No. 40

Division of Medical Technology
Department of Laboratory Medicine and Pathology
University of Minnesota

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TECH'S TALK

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This year, 1986, marks the 40th consecutive annual publication of this newsletter. The first issue was distributed in April 1947. The primary purpose of *Tech's Talk* is, of course, to provide alumni and friends of Medical Technology with a yearly update of events and topics that we consider more or less newsworthy. In reviewing past issues of this publication, however, it becomes evident that *Tech's Talk* serves another, more long-range purpose: to chronicle the continuing history of Medical Technology at the University. Some of the highlights of the past 40 issues include:

1947 The program had already existed for close to 25 years. There were 79 seniors who rotated through ten laboratories for a total of 51 weeks (plus one week vacation). At the annual banquet, Dr. Richard Varco spoke about congenital heart disease in children. The cost of the dinner, held in the Coffman Union main ballroom was $1.25.

1951 The total professional staff of the UMH laboratories consisted of 28 medical technologists, working in the following areas: Bacteriology (5), Blood Bank (2), BMR-EKG (2), Chemistry (8), Dispensary (3), Hematology (5), Parasitology and Serology (1), Tissues (1), and Urinalysis (1). Both the Health Service and the Variety Club Heart Hospital were opened.

1956 The first Wm. A. O'Brien scholarship was awarded to a deserving senior student. The clinical laboratories had recently completed their move to the new 14 story Mayo Memorial Building. There was a "very serious shortage of well trained medical technologists for clinical laboratories."

1961 The newly established Graduate program in Medical Technology had six students. There were 81 Medical Technologists in the clinical labs serving a 777 bed hospital. Starting salaries were $433 per month. The term "Medical Technologist" first appeared on a civil service classification list.

1968 Medical Technology made a major curriculum change from the traditional "3+1" model to a new "2+2" format. As a result, the length of the clinical rotations was shortened, and histology, BMR-EKG, and the night rotation were removed from the students' hospital experience.

1975 There were 107 applicants for the 60 positions in the junior Medical Technology class. Teaching labs in the new Health Sciences Unit A were shared with the Medical School pathology program, and binocular microscopes were purchased. Dr. Jeanette Piccard spoke on "The Stratosphere" at the annual banquet, held at the Hotel Sofitel. The cost was $10.

1981 Powell Hall was imploded: Medical Technology offices moved temporarily to Jackson Hall while the 15th floor space in the Phillips-Wangensteen building was being finished. Junior and senior students participated in the first Medical Technology phonathon, which raised over $9,000 in donations.

1986 We're still here, and we're still proud of our program and our people. This year has been one of change and growth for the University. We're looking forward to a new curriculum and a new hospital. For both current events and our plans for the future, read on.

GOLD AND SILVER CLASSES HONORED

Our 50th and 25th anniversary classes are getting younger ever year. This year, they include the following:

Class of 1936 (50th anniversary)

Frances V. Anderson
*Mary Behrens Williams
*Loretta Ann Bell Martin
*Jane Blomquist
Ardus Bottge Windhorst
Kathleen L. Casey
Gayette Clarkson Anderson
Marion Cody
*May Collins
*Ruth Cooperman Greenberg
*Joan A. Cress
Ruth Lorraine Evarts Hanold
*Margarette L. Fawcett
*Barbara Fishbein Friedell
Audrey Fjelde
Flora Gilmore Mitchell
*Mabel Gordon Graeber
*Annis Gould Smith
*Dorothy Greenberg
Eloise V. Greenwood
Helen Edith Heino
Lucille Hoilund
Mavis Pritchard Johns Nelson
*Ruth Mayne
Elizabeth McClean Kearney
*Geraldene S. Miller
Louise Miller Varco
*Evelyn Norquist Gardner
Gladys Nyborg MacKenzie
*Adrienne Odlaug Mullin
*Cornelia Pautsch Bogart
Gertrude L. Peterson Kirkham
Dorothea Poppenberger Kryewinske
**Rhea Post Chandler
**Virginia Sparks Green
*Caroline G. Stutzman Hall
Alice Van Krevelen
Gertrude M. Wooldrik Nessa
*Leah Zeesman Lewis

CLASS OF 1961 (25th anniversary)

