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TECH'S TALK

Editor: Helen M. Hallgren

Contributors:

Nancy Brunzel Doug Christie

Sue Feist

Joanna George Naomi Hanson

Karen Karni Karen Lofsness

Vicki Miller Eileen Rogers Lillian Sarkinen Pat Solberg

Cheryl Swinehart Michael Tsai Carol Wells

Kathy Hansen Elected President of ASCLS

Kathleen Lawler Hansen, of St. Paul, was elected president-elect of the American Society for Clinical Laboratory Science (ASCLS), at its 1994 June annual meeting in Nashville, Tennessee.



Ms. Hansen is a 1963 summa cum laude graduate of Macalaster College. She has worked in the chemistry laboratories of the University of Minnesota Hospital and Clinic for over 30 years. Currently, Kathy is the hospital clinical laboratory group administrator for the special chemistry, special coagulation, and molecular diag-

nostics laboratories of the University of Minnesota Hospital and Clinic. She is responsible for the budget, planning, quality assurance, cost containment, management of relationships with external and internal reference laboratories, grants and contracts administration.

As part of her role as president-elect this past year, Kathy chaired the ASCLS Appointments Committee, the Long Range Planning Committee, the Task Force on Multiskilled Workers, and was a member of the Finance Committee.

Since 1984 Kathy has also served as the executive secretary for the Minnesota Society for Clinical Laboratory Science (formerly the Minnesota Society for Medical Technology). She was selected as the MSMT Outstanding Member of the Year in 1974 and again in 1984. She was elected Region V Director, representing Minnesota, Wisconsin, North Dakota, and South Dakota from 1991-94.

Kathy becomes the tenth Minnesotan (the largest number from a single state) to be elected to this national presidency. Others with the "Minnesota Connection" include: Frieda Claussen (1936-37), Lucille Wallace (1947-48), Sadie Cartwright (1952-53), Mary Mix (1953-54), Ruth Hovde (1954-55), Ruth Heinemann (1959-60), Verna Rausch (1966-67), Nancy Preuss (1975-76), and Donna Meyer (1987-88).

We congratulate Kathy on achieving this well-deserved honor, and wish her the best as she assumes the ASCLS presidency July 22 in Anaheim, California.

A Message from the Director

This year the University has embarked on an ambitious plan called "U2000." Fashioned by President Nils Hasselmo, it addresses six broad directions for the University: 1) research; 2) graduate and professional education; 3) undergraduate education; 4) outreach and access; 5) a user-friendly university community and 6) diversity.

As part of the 1995-96 planning and budgeting process, central administration reviewed academic programs according to the following criteria:

- What is the overall quality of the program?
- Is it central to the role and mission of the college, the institution, and the state?
- Does it have a comparative advantage over similar programs?
- Is the program run effectively and efficiently?
- What is the demand (present and future) for the program?

Let me point out some of the strengths of the Division of Medical Technology in each of these areas.

Quality

- In January 1994, our graduates scored at 116% of the national mean on the National Certification Agency examination.
- In September 1994, the National Accrediting Agency for Clinical Laboratory Sciences awarded our program seven years of continued program accreditation—the maximum accreditation period granted by this agency.

Centrality

- Currently there are only five medical technology programs in the state. In 1994 there were 51 total B.S. graduates, of whom 26 were U of M graduates.
- Our program reflects the Medical School and University's mission in research; our seven core faculty published 41 articles, abstracts and chapters in 1993, served as reviewers for 15 scientific journals, and earned \$616,000 in external grants, contracts and awards. This external funding supports the research efforts of faculty.
- The program reflects a second mission of service—our faculty provide presentations and continuing education programs throughout the nation, and serve as officers and committee chairs in state and national organizations.

Comparative Advantage

• Teaching laboratory science courses is expensive in

terms of equipping teaching laboratories and providing the TA support staff required to teach well. Largely through the support of alumni, we have been able to equip our teaching laboratories. With dedicated faculty, staff and graduate students, we have also been able to maintain the high quality of instruction that marks this program.

- Since 1984, our scholarship program has grown by over \$150,000. In August 1994, \$12,000 in scholarships was provided to 13 students in the professional program.
- We have the only endowed chair in Medical Technology in the country—the Mildred King Rohwer Professorship.

