Promotion of the Public Health, and such other matters as may come legitimately within its sphere.

ARTICLE III

Section 1. The Society shall consist of Active, Senior, Nonresident, Government Service, and Honorary and Inactive Fellows.

Section 2. The Active Membership shall be limited to one hundred and fifty (150) Fellows.

Section 3. Active Fellows shall automatically become Senior Fellows of the Academy after they have been members for twenty (20) years or have reached the age of sixty (60). Senior Members shall have all the privileges of Active Fellows.

Section 4. Upon request, any Fellow in good standing, who may remove from the City of Philadelphia, to reside at a distance exceeding thirty (30) miles from the City Hall, may be made a Nonresident Fellow of the Academy, by recommendation of the Council and a two-thirds vote of the Fellows present at any regular meeting of the Academy. Nonresident Fellows shall have all the privileges of Active Fellows.

Section 5. Officers of the Government Services stationed in Philadelphia may be elected as Government Fellows of the Philadelphia Academy of Surgery for the period of their stay in Philadelphia. Such Fellows shall have all the rights and privileges of Active Fellows but shall be ineligible to vote or hold office.

Section 6. Honorary Fellows, to the number of thirty (30), may from time to time be elected. They shall not be eligible for election as Officers.

Section 7. Inactive Fellows. This consists of Active Fellows or Senior Fel-

lows no longer in active practice of Surgery but who wish to participate in the activities of the Philadelphia Academy of Surgery. These Fellows will be subject to reduced dues and will not be subject to assessments.

ARTICLE IV

The Officers of the Academy shall consist of the President, the First Vice-President, the Second Vice-President, the Secretary, the Treasurer, the Recorder, and the Chairman of the Committee on Scientific Business.

ARTICLE V

These Officers shall be elected by a ballot each year and shall be eligible for re-election. A Fellow may serve as President for only two (2) terms.

ARTICLE VI

There shall be a standing Committee on Scientific Business.

The Committee on Scientific Business shall consist of a Chairman, who is an elected Officer of the Society, the Recorder, and one (1) Fellow appointed by the President. The duties of this Committee shall be to organize the Scientific Programs of the Society.

ARTICLE VII

A Council shall be established consisting of the President, the Vice-Presidents, the Secretary, the Treasurer, the Chairman of the Business Committee, and three (3) Fellows-at-large elected by the Society annually, one (1) of whom will whenever possible be a previous President. The President of the Academy shall act as Chairman of the Council. The duties of the Council shall be three:

1. To act as an Executive Committee for the Academy between meetings,
2. To receive all nominations for Fellowship and to report names for election to the Academy after due investigation.
3. To act as a Board of Censors as required by the Academy.

ARTICLE VIII

At the stated meeting in February every fifth year, three (3) Fellows shall be appointed by the President to serve for five (5) years, or until their successors are appointed, as Trustees of the S. D. Gross Prize Fund and Library. It shall be the duty of the Trustees to keep charge of the Fund, to attend to its safe investment, and to submit a report to each annual meeting of the Academy of their work during the year, which shall be entered upon the minutes of the Academy. The Trustees shall have, on behalf of the Academy, charge of the S. D. Gross Library, which is, in accordance with the will of the Testator, in the custody of the College of Physicians of Philadelphia. They shall each year make such additions to the collection of Surgical Books in the Library as may be deemed advisable, and as the funds contributed to the care and support of

the Library may permit. They shall have charge of the distribution of the S. D. Gross Prize. It shall be their duty to publish in the medical journals the conditions on which the Prize is offered, to receive all essays submitted for competition, and upon approval of their decision by the Academy, to make award of the Prize to the successful competitor.

ARTICLE IX

To become a Fellow of the Academy, a physician must be a Doctor of Medicine who has graduated from a reputable School of Medicine at least ten (10) years before he is proposed. He must be proposed by at least three (3) Fellows of the Academy, who shall write letters to the Secretary in support of the proposal. The candidate for Fellowship must receive the approval of the Council before his name may be presented to the Academy as a candidate for election. He must meet such other requirements as are from time to time stipulated in the By-Laws and must be elected by the Fellows in accordance with the By-Laws.

ARTICLE X

Any Fellow having complied with the requirements of the Constitution and By-Laws may resign his Fellowship by presenting at a stated meeting a communication to that effect, with the Treasurer's certificate that he is not indebted to the Academy, and such resignation shall become valid on acceptance by the Academy.

Any violations of the regulations of the Academy, and of the Code of Medical Ethics adopted by it, shall be punished by reprimand, suspension, or expulsion after a full hearing by the Council of the Academy or upon the request of the Fellow in question by the Academy itself.

ARTICLE XI

This Constitution may be amended by a two-thirds vote of the Fellows, after such amendment has been presented in writing to the Secretary and read at the two previous meetings of the Academy, and circulated with the call to the meeting at which action is to be taken.

By-Laws

SECTION I

MEETINGS

The stated meetings of the Academy shall be held at eight-fifteen o'clock P.M., on the first Monday of each month, except June, July, August and September. The date of any stated meeting may be changed at the discretion of

the Council by giving notice to the Fellows at least two (2) weeks before the meeting.

SECTION II

SPECIAL MEETINGS

A special meeting may be called at any time by the President, and it shall be his duty to do so upon the requisition, in writing, of any ten (10) Fellows.

SECTION III

QUORUM

For the transaction of ordinary business any number of Fellows shall, at any meeting, constitute a quorum. For all elections, changes in the Constitution and By-Laws, for ordering assessments, or for the appropriation or expenditure of any sum of money exceeding one hundred dollars (\$100.00), or for any other business affecting the interests of the Academy, or of its individual Fellows, fifteen (15) shall be required to be present.

SECTION IV

DUTIES OF OFFICERS—PRESIDENT AND VICE-PRESIDENTS

The President shall preside at the meetings, regulate debates, sign Certificates of Fellowship, appoint committees not otherwise provided for, announce the results of elections, and perform all other duties pertaining to his office. The Vice-Presidents shall assist the President in the discharge of his functions, and in his absence preside in the order of seniority.

SECTION V

SECRETARY

The Secretary shall keep the minutes of the meetings of the Academy, one copy of which he shall send to the Recorder. He shall notify the Fellows of the meetings, announcing on the notices the business to be transacted, with the names of candidates for Fellowship to be balloted upon by the Academy, attest all official acts requiring certificates in connection with, or independently of, the President, notify the Officers and Fellows of their election, acquaint newly elected Fellows with the requirements of the By-Laws concerning admission, receive the signatures of newly elected Fellows, take charge of papers not otherwise provided for, shall keep in his custody the seal of the Academy, and affix it to any documents or papers that the Academy may direct.

SECTION VI

TREASURER

It shall be the duty of the Treasurer to receive all moneys and funds belonging to the Academy, unless otherwise provided for; he shall pay bills for all expenses properly incurred by the Academy; collect all dues and assessments as promptly as possible, and present an annual account for audit. Two auditors shall be appointed by the President at the Annual Meeting to audit these accounts.

At the December meeting, the Treasurer shall propose suitable honoraria for the secretaries of the following officers: the Secretary, the Treasurer, the Recorder, the Chairman of the Committee on Scientific Business, and upon affirmative vote of the Fellows shall send such honoraria before Christmas.

SECTION VII

RECORDER

The Recorder shall serve as a Member of the Committee on Scientific Business. He shall receive copies of the Annual Oration. He shall maintain the archives of the Academy, including copies of the minutes, and he shall consult with Fellows who present Annual Orations and Memoirs before the Academy in regard to publication. He shall maintain the material required for publication of the *Transactions of the Philadelphia Academy of Surgery*, and shall act as Editor for the *Transactions*, arranging for their publication at intervals of approximately four (4) years as required by the Academy.

SECTION VIII

COUNCIL

The Council of the Academy shall hold meetings for the transaction of routine business upon notice from the Secretary and special meetings shall be held on call of the President or on the call of any two (2) of its own number. A quorum shall consist of not less than four (4) of its members, and notice of any unusual business or any routine business having unusual significance for the Academy shall be sent to members at least five (5) days prior to a meeting.

SECTION IX

THE COMMITTEE ON SCIENTIFIC BUSINESS

The Committee on Scientific Business shall consist of three (3) Fellows, a Chairman elected by the Academy, the Recorder, and one (1) additional Fellow appointed by the President. It shall have charge of the scientific business of the meetings, it shall be its duty to provide for the presentation of papers and discussions of subjects for each meeting, it shall arrange, at such times as may

deem proper, for the discussion of scientific subjects by the Fellows of the Academy, and it shall, when authorized by the Academy, invite members of the profession, resident or nonresident, to read papers before the Academy, or to present topics for discussion. It shall act as a committee on publication, and shall present at the annual meeting a report of the work done during the year, which shall be entered upon the minutes of the Academy.

SECTION X

ANNUAL ORATION

There shall be appointed by the President at the stated meeting in February of each year, a Fellow whose duty it shall be to deliver at a stated meeting, usually December, of that year, an address in Surgery. This address shall be delivered to the Recorder in writing at the time of its presentation, and it shall be published in the *Transactions* of the Academy. After consultation with the Recorder, it may be published in any other reputable scientific journal so long as it is identified as the Annual Oration of the Philadelphia Academy of Surgery, and so long as permission is obtained for its subsequent publication in the *Transactions* of the Academy.

SECTION XI

ELECTION OF OFFICERS

At the November meeting of the Academy, the President shall nominate three (3) Fellows to act as a Nominating Committee. Insofar as possible, these shall be previous Presidents of the Academy. This Committee shall report at the December meeting each year. Additional Fellows may be nominated for any office from the floor. The Officers of the Academy shall be elected at the January meeting. The election shall be by ballot whenever more than one (1) candidate has been nominated for any office, and a majority of all those present shall be necessary to a choice. Where there is no contest, election may be by acclamation.

SECTION XII

PROPOSALS FOR FELLOWSHIP

Proposals for Fellowship shall be in writing signed by three (3) Fellows with a letter from each vouching for the character of the candidate. Completed nominations shall be considered by the Council at its next meeting. In the event action is deferred for more than three (3) meetings of Council, the President shall communicate with one or more of the candidate's sponsors.

No candidate may be proposed for Fellowship who has not made at least one (1) presentation before the Academy. The names of candidates who are to be recommended by the Council shall be published with the notices of the

meeting immediately preceding consideration by the Fellows. Certification by the candidate's specialty board is not a requirement, but the case of an individual who is not certified must be especially strong to justify his election. It is expected that a candidate proposed for Fellowship will have attained some reputation in surgical practice, research and/or teaching.

SECTION XIII

ELECTION OF FELLOWS

The names of candidates proposed for Fellowship, who are approved by Council, shall be read with supporting letters from each of the three (3) proposers at a stated meeting of the Academy. Their names shall be read at a second meeting, and sent out with a call to the following meeting at which the election shall be held. Election of candidates for Fellowship who have been reported upon by the Council may take place at any stated meeting and shall be by ballot. A two-thirds vote of those present shall be necessary to elect the candidate to Fellowship.

A candidate for Fellowship failing to obtain the requisite number of votes in his favor may not again be nominated before the expiration of two (2) years.

SECTION XIV

SIGNING THE CONSTITUTION

Every person elected to be a Fellow shall pay the initiation fee and shall sign the Constitution and By-Laws. No person shall acquire the rights of Fellowship unless he makes payment of the initiation fee and signs the Constitution and By-Laws by the third meeting following his election.

SECTION XV

INITIATION FEE

Every Fellow shall, on admission, pay an initiation fee of twenty-five dollars (\$25.00).

SECTION XVI

ANNUAL DUES

There shall be an annual assessment of fifteen dollars (\$15.00), to be paid within four (4) months after the meeting in January. Fellows elected in November or December shall not be subject to the annual assessment for that year. The annual assessment for Nonresident Fellows shall be five dollars (\$5.00). The dues for Senior Fellows who have retired from practice may be reduced or permanently remitted by a two-thirds vote of Council. Government

Fellows shall be assessed annual dues of \$15.00. Inactive Fellows will be subject to reduced dues and will not be subject to assessments. Dues of Active Fellows who go on active duty with the government may be remitted temporarily by action of Council.

Any Fellow who requests relief from the payment of dues and assessments may, at the discretion of the Council, be relieved of such dues and assessments, without loss of his Fellowship or other rights.

SECTION XVII

Any Fellow in arrears for one (1) year, being notified of the fact by the Treasurer, in writing, and not paying his dues within two (2) months thereafter, shall forfeit his Fellowship; and it shall be the duty of the Treasurer to notify the Academy of such forfeiture, which shall be entered on the minutes, and the name stricken from the list of Fellows. The notice aforesaid shall contain a copy of this section.

Any active Fellow not attending at least two (2) of the Stated Meetings in any one (1) year (October through May) shall state in writing to the Secretary the reasons for this failure. The names of such Active Fellows shall then be read to the members of Council by the Secretary. The members of Council may then take whatever action they deem necessary as follows: excuse, reprimand, or expel the offending Fellow.

SECTION XVIII

GUESTS

The Scientific Programs of the Society shall be open to any members of the medical profession and individuals in ancillary fields, including medical students and graduate students in the medical sciences, unless attendance is specifically restricted by vote of the Academy. Any Fellow may invite any medical man in good standing to a meeting of the Academy as an official guest. Such an official guest shall be introduced to the President, and to the Academy by the President, and his name entered upon the minutes. The President may invite any such person to participate in the discussion.

Business meetings shall be limited to Fellows of the Academy, except when a non-Fellow shall be invited to attend some portion of a business meeting for a particular purpose at the request of the President, who shall make known the presence of such an individual at the beginning of the meeting.

SECTION XIX

SEAL AND CERTIFICATE OF FELLOWSHIP

The Academy shall have a distinct seal, as well as a Certificate of Fellowship, to a copy of which, signed by the President and Secretary, every Fellow shall be entitled.

SECTION XX

ORDER OF BUSINESS

The order of business shall be as follows unless modified by the President:

- I. Scientific Proceedings:
 1. Call to order.
 2. Introduction of guests.
 3. Introduction of new Fellows.
 4. Reading of scientific papers, including the discussion of each.
- II. Business Session:
 1. Reading of minutes of the last meeting.
 2. Reports of committees.
 3. Unfinished business.
 4. New business.
 5. Election of officers.
 6. Election of Fellows.
 7. Adjournment.

SECTION XXI

RULES OF ORDER

The proceedings of the Academy shall be conducted according to *Robert's Rules of Order*.

SECTION XXII

ALTERATIONS OF THE BY-LAWS

Amendments to the By-Laws may be made at any stated meeting at which a quorum is present, providing that notice of the proposed amendment shall have been sent to the members with the call to the meeting at least five (5) days in advance. A majority vote shall suffice for amendment to the By-Laws.

Founders

Founded April 21, 1879

Incorporated December 27, 1879

- *SAMUEL D. GROSS, M.D., LL.D., D.C.L., Oxon
- *D. HAYES AGNEW, M.D., LL.D.
- *ADDINELL HEWSON, M.D.
- *RICHARD J. LEVIS, M.D.
- *THOMAS G. MORTON, M.D.
- *JOHN H. PACKARD, M.D.
- *JOHN H. BRINTON, M.D.
- *WILLIAM H. PANCOAST, M.D.
- *J. EWING MEARS, M.D.
- *SAMUEL W. GROSS, M.D., LL.D.

*Deceased

List of Officers, 1980

President

BROOKE ROBERTS, M.D.

First Vice-President

WILLIAM T. FITTS, JR., M.D.

Second Vice-President

PAUL NEMIR, JR., M.D.

Secretary

FREDERICK B. WAGNER, JR., M.D.

Treasurer

CHARLES C. WOLFERTH, JR., M.D.

Recorder

ELMER L. GRIMES, M.D.

Council

DONALD R. COOPER, M.D.

WILLIS P. MAIER, M.D.

FRANCIS E. ROSATO, M.D.

*With the President, First and Second Vice Presidents,
Secretary, Treasurer and Chairman of the Business Committee*

Chairman, Committee of Scientific Business

R. ROBERT TYSON, M.D.

Samuel D. Gross Prize Fund

MOREYE NUSBAUM, M.D., Chairman

Philadelphia Academy of Surgery

Founded April 21, 1879

Incorporated December 27, 1879

Officers

1879

Temporary Chairman ADDINELL HEWSON

Temporary Secretary J. EWING MEARS

Temporary Treasurer WILLIAM HUNT

Temporary Recorder JOHN B. ROBERTS

PRESIDENT

ELECTED

1880 SAMUEL D. GROSS
1884 D. HAYES AGNEW
1891 WILLIAM HUNT
1895 THOMAS G. MORTON
1898 DEFOREST WILLARD
1902 RICHARD H. HARTE
1904 HENRY R. WHARTON
1906 JOHN B. ROBERTS
1908 WILLIAM J. TAYLOR
1910 ROBERT G. LECONTE
1912 GWILYM G. DAVIS
1914 JOHN H. GIBBON
1916 CHARLES H. FRAZIER
1918 EDWARD MARTIN
1920 GEORGE C. ROSS
1922 JOHN H. JOPSON
1924 EDWARD B. HODGE
1926 CHARLES F. MITCHELL
1928 ASTLEY P. C. ASHHURST
1930 GEORGE P. MULLER
1932 JOHN SPEESE
1934 WALTER ESTELL LEE
1936 DAMON B. PFEIFFER

ELECTED

1938 J. STEWART RODMAN
1940 ELDRIDGE L. ELIASON
1942 ROBERT H. IVY
1944 HUBLEY R. OWEN
1946 JOHN B. FLICK
1948 THOMAS A. SHALLOW
1950 CALVIN M. SMYTH
1952 I. S. RAVDIN
1954 L. K. FERGUSON
1956 JOHN GIBBON, JR.
1958 ADOLPH WALKLING
1960 W. EMORY BURNETT
1962 J. MONTGOMERY DEAVER
1964 JONATHAN E. RHOADS
1965 GEORGE J. WILLAUER
1967 GEORGE P. ROSEMOND
1970 JULIAN JOHNSON
1972 WILLIAM H. ERB
1974 JOHN Y. TEMPLETON, III
1976 H. TAYLOR CASWELL
1978 DONALD R. COOPER
1980 BROOKE ROBERTS

VICE-PRESIDENT

ELECTED

1880 D. HAYES AGNEW
1880 R. J. LEVIS

ELECTED

1884 SAMUEL W. GROSS
1889 JOHN H. PACKARD

ELECTED

- 1891 WILLIAM W. KEEN
- 1891 J. EWING MEARS
- 1898 JOHN ASHHURST, JR.
- 1900 RICHARD H. HARTE
- 1900 HENRY R. WHARTON
- 1902 JOHN B. DEAVER
- 1904 JOHN B. ROBERTS
- 1905 WILLIAM J. TAYLOR
- 1906 ROBERT G. LECONTE
- 1908 G. G. DAVIS
- 1910 JOHN H. GIBBON
- 1912 CHARLES H. FRAZIER
- 1914 EDWARD MARTIN
- 1916 GEORGE G. ROSS
- 1918 JOHN H. JOPSON
- 1919 H. C. DEAVER
- 1920 JOHN H. JOPSON
- 1920 EDWARD B. HODGE
- 1922 CHARLES F. MITCHELL
- 1924 ASTLEY P. C. ASHHURST
- 1926 ASTLEY P. C. ASHHURST
- 1926 GEORGE P. MULLER
- 1928 JOHN SPEESE
- 1930 WALTER ESTELL LEE

ELECTED

- 1932 DAMON B. PFEIFFER
- 1934 J. STEWART RODMAN
- 1936 E. J. KLOPP
- 1938 ELDRIDGE L. ELIASON
- 1938 ROBERT H. IVY
- 1940 HUBLEY R. OWEN
- 1942 JOHN B. FLICK
- 1943 THOMAS A. SHALLOW
- 1945 CALVIN M. SMYTH
- 1948 L. KRAEER FERGUSON
- 1950 I. S. RAVDIN
- 1952 L. K. FERGUSON
- 1954 JOHN H. GIBBON, JR.
- 1956 ADOLPH WALKLING
- 1958 W. EMORY BURNETT
- 1960 J. MONTGOMERY DEAVER
- 1962 JONATHAN E. RHOADS
- 1964 GEORGE J. WILLAUER
- 1965 GEORGE P. ROSEMOND
- 1967 JULIAN JOHNSON
- 1976 DONALD R. COOPER
- 1978 BROOKE ROBERTS
- 1980 WILLIAM T. FITTS, JR.

SECRETARY

ELECTED

- 1880 J. EWING MEARS
- 1885 J. HENRY C. SIMES
- 1893 THOMAS R. NEILSON
- 1896 WILLIAM J. TAYLOR
- 1905 JOHN H. GIBBON
- 1909 CHARLES F. MITCHELL
- 1915 GEORGE P. MULLER
- 1920 J. STEWART RODMAN
- 1922 HUBLEY R. OWEN
- 1930 DEFOREST P. WILLARD
- 1935 HENRY P. BROWN, JR.

ELECTED

- 1940 JOHN B. FLICK
- 1942 L. KRAEER FERGUSON
- 1943 CALVIN M. SMYTH
- 1945 L. KRAEER FERGUSON
- 1948 J. MONTGOMERY DEAVER
- 1958 WILLIAM B. FITTS
- 1960 HENRY P. ROYSTER
- 1964 THOMAS F. NEALON
- 1967 DONALD R. COOPER
- 1974 PAUL NEMIR, JR., M.D.
- 1980 FREDERICK B. WAGNER, SR.

TREASURER

ELECTED

- 1880 WILLIAM HUNT
- 1891 WILLIAM G. PORTER
- 1904 JAMES P. HUTCHINSON
- 1911 EDWARD B. HODGE

ELECTED

- 1920 DUNCAN L. DESPARD
- 1922 WILLIAM B. SWARTLEY
- 1935 L. KRAEER FERGUSON
- 1938 HARRY E. KNOX

ELECTED

- 1947 S. DANA WEEDER
- 1960 ORVILLE C. KING
- 1965 EDWIN W. SHEARBURN

ELECTED

- 1974 WILLIAM T. FITTS, JR.
- 1980 CHARLES C. WOLFERTH, JR.

RECORDER

ELECTED

- 1880 JOHN B. ROBERTS
- 1881 DEFOREST WILLARD
- 1884 C. B. G. DENANCREDE
- 1884 J. EWING MEARS
- 1891 LEWIS W. STEINBACH
- 1902 JOHN H. GIBBON
- 1905 JOHN H. JOPSON
- 1915 JOHN SPEESE
- 1920 HENRY P. BROWN, JR.
- 1922 J. WILLIAM BRANSFIELD

ELECTED

- 1926 CALVIN M. SMYTH, JR.
- 1937 ADOLPH A. WALKLING
- 1950 JONATHAN E. RHOADS
- 1952 W. EMORY BURNETT
- 1956 FREDERICK A. BOTHE
- 1960 H. TAYLOR CASWELL
- 1966 WILLIAM S. BLAKEMORE
- 1974 EDWIN W. SHEARBURN
- 1976 JOSEPH W. STAYMAN
- 1980 ELMER L. GRIMES

COUNCIL

ELECTED

- 1880 JOHN ASHHURST, JR.
- 1880 JOHN H. BRINTON
- 1894 WILLIAM B. HOPKINS
- 1895 HENRY R. WHARTON
- 1898 THOMAS R. NEILSON
- 1900 W. JOSEPH HEARN
- 1902 ROBERT G. LECONTE
- 1906 THOMAS R. NEILSON
- 1910 J. CHALMERS DE COSTA
- 1920 CHARLES F. MITCHELL
- 1922 GEORGE G. ROSS
- 1922 JAMES H. BALDWIN
- 1923 WILLIAM J. TAYLOR
- 1924 JOHN H. JOPSON
- 1924 JOHN SPEESE
- 1925 EDWARD B. HODGE
- 1926 DAMON B. PFEIFFER
- 1927 CHARLES F. MITCHELL
- 1930 ASTLEY C. ASHHURST
- 1930 HUBLEY R. OWEN
- 1932 GEORGE P. MULLER
- 1935 DEFOREST P. WILLARD
- 1936 WALTER ESTELL LEE
- 1936 ROBERT H. IVY
- 1940 J. STEWART RODMAN
- 1940 DAMON B. PFEIFFER

ELECTED

- 1941 EDWARD B. HODGE
- 1942 THOMAS A. SHALLOW
- 1942 ELDRIDGE L. ELIASON
- 1943 ROBERT H. IVY
- 1946 HUBLEY R. OWEN
- 1947 CHARLES F. MITCHELL
- 1948 FRANCIS C. GRANT
- 1950 THOMAS A. SHALLOW
- 1952 ADOLPH WALKLING
- 1952 CALVIN M. SMYTH
- 1954 I. S. RAVDIN
- 1954 FREDERICK A. BOTHE
- 1956 FREDERICK ROBBINS
- 1956 L. KRAEER FERGUSON
- 1957 FREDERICK ROBBINS
- 1958 JOHN H. GIBBON, JR.
- 1959 ORVILLE C. KING
- 1960 ADOLPH WALKLING
- 1960 JONATHAN E. RHOADS
- 1962 DONALD K. COOPER
- 1962 W. EMORY BURNETT
- 1964 J. MONTGOMERY DEAVER
- 1965 JONATHAN E. RHOADS
- 1967 JOHN Y. TEMPLETON
- 1967 GEORGE WILLAUER
- 1974 WILLIAM H. ERB

ELECTED

- 1974 CHARLES C. WOLFERTH, JR.
- 1974 JOSEPH W. STAYMAN, JR.
- 1976 JOHN Y. TEMPLETON, III
- 1976 CHARLES C. WOLFERTH, JR.
- 1976 R. ROBERT TYSON
- 1978 H. TAYLOR CASWELL

ELECTED

- 1978 ELMER L. GRIMES
- 1978 FREDERICK B. WAGNER, JR.
- 1980 DONALD R. COOPER
- 1980 WILLIS B. MAIER
- 1980 FRANCIS E. ROSATO

With President, Vice-President, Secretary and Treasurer

BUSINESS COMMITTEE

ELECTED

- 1895 WILLIAM J. TAYLOR
- 1895 DEFOREST WILLARD
- 1896 RICHARD H. HARTE
- 1897 ROBERT G. LECONTE
- 1900 G. G. DAVIS
- 1902 JOHN H. JOPSON
- 1905 GEORGE C. ROSS
- 1908 FRANCIS T. STEWART
- 1914 JOHN SPEESE
- 1916 WALTER ESTELL LEE
- 1916 MORRIS BOOTH MILLER
- 1917 DAMON B. PFEIFFER
- 1917 ASTLEY P. C. ASHHURST
- 1919 A. BRUCE GILL
- 1919 J. STEWART RODMAN
- 1920 ARTHUR BILLINGS
- 1922 DAMON B. PFEIFFER
- 1924 DEFOREST P. WILLARD
- 1928 WALTER ESTELL LEE
- 1930 EDWARD T. CROSSAN
- 1930 JOHN B. FLICK

ELECTED

- 1931 HENRY P. BROWN, JR.
- 1932 EDWARD T. CROSSAN
- 1935 B. FRANKLIN BUZBY
- 1936 JOHN B. FLICK
- 1938 L. KRAEER FERGUSON
- 1940 J. MONTGOMERY DEAVER
- 1942 CALVIN M. SMYTH
- 1943 FREDERICK A. BOTHE
- 1943 W. EMORY BURNETT
- 1944 ADOLPH A. WALKLING
- 1946 J. MONTGOMERY DEAVER
- 1949 FREDERICK A. BOTHE
- 1950 JOHN H. GIBBON, JR.
- 1950 JONATHAN E. RHOADS
- 1951 FRANK ALLBRITTEN, JR.
- 1954 EDWIN W. SHEARBURN
- 1960 JOHN Y. TEMPLETON, III
- 1964 BROOKE ROBERTS
- 1974 BROOKE ROBERTS
- 1978 R. ROBERT TYSON

With the Recorder

Officers

TRUSTEES OF THE SAMUEL D. GROSS PRIZE
FUND AND LIBRARY

1894

- J. EWING MEARS JOHN ASHHURST, JR. WILLIAM W. KEEN

With Samuel Ashhurst and William Hunt to serve with them on distribution of prize.

1895-1899

- J. EWING MEARS
- JOHN ASHHURST, JR.
- WILLIAM W. KEEN

1900-1901

- WILLIAM W. KEEN
- J. EWING MEARS
- J. CHALMERS DACOSTA

1902-1904

- WILLIAM J. TAYLOR
- WILLIAM L. RODMAN
- JOHN B. ROBERTS

1905

- WILLIAM J. TAYLOR
- RICHARD H. HARTE
- DEFOREST WILLARD

1910

- WILLIAM J. TAYLOR
- RICHARD H. HARTE
- JOHN H. GIBBON

1915

- WILLIAM J. TAYLOR
- JOHN H. JOPSON
- EDWARD B. HODGE

1920

- WILLIAM J. TAYLOR
- JOHN H. JOPSON
- EDWARD B. HODGE

1925

- WILLIAM J. TAYLOR
- JOHN H. JOPSON
- EDWARD B. HODGE

1930

- WILLIAM J. TAYLOR
- JOHN H. JOPSON
- EDWARD B. HODGE

1935

- EDWARD B. HODGE
- CHARLES F. MITCHELL
- CALVIN M. SMYTH, JR.

1940

- EDWARD B. HODGE
- CHARLES F. MITCHELL
- CALVIN M. SMYTH, JR.

1945

- DAMON B. PFEIFFER
- CHARLES F. MITCHELL
- CALVIN M. SMYTH, JR.

1950

- JOHN H. GIBBON, JR.
- FRANCIS C. GRANT
- CALVIN M. SMYTH, JR.

1955

- CALVIN M. SMYTH
- JOHN M. GIBBON, JR.
- GEORGE P. ROSEMOND

1957

- CALVIN M. SMYTH
- JOHN H. GIBBON, JR.
- GEORGE P. ROSEMOND

1961

- GEORGE P. ROSEMOND
- S. DANA WEEDER
- GEORGE WILLAUER

1964

- PAUL NEMIR, JR. (Chairman)
- S. DANA WEEDER
- GEORGE WILLAUER

1974

- PAUL NEMIR, JR.