*Gloria Ann Bagnas
*Harriet Block
Constance Cave Wollun
Nancy Christiansen Ballot
*Dorothy Ann Engelbretson Lannon
*Donna Fruen
Harriette Goldstein Burstein
Mary Alice Johnson Grewe
Catherine May Harrison Hanson
*Rhoda Hanson Drake
*Carolyn Hart Albrecht
Renelda Hess Sather
Susan Beneva Johnson Caquelin
*Martha Ann Jurkovich Arko
Marianna Juhl Jergenson
Jane Lafayette Lender
Joanne Laine Koski
*DonnaMae McKeone Gustafson
Joanne Myhre Kerns
Clareyse Nelson
*Sheila Nilan Seifert
Laurie Jean Reinhart Mackichan
Alice Evelyn Saari Martella
Cheryl JoAnn Schlief Luchow
Vizma Strauman Podnieks
Gretchen Tronnes Johnson
Nancy Ann Witstine
Karen Halverson Wasson

*Address unknown
**Deceased

If you are a member of either class, make a special effort to attend the annual alumni banquet (reservation form on the last page). You and your classmates will be seated together, and will have the opportunity to renew friendships.

We like to keep track of our graduates, and you can do us a favor by sending us the addresses of any of the people with whom we have lost contact. Thanks.

KARNI APPOINTED NEW DIRECTOR

After a nationwide search, Dr. Karen Karni has been appointed Director of the Division of Medical Technology, succeeding Ruth Hovde who retired in 1984.

Karen, who is a native of Soudan MN., received her B.S. in Medical Technology here at the University. She earned an Ed.M. from the State University of New York at Buffalo, and returned to Minnesota, where she received her Ph.D. in Education in 1983.

In addition to her academic and administrative duties at the University, Karen founded and co-directs the Coalition for Continuing Education for Laboratorians in Minnesota. This organization has sponsored over 50 successful laboratory workshops throughout the state over the past five years. She has also served as a consultant to Medical Technology programs in Panama (through Project HOPE), Louisiana State University, and the University of Texas at Galveston.

Karen has long been active in professional organizations at both the national and state levels, and is a former president of the Minnesota Society of Medical Technology.

Under Karen's energetic leadership, we expect the University of Minnesota to maintain its national reputation as the flagship program in Medical Technology.

STUDENT LOAN FUND ESTABLISHED

We are pleased to announce that an Emergency Loan Fund has been established for Medical Technology students by Lorraine Gonyea Stewart. At the time of her retirement, Professor Stewart donated a generous amount of money to the Division, the interest from which may be used by Medical Technology students whose loans have been delayed.

Present tuition for resident Medical Technology students is $58.10 per quarter credit, or about $2700 per year. Non-residents pay even more. Most of our students work while attending school, and many must take out loans. However, the processing of loans is cumbersome and lengthy and often students do not receive them on time. The Gonyea-Stewart Fund provides up to $900 per quarter, interest free for three months. Thereafter, an interest rate of 6 percent is charged.

The Division and its students are grateful for these special monies received from Lorraine Gonyea Stewart, and thank her for her generosity and beneficence.

CAREER OPTIONS RE-EXPLORED

In November 1985, the Medical Technology Alumni Society hosted our second annual professional development program, entitled "The Future for Medical Technologists." Following dinner at the Campus Club, more than 100 attendees participated in four special interest discussion groups to stimulate new ideas about career options. The topics discussed were:

1. Re-entry/Employment opportunities in the medical lab
2. Continuing education/Teaching/Scientific specialties
3. Management/Administration
4. Sales/Industry

Our first program "Versatility and Opportunity with Your Medical Technology Degree" which attracted nearly 250 alumni and practitioners, recently received the Model Program Award from the Minnesota Alumni Association.

Watch your mail for future programs. We will continue to explore the changing practice of Medical Technology.

CURRICULUM REVISION IN PROGRESS

The faculty and staff are busy working on revision of the Medical Technology curriculum. This restructuring is prompted by several factors:

the changing clinical laboratory environment
high costs associated with professional education
the need for specialists as well as generalists in clinical laboratories
the desire to re-establish an "Honors" type of research option

As all alumni know, we have the oldest baccalaureate program in the nation, with the largest number of graduates. Even in the 1920s and 1930s, when other programs required only two years of training to become a medical technologist, this University required the baccalaureate degree. For many years, our curriculum consisted of three years in college and a one year internship in the University Hospitals laboratories.