Effectiveness and Efficiency

- The use of preclinical professional course work ensures uniformity of instruction, and reduces the need for clinical instructors to teach one-on-one in the clinical setting. Moreover, learning basic techniques in structured student laboratories is more cost-effective than trying to teach in a busy laboratory environment.
- The Instructional Cost Study conducted by the University's Management Planning and Information Services Office (October 1994) stated the cost of educating a medical technology student to be \$11,131 per full year enrollee. Costs for nursing students were \$13,587 per FYE; for occupational therapy students, the figure was \$11,827. The average cost per University student in Liberal Arts (Twin Cities) was \$6,712. Tuition accounted for 29% of the cost of educating each medical technology student, close to the figure the legislature seeks in determining its financial support to the University.

Demand

- Numbers of medical technologists currently working in Minnesota are estimated at 3,000. The national vacancy rate for medical technologists is 10%; the Minnesota rate is lower due to institutional mergers, closures and downsizing.
- Despite these forces, the need for four-year graduates remains, as new laboratory subspecialty areas emerge, e.g., molecular diagnostics, immunophenotyping, biochemical genetics, cytogenetics, etc. Older medical technologists are also retiring. Thus, the need for our graduates continues.

In compiling this information, it gave me considerable pride to report the contributions of our faculty, staff, graduates and students to the state, the University and the profession. I hope you share this pride as well!

Karen R. Karni, Director

1994 Major Contributors

The following persons contributed \$100 or more to the Division of Medical Technology in 1994:

\$500 - \$999

Mardie G. Geiser Carl Rohwer

\$300 - \$499

Lorna Henderson Canfield Grace Mary Ederer Mary Lunzer and Todd Jacobson Verna L. Rausch

\$100 - \$299

Ellis and Ann Benson Ruth Bienhoff Brauer Marilyn Tucker Budge Caroline Lundberg Carlin Kathleen Quast Carlsen Ruth Minor Chamberlain Elise Andreassen Church Gerry Olafson Cochran Irma Koskella Coleman Robert A. Dahl Dorothy Carlson Duffell Mary Jane Eaves-Raich David Ellis Beverly I. Fiorella Frances Rosenblum Firestone Cathie Leiendecker Foster Mary Moriarty Galvani Neal L. Gault Kathryn Hammer Glen Christina Fox Gramlich Mary Johnson Grewe Walter Hagen Helen Nordine Hallgren Carol Luck Harris Jean Houger Hengesbaugh Janet Smith Hoeft Margaret C. Hovde Karen Kloss Huff Helen K. James Anna Nelson Jensen Billie Anne Herranen Juni Karen Soderberg Karni

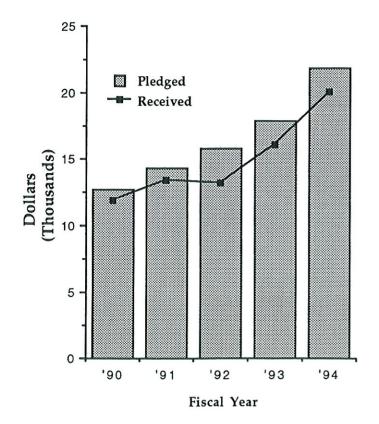
Marilyn M. Klein Patricia Maser Koors Arline Volkert Krave Dorothea Poppenberger Kryewinske Karin Rittgers Libby Jean Jorgenson Linné Karen Gates Lofsness Diane Olson Michalik Shirley Lindquist Michel Harriet Noreen Kay Nelson Olson Elizabeth Hall Perry Kathleen M. Pfleghaar Debra C. Rodahl Ruth M. Rosendahl Shelly Lepisto Russ Joanne J. Samuelson Mary T. Skupa Harriet Broman and J.R. Snoga Ella M. Spanjers Lorraine Gonvea Stewart Elizabeth Stone R. Dorothy Sundberg Cheryl Damien Swinehart Kay S. Townsend Aija Kancitis Vikmanis Nettie Conser Warwood Phyllis Hanson and Verne Weiss Joyce Clarke Wian Marie Wujcik Joan and Walid Yasmineh Memorial from UMHC Laboratory Admin.

Annual Fund Drive: A Success Once Again

Last spring's *Tech's Talk* acknowledged the generous giving by medical technology alumni, reporting that 41 percent of all those contacted in 1992-93 responded with a gift. For fiscal year 1993-94, our gifts reached an all-time high—over \$20,000 was pledged by more than 500 alumni and friends of medical technology, with an average gift of \$42.