1980

- MOREYE NUSBAUM

Honorary Fellows

ELECTED

1881 SIR JAMES PAGET, London, England December 30, 1899
 1881 THEODORE BILLROTH, Vienna, Austria January 5, 1894
 1881 BERNHARD VON LANGENBECK, Berlin, Germany ... September 30, 1887
 1881 WILLARD PARKER, New York, N.Y. April 25, 1884
 1881 LEWIS A. SAYRE, New York, N.Y. September 21, 1900
 1881 MOSES GUNN, Chicago, Ill. November 4, 1887
 1881 JOHN T. HODGEN, St. Louis, Mo. April 28, 1882
 1881 W. W. DAWSON, Cincinnati, Ohio February 16, 1893
 1881 T. G. RICHARDSON, New Orleans, La. May 26, 1892
 1881 J. COLLINS WARREN, Boston, Mass. 1927
 1881 W. T. BRIGGS, Nashville, Tenn. June 13, 1894
 1881 CHRISTOPHER JOHNSTON, Baltimore, Md. October 11, 1891
 1881 D. W. YANDELL, Louisville, Ky. May 2, 1898
 1898 MAURICE H. RICHARDSON, Boston, Mass. July 31, 1912
 1898 GEORGE M. STERNBERG, Washington, D.C. November 3, 1915
 1898 CHARLES W. McBURNEY, New York, N.Y. November 7, 1913
 1898 NICHOLAS SENN, Chicago, Ill. January 2, 1908
 1898 THEODORE F. PREWITT, St. Louis, Mo. October 17, 1904
 1898 L. McLANE TIFFANY, Baltimore, Md. October 23, 1916
 1898 NATHANIEL P. DANDRIDGE, Cincinnati, Ohio 1910
 1898 ROSWELL PARK, Buffalo, N.Y. February 15, 1914
 1898 ROBERT F. WEIR, New York, N.Y. 1927
 1898 FREDERICK S. DENNIS, New York, N.Y. March 8, 1934
 1900 W. H. A. JACOBSON, London, England July 27, 1917
 1900 THEODORE KOCHER, Berne, Switzerland October 3, 1916
 1900 VINCENZ CZERNY, Heidelberg, Germany October 3, 1916
 1906 DUDLEY P. ALLEN, Cleveland, Ohio January 6, 1915
 1906 WILLIAM J. MAYO, Rochester, Minn. July 28, 1939
 1906 ROBERT ABBE, New York, N.Y. March 7, 1928
 1906 C. B. G. DENANCREDE, Ann Arbor, Mich. May 6, 1921
 1907 JOHN C. MUNRO, Boston, Mass. December 6, 1910
 1908 J. EWING MEARS, Philadelphia, Pa. May 28, 1919
 1909 LEWIS STEPHEN PILCHER, Brooklyn, N.Y. December 24, 1934
 1916 W. W. KEEN, Philadelphia, Pa. June 7, 1932
 1920 HENRY R. WHARTON, Philadelphia, Pa. December 3, 1925
 1927 JOHN CHALMERS DACOSTA, Philadelphia, Pa. May 16, 1933
 1929 D'ARCY POWER, London, England May 18, 1941
 1929 ALBIN LAMBOTTE, Esneux, Belgium
 1929 HENRI HARTMANN, Paris, France
 1929 TH. TUFFIER, Paris, France October 27, 1929
 1929 JOSEPH GUYOT, Bordeaux, France
 1929 GEORGES JEANNENEY, Bordeaux, France
 1929 F. DEQUERVAIN, Berne, Switzerland January 23, 1940

DIED

ELECTED

1929 BERKELEY MOYNIHAN, Leeds, England September 7, 1936
 1929 HARVEY CUSHING, Boston, Mass. October 7, 1939
 1929 EDWARD W. ARCHIBALD, Montreal, Canada 1945
 1929 JOHN M. T. FINNEY, Baltimore, Md. May 30, 1942
 1929 EVARTS GRAHAM, St. Louis, Mo. March 4, 1957
 1929 ELLISWORTH ELIOT, JR., New York, N.Y. November 2, 1945
 1929 RUDOLPH MATAS, New Orleans, La. September 23, 1957
 1929 DEAN D. LEWIS, Baltimore, Md. 1941
 1929 EUGENE H. POOL, New York, N.Y. 1949
 1929 GEORGE W. CRILE, Cleveland, Ohio January 7, 1943
 1929 EDWARD STARR JUDD, Rochester, Minn. November 30, 1935
 1929 DALLAS B. PHEMISTER, Chicago, Ill. 1951
 1933 JOHN H. JOPSON, Mills, N.C. December 4, 1954
 1954 HAROLD FOSS, Danville, Pa.
 1954 DIGBY CHAMBERLAIN, Leeds, England
 1954 FREDERICK COLLIER, Ann Arbor, Mich. November 5, 1964
 1954 HOWARD NAFZIGER, San Francisco, Calif. 1961
 1954 ARTHUR ALLEN, Boston, Mass. March 18, 1958
 1954 ERIK HUSFELDT, Copenhagen, Denmark
 1954 ALLEN WHIPPLE, New York, N.Y. April 16, 1963
 1954 SIR JAMES PATTERSON ROSS, London, England
 1979 J. ENGLEBERT DUNPHY, San Francisco, Calif.
 1979 FRANCIS D. MOORE, Boston, Mass.
 1979 OWEN WAGENSTEEN, Minneapolis, Minn.
 1979 CLARENCE CRAFOORD, Sweden
 1979 JOHN GOLIGHER, Leeds, England
 1979 RODNEY SMITH, The Right Honorable Lord of Marlow,
 London, England
 1979 WILLIAM LONGMIRE, Los Angeles, Calif.
 1979 DAVID SABISTON, Durham, N.C.
 1979 ROBERT ZOLLINGER, Columbus, Ohio

DIED

Winners of the Samuel D. Gross Prize

- 1895 "Inquiry into the Difficulties Encountered in the Reduction of Dislocations of the Hip."—Dr. Oscar H. Allis, Philadelphia, Pa.
- 1902 "Treatment of Certain Malignant Growths by Excision of the External Carotids."—Dr. Robert H. W. Dawbarn, New York, N.Y.
- 1905 "The Biology of the Micro-organisms of Actinomycosis."—Dr. James Homer Wright, Boston, Mass.
- 1910 "An Anatomical and Surgical Study of Fractures of the Lower End of the Humerus."—Dr. Astley P. C. Ashhurst, Philadelphia, Pa.
- 1915 "Surgery in the Treatment of Hodgkin's Disease."—Dr. John Lawrence Yates, Milwaukee, Wis.°
- 1920 "Some Fundamental Considerations in the Treatment of Empyema Thoracis."—Dr. Evarts A. Graham, St. Louis, Mo.
- 1925 "The Surgery of Pulmonary Tuberculosis."—Dr. John Alexander, Saranac Lake, N.Y.
- 1930 "Abnormal Arteriovenous Communications."—Dr. Emile Holman, Stanford University, San Francisco, Calif.
- 1935 "The Therapeutic Problems in Bowel Obstruction."—Dr. Owen H. Wangensteen, Minneapolis, Minn.
- 1940 "The Role of the Liver in Surgery."—Dr. Frederick Fitzherbert Boyce, New Orleans, La.
- 1945 "Parenteral Alimentation in Surgery with Special Reference to Protein and Amino Acids."—Dr. Robert Elman, St. Louis, Mo.
- 1950 "Localization of Brain Tumors with Radio-Active Agents."—Dr. George E. Moore, Minneapolis, Minn.
- 1955 "Liquid Plasma—Its Safety and Usefulness in Shock and Hypoproteinemia."—Dr. J. Garrott Allen, Chicago, Ill.
- 1962 "The Pathogenesis of Gastric and Duodenal Ulcers."—Dr. Lester Dragstedt, Gainesville, Fla.
- 1967 "Cholesterol Metabolism and Atherosclerosis as Influenced by Partial Small Bowel Intestinal Exclusion."—Dr. Henry Buchwald, University of Minnesota, Minneapolis, Minn.
- 1972 "Hepatic Metabolism in Human Cirrhosis: The Effect of Portacaval Shunt on Liver and Brain Metabolism."—Dr. Frederick A. Reichle, Temple University, Philadelphia, Pa.
- 1979 "Simulation of Congenital Heart Disease in Fetal Lambs."—Dr. Noel H. Fishman.

*This essay has never been published by the author as required under the terms of the award.

Fellows Who Have Delivered the Annual Oration

- | | | |
|----------------------------|--------------------------|-----------------------------|
| 1881 S. D. Gross | 1914 Alfred C. Wood | 1947 L. Kraeer Ferguson |
| 1882 D. Hayes Agnew | 1915 Frances T. Stewart | 1948 Jonathan E. Rhoads |
| 1883 William Hunt | 1916 Edward B. Hodge | 1949 Francis C. Grant |
| 1884 John H. Brinton | 1917 J. Edwin Sweet | 1950 W. Emory Burnett |
| 1885 John H. Packard | 1918 None | 1951 J. Montgomery Deaver |
| 1886 R. J. Levis | 1919 None | 1952 Herbert R. Hawthorne |
| 1887 J. Ewing Mears | 1920 John G. Clark | 1953 Julian Johnson |
| 1888 C. B. G. deNancrede | 1921 J. Torrance Rugh | 1954 George Rosemond |
| 1889 John B. Roberts | 1922 George P. Muller | 1955 William H. Erb |
| 1890 DeForest P. Willard | 1923 Walter Estell Lee | 1956 George Willauer |
| 1891 William G. Porter | 1924 Robert H. Ivy | 1957 Irvin E. Deibert |
| 1892 T. G. Morton | 1925 John Speese | 1958 Orville C. King |
| 1893 C. W. Dulles | 1926 Damon B. Pfeiffer | 1959 James R. Jaeger |
| 1894 W. B. Hopkins | 1927 Emory G. Alexander | 1960 H. Taylor Caswell |
| 1895 John B. Deaver | 1928 Edward J. Klopp | 1961 Donald R. Cooper |
| 1896 James M. Barton | 1929 Edward T. Crossan | 1962 John Y. Templeton, III |
| 1897 Thomas R. Neilson | 1930 J. Stewart Rodman | 1963 Edwin W. Shearburn |
| 1898 O. H. Allis | 1931 Hubley R. Owen | 1964 Henry P. Royster |
| 1899 William J. Taylor | 1932 Eldridge L. Eliason | 1965 C. Everett Koop |
| 1900 None | 1933 George M. Dorrance | 1966 Kenneth E. Fry |
| 1901 H. R. Wharton | 1934 DeForest P. Willard | 1967 Thomas F. Nealon, Jr. |
| 1902 J. M. Spellissy | 1935 A. Bruce Gill | 1968 R. Robert Tyson |
| 1903 R. G. LeConte | 1936 Alexander Randall | 1969 H. L. Stahlgren |
| 1904 G. G. Davis | 1937 Henry P. Brown, Jr. | 1970 Brooke Roberts |
| 1905 J. Chalmers DaCosta | 1938 Isidor S. Ravdin | 1971 William T. Fitts, Jr. |
| 1906 Richard H. Harte | 1939 John B. Flick | 1972 Joseph G. Bassett |
| 1907 Edward Martin | 1940 Francis C. Grant | 1973 Lloyd W. Stevens |
| 1908 Charles H. Frazier | 1941 William Bates | 1974 Joseph W. Stayman |
| 1909 John H. Gibbon | 1942 S. Dana Weeder | 1975 Charles Fineberg |
| 1910 Astley P. C. Ashhurst | 1943 Frederick A. Bothe | 1976 Leonard Goldman |
| 1911 John H. Jopson | 1944 Calvin M. Smyth | 1978 David Wagner |
| 1912 George C. Ross | 1945 Adolph A. Walking | 1979 Frederick Wagner |
| 1913 William L. Rodman | 1946 John H. Gibbon, Jr. | 1980 Clyde Barker |

Fellows of the Philadelphia Academy of Surgery

Active Fellows

	ELECTED	BORN	SPECIALTY
Ayella, Alfred S., Jr., M.D. 1213 South Broad Street Philadelphia, Pa. 19147	4-2-62	1921	G.S.
Bacharach, Benjamin, M.D. Suite 6255 111 S. 11th Street Philadelphia, Pa. 19107	5-3-71	1930	G.S.
Baker, Arthur G., Jr., M.D. 15 Morton Avenue Ridley Park, Pa. 19078	5-1-72	1935	G.S.
Barker, Clyde F., M.D. 3400 Spruce Street Philadelphia, Pa. 19104	12-7-70	1932	G.S.
Berkowitz, Henry D., M.D. 3400 Spruce Street Philadelphia, Pa. 19104	10-6-75	1934	G.S., Vascular
Berman, Arnold T., M.D. 230 N. Broad Street Philadelphia, Pa. 19102	2-7-77	1940	Orthopedics
Bishop, Harry C., M.D. Children's Hospital One Children's Center Philadelphia, Pa. 19104	5-3-71	1921	G.S.
Bower, Robert, M.D. Hemlock Lane Wyncote, Pa. 19095	11-6-67	1925	G.S.
Boyd, Robert, T., III, M.D. 3910 Powelton Street Philadelphia, Pa. 19104	11-6-67	1925	G.S.
Brockman, Stanley, K., M.D. 1025 Walnut Street Suite 605 Philadelphia, Pa. 19107	10-7-74	1928	G.S., Thoracic
Buchheit, William A., M.D. 3401 North Broad Street Philadelphia, Pa. 19140	1-6-75	1933	G.S., Neurosurgery
Camishion, Rudolph C., M.D. 300 Broadway, Suite 502 Camden, N.J. 08103	1-4-65	1927	G.S., Thoracic
C. Gene Cayten, M.D. 37th and Spruce Street Philadelphia, Pa. 19104	1-7-80	1941	G.S.

	ELECTED	BORN	SPECIALTY
Chen, Chijen, M.D. Suite 233 Lankenau Medical Bldg. Philadelphia, Pa. 19151	1-4-71	1933	G.S.
Clarke, John R., M.D. 3300 Henry Avenue Philadelphia, Pa. 19129	1-8-79	1943	G.S.
Clement, Gordon S., M.D. 15 West Wood Street Norristown, Pa. 19401	10-1-79	1934	G.S., Vascular
Cohen, Erwin A., M.D. Medical Arts Bldg. 60 E. Township Line Road Elkins Park, Pa. 19117	2-4-74	1925	G.S.
Cohn, Herbert E., M.D. Suite 8229 111 S. 11th Street Philadelphia, Pa. 19107	12-6-65	1930	G.S.
Cossa, John P., M.D. 1907 South Broad Street Philadelphia, Pa. 19148	5-6-74	1933	G.S.
Davis, Richard A., M.D. 3400 Spruce Street Philadelphia, Pa. 19104	1-6-69	1925	Neurosurgery
DeClement, Frederick A., Jr., M.D. 1900 South Broad Street Philadelphia, Pa. 19145	2-7-77	1933	G.S.
DeLaurentis, Dominick A., M.D. Director, Dept. of Surgery Pennsylvania Hospital 8th and Spruce Sts. Philadelphia, Pa. 19107	5-4-64	1925	Cardiovascular
DeSantis, Donald, M.D. 204 E. Chester Pike Ridley Park, Pa. 19078	12-2-74	1937	G.S.
Donnelly, Joseph C., Jr., M.D. Suite 225 301 S. 7th Avenue West Reading, Pa. 19611	1-8-68	1929	G.S., Thoracic Cardiovascular
DiGiovanni, Alphones 4 Martin's Run Media, Pa. 19063	2-4-80	1931	G.S.
Duckett, John W., Jr., M.D. Children's Hospital One Children's Center Philadelphia, Pa. 19104	4-2-73	1936	G.S.
Edmunds, L. Henry, Jr., M.D. 3400 Spruce Street Philadelphia, Pa. 19104	10-7-74	1931	Cardiovascular

	ELECTED	BORN	SPECIALTY
Fallahnejad, Manoucher, M.D. Room 1200 The Graduate Hospital 19th and Lombard Street Philadelphia, Pa. 19146	10-6-75	1936	G.S., Thoracic, Cardiovascular
Finnegan, James O., M.D. Div. of Cardiothoracic Surgery 3300 Henry Avenue Philadelphia, Pa. 19129	11-4-74	1938	G.S., Thoracic
Frazier, Thomas G., M.D. 207 Bryn Mawr Medical Bldg. Bryn Mawr, Pa. 19101	2-5-79	1943	G.S.
Gain, Thomas B., M.D. 230 N. Broad Street Philadelphia, Pa. 19102	12-5-77	1930	G.S.
Gonick, Paul, M.D. 1320 Race Street Philadelphia, Pa. 19107	5-6-74	1930	Urology, G.S.
Gorham, William K., III, M.D. 301 South 8th Street Philadelphia, Pa. 19106	1-6-69	1927	G.S.
Gostigian, John J., M.D. 1016 Warrior Road Drexel Hill, Pa. 19026	5-4-70	1929	G.S.
Gowen, George F., M.D. 1200 East High Street Pottstown, Pa. 19464	1-4-65	1923	G.S.
Grosh, Julieta D., M.D. 48 Laubert Road Conshohocken, Pa. 19428	10-6-80	1939	G.S.
Gross, Richard H., M.D. Paoli Memorial Medical Bldg. Paoli, Pa. 19301	5-6-74	1935	G.S.
Hamilton, Ralph W., M.D. 3400 Spruce Street Philadelphia, Pa. 19104	11-6-78	1933	Plastic
Hardesty, William H., M.D. 433 Bellevue Avenue Trenton, N.J. 08618	10-7-68	1932	G.S.
Hartford, Charles E., M.D. Crozer Chester Medical Center Chester, Pa. 19013	12-4-78	1932	G.S.
Harwick, Robert D., M.D. 2201 Benjamin Franklin Parkway Philadelphia, Pa. 19130	12-6-76	1923	Surgical Oncology
Hayes, Martin F., M.D. 6213 Frankford Avenue Philadelphia, Pa. 19135	10-6-80	1943	
Holst, Hazel, M.D. 3400 Spruce Street Philadelphia, Pa. 19104	11-5-73	1931	G.S., Plastic

	ELECTED	BORN	SPECIALTY
Hughes, Eugene P., Sr., M.D. Northwest Surgical Association 8815 Germantown Avenue Philadelphia, Pa. 19118	5-4-64	1924	G.S.
Hulnick, Stuart J., M.D. 2600 North Lawrence Street Philadelphia, Pa. 19133	12-6-76	1938	Plastic
Krueger, Charles S., M.D. 131 Madison Avenue Mt. Holly, N.J. 08060	5-4-70	1930	G.S.
Langfitt, Thomas W., M.D. 3400 Spruce Street Philadelphia, Pa. 19104	2-7-66	1927	Neurosurgery
LaRossa, Donato, M.D. 3400 Spruce Street Philadelphia, Pa. 19104	12-3-79	1941	Plastic
Lauby, Vincent W., M.D. 3401 North Broad Street Philadelphia, Pa. 19140	10-1-62	1921	G.S., Thoracic
Lemole, Gerald, M.D. Suite 206 3910 Powelton Avenue Philadelphia, Pa. 19104	1-7-74	1936	G.S., Thoracic
Lerner, Harvey J., M.D. 330 South Ninth Street Philadelphia, Pa. 19107	2-3-69	1932	G.S.
Lyness, Samuel S., M.D. 958 County Line Road Bryn Mawr, Pa. 19010	12-4-72	1933	Neurosurgery
Mackie, Julius A., M.D. 3400 Spruce Street Philadelphia, Pa. 19104	11-7-66	1927	G.S.
MacVaugh, Horace, III, M.D. 222, Lankenau Medical Bldg. Philadelphia, Pa. 19151	10-5-70	1930	Thoracic
Maier, Willis P., M.D. 3401 North Broad Street Philadelphia, Pa. 19140	5-4-70	1933	G.S.
Marks, Gerald, M.D. Suite 8254 111 S. 11th Street Philadelphia, Pa. 19107	10-5-70	1925	G.S.
Matsumoto, Teruo, M.D. Suite 7150 230 North Broad Street Philadelphia, Pa. 19102	2-7-72	1929	G.S.
McLaughlin, Edward D., M.D. Department of Surgery Misericordia Hospital 54th and Cedar Avenue Philadelphia, Pa. 19143	5-5-69	1931	Thoracic

	ELECTED	BORN	SPECIALTY
Miller, Leonard D., M.D. 3400 Spruce Street Philadelphia, Pa. 19104	10-5-70	1930	G.S.
Morse, Dryden P., M.D. Deborah Heart and Lung Center Browns Mills, N.J. 08105	5-6-63	1924	Cardiac, Thoracic
Moss, N. Henry, M.D. Suite 104 1335 West Tabor Road Philadelphia, Pa. 19141	11-2-64	1925	G.S.
Mulholland, S. Grant, M.D. Suite 6001 111 S. 11th Street Philadelphia, Pa. 19107	2-2-76	1936	Urology
Mullen, James L., M.D. 1000 Ravdin Institute 3400 Spruce Street Philadelphia, Pa. 19104	1-2-78	1942	G.S.
Mundth, Eldred D., M.D. Cardiovascular Institute Hahnemann Medical College 230 N. Broad Street Philadelphia, Pa. 19102	10-3-77	1933	Cardiothoracic
Neal, Hunter, S., M.D. Suite 334 Lankenau Medical Bldg. Philadelphia, Pa. 19151	11-6-66	1923	G.S.
Nelson, Harry M., Jr., M.D. 1308 DeKalb Street Norristown, Pa. 19401	5-1-72	1931	G.S.
Noone, R. Barrett, M.D. 888 Glenbrook Avenue Bryn Mawr, Pa. 19010	4-5-76	1939	G.S., Specialty
Nusbaum, Moreye, M.D. Graduate Hospital 19th and Lombard Streets Philadelphia, Pa. 19146	1-7-74	1929	G.S., Thoracic
O'Connor, Michael J., M.D. 117 Maple Avenue Bala Cynwyd, Pa. 19004	11-3-80	1941	Neurosurgery
Osterholm, Jewell L., M.D. Suite 501 1025 Walnut Street Philadelphia, Pa. 19107	11-4-74	1929	Neurosurgery, G.S.
Paskin, David L., M.D. Pennsylvania Hospital 8th and Spruce Street Philadelphia, Pa. 19107	12-1-75	1938	G.S.
Perlman, Morton H., M.D. 230 N. Broad Street Philadelphia, Pa. 19102	2-7-72	1930	G.S.

	ELECTED	BORN	SPECIALTY
Pierucci, Louis, Jr., M.D. Cooper Parkway West N. Park Drive and Airport Hwy. Pennsauken, N.J. 08109	12-6-65	1928	G.S., Thoracic
Plzak, Louis F., Jr., M.D. 136 Lindsay Avenue Bryn Mawr, Pa. 19010	5-7-79	1934	Thoracic
Quill, Joseph R., M.D. 21 W. Fornance Street Norristown, Pa. 19401	2-2-76	1928	G.S.
Randall, Peter, M.D. 3400 Spruce Street Philadelphia, Pa. 19104	4-2-62	1923	Plastic
Reichle, Frederick A., M.D. 3401 North Broad Street Philadelphia, Pa. 19140	12-6-71	1935	G.S.
Rhoads, Jonathan E., Jr., M.D. 3300 Henry Avenue Philadelphia, Pa. 19129	1-8-79	1938	G.S., Thoracic
Roberts, John M., M.D. Northwest Surgical Assoc. 8815 Germantown Avenue Philadelphia, Pa. 19118	5-4-64	1926	G.S.
Rosato, Ernest F., M.D. 3400 Spruce Street Philadelphia, Pa. 19104	10-4-74	1936	G.S.
Rosato, Francis E., M.D. Suite 605 1025 Walnut Street Philadelphia, Pa. 19107	10-4-74	1936	G.S.
Saris, Demetrius S., M.D. 230 N. Broad Street Philadelphia, Pa. 19102	2-1-65	1921	G.S.
Sencindiver, P. Victor, M.D. 2301 South Broad Street Philadelphia, Pa. 19148	2-1-65	1927	G.S.
Schwartz, Gordon, M.D. Suite 510 1015 Chestnut Street Philadelphia, Pa. 19107	2-1-65	1927	G.S.
Sherk, Henry H., M.D. 2647 Westfield Avenue Camden, N.J. 08105	2-3-69	1930	Orthopedics
Smink, Robert D., Jr., M.D. Suite 233 Lankenau Medical Bldg. Philadelphia, Pa. 19151	1-7-80	1940	G.S.
Smullens, Stanton N., M.D. Suite 6255 111 S. 11th Street Philadelphia, Pa. 19107	5-1-72	1936	G.S., Thoracic

	ELECTED	BORN	SPECIALTY
Snedden, Hal E., M.D. 26 South Bryn Mawr Avenue Bryn Mawr, Pa. 19010	12-1-75	1922	G.S.
Solit, Robert W., M.D. Suite 8229 111 S. 11th Street Philadelphia, Pa. 19107	11-4-74	1935	G.S.
Somers, Laurence A., M.D. 2600 North Lawrence Street Philadelphia, Pa. 19133	11-6-78	1931	G.S., Pediatrics
Spagna, Paschal M., M.D. Room 206 3910 Powelton Avenue Philadelphia, Pa. 19104	11-6-72	1935	Thoracic
Steel, Howard H., M.D. 3401 North Broad Street Philadelphia, Pa. 19140	5-6-68	1921	Orthopedics
Tobias, Gordon L., M.D. Bryn Mawr Medical Bldg. Bryn Mawr, Pa. 19101	12-4-78	1927	Urology
Trout, Robert C., M.D. 3910 Powelton Avenue Room 202 Philadelphia, Pa. 19104	11-3-69	1922	Thoracic
Vernick, Jerome J., M.D. Suite 6015 111 S. 11th Street Philadelphia, Pa. 19107	1-3-77	1937	G.S.
Wagner, David K., M.D. 3300 Henry Avenue Philadelphia, Pa. 19129	2-3-69	1931	G.S.
Wallace, Herbert W., M.D. The Graduate Hospital 19th and Lombard Street Philadelphia, Pa. 19146	11-4-74	1930	G.S., Thoracic
Wein, Alan J., M.D. 3400 Spruce Street Philadelphia, Pa. 19104	5-3-76	1941	Urology
Whitaker, Linton A., M.D. 3400 Spruce Street Philadelphia, Pa. 19104	1-6-75	1936	Plastic
White, Jack C., M.D. Paoli Memorial Medical Bldg. Paoli, Pa. 19301	12-4-72	1928	G.S.
Williams, Kirkley R., M.D. 207 Bryn Mawr Medical Bldg. Bryn Mawr, Pa. 19010	5-1-71	1931	Thoracic

	ELECTED	BORN	SPECIALTY
Wolferth, Charles C., Jr., M.D. The Philadelphian Suite 2C45 2401 Pennsylvania Avenue Philadelphia, Pa. 19130	11-1-65	1928	G.S.
Yum, Keuk Y., M.D. Suite 334, Lankenau Medical Bldg. Philadelphia, Pa. 19151	10-7-74	1936	G.S.

Senior Fellows

	ELECTED	BORN	SPECIALTY
Armitage, Harry V., M.D. Suite 406, Professional Bldg. Crozer Chester Medical Center Chester, Pa. 19013	10-6-58	1916	G.S.
Bassett, James G., M.D. 3300 Henry Avenue Philadelphia, Pa. 19129	12-4-61	1919	G.S.
Blady, John V., M.D. Parkway House 2201 Benjamin Franklin Parkway Philadelphia, Pa. 19130	12-5-60	1905	Head and Neck Surgery
Buyers, Robert A., M.D. 1308 DeKalb Street Norristown, Pa. 19401	10-1-56	1917	G.S.
Caswell, H. Taylor, M.D. 3401 North Broad Street Philadelphia, Pa. 19140	5-7-51	1913	G.S.
Chodoff, Richard J., M.D. 2000 Old West Chester Pike Havertown, Pa. 19083	1-3-49	1909	G.S.
Closson, Edward W., M.D. Homestead Farm 260 North Main Street Lambertville, N.J. 08530	12-5-66	1914	G.S.
Cooper, Donald R., M.D. 3300 Henry Avenue Philadelphia, Pa. 19129	10-6-52	1917	G.S.
Cooper, Robert A., M.D. 804 Mark 70, Route 70 Cherry Hill, N.J. 08034	-52	1917	G.S.
Cresson, Samuel L., M.D. 2600 North Lawrence Street Philadelphia, Pa. 19133	2-7-55	1914	Pediatrics
D'Alonzo, Walter A., M.D. 1647 South 15th Street Philadelphia, Pa. 19145	-51	1914	G.S.
DeTuerk, John J., M.D. 2301 South Broad Street Philadelphia, Pa. 19148	5-7-71	1912	G.S.

	ELECTED	BORN	SPECIALTY
Engel, Gilson C., M.D. Suite 334, Lankenau Medical Bldg. Philadelphia, Pa. 19151	1934	1898	G.S.
Erb, William H., M.D. 15 Morton Avenue Ridley Park, Pa. 19078	1941	1907	G.S.
Farrell, Harry L., M.D. 135 South 20th Street Philadelphia, Pa.	12-3-62	1905	G.S., Thoracic
Fineberg, Charles, M.D. 902 Locust Street Philadelphia, Pa. 19107	12-7-59	1921	G.S.
Frobese, Alfred S., M.D. 1245 Highland Avenue Abington, Pa. 19001	1952	1919	G.S.
Garrison, Sherman, M.D. 108 West Commerce Street Bridgeton, N.J. 08302	11-7-77	1915	G.S.
Gartland, John J., M.D. 620D Curtis 1015 Walnut Street Philadelphia, Pa. 19107	1-7-66	1918	Orthopedics
Geist, Donald C., M.D. Penn Wynn House, Apt. 1205 2201 Bryn Mawr Avenue Philadelphia, Pa. 19131	1941	1901	G.S.
Grimes, Elmer L., M.D. 108 Kings Highway South Cherry Hill, N.J. 08034	4-11-60	1914	G.S.
Grotzinger, Paul J., M.D. 2121 Valley Road Huntingdon Valley, Pa. 19006	10-1-56	1918	G.S.
Hall, John H., M.D. 3401 North Broad Street Philadelphia, Pa. 19140	10-1-62	1915	G.S.
Harris, James S.C., M.D. Suite 108, 666 E. Penn Street Philadelphia, Pa. 19144	11-2-53	1914	G.S.
Hawthorne, Herbert R., M.D. 3625 Darby Road Bryn Mawr, Pa. 19010	1945	1894	G.S.
Hoeffel, Joseph M., Jr., M.D. 1245 Highland Avenue Abington, Pa. 19001	12-5-55	1917	G.S.
Inouye, William Y., M.D. 3400 Spruce Street Philadelphia, Pa. 19104	1-4-65	1920	G.S.
Johnson, Julian, M.D. 31 Righters Mill Road Gladwyne, Pa. 19035	3-2-42	1906	G.S.

	ELECTED	BORN	SPECIALTY
King, Orville C., M.D. 8022 Roanoke Street Philadelphia, Pa. 19108			
Koop, C. Everett, M.D. Children's Hospital One Children's Center Philadelphia, Pa. 19104	4-6-53	1916	Pediatrics
Lamp, J. Curtis, M.D. 888 Glenbrook Avenue Bryn Mawr, Pa. 19010	11-7-66	1918	Plastic
Laucks, Robert B., M.D. 419 South 19th Street Philadelphia, Pa. 19146	1-7-63	1923	G.S.
Lemmon, William M., M.D. 1320 Race Street Philadelphia, Pa. 19107	5-2-66	1920	G.S., Thoracic
Lightfoot, William P., M.D. 3401 North Broad Street Philadelphia, Pa. 19140	10-5-70	1920	G.S.
Lin, David Y., P., M.D. 2222 South Broad Street Philadelphia, Pa. 19145	1964	1919	G.S.
McKeown, John J., Jr., M.D. 935 Cedar Grove Road Wynnewood, Pa. 19096	4-3-61	1919	G.S.
Medinger, Frederick G., M.D. 1245 Highland Avenue Abington, Pa. 19001	1950	1911	G.S.
Morani, Alma D., M.D. 3665 Midvale Avenue Philadelphia, Pa. 19129	2-4-74	1907	Plastic
Morris, Robert S., M.D. 108 Abington Medical Bldg. Abington, Pa. 19001	5-5-58	1915	G.S.
Murphy, John J., M.D. 3400 Spruce Street Philadelphia, Pa. 19104	10-6-58	1920	Urology
Murtaugh, Frederick, Jr., M.D. Hospital of the U. of P. 210 White Bldg. 3400 Spruce Street Philadelphia, Pa. 19104	11-6-67	1917	Neurosurgery
Nemir, Paul, Jr., M.D. Room 1200 19th and Lombard Streets Philadelphia, Pa. 19146	1-3-55	1920	G.S., Thoracic
Nicholson, Jesse T., M.D. 419 South 19th Street Philadelphia, Pa. 19146	1938	1903	Orthopedics

	ELECTED	BORN	SPECIALTY
Oakey, Richard S., Jr., M.D. 419 East 22nd Street Chester, Pa. 19013	11-2-53	1916	Plastic
Pechin, Sergius P., M.D. 3001-B Garrett Road Drexel Hill, Pa. 19026	2-4-74	1914	G.S.
Pecora, David V., M.D. V.A. Hospital 1601 Kirkwood Highway Wilmington, Delaware 19805	2-3-75	1916	G.S., Thoracic
Pilling, George P., IV, M.D. Pocono Lake Preserve Pennsylvania 18348	5-5-58	1918	Pediatric
Pitt, Leldon P., M.D. 811 Spruce Street Philadelphia, Pa. 19107	12-5-60	1920	G.S.
Ranieri, Tito A., M.D. 2320 South Broad Street Philadelphia, Pa. 19145	1951	1912	G.S.
Reagan, Lindley B., M.D. 131 Madison Avenue Mount Holly, N.J. 08060	2-2-53	1918	G.S.
Rhoads, Jonathan E., Sr., M.D. 3400 Spruce Street Philadelphia, Pa. 19104	1943	1907	G.S.
Roberts, Brooke, M.D. 3400 Spruce Street Philadelphia, Pa. 19104	1-4-54	1917	G.S.
Rosemond, George P., M.D. 3401 North Broad Street Philadelphia, Pa.	1945	1910	G.S.
Schumann, Francis, M.D. Northwest Surgical Association 8815 Germantown Avenue Philadelphia, Pa. 19118	4-2-62	1914	G.S.
Schwegman, Cletus W., M.D. 3400 Spruce Street Philadelphia, Pa. 19104	1951	1914	G.S.
Stainback, William C., M.D. c/o Ann Pagano Department of Surgery Bryn Mawr Hospital Bryn Mawr, Pa. 19010	4-1-57	1916	G.S.
Stayman, Joseph W., Jr., M.D. Hearthstone Ridge Rt. 1, Box 308E Landrum, S.C. 29356	1950	1915	G.S.
Strong, George H., M.D. Suite 6128 111 S. 11th Street Philadelphia, Pa. 19107	4-2-56	1914	Urology

	ELECTED	BORN	SPECIALTY
Templeton, John Y., M.D. Suite 6255 111 S. 11th Street Philadelphia, Pa. 19107	1-4-54	1917	G.S.
Troncelliti, Manrico A., M.D. Suite 101 DeKalb Fornance Bldg. DeKalb and Fornance Streets Norristown, Pa. 19401	5-4-70	1915	G.S.
Tropea, Frank, Jr., M.D. 2512 South Cleveland Street Philadelphia, Pa. 19145	2-3-58	1912	G.S.
Tyson, R. Robert, M.D. 3401 North Broad Street Philadelphia, Pa. 19140	12-6-54	1920	G.S.
Ulin, Alex W., M.D. 60 East Township Line Road Elkins Park Philadelphia, Pa. 19117	5-2-55	1913	G.S.
Wagner, Frederick B., Jr., M.D. Suite 605, Jefferson Medical College 1025 Walnut Street Philadelphia, Pa. 19107	1-7-52	1916	G.S.
West, Clifton Jr., M.D. Suite 334 Lankenau Medical Bldg. Philadelphia, Pa. 19151	2-1-60	1923	G.S.
Williamson, Ernest G., M.D. 6353 Woodbine Avenue Philadelphia, Pa. 19151	1927	1895	G.S.
Zaslow, Jerry, M.D. Medical Arts Bldg. #335 60 East Township Line Elkins Park Philadelphia, Pa. 19117	10-6-58	1918	G.S.