In 1968, under the guidance of Verna Rausch, the University of Minnesota originated the 2 + 2 educational model: two years of pre-professional courses and two years of the professional program. Since then, 125 other Medical Technology schools nationwide have adapted the 2 + 2 plan. As part of this change, clinical rotations were reduced to 20 weeks and our students had the option of spending time at other sites. Presently, students may rotate through the clinical laboratories of the Veterans Administration Medical Center, St. John's Hospital, and the St. Paul Area Red Cross, in addition to the University Hospital and Clinic.

The implementation of TEFRA in 1983, and the Medicare Prospective Payment System (PPS) in 1985 dramatically changed health care in general, and clinical laboratories in particular. Under PPS, pay per case for hospital inpatient services is fixed in advance through diagnostic-related groups (DRGs) pricing. As a result of TEFRA and PPS, laboratories, which in the past were revenue producers, are now cost centers. The result has been cost-cutting, which has taken several forms:

more rigorous procedural rules governing the use of diagnostic tests
computerization of most clerical functions and test reporting
increased pre-admission and off-site testing
contracting out of certain laboratory tests to referral laboratories
decreases in overall test volume
increased use of instrumentation
a reduction in total numbers of laboratory personnel
increased employment of medical laboratory technicians in place of technologists
freezing of salaries or positions
decreased operating and capital equipment budgets for clinical laboratories
cut-backs in teaching and professional development budgets

While some may think these changes are foreboding, perhaps even insurmountable, we believe they provide us with the opportunity to design a curriculum that is flexible, cost-effective, and appropriate to the present and the future. In the end, we hope to produce a graduate well-equipped to contribute to the operation of a variety of clinical laboratories, and to change with the times. While curriculum revision is not complete, and cannot be implemented until fall 1987, several projected changes are noteworthy:

greater flexibility in prerequisites
the requirement of a higher entering GPA
the option for a student to select a generalist or specialist track
greater use of a variety of clinical laboratory settings

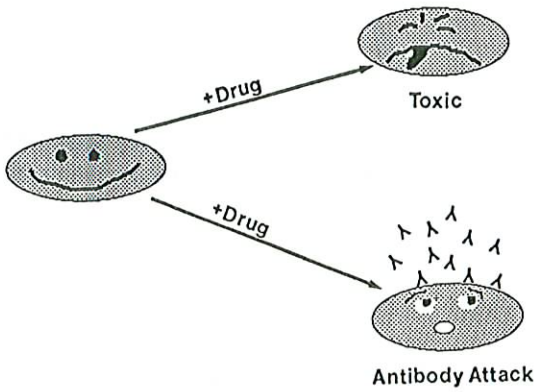
As part of the curriculum revision process, we have interviewed over 60 laboratory directors and managers, surveyed graduates, and compiled an exhaustive list of career opportunities for the medical technologist. Next year's *Tech's Talk* will provide additional information. In the meantime, if alumni have questions, comments or suggestions for the new curriculum, please contact the MedTech office.

COMPUTER FAMILY GROWS

The first member of our Apple Macintosh Computer family came along late in 1984. We added a second in 1985 that was soon joined by an Apple Laser Writer (printer). It seemed reasonable that all of our computing needs would be met by two powerful "Fat Macs" and a laser printer. However, the computers were so popular that we were literally "waiting in line" to use them. Instead of replacing a worn-out typewriter, we decided to add a third computer this year.

Is is possible that the Division of Medical Technology could be so productive as to need assistance from all of this hardware? The fact is, the computers have greatly augmented our productivity. Aside from producing this newsletter, manuscripts, lectures, records, grade sheets, exams, financial statements, not to mention countless forms and correspondence, have all been generated more quickly and efficiently than was previously possible.

In addition to word processing jobs, our computing family has provided excellent support for statistical calculations and data analysis in both faculty and graduate student research projects. But perhaps the most entertaining use has been production of our own pictures for lecture slides. Several of the faculty have used the MacPaint program to make lecture, seminar, and conference slides that have definitely spiced up our presentations. An example from a recent research conference on platelet-drug interaction is shown here.