These gifts enabled the Division of Medical Technology to purchase instructional materials for student use (including new computer-based programs), to replace old or failing equipment in the teaching laboratories, and to add to the Division's four scholarship funds. This past year all senior students were also funded for a day at the annual MSMT meeting in May. At this meeting, held in Brooklyn Park, they attended scientific and technical sessions, visited exhibitors, and investigated employment opportunities.

No other unit within the University has such loyal alumni as the Division of Medical Technology. With cutbacks in state funding and internal reallocations in the University, alumni support provides us with the resources to remain pre-eminent among medical technology education programs in the nation. Once again, our most sincere thanks to all of our contributors.



David Nevalainen Becomes a Member of the National Blood Foundation Board of Trustees

David Nevalainen, Ph.D. was elected a member of the National Blood Foundation Board of Trustees. Currently he is director of the Abbott Quality Institute in the Diagnostics Division of Abbott Laboratories. Since joining Abbott Laboratories in 1981 as senior hematologist in research and development, Dr. Nevalainen has held positions in its scientific and regulatory fields. He has been clinical project manager and section head of scientific affairs, senior technical manager (Venture Technology), manager of clinical affairs (Regulatory Affairs) and manager of laboratory quality assurance.

Dr. Nevalainen earned his bachelor of science degree with distinction in medical technology in 1966 and his doctorate in hematology from the University of Minnesota in 1972. Having published over 60 articles, presented more than 160 worldwide lectures and workshops on laboratory related topics, and holding several patents for laboratory tests, Dr. Nevalainen remains actively involved and influential in blood banking. He also serves on the board of directors of NCCLS, the international organization that sets voluntary standards for clinical laboratory procedures.

David was also instrumental in gaining support from industry for our scholarship program. His reputation in transfusion medicine and his loyalty to the Division and to the University of Minnesota are valued and respected.

Jean Houger Hengesbaugh Honored

Jean Houger Hengesbaugh (1973) of Salt Lake City, Utah, was recently honored as the Intermountain States Medical Technologist of the Year. She received this award, for which candidates from Utah, Colorado, Idaho, Wyoming and Montana are eligible, because of her many contributions to the profession. We congratulate Jean on this honor.

Jean is currently a Senior Management Consultant with Superior Consultant Company, Inc. She uses her background in clinical laboratory science and laboratory information systems (LIS) to develop and teach continuing education programs for health care professionals. Her work in teaching fourth-year medical technology students in Saudi Arabia was featured in *Tech's Talk* in 1991.

What Are Our Graduates Doing?

Each year, we ask our alumni to respond to the "Let's Keep in Touch" column of *Tech's Talk*. The following represents a sampling of those who responded in 1994.

Allegra Pedersen Stehr (1940) of Texas retired about 15 years ago. She commented, "I've always been glad we could get both X-ray and lab certification, way back then."

Charlotte Helgeson Hansen (1944) has led an interesting life in the laboratory as an instructor in microbiology as well as a contributor to civic activities. She has been president of the Jamestown, North Dakota, Chamber of Commerce, and was chosen both "Outstanding Citizen of Jamestown" and the "Outstanding Citizen" of North Dakota in Community Service.

The career of **Helen Jorgenson Fowler** (1944) has included research in aviation medicine. She currently lives in Sarasota, Florida, enjoying the beach and warm climate.

Beverly Robinson Peterson (1945) worked as a technologist for 33 years, and raised a family of four; one of whom, **Laura Lee Peterson Hastings**, graduated in medical technology from the University in 1971.

Donna Dalquist Rustad (1947) reports that she "hung up my uniform in '53." Presently living in Arizona, she is a violinist in the Sun City Symphony Orchestra.

Georgia Rietz Parker (1947) retired from Abbott-Northwestern Hospital in 1984 and is currently living in California.

Joyce Schellbach Johnson (1948) raised a family of five (four of whom are U of M graduates). She and her husband are now retired in Albert Lea, Minnesota.

Gail Janicke Kassis (1949) is currently living in California, where she is a docent at the Sacramento Zoo.

The current primary interest of Mary Lou Enger Carlson (1949) is distance running. She has run 26 marathons including all 12 held in the Twin Cities. In 1991 she and her husband toured Europe by bicycle, tenting along the way.