Inactive Fellows

Bucher, Robert M., M.D. 2451 Fillingim Street Mobile, Alabama	12-6-54	1920	G.S.
Culf, Norris K., M.D. 3433 North Broad Street Philadelphia, Pa. 19140	11-3-75	1931	G.S., Plastic
Davis, David M., M.D. 818 Pennstone Road Bryn Mawr, Pa. 19010	1939	1886	Urology
Eger, Sherman A., M.D. Valley View Apt. A-406 King of Prussia, Pa. 19406	1944	1904	G.S.

	ELECTED	BORN	SPECIALTY
Gilmour, William R., M.D. 6616 Woodland Avenue Philadelphia, Pa. 19142	1928	1891	G.S.
Greene, Lloyd B., M.D. 326 South 19th Street Philadelphia, Pa. 19103	1934	1892	Urology
Haupt, George J., M.D. Suite 306 Lankenau Medical Bldg. Philadelphia, Pa. 19151	10-5-59	1924	G.S.
Hinton, Drury, M.D. 50 Pilgrim Lane Drexel Hill, Pa. 19026	1925	1894	G.S.
Hopkins, John E., M.D. 85 Crestline Road Strafford-Wayne, Pa. 19087	12-2-56	1921	G.S.
Kaplan, Louis, M.D. 1204 Greentree Lane Narberth, Pa. 19072	4-4-47	1904	G.S.
Manges, W. Bosley, M.D. 613 Montgomery School Lane Wynnewood, Pa. 19096	11-6-61	1918	G.S.
Martin, William L., M.D. 402 Holly Lane Wynnewood, Pa. 19096	1953	1891	G.S.
Mason, James B., M.D. 1730 South Jackson Street Tacoma, Washington 98465	1933		
Moore, John R., M.D. 344 92nd Street Stone Harbor, N.J. 08247	1938	1899	Orthopedic
Moore, Robert M., M.D. American Board of Surgery 1617 John F. Kennedy Boulevard Philadelphia, Pa. 19102	5-4-64	1902	G.S.
O'Neill, James F., M.D. 8116 Bustleton Avenue Philadelphia, Pa. 19152	1954	1910	G.S.
Ristine, Edwin R., M.D. 17 Clinton Avenue Mantua, N.J. 08051	1954	1910	G.S.
Sacks, Charles Louis, M.D. 2275 Ibis Isle Road Palm Beach, Florida 33480	5-1-67	1914	G.S.
Stevens, Lloyd, M.D. 316 Mill Creek Road Haverford, Pa.	10-4-48	1914	G.S.
Shands, Alfred R., Jr., M.D. Alfred I. DuPont Institute Wilmington, Delaware 19801	1953	1899	Orthopedic

	ELECTED	BORN	SPECIALTY
Singmaster, Lawrence, M.D. 272 Cheswold Lane Haverford, Pa. 19041	1-2-57	1916	G.S.
Weber, Edgar H., M.D. 3008 E. Powell Avenue Evansville, Indiana 47714			G.S.
Wells, J. Ralston, M.D. Stone Island Estates Enterprise, Florida 32763			G.S.

Non-Resident Fellows

Ainsworth, Thomas H., Jr., M.D. 40 County Club Drive Carmel Valley, Ca. 93924			G.S.
Allbritten, Frank F., Jr., M.D. P.O. Box 177 Cunningham, Kansas 67035			G.S., Thoracic Neurosurgery
Austin, George, M.D. Loma Linda Medical School Loma Linda, Ca. 92354			G.S., Thoracic
Bailey, Charles P., M.D. 14 East 60th Street New York, N.Y. 10022			
Billig, Donal, M.D. 279 Third Avenue Long Branch, N.J. 07740			
Boland, James P., M.D. 1939 Parkwood Road Charleston, West Virginia 25314	10-7-68	1931	G.S., Thoracic
Chase, Robert A., M.D. Anatomy Bldg., Room 5 Medical School Stanford University Stanford, Ca. 94305	11-3-75	1923	Plastic, G.S.
Coppola, Edward D., M.D. Michigan State University East Lansing, Michigan 48823			G.S.
Crichlow, Robert W., M.D. Dartmouth Medical School Hanover, New Hampshire 03755			G.S.
Cramer, Lester M., M.D. 1715 North Weber Street Colorado Springs, Colorado 80907	4-1-68	1928	G.S., Plastic
Davila, Julio C., M.D. 1012 N. 10th Street Wausau, Wisconsin			

	ELECTED	BORN	SPECIALTY
Deutsch, Joel, M.D. Director of Surgery Mt. Sinai Hospital 500 Blue Hills Avenue Hartford, Conn. 06112	12-7-70	1926	G.S.
Fry, Kenneth E., M.D. 621 University Avenue Walla Walla, Washington 99362			G.S.
Goldman, Leonard, M.D. 3013 Nottingham Drive Shreveport, La. 71115			
Goldsmith, Harry S., M.D. Hitchcock Clinic Hanover, New Hampshire 03755	5-1-72	1929	G.S.
Hume, H. Alan, M.D. R.F.D. #L Pond Road Oakland, Maine 04963	2-3-64	1926	G.S.
Johnson, Robert G., M.D. 901 Rancho Lane Las Vegas, Nevada 89106			G.S.
Law, F. Dana, M.D. Port William Medical Associates Carrollton, Kentucky 41008	2-3-64	1924	G.S.
Manges, Lewis C., M.D. 7 Palm Lane Tangerine, Florida 32777			G.S.
Masson, Newton L., M.D. 3572 Montclair Circle Shingle Springs, Ca. 95682			G.S.
Moulder, Peter V., M.D. University of Florida College of Medicine Gainesville, Florida 32610			G.S., Thoracic
Myers, Richard, M.D. Raleigh Road R.D. #3 Eldorado, Illinois 62930	1-4-65	1929	G.S.
Nealon, Thomas F., Jr., M.D. St. Vincent's Hospital 170 W. 12th Street New York, N.Y. 10011			G.S.
Royster, Henry P., M.D. 1507 Canterbury Road Raleigh, N.C. 27608	1950	1909	Plastic
Sain, Fletcher, D., M.D. 1200 West Haven Blvd. Rocky Mount, N.C. 27801	12-5-60	1909	G.S.

	ELECTED	BORN	SPECIALTY
Sandzen, Sigurd C., Jr., M.D. St. Paul Medical Bldg. 5959 Harry Hines Boulevard Dallas, Texas 75235	10-4-76	1932	Orthopedic
Schmidek, Henry H., M.D. Neurosurgical Practice Offices Medical Center Hospital of Vermont DeGoesbriand Unit Burlington, Vermont 05401	2-7-77	1937	Neurosurgery
Sensenig, David M., M.D. 431 State Street Bangor, Maine 04401			G.S.
Shearburn, Edwin W., Jr., M.D. 2 Spotted Sandpiper Road Hilton Head Island, S.C. 29928	1947	1913	G.S.
Stahlgren, LeRoy H., M.D. Director of Surgery Department St. Barnabas Medical Center Livingston, N.J. 07039	11-7-60	1924	G.S.
Swartley, Robert N., M.D. 44 Walnut Tree Court Colusa, Ca. 95932			G.S.
Thomas, Paul A., Jr., M.D. Associate Professor of Surgery Division of Cardio-Thoracic Surgery P.O. Box 6998 Chicago, Illinois 60680	1-4-71	1923	Thoracic
Thompson, James C., M.D. Department of Surgery University of Texas Galveston, Texas 77550			G.S.

Annual Oration for 1976

Malignant Melanoma—A Therapeutic Approach Related to Biologic Behavior

LEONARD I. GOLDMAN, M.D.

Capricious, unpredictable, virulent, grave and peculiar have all been applied to descriptions regarding the behavior of cutaneous malignant melanoma. Recently Peacock, in editorial comment, remarked "as yet, it is not possible to correlate prognosis, the need for secondary surgery, or the best type of chemotherapy or immunotherapy with any general scheme for classification of the disease."¹ On the contrary, we disagree with the above and in this report will attempt to outline our strategies in treating cutaneous melanoma. These are based upon identifiable parameters which correlate well with the biologic behavior of this disease.

The Developmental Biology of Primary Cutaneous Melanoma

In 1969, Clark and his coworkers described a relationship between the depth of dermal invasion by cells of the primary tumor with patient survival following treatment.² More important, however, was their observation that in several clinical types of melanoma (i.e., lentigo maligna, volar, superficial spreading) these invasive tumors can exist in a form which lacks the capacity to produce metastases. This phase of radial growth has been well documented, can be present for several years and has been identified by the invasion of tumor cells into, but not completely through, the papillary dermis (level II). If uninterrupted, these tumors undergo a change (called intralesional transformation by Clark) which has been characterized by the development of a phase of vertical growth. Tumor cells have penetrated more deeply into the dermis (level III-papillary reticular dermal level, level IV-reticular dermal level, level V-subcutaneous level) and frequently polyconism can be seen microscopically. Characteristically a nodule(s), occurring within the primary tumor, heralds this change. Nodular melanomas lack an antecedent radial growth phase and present initially with vertical growth. Tumors at these stages have the capacity to produce metastases. A superb and comprehensive review of this subject by Clark et al. is suggested for more complete details.³ In addition to the above, other prognostic variables including tumor thickness and host lymphocyte response to tumor, have been employed as supplemental predictors of tumor behavior.

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The Role of Surgery

Surgical excision is presently the only curative treatment available in melanoma. The two areas potentially controllable by surgery include the primary lesion site and the lymph node regions into which they drain. Our experience with 117 cutaneous melanomas occurring in 115 patients comprises the basis for this report. They were seen initially between January 1971 through July 1976; had a median follow up of 3 years; and with the possible exception of an occasional biopsy were evaluated, treated and followed by the author. The composition of this group is shown in Table 1. Accurate microstaging of

TABLE 1. Type + Level of Cases

Microstage	Type					Male	Female	Ages (median)
	LMM	SSM	NM	VOL	UNC			
II	2	39	0	0	0	16	25	18-75 (46)
III	1	26	11	1	2	18	23	17-72 (44)
IV	0	18	10	3	0	21	10	21-78 (50)
V	0	1	0	1	0	2	0	—

LMM—Lentigo Maligna Melanoma, SSM—Superficial Spreading Melanoma, NM—Nodular Melanoma, Vol—Volar Melanoma, Unc—Unclassified Melanoma

the primary tumor was carried out by serial block sectioning² and all patients were further evaluated by physical examination, chest x-ray, liver function studies and radionuclide scanning of brain, liver and bone. By these techniques the overall extent of disease was determined (i.e., Stage I-localized disease without metastases, Stage II-tumor confined to the regional nodes and Stage III-disseminated melanoma). Surgical therapy has been confined to Stages I and II.

Treatment of the Primary Area

The principle of "wide surgical removal in a three dimensional plane" was advocated by Sampson-Handley in 1907 because centrifugal, dermal lymphatic permeation was frequent.⁴ The extent of excision, a measured distance of 3 to 5 cm. about the tumor in all directions to and including the deep fascia, aims at resection of this potentially involved lymphatic plexus. A skin graft is usually required for closure. This should be obtained prior to excision of the primary area with protection of the donor site from tumor cell seeding.

Certain types and sites of melanoma deserve special mention. Level II lentigo maligna melanoma is one example. In these, local excision (with visibly free margins) and primary closure fortunately affords both adequate treatment and satisfactory cosmetic results. Subungual tumors usually require amputation in order to achieve adequate resection margins. These are best accomplished through the appropriate metatarsal or metacarpal-phalangeal joint. Lesions on the sole of the foot cause concern because of the questionable ability of split-thickness grafts to tolerate weight bearing. We feel that initial free-grafting is

almost always indicated, in most instances long-term function is adequate and revisions can be performed when necessary.

Our treatment of the primary lesions in this series is shown in Table 2. A measured wide excision was carried out in the majority, and most of these required skin grafting for closure. In 11 cases (all trunk lesions) primary wound

TABLE 2. Primary Lesion*

Microstage	Total	Procedure			
		Wide Excision		Local Excision	Amputation
		Graft	Primary Closure		
II	43	31	7	4	1
III	41	39	2	0	0
IV	31	29	2	0	0
V	2	1	0	0	1
	117	100	11	4	2

*117 primary lesions in 115 patients

apposition was possible. Local excision (LMM) and minor amputations (Vol) were used when conditions dictated. To date no local recurrences have developed, therefore strengthening our continued endorsement of the treatment outlined above.

Treatment of the Regional Lymph Nodes

The excision of clinically involved regional lymph nodes prompts little argument; however, the management of those which appear normal remains controversial.^{5,6} In an attempt to improve the yield of tumor-positive lymph nodes, we retrospectively correlated nodal findings with microstaging, and found metastases only in association with those primary tumors invasive to level III or beyond.⁷ For this reason, we performed prophylactic regional lymphadenectomy in all patients with level III, IV or V disease whose tumors drained to a single lymph node basin. Lymphadenectomy was not done in level II disease, or in those more deeply invasive tumors located in ambiguous sites (drained by more than one nodal region). In-continuity dissections were preferred and used whenever feasible. In the others, nodal and primary excisions were performed disparately during the same operation.

While our major aim was to remove potential areas of metastatic disease, we were also able to correlate the depth of dermal invasion with the physical status of the regional nodes (as determined by a single observer) and the eventual nodal microscopic findings. These can be seen in Table 3. To date no level II patient has either presented with, or developed, delayed nodal metastases. Withholding lymph node dissections from this group appears justified.

In 45 regional lymphadenectomies performed at primary operation (5 others were performed when delayed metastases appeared), 3 patients were found with clinically positive nodes. Two of these had level IV tumors, the other was found in a level III patient. Tumor was confirmed in each case at microscopy (no clinical false positives). The absence of tumor involved lymph nodes, as suggested by the clinical examination in 23 cases with level III invasion, was confirmed histologically in 22 (4% clinical false negatives), thereby providing satisfactory correlation between the clinical and microscopic findings at this level. This was not the case in the 26 lymphadenectomies performed for level IV disease. Five clinically negative nodal regions (5 of 19) were found to contain tumor at microscopy, while 5 others (5 of 12, not treated initially by regional node dissection (because of ambiguous location), developed delayed, microscopically confirmed nodal metastases (false negatives—26% and 42% respectively).

These findings have prompted an alteration of our views regarding the presence of tumor-involved lymph nodes at the time of "prophylactic" regional lymphadenectomy in level III patients. Since there was good correlation between the physical and microscopic lymph node findings, as well as an absence, to date, of "delayed" nodal metastases, we presently withhold regional lymphadenectomy from level III patients without clinical evidence suggesting nodal metastases. On the other hand, at levels IV and V, the potential for occult nodal metastases exceeds 25%, and therefore prophylactic dissection appears justified.

Emphasis must again be placed on the ability to cure some patients with positive lymph nodes as well as using these findings in gauging prognosis. Tumor in lymph nodes is clearly associated with a high risk for recurrence, and this information can be used for placing these patients into some form of adjuvant therapeutic program (see below). Although the excision of uninvolved lymph nodes may theoretically produce an immunologic deficit, no firm evidence exists to either support or contradict this hypothesis. Since the potential for nodal metastases can be reasonably predicted, the performance of elective regional lymphadenectomy continues to outweigh any hypothetical disadvantage.

Results of Surgical Therapy

While the results of these data encompass a median followup of only 3 years, certain preliminary observations can be made. These are shown in Table 4. All patients have been followed at 3 month intervals by physical examination supplemented by routine laboratory studies, chest x-rays and radionuclide scans at defined times. To date, 19 patients have developed recurrences or died from metastatic melanoma. One level II patient developed a subcutaneous metastasis in the same extremity as, but quite a distance from, the site of primary tumor 18 months following her initial treatment. In the others, the frequency of recurrence related directly to the depth of dermal invasion originally noted (level III—7%, IV—45%, V—50%). Further, the presence of lymph

TABLE 3. Correlation of Microstaging With Nodal Status

Microstage	Number of Patients	Prophylactic Regional Lymphadenectomy						Number of Patients With Delayed Nodal Metastases
		Performed			Not Performed			
		Micro +	Clinical +	Clinical -	Micro -	Clinical +	Clinical -	
II	41	0	0	0	0	0	41	
III	41	1	1	0	22	0	17	
IV+V	33	5	2	14	14	0	12	

*Nodes not dissected

TABLE 4. Recurrences as Related to Microstage and Nodal Status

Microstage	Number of Patients	Total (%)	Recurrence Nodes		Total	No Recurrence Nodes	
			Negative	Positive		Negative	Positive
II	41	1 (2%)	0	0	40	0	0
III	41	3 (7%)	2	1	38	20	1
IV	31	14 (45%)	7	7	17	10	3
V	2	1 (50%)	1	0	1	1	0

*Nodes not dissected

node metastases had ominous significance, since eight of these patients have already developed recurrences or died from their disease. This is not unexpected, since these patients' tumors have already demonstrated their biologic aggressiveness by metastasizing to lymph nodes. Four patients with nodal metastases remain free of disease (3, 6, 31 and 42 months following surgery). Each had microscopic tumor discovered in clinically negative nodes.

The Role of Adjuvant Therapy

Adjuvant therapy represents an additional approach in the care of patients with melanoma. Its aim is the treatment of those patients who are clinically well without evidence of disease, but at appreciable risk for the development of recurrence. As noted above, this can be predicted to a great degree by combining the level of invasion with the presence or absence of lymph node metastases. Several recent reports employing BCG immunotherapy appear promising.^{8,9} Mastrangelo et al.¹⁰ have treated 44 Stage II (previously operated and presumably without residual disease) with dimethyl-triazeno imidazole carboxamide (DTIC). Thirty-four of these patients have been at risk for at least 1 year with the range encompassing 1 through 49 months. When compared to historical controls, both the disease-free interval and the survival of those treated appeared significantly better.

Several contrary reports have also been presented. Hill et al.¹¹ determined that DTIC was of no value in Stage II melanoma. Similarly, Pinsky et al.¹² and Cunningham et al.¹³ have reported that BCG failed to improve the survival of patients in identical stages when compared with those treated by surgery alone. Many factors may account for these discrepancies, including the types of controls, drugs employed, dosages and their schedules. In any event, further clarification is necessary. While the efficacy of the present treatment regimes may be questionable, the ineffectiveness of surgery alone in these high risk groups demands continued exploration in this area.

Summary

This review has attempted to demonstrate that rational therapeutic decisions relative to cutaneous malignant melanoma can be based on defined prognostic variables. Among these are the clinical type of tumor, its depth of dermal invasion and the presence or absence of lymph node metastases. The role of surgery and the potential value of adjuvant therapy have been described.

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Annual Oration for 1978

Necrotizing Neonatal Enterocolitis

DAVID K. WAGNER, M.D.

Recently health professionals have been buffeted by the winds of change. In the past decade changing of health conditions, health delivery, and health education have rapidly occurred. The discipline of pediatrics and its surgical subset has not been immune to this phenomenon. Abortion on demand has significantly altered the incidence of certain congenital anomalies, and birth control, a declining birth rate, the control of childhood communicable diseases, and the decrease of infectious childhood entities, have markedly altered the incidence of traditional problems of children. As the middle-aged child has decreased its demand from the pediatrician, this creative physician has insinuated himself earlier and earlier into the life of the infant, until now the neonatologist and his obstetrical counterpart, the perinatologist, meet arm in arm in the birth canal to escort infants of small size and immature organ structure into a world of aggressive resuscitation and life support modalities committed to the subsequent salvage of the immature and small birth weight infant.

While in virtually every other sphere of pediatric practice, disease reduction, both in incidence and in identity has occurred, in the neonatal nursery the winds of change have ushered in new challenges, one of which is a disease entity which has been called, NNE, NEC, or Neonatal Necrotizing Enterocolitis.

The purpose of this presentation is threefold: first to review the etiology, pathogenesis and clinical course of this disease entity. Secondly, to share with you our recent experience in the clinical recognition and response to NEC, and finally to propose a philosophical surgical approach to this often nebulous and vexing clinical syndrome.

Incidence

At the recent American Academy of Pediatrics Section on Surgery meeting it was estimated that NEC now comprises approximately 4000 cases per year in the United States, a figure exceeding the incidence of solid tumors, gastrointestinal obstructive anomalies, tracheal esophageal anomalies, and many other congenital conditions with which pediatric surgery has become identified. For many of us, it has become the single most common reason for which surgical consultation is sought by the neonatal unit physician. In low birth weight premature hi-risk infants its incidence is estimated to affect 5% or approximately one in twenty.

Identified Risk Factors

Infants at risk for developing NEC can be pictured as a premature newborn weighing less than 1500 grams with an episode of perinatal stress. Prenatal and perinatal complications increase the risk, such as premature rupture of membranes, placenta previa, breech deliveries and cesarean section. However, the greatest risk factor involves specific post-partum respiratory or cardiovascular complications, including apnea, respiratory distress syndrome, episodes of hypothermia, and sepsis. A significant correlation with umbilical and venous cannulation has been noted, although it is difficult to incriminate a cause and effect relationship, since these activities are normally carried out in the sicker neonates.

Diagnosis

In 90% of the cases symptomatology begins between the first 24 hours of life and the fourteenth day. A constellation of at least seven signs or symptoms can be pieced together to develop the diagnosis.

Gastrointestinal Dysfunction

Abdominal distention with associated gastric retention or simple failure to take feeds is the single most consistently associated sign. Increased nasogastric draining progressing to bile stained material further attest to gastrointestinal dysfunction. Eventual vomiting may occur in larger infants, but is usually absent in the small premature.

Abdominal Tenderness

Abdominal tenderness may present with an advancing process. Such tenderness may be difficult to elicit in the depressed infant on life support equipment, but in the non-obtunded infant evidences of discomfort occur at a point when bowel integrity is beginning to be compromised.

Abdominal Wall Cellulitis

The presence of a reddened indurated anterior wall signifying an active inflammatory process in juxtaposition to the parietal peritoneum is a physical finding unique to the thin abdominal wall of the neonate, and is usually associated with an advanced process, in many instances signifying imminent perforation.

Hematologic Alterations

Although many variations in the standard blood count and differential are noted, the most significant change relative to NEC involves a visible decrease in platelets. Early in the course, prolongation of the bleeding time may be noted, while a later manifestation involves not only alterations in the bleeding time, but a progressive dissolution of all clotting factors consistent with the syndrome identified as disseminated intravascular coagulation or consumptive coagulopathy.

Hematochezia

Some manifestation of blood in the stool commonly occurs. This may range from a guaiac-positive specimen to mucoid, frankly bloody discharge material. Most commonly, stools show a trace to moderate amount of free unaltered blood. Symptomatic volume loss of red cell mass per-rectum is unusual.

Metabolic Acidosis

Metabolic acidosis unassociated with an obvious etiologic cause such as sepsis, and which fails to respond to corrective measures, is a reasonable indication of clinical deterioration, probably representing persistent lactic acidosis, the result of early cellular death within the bowel wall.

Pneumatosis Intestinalis

Intramural air, or pneumatosis, is a pathognomonic sign of NEC being associated with 70 to 80% of reported cases. The subtle nature of early pneumatosis, often resembling normal fecal matter, may make its early delineation on x-ray difficult. Advancing pneumatosis may be observed as a linear stripe outlining a gas filled intestinal loop, or as bubbles of gas in the wall of the gut. Portal vein gas provides a dramatic demonstration of advanced pneumatosis, although this occurs in less than 10% of cases.

Few babies have all the above signs and symptoms, and each must be evaluated to develop the final equation, which warrants the diagnosis of NEC. Although the constellation of signs and symptoms, including the low birth weight infant with a stressful history associated with gastrointestinal dysfunction, abdominal tenderness, hematest positive stools, and pneumatosis consolidate to make the diagnosis possible in a significant number of cases, the more perplexing problems remain: Why does it happen, and what should be done about it?

Etiology and Pathogenesis*Infection*

Because of the commonly reported clustering of cases by time and location, and the frequent association of documented sepsis, the possibility that NEC could be secondary to infectious agents has long been suggested. Evidence at present suggests no demonstrable viral, fungal, or bacteriologic agent is responsible for NEC. The presence of normal gastrointestinal flora invading the bowel wall appears to be a secondary role subsequent to other etiologic processes causing bowel wall necrosis.

Hyperosmolar Feedings

Hyperosmolar feedings have been sighted as causing injury to sensitized mucosal cells in both animals and human studies. For example, prematurely delivered pigs fed hyperosmolar goat milk developed a disease closely resembling NEC, while seven of eight under 1200 grams-sized babies fed a high

osmolar diet developed the characteristic clinical features. However, NEC has continued to increase in the absence of hyperosmolar formula feedings.

Decreased Secretory IGA

The principle immunoglobulin in intestinal secretions is IGA, with its formation centered in plasma cells present in the lamina propria. Such IGA is deficient in the neonate for several days, until food antigens and endogenous flora of the colonized gut serve to stimulate antibody production. During these first few days the primary source of IGA is the colostrum of mothers milk, specifically the colostrum leukocytes which provide passive immunity against enteric pathogens. Enteric overgrowth of potentially pathogenic bacteria in the formula fed rat emphasized the importance of protective antibodies in breast milk. Unfortunately, after a spate of enthusiasm for the utilization of breast milk in all infants at risk, breast milk alone has not shown itself to be fully protective against the development of NEC.

Plasticizers—Polyvinyl Tubing

Increased tissue concentration of diphthalate, associated with polyvinyl catheters and umbilical catheterization, has been incriminated as an etiologic factor. Arterial and venous umbilical catheters are known to disrupt the hemodynamics of splanchnic circulation with portal vein pressure increased by umbilical vein catheterization. However, it is doubtful that this is a causative agent and it is more likely due to the fact that small birth weight infants with difficulties routinely receive vascular access procedures.

Selective Circulatory Ischemia

The most widely held and easiest understood etiologic concept involves selective circulatory ischemia as an asphyxial defense mechanism in the primitive organism. Conceptually, this relates to original experimental activities carried out at the Edward Martin Biological Laboratory at Swarthmore College in the early 1940's, when a paper entitled "The Regulation of Arterial Blood Pressure in the Seal During Diving" was published in the American Journal of Physiology. This work showed a pronounced bradycardia, as well as alteration of blood pressure, occurring during rapid submersion of this mammal. Some 20 years later other investigators utilizing a diving duck model quantitated regional blood flow by following the distribution of rubidium chloride tagged red cells. This experiment compared regional blood flow in the normal breathing state to that occurring in the stressed state of the diving duck in the prolonged submerged situation. Consistent and significant shunting of oxygenated blood occurred away from certain portions of the gastrointestinal tract toward an increased concentration within the heart and brain. Interestingly enough, in the gastrointestinal tract the esophagus was shown to have a minimal alteration of blood flow while the remaining portions of the gastrointestinal tract, particularly the distal small bowel received sharp reduction—a pattern consistent with the gastrointestinal areas of involvement of NEC. This hypothesis is supported

by more recent work involving regional blood flow determination of asphyxiated and resuscitated neonatal piglets. Furthermore, the gut of such asphyxiated and resuscitated piglets showed a rebound phenomenon which resulted in vascular congestion and mucosal hemorrhages strikingly similar to the findings described in infants with NEC. In the opinion of these investigators, local hemorrhages are the primary lesion of necrotizing enterocolitis, resulting from a combination of increased capillary fragility produced by gut ischemia and intramural vascular congestion resulting from the resuscitative effort and rebound phenomenon. Subsequently, local cellular necrosis occurs, invasive bacterial proliferation and transmural inflammation result in gastrointestinal dysfunction and the clinical symptomatology associated with enterocolitis. Primitive reflex mechanisms are most pronounced in the immature and incompletely differentiated organism. The dramatic implementation of these reflexes is postulated to be particularly active in the immature and premature infant. The most logical common pathway would then appear to be hypoxia, which stimulates primitive reflex mechanisms to shunt oxygenated blood away from the gastrointestinal tract—producing ischemic mucosal lesions wherein bacteriologic invasion and subsequent gut necrosis occurs, resulting in cell death and the syndrome of necrotizing enterocolitis.

Clinical Course

The clinical picture can usually be divided into those involving an early versus late onset of symptoms, those involving short isolated segments of gut versus a generalized involvement of the gastrointestinal tract, and those involving fulminate development of symptoms, versus a protracted period of symptomatology. Fulminate development of symptoms is generally associated with poor outcome, whether occurring early or late in the neonatal period, and whether involving short or long segments of the gastrointestinal tract. Localized disease commonly associated with ileocecal involvement provides, in general, a better prognosis than diffuse involvement of the gastrointestinal tract. Delayed onset versus early onset has the least direct influence on outcome. Consequently, a prognostic nomogram might show early onset, fulminate course, and generalized involvement of the gut as having the poorest outcome. Late onset, localized disease, and protracted development of symptoms provide the best prognostic possibilities.

Treatment

In many instances the progressive features of NEC can in fact be aborted if appropriate use of gastrointestinal rest, intravenous alimentation, and systemic antibiotics are utilized. At the earliest sign of gastrointestinal distention with retention of gastric contents, culturing of body orifices and secretions is carried out and the infant begun on a regimen of antibiotics. Our current choice for this is ampicillin (150mg/kg/day) and gentamicin (5mg/kg/day). Regional flora as identified in each nursery may give rise to variation in the choice of antibiotics. The use of enteral antibiotics, although popularized by some, has not received universal acceptance and is not a part of our regimen.

Gastrointestinal Rest

Gastrointestinal rest by a nasogastric tube and/or gastrostomy is desirable. In our hands nasogastric decompression has been used exclusively, while others have preferred a gastrostomy.

One of the most important considerations is continued nutritional support with parenteral alimentation either through a peripheral or a central access port. By utilizing free fat solutions which provide nine calories per gram, peripheral alimentation is possible and maintenance of nearly total nutritional support facilitated. Such therapy obviates the potential septic components of a central venous long term catheter. Removal of umbilical venous and arterial lines is to be encouraged, and if continuing blood gas monitoring is necessary, this can be carried out from a temporal or radial artery site. Gastrointestinal rest with intravenous alimentation is carried out for a minimum of five to seven days, and in most instances of non-progressive NEC is discontinued between the seventh and fourteenth day, when resumption of oral intake occurs.

When surgical intervention is decided upon, the surgical procedure involves resection and reconstruction. Obvious necrotic material is removed but questionable material, particularly in extensive segment involvement, should remain in situ. A second look at 24 or 48 hours is preferable to resecting long segments of questionable viability. To exteriorize the remaining bowel or carry out primary anastomosis is the major intraoperative decision. Many suggest routine exteriorization of all cases. More recently, some evidence indicates that in selective cases, primary anastomosis is a satisfactory procedure. Because of infection and severe catabolism, the risk of disruption is high. In our hands the use of monofilament wires for the fascia has proved useful, while the use of prophylactic retention sutures has not been employed. Fresh whole blood, rather than component therapy, provides clotting factors often depleted in the baby with NEC. As previously indicated, parenteral nutrition in the post-operative period is essential.