EDERER WINS KIMBLE AWARD

Grace Mary Ederer, Professor Emeritus, was awarded the prestigious Kimble Methodology Award at the Conference of Public Health Laboratorians held in Washington D.C. last November. Professor Ederer was honored because of the rapid test methods she developed for bacterial identification, and for the single multi-test media she introduced for use in clinical microbiology.

It is noteworthy that in the 34 years this award has been given, Professor Ederer is the first woman to win the award singly - - not in collaboration with another individual. Five previous winners have also been Nobel Prize laureates.

The Kimble Methodology Award consisted of a $1,000 cash prize, an inscribed plaque and a Kimble glass sculpture of entwined circles. Professor Ederer's acceptance speech was entitled "Microbiology in the Fast Lane."

Grace Mary has donated her cash prize to Medical Technology for the construction of a special glass cabinet to house a collection of laboratory antiques. The cabinet, which should be completed by early summer, will be located in the Medical Technology Conference Room, 15-194 Phillips Wangensteen Building.

We are proud of Grace Mary Ederer, and join other colleagues, former students and friends in saluting her for this latest accomplishment.

ALUMNI GIFTS TOP $8800

We wish to thank the generous alumni who have contributed to the University of Minnesota Foundation during 1985. Last year nearly 300 donors contributed over $8800 to Medical Technology. We would especially like to recognize the following individuals, who according to available records, contributed $100 or more in the past year.

Dr. Ellis Benson
Lorna Canfield
Richard Chamberlain
Karen Karni
Mary Jacobson
Karen Libby
Karen Lofsness
Dora McClintock
Donna Ripley
Joanne Samuelson
Lorraine Stewart
Dorothy Trach
Phyllis Weiss
Lila Wengler
Mildred Zumwalt

If you have made a donation of any size this year, we thank you. Our 1986 drive will continue, with students trying to reach all of our graduates by phone. When you receive your call, please consider a gift. Private support from alumni is invaluable to Medical Technology.

MASTER'S PROGRAMS MERGE

The two Master's degree programs in the Department of Laboratory Medicine and Pathology, Medical Technology and Laboratory Medicine, have been merged to create a new multidisciplinary program titled Clinical Laboratory Science. Because the two previous programs had similar and overlapping goals, faculty and curricula, it was felt that a merger would not only focus the efforts of the faculty, but also eliminate the duplication of effort and costs inherent in maintaining two programs.

The Clinical Laboratory Science program will offer a Master of Science degree which will include original research with a thesis and course work in one of five speciality areas; chemistry, genetics, hematology, immunology or microbiology. The objectives of the new program are to: a) provide students holding a bachelor's degree in a basic science the opportunity to gain competence in a specialized area of laboratory medicine; and b) provide students holding a bachelor's degree in Medical Technology further training in the research, supervisory and teaching aspects of laboratory medicine.

Based on the interest and enrollment in the previous programs, it is expected that there will be a yearly admission of approximately ten to fifteen students. The first students will enter the program in the fall of 1986. Dr. Walid Yasmineh has been elected Director of Graduate Studies for the new program.

SPRING EVENTS HONOR SENIORS

This year's reception for the graduating Senior Medical Technology students is scheduled for Thursday, June 5, 1986. The reception is sponsored by the Medical Technology Alumni Society and will be in the Bell Institute of Pathology in the Health Sciences complex. After the reception, tours of the new University of Minnesota Hospital and Clinic will be offered to those interested.

The graduation and oath ceremony will be held on the following Sunday, June 8, in 125/175 Willey Hall (West Bank Auditorium) at 1:00 pm. Cheryl Swinehart will deliver the commencement address, and a reception for families and friends will follow the ceremony.

We are proud of the class of 1986. Please join us in congratulating them.

1923 GRAD RECALLS EXCITING CAREER

Marjorie Knowlton, a member of our first graduating class of 1923, recently shared some of her experiences with us. Marjorie was originally a pre-med student, but at the recommendation of Dr. William O'Brien enrolled in the "new" Medical Technology program. After graduation, she worked with such notables as Drs. Jesse McClendon, Wallace Armstrong, and Maurice Visscher. She remembers receiving a salary of $100-125 per month.

After World War II, Marjorie worked in Naples, studying Vitamin C deficiency in nutritionally deprived Italian children. Another interesting duty involved testing the purity of the liquor supply served at the U.S. Army base in Livorno, Italy.