Inez Krantz Schade (1955) continues to work in Hawthorne, Nevada. She reports, "After 39 years I still love being a generalist!" Barbara Goldbarg-Cohen Melamed (1957) is very busy in voluntary activities. She is on the National Board of Hadassah, and is president-elect at Mt. Zion Temple in St. Paul.

Patricia Chambers Kriesel (1959) works in the protein/immunology chemistry lab at Hartford Hospital, Hartford, Connecticut. An avid traveler, she and husband Doug, who works for Bristol-Meyers-Squib, still return to Minnesota for family gatherings.

Marilyn Wainio Halonen, Ph.D. (1963) is a professor of pharmacology, College of Medicine, University of Arizona Health Science Center. She noted, "I very much appreciate the introduction to the laboratory I gained through majoring in Medical Technology. The rigor related to quality control training has served as a crucial basis for many years of subsequent work in the research laboratory. I am grateful!" On May 15 at noon, Marilyn will be in Minneapolis to present a Department of Laboratory Medicine and Pathology research seminar in Todd Amphitheater.

Kathleen Kryewinske Nadreau (1963) continues to work in surgical pathology at UMHC. Her mother, **Dorothea Poppenberger Kryewinske** graduated in 1936 from our program.

The interests of Mary Sanford Parker (1964) are in Scandinavian music and folk dance, including "playing the fiddle" with the American Swedish Institute's Spelmonslag. She travels to Scandinavia frequently and wrote in 1994, "I will spend the summer in Norway, helping with the hay, among other things."

Carol Luck Harris (1969) and family live in Valdez, Alaska. Her husband's great grandfather came to Alaska during the 1898 gold rush.

Carol Hallgren Arnason (1982) is an emergency room physician with Methodist Hospital in St. Louis Park, Minnesota. She and her husband Fritz are the recent proud parents of Anne Helene. Carol's mother, Helen Nordine Hallgren, (1965) is an associate professor in the Division of Medical Technology.

Elaine Oberle Dooley (1984) sent a photo of herself attired in scuba gear. She is the coordinator of the immunohistology laboratory at Shands Hospital, University of Florida in Gainesville.

Dawn Glass Buck (1987), husband Ted and family have returned to the U.S. following an Air Force stint in Germany. Dawn is currently an automobile salesperson in New Jersey.

MT Alumni Cookbook Featured in St. Paul *Pioneer Press*

The Medical Technology cookbook, "Laboratory Tested Recipes," was featured in Ellen Carlson's column, "Household Forum," Wednesday, May 4, 1994, in the St. Paul *Pioneer Press.* Ms. Carlson wrote:

Dear Readers: "Laboratory Tested Recipes" is a cookbook put together by the Medical Technology Alumni Society of the University of Minnesota. The vinyl-covered book boasts 168 pages of recipes contributed by its members. Desserts of all kinds seem to be favored. Recipe categories are appetizers, breads, brunch foods, soups and salads, main dishes, meats, side dishes, cakes, desserts, cookies and canning. The book dividers also offer helpful substitutions and cooking hints, such as to add a pinch of baking soda to icing to keep it moist and prevent cracking.

Proceeds from sale of the book will be used for scholarships for students in the medical technology program at the University.

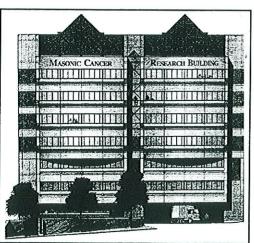
Because it soon will be Mother's Day, here are some recipes you may want to make for the special day.

Recipes highlighted in the column included: Truffle Brownies, Tequilaberry Salad, Sour Cream Coffee Cake, Hot Pecan Dip and Wild Rice Soup.

The cookbook is now being sold at a special price—\$8.00 plus \$2.75 for shipping and handling. It can also be purchased directly for \$8.00 in the Medical Technology Office, 15-170 Phillips Wangensteen Building. Make checks payable to "Medical Technology Alumni Society." Proceeds from cookbook sales support our scholarship programs.

The U of M Cancer Center

The Masonic Cancer Research Building currently is midway in construction, with completion set for January 1996. It is a four-story facility with 81,000 square feet.



Located on East River Road on the Minneapolis campus, it will contain 30 state-ofthe-art laboratories, plus seminar facilities and office areas.