The Medical College of Pennsylvania Experience

During the past three years thirty cases of NEC were diagnosed and managed by the neonatal and pediatric surgical service at The Medical College. The seven previously identified signs and symptoms were utilized to establish the diagnosis. Gastrointestinal dysfunction to some degree was uniformly present with the exception of a single case in which the course was so fulminant that dysfunction and diagnosis occurred simultaneously. Hematochezia, metabolic acidosis, and pneumatosis were present in a consistently high percentage of cases. The diagnosis was considered established in this series under the following circumstances: 1. operative or postmortem delineation of disease; 2. pneumatosis associated with a clinical picture compatible with NEC; 3. in the absence of demonstrable pneumatosis any constellation of four of the identified signs or symptoms. In 80% the onset was within the first ten days of life. Twenty-six or 86.6% weighed less than five pounds. It should be noted this leaves 20% to have occurred later than the first ten days of life and some 13%

to be term size infants. All term sized infants presented with symptoms between the third and fifth day of life.

Management

In 16 cases, non-surgical treatment was elected. Of these, 12 survived and four died. Of those dying without surgical intervention, the clinical course was so fulminant as to preclude a surgical consideration. Fourteen received an abdominal surgical procedure. Of these, nine survived and five died.

Surgical Intervention

The decision to surgically intervene was carried out when free perforation was identified in ten of our cases, or when clinical deterioration appeared to be present in the absence of free perforation as occurred in four cases. For effective surgical management to ensue, one must intervene ideally at that point just prior to perforation, and/or immediately thereupon such an occurrence. The generous use of x-rays, or more importantly the close monitoring by trained nursing personnel, produces the middle of night and weekend diagnosis so necessary if surgical intervention is to be helpful.

Exteriorization was carried out in five situations, two of whom survived to have subsequent reconstitution of the gastrointestinal tract, three of whom died after stoma formation, all in the immediate post-operative period. In nine patients primary anastomosis was carried out, seven of whom survived and two of whom died. Both of these deaths were in the immediate post-operative period, and in neither was anastomotic disruption identified at postmortem examination. In all cases 10cm or more of the gastrointestinal tract was involved, and in at least 1/3 of the cases, more than 1/3 of the small bowel was involved. However, at no time was it necessary to remove more than 50% of the gastrointestinal tract. Two patients received a second look procedure to determine ultimate bowel survival. Only two of 21 survivors followed for three months or more have developed strictures. In both instances these were amenable to corrective local resective procedures. This 9.5% incidence of strictures is somewhat lower than that reported in other series. One of our two strictures involved a site of primary anastomosis. All infants have required careful long term monitoring of formula and feeds. One is a persistent gastrointestinal cripple.

NEC—Results of Therapy

The MCP overall survival of 70% is a figure which compares favorably to other reported series. It is of interest to note that based on these reported series there would appear to be progressive improvement in the recognition and response to this entity, probably the result of increased number of physicians having undergone the learning curve necessary to recognize and appropriately respond to a process with so many variables.

Summary and Conclusion

The winds of change then have indeed ushered in a disease of mounting

concern to health professionals caring for children. Its origin is still somewhat obscure, its clinical manifestations are variable and unpredictable, its decision points and outcomes are not easily identified by laboratory studies or programmable computer printouts. Perhaps the message the neonate sends forth to the physician in reality is saying, "Stand by my bedside rather than in the laboratory or x-ray department and look, listen, feel and cerebrated. Operate when your fantasy says perforation is imminent or an immediate reality, whether this is day, night, weekends or holidays; do what you must to remove dead or dying tissue but no more; provide a stoma only if lack of blood supply or increased tension jeopardize my anastomosis; encourage my healing phase with vigorous nutritional support and in many instances I'll survive." Survive as a combination of the marvels of resuscitative mechanized medicine but only when these modalities are sustained by traditional clinical judgment, learned and applied best by day and night and weekend appearances at the bedside or in the operating room where to look, listen, feel, cerebrated, and then only sometimes to operate, are the surgeon's contribution to this challenging disease process ushered upon us by the winds of change.

Annual Oration for 1979

The Founding Fathers and Centennial History of the Philadelphia Academy of Surgery

FREDERICK B. WAGNER, JR., M.D.

On April 10, 1879, eleven days before the founding of the Philadelphia Academy of Surgery, a dinner was held for Dr. Samuel D. Gross at the St. George Hotel, later to become the Bellevue Stratford. Gross was 74 years old and the occasion was the 51st anniversary of his entrance into medical practice. D. Hays Agnew, the distinguished Professor of Surgery at the University of Pennsylvania who presided, pinned a jeweled badge, now in the Mütter Museum, on the lapel of Gross as a testimonial of esteem of the 105 subscribers. One sentence from Gross' response reflects the ideals he had cherished for so many years: "Oh, for a glance at the profession half a century hence when man, enlightened and refined by education shall reflect more perfectly the image of his Maker!" What if he had been given a whole century, as we most fortunately have, and what would have been his astonishment?

Gross states in his *Autobiography* that he had long seen the necessity for both a local and a national surgical association. When he formally broached the matter to some of his surgical friends, they at once offered their cooperation. This culminated in the Philadelphia Academy of Surgery and the American Surgical Association, in both of which he was the founder and first president, and in which the certificates of membership are identical.

Organization of the Academy

The following surgeons met at the home of Professor Samuel D. Gross at 11th and Walnut Sts. on Monday evening, April 21, 1879: Drs. D. Hays Agnew, Richard J. Levis, Addinell Hewson, Thomas G. Morton, William H. Pancoast, John H. Packard, John H. Brinton, Samuel W. Gross, and J. Ewing Mears. Professor Gross reiterated that the purpose of the meeting was the formation of an association of the surgeons of Philadelphia to be known as the Academy of Surgery. He had painstakingly prepared a constitution and by-laws which he submitted for action by those present. The first article relating to the name of the society was adopted on the motion of Dr. Packard. Those present thus formed themselves into the Philadelphia Academy of Surgery and constituted our Founding Fathers.

The Founders

A review of the lives of the ten founders should be fascinating to Fellows of this Academy, since we are all in similar pursuits; and if what is portrayed

should prove uninteresting, it is only the fault of the writer, for not only did they gain success and honor in surgery, but possessed other qualities that make study of their lives worthwhile. The sketches will be given in the order in which their names are signed on the Charter.

Samuel D. Gross (1805-1884), the Founder, was born near Easton, Pa., on a farm in the Pennsylvania Dutch country. His education started in a rural log cabin. After a desultory course to high school level and an unsatisfactory preceptorship in Easton with a country practitioner, he studied in Philadelphia under Dr. George McClellan, the founder of Jefferson Medical College, and graduated from that institution in 1828. Unlike his founding cohorts he lacked the advantage of a prominent father, a broad college background and foreign travel after medical graduation. Despite these initial handicaps he eventually towered as the "Emperor of Surgery of the Nineteenth Century," and was acknowledged in Garrison's History as the "greatest surgeon of his time." He pioneered to combine clinical surgery, teaching and research in an academic setting, and succeeded eminently. He accepted his first professorship of surgery at the University of Louisville in 1840, which he served for 16 years, and then took the Chair at his Jefferson Alma Mater in 1856 for the last 26 years of his long academic life. His literary output was prodigious, including 14 books translated, edited or written by him on diseases of bones and joints, pathological anatomy, wounds of the intestines, genito-urinary diseases, foreign bodies in the air passages, military surgery (used by both North and South during the Civil War), his herculean two-volume *System of Surgery*, lives of eminent physicians and surgeons, and his extensive autobiography. In addition to being founder and first president of the Philadelphia Academy of Surgery, he took the same role in the Jefferson Alumni Association and Philadelphia Pathological Society. He was also president of the Kentucky and Pennsylvania State Medical Societies and Philadelphia County Medical Society. On the national level he was founder and first president of the American Surgical Association, president of the American Medical Association, the American Philosophical Society, the American Academy of Sciences, and the Teacher's Medical Convention in Washington, D.C. in 1870. He was president of the World Medical Congress in 1876, twice a delegate to the British Medical Association, and belonged to numerous prestigious European societies. He was awarded honorary degrees from Jefferson College at Canonsburg, Oxford, Cambridge, Edinburgh, and the University of Pennsylvania. In 1897, the United States Congress supplied the granite base for a bronze statue of Gross that stood in Smithsonian Park, Washington, D.C., opposite the Army Medical Museum. This statue was removed to its more parochial home on the campus of Thomas Jefferson University in 1970. The name of Gross appears in mosaic on the ceiling of the Library of Congress, an honor usually reserved for a military man. His portrait by Thomas Eakins, known as the "Gross Clinic" is considered by many critics as the finest example of American art. Copies appear frequently in books on art and as the frontispiece in medical texts. In the fitting words of Academy Fellow Dr. J. Chalmers DaCosta, the first Samuel D. Gross Professor at Jefferson

Medical College: "I beheld the mighty leader a great many times, heard him lecture frequently, and watched him operate, and in him always saw the embodiment of surgical learning, dignity, and distinction, and felt that fifty years of American surgery were speaking through his lips."

D. Hays Agnew (1818-1892), of Scottish lineage, grew up in Lancaster County, Pennsylvania, with an inclination toward the surgical profession of his father. At age 21 he graduated from the Medical College of the University of Pennsylvania, class of 1838. He attained prominence as one of the finest surgeons in Philadelphia, with subsequent achievements as head of the Philadelphia School of Anatomy, military hospital service during the Civil War, culminating in his becoming an authority on gunshot wounds; co-founder of the Orthopedic Hospital; full Professor of Surgery at the University of Pennsylvania; recipient of an LL.D. degree from Princeton; and author of *Principles and Practice of Surgery*, three volumes which appreciated Listerian antisepsis. Dr. Agnew's personality and force of character established him as a chief justice in medicine.

Addinell Hewson (1828-1889), a native Philadelphian, was reared among the best medical surroundings, graduating from the University of Pennsylvania in arts and from Jefferson Medical College in 1850. After postgraduate study in Paris and Dublin, he served a residency in the Pennsylvania Hospital. He started a most successful surgical practice, with hospital positions at Episcopal, Pennsylvania, and Wills Eye. He was the private physician to General Meade, and just before the battle of Gettysburg removed a bullet from his side when army surgeons had failed to get the ball. He edited works on otologic and ophthalmic surgery, published *The Use of Earth in Surgery* for wounds and tumors, invented a fracture bed, and was interested in the influence of weather over the results of surgical operations. As a fourth generation physician, he brought honor to his father, who had been president of the College of Physicians, and sired a son who also became prominent in the medical profession.

John H. Brinton (1832-1907), a native Philadelphian, received his Bachelor of Arts from the University of Pennsylvania and doctor's degree from Jefferson Medical College in 1852. He then spent a year in the medical schools of Paris and Vienna. On returning, he entered general practice and lectured on operative surgery at Jefferson Medical College under Mütter and Gross. In the Civil War he attained great prominence as Medical Director of the Army of Cumberland; served on various examining boards in Washington; estimated losses and casualties for the government; was one of the founders of the Army Medical Museum; acted as personal physician to Generals Grant, Rosencrans, Sheridan, and McPherson; wrote "Medical and Surgical History of the War of the Rebellion" and "Personal Memoirs" of the Civil War. He then resumed his lectureship at Jefferson, practiced as Surgeon to Philadelphia General and St. Joseph's Hospitals, assumed Chairmanship of the Mütter Museum, and aided Gross in the founding of societies. In 1882, at the retirement of Professor Samuel D. Gross, he shared the divided Chair of Surgery of Jefferson Medical College with his boon companion, Samuel W. Gross. He received an LL.D. degree

from the University of Pennsylvania in 1901. Brinton contributed important papers on a variety of surgical topics, as the American editor of *Erichsen's Surgery*, and retained respect as a fluent lecturer and polished gentleman.

J. Ewing Mears (1838-1919) was born in Indianapolis, the son of a Jefferson Medical College graduate. He received the degrees of A.B. and B.S. from Trinity College, Hartford, Connecticut, and graduated from his father's medical Alma Mater in 1865. He then served a one-year term as resident physician at Philadelphia General Hospital. His clinical practice of surgery was highly successful at Jefferson, St. Mary's, St. Agnes' and his own private hospital on South Broad Street, where he did mostly general abdominal and gynecological work. Along with charter member of the Academy, William W. Keen, he pioneered in Listerian methods. As a teacher, he was Professor of Anatomy at the Philadelphia College of Dental Surgery, and Demonstrator of Surgery and Lecturer in Gynecology at Jefferson Medical College. He achieved notice for his preparation of medical men for the U.S. naval service, for it was said that no pupil of his failed to pass. Along with numerous articles, he published a *Practical Surgery* and *Surgery of the Abdomen*. In later life he was interested in eugenics and advocated the sterilization of criminals. As a charter member of the American Surgical Association, he served as its president in 1894. He was the youngest (41 years) of the founding fathers of the Philadelphia Academy and lived through the first forty years of its progress, having survived the longest of the original ten (81 years).

Thomas G. Morton (1835-1903) was a native Philadelphian and son of a physician. His literary and medical education was obtained at the University of Pennsylvania, class of 1856. He was a resident physician in the St. Joseph's, Wills Eye, and Pennsylvania Hospitals. He was Professor of Orthopedic Surgery to the Philadelphia Polyclinic and College for Graduates in Medicine, and founder of the Philadelphia Orthopedic Hospital in 1867. In the Pennsylvania Hospital, over a period of 43 years, he was a pathological curator, chief of surgery, president of the medical staff, and author of "The History of the Pennsylvania Hospital." In 1875, Morton described the painful disorder of the foot since then known as "Morton's Toe" or "Morton's Neuralgia." He devised many mechanical devices for diagnosis and treatment of surgical disorders, which he exhibited in his scientific presentations before the Academy of Surgery. In membership of many of the surgical, scientific, and social societies both here and abroad, he spent a "life in intelligent devotion to the interests of humanity."

Samuel W. Gross (1837-1889) was born in Cincinnati, the eldest son of the founder, and inherited in fullest measure the intellectual prowess of his world renowned father. He was educated at Shelby College, Kentucky, the Medical College in Louisville, and Jefferson Medical College (1857). He entered private practice, devoting much time to teaching in his father's surgical department, doing research in pathology, and aiding in editing the *North American Medico-Chirurgical Review*. His Civil War service extended over a period of nearly four years as medical director in various military departments of the country. He then returned to surgical activity at the Jefferson, Howard, and

Philadelphia General Hospitals. He lectured on genito-urinary diseases, edited the elder Gross' book on *Diseases, Injuries, Etc., of the Urinary Bladder*, wrote a *Treatise on Impotence, Sterility, and Disorders of the Male Sexual Organs*, and became one of the founders of the American Genito-Urinary Association. Other literary activities consisted of aiding his father in various editions of the monumental *System of Surgery*, an authoritative treatise on *Tumors of the Mammary Gland*, and editorial articles in *Medical News*. In 1882, on the retirement of his father, he shared the divided Chair of Surgery at Jefferson with Dr. John H. Brinton. Pneumonia claimed his life at the age of 52 while he was at the zenith of his powers. The "Widow Gross" married his close friend, Dr. William Osler, three years later, and as Lady Grace Revere Gross Osler endowed a lectureship and titled Professorship in Surgery at Jefferson Medical College in honor of his special interest in tumors.

John H. Packard (1832-1907), a Philadelphian, came from a distinguished family of Puritan descent, his father being a prominent lawyer. He graduated from the Department of Fine Arts of the University of Pennsylvania and continued his medical studies there under the preceptorship of the eminent Joseph Leidy, graduating in 1853. After two years of postgraduate work in Paris, he returned to a coveted residency in the Pennsylvania Hospital for an additional eighteen months. He next secured a teaching position as Demonstrator of Anatomy at his medical alma mater. In addition to a large private practice as surgeon to the Episcopal and Pennsylvania Hospitals, he published a *Handbook of Minor Surgery*, *Handbook of Operative Surgery*, and a *Philadelphia Medical Directory*. He was an Original Fellow and treasurer of the American Surgical Association. Besides his interest in art, music and travel he was admired for his humorous reminiscences and amusing pencil sketches. His recently restored portrait now hangs on permanent display in Thompson Hall of the College of Physicians.

Richard J. Levis (1827-1890), a native Philadelphian and son of a physician, was an office student of Professor Thomas D. Mütter, and graduated from Jefferson Medical College in 1848. He became prominent as a surgeon, with appointments at Philadelphia, Jefferson, Pennsylvania, Jewish, and Wills Eye Hospitals. Besides lecturing on ophthalmic and otologic surgery at Jefferson Medical College, he was the first president of the board of trustees of the Philadelphia Polyclinic and College for Graduates in Medicine, president of the Philadelphia County and Pennsylvania State Medical Societies, and original member of the American Surgical Association. He modified numerous operative procedures and invented surgical instruments and orthopedic appliances. Always especially considerate of young physicians, he claimed he could learn more from them than from older men.

William H. Pancoast (1835-1897), a Philadelphian, was the son of the illustrious surgeon-anatomist, Joseph Pancoast. He graduated from Haverford College and subsequently from Jefferson Medical College in 1856. As was customary he did postgraduate work in London, Paris, Vienna and Berlin. He served for many years as Demonstrator of Anatomy in his father's department

at Jefferson Medical College and succeeded him in that Chairmanship in 1874. He was Surgeon-in-Chief of a military hospital in Philadelphia throughout the Civil War and helped found the Medico-Chirurgical College of Philadelphia in 1888, in which he served as Chairman of Anatomy. In 1874, along with Dr. Harrison Allen in a commission appointed by the College of Physicians, he performed an autopsy on the original Bunker Siamese twins in regard to the propriety of an operation for their separation. It is historically significant that Academy Fellow Dr. C. Everett Koop has successfully separated three different sets of Siamese twins, the last in 1977, in which the attachments were much more complex.

Philadelphia Academy and New York Surgical Society

Philadelphia, the seat of the oldest Medical College (University of Pennsylvania, 1765), could now lay claim to the oldest surgical society. New York followed as a close second with founding of the New York Surgical Society on October 30, 1879, just six months after the Philadelphia Academy. Joint meetings with the New York society, in Philadelphia or New York in alternating years, are held with an excellent scientific program and banquet. A most gratifying relationship between the members of the two organizations has always existed.

Book for Constitution and By-Laws

At a second meeting in the home of Professor Gross on April 29, it was authorized to purchase a suitable book in which the constitution and by-laws, just adopted with slight alterations, should be copied and for the signatures of the fellows. J. Ewing Mears, the temporary secretary, had the book custom-made. It remains in active use and as of April 2, 1979, there are 413 signatures, starting with that of Samuel D. Gross. The list is an impressive galaxy of Philadelphia's finest surgeons of the past century. The book is stored for safe keeping in the fireproof vault of the College of Physicians, and the quality of the paper promises to last beyond another century.

Home for Academy in College of Physicians

On the evening of May 5, a third meeting was held at the home of Professor Agnew, 1611 Chestnut Street, at which time a committee was appointed to secure a room in the College of Physicians for the purpose of meetings. The final organization meeting was held June 2, at the hall of the college, which had been engaged at a rental of fifty dollars per year. Thus the College of Physicians has been the one and only home for the Academy. At that time the building which has been erected in 1863 was located on the northeast corner of 13th and Locust Streets, now a parking lot. In 1909 the College moved to its present location at 19 South 22nd Street, and the handsome furniture on the podium of the former building was transferred to Mitchell Hall. Through the years the Academy and College have enjoyed a symbiotic relationship.

The Scientific Meetings

The first scientific meeting was held October 6, 1879, with Dr. Addinell Hewson as temporary chairman and eleven Fellows present. The speakers were Drs. Samuel D. and Samuel W. Gross on treatment of sarcomas, and Dr. Thomas Morton on fracture of the acetabulum, with remarks by the others in attendance. From then until now the typical scientific session has consisted of three papers with discussion. Patients regularly were exhibited as well as specimens, models, apparatus, and new instruments. With the advent of slides this practice has virtually disappeared during the past 25 years.

An original custom which has persisted is the black tie formal attire of the president and secretary at all scientific meetings.

The Charter

At the meeting of December 1, 1879, all necessary steps were authorized to procure a charter, with the designation of A. Haller Gross, the younger son of Samuel D. Gross, to act as attorney. It was signed on December 24 by nineteen Original Fellows, consisting of the ten founders and nine additional charter members. It is printed and signed on parchment which, except for some fading of the ink, appears not a day old one hundred years later.

The Seal

At the same December 1 meeting, the committee on obtaining a charter was charged to obtain designs for a seal. It now appears on the front cover of the *Transactions of the Philadelphia Academy of Surgery*, starting with Volume III, 1901, and is stamped on the certificates of membership. Within a four centimeter circle is inscribed in Latin "Academy of Surgery of Philadelphia, to the Art and Principles of Surgery, Founded 1879."

First President and Officers

At the meeting of January 5, 1880, Dr. Samuel D. Gross was elected the first president. The other duly elected officers were: vice presidents, D. Hays Agnew and Richard J. Levis; secretary, J. Ewing Mears; treasurer, William Hunt; recorder, John B. Roberts; librarian, Oscar H. Allis; corresponding secretary, Thomas G. Morton; council, John Ashhurst and John H. Brinton; pathological histologist, Samuel W. Gross. William W. Keen and John H. Packard were elected to the committee on publication. It seems curious that Addinell Hewson, who was the temporary chairman and so active in obtaining the charter, never served in any subsequent office of the Academy. The reason becomes likely in the fact that for the previous eleven years he had been suffering from a progressive neurologic disorder that was to prove fatal. Mrs. Hewson attributed his first epileptic seizure in 1868 to a head injury sustained in a horse and carriage accident. In 1889, at age 61, he fell on the stairs and died one hour later without recovering consciousness.

Records of the Academy

The minutes for the first thirty years of the Academy are well preserved

in a book of 442 pages, stored with other historic documents in the fire-proof vault of the College. For the first twenty-five years they were handwritten and thereafter appear in type. The easy legibility and detail of all the proceedings from the very first meeting at the home of Gross make this volume not only a treasure but delightful reading.

Transactions of the Philadelphia Academy of Surgery first appeared in 1899, with Volume XXXII as the latest in 1976. They come out at roughly five-year intervals and are edited by the recorder. While these volumes reflect only the top of the iceberg with respect to the accomplishments of Philadelphia Surgery, many pioneer and enduring contributions from illustrious Fellows may be found in their pages.

The *Annals of Surgery*, in existence since 1885, has been the official publication of the Philadelphia Academy as well as for our fraternal New York Surgical Society. Dr. John H. Gibbon, Jr., one of the Academy's past presidents, served for many years as chairman of the editorial board of this prestigious journal in which many of the articles presented before this society appear.

Annual Orations

The first Annual Oration was given by Founder Samuel D. Gross on January 7, 1881, entitled "John Hunter and His Pupils," which he subsequently published as a treatise. They have been given yearly with but three exceptions. The first missed year was 1900. During the year 1918 the meetings of the Academy were more or less irregular owing to the absence of many of the Fellows in military service, and for this reason the Orations were not given in 1918 and 1919. Thereafter they have been given without interruption for a total of 96.

Gross Room and Endowed Library in College of Physicians

At the time of his move from Louisville to Jefferson Medical College in 1856, Gross received the sad news that 2,000 of his most treasured books, supposedly in safe storage, had been totally destroyed in a fire at Louisville. In the ensuing years he increased his library once more to approximately 4,000 volumes, leaving them in his will to the Academy with the proviso that they be housed in the library of the College. A special room was created in the present building of the College, maintained by an endowment from the children of Gross. J. Ewing Mears presented the bookcases and mantel. The chairs, table, and rugs were ordered to the College's specifications and presented by members of the Gross family. In 1946 Mr. Orville H. Bullitt, the great-grandson, presented Gross' gold-headed cane to adorn the mantelpiece. The Gross Library is housed partially in this room, the remainder in the stacks of the College building.

A portrait of J. Ewing Mears and one of Samuel W. Gross hang on the west wall of the Gross Room. It is thought, but not authenticated, that some attempt was made to simulate Gross' own library at home. The Gross Room continues its original use for council meetings of the College and Academy.

The marble bust of Gross has recently been moved from the entrance hall of the College to a more appropriate location just outside the Gross Room.

The Gross Prize

As if to outdo himself after founding the Academy, writing the original constitution and by-laws, serving as first president, giving the first Annual Oration, involving his children and daughter-in-law in benefactions to the Academy, and bequeathing his large library, Gross provided \$5,000 in his will of January 23, 1884, for a prize, since then known as the "Gross Prize." This is a permanent fund, the accumulated income therefrom to be paid every five years to the writer of the best original essay, not exceeding 150 printed pages on some subject in surgical pathology or surgical practice, founded upon original investigation, the candidates to be American citizens. The prize has been awarded 17 times, first in 1895 and last in 1977. Some of the well known winners were Evarts Graham, Emile Holman, Owen Wangensteen, Robert Elman and Lester Dragstedt.

Honorary Fellowships

Since founding of the Academy, Honorary Fellowship has been conferred on 73 noteworthy surgeons on both sides of the Atlantic. Fifty-two are from 14 U.S. states and Washington, D.C., while 21 are from 9 other countries (England, France, Germany, Switzerland, Austria, Belgium, Denmark, Sweden, and Canada). Samuel D. Gross championed the idea, and in 1881, only two years after the birth of the Academy, 13 Honorary Fellows were elected from his suggested list. The awards since then have been made somewhat sporadically, including 19 at the 50th and 8 at the 75th Anniversaries. With a lapse of the past 25 years, nine were elected for the Centennial Celebration.

Anniversary Celebrations

In 1904 there was no recognition given to the 25th anniversary of the Academy. It was a routine year with no award of Honorary Fellowships.

In 1929 a special Semi-Centennial Celebration was held on April 22, at 3 P.M. in Mitchell Hall of the College. Nineteen Honorary Fellows were elected, of which ten were from the United States and nine from foreign countries. Dr. Edward Archibald, Dr. John Finney, and Dr. Evarts Graham gave scientific presentations. A banquet was held that evening at the Bellevue-Stratford Hotel. Subscription was \$5 per plate in contrast to the assessment of \$100 for Fellow and Spouse at the Centennial.

In 1954 the 75th Anniversary was held on November 20 at the Barclay Hotel. Dr. John Gibbon, Jr., presided in the absence of Dr. L. Kraeer Ferguson, who was ill. A brief history of the Academy was read by Dr. Calvin Smyth. Honorary Fellowships were conferred upon eight distinguished surgeons, five from the United States and three from abroad. Representatives from 15 outstanding surgical organizations were recognized from the floor. A paper by Dr. Detlov Bronk entitled "Discoveries of New Knowledge" concluded the evening.

In 1979, the Centennial Year, a black tie dinner-dance was held on November 3rd at the Union League of Philadelphia, with President of the Academy, Dr. Donald R. Cooper presiding. This gala occasion was attended by

Fellows, their spouses, and honored guests, totaling 227. Honorary Fellowships were bestowed upon Drs. William P. Longmire, Francis D. Moore, David C. Sabiston, Owen H. Wangensteen, and Robert M. Zollinger. Dr. J. Engelbert Dunphy and three foreign recipients, Drs. Clarence Crafoord, John C. Goligher, and Lord Rodney Smith (K.B.E.), were unable to attend. A Centennial Celebration Award in the form of a plaque was presented to Academy Fellow Dr. Herbert R. Hawthorne, in honor of his "devotion to the ideals of the Philadelphia Academy of Surgery." On December 3, in conjunction with the Annual Oration, there was an exhibit in the Mütter Museum of memorabilia relating to the founders and history of the Academy.

Heritage and Challenge

To trace the progress and contributions of Philadelphia Surgery through the past hundred years is not the object of this oration. Suffice it to say that in wielding the scalpel, teaching in surgical amphitheatres, classrooms, and bed-sides, and in carrying out clinical and laboratory research, the Fellows of this Academy have continued to distinguish themselves.

It has been the honor of six Fellows to aid in the care of presidents of the United States. Gross was consulted by Andrew Johnson for ankylosis of the left elbow. D. Hays Agnew, as an authority on gunshot wounds, was a consultant for President Garfield, victim of an assassin's bullet. John H. Brinton was the personal physician to Ulysses S. Grant. William W. Keen was a member of the team that successfully removed a tumor of the jaw from President Cleveland in the famous secret operation aboard a yacht in New York Harbor in 1893. John Chalmers DaCosta, as a Naval Commander in World War I, cared for President Wilson while crossing the Atlantic for the European Peace Treaty and negotiations for the League of Nations. Many Fellows will recall that Isidore S. Ravdin was a member of the team that operated upon President Eisenhower for Crohn's disease.

Just as Samuel D. Gross could not have imagined or believed possible what has transpired surgically in the last century, it is impractical to envisage what surgery will be like in a future century. Rather it is for us to continue the same challenge laid down by our Founding Fathers, namely, the "Cultivation and Improvement of the Science and Art of Surgery, the Elevation of the Medical Profession, the Promotion of the Public Health, and such other matters as may come legitimately within its sphere."

The era covered in this oration has extended from Edison's invention of the incandescent bulb in 1879 to Cormack and Hounsfield's computer-assisted tomography for which they won the Nobel Prize in 1979. For the rewarding assignment to study the Academy's history during these years I am indebted to our President, Dr. Donald R. Cooper. With all the privilege that giving the Centennial Oration confers, I wish the Philadelphia Academy of Surgery continued success and honor in its progressive work, both ahead and with respectful regard for the past—that ladder by which we all climb, adding but a step each year.

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Annual Oration for 1980**The Role of Immunology and Pancreatic Transplantation in Diabetes**

CLYDE F. BARKER, M.D.

The role of immunology in diabetes might seem an unusual subject for consideration at a surgical meeting. Yet there is good precedent for the interest of surgeons in the pathogenesis and treatment of this disease. The Canadian surgeon Frederick Banting was, of course, the first to isolate insulin and use it to maintain life in pancreatectomized animals, an accomplishment which could hardly have been expected from investigators lacking surgical skills. It is ironic that this landmark experiment, which must surely be considered one of the greatest in all of medical history, although allowing prolongation of life in juvenile diabetics, has not led to "cure" of the disease, as initially hoped.¹ Instead the incidence of diabetes has continued to increase so that 20% of the population are soon expected to be stricken by a malady which is already the fourth ranking cause of death in Americans. It is also the third most common cause of renal disease and the most common cause of blindness occurring in adults. As surgeons we are confronted daily with the peripheral vascular complications of the disease, leading so commonly to requirement for amputation.

Despite the failure of present insulin regimens to prevent the disease there is new evidence that if insulin could be delivered more effectively—in such a way as to really normalize blood glucose concentration—complications would be diminished or prevented.² Unfortunately, the practical aspects of such perfect insulin delivery are not easy and could be accomplished only in two ways. One would be continuous monitoring of blood glucose, the use of a computer to determine the proper insulin dose and its delivery intravenously by a mechanical device (artificial pancreas). The other method is replacement of normal pancreatic tissue, which although presenting formidable biological problems, is likely to be a more practical method. Thus, the rationale for transplantation as a treatment for diabetes is not avoidance of the inconvenience of insulin injection, but complete normalization of blood glucose, which probably is the only method by which vascular sequelae of the disease can be avoided. Experimental evidence in animals supports the contention that this treatment would be effective, since vascular lesions characteristic of experimental diabetes in inbred rats are prevented, and even reversed if treated early, by replacement of normal islets.³ In outbred species such as man, in which histocompatible donors are unlikely to be available, the most serious

problem associated with islet replacement will undoubtedly be immunologic rejection.