A major portion of Marjorie's research career was devoted to the study of hepatitis, both in Germany and at the Walter Reed Army Hospital in Washington D.C. She remained an active laboratory scientist until her retirement in 1968.

Marjorie Knowlton is an energetic, interesting woman who is very positive about her career as a medical technologist. She plans to be at the spring banquet, and we hope you will be able to greet her there.

HOVDE-O'BRIEN SCHOLARSHIP FUND

The Hovde-O'Brien Scholarship Fund is an important source of financial aid for students in Medical Technology. All students accepted into the professional program are eligible, and may apply before April 1st each year. Recipients are chosen on the basis of academic scholarship, need and future potential.

Awards for the 1985-86 school year went to seniors Julie K. Anderson (Luverne, MN), Richard Naatz (Mantorville, MN), Sheryl Pust (Milan, MN), Mary Rolfzen (Hibbing, MN) and Carol Spanier (Albany, MN). The five recipients were awarded from $400-700 for a total amount of $2600.

This fund has continued to grow through the years due to donations from alumni, faculty and staff. Our thanks to you for your generous support of our students.

Contributions to the Hovde-O'Brien Scholarship Fund may be sent to the Division of Medical Technology, Box 198 UMHC, University of Minnesota, Minneapolis, MN., 55455.

AUSTRALIA CALLS HARVEY

Dolores Harvey, a member of our faculty since 1945, left her teaching position last July and moved to Melbourne, Australia. Both she and her husband Rod have accepted research positions at the University of Melbourne.

For many years Dolores, together with Mary Damron, was in charge of teaching urinalysis to our students. She was also the mainstay of the laboratory portion of our clinical chemistry course.

We miss Dolores, but wish her and Rod well in their new adventure. If former students or colleagues would like to write to her, the address is:

Dolores Harvey
13 Clancy's Lane
Doncaster, Victoria 3108
Australia

MED TECH WELCOMES NEW FACES

During the past two years there have been many changes in the faculty and staff of the Divsion of Medical Technology. Join us in welcoming four new faces to our ranks.

Marty Frame is the new Senior Medical Technologist supervising the clinical chemistry courses. She graduated from the University of Vermont in Burlington and also worked in Hanover, New Hampshire before coming to Minnesota. Marty plays an active role in MSMT activities, and also plays a lot of tennis. She hopes to start an aerobic exercise class for fitness conscious lab people.

Joan Schmidt was recently chosen as manager of our teaching laboratories. She is a U of M graduate and has held a variety of clinical and teaching positions. Joan is a past president of the Medical Technology Alumni society. She enjoys running (including marathons) and cross-country skiing.

Doug Christie joined us as an Assistant Professor of clinical immunohematology last year. He received his undergraduate degree in chemistry at Southern Oregon College, and earned his Ph.D. in biochemistry at Washington State University. He completed a post-doctoral fellowship in blood banking at the Blood Center in Milwaukee. His major research interest is drug induced thrombocytopenia. Doug likes to spend time with his family and also plays tennis.

Bob Jechorek is the new Associate Scientist in diagnostic microbiology. He received both a B.A. and an M.A. in microbiology from St. Cloud State University. He focuses his research on bacterial translocation. Bob enjoys model railroading; but says he'd rather be fishing.

NEW HOSPITAL WINS APPROVAL

The new University of Minnesota Hospital and Clinic is set to open this spring right on schedule. This 432 bed facility overlooks the Mississippi River, on the site previously occupied by Powell Hall. It is a beautiful and functional eight story building, which is designed to improve the environment in which patients and their families find themselves. The building opened for staff and faculty tours on January 29. The actual moving of patients and staff to the new facility is scheduled for April.

Entering the new hospital on the second floor from Harvard Street, the admissions area and its lobby are roomy and pleasant, and the three story tall atrium is spacious and bright. The Emergency Room and Radiology are closely aligned spacially to enable them to interrelate in emergency diagnosis. The Rapid Response Laboratory is situated on the third floor. Adjacent to it is the Neonatal Intensive Care Unit, down the hall are the Surgical Suites, and immediately above are the Pediatric and Surgical Intensive Care Units; an example of the careful thought that went into the building. The lab will house a central specimen receiving area and predominantly emergency chemistry instrumentation, although the final composition of the lab is still under discussion. The remainder of the laboratory services will remain in their present location.