Recruitment of renowned cancer

specialists to enhance the already outstanding faculty is a vital part of the Cancer Center effort. To date, seven new endowed chairs have been pledged or established for the Center. Additional chairs are planned to further research in other cancer areas and to attract top investigators to the University.

Fund-raiser Held for Senior Medical Technology Student

A group of senior medical technology students held a cookie sale in December 1994 to assist one of their classmates who was diagnosed with ovarian cancer earlier in the year. The fund-raiser was organized to help with ongoing expenses related to extensive chemotherapy that were not covered by insurance.

The students baked over 300 dozen cookies, which were sold at UMHC and the Veteran's Affairs Medical Center. They used commercial kitchen facilities at a nearby institution to bake the cookies and packaged them in holiday baskets. The project was a success—all cookies were sold by 10 a.m. on the day of the sale. Individual donors also contributed money, and a total of over \$1,200 was raised in this effort.

We are proud of the care, concern and enterprise exhibited by these students, and consider it an honor to work with them.

The First Certification Exam

In reviewing our files, we found the original Board of Registry examination for 1933. We thought our readers would find it interesting—typographical errors and all.

MASTER COP REGISTRY EXAMINATION OCTOBER 1933 1. Name five divisions of the clinical laboratory, in well organized work. In which divisions or division of the clinical laboratory has the applicant had the most training? Outline the nature of the practical training. In what division has the applicant had little or no training? 2. Define: meniscue, artefact, bacterial antigen, pyogenic, autolysis, hemolytic 3. Define: metastasis, vilulence, aspiration, Negri bodies, pyrexis.
4. Define: pediatrics, otology, neurology, psychiatry, orthopedics, rethology, gynecology, radiography, gastro-enterology, phthalmology.
5. Define: cylindroid, hypychlorhydria, physiological leukocytonis, hemoglobinuria, symbiosis. Clinical 1. Define: endotoxin, chromogenic, anaerobic, attenuation symbiosis. 2. Name six organisms representing normal respiratory flora. Hematology 1. Name the procedures included in the routine examination of the blood. 2. Distinguish by dwaring: squamous epithelial cell, normal crythrocyte, normal lymphocyte, blood platelet, and pus cell. Urinalysis 1. Name seven factors which should be included in the routine examination of the urine. Serology 1. Name serological tests in the clinical diagnosis of syphilis, undulant fever, typhoid, and paratyphoid. Tiasue Technic 1. What is the most satisfactory fixing fluid for tissues?

Following grading, the examination was usually published in the *Journal of Medical Technology*. Thus, we believe we have not violated any confidentiality in publishing this 62-year-old examination.

Division and Department Recognized by Former Fellow

In December 1994, we received a letter from **Dr. James G. Ruggles**, a pathologist practicing at Sacred Heart Hospital, Yankton, South Dakota. Dr. Ruggles, who was a fellow in the Department of Laboratory Medicine and Pathology from 1968 to 1970, stated:

I have funded a sugar maple tree as a remembrance to the Department of Laboratory Medicine for the training I received during those years. I have made a special statement that the Division of Medical Technology be included in this remembrance. I felt and still do feel that those faculty involved in the Medical Technology program were bench marks of excellence in the field and that the success of the Department of Laboratory Medicine was in no small way supported by BSMT Minnesota, Medical Technologists.

The maple tree was planted last fall on the Presidents' Knoll, which is the grassy area located between Pillsbury Drive and University Avenue—directly across from Burton Hall.

Scholarly Activities of Medical Technology Faculty

One of the roles of faculty in an academic health center is that of scholarship. This means conducting research, analyzing that research, and publishing it. Recent research publications by our faculty are listed below:

Hallgren HM, Ambroziak J, O'Leary JJ and Degelau J: Changes with Age in CD4+ Memory and Naive Lymphocyte Proliferative Responses to Both Mitogen and Recall Antigens in Healthy Humans. Aging, Immunology and Infectious Disease, 5:109-119, 1994.

Degelau J, O'Leary JJ and Hallgren HM: Relationship of Memory and Naive T Cell Subsets to Diminished Influenza Vaccination Response in Nursing Home Elderly. Aging, Immunology and Infectious Disease, 5:27-41, 1994.

Karni K, Munro-Bjorklund V, and Lofsness K: Undergraduate Research: A First-hand Experience. Clinical Laboratory Science, 7:5, 270-271, 1994.