Rejection Problem

The rejection problem (common to transplantation of foreign tissue by any method), will no doubt frustrate to some degree efforts to replace pancreatic islets, whether this be accomplished by transplanting the entire pancreas with vascular anastomoses, or by isolating the islets of Langerhans and transplanting them by simple injection, a non operative technique which would be easier and safer for the patient. There is, however, considerable evidence that the rejection process may be particularly severe in the case of isolated islet allografts.⁴

Initially it was hoped that the opposite might be true since pancreatic islets might share the immunologically privileged status of other endocrine tissues. However, the initial report of successfully transplanted islet allografts by Reckard and Barker indicated that their rejection was disappointingly rapid, sometimes occurring as early as 1-2 days after transplantation to strongly histoincompatible recipients, while syngeneic (histocompatible) islets transplanted in inbred animals by identical techniques enjoyed permanent survival.⁵ Many other workers have now confirmed the finding that allogeneic islet survival is short lived in a number of species.⁴ In the rat, median survival times of islet allografts transplanted across a major histocompatibility barrier have been variously reported as 3.2 days, 5.2 days and 4 days. Survival times of skin, kidney and heart allografts are, however, consistently longer, 8-12 days.⁶ The reason for discrepancy in survival of islets as compared with other tissues is unknown, but one simple possibility is that the method of transplantation of isolated islets as a dispersed cell preparation renders them more susceptible to immune destruction than vascularized organ allografts. In fact, a number of studies in which result of transplantation of isolated islets was compared with that of various vascularized organs, suggest that transplantation of the dispersed islet tissue may place it at a disadvantage as compared with other types of allografts which are immediately revascularized. Most of these studies, however, compared islet allografts in the rat with kidney or heart allografts in this species, or with whole pancreas allografts in other species such as the dog. To clarify whether islets and vascularized pancreas allografts in the same species would have a different likelihood of success, Perloff et al. recently compared the outcome of these two methods of transplanting beta cells in the same strains of inbred rats.⁷ Isolated BN islets were rejected by major histocompatibility complex (MHC) incompatible diabetic Lewis rats in 4.4 ± 1.8 days, while vascularized whole pancreas grafts consistently survived longer, 7.6 ± 1.1 days. When histocompatibility was minimized, a greater difference in functional survival was seen, as Lewis islets survived in MHC compatible Fischer rates for only 4.4 ± 1.8 days, while vascularized pancreas survived for 16.5 ± 3.9 days (occasionally for as long as 75 days). Histological examination of allografts at various intervals revealed earlier and more extensive damage of the

isolated islet allografts than of islets within vascularized pancreas. Perloff also found that he was unable to prolong islet allograft survival by an enhancement protocol which proved effective in prolonging heart and kidney allograft survival. A similar result has been reported by Reckard et al.,⁸ and by Morris et al.,⁹ who had only minor success in enhancement of islet allograft survival. Morris also found that prolongation of survival of pancreas grafts is more easily achieved by immunosuppressive drugs than is the case with isolated islet allografts. Thus, it seems clear that when isolated islet survival is compared to that of vascularized pancreas, islets fare worse either in normal or immunosuppressed animals.

The rather dismal results of clinical trials in man lend support to the concept that transplanted isolated islet tissue is especially vulnerable to rejection (although technical problems in separating islets from the fibrous human pancreas could also play a role). Indeed only 4 of 68 isolated islet allografts in humans appear to have had even transient function.¹⁰ These results are so poor that at this time isolated islet transplantation in man probably has only one indication, this being replacement of a patient's own pancreatic islets in instances when pancreatectomy is being performed for benign disease. Najarian et al. recently reported ten instances of islet autotransplantation to prevent diabetes in patients undergoing near total pancreatectomy for pancreatitis.¹¹ In three of these patients the autograft apparently succeeded, thus avoiding diabetes and the necessity for insulin therapy.

Allografts

The possibility of successful transplantation of allografts of isolated islets as a treatment for human diabetes in the future should not, however, be discounted. Despite the seemingly great vulnerability of transplanted islets to rejection documented above, islet cells may paradoxically in themselves be only weakly immunogenic. Until recently, there has been no direct evidence regarding the makeup of cell surface antigens of islets cells. It now appears that rather than being especially immunogenic, they may actually be *deficient* with regard to histocompatibility antigens. Parr recently reported that with an immunofluorescent labeling technique he was unable to demonstrate H-2 antigens on the surface of beta cells of dissociated islets, though H-2 antigens were present on acinar, ductal and capillary endothelial cells.¹² He postulated that beta cell failure after islet transplantation occurs only as a result of their proximity to other pancreatic cells, which provoke an immune response and subsequently come under its direct attack.

More recently, Faustman et al. studied islet cells by cytotoxicity and absorption assays, using 20 antisera directed against different portions of the MHC (H2) locus.¹³ They reported that H-2K and H-2D antigens were present on islet cells in mice, but found no evidence that Ia antigens were present. Since Ia antigens appear to be necessary for stimulation of immune responses, although H-2K and H-2D antigens can serve as targets for immune reactivity, this finding could explain the success of Bower et al.¹⁴ and of Lacy et al.¹⁵ in

preventing islet allograft rejection by a pretransplant period of tissue culture. Considerable evidence has now been accumulated by Talmage that passenger leukocytes, especially those of the macrophage series, which are known to express the Ia antigens necessary for stimulating an immune response, are destroyed by prolonged culture under high O₂ tension.¹⁶ This may also be true of other cell types, such as vascular or ductal endothelium, which may express Ia antigens, while pancreatic beta cells could survive these conditions. "Pure" cultured islet cells might then be transplanted to allogeneic hosts, presenting only H-2D and H-2K histocompatibility antigens on islet cells, and not the Ia determinants necessary to initiate the immune response (but which may be present only on the non endocrine cells). Thus, islet cells might survive without immunosuppression. However, they would remain vulnerable to rejection if the recipient was later confronted with Ia antigen bearing cells of the donor type. This has, in fact, been the finding of Lacy et al.¹⁵

Until these theoretical and experimental results are shown to have clinical application, islet tissue appears more likely to function in humans without being rejected if it is transplanted as a portion of a vascularized pancreas allograft. Since 1977, 64 patients have received pancreas allografts and of these, 10 presently retain their grafts, 4 for more than 1 year.¹⁶ Although these results are much superior to those achieved so far with isolated islet allografts in man, it is of interest that they are worse than those of transplanting any other organ, i.e., kidney, heart, liver. This may be due to the complications arising from manipulating the exocrine portion of the pancreas (e.g., pancreatic fistulas), but could suggest another reason. The original disease process may recur in the transplanted tissue, causing destruction of the new islets. If human diabetes is an autoimmune disease (as seems likely), this possibility would be a real one. Recurrence of another autoimmune disease (glomerulonephritis) is known to occur in a significant fraction of kidney transplants, even of identical twin donors (11/17).¹⁷

Another likely etiological mechanism of human diabetes is that islet destruction is mediated by viral infection. These two etiological possibilities (autoimmune and viral), rather than being mutually exclusive are likely to work in combination, the hypothesis being that viral infection modifies islet cell surface antigens so that their autoimmune destruction is brought about. If this is indeed the case, the possibility must be seriously considered that an ongoing autoimmune state or recurrence of autoimmunity triggered by reinfection with a viral agent could bring about destruction of transplanted islets. A theoretical possibility of more optimistic implication is that islet destruction on an autoimmune basis might be prevented (or even reversed), by immunosuppression alone. Several animal models have recently been examined by us with regard to these possibilities.

Infection (EMC)

Infection with the encephalomyocarditis virus (EMC) induces a short lived hyperglycemic syndrome in some, but not all strains of mice. Suscepti-

bility has been attributed to viral receptors in the islet cells, although an extra-pancreatic host factor is another possibility.¹⁸ Dafoe et al. demonstrated that immunosuppression with ALS was usually able to prevent the induction of EMC diabetes.¹⁹ Dafoe et al. also showed that pancreata from either EMC susceptible or non susceptible strains were equally vulnerable to EMC induced damage when transplanted to F1 hybrids.²⁰ Thus, susceptibility to the virus seemed likely to be attributable to the immunological responsiveness of the host, rather than the intrinsic susceptibility of the pancreas. With regard to possible adverse effects that EMC virus-induced autoimmunity might have on transplanted islets, both Naji et al.²¹ and Howard et al.²² showed that syngeneic isolated islet transplantation could be carried out successfully in EMC diabetic mice. Thus, it seems unlikely that this autoimmune state will damage islets transplanted late in its course.

Another animal model in which autoimmunity appears to play a role is the "BB" rat. These animals spontaneously and abruptly develop hyperglycemia and insulin dependence.²³ The histological appearance of the islets in newly diabetic rats is one of mononuclear infiltration, strongly suggesting autoimmunity. Like et al.²⁴ and Naji et al.²⁵ have demonstrated that immunosuppression may prevent or even reverse early stages of diabetes in these animals. Naji et al.²¹ also demonstrated that transplanted allogeneic islets from Wistar Furth donors survive and function normally in immunosuppressed diabetic "BB" rats, even reversing hyperglycemia of long standing in animals in which the native islets were irreversibly damaged. Immunosuppression was necessary for islet transplant survival in these animals, since the outbred status of the "BB" stock provided no opportunity for transplantation of (truly histocompatible) syngeneic islets. Thus, these experiments did not allow assessment of whether the unmodified immune state would preclude successful islet transplantation in nonimmunosuppressed diabetic hosts. In order to answer this, Naji²⁵ has recently used donor islets from a second "BB" stock not susceptible diabetes, but rather closely histocompatible with the diabetic recipients (routinely allowing skin allograft survival of >30 days). When such islets were transplanted to *artificially* diabetic streptozotocin treated "BB" rats, 60% remained normoglycemic for 4 months, showing that rejection was very indolent because of the close histocompatibility. However, when "BB" islets were transplanted to *spontaneous* (and non-immunosuppressed) diabetics, 9 of 10 rats remained normoglycemic for less than 5 days and the other for only 18 days. In these rats, the transplanted islets were found to be heavily infiltrated with mononuclear cells, suggesting that they had been destroyed by an autoimmune reaction. The rapid failure of islet grafts in the non-immunosuppressed spontaneous "BB" diabetics (but not in chemically induced "BB" diabetics), indicates that transplanted islets may remain vulnerable to the same ongoing autoimmune factors that caused failure of the native islets. These findings merit consideration with regard to possible recurrence of diabetes in humans who might receive a pancreas transplant from a closely histocompatible related donor.

Recently Naji et al.²⁶ considered the possibility that since susceptibility of

the "BB" rat appears to be based on both genetic and immune factors, alteration of the make-up of the immune system of these rats might alter their predisposition to diabetes. Members of some "BB" litters were inoculated at birth with bone marrow cells from a nondiabetes prone strain of rats. Preliminary results indicate that these chimeric "BB" rats have about a fourfold lessening in the expected incidence of diabetes.

Conclusion

Thus, one hope for future therapy or prevention of diabetes might be the identification of potentially susceptible individuals and protection from an autoimmune reaction by immunosuppression, or conceivably by changing the make-up of some cellular elements of the immune system. These possibilities for future immunotherapy of diabetes, along with hopes for improving results of pancreatic transplantation seem likely to be the best hope for a real "cure" of this disease.

I wish to express my appreciation to President Roberts and to the fellows of the Academy for the privilege of giving the annual oration. My colleagues, Drs. Ali Najj, Don Dafoe, Leonard Perloff and Willys Silvers (who would under usual circumstances be co-authors of this paper) deserve the credit for performing most of the experiments cited in the text. Thanks are also due to George Sawchuck, Brigitte Koberlein and Cathy Lee Moore for technical help, and to Fran Ramirez for preparation of the manuscript.

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Transactions of the Philadelphia Academy of Surgery

Regular Meeting January 5, 1976

The meeting was called to order by President John Y. Templeton, III, M.D. at 8:15 P.M. Present at the meeting were 115 members and guests. Present at the dinner were 72 members and guests.

Dr. William C. Stainback introduced Dr. Hal E. Snedden.

Dr. Jonathan E. Rhoads introduced Dr. David L. Paskin.

Scientific Session

A memoir to Hans May, M.D. was read by Edwin W. Shearburn, M.D. The memoir is attached to the minutes of this meeting.

A memoir to Ward D. O'Sullivan, M.D. was read by John J. McKeown, Jr., M.D. The memoir is attached to the minutes of this meeting.

A paper entitled, "Simple Method of Delineation Between Antrum and Corpus of the Stomach" was presented by Drs. Bunichi Nagakawa, Michael Weiss and Teruo Matsumoto. The paper was discussed by Drs. Elmer L. Grimes, William M. Lemmon, Teruo Matsumoto and John Y. Templeton, III, and then closed by Dr. Matsumoto.

A paper entitled, "The Sequential Femoral-Popliteal Bypass Graft—A Five Year Experience" was presented by Drs. Dominic A. DeLaurentis and Paul Friedman. The paper was discussed by Dr. R. Robert Tyson and then closed by Dr. DeLaurentis.

A paper entitled, "The Anterior Approach for Spinal Surgery" was presented by Dr. Henry H. Schmidek by invitation, sponsored by Charles C. Wolferth, Jr., M.D.

Regular Meeting February 2, 1976

The meeting was called to order by President H. Taylor Caswell, M.D. at 8:15 P.M. Present at the dinner were 51 members and guests. Present at the meeting were 57 members and guests.

Scientific Session

A paper entitled, "One Year's Experience in the St. Agnes Hospital Burn Center" was presented by Dr. Frederick A. DeClement, under the sponsorship of Dr. Charles C. Wolferth, Jr. The paper was discussed by Dr. Teru Matsumoto and then Dr. DeClement made closing remarks.

A paper entitled, "Salvage of Devascularized Digits by Microvascular Repair" was presented by Drs. Stuart Hulnick, T. Brobyn, Lester M. Cramer and M. Kodsi. The paper was discussed by Dr. R. Robert Tyson and closed by Dr. Hulnick.

A paper entitled, "Splenectomy for Chronic Myelocytic Leukemia" was presented by Drs. William Manella, Isadore Brodsky and Teruo Matsumoto and discussed by Drs. Matsumoto, Elmer L. Grimes, H. Taylor Caswell and closed by Dr. Manella.

Conjoint meeting of the Baltimore Academy of Surgery, Boston Surgical Society, Philadelphia Academy of Surgery, and the New York Surgical Society, March 10, 1976.

Scientific Program

"The Therapy of Malignant Melanoma: A Prospective Study Based on Microstaging," Leonard I. Goldman, M.D., M. J. Mastrangelo, M.D., W. H. Clark, Jr., M.D., A. M. Ainsworth, M.D., R. E. Bellet, M.D., E. A. Bernardino, M.D.

Discussion opened by E. George Elias, M.D. (Baltimore group)

"Changing Clinical, Pathologic, and Survival Patterns in Differentiated Thyroid Cancer," Blake Cady, M.D., Cornelius E. Sedgwick, M.D., William A. Meissner, M.D., John R. Bookwalter, M.D.

Discussion opened by Elliot Strong, M.D. (New York group)

"Influence of Topical 5-FU Chemotherapy Adjuvant to Surgery for Resectable Colo-rectal Cancer," C. E. Grossi, M.D., W. I. Wolff, M.D., T. E. Nealon, M.D., B. Pasternack, M.D., L. Ginsburg, M.D., L. M. Rousselot, M.D.

Discussion opened by Ernest F. Rosato, M.D. (Philadelphia group)

"Surgical Correction of Pectus Excavatum without Internal Prosthetic Support," J. Alex Haller, Jr., M.D., John J. White, M.D., I. J. Shaker, M.D., Dennis Shermeta, M.D.

Discussion opened by Samuel L. Cresson, M.D. (Philadelphia group)

"Extracorporeal Membrane Oxygenation (ECMO) as a Treatment for Massive Pulmonary Thrombo-Embolism," Daniel Krellenstein, M.D., Christopher Bryan-Brown, M.D., Jennifer Hanns, M.D., E. Converse Peirce, II, M.D.

Discussion opened by M. Terry McEnany, M.D. (Boston group)

"Experience with Patients Undergoing Fundoplication for Esophageal Reflux," LeRoy H. Stahlgren, M.D., Nathan Noznesky, M.D., Agnes Kammerer, B.S.

Discussion opened by Thomas F. Nealon, Jr., M.D. (New York group)

"The Surgical Correction of Major Craniofacial Deformities," Linton A. Whitaker, M.D., Peter Randall, M.D.

Discussion opened by John P. Remensnyder, M.D. (Boston group)

"Renal Transplantation—A Twenty-five Year Experience," Joseph E. Murray, M.D., Nicholas L. Tilney, M.D., Richard E. Wilson, M.D.

Discussion opened by Fuad Dagher, M.D. (Baltimore group)

"Further Experience with Peritoneo-Venous Shunts for Ascites," Harry H. LeVeen, M.D., George Christoudias, M.D., Moon Ip, M.D., Simon Wapnick, M.D.

Discussion opened by Gardner Smith, M.D. (Baltimore group)

"Surgical Treatment of Acute Diverticulitis," John N. Classen, M.D., Ronaldo Bonardi, M.D., Charles S. O'Mara, M.D., Wharton Finney, M.D., Sylvester Sterioff, M.D.

Discussion opened by Charles K. McSherry, M.D. (New York group)

"Internal Pancreatic Fistulas," John L. Cameron, M.D., Richard S. Kieffer, M.D., William J. Anderson, M.D., George D. Zuidema, M.D.

Discussion opened by Kenneth W. Warren, M.D. (Boston group)

"New Approaches to Nutritional Support of the Cancer Patient," George L. Blackburn, M.D., Bruce R. Bistrian, M.D., Albert Bothe, M.D., William V. McDermott, Jr., M.D.

Discussion opened by Jonathan E. Rhoads, M.D. (Philadelphia group)

Regular Meeting

April 5, 1976

The meeting was called to order by President H. Taylor Caswell, M.D. at 8:15 P.M. There were 36 members and 17 guests present at the dinner and 52 members and 17 guests present at the Scientific Session.

Scientific Session

A paper entitled, "Trauma, Diet and Protein Metabolism" by T. Peter Stein, Ph.D., Jeffrey C. Oram-Smith, M.D. and Herbert W. Wallace, M.D. was read by Dr. T. Peter Stein, sponsored by Dr. Wallace and discussed by James L. Mullen, M.D. and John R. Moore, M.D. and then closed by Dr. Stein.

A paper entitled, "A New Technique for Multiple Valve Replacement" was presented by Michael Strong, M.D., Gerald M. Lemole, M.D. and Paschal M. Spagna, M.D., discussed by John Y. Templeton, III, M.D. and closed by Dr. Strong.

A paper entitled, "Massive Resection of the Liver for Liver Cell Adenomas" was read by Rudolph H. Hecksher, Jr., M.D., sponsored by William M. Lemmon, M.D., discussed by Michael O. A. Grassi, M.D. and H. Taylor Caswell, M.D. and closed by Dr. Hecksher.

Regular Meeting

May 3, 1976

The meeting was called to order by President H. Taylor Caswell, M.D. at 8:15 P.M. There were 52 members and 10 guests present at the dinner, 66 members and 10 guests at the meeting.

Scientific Session

A paper entitled, "Complications of Thorotrast Studies" by Anthony M. Padula, M.D., Terrance Cochran, M.D., Joseph W. Stayman, Jr., M.D. and

John M. Roberts, M.D. was presented by Dr. Padula, sponsored by Dr. Stayman, and discussed by Drs. Sherman Garrison, James S. C. Harris and Dr. Caswell and closed by Dr. Padula.

A paper entitled, "A Giant, Giant Cell Tumor: Report of a Case and Review of a Problem" was presented by Thomas Gain, M.D. under the sponsorship of Dr. Teruo Matsumoto and discussed by Charles C. Wolferth, Jr., M.D. and closed by Dr. Gain.

A paper entitled, "Trauma in the Community Hospital" was read by Sherman Garrison, M.D. under the sponsorship of William T. Fitts, Jr., M.D. and discussed by Dr. Fitts and closed by Dr. Garrison.

Regular Meeting

October 4, 1976

The meeting was called to order by President H. Taylor Caswell, M.D. at 8:15 P.M. There were 62 members and 20 guests present at the dinner, 71 members and 20 guests at the meeting.

Scientific Session

A paper entitled, "Anticonvulsant Rickets and Osteomalacia" was presented by Dr. Henry H. Sherk and discussed by Drs. Nicholson, Roberts and closed by Dr. Sherk.

A paper entitled, "Malignant Mesothelioma of Omentum—Case Report" was presented by Drs. Juan Suris and Joseph W. Stayman, Jr. The discussion was by Dr. Edmunds, and the discussion was closed by Dr. Suris.

A paper entitled, "Experience with Carotid Endarterectomy" was presented by Dr. Louis Pierucci, Jr. and discussed by Drs. Roberts, Nemir, Wolferth and Reichle and closed by Dr. Pierucci.

Regular Meeting

November 1, 1976

The meeting was called to order by President H. Taylor Caswell, M.D. at 8:15 P.M. There were 47 members and 32 guests present at the dinner and 74 members and 32 guests present at the meeting.

Scientific Session

A paper entitled, "External Biliary Bypass" was given by Nino de Prophetis, M.D. and discussed by Harry V. Armitage, M.D. and Dr. Caswell. The paper was closed by Dr. de Prophetis.

A paper entitled, "Crossed Innervation of Lumbar Sympathetic Chains" was presented by Robert V. Mandraccia, M.D. and R. Robert Tyson, M.D. Discussion was by Dr. Tyson, Edwin W. Shearburn, M.D. and Brooke Roberts, M.D. The paper was closed by Dr. Mandraccia.

A paper entitled, "Review of Splenectomy" was presented by William Bell, B.A. and Teruo Matsumoto, M.D., Ph.D. and discussed by George P. Pilling, IV, M.D. and Dr. Matsumoto. The paper was closed by Mr. Bell.

Regular Meeting

December 6, 1976

The meeting was called to order by President H. Taylor Caswell, M.D. at 8:15 P.M. There were 54 members and 34 guests present at dinner and 81 members and 44 guests present at the meeting.

Scientific Session

A paper entitled, "The Swan-Ganz Catheter as an Adjuvant in the Care of Surgical Patients" was presented by John R. Clarke, M.D. introduced by Donald R. Cooper, M.D. and discussed by Fernando Gomez, M.D.

A paper entitled, "Changes in Free Water Clearance as an Early Indicator of Acute Renal Failure in the Patient with Sepsis" was presented by Martin F. Hayes, Jr., M.D., sponsored by Charles C. Wolferth, Jr., M.D. and discussed by Dr. Wolferth and then closed by Dr. Hayes.

The Annual Oration was presented by Leonard I. Goldman, M.D. The title of the Annual Oration was "Malignant Melanoma—A Therapeutic Approach Related to Biologic Behaviour." The manuscript has been received by the Secretary and forwarded to Dr. Stayman, the Recorder.

Annual Report of the Secretary

December 1976

In 1976 there were seven formal meetings of the Philadelphia Academy of Surgery and the Conjoint Meeting which was held in Philadelphia. The Conjoint Meeting was a Bicentennial Celebration with the participation of the New York Surgical Society, the Boston Surgical Society, the Baltimore Academy of Surgery and the Philadelphia Academy of Surgery. The meeting began at 10 A.M. at the College of Physicians on March 10, 1976. There were 89 members of the Philadelphia Academy of Surgery and 154 guests present. Dr. H. Taylor Caswell, the President of the Philadelphia Academy of Surgery, presided at the Scientific Session, assisted by the Presidents of the other three societies. Lunch was served at the College of Physicians and dinner was served at the Union League.

Election of officers was held in January and a new President was elected, Dr. H. Taylor Caswell. First Vice President, Dr. Donald R. Cooper; Second Vice President, Dr. Edwin W. Shearburn. Dr. Paul Nemir, Jr. remained in his post as Secretary, as did Dr. William T. Fitts, Jr. as Treasurer. Dr. Joseph W. Stayman, Jr. was elected Recorder, and Dr. Brooke Roberts was elected Chairman, Committee on Scientific Business once again. The change made in the By-Laws made it possible to have three Members-at-Large and these were elected: Dr. John Y. Templeton, III; Dr. Charles C. Wolferth, Jr. and Dr. R. Robert Tyson. Dr. Moreye Nusbaum was elected Chairman of the Samuel D. Gross Prize Fund.

In January of 1976, a letter of thanks was received from Dr. C. S. Rangarathnam. He stated that the support of the Academy helped him to face

the ordeal with determination and hope. The contributions were turned over to Dr. Sweeney of the Thomas Jefferson University Hospital for the Rangarathnam legal defense fund in January.

At the October meeting 1976 it was with considerable satisfaction that the Publication of the Transactions of the Philadelphia Academy of Surgery was completed.

The malpractice bill was passed in 1975 and in October of 1976 it was announced that the most recent information was that the insurance carrier had been restrained from withdrawing insurance from a group of Pennsylvania physicians.

The average attendance at the formal meetings of the Academy during 1976 was 91. Dinners preceded each of these stated meetings.

Paul Nemir, Jr., M.D., Secretary

Regular Meeting

January 3, 1977

The meeting was called to order by President H. Taylor Caswell, M.D. at 8:15 P.M. There were 46 members and 25 guests present at the dinner and 72 members and 35 guests present at the meeting.

Scientific Session

A paper entitled, "Non-Invasive Studies in the Diagnosis of Deep Venous Thrombophlebitis" was presented by Henry D. Berkowitz, M.D. and discussed by Drs. Fallahnejad, Matsumoto, and Roberts and was closed by Dr. Berkowitz.

A paper entitled, "Hyperalimination—Total Parenteral Nutrition—Potentials and Problems" was presented by George F. McInnes, M.D., sponsored by William C. Stainback, Jr., M.D. and discussed by George F. Gowen, M.D.

A paper entitled, "Surgical Management of Myocardial Ischemia" was presented by Eldred R. Mundth, M.D. under sponsorship of Charles C. Wolferth, Jr., M.D. and was discussed by Dr. MacVaugh and closed by Dr. Mundth.

Regular Meeting

February 7, 1977

The meeting was called to order by First Vice President Donald R. Cooper, M.D. at 8:15 P.M. There were 47 members and 43 guests present at the dinner and 65 members and 21 guests at the meeting.

Scientific Session

A paper entitled, "Microcirculatory Response of the Kidney in the Use of Gentamycin" was presented by Shekeeb Sufian, M.D., Keizo Sugimachi, M.D. and Teruo Matsumoto, M.D. and discussed by Dr. Matsumoto and closed by Dr. Sufian.

A paper entitled, "Tic Douloureux—A New Approach to an Old Problem" was presented by Samuel S. Lyness, M.D. and discussed by Drs. Richter and Murtagh and closed by Dr. Lyness.

A paper entitled, "The Diagnosis of Magnesium Deficiency in Patients with a Normal Serum Magnesium" was presented by Robert D. Smink, Jr., M.D., Richard N. Myers, M.D. and George Reichard, Ph.D. and discussed by Dr. Troncelliti and closed by Dr. Smink.

Regular Meeting

March 9, 1977

Minutes

A Conjoint Meeting with the New York Surgical Society was held in New York. There were 60 members of the Philadelphia Academy of Surgery who journeyed to New York by bus and the Scientific Program commenced at 2:00 P.M. The papers which were presented and the invited discussants were as follows:

A. M. Imparato, M.D., G. E. Kim, M.D., K. Francis, M.D., S. A. Localio, M.D., S. Gumport, M.D., G. Twombly, M.D. and R. Hotchkiss, M.D., "Vascular Surgical Techniques in Tumor Surgery."

Discussor: Ralph Hamilton, M.D.

J. C. Pierce, M.D., G. A. Hashim, Ph.D., W. G. Ramey, M.D., D. H. Lee, M.D., W. B. Burrows, M.D., A. S. Munther, M.D., and H. F. Fitzpatrick, M.D., "A New Blood Test for Carcinoma of the Breast."

Discussor: Leonard I. Goldman, M.D.

F. Glenn, M.D., "The Management of Iatrogenic Injuries to the Biliary Ductal System."

Discussor: Jonathan E. Rhoads, M.D.

J. G. Fortner, M.D., D. K. Kim, M.D., M. H. Shiu, M.B., S. D. J. Yeh, M.D., W. S. Howland, M.D., and E. J. Beattie, Jr., M.D., "Heterotopic (Auxiliary) Liver Transplantation in Man."

Discussor: Clyde F. Barker, M.D.

W. Metcalf, M.D., "Continuing Improvement for Operable Breast Cancer Survival in the Last Five Decades."

Discussor: George P. Rosemond, M.D.

R. Goldenkranz, M.D., and B. Thorbjarnarson, M.D., "Malignancy of the Stomach Following Previous Peptic Ulcer Surgery."

Discussor: Charles Fineberg, M.D.

Regular Meeting

April 4, 1977

The meeting was called to order by President H. Taylor Caswell, M.D. at 8:15 P.M. There were 53 Fellows and 38 guests for dinner and 66 Fellows and 38 guests present at the Scientific Program.

Scientific Session

A paper entitled, "Fractures of the Distal Radius—Comparison of Two

Methods of Treatment" was presented by William G. Stewart, Jr., M.D., introduced by William C. Stainback, Jr., M.D. The paper was discussed by Howard H. Steel, M.D. and John R. Moore, M.D. and then closed by Dr. Stewart.

A paper entitled, "What is a Hiatal Hernia?" was presented by David V. Pecora, M.D. The paper was discussed by George F. Gowen, M.D. and the discussion was closed by Dr. Pecora.

A paper entitled, "Ten Years' Experience with Intravenous Hyperalimentation and Inflammatory Bowel Disease" by James L. Mullen, M.D., W. Clarke Hargrove, M.D., William T. Fitts, Jr., M.D. and Ernest F. Rosato, M.D. The paper was presented by Dr. Mullen, discussed by Drs. Caswell, Jerry Zaslow and then closed by Dr. Mullen.

Regular Meeting

May 2, 1977

The meeting was called to order by President H. Taylor Caswell, M.D. at 8:15 P.M. There were 38 Fellows and 30 Guests for dinner and 57 Fellows and 52 Guests present at the Scientific Session.

Scientific Session

A paper entitled, "Hepatic Dearterialization—Experience with a Newer Technique for Dealing with Hepatic Metastases" was presented by Thomas G. Frazier, M.D., introduced by William C. Stainback, Jr., M.D. The paper was discussed by Dr. Ernest F. Rosato and Dr. Caswell and discussion was closed by Dr. Frazier.

A paper entitled, "Review of Surgery of the Thyroid Gland" was presented by Paul Rodigas, M.D. The co-authors were Shekeeb Sufian, M.D. and Teruo Matsumoto, M.D. The paper was discussed by Dr. Caswell and closed by Dr. Rodigas.

A paper entitled, "Management of Complicated Diverticulitis with Primary Anastomosis Without Colostomy or Cecostomy" was presented by Robert A. Buyers, M.D. and co-author was Dr. Conrado Agra. The paper was discussed by Dr. William C. Stainback, Jr., Dr. Edwin W. Shearburn and Dr. Caswell and closed by Dr. Buyers.

Regular Meeting

October 3, 1977

The meeting was called to order by President H. Taylor Caswell, M.D. at 8:15 P.M. There were 49 Fellows and 37 guests for dinner and 58 Fellows and 42 guests for the Scientific Session.

Scientific Session

A paper entitled, "Cholecystochoigraphy in Gallbladder Disease" was presented by Dr. Anthony Comerota, introduced by Willis P. Maier, M.D. The paper was discussed by Drs. John Brackenridge, Anthony Comerota and R. Robert Tyson.

A paper entitled, "Splenorhaphy" was presented by Laurence A. Somers, M.D., introduced by Samuel L. Cresson, M.D. The paper was discussed by Drs. Brooke Roberts, Edwin W. Shearburn, and C. Everett Koop and closed by Dr. Laurence A. Somers.

A paper entitled, "Vascular Ectasia of the Cecum" was presented by Gordon S. Clement, M.D., introduced by Robert A. Buyers, M.D. and was discussed by Drs. Moreye Nusbaum and Elmer L. Grimes.

Regular Meeting

November 7, 1977

The meeting was called to order by President H. Taylor Caswell, M.D. at 8:15 P.M. There were 39 Fellows and 29 guests present at the dinner and 45 Fellows and 43 guests present at the Scientific Session.

Teruo Matsumoto, M.D. presented Eldred D. Mundth, M.D. to President Caswell and the Fellows of the Academy.

Scientific Session

A paper entitled, "The Surgical Treatment of the Inaccessible Extracranial Internal Carotid Artery Disease" was presented by P. Sabanayagam, M.D., introduced by Teruo Matsumoto, M.D., Ph.D. The paper was discussed by John Y. Templeton, III, M.D. and closed by Dr. Sabanayagam.

Regular Meeting

December 5, 1977

The meeting was called to order by President H. Taylor Caswell, M.D. at 8:15 P.M. There were 42 members and 29 guests present at dinner and 57 members and 34 guests at the Scientific Session.

Scientific Session

A paper entitled, "Drug Therapy for Urinary Incontinence" was presented by Dr. Om P. Khanna, introduced by Paul Gonick, M.D. There was no discussion of the paper.

A paper entitled, "Incarcerated Hernia of the Bochdalek in Adults" was presented by Dr. Alphonse DiGiovanni, introduced by Richard H. Flandreau, M.D. The paper was discussed by Drs. Samuel L. Cresson, John Y. Templeton, III, and Julian Johnson and closed by Dr. DiGiovanni.

A paper entitled, "Effect of Cimetidine in the Prevention of Stress Ulcer" was presented by Drs. Shekeeb Sufian, Keizo Sugimachi and Teruo Matsumoto. The paper was discussed by Dr. Matsumoto and the discussion was closed by Dr. Sufian.