Most impressive about the new hospital is the thought that went into the comfort and care of the patients and their families. There is a large family waiting room on each floor, as well as a dayroom overlooking the river which is restricted to patients only. The pleasant atmosphere and state-of-the-art technology will make the new hospital a first rate medical care facility, a much needed improvement over the time-worn Mayo building. Approaching the new building from the north, the sight of the cupola from Powell Hall standing in front of the new hospital serves as a reminder that prior excellence is not forgotten and new advances are built on the past. If you get a chance to tour the new hospital, don't miss it!

MISSING JOURNALS NEEDED

The Division of Medical Technology wishes to complete our collection of the American Journal of Medical Technology so we can have it bound for our conference room. Though the journal began in January of 1935, we are only missing the journals on the following list. If you have a copy of any of these journals that you would be willing to donate to the University of Minnesota please contact:

Cheryl Swinehart
Box 198
University of Minnesota Hospital and Clinic
Harvard Street at East River Road
Minneapolis, MN. 55455
(612) 625-9136

Volume	No.	Year	Month(s)
17	5	1951	Sept-Oct
19	2	1953	Mar-Apr
19	3	1953	May-June
20	5	1954	Sept-Oct
20	6	1954	Nov-Dec
21	1	1955	Jan-Feb
21	2	1955	Mar-Apr
21	4	1955	July-Aug
21	6	1955	Nov-Dec
21	3	1955	May-June
22	1	1956	Jan-Feb
22	2	1956	Mar-Apr
22	3	1956	May-June
22	5	1956	Sept-Oct
23	1	1957	Jan-Feb
23	2	1957	Mar-Apr
23	3	1957	May-June
23	5	1957	Sept-Oct
23	6	1957	Nov-Dec
24	1	1958	Jan-Feb
24	2	1958	Mar-Apr
24	3	1958	May-June
24	4	1958	July-Aug
42	12	1976	Dec

LET'S KEEP IN TOUCH

Have you often wondered whatever happened to some of your classmates you haven't seen since graduation? A display at this year's Medical Technology Alumni Society annual banquet may give you the opportunity to find out. We would like to ask each of you to contribute some personal information on your life since graduation. Submitted information will be displayed at the banquet.

It is not necessary to limit the information you submit to that requested on the form. Letters and pictures would be greatly appreciated, and pictures will be returned, if you wish.

Name _____ Year of Graduation _____

Address _____ Career Info _____

_____ _____

Famiy Info _____ Special Interests _____

_____ _____

_____ _____

Whether you attend the banquet or not we would like to hear from you.
Please mail info to:

Medical Technology Alumni Society
100 Morrill Hall
100 Church Street S.E.
Minneapolis, MN. 55455

ANNUAL BANQUET NEWS

This year's annual banquet is to be held at the Women's Club of Minneapolis, a lovely setting noted for its fine cuisine.

Date: Wednesday, April 30, 1986
Social Hour (cash bar) 6:00 p.m.
Dinner (ballroom) 7:00 p.m.
Program to follow

Place: Women's Club of Minneapolis
410 Oak Grove
Minneapolis, MN. 55403
Please note: Parking is free at the club

Menu: Women's Club House Salad
Roast Prime Ribs of Beef au Jus
or
Baked Orange Roughy a la Citrus
Baked potato with Sour Cream
Green Beans Almondine
French Silk Pie

Cost:

M.A.A. Members	Beef	$17.50
	Fish	$16.00
Non-members	Beef	$19.50
	Fish	$18.00

Gratuity and tax are included in price

*Non-members may take advantage of a special membership offer in conjunction with the April 30 meeting. Single memberships are available to non-members at $17.00. (Regular annual membership is $22.00)

Program: **The Peace Corps in Thailand**
Bridget Cavanaugh, Med Tech Class of '84

Special recognition will be given to the class of 1961 (25 Years) and 1936 (50 Years)

Deadline for reservations: April 25, 1986

Please reserve _____ places for me at the Medical Technology Alumni Dinner.

I enclose _____ as payment. _____ Beef _____ Fish

Please reserve _____ seats for me at the 1936 table.

Please reserve _____ seats for me at the 1961 table.

Signature _____ Class _____ M.A.A. #_____

Mail by April 25, 1986 to: Medical Technology Alumni Society
100 Morrill Hall
100 Church Street S.E.
Minneapolis, MN. 55455