Howe RB and **Christie DJ**: Clinical Applications of Protein A Immunoadsorption in Thrombocytopenic Disorders. Transfus. Sci., 15:4, 423-427, 1994.

Tsai MY, Hanson NQ, Copeland KR, Beheshti I and Garg U: Determination of a T/G Polymorphism at Nucleotide 3206 of the Apolipoprotein C III Gene by Amplification Refractory Mutation System. Clin. Chem., 40:2235, 1994.

Beheshti I, Hanson NQ, Copeland KR, Garg U and Tsai MY: Single-strand Conformational Polymorphism (SSCP): Studies of the Genetic Polymorphisms of Exon 4 of Apolipoprotein C III. Clin. Biochem, Vol 28, June 1995.

Wells CL, Jechorek RP, Olmsted SB and Erlandsen SL: Bacterial Translocation in Cultured Enterocytes: Magnitude, Specificity, and Electron Microscopic Observations of Endocytosis. SHOCK, 1:6, 443-451, 1994.

Olmsted SB, Dunny GM, Erlandsen SL and Wells CW: A Plasmid-Encoded Surface Protein on *Enterococcus faecalis* Augments its Internalization by Cultured Intestinal Epithelial Cells. The Journal of Infectious Diseases, 170:1549-56, 1994.

Undergraduate Research Opportunities Program

This past fall **Jeffery Boutain** and **Alex Solovey** became the 24th and 25th medical technology undergraduates to win UROP (Undergraduate Research Opportunities Program) grants.



Jeff's research project was entitled "Determination of G374A Mutation of the Cystathionine Beta-synthase Gene in Patients with Homocysteinemia." He worked with faculty sponsors, **Michael Tsai** and **Naomi Hanson**, performing the amplification refractory mutation system (ARMS) procedure on a variety of patient samples.

Alex worked in the research laboratory of Dr. Robert Hebbel of the Department of Medicine on the "Effect of Iron Chelators L1 and Deferoxamine Mesylate on Iron Induced Oxidation-Reduction Reactions." This project studied the mechanism by which chelators reduce cellular iron overload, such as that resulting from repeated red cell transfusions or sickle cell disease.

UROP projects are conducted separate from regular course work, and all research is performed outside of the classroom—after school hours, on weekends, during school breaks or summer vacations. Through their participation in the UROP program, our students have had the opportunity to write project proposals, perform research, publish their findings, and present their work at state and national scientific meetings.



Graduation Ceremony-1994

The graduation ceremonies for the 72nd class in Medical Technology were held October 8, 1994, in the St. Paul Student Center Theatre. A string quartet greeted family and guests arriving at the event. **Shamsur Rahman**, president of the Medical Technology Student Council, welcomed graduates, faculty, staff and guests. **Nancy Brunzel**, chemistry instructor, was chosen by the students to present the graduation address.

Julie Newham and Jeff Boutain, seniors, provided a slide presentation explaining classes and clinical rotations—both at the University of Minnesota and other affiliates—together with outside activities. Sue Feist, teaching specialist in chemistry, announced the many awards and scholarships granted to the graduates. Carolyn Young and Toni Muckala jointly received the award for the highest grade point average in the class.

Karen Lofsness, assistant professor, led graduates in reciting the Medical Technology Oath. Each graduate was then greeted by Karen Karni, program director, and Dr. Shelley Chou, dean of the Medical School. Karen Karni conferred the degrees, and Karin Libby, president of the Medical Technology Alumni Society, welcomed the new graduates to the Society. After the ceremony, a reception was held in the St. Paul Student Center Terrace.

The class of 1994 included:

Phillip Bauer, Minneapolis, Minnesota with distinction

Maria Bausero, Montevideo, Uruguay Mary Jo Blooflat, Bemidji, Minnesota Luke Bonawitz, Apple Valley, Minnesota Jeffery Boutain, Clontarf, Minnesota Patti Buttrey, Minneapolis, Minnesota with distinction

Lawrence Carroll, Minnetonka, Minnesota with high distinction

Christine Drum, Shakopee, Minnesota Peter Erickson, Rochester, Minnesota with distinction

Janell Gazdecki, Winona, Minnesota Judith Haswell, Minneapolis, Minnesota with distinction

Stacy Hemer, Eveleth, Minnesota Arla Keckeisen, Burnsville, Minnesota with distinction Joseph Masloski, Scandia, Minnesota Michelle Mignone-Blasing, Spring Valley, Illinois Toni Muckala, Golden Valley, Minnesota with high distinction