Annual Report of the Secretary

December 1977

In 1977 there were seven formal meetings of the Philadelphia Academy of Surgery and the Conjoint Meeting with the New York Surgical Society held on

March 9, 1977, in New York. Sixty members of the Philadelphia Academy of Surgery journeyed to New York and members of the Academy were discussors for papers presented.

Election of officers was held in January and the same slate of officers as 1976 were elected which were President H. Taylor Caswell, M.D.; First Vice President, Dr. Donald R. Cooper; Second Vice President, Dr. Edwin W. Shearburn; Secretary, Dr. Paul Nemir, Jr., Treasurer, Dr. William T. Fitts, Jr.; Recorder, Dr. Joseph W. Stayman, Jr. and Dr. Brooke Roberts was elected Chairman, Committee on Scientific Business. The Members-at-Large were Dr. John Y. Templeton, III, Dr. Charles C. Wolferth, Jr., and Dr. R. Robert Tyson. Dr. Moreye Nusbaum was elected Chairman of the Samuel D. Gross Prize Fund.

In January there was a discussion of physician membership on HSA Technical Advisory Committees by President Caswell and he stated that he would pursue this matter with the President of the County Medical Society.

Also in January a letter was received from Dr. Mason of the Baltimore Academy of Surgery inquiring whether the Philadelphia Academy of Surgery would be interested in meeting with the Baltimore Academy of Surgery and we are accepting their kind invitation. The meeting is to be held on April 13, 1978.

In April there were changes in the By-Laws concerning Proposals for Fellowship. The change was, "The members of Council will not act as proposers or seconders of candidates for Fellowship." There was also a change stating Fellowship in the American College of Surgeons are requirements which can only be waived in extraordinary circumstances by Council—and that he has demonstrated potential for making contributions to the various programs of the Academy. These changes were approved unanimously by the membership.

In October Dr. Jonathan E. Rhoads presented, on behalf of the city, the John Scott Award to Mr. Godfrey N. Hounsfeld of England. Dr. Hounsfeld had been selected by the Advisory Committee on the John Scott Award of the Board of Directors of City Trusts. Dr. Hounsfeld is the inventor of the computerized axial tomography equipment, commonly known as the EMI scanner.

In November of 1977 the Samuel D. Gross Prize was awarded to Dr. Noel H. Fishman, a graduate of the Medical School of the University of California at Los Angeles in 1960. He presented his lecture on the "Simulation of Congenital Heart Disease in Fetal Lambs."

There will be the usual Conjoint Meeting with the New York Surgical Society in 1978 which the Philadelphia Academy of Surgery is planning to host.

Plans are progressing for a meeting with the College of Physicians of Philadelphia to be held sometime in the Fall of 1978.

Paul Nemir, Jr., M.D., Secretary

Regular Meeting

January 2, 1978

The meeting was called to order by President H. Taylor Caswell, M.D. at

8:15 P.M. There were 21 members and eight guests at dinner, 35 members and 12 guests at the meeting.

Scientific Session

A paper entitled, "Axillary-Femoral and Femoral-Femoral Bypass—12 Year Experience" by Luis Sala, M.D., Ned Russell, M.D. and Dominic A. DeLaurentis, M.D. was presented by Dr. DeLaurentis. The paper was discussed by Drs. Frederick A. Reichle, Brooke Roberts, R. Robert Tyson, William Y. Inouye and closed by Dr. DeLaurentis.

A paper entitled, "Metabolic Response of Patients on Hyperalimentation" by Richard N. Myers, M.D., Robert D. Smink, Jr., M.D. and George A. Reichard, Ph.D. was presented by Dr. Myers and discussed by Drs. R. Robert Tyson and Jonathan E. Rhoads and closed by Dr. Myers.

A paper entitled, "Experience with Renal Failure Following Aortic Surgery for Abdominal Aneurysm" by Peter R. McCombs, M.D., Brooke Roberts, M.D. and Robert Grossman, M.D. was presented by Dr. McCombs. The paper was discussed by Drs. DeLaurentis, Tyson and Roberts and closed by Dr. McComb.

Regular Meeting

February 6, 1978

Meeting Call to Order by President Donald R. Cooper, M.D.

Scientific Session

George F. Gowen, M.D.: "Endoscopic Biopsy for a Correct Upper Gastrointestinal Diagnosis."

Jonathan E. Rhoads, Jr., M.D.—introduced by Donald R. Cooper, M.D., "Management of Massive Hemoptysis."

Arthur G. Baker, Jr., M.D., "Long Venous Grafts."

Conjoint Meeting Philadelphia Academy of Surgery, and
New York Surgical Society, held on March 15, 1978 at
The College of Physicians of Philadelphia

The Conjoint Meeting of the Philadelphia Academy of Surgery and the New York Surgical Society was held on March 15, 1978, at the College of Physicians of Philadelphia, 19 South 22nd Street, commencing at 2:00 P.M. There were 68 members of the Philadelphia Academy of Surgery and 46 guests from New York Surgical Society.

Scientific Program

Charles E. Hartford, M.D. and Harry V. Armitage, M.D.: "Surgical Management of Wounds Caused by Electrical Injury."

Willis P. Maier, M.D., David C. Leber, M.D.—by invitation and George P.

Rosemond, M.D.: "Modified Radical Mastectomy with Immediate Prosthetic Implant."

James L. Mullen, M.D., Gordon Buzby, M.D., Marc Gertner, M.D. and Ernest F. Rosato, M.D.: "Consequences of Malnutrition in the Surgical Patient."

Gerald Marks, M.D.: "Surgical Correction of the Radiation Injured Rectum by the Combined Abdominotranssacral Approach."

Paul Nemir, Jr., M.D. and Pierre Darbouze, M.D.—by invitation: "The Significance of the Ulcerated Plaque in Transient Cerebral Ischemia."

Frederick A. Reichle, M.D., Wasfy F. Fahmy, M.D.—by invitation, Muhammad Golsorkhi, M.D.—by invitation: "Early and Intermediate Results of Portal Venous Decompression by Distal Splenorenal or Mesocaval Shunt."

Conjoint Meeting with Baltimore Academy of Surgery, April 13, 1978

Program

Islet Transplantation in Naturally Occurring Diabetes: Clyde F. Barker, M.D., Leo Frangipane, M.D., Ali Naji, M.D.

Non Infectious Complications in Renal Transplant Recipients: F. J. Dagher, M.D., S. A. Karmi, M.D., A. V. Alongi, R.N., E. Ramos, M.D.

Sequential Ultrastructural Morphology of Grafts in the Arterial System: F. A. Reichle, M.D., H. S. Sue, M.D., W. Fahmy, M.D., G. J. Stewart, M.D.

Classification of Renal Injuries as a Guide to Therapy: S. A. Karmi, M.D., John D. Young, M.D. and C. Soderstrom, M.D.

Removal of Serum IgG by Immunoabsorption by Protein A on *S. Aureus* in a Patient with Colon Carcinoma: S. C. Bansal, M.D., B. R. Bansal, M.D., D. R. Cooper, M.D., J. E. Rhoads, Jr., M.D.

Mural Thrombus of the Abdominal Aorta: A New Problem and Cause of Emboli: G. M. Williams, M.D.

Reconstruction of Soft and Hard Tissue Defects by Microsurgical, Free Flaps: D. LaRossa, M.D., R. B. Noone, M.D., and D. A. DeLaurentis, M.D.

Hepatitis and the Surgeon: Joseph L. Romolo, M.D.

Regular Meeting

May 1, 1978

The meeting was called to order by President Donald R. Cooper, M.D. at 8:15 P.M. There were 41 members and 24 guests present at the dinner and 59 members and 30 guests present at the meeting.

Scientific Session

A paper entitled, "Endoscopic Biopsy for a Correct Upper Gastrointestinal Diagnosis" was presented by George F. Gowen, M.D. The paper was discussed by Dr. Cooper and closed by Dr. Gowen.

A paper entitled, "Management of Massive Hemoptysis" was presented by Jonathan E. Rhoads, Jr., M.D. who was introduced by Dr. Cooper. The paper

was discussed by L. Henry Edmunds, M.D., Paul Nemir, Jr., M.D. and Benjamin Bacharach, M.D.

A paper entitled, "Long Venous Grafts" was presented by Arthur G. Baker, Jr., M.D. and discussed by R. Robert Tyson, M.D., Brooke Roberts, M.D. and Charles C. Wolferth, Jr., M.D. and closed by Dr. Baker.

Regular Meeting

October 2, 1978

The meeting was called to order by President Donald R. Cooper, M.D. at 8:30 P.M. There were 36 members and 35 guests present at the dinner and 50 members and 57 guests present at the meeting.

Scientific Session

The paper of Dr. Edward C. Meyer and John J. McKeown, Jr., M.D. was cancelled due to the collapse of Dr. Meyer during the dinner preceding the meeting.

A paper entitled, "Perisphincteric Fibrosis: Morphine Provocative Test and Sphincteroplasty" was presented by Dr. Jerome J. Vernick. Co-authors were Drs. Susan Gordon and Louis Broad, by invitation. The paper was discussed by Dr. Ernest F. Rosato and then closed by Dr. Vernick.

A paper entitled, "Massive Intravascular Hemolysis After Triple Cardiac Valve Replacement: Cure by Replacement of Aortic and Mitral Valves with Porcine Xenografts" was given by Dr. Rudolph C. Camishon, discussed by Dr. William M. Lemmon and then closed by Dr. Camishon.

Regular Meeting

November 6, 1978

The meeting was called to order by President Donald R. Cooper, M.D. at 8:15 P.M. There were 27 guests and 37 members present at the dinner and 39 guests and 51 members present at the meeting.

Scientific Session

A paper entitled, "Multicentricity of Clinically Occult Mammary Cancer: Treatment Implications" was given by Drs. Gordon Schwartz, Arthur Pachefsky and Stephen Feig. The paper was sponsored by Dr. Frederick B. Wagner, Jr. The paper was discussed by Drs. Wagner, Francis E. Rosato and N. Henry Moss and then closed by Dr. Schwartz.

A paper entitled, "Diverticular Disease of the Colon" was presented by Dr. Alex W. Ulin. The paper was discussed by Dr. Robert A. Buyers and discussion was closed by Dr. Ulin.

A paper entitled, "Effect of Various Agents on Experimental Stress Ulcer" by Drs. N. Kibara, S. Sufian and Teruo Matsumoto was presented by Dr. Sufian. The paper was discussed by Dr. Matsumoto and then closed by Dr. Sufian.

Regular Meeting

December 4, 1978

The meeting was called to order by President Donald R. Cooper, M.D. at 8:15 P.M. Present at the dinner were 41 members and 25 guests and present at the Scientific Meeting were 49 members and 37 guests.

Scientific Session

A paper entitled, "Long Term Effects of Myocardial Ischemia" was presented by Steven D. Herman, M.D. (by invitation) and Eldred D. Mundth, M.D. The paper was discussed by Drs. Horace MacVaugh, III and John J. McKeown and closed by Dr. Herman.

A paper entitled, "Abdominal Trauma: The Philadelphia General Hospital Experience 1966-1975" was presented by Gene C. Cayten, M.D. (by invitation), Leo Frangiopane, M.D. (by invitation), Frank Poladora, M.D. (by invitation) and William Y. Inouye, M.D. Dr. Cayten gave the presentation. The paper was discussed by Dr. Elmer L. Grimes and closed by Dr. Cayten.

The Annual Oration for the Philadelphia Academy of Surgery for 1978 was presented by Dr. David K. Wagner. The topic was, "Necrotizing Enterocolitis." A copy of this paper is appended to the minutes, and a copy has been sent to the Recorder.

Annual Report of the Secretary

December 1978

In 1978 there were seven formal meetings of the Philadelphia Academy of Surgery and the Conjoint Meeting which was held in Philadelphia on March 15, 1978. In February there was no meeting due to inclement weather. On April 3, 1978, there was a Conjoint Meeting with the Baltimore Academy of Surgery held in Baltimore.

Election of officers was held in January and the new slate of officers for Council was unanimously elected. Dr. Donald R. Cooper, President, President-Elect Dr. Brooke Roberts, 2nd Vice President Dr. Charles C. Wolferth, Jr., Secretary Dr. Paul Nemir, Jr., Chairman, Committee on Scientific Business Dr. R. Robert Tyson, Members-at-Large were Dr. H. Taylor Caswell, Dr. Elmer L. Grimes and Dr. Frederick B. Wagner, Jr.

In January it was announced that a previous President of the Philadelphia Academy of Surgery, Dr. George J. Willauer, had died.

The Conjoint Meeting with the New York Surgical Society was held on March 15, 1978, at the College of Physicians of Philadelphia. There were 68 members of the Philadelphia Academy of Surgery and 46 guests from New York Surgical Society. It was held in Mitchell Hall and was very nearly filled to capacity for the Scientific Session. Six papers were presented and there then followed impromptu discussions from the floor. Following the Scientific Meeting, both societies then adjourned to the Union League of Philadelphia for cocktails and dinner. Dr. Robert E. Cooke, the President of the Medical College of Pennsylvania was the guest speaker.

The Conjoint Meeting with the Baltimore Academy of Surgery was held on April 13, 1978, at Hunt Valley Inn, Cockeysville, Maryland. 53 members of the Philadelphia Academy of Surgery attended. The program began with lunch at 12:30 P.M. and was followed by an excellent Scientific Program which began at 1:30 P.M. The societies then adjourned to another part of the Hunt Valley Inn for cocktails and dinner.

At the May meeting of the Philadelphia Academy of Surgery, Dr. Cooper announced the appointment of Robert A. Buyers, M.D. to the Interspecialty Committee of the Pennsylvania Medical Society and the appointment of Brooke Roberts, M.D. as his alternate. Also announced by Dr. Cooper was the appointment of Dr. Charles C. Wolferth, Jr., to the Advisory Committee in General Surgery of the Pennsylvania Medical Society.

The average attendance of the formal meetings of the Academy during 1978 was 77. Dinners preceded each of these stated meetings.

Paul Nemir, Jr., M.D., Secretary

Regular Meeting

January 8, 1979

The meeting was called to order by President Donald R. Cooper, M.D. at 8:15 P.M. The meeting was again held in the Thomson Room for the first time since the renovation of that room. Present at the dinner were 40 Fellows and 29 guests, and present at the Scientific Session were 54 members and 39 guests.

Scientific Session

A paper entitled, "Tamoxifen—10 mgs. BID—in the Treatment of Metastatic Breast Cancer" was presented by Dr. Harvey J. Lerner. Dr. Francis E. Rosato discussed the paper and then the paper was closed by Dr. Lerner.

A paper entitled, "Indocyanine Green Clearance in the Shock and Trauma Patient" was presented by Drs. David S. Pollack and Shekeeb Sufian, by invitation, and Teruo Matsumoto, M.D., Ph.D. The paper was presented by Dr. Pollack. The paper was discussed by Drs. Matsumoto and Tyson and closed by Dr. Pollack.

A paper entitled, "Left Ventricular Assist Devices" was presented by Dr. Jacob Kolff, by invitation, and Dr. R. Robert Tyson.

Regular Meeting

February 5, 1979

The meeting was called to order by President Donald R. Cooper, M.D. Thirty-four Fellows and thirty-three guests attended the dinner, and fifty Fellows and forty-four guests attended the Scientific Session.

Scientific Session

A paper entitled, "Long Term Respiratory Support in Pediatric Surgical

Crises: Efficacy of a Life Support System" was authored by Moritz Ziegler, M.D., Susan Shaw, Alan Goldberg, M.D. and C. Everett Koop, M.D. and was presented by Dr. Ziegler, discussed by Dr. Koop and closed by Dr. Ziegler.

A paper entitled, "Epidermoid Cyst of the Spleen: Case Report and Review of the Literature" was presented by Dr. Ronald Mattson who was introduced by Dr. William C. Stainback, Jr. The paper was discussed by Dr. Francis E. Rosato and closed by Dr. Mattson.

A paper entitled, "Penetrating Chest Trauma" by Drs. Julieta Grosh, Louis Barr, Joseph Cremone and Vincent W. Lauby was presented by Dr. Grosh, discussed by Dr. Manoucher Fallahnejad and Dr. Paschal M. Spagna and closed by Dr. Grosh.

Centennial Meeting of The New York Surgical Society, March 14, 1979
in association with, Baltimore Academy of Surgery,
Boston Surgical Society, Philadelphia Academy of Surgery

Scientific Program

Secondary Lesions of Penetrating Cardiac Injuries: A Frequent Complication: M. Fallahnejad, M.D., A. Kutty, M.D., and H. W. Wallace, M.D., Philadelphia. Discussor: J. N. Cunningham, Jr., M.D., New York.

Esophagogastrectomy for Carcinoma: Current Hospital Mortality and Morbidity Rates: F. H. Ellis, Jr., M.D. and S. P. Gibb, M.D., Boston. Discussor: J. R. Hankins, M.D., Baltimore.

Efficacy of Capmul in the Dissolution of Biliary Stones: T R. Gadacz, M.D. and R. Plack, Jr., M.D., Baltimore. Discussor: F. E. Rosato, M.D., Philadelphia.

Presiding Jack M. Zimmerman, M.D., President, Baltimore Academy of Surgery.

Morphology, Anatomic Distribution and Cancer Potential of Colonic Polyps: An Analysis Based on 3,414 Polyps Endoscopically Removed: H. Shinya, M.D. and W. I. Wolff, M.D., New York. Discussor: S. E. Hedberg, M.D., Boston.

Percutaneous Transluminal Angioplasty Using A Vinyl Balloon Catheter: E. J. Ring, M.D., D. B. Frieman, M.D., J. A. Oleaga, M.D., H. D. Berkowitz, M.D. and B. Roberts, M.D., Philadelphia, Discussor: R. L. Gelber, M.D., Baltimore.

Surgical Management of Bronchopleural and Bronchobiliary Fistulas: K. W. Warren, M.D., Boston. Discussor: P. A. Kirschner, M.D., New York.

Post-Operative T-Tube Cholangiography: Is Antibiotic Coverage Necessary?: H. A. Pitt, M.D., R. G. Postier, M.D. and J. L. Cameron, M.D., Baltimore. Discussor: J. R. Brooks, M.D., Boston.

Lowering Blood Viscosity: A Treatment for Increased Vascular Resistance: H. H. LeVein, M.D., M. Ip, M.D. and H. Ahmed, M.D., New York. Discussor: F. A. Reichle, M.D., Philadelphia

Coincident Gallstones and Gastroesophageal Reflux: L. H. Stahlgren,

M.D., T. Pagana, M.D. and G. Constantino, M.D., Philadelphia. Discussor: F. H. Ellis, Jr., M.D., Boston.

Myocardial Performance as A Guide to Volume Therapy: G. A. Grindlinger, M.D., J. Manny, M.D., R. C. Dennis, M.D., R. D. Weisel, M.D., J. A. Mannick, M.D. and H. B. Hechtman, M.D., Boston, Discussor: J. R. Clarke, M.D., Philadelphia.

Neonatal Hyperinsulin Hypoglycemia: D. W. Shermeta, M.D. and J. A. Haller, M.D., Baltimore. Discussor: S. J. Boley, M.D., New York.

End-Stage Heart Disease: Treatment by Mechanical Circulatory Assistance and Cardiac Transplantation: K. Reemtsma, M.D., R. Edie, M.D., D. Bregman, M.D., R. Drusin, M.D., A. Schwartz, M.D., W. Dobelle, Ph.D. and M. Hardy, M.D., New York. Discussor: J. S. McLaughlin, M.D., Baltimore.

Regular Meeting

April 2, 1979

The meeting was called to order by President Donald R. Cooper, M.D. at 8:15 P.M. Forty-three Fellows and thirty-five guests attended the dinner and fifty-two Fellows and forty-five guests attended the Scientific Session.

Scientific Session

A paper entitled, "Soft Tissue Sarcoma: Clinical Indications for Modification of Treatment" was presented by Henry F. Sears, M.D. (by invitation), Paul J. Grotzinger, M.D., Ronald Hopson, Ph.D. (by invitation) and Thomas Rizzo, M.D. (by invitation). Dr. Sears presented the paper. The paper was discussed by Drs. Thomas G. Frazier and Grotzinger and closed by Dr. Sears.

A paper entitled, "The Benefit of Splenectomy on Renal Transplant Graft Survival" was presented by Drs. Simon Simonian (by invitation), Frank Stuart (by invitation) and Teruo Matsumoto. The paper was presented by Dr. Simonian and discussed by Dr. Clyde F. Barker and closed by Dr. Simonian.

A paper entitled, "Division of the Left Renal Vein—Guidelines and Consequences" was presented by Dr. Peter R. McCombs (by invitation) and Dominic A. DeLaurentis, M.D. The paper was presented by Dr. McCombs, discussed by Drs. Clyde F. Barker, DeLaurentis and Brooke Roberts, and closed by Dr. McCombs.

Regular Meeting

May 7, 1979

The meeting was called to order by Dr. Brooke Roberts at 8:15 P.M. There were 45 Fellows and 25 guests present at the dinner, and 56 Fellows and 50 guests at the meeting.

Scientific Session

A paper entitled, "The P.T.F.E. Graft in Peripheral Vascular Surgery: Experience with 457 Grafts" was presented by Drs. Charles C. Wolferth, Jr.,

Martin F. Hayes, Jr. (by invitation), George Amrom (by invitation) and Ponnampalam Sabanayagam (by invitation). The paper was presented by Dr. Wolferth, discussed by Drs. Brooke Roberts and Frederick A. DeClement, Jr. and closed by Dr. Wolferth.

A paper entitled, "Angiography and the Management of Massive Lower Gastrointestinal Hemorrhage" was presented by Drs. Allen Bar (by invitation) and Dominic A. DeLaurentis. Dr. Bar presented the paper, and it was discussed by Drs. Moreye Nusbaum and Gerald Marks and then closed by Dr. Bar.

A paper entitled, "Emergency Coronary Artery Revascularization: A Possible Therapy for Acute Myocardial Infarction" was presented by Drs. Robert H. Zeff (by invitation) and Horace MacVaugh, III. The paper was presented by Dr. Zeff, discussed by Dr. L. Henry Edmunds and closed by Drs. MacVaugh and Zeff.

Regular Meeting

October 1, 1979

The meeting was called to order by President Donald R. Cooper, M.D. at 8:15 P.M. There were 48 Fellows and 49 guests present at the dinner and 55 members and 60 guests at the meeting.

Scientific Session

A paper entitled, "Long Term Follow-up of Patients with Very Small Aortic Valve Prostheses" was presented by Dr. Stanley K. Brockman. The paper was discussed by Dr. L. Henry Edmunds and closed by Dr. Brockman.

A paper entitled, "Craniofacial Reconstruction Updated" was presented by Drs. Linton A. Whitaker, Luis Schut (by invitation) and Derek Bruce (by invitation). The paper was given by Dr. Whitaker, discussed by Dr. Brooke Roberts and closed by Dr. Whitaker.

A paper entitled, "Early Splenectomy in Chronic Myelogenous Leukemia: Surgical Aspects" was presented by Dr. Paul Rodigas (by invitation) and Dr. Teruo Matsumoto. The paper was discussed by Dr. Matsumoto and closed by Dr. Rodigas.

Regular Meeting

November 5, 1979

The meeting was called to order by President Donald R. Cooper, M.D. at 8:10 P.M. There were 45 members and 43 guests present at the dinner and 60 Fellows and 56 guests present at the meeting.

Scientific Session

The Scientific Session followed a new format for this meeting. There was a panel discussion of Selected Biliary Tract Topics. Dr. R. Robert Tyson gave the introduction and the Moderator was Dr. LeRoy H. Stahlgren. The first formal presentation was entitled, "Operative Cholangiography—Should it be

Routine" by Dr. LeRoy H. Stahlgren. This paper was discussed by Dr. Francis E. Rosato.

The second formal presentation was entitled, "Choices in Management of Biliary Duct Stricture" by Dr. Willis P. Maier. Discussion was by Dr. Francis E. Rosato.

The third formal presentation was entitled, "Transhepatic Decompression" by Dr. Ernest Ring (by invitation), and discussion was by Dr. Teruo Matsumoto.

There then followed a question and answer period between the Fellows of the Academy and the Panel. The new format seemed to be received with enthusiasm.

Regular Meeting

December 3, 1979

The meeting was called to order by President Donald R. Cooper, M.D. at 8:15 P.M. There were 43 Fellows and 26 guests present at the dinner and 59 Fellows and 26 guests present at the meeting.

Scientific Session

The entire scientific session was devoted to the Annual Oration which was given by Dr. Frederick B. Wagner, Jr., Grace Revere Osler Professor of Surgery at the Thomas Jefferson University. Dr. Wagner spoke on "The Founding Fathers and Centennial History of the Philadelphia Academy of Surgery." Following the excellent, scholarly presentation, there was a standing ovation. A copy of the Annual Oration is attached to these minutes and a copy has been sent to the Recorder.

Annual Report of the Secretary

In 1979 there were nine formal meetings of the Philadelphia Academy of Surgery. Election of officers was held in January and the new slate of officers for Council was unanimously elected as follows:

President	Donald R. Cooper, M.D.
1st Vice President	Brooke Roberts, M.D.
2nd Vice President	Charles C. Wolferth, Jr., M.D.
Secretary	Paul Nemir, Jr., M.D.
Treasurer	William T. Fitts, Jr., M.D.
Recorder	Joseph W. Stayman, Jr., M.D.
Chairman, Committee on Scientific Business	R. Robert Tyson, M.D.
Members-at-Large	H. Taylor Caswell, M.D. Elmer L. Grimes, M.D. Frederick B. Wagner, Jr., M.D.

Two former Presidents of the Philadelphia Academy of Surgery, Dr. W.

Emory Burnett and Dr. J. Montgomery Deaver died during the year and memoirs were presented.

On March 14, 1979, 62 Fellows of the Academy travelled to New York to participate in the Centennial Meeting of the New York Surgical Society, along with the Boston Surgical Society and the Baltimore Academy of Surgery. Papers were presented by all four societies and discussed.

On November 3, 1979, the Philadelphia Academy of Surgery had its Centennial Celebration at the Union League of Philadelphia, with Fellows and spouses attending. Nine Honorary Fellowships were awarded as follows: William P. Longmire, M.D., Francis D. Moore, M.D., David C. Sabiston, Jr., M.D., Owen H. Wangenstein, M.D., Robert M. Zollinger, M.D., J. Engelbert Dunphy, M.D., Dr. Clarence Crafoord, Professor John C. Goligher, Lord Smith of Marlow (K.B.E.).

Five of the Honorary Fellowship recipients were present at the Centennial Celebration.

Dr. Herbert Reid Hawthorne, a Fellow of the Academy of Surgery since 1945, received the Centennial Award of the Philadelphia Academy of Surgery.

There were 227 people present at the Cocktail Hour and Reception. Dr. Frederick B. Wagner, Jr. was responsible for the planning of this superb affair.

On November 5, 1979, the Scientific Session followed a new format which was initiated by Dr. R. Robert Tyson, the Chairman of the Committee on Scientific Business. There was a panel discussion of "Selected Biliary Tract Topics," with three formal presentations and then a question and answer period between the Fellows of the Academy and the panel. The new format was received with enthusiasm.

On December 3, 1979, the Annual Oration was given by Dr. Frederick B. Wagner, Jr., Grace Revere Osler Professor of Surgery at the Thomas Jefferson University. Dr. Wagner spoke on "The Founding Fathers and Centennial History of the Philadelphia Academy of Surgery." There was a standing ovation following the excellent, scholarly presentation.

Preceding the Annual Oration, the Cocktail Hour was held in the Mutter Museum where Mrs. Elizabeth Moyer and her colleagues had arranged an exhibit of memorabilia of the Philadelphia Academy of Surgery.

The average attendance at the formal meetings of the Academy during 1979 was 96. Dinners preceded each of these stated meetings.

Paul Nemir, Jr., M.D., Secretary

Program

January 7, 1980

R. Rizzo, M.D. (by invitation), Teruo Matsumoto, M.D.: "Above versus Below The Knee Amputation: Retrospective Analysis."

Howard H. Steel, M.D.: "Protrusio Acetabuli—A Surgical Approach to Arresting the Problem by Closure of the Triradiate Epiphysis."

Henry D. Berkowitz, M.D., J. Alpert, M.D. (by invitation), E. Ring, M.D. (by invitation), D. Freiman, M.D. (by invitation), J. Oleago, M.D. (by invitation), B. Roberts, M.D.: "Treatment of Vein Graft Stenosis by Balloon Catheter Dilatation."

Regular Meeting

February 4, 1980

The meeting was called to order by President Brooke Roberts at 8:15 p.m. There were 48 Fellows and 7 Guests present at the meeting.

Scientific Session

A paper entitled "Case Report: Repair Ulnar Nerve Eleven Years after Injury" was presented by Dr. Jack C. White and discussed by Dr. Elmer C. Grimes.

A paper entitled "Bile Reflux Gastritis" was presented by Dr. George F. Gowen and discussed by Dr. Willis Maier and Dr. Jonathan E. Rhoads, Sr.

A paper entitled "Tranvenous Adrenal Ablation in the Treatment of Breast Cancer" was presented by Dr. Robert S. Boova (by invitation), Dr. Ralph A. Carabasi, (by invitation), Dr. Daniel Scotti (by invitation), and Dr. Francis E. Rosato. It was discussed by Dr. William T. Fitts, Jr., and Dr. George F. Gowen, and closed by Dr. Robert S. Boova.

Scientific Program

Conjoint Meeting: Philadelphia Academy of Surgery, and New York Surgical Society.

March 12, 1980

Neurologic Function and Blood Flow Changes Following STA-MCA Anastomosis: Paul Nemir, M.D., Michael J. O'Connor, M.D. (by invitation), John P. Hungerbuhler, M.D. (by invitation), John Gordon, M.D. (by invitation), John Laurent, M.D. (by invitation), Pablo Lawner, M.D. (by invitation), Herbert I. Goldberg, M.D. (by invitation), Martin Reivich, M.D. (by invitation), Walter Obrist, M.D. (by invitation).

A Method of Reducing Burn Wound Sepsis Due to Multiple Drug-Resistant Bacteria: Frederick A. Clement, M.D., S. Randolph May, M.D. (by invitation).

A Scanning Electron Microscope Study of the Healing of Dacron Internal Velour Bypasses in the Canine Thoracic Aorta: Frederick A. Reichle, M.D., Hong S. Sue, M.D. (by invitation), Tzi A. Chou, M.D. (by invitation), Gwendolyn J. Stewart, M.D. (by invitation).

Fine Needle Aspiration Biopsy of Breast: Hunter S. Neal, M.D., Tilde S. Kline, M.D. (by invitation).

Catheter Culture as a Guide in the Management of Sepsis in the Critically Ill Surgical Patient: A. Mohsen Kholoussy, M.D. (by invitation), Shebeeb Sufian, M.D. (by invitation), Teruo Matsumoto, M.D.

Comparative Effectiveness of Rigid and Flexible Fiberoptic Sigmoidoscopy: A Prospective Cooperative Study of 1800 Cases: Gerald Marks, M.D.

Regular Meeting

April 7, 1980

The meeting was called to order by President Brooke Roberts at 8:15 p.m. Present at the dinner were 40 members and 19 guests and present at the meeting were 50 members and 30 guests.

Scientific Session

Dr. Hunter S. Neal read the Memoir to Richard H. Flandreau, M.D. This memoir is attached to these minutes.

A paper entitled, "Cecostomy for Transcecal Colostomy—Effective Decompression of the Colon" was presented by Dr. Frederick A. DeClement, Jr. and discussed by Drs. Alex W. Ulin and Dominick A. DeLaurentis and closed by Dr. DeClement.

A paper entitled, "Results and Complications of Operative Biopsy of the Pancreas: A Ten Year Review" by Drs. Stephen M. Weiss, John M. Skibber, Ralph A. Dobelbower, Richard Whitting, by invitation and Dr. Francis E. Rosato. The paper presented by Dr. Weiss and discussed by Dr. Jonathan E. Rhoads, Elmer L. Grimes, R. Robert Tyson, and closed by Dr. Weiss.

A paper entitled, "Use of Endorectal Pullthrough to Preserve Anal Continence in Ulcerative Colitis" by Drs. William H. Weintraub, by invitation, and R. Robert Tyson. The paper was presented by Dr. Weintraub and discussed by Drs. Tyson and George P. Pilling, IV.

Regular Meeting

May 5, 1980

Meeting was called to order by President Brooke Roberts.

Scientific Session

Paper presented by H. D. Berkowitz, M.D. entitled Comparative Study of Non-Invasive Cerebral Vascular Diagnostic Methods and discussed by Paul Nemir and Charles Wolfert.

Paper presented by Charles Hartford, R. Michael McClellan, James H. Loucks, entitled Interhospital Transfer of Patients by a Burn Team and discussed by Paul Nemir and Brooke Roberts.

Paper presented by Joel Rosenfeld, Harvey Lerner, and D. A. DeLaurentis entitled Cystosarcoma Phylloides, Diagnosis and Management and discussed by Clifton West and H. Lerner, and Thomas Frazier.

Regular Meeting

October 6, 1980

Meeting was called to order by President Brooke Roberts.

Scientific Session

Paper presented by L. W. Stephenson, M.D. entitled "Subclavian Artery Grafting for Anomalous Left Coronary Artery" and discussed by H. L. Edmunds, M.D.

Paper presented by R. K. Balsara, M.D. entitled "Conjoined Thoracopagus Twins—Surgical Separation" and discussed by H. L. Edmunds.

Paper presented by I. P. Goel, M.D., entitled "The Surgical Correction of Severe Bilateral Carotid Artery Stenosis and Unstable Angina" and discussed by Drs. Spagna, Wolfarth, Templeton, and Nemir.

Regular Meeting

November 3, 1980

The meeting was called to order by President Brooke Roberts.

Scientific Session

A panel discussion was presented concerning the Management of Colorectal Cancer with introduction by Dr. R. Robert Tyson and Dr. Francis Rosato serving as moderator.

Various topics were discussed as follows: Bowel Preparation for Colon Surgery—presented by John Clark, M.D. and discussed by Alan Resnik, M.D.

The Management of Perforative Colon Cancer—presented by Thomas Gain, M.D. and discussed by Dominic DeLaurentis, M.D.

The Management of Low Lying Lesions: A. Sphincter Saving Procedures—presented by Gerald Marks, M.D. and discussed by Paul Grotzinger, M.D., B. Abdominal Perineal Resection—presented by Anthony Gennaro, M.D. and discussed by Paul Grotzinger, M.D.

Perioperative Radiation Therapy—presented by William Y. Inouye, M.D. and discussed by Luther Brady, M.D.

Regular Meeting

December 1, 1980

The meeting was called to order by President Brooke Roberts.

Scientific Session

A paper entitled Five Unusual Tumors of the Duodenum was presented by Elmer L. Grimes, M.D. and discussed by Dr. George Gowen and Dr. Charles E. Hartford.

A paper entitled Percutaneous Dilatation of Stenosed Mesocaval Shunts was presented by Constantine Cope, M.D. and discussed by Dr. Robert Tyson and Dr. Henry Moss.

Memoirs**ALBERT BEHREND**

1907-1978

Dr. Albert Behrend, a member of this Academy for many years, was born in 1907, the son of Clara and Moses Behrend, himself an illustrious Philadelphia physician and surgeon. After graduating from Central High School in Philadelphia, he attended the University of Pennsylvania, receiving his A.B. degree in 1929 and his medical degree in 1932. He subsequently interned at Philadelphia General Hospital and took his surgical training at the Mayo Clinic, receiving his Master of Science (Surgery) degree from the University of Minnesota in 1937. That year he returned to Philadelphia to establish his practice in General Surgery. Soon thereafter, he was certified by the American Board of Surgery. He entered the Armed Forces of the United States as a First Lieutenant. He served until 1945 when he transferred to the Reserves as a Lieutenant Colonel.

From 1945 until 1972 he remained in Philadelphia as a Senior Attending Surgeon at Albert Einstein Medical Center, during which time he was actively engaged in the training of surgical residents at that hospital, as well as acting as an Associate Professor of Surgery at the Graduate School of Medicine of the University of Pennsylvania, and as clinical Professor of Surgery, Temple University Medical School. He published over 100 medical and surgical papers.

He was a member of the Philadelphia County Medical Society, A.M.A., American College of Surgeons, Surgeons Travel Club, College of Physicians of Philadelphia, International College of Surgeons, American Trudeau Society, American Geriatric Society, as well as of our own organization.

In 1972, Dr. Behrend was asked by the American Mediacorp Corporation to direct medical affairs at the new Cypress Community Hospital in Pompano Beach, Florida. He left Philadelphia at that time, and after three years, left Cypress Hospital to return to the private practice of surgery, in which he was engaged until 1977, and he enjoyed complete retirement until his untimely death in 1978, just three weeks before his 71st birthday.

Not only was Albert an accomplished surgeon, but he also was a violinist and engaged actively in fishing, tennis, golf, needlepoint and orchid raising, receiving several prizes in shows and acting as President of the Deerfield Beach Orchid Society from 1976 to 1978.

In 1943 he married Elsa Loewenstein and had two children, Albert James, who is now Chief Surgical Resident at the Albert Einstein Medical Center in Philadelphia, and John Carl, who is Assistant Vice-President of the Industrial Valley Bank. He lived to enjoy a grandchild born in 1977.

I should like to close with a quote from a eulogy given by Rabbi Bertram W. Korn on July 25, 1978. "Albert had so many qualities combined. All that

skill and all that talent in a scientific and professional sense, together with humor and modesty and warmth and a special kind of gentle sweetness . . . no falsehood, no superficiality, no desire to make a big noise, no seeking acclaim, just a very, very poignant awareness of who he was and what life was always about. . . . We are only made of dust, of chemicals and moisture; and that which is dust and chemicals blows away with the wind, but that which is made of spirit, of love, of kindness, of intellect, of sensitivity and warmth and graciousness remains always. That of Albert which we prized and cherished the most, remains always with us. For this we are grateful. . . .”—Jerry Zaslow, M.D.

WILBUR EMORY BURNETT

1898-1979

Wilbur Emory Burnett, known to his numerous friends as “Mose,” died January 11, 1979, at the age of 80. “Mose” Burnett, a pioneer in thoracic surgery and a highly respected and admired general surgeon, was Emeritus Chairman of the Department of Surgery at Temple University Health Sciences Center.

In 1944 the Temple University Medical School Year Book was dedicated to him with this preamble: “The scholar is measured by his mastery and honest interpretation of his subject. The surgeon is judged by the living results of the combined application of his knowledge, surgery and technical skill. The teacher is evaluated more subjectively; first, by his ability to impart a knowledge of his subject to his students; and second, by the degree to which he can inspire them to independent investigation.

“We of the class of 1944 dedicate this book to you, Dr. Burnett. You have combined well these attributes and in addition we are grateful for your friendship and honesty. Your influence will enrich our lives in medicine.”

Having been an admiring student of “Mose” Burnett several years prior to 1944, and having been his associate in the practice of surgery at that time and for many years thereafter, I can attest to the unusual characteristics of this man who influenced the lives of so many of us. He gave generously of himself.

“Mose” Burnett was born February 20, 1898, in Spartanburg, South Carolina, a member of a large and close-knit family. His pre-medical education was received at Wofford College in Spartanburg, where he excelled as an athlete and as a student. His medical education was temporarily interrupted by World War I. He received his M.D. degree from Jefferson Medical College in 1923. Internship followed at Joseph Price Hospital and Jefferson Medical School Hospital.

As was customary at the time, he then took post graduate work in Vienna, Paris, London and Edinburgh.

Dr. Wm. N. Parkinson, later long-time Dean at Temple, but in 1926 Chief Surgeon for the Florida East Coast Railways, headquartered in St. Augustine, Florida, invited him to St. Augustine as Assistant Chief Surgeon. When Dr. Parkinson returned to Temple as Dean in 1929, Dr. Burnett succeeded him as Chief Surgeon. One year later, in 1930, Dr. Parkinson persuaded Dr. Burnett to join the Temple University Surgical Faculty. His highly successful career in the Philadelphia area was on its way.

Dr. Burnett was a member of numerous medical and surgical societies, among them the American Association of Thoracic Surgery, the County, State and American Medical Associations, The American Surgical Association, the International Society of Surgery and the American College of Surgeons (Vice President 1954-1955) and the Philadelphia Academy of Surgery which he

served as President for a two-year term (1960 and 1961). He was Chairman of the Surgical Department at Temple for 18 years. He was the author of many surgical papers and surgical consultant to many hospitals in the Philadelphia area. He was a diplomate of the American Board of Surgery and the Board of Thoracic Surgery.

He was an ardent golfer and for years a competent and enthusiastic aviator.

Dr. Burnett was married to the late Peyton Bolling Jones in 1938. He is survived by a son, Livingston, of Norristown, Pennsylvania, and three sisters and one brother who reside in South Carolina.

Dr. Burnett will be remembered by those of us who knew and loved him for his great capacity for friendship, his surgical technique and surgical integrity, his generosity and his ability to transmit his considerable surgical knowledge to those of us fortunate enough to be listed among his students.

He lived a long and fruitful life, humbly accepting the rewards of his accomplishments and valiant in adversity. May his soul rest in peace.—George P. Rosemond, M.D.

J. MONTGOMERY DEAVER

1901-1978

Joshua Montgomery Deaver was born October 10, 1901, the son of John Blair and Carolina Randall Deaver. He died Sunday, November 12, 1978, at Lankenau Hospital, after a long and painful illness, of one of the three concomitant malignancies from which he suffered.

As a youth he resided in Wyncote, Pennsylvania. He attended Episcopal Academy and the Hill School in Pottstown from which he was graduated in 1920. Later in life he served the School as a devoted trustee for many years. He was graduated from the Sheffield Scientific School, Yale University, in 1924, with a B.S. degree.

While a student at Yale he played end on the varsity football team, earning his letter in the years 1921, 22, and 23.

Consistent with a strong family tradition in medicine, he entered the University of Pennsylvania School of Medicine and was graduated in 1928.

He married Priscilla Sparks Sailer December 16, 1932. A daughter, Sally Deaver Murray, was born November 14, 1933. She was killed August 14, 1963, in a riding accident. Prior to her death, she had been an Olympic skier and successfully competed in the winter games in Switzerland. Her father took great pride in her triumphs.

Dr. Deaver's medical career was spent at Lankenau Hospital, except for an interlude in the Navy during World War II.

He was first intern, then resident at Lankenau, completing his residency in 1934. He was in the first group to be examined by the American Board of Surgery for certification in 1937. He became a staff surgeon on Surgical Service "A", becoming chief of the service in 1942, and chief of General Surgery in 1964. He retired as chief in 1967.

Dr. Deaver served his country in two wars: as a Marine Private in World War I and as a Naval Officer in World War II. He was separated from active service in March 1946, with the rank of Captain. He served as Chief of Surgery in Mobile Hospitals #105 and #108 in the Pacific Theater. He continued to be active in the Naval Reserve until 1961, when he retired.

His academic career spanned a period of almost 40 years. He held the title of Clinical Professor of Surgery in both the Graduate School of Medicine University of Pennsylvania and the Medical College of Thomas Jefferson University. As a tribute to his contributions, he was awarded the Honorary Degree of Doctor of Science by Jefferson Medical College on June 8, 1973.

Aside from his family, "Gun" was twice devoted: once to his farm and once to Lankenau Hospital. The latter probably received the greater devotion.

His technical skill was superior but his outstanding ability was that ethereal quality, "surgical judgment." Many was the time that his opinion stayed the hand of an overly aggressive resident or colleague. On other occa-

sions he would provide the impetus to get going on an operation when time was important.

But above all his surgical skills was his devotion to his patients and colleagues. His early morning appearance at the hospital was a source of comfort to his many patients and served to keep the house staff on their toes. Early breakfast seemed to be the "listening post," and he knew every bit of gossip almost before it had had time to occur. And when anyone, patient or colleague, was in some kind of trouble you could predict that JMD would show up to help out.

Following his retirement as Chief of Surgery in 1967, he continued to serve Lankenau as a member of the Board of Trustees where he chaired the Research Committee of the Board.

He was a member of many professional societies, including the American Medical Association, American College of Surgeons, the College of Physicians of Philadelphia, American Surgical Association, the International Society of Surgery and the Philadelphia Academy of Surgery, of which he was President from 1962-64. He was one of the two Philadelphia members of the Surgeons Club.

He belonged to the Racquet Club and the Philadelphia Club.

The world and especially Lankenau Hospital was a better and more stimulating place to be as a consequence of Montgomery Deaver's presence. Paraphrasing the quotation on the plaque of John D. Lankenau would seem an appropriate approbation for him.

"A life spent for others is a life spent not in vain."—Edwin W. Shearburn, M.D.

WILLIAM T. FITTS, JR.

1915-1980

William Thomas Fitts, Jr. was born in Jackson, Tennessee, on October 6, 1915. As far as I know, that was the first and last time anyone ever called him William—he was "Billy" or "Bill" ever after, even to his children. His father was a distinguished internist in Jackson, and, at first, Billy aimed to follow in his footsteps. He graduated at or near the top of his class at every educational institution he ever attended, including Union University and the University of Pennsylvania School of Medicine, just as he rose to the top of every professional endeavor in which he had a serious interest. At Penn, he was elected to Alpha Omega Alpha in 1938 and later won the Spencer Morris Prize indicative of the brightest medical student in the class.

With the outbreak of World War II, he became a Surgical Ward Officer in the Affiliated Unit of the University of Pennsylvania, the 20th General Hospital, serving the China-Burma-India Theatre. The assignment to a surgical section was not particularly to Bill's liking, since he had won an appointment in internal medicine at the Mayo Clinic. Once clinical work began overseas, he was assigned an orthopedic ward, under Dr. Ernest Brav. Their union was a fruitful one, since Bill learned a great deal about trauma and shock. This experience formed the basis of his later interest and unquestioned leadership in this field. He also became known for his ability to work 20 hours a day, to give each of his patients his full and undivided attention, and for his unwavering concentration on the surgical literature of the time. Henry Royster, his lifelong friend, who was with him during those days, likes to tell the story of a mess officer who attempted to distract Bill from the latest surgical journal by stuffing several pieces of taffy in Bill's mouth. The mess officer's ministrations were not acknowledged—Bill just kept chewing and reading. The story goes that the mess officer then stopped unwrapping the wax paper from the sweet, but even this was to no avail. I. S. Ravdin, Bill's Commanding Officer, although occasionally given to hyperboles was probably correct when he stated that Dr. Fitts had done more onlay grafts for delayed union of the tibia, while in India, than any surgeon in the United States. Many of these were done for Chinese soldiers.

He had married Barbara Willits, a woman of great intelligence, graciousness and warmth, before he went overseas. She proved to be a source of great strength and influence for him throughout her life. They had three children, Barbara Hayden and Michael Andrew, both lawyers, and Catherine Austin Fitts, now a successful person in the business world. After Barbara's tragic death, Bill married the lovely and steadfast Stella White in 1976, whom he had known since childhood. In fact, Bill was Stella's baby-sitter, at a tender age, when their fathers both trained at the Mayo Clinic, hers in surgery and his in medicine, before returning to Jackson to set up the Fitts-White Clinic. Billy was actually blessed with several families, including the University, the Medi-

cal School, his patients and, notably, his residents and students. Although he cared, really cared about all of his families, he gave an extra measure of himself to these young people. He cared about who we were as human beings, what troubled us and what made us laugh, what motivated us and what made us angry, who we were related to; in other words, what made us tick. I was Billy's student, as I continued to be until his death, his intern, his resident, his faculty colleague, his Vice-Chairman, and then he became a most supportive and productive member of my faculty. Although the roles changed, our basic relationship didn't. I had the privilege of experiencing that special warmth, that special concern, that special caring, that typified Bill, as much as a medical student as when I became chairman of his department. This relationship was extended to countless people, members of his "family," in all walks of life.

Returning to the University Hospital early in 1946, Dr. Fitts finished his surgical training. Although his father wanted him to return to Tennessee to set up a joint practice with him as internist and surgeon, Bill and Dr. Ravdin, then the Chairman of the Department, had other aspirations. A truly distinguished academic career was begun with this pivotal decision.

His continuing interest in trauma led him to active participation in the American College of Surgeons Trauma Committee, first as Chairman of the Regional Trauma Committee, later as a member of the National Committee on Trauma and, afterwards, as its Vice-Chairman. He also became extremely active in the American Association for the Surgery of Trauma and was elected to all of the offices in the Association, serving as Secretary, Vice-President, President-Elect, and President. In connection with this, he assumed the Editorship of the *Journal of Trauma*, in 1968, and transformed it to a monthly journal, greatly expanding its circulation and scope. In 1975, the Association established an Annual Lectureship in his honor. He was also one of the founders of the American Trauma Society, and rejuvenated its activity and effectiveness when he became President in 1972. The National Safety Council awarded him its Surgeon's Award for Distinguished Service to Safety in 1971. Before the idea's time had come, he challenged, and in part rebuked, his colleagues about the regionalization of trauma care. His sense of duty to the public at large, to his department and school, his desire to achieve, and his devotion to principle, were virtues that were often extended and tested to the point of discomfort for him. When crucial decisions were to be made, Bill was usually out on the point, but he had a congenital inability to say "no" to still another important assignment.

With Dr. Oscar Hampton, he wrote the four chapters on fractures in Lippincott's *Textbook of Surgery*, in each of the four editions. He and Dr. Hampton also published a monograph on the open reduction of fractures, which was widely used. He also published 150 scientific papers, which have had a substantial impact on surgical practice, not only in trauma, but also on the treatment of breast cancer and inflammatory and malignant disease of the gastrointestinal tract, areas in which he possessed a wealth of surgical experience.

He enjoyed his surgical society memberships enormously, particularly the

American Surgical Association, and contributed, in his own inimitable way to each, both professionally and socially. He was also a member of the Society of University Surgeons, the Halsted Society, the Society for Surgery of the Alimentary Tract, the Eastern Surgical Society, the Pan-Pacific Surgical Association, the Allen Whipple Society, and the Southern Surgical Association, for which he had a special fondness.

Few loved the University, as a university, as much as Bill did. None worked harder for it. His list of important committee assignments and chairmanships is truly prodigious. He became John Rhea Barton Professor and Chairman of the Department of Surgery in 1972, but gave it up in 1975 to give fuller attention to his first loves: his patients and the University. One of his last major undertakings was in connection with the "Campaign for the 80's" to raise \$255 million for the University of Pennsylvania. He headed, at first, the successful campaign for the Medical School, and then the equally successful drive for the University as a whole. Needless to say, it went "over the top," in the week of his death on June 17, 1980. The University had honored him in 1964 with the well-deserved Lindback Award for Distinguished Teaching. The year before his death, it honored him with an Alumni Merit Award, the highest honor the University can bestow on one of its own. In the same year, Union University, his alma mater, also gave him its Distinguished Service Award.

Despite his manifold contributions to trauma care and research and his reputation as a surgeon with superior judgment and skill, Bill will probably be best remembered as a teacher with a unique impact on those he taught. He had an encyclopedic knowledge, not only of medicine and surgery, but outside his professional field. He used language well, and was always clear, explicit and scrupulously honest in his statements. Perhaps the greatest message he delivered was one that he never needed to put into words: he really did put the patient first. Long after the students forgot the surgical knowledge and wisdom he gave them, they remembered who he was as a person.

Like most productive men, Bill had a many-sided, often paradoxical personality. Often garrulous, a yarn-spinner with the best of them, he could be the most silent and reflective of men. Every intern who at the operating table pointed to a tiny bleeder knows how sharply reproachful he could be, yet gentleness and generosity were at the core of him. Some saw him as somewhat rustic and provincial in demeanor, but, in truth, he had an intellect of considerable depth and breadth. Books were his primary outside interest, and he would often, typically and methodically, pile up all the books he could find on a subject—and it could be anything from big city political bosses to native American dialects—and read them voraciously, one after the other. The most informal and unpretentious of men, he had an innate sense of propriety and an innate appreciation for style and elegance. A pillar of clinical confidence and determination outwardly, questions of diagnosis and treatment gnawed at him constantly, until he satisfied himself that his course was correct.

Exquisitely sensitive to the physical problems of others, he often ignored and always minimized his own. Courageous in his public stands and dogged

in his academic principles, his own personal vulnerability united him with patients and colleagues: He was one doctor who knew, really knew, how they felt. To his patients he was a legend personified. No problem, surgical or medical, physical or emotional, was too small to merit his attention. Once a patient of his, you were his patient for life. He was really a "horse and buggy" doctor practicing in one of the nation's finest academic institutions. Although he was totally incapable of self-deception, a mixed blessing for him, he was completely unaware of his own uniqueness. His father once told him and his brother, Tommy, also a member of this Association, that they were tougher than "whitethair and pine knots." A good part of him was, but the ravages of at least three lethal medical complications were too much, even for him.

The Medical Student Scholarship Fund, established in his honor at the University of Pennsylvania, the proceeds going to a needy medical student, would have been his favorite charity. Nearly a thousand people from all walks of life attended his Memorial Service at the University on June 30, 1980. Many of his University faculty colleagues were also patients of his. One of the speakers was such a patient, a distinguished professor of economics. He summed it up best when he said, "Others will esteem Bill as a colleague, teacher and eminent surgeon. I speak from the other side of the operating table, as the 'patient anonymous' who gives purpose and poignancy to the science of medicine. I am among the untold numbers who live because of Bill's superb skill, tender compassion, and unswerving dedication to his life-assisting mission . . . I relaxed, confident, for Bill was on my side."—Leonard D. Miller, M.D.

GILMAN E. HEGGESTAD

1919-1978

Dr. Gilman E. Heggstad died at his home in Newtown Square, Pennsylvania, on Saturday, August 26, 1978, at the age of 59.

Dr. Heggstad was born on August 6, 1919 in Stoughton, Wisconsin. He was raised on a farm in Southern Wisconsin and, thus, early in life he learned the rigors and hardships of surviving under tough circumstances. This early training was to prepare him well for his career in medicine and surgery.

Dr. Heggstad attended the University of Wisconsin, graduating in June, 1941. He then entered the University of Wisconsin School of Medicine, from which he graduated in June, 1945. He served his internship at The Bryn Mawr Hospital from June, 1945 to June, 1946. Following this he took a residency in Pathology and Surgery at The Bryn Mawr Hospital from 1946 to 1948, and then spent one year as a surgical resident at the Veterans' Administration Hospital in Mountain Home, Tennessee. After this he returned to The Bryn Mawr Hospital for the last two years of his surgical training. He served in the Medical Corps of the United States Army from 1952 to 1954, at Fort Eustis, Virginia.

Dr. Heggstad was appointed to the Attending Staff of The Bryn Mawr Hospital in June, 1952. He rose from the position of Assistant Surgeon to the Out-patient Clinic to Attending Surgeon and Chief of the Red Surgical Service, and on July 1, 1976, he was appointed Director of the Department of Surgery, serving in that position until his recent illness. He served as Secretary-Treasurer of The Bryn Mawr Hospital Staff in 1971 and 1972, Vice President in 1973, and was elected President of the Staff in 1973, serving until 1975. Doctor Heggstad in each instance discharged his responsibilities with wisdom, fairness, and always with good humor. Following the affiliation of The Bryn Mawr Hospital with Jefferson Medical College on April 7, 1972, he was appointed Clinical Associate Professor of Surgery. He was also a Consultant in Surgery at the Veterans Administration Hospital in Wilmington, Delaware.

Dr. Heggstad was a member of a number of prestigious medical organizations. He was a Diplomate of the American Board of Surgery, a Fellow of the American College of Surgery, a member of the Philadelphia Academy of Surgery, a member of the American Medical Association and Montgomery County Medical Society.

On October 4, 1961, Dr. Heggstad was elected to the Philadelphia College of Physicians. I know how proud he was to become a member of this distinguished College, and how much he enjoyed his association with the other physicians in the College.

I had the pleasure of working with Gil Heggstad at The Bryn Mawr Hospital for 24 years, and was associated with him in practice for eight years. From this long and pleasant association I learned that Gil Heggstad's life and deeds

made a lasting impression upon the lives of countless others. His medical and surgical skills helped so many people, and his cheerful manner made him a joy to his patients and to those of us who worked with and for him. As a teacher he excelled in the clinical areas at the bedside and the operating room because of his wide experience, and he demanded the best from each of us as well as of himself.

As an administrator, Dr. Heggstad had the ability to be objective in his evaluation of a problem, the fairness to convince others of the proper solution, and the firmness to carry out the policy as he conceived it. Dr. Heggstad's patients loved him and his sympathetic manner of dealing with them, and his ever present encouragement contributed much to their recovery. Those of us who knew him best saw him as a true friend, a man of great compassion, an ever present sense of humor and his optimism for life was boundless.

In his eulogy at Dr. Heggstad's Memorial Service, Rev. Paul F. Kramp, Jr., who had known him for 24 years, pointed out his devotion to his God, his family, his church, his patients and his community. Rev. Kramp said of him, and I quote, "Dr. Heggstad was single-minded in his relationship with his friends. In all our social contacts I was never aware of him being involved in pettiness, hypocrisy or manipulation. His gaze was level and without guile, and this is the way you were treated by him. Perhaps most indicative of his loyalty to friends was the fact that, however high he climbed professionally, he never left the neighborhood, the church, the persons to whom he first related when he came out of the service and moved to Newtown Square."

The manner in which Dr. Heggstad endured his terminal illness is a measure of the courage and faith of the man. He was stricken with an inoperable carcinoma of the thyroid with distant metastasis in July, 1977, and shortly thereafter and until his death, he was unable to swallow even saliva and required a tracheostomy for breathing. In spite of tremendous suffering and a hopeless disease, he remained cheerful and optimistic. With the help of a loving and dedicated wife and family he was able to spend most of the year at home. Having seen him in this setting almost daily from July, 1977, until his death on August 26, 1978, I believe he enjoyed every moment, and I also believe he was as well prepared for death as anyone I have known.

Dr. Heggstad is survived by his wife, Helen, who is a nurse, two daughters, and a son, who live and work in the Philadelphia area, and another son who is a graduate student in Boston. He was a gifted surgeon and an unusual person whose interest and perspective extended far beyond the field of surgery. The loss resulting from his untimely death is deeply felt by his many grateful patients along the Main Line, and by his many friends and appreciative colleagues.—William C. Stainback, M.D.

GEORGE MALCOLM LAWS

1881-1976

George Malcolm Laws was born in Paulsboro, New Jersey, September 15, 1881. He was the son of Dr. George C. Laws and Elizabeth Roe Laws. His education was in Philadelphia, where he attended Friends' Central School. He earned a B.S. from the University of Pennsylvania in 1902, and was graduated from the famous Class of 1905 of the School of Medicine. Many members of that class attained professorial rank in various fields of medicine, viz., Dr. Eldridge Eliason, John Rhea Barton Professor of Surgery, Dr. George Morris Piersol, Professor of Medicine and pioneer in Rehabilitation Medicine, Dr. Donald Guthrie, the First Fellow at the Mayo Clinic, later founder of the Surgical Clinic, Sayre, Penna., and Dr. Robert Ivy, Professor of Plastic Surgery and Pioneer in Reconstructive Surgery and Consultant to the Surgeon General of the U.S. Army in both World Wars.

Doctor Laws is survived by his spouse, Elizabeth William Laws, who in her 92nd year has been a loyal and gracious consort. A daughter, Elizabeth, is the Program Director of the Civic Center of Philadelphia, and is active in Pan-American Affairs. This affable lady has inherited the pioneer spirit of her family in carrying on the American tradition in the frontiers of social service in which to live in an atmosphere of harmony and congeniality. His son, G. Malcolm Laws, Jr. is Professor of English at the University of Pennsylvania, alma mater of both his father and grandfather, exemplifying the same traditions and spirit to strive, seek and find in the field of education. Four grandchildren continue the lineage of George Malcolm Laws.

Doctor Laws served his internship at the Hospital of the University of Pennsylvania 1905-06, beginning as an assistant Instructor in Surgery and then advanced through grades to Associate Professor of Gynecology. He was appointed Chief of Gynecology at the Presbyterian Hospital in 1933, and also served a term as President of the Medical Staff.

During World War I, he served with Base Hospital 20 of the University of Pennsylvania A.E.F. in France on the Western Front, where he was involved in active combat. He attained the rank of Major in the U.S. Army Medical Corps. He was a member of the Philadelphia County Medical Society, Pennsylvania State Medical Society, American Medical Association, American Gynecological Society, Obstetrical Society of Philadelphia, in which he was a member of the Founders Group and its Past President, Pathology Society, Philadelphia Academy of Surgery, College of Physicians of Philadelphia, Phi Alpha Sigma Medical Fraternity, Alpha Omega Alpha. He was a member of Philadelphia Country Club, and Past-President of the Doctors Golf Association. He enjoyed moments of relaxation with his professional colleagues. Bowling on the green was another sport of his enjoyment.

Doctor Laws had carried on a tradition begun by his own father, a Civil War cavalryman, who later became a "horse and buggy" general practitioner in Paulsboro, New Jersey. Between them, they practiced for more than a century. Not only did Dr. Laws and his father make house calls, but actually performed operations on the kitchen table in patients' homes early in his career.

This nonagenarian, in his span of years, had encompassed the marvelous changes taking place in the world. He had seen the tallow candle, whale oil, mercury vapor and neon lamp as well as the fluorescent light. He had seen various mechanical instruments, viz., phonograph, seismograph, radio, television, telstar. He witnessed five major wars and the fall of empires changing the map of the world. He had participated in the triumph of science in preventive medicine in eliminating mortal diseases as well as hypothermia, open heart surgery and microsurgery. He experienced the saddle horse, covered wagon, railroad, horseless carriage, automobile, aeroplane to supersonic and space travel and the atomic age.

If this Academy of Surgery would award a perfect attendance certificate, Dr. Ivy and Dr. Laws would be the recipients. Also they were the oldest members of this Academy. They were not only classmates but maintained a close relationship in the practice of medicine and surgery as well as in social life. Rain or shine, he would walk from his home in Rittenhouse Square to this College of Physicians and cordially declined any transportation back to his home. Regardless of the subject on the scientific program, he was very attentive to the matter in discussion. He confided to me that he always derived some benefit in his own specialty.

While attending the historical lecture on the John Rhea Barton Professors of Surgery of the University of Penna. given by Dr. Ivy, June, 1975, he was asked; "Dr. Laws, do you continue to have office hours?" He answered: "Yes, but I do not see any new patients." He embodied the concept of the family doctor with the specialist. He was the oldest staff member at Presbyterian where he actively participated in staff and departmental meetings, keeping abreast of changes in medicine. He was affectionately called "Pappy" by the personnel of the hospital. Often he would consult Dr. James Butcher, the pathologist, in order to cut a specified piece of tissue and correlate the clinical with the laboratory findings. Through Dr. Laws, The Medical Center receives funds from The George L. and Emily McMichael Harrison Fund for gynecological research.

It was a pleasure to watch a skillful and compassionate obstetrician and surgeon examine and palpate the abdomen of an acutely ill female patient. His gracious, quiet and sympathetic personality won many friends. His affection, kindness and gentleness in dealing with patients demonstrated his true intimate character. He was like a good watch: open-face, pure gold, and quietly busy with good works.

He led a full life, he was devoted to his family, his work, his patients, and his Church. He embodied the quadrad of a good balanced living: work, play,

love, worship. He enjoyed the pleasures of life; good company; music; literature; golf and conversation.

His heart came to rest on April 22, 1976 in his 95th year. He died as a swinging gate and not as a rusty one. He left us the heritage: Live and be prepared as to die tomorrow, work and study as to live forever.—T. A. Ranieri, M.D.

HERNDON BRIGGS LEHR

1923-1979

Herndon Briggs Lehr—better known as “Bugs”—died on June 3, 1979, at the age of 56, of fulminating viral hepatitis in New Orleans, while attending a medical meeting. At the time of his death Bugs was Chief of the Division of Plastic Surgery of the School of Medicine of the University of Pennsylvania. Bugs remained a southerner until the end. He was born in Laurel, Mississippi and grew up in Valdosta, Georgia, and his southern accent and style of life never left him.

Bugs Lehr was unique, and I use “unique” in its literal sense, meaning “the only one.” There never was a Bugs Lehr before, and there’ll never be another one.

As one who considered himself one of Bugs’ best friends, I count it a privilege to be able to speak about some of his outstanding characteristics at this Academy of Surgery meeting.

First, Bugs was a man of keen intelligence. This was manifested in a number of ways: in his scientific accomplishments; in his knowledge in fields outside of medicine, such as history, especially military history; and in his uncanny ability to size up people in all walks of life. When I was Chairman of the Department of Surgery I learned that Bugs would steal many of our best residents and persuade them to go into his field of plastic surgery. He was really a superb recruiter of young men, a superb talent scout.