Julianne Newham, New Brighton, Minnesota with distinction

Michelle Orbeck, Atwater, Minnesota with distinction

Katherine Pearson, Chippewa Falls, Wisconsin Marisa Peterson, Brainerd, Minnesota with high distinction

William Petik, Eveleth, Minnesota
Shamsur Rahman, Hyderabad, India
Mark Schnapf, Coon Rapids, Minnesota
Kristina Sitarz, Apple Valley, Minnesota
with distinction

Thomas Yentsch, Anoka, Minnesota Carolyn Young, Joliet, Illinois with high distinction

The Division of Medical Technology will hold graduation ceremonies for the class of 1995 on Saturday, October 7, 1995, at 2:00 p.m. All alumni and friends of the program are welcome.

Did You Know...???

The University of Minnesota awarded more than 10,725 degrees in the 1993-94 academic year, including 675 doctoral degrees and 2,190 master's degrees. In past years, approximately 70% of U of M graduates have chosen to remain in Minnesota, contributing to the quality of life and economic well-being of the state.



Scholarship Funds

Scholarships are more important than ever for our students because of increasing tuition costs (\$82.90 per quarter credit), living expenses, and a decline in available financial aid. The Division of Medical Technology administers four scholarship programs that provide funds exclusively for our students. All Medical Technology students are eligible, and recipients are chosen on the basis of scholastic standing, financial need, and professional potential.

The Hovde-O'Brien Scholarship Fund is supported by generous contributions from alumni, faculty, staff, and friends. This scholarship fund was named to honor William O'Brien, medical director of Medical Technology from 1925-1939, and Ruth Hovde, who joined the faculty in 1946, and served as professor and director of Medical Technology from 1964-1984.

The Gonyea-Stewart Scholarship Fund and the Gonyea-Stewart Loan Fund were established in 1986 by Lorraine Gonyea-Stewart, an emeritus member of our faculty. In addition to the scholarship monies provided, students may utilize this fund to obtain short-term, emergency loans.

The Yvonne C. Cooke Scholarship Fund was established in 1990 by Yvonne Chenoweth Cooke, a 1937 alumna of our Medical Technology program. The Cooke Fund helps deserving students complete the medical technology program, and asks awardees to eventually repay the money, if they are able.

Lunch at McDonald's

RICINIC COSTS

The Betty Rae Kramer McConnell Scholarship Fund was established in 1992 by the family of Mrs. McConnell, a 1945 alumna of our program. As with the other scholarship programs, interest on the principal is used for the McConnell scholarships, which are awarded each autumn.

This year 13 deserving students (approximately 25 percent of those enrolled in medical technology) received scholarships ranging from \$500 to \$1,000. A total of \$12,000, the largest amount awarded by the Division of Medical Technology, was provided. The recipients were: Jacquelyn Andres, Antigo, WI; Teresa Barela, Saginaw, MN; Luke Bonawitz, Apple Valley, MN; Maria Brown, Eagan, MN; Larry Carroll, Minnetonka, MN; Susan B. Ewanga, Minneapolis, MN; Anna M. Hahm, Caledonia, MN; Shane McCoy, Cottage Grove, MN; Viet H. Nguyen, Minneapolis, MN; Anita Oakman, Brooklyn Center, MN; Michelle Orbeck, Isanti, MN; Janell Stiles, Winona, MN; Kelly Ann Vaught, Savage, MN.

The recipients of these scholarships, along with the Division of Medical Technology, thank the many contributors to the Hovde-O'Brien Scholarship Fund as well as Lorraine Gonyea-Stewart, Yvonne Cooke, and the McConnell family for their generosity. Contributions to any of the scholarship programs may be sent to the Division of Medical Technology, Box 609 UMHC, University of Minnesota, Minneapolis, MN, 55455.

**

\$2.14

167%

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	20 Yrs. Ago 1974	10 Yrs. Ago 1984	Late 1994	% Increase	
Average cost of					
tuition and fees per year	\$714	\$1,800	\$3,392	375%	
National Minimum Wage	\$1.80	\$3.35	\$4.25	136%	
Standard Introductory Textboo	ks				
(same books, revised editions)	State of the second	40			
Economics	\$11.95	\$30.95	\$56.25	370%	
Accounting	\$11.50	\$27.95	\$61.25	433%	
English	\$5.75	\$11.95	\$22.20	286%	

The Consumer Price Index reports college tuition as the fastest rising cost over the last 20 years. As the comparisons show, a student working for minimum wage today has to work 402 more hours than a student in 1974 to pay for one year's tuition.