He liked to hide his broad intelligence behind a façade we southerners call “po’-mouthing,” and Bugs tested 100% as a po’-mouther, the best po’-mouther I’ve even known. I’d meet him early at the hospital at the beginning of a hospital day. The dialogue was always the same: “Morning. How are you, Bugs?” The answer always the same: “I’m terrible.” “Why, Bugs?” Bugs: “No prestige, no money, no patients.” Actually, of course, he was doing very well in all three categories.

Another characteristic was that of great loyalty. Bugs was one of the most loyal humans I’ve ever known, both to men and women and to institutions. I’ll give some examples:

When Henry Royster resigned as the administrative head of the Division of Plastic Surgery in 1969, I happened to be out of town. Bugs met me at the airport when my plane arrived, with tears in his eyes. He said, “Uncle Henry has resigned and you’ll have to do something about it.” I did all I knew how but was unsuccessful. Bugs loved Henry, his mentor in plastic surgery, and was always extremely loyal to him.

As most of you know, the University of Pennsylvania is now at the tail end of a drive, “Program for the Eighties,” in which it hopes to raise 255 million dollars. It was my job in the Department of Surgery to solicit funds for this

drive. When I solicited Bugs he said, “I’ve got no money at all. You know that. Why come to me?” Yet later he showed me his pledge card (the amount of donation supposedly being kept confidential) and his pledge was the second highest made by any of our surgical staff up to that time.

Bugs was very proud of having been the head of the Nu Sigma Nu Fraternity during his student days, was extremely loyal to it, and would always claim that his fraternity was better than my own, namely Phi Chi. It gave him great pleasure to point out that Nu Sigma Nu was the only medical fraternity to survive in recent years, and he seemed especially glad to see the Phi Chi Fraternity dissolve on campus.

Bugs was a man of great generosity. He had many friends and he gave them many things, some of them spiritual, in that he had a way about him that would cheer up a depressed person, as well as giving some material gifts. I cannot recall a Christmas in which Bugs did not bring me gifts out of all proportion to what I deserved. If I did a procedure for him, such as a special surgical examination, Bugs would invariably send me a present worth much more than even a large fee would be.

Bugs was not all sweetness and light. He had a competitive side that was hard to equal. I can attest to this in his and my many weight-losing contests. Bugs and I shared a weight problem and would make large bets, the winner being the one who could lose the most weight. We made each pound worth a sizable sum of money, or otherwise we’d lose no weight. In one of these contests I was doing exceptionally well until the last day, when Bugs lost twelve pounds in twenty-four hours. I was astounded until his internist told me he had taken sub-lethal doses of diuretics and cathartics the night before weighing-in time, and had donated one unit of blood.

But Bugs was really a giant of a man, both spiritually and physically. Some years ago I noted his residents began to call him “Boss.” This name spread to the nursing staff and many members of the University family. And so, in closing I say, “Goodbye, Boss. God bless you. We will never forget you and we’ll always miss you.” And for the Academy of Surgery I extend our sincerest sympathy to his family, many of whom are here tonight.—William T. Fitts, Jr., M.D.

JOHN B. FLICK, SR.

1893-1979

Doctor John B. Flick, Sr., was born in Philadelphia on January 15, 1893, the son of Doctor and Mrs. Lawrence Flick. His father, Doctor Lawrence Flick, was one of the first physicians in the country interested in tuberculosis. He founded the Phipps Institute with Mr. Phipps, and was one of the founders of the National Tuberculosis Association. He also founded the Whitehaven Sanatorium. It was thus from his father that John Flick became interested in medicine, and particularly in diseases of the chest and later, thoracic surgery.

Doctor John Flick received his medical education at Jefferson Medical College from which he graduated in 1913. Immediately after graduation he served as an intern at the Whitehaven Sanatorium from August, 1913 to February, 1914. In February of 1914 he continued his post-graduate training as an intern and then as a surgical trainee at the Pennsylvania Hospital. During the Summer and Fall of 1915, he served at the American Ambulance Hospital of Paris, Neurilly-sur-Seine, France. He was commissioned First Lieutenant in the Medical Corps, U.S. Army on May 15, 1917, and served in France until his discharge from the Army. During part of his war service in Europe he was on detached service with the British General Hospital #3, as well as the British Tank Corps and surgeon on the 23rd British Surgical Team. He was discharged from the Army at Camp Dix, New Jersey on April 23, 1919, with the rank of Captain.

The major part of Doctor Flick's surgical activities were centered at the Pennsylvania Hospital and the Bryn Mawr Hospital. He was Chief of the Surgical Service A at the Pennsylvania Hospital from 1936 to 1946, and became Director of the Division of Surgery at the Pennsylvania Hospital in 1946, serving in this capacity until 1953. From 1953 to 1954, he was President of the Medical Staff at the Pennsylvania Hospital. He first became associated with the Bryn Mawr Hospital in 1922, with the rank of Assistant Attending Surgeon. In 1950 he was appointed Attending Surgeon at The Bryn Mawr Hospital and named Surgeon and Chief, serving in this capacity until 1952.

Doctor Flick always had a keen interest in academic surgery and the teaching of surgery in general, and he held a number of important teaching appointments, both at Jefferson Medical College and the University of Pennsylvania. He was Assistant Professor of Surgery from 1933 to 1935 at Jefferson Medical College, Associate Professor of Surgery from 1935 to 1937, Clinical Professor of Surgery from 1937 to 1946. He was Professor of Clinical Surgery at the School of Medicine of the University of Pennsylvania from 1946 to 1953, and during the same time he was also Professor of Clinical Surgery at the Graduate School of Medicine of the University of Pennsylvania.

Doctor Flick was a member of the Founders Group of the American Board

of Surgery in 1937, and was a member of the American Board of Surgery, Inc., representing the American Surgical Association, from 1952 to 1958. He was appointed Secretary-Treasurer of the American Board of Surgery, Inc., in July, 1952, serving in this capacity until his retirement in February, 1963. He was also a member of the Founders Group of the American Board of Thoracic Surgery in 1950.

Doctor Flick was again called upon to serve in the Army of the United States during World War II, and was appointed Lieutenant Colonel in the Army Medical Corps on August 11, 1942. He was promoted to Colonel on January 1, 1944. His two principal assignments were Surgical Consultant to the 9th Service Command from September 1942 to April 1945, and Surgical Consultant to the Pacific Ocean Areas on Guam from April 1945 to January 1946. He was the recipient of both the Bronze Star and the Legion of Merit in 1945. His citation read in part: "Surgeon of extraordinary capabilities in his field, he was in large measure responsible for the high standards of surgical service in Hospitals throughout the command." This citation typifies the standard of excellence which Doctor Flick provided and insisted upon during his Army and civilian careers. He was discharged from the Army with the rank of Brigadier General on January 15, 1946.

During his career, Doctor Flick was elected to numerous distinguished medical and surgical societies. He was a Fellow of the American Surgical Association, the American Association for Thoracic Surgery, the American College of Surgeons, the International Society of Surgery, and the College of Physicians of Philadelphia. He was also a member of the Society of Clinical Surgery, the Halsted Society, the Society of U.S. Medical Consultants, World War II, the Pathological Society of Philadelphia and Laennec Society, and was founder and a member of the Eastern Surgical Society. He was also a member of the Philadelphia County Medical Society, the Pennsylvania Medical Society, and the American Medical Association. He was a founding member of the Pennsylvania Tuberculosis Association.

Doctor Flick was the author or co-author of at least 39 publications of major importance on various surgical subjects. His primary interest, however, was in the field of thoracic surgery, of which he was an outstanding pioneer. He performed the first successful pneumonectomy in Philadelphia in 1933, soon after Doctor Evarts A. Graham reported the first successful pneumonectomy performed in the world at Washington University in St. Louis. Doctor Flick's was the sixth such operation performed and reported in the literature.

Doctor Flick was elected to a Fellowship in the Philadelphia Academy of Surgery in 1926 and took an active interest in the affairs of the Academy until his retirement from clinical surgery. He was President of the Academy of Surgery from 1946 to 1948. During his career he presented six important papers before the Academy, and he remained vitally interested in the affairs of the Academy until his death.

In addition to thoracic surgery, Doctor Flick's major interest was in the teaching of excellence in the practice and performance of clinical surgery, for

which he was most respected and loved by his residents and patients alike. Following his retirement in 1963 as Secretary-Treasurer of the American Board of Surgery, Doctor Flick devoted himself to the care of his invalid wife for many years. He is survived by a son, Doctor John B. Flick, Jr., two daughters, Mrs. Anne Tanguay Garrison and Mrs. Ardis M. Parrott, nine grandchildren and eleven great grandchildren.

Doctor Flick died on February 17, 1979. He will be remembered as a compassionate and dedicated physician and surgeon, a pioneer in pulmonary surgery for tuberculosis, a superior teacher and educator, and a founding member and Secretary-Treasurer of the American Board of Surgery, a real patriot who served with distinction in both World Wars, and as a long-time member and former President of the Philadelphia Academy of Surgery.—William C. Stainback, M.D.

JOHN PAUL NORTH

1901-1977

To the vast majority of the present members of the Philadelphia Academy of Surgery, John Paul North doubtless is remembered as the previous Director of the American College of Surgeons, a post which he held with distinction from 1961 to 1969. To those of us who worked with him here in Philadelphia before the war, and in the Army during the war, he will always be remembered as not only an excellent surgeon, but as a kind gentle soul, whose outstanding characteristic perhaps was the gracious manner in which he dealt with his juniors as well as his peers.

Paul was born January 25, 1901, the son of an Episcopal minister, in Buffalo, New York. He graduated from Princeton in 1922, and from the Medical School of the University of Pennsylvania in 1926. He interned at the University of Pennsylvania Hospital and took his surgical training there under Dr. E. L. Eliason. Dr. L. Kraeer Ferguson, whom many of you will remember, was Dr. Eliason's 2nd surgical fellow (as they were called in those days), Paul North was his 4th, William Erb his 7th, and I was his 8th.

When I was a Junior in Medical School, Paul was in his fellowship and served as my surgical quiz master each Monday afternoon. When Paul completed his training in 1932 he joined the Medical School faculty and went into private practice. When I finished my surgical residency in 1939 it was my good fortune to not only work as Dr. Eliason's assistant at the University and Presbyterian Hospitals, but as assistant to Dr. North on his services at the Philadelphia General and Roxborough Memorial Hospitals.

When the University of Pennsylvania Army Unit was called up in 1942, Paul went in as Chief of General Surgery, but became the Chief of the Surgical Service by the time we got set up in India and Dr. Ravdin had taken over as commanding officer. Some two and a half years later he returned to the United States to become Chief of Surgery at the Army Kennedy General Hospital in Memphis, Tennessee. For his outstanding service in the Army he received the Legion of Merit. Those of us who worked under Paul, whether in Philadelphia, in India, or in Memphis, remember him with real affection for his warm and kindly manner in dealing with everyone.

As far as I know, Paul had not been in a position to attend a meeting of the Philadelphia Academy of Surgery since 1942, some 35 years, but maintained his absentee membership. After the war Paul joined the Veterans Administration and served as Chief of Surgery at two Veterans Hospitals, first at McKinney, Texas, and later at Dallas. He also became Professor of Clinical Surgery at the Texas Southwestern Medical College. Paul had already demonstrated his ability as a clinical surgeon. In the Army and Veterans Administration he demonstrated his ability as an excellent administrator. He became well known,

well liked, and greatly admired and respected by the members of the surgical community of Dallas. In 1956 he was designated the "Dallas Federal Civil Servant of the Year."

After Paul announced that he had accepted the position of Director of the American College of Surgeons, a memorable farewell dinner was held in Dallas on May 7, 1960. Several hundred guests attended this affair, which was sponsored jointly by the Veterans Hospital of Dallas, the Texas Southwestern Medical School, the Princeton Club of Dallas, the Dallas Society of General Surgeons, the Texas Surgical Society, the local Chapter of the American College of Surgeons, and the Southwestern Medical Foundation. Dr. I. S. Ravdin was the principal speaker. On this occasion Paul was awarded honorary membership in the Texas Surgical Society (of which he was already an active member), Emeritus Professorship in the Department of Surgery at the University of Texas Southwestern Medical School, and the Distinguished Service Award of the Veterans Administration.

Paul had done an outstanding job in the teaching and training of surgical residents in the Veterans Hospitals. As an indication that he was greatly beloved and respected by his residents, the John Paul North Surgical Society was formed in 1964, and sixty-four of his ex-residents soon became members. The Constitution states, "The purpose of this society is to honor and perpetuate the ideals and training imparted by Dr. John Paul North, to us the founding members, and to establish and maintain an association of surgeons for the benefit of humanity by advancing the education of its membership in the science of surgery and the ethical and competent practice of its art."

After a short period of transition, Paul assumed the responsibility of the directorship of the American College of Surgeons in 1961. His tenure was characterized by statesmanship, dignity, conservation and tolerance. His gentlemanly manner greatly enhanced his ability as a surgical leader. At the time of his retirement in 1969, the Chairman of the Board of Regents said, "Dr. North's skill in making the College's services relevant to a time characterized by profound change in the medical profession, and in public life, has greatly raised its prestige and extended its influence across the whole of the United States and Canada." A room on the 8th floor of the American College of Surgeons building in Chicago was set aside as the John Paul North room in his honor and dedicated with Paul being present. While Paul served as director of the American College of Surgeons he was on the National Safety Council, and received its award in 1970. He had been the representative of American Surgery and carried out his responsibility with great dignity and tact and made countless friends in the profession here and abroad by his warmth and strength of character.

After his retirement as Director of the College, Paul went to live in Dallas, a city which by now he considered home. He accepted a part time appointment at the University of Texas Health Science Center, as Professor of Health Care Sciences and Medical Director of the Physicians Assistants Program. Paul and his second wife of 25 years, Grace Heafner North, both suffered from emphy-

sema, and Grace died after a long illness in February 1972. Paul married Eugenia Davis Liebolt of Dallas two years later. Paul died of one or more coronary occlusions on January 28, 1977. He is survived by his widow, Eugenia North, an adopted son, John Paul North, Jr., and a step-son, F. Lee Liebolt.

His memberships in professional societies include the American College of Surgeons, the American Surgical Association, the Southern Surgical Association, the Western Surgical Association (honorary), the American Association for the Surgery of Trauma, the Texas Surgical Society (active and honorary), the Surgeon's Club and Alpha Omega Alpha.

Paul had a host of friends who will remember him with affection and admiration for his gracious charm, his sensitivity, and his steadfast loyalty to his principles and to his friends. He was truly a gentleman in the finest meaning of the word.—Julian Johnson, M.D.

MICHAEL SCOTT

1907-1979

On April 24, 1979 Dr. Michael Scott, a long time member of the Academy of Surgery and the Emeritus Professor and Chairman of the Department of Neurological Surgery at Temple University, died at his home in Bala Cynwyd, Pennsylvania. At the time of his death he was 72 years old.

Michael Scott graduated from Rutgers University, and in 1932 received his medical degree from Jefferson Medical College. Following his internship at the Jersey City Medical Center and several years of post graduate training in Neurology and Psychiatry, he became Temple University's first neurosurgical resident. Later associated with Dr. Temple Fay he became an early contributor to the original works on hypothermia and its clinical application. Dr. Scott was appointed Chief of the Department of Neurological Surgery in 1943 and became full professor and chairman in 1959. He became emeritus in 1973, but continued to maintain an active role in departmental affairs until January, 1979 when his health began to fail. He was board certified in both Neurology, Psychiatry and Neurosurgery.

Dr. Scott knew no bounds for excellence or hard work. He dedicated himself to each and every patient and would spend as much time worrying about their creature comforts as he did their surgical problems, and I might add that he was able to convey this sense of personal concern almost by extrasensory perception. His relationships with families and relatives was truly artful. He could tame the most irate and hostile patient or family with an uncanny sense of personal insight and humility.

He was always fastidious. In spite of his residents arriving with at least two years of post graduate training, it was unthinkable that he would allow them even so much as to put in a skin stitch. He insisted that all dressing changes and lumbar punctures be done by his "chief resident" and would tolerate very few exceptions.

He was a man with great respect for individual feelings and masterfully controlled his own. In the seventeen years that I knew him, I have no recollection of ever seeing him lose his temper or make an effort to intimidate. Michael Scott believed in firmness with flexibility, and often said to all of us that in a strong wind the rigid tree snaps, but the reeds bend.

His influence on students at all levels of medical education was profound. In my class alone, the class of 1960 at Temple University, four of us went into neurosurgery principally because of Dr. Scott. During his years as Program Director of the department he trained 31 neurosurgeons, including 4 full professors. He trained men not only to be surgeons, but to emulate his well controlled very sensitive manner. He instilled in all of us that right was right and the patient's best interest always came first. Dr. Scott was a great man by any measure and a man whose legacy will truly live.—William A. Buchheit, M.D.

ARTHUR VON DEILAN

1905-1977

Arthur Von Deilan, born in Morristown, N.J., January 24, 1905, enjoyed a multifaceted career for 72 years. After high school graduation he attended Newark Academy and graduated from University of Maryland Dental School in 1928. He practised oral surgery for several years, and in 1930 received a master of science degree from Northwestern University in 1930. At this point in his life he decided to study medicine, relinquished his large dental practise to a colleague, and enrolled in Hahnemann Medical College. In 1943 he completed medical training, and during 1944 interned at Atlantic City General Hospital. He next became a surgical resident at Abington Memorial Hospital, working in the Pfeiffer Surgical Clinic 1944-46. He soon was attracted by the pioneer work of Robert H. Ivy, and accepted the first two-year plastic surgery resident at Graduate Hospital of Philadelphia under the University of Pennsylvania. The years 1947-48 were most important in formulating his future career, for he soon became assistant to Robert H. Ivy, working with him from 1949-1956 in several Philadelphia Hospitals. He worked with dedication and enthusiasm.

Arthur Von Deilan was a gentleman of large physical proportions, with a stature of 6'6" and 230 pounds. His mere presence frequently frightened young patients and timid colleagues, yet his enormous hands could skillfully repair the smallest cleft lip or palate. This surgeon possessed both dexterity and patience. Often he demonstrated the multiple scars on his bald occiput with the statement, "These are battle scars from collisions with operating room lights, but I ignore them." He soon found himself in demand in a new specialty known as head and neck surgery, and in the years 1945-75 he demonstrated particular experience and skills because of his dental background. This encouraged him to attempt difficult jaw reconstructions not generally attempted by plastic surgeons. It was therefore logical that in the developing specialty of plastic surgery Arthur Von Deilan became a pioneer and contributed greatly to this type of reparative and aesthetic surgery.

Arthur Von Deilan was a member of many medical societies serving the dental and medical professions. These included the AMA, ADA, Camden County Medical Society, New Jersey State Medical Society and Dental Society, as well as Philadelphia County Medical Society. He was diplomate of American Board of Plastic and Reconstructive Surgery and a Fellow of the American College of Surgeons. Election to the Philadelphia Academy of Surgery made him very proud, and he enjoyed membership in the American Society of Plastic and Reconstructive Surgery, the Association of Maxillo-facial Surgeons and the American College of Dentistry. His favorite club was the Union League, where he frequently dined with his charming wife Marjorie, who survives him.

At the time of his death on January 26, 1977, Arthur Von Deilan was the

emeritus chief of Plastic Surgery and Reconstructive Surgery at several hospitals. These included Graduate Hospital, Presbyterian Hospital, Wills Eye Hospital in Philadelphia and four hospitals in New Jersey: Lady of Lourdes, Cooper Hospital, West Jersey Hospital and Burlington County Memorial Hospital. His colleagues wondered how one man could travel and operate in so many institutions, yet he calmly drove to three or four hospitals daily, operating with competence and compassion. Here was a worker who at age 65 was enjoying appointments as consultant in Plastic and Reconstructive Surgery at seven hospitals in two states. In addition, he was always ready to produce an exhibit for his specialty as he did frequently for the American Medical Association, the Pennsylvania Medical Society and American Society of Plastic and Reconstructive Surgery. During his long and active life he served his profession with distinction, acquiring many close friends whom he helped to train in plastic surgery. His surgical schedule was impressive in its volume, technique and diversity of cases.

His devoted interest in the Robert H. Ivy Society of Plastic Surgery made him the third president of this specialty group and he made generous use of his lovely home for entertaining the membership. His popularity with local plastic surgeons was well deserved, for Artie was a helpful, willing and wise consultant.

The members of the Philadelphia Academy of Surgery join the family, friends and colleagues of this surgeon in their grief at his loss. Arthur Von Deilan was a pioneer in Philadelphia in plastic surgery, contributing much in tireless efforts, original papers and consultative skills. He truly deserves a tribute for he earned the salutation, "Well done, thou good and faithful servant."—Alma Dea Morani, M.D.

GEORGE J. WILLAUER

1896-1977

George J. Willauer was born on September 11, 1896 in the town of Stockerton, Pennsylvania. Early in life he was introduced to commitment to the well being and needs of others. His mother died when he was fifteen, and his younger sister was devastated by poliomyelitis. He saw to it that she grew with courage. He transported her to school daily in an express wagon and gave her the will to be a whole and self-sufficient person. That kind of courage is the other side of love. Throughout the rest of his life, George Willauer was characterized as an unpredictable, generous and enthusiastic individualist; but above all he remained a wellspring of courage and love for every life that he touched. He believed in the sun, even when it wasn't shining; he built self-esteem into those who never dreamed that they had any; and like Horace Mann, he felt one should be embarrassed to die before scoring a victory for humanity.

Doctor Willauer received a Bachelor of Science degree from Franklin and Marshall College in 1917. He then served two years in the cavalry of the United States Army as a second lieutenant. He then matriculated at Jefferson Medical College, and thus began a love affair that was surpassed only by one with Mary Eshleman, who became his wife. He received his degree as Doctor of Medicine in 1923, and interned at Jefferson from 1923 to 1925.

These years stirred a profound interest in surgery, as the surgical renaissance in Europe drew him to postgraduate training at the University of Vienna in Austria. Here, under the tutelage of Vienna's giants, the fires of the surgical pioneer ignited. He returned to Jefferson and began the slow, tedious climb through the academic ranks of his alma mater. He had brought Europe's advances in thoracic surgery making him a major influence in developing the new field in America. He introduced a variety of surgical procedures and invented a number of surgical instruments and was one of the first surgeons in Philadelphia to successfully remove a patient's lung. He rose from Assistant Demonstrator in Operative Surgery in 1930 to Honorary Professor of Surgery in 1961. At Methodist Hospital, Doctor Willauer was named Director of Surgery in 1948, serving in that capacity until 1961. He was President of Methodist Hospital Medical Staff and Director of its Department of Anesthesia. He served as Director of the Department of Surgery at Eagleville Sanatorium from 1928 thru 1964, a place where hundreds benefited from his willingness to deal with their problems on a day-to-day basis and his uncanny notion as to the right time to operate *and* the time to stop.

Doctor Willauer was a member of numerous medical and surgical societies. He was a founding member of most, and president of many. He served as President of this Academy from 1966 to 1968. His alma mater elected him

Alumni Trustee of Thomas Jefferson University and Jefferson Medical College, and Jefferson Medical College Trustee of the Philadelphia College of Pharmacy from 1968 to 1971.

In 1963 Franklin and Marshall College awarded him the honorary degree of Doctor of Science, and in 1971 his beloved Jefferson awarded him an honorary LL.D. degree.

This then was one George Willauer, the one familiar to most, dressed to the nines and polished to the turn. There were others. In 1932 he became seriously ill. Through the extraordinary efforts of his colleagues, he recovered, though a severely depleted man. Three good and close friends, Emory Burnett, William Parkinson and Newt Weiman took him under their care, determined to restore him to health. They took him on a prolonged visit to Maine. They fed him, wined him, rested him and introduced him to a way of life that was to become a life long adventure for him. In short, he fell in love with the wilderness of our great north woods and the giants that grew from its earth, flowed through its river beds, and the Bunyanesque men that lived in it, worked it and challenged it daily. These same gentle, burly men grew to respect and love him and finally took him completely to their bosoms. Twice yearly, for nearly forty years, he returned to Maine to fish, hunt and refresh himself with nature. He felt that we are truly children of the earth and that when separated for long, our spirits wither. He fished and hunted as keenly as he operated: delicate, sure, with precision and nearly always successfully.

He participated in the last great log run down the St. John's River. He earned the respect of the giants of the Allagash and the St. John's rivers. He was dressed to the nines again, this time in his wilderness uniform and he loved it. He introduced some of his old friends to the charm of this great place and, fortunately for some of us, a few of his young charges.

During many years of devotion to his patients, students, interns and residents, there developed around this man a very special aura. Patients loved him and were totally dependent on him. Students and interns stood in awe of him. Residents found in him a wellspring of help. His guidance in basic surgical skills, attention to details and developing empathy with patients and their problems without losing perspective provided each of us with a vein of richness very precious indeed!

After a life of activity that would have done credit to a dozen men, George J. Willauer died on December 19, 1977. In yet another sense, he lives on in the dreams that he realized, in the minds that he inspired, in the sick that he healed, and in the children that he created.

May God bless our old comrade and bring him safe to shore.—P. Victor Sencindiver, M.D.

PAUL D. ZIMSKIND, M.D.

1931-1976

Paul D. Zimskind died quite suddenly of cardiac arrest in the emergency room of his beloved Institution, Thomas Jefferson University Hospital, at the age of 44. He had acute pericarditis, probably viral, complicated by adrenal insufficiency. Notification of his death early Sunday, February 29th of this year, came as a tragic shock. I had known him since the beginning of his urologic residency at Jefferson.

Paul was born August 28, 1931, in Trenton, N.J. He was early subjected to the importance of personal interrelationships by his devoted family. His medical background began through the influence of his father, Joshua, who was also a Jefferson Graduate. His interest and concern for people continued throughout his undergraduate, graduate and postgraduate years. He was active in many civic affairs. He was a participant and supporter of his local synagogue, many charities and was a member of the American Physicians Fellowship, a philanthropic activity promoting medical exchange research with the Israel Medical Associations, as well as an active participant in the Center for International Visitors. He was instrumental in developing an affiliation with the Hebrew University Medical Center in Jerusalem for urologic residents in 1968.

On the lighter side, his interests were in music and dramatics. He was an accomplished violinist, enjoying his activities with an amateur orchestra and the personal relaxation of playing for his family at home. His involvement in dramatics began as an undergraduate at Princeton University, where he acted in the Triangle Club Shows, played Summer Stock, and was a willing actor for his synagogue. His role as Abraham in the Biblical story concerning sacrifice of Abraham's son, Isaac, will well be remembered.

Paul graduated from Princeton University in 1953 with Bachelor of Arts Degree, Cum Laude, majoring in Biology. His medical education and devotion was entirely to Jefferson. He received his Doctor of Medicine degree in 1957. He had his rotating internship from 1957 to 1958, followed by a year of general surgical residency, and subsequently completed his residency in urology at Jefferson in 1962. He was a graduate student in physiology from 1962 to 1964 receiving his Ph.D. in 1964. His thesis was titled "Studies on Ureteral Dynamics," which continued as his prime research interest until his death. During this time he also enjoyed his position as Research Associate in Urology and a postdoctoral Fellowship at the National Institutes of Health. In 1964 he became Assistant Professor of Urology, in 1966 Markle Scholar in Academic Medicine, and in 1967 was appointed Nathan Lewis Hatfield Professor of Urology and chairman of the department. The following year he was certified by the American Board of Urology.

He was a member of fifteen local, national and international societies,

among them American Association for the Advancement of Science, Society of University Urologists, Philadelphia College of Physicians, American Urological Association, American College of Surgeons, National Research Council and the National Urologic Forum. He also served actively as a member of the Editorial Board of *Urological Survey*. He was the author or co-author of more than twenty articles dealing primarily with urodynamics, a relatively new research field in urology in which he excelled. His medical presentations exceeded 60 papers to local and national groups.

He was honored by the award of the Francis W. Shain Surgery Prize at Jefferson Medical College in 1957. He received first prize in basic research essay competition from the Philadelphia Urologic Society in 1961, and honorable mention for Scientific Exhibit Section on Urology of the American Medical Association in 1963 in conjunction with his supporting colleagues.

It would be remiss not to mention one of Paul Zimskind's outstanding innate qualities. He had the ability to recognize capability, as exemplified in his selection of outstanding young men for urologic residency training. Dr. Zimskind died prematurely at the peak of his career, but his life work survives in the daily lives of his young residents. He lived in Narberth, Pennsylvania, and is survived by his wife Gay, his daughter, Wendy, age 9, and a son Jeffrey, age 14. His loss is deeply felt, not only by his family, but also by his many friends and medical colleagues.—George H. Strong, M.D.

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CONTRIBUTORS INDEX

- AGRA, C.
 ASHMED, H.
 AINSWORTH, A.
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 ANDERSON, W.
- BACHARACH, B.
 BAKER, A.
 BALSARA, A. K.
 BARKER, C.
 BARR, L.
 BELL, W.
 BELLET, R.
 BERKOWITZ, H. D.
 BERNARDINO, E.
 BISTRIAN, B. R.
 BLACKBURN, G.
 BOLEY, S. J.
 BONARDI, R.
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 BOOVA, R.
 BOTHE, A.
 BRECKENRIDGE, J.
 BREGMAN, D.
 BROAD, L.
 BROBYN, T.
 BRODSKY, I.
 BROOKS, J. R.
 BRYAN-BROWN, C.
 BUCHHEIT, W.
 BUYERS, R.
 BUZBY, G.
- CADY, B.
 CAMEROTA, A.
 CAMERON, J.
 CAMISHION, R.
 CANNON, B.
 CARABASI, R.
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 CHRISTONDIAS, G.
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 CLARK, J.
 CLARK, W. H.
- CLASSEN, J.
 CLEMENT, G.
 COCHRANE, T.
 COHEN, E. A.
 CONSTANTINO, G.
 COOPER, D.
 COPE, C.
 CRAMER, L.
 CREMONE, J.
 CRESSON, S.
 CUNNINGHAM, J. N., JR.
 CURRERI, W.
- DARBOUZE, P.
 DECLEMENT, F.
 DELAURENTIS, D.
 DENNIS, R.
 DEPROPHETIS, N.
 DIGIOVANNI, A.
 DINEEN, P.
 DOBELBOWER, R.
 DOBELLE, W.
 DONALDSON, G.
- EDIE, R.
 EDMUNDS, H.
 ELLIS, F. H.
- FAHMY, W.
 FALLAHNEJAD, M.
 FEIG, S.
 FINNEY, W.
 FISHMAN, N. H.
 FITTS, W. T.
 FRANGIOPANE, L.
 FRAZIER, T.
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- GADACZ, T. R.
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 GARRISON, S.
 GELBER, R. L.
 GENNARO, A.
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 GIBB, S. P.
- GINSBURG, L.
 GOEL, I. P.
 GOLDBERG, A.
 GOLDBERG, H.
 GOLDMAN, L.
 GOLSORKI, M.
 GOMEZ, F.
 GORDON, J.
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 GOWEN, G.
 GRASSI, M.
 GRIMES, E. L.
 GRINDLINGER, G.
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 GROSSI, C.
 GROTZINGER, P.
- HALLER, J. A.
 HANKINS, J.
 HANS, J.
 HARDY, M.
 HARGROVE, W.
 HARRIS, J.
 HAYES, M. F., JR.
 HECHTMAN, H. B.
 HECKSHER, R.
 HEDBERG, S. E.
 HENNAN, S.
 HOPSON, R.
 HUBBARD, T.
 HULNICK, S.
 HUNGERBUHLER, J.
- INOUYE, W.
 IP, M.
- JACOBSON, J.
 JOHNSON, J.
- KAMMERER, A.
 KHOLOUSSY, M.
 KIBAVA, N.
 KIEFFER, R.
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 KODSI, M.

- KOLFF, J.
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 KRELLENSTEIN, D.
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 PITT, H.
 PLACK, R.
 POLADORA, F.
 POLLACK, D.
 POSTIER, R.

 RANIERI, T. A.
 REEMTSMA, K.
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 RHOADS, J. E.
 RHOADS, J. E., JR.
 RICHTER, H.
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 STERIOF, S.
 STEWART, G.
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 STRONG, M.
 SUE, H.
 SUFFIAN, S.
 SUGIMACHI, K.
 SURIS, J.

 TILNEY, N.
 TRONCELLITI, M.
 TYSON, R.

 ULIN, A.

 VOORHEES, A. B.
 VENET, L.

 WAGNER, D.
 WAGNER, F.
 WALLACE, H.
 WAPNICK, S.
 WARREN, K. W.
 WEINTRAUB, W.
 WEISEL, K.
 WEISS, M.
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