\$1.60

\$.80

Gold and Silver Classes Honored

Each year we continue our tradition of honoring the 50th and 25th anniversary classes. This year they include the following:

Class of 1945 (50th Anniversary)

Martha Jerrell Basenfelder Wanda Worth Beardsley Esther P. Bjorneson Ruth Halvorson Bradley Eleanore Anderson Bredvold *Sybil Urness Brislain Lorna Henderson Canfield Dona Simpson Clark Vivian Lundquist Clark Grace Hegman Cross *Rosemary Hope Dickson *Elizabeth Schneider Ferrin Teena Bruich Fletcher

*Rosemary Hope Dickson
*Elizabeth Schneider Ferrin
Teena Bruich Fletcher
Shirley Winnick Gitis
Doris Fredson Groten
Muriel Griffith Hall
Virginia Counter Hansen
Dolores Gullickson Harvey
Betty Johnston Herman
*Dorothy Jensen
*Phyllis Sunder Jenson

**Carol Johnson Jett

*Mary Anne Carey Johnson
Jean Zierke Johnston
Eunice Feldman Joronsky
Shirley Peterson Kenning

*Elaine Connors Kirkaldie

*Annette Knox
Hilda Theobald Koryus
Lorraine Semanko Koza
Jean Hagemann Kuban

*Martha J. Lippincott

**Angela diGiambattista Manning

Carley McCauley

**Betty Rae Kramer McConnell
Pearl Engelstad McDonald
Jeanne Crosley Mielcarek
Doris Hansen Nelson

*LaVonne Nelson
Eileen Jorgenson Nienaber
Kazuko Kitagawa Onomiya
Marilyn Stromgren Palmer

Beverly Robinson Peterson *Ardell Mae Proctor Verna Rausch EttaMarie Christenson Reubendale Ina Tausta Roholt Peggy Bergford Ross Jeanne Laughlin Shields Lorene Ellefson Silcher *Mavis Martin Smith *Lucille Snyder *Carolyn DeBoer Stephens Winifred Marlin Storeim Elaine Daughenbaugh Tenney Dorothy Bennett Trach Betty Stuber Waldoch Dolores Meyers Weinberg Dorothy Denk Wood Mary Premer Wright *Mabel Fujisaki Yamada Betty Topel Yeager

Class of 1970 (25th Anniversary)

Marilee Preble Anderson
Valerie Mellgren Askeland
Diane Doll Benz
Cheryl Lenz Bertz
Margaret Menold Borene
Priscilla Rupp Bormann
Joan Cundy Bromander
Marjorie A. Christenson
Janis Bruce Crowther
Joyce L. Cundy
Carolyn K. Dotzenrod
Louise Tengquist DuCharme
Harriet F. Edwards
Wendy Kagin Engel
Maureen Hart Finnegan
Janet Mongan Flemming
*Nancy Levenson Gordon

Julie Nelson Grudzinskas Cheryl Diekman Hall Janis Jacobsen Hoffart Bonnie K. Hultman Billie Anne Herranen Juni Lynn Johnson King Vicki Marti Kleeberger Nancy J. Koenker Marilyn Meinke Koenst Carol Niemi Kolari Jean Anne Korupp Marit Oden Kvamme Carol Ferguson Ladwig **Peggy Johnson Lamb Louise A. Lamusga *Susan Lindahl Lee Cora Ward Lueben

Kay Delger Malerich
Arlene Werman Meadows
Carol Hughes Mulder
Susan Schletz Nippert
Charyl Dotson Olander
Susan Nelson Pearsall
Jennifer Powell Prasek
Nancy Applebaum Rosenberg
Lynda Wredberg Sequin
Charlene Friedenson Schwartz
Kathleen Gombold Siesennop
Charlotte Highmark Sjoberg
Kathleen J. Skradski
Arlene L. Sletten
Lorraine McCarvill Toohey
Patricia Rupp Ziemer

*Address unknown
**Deceased

If you are a member of either class, please make a special effort to attend the annual alumni banquet. The reservation form is on the last page. Classmates from 1945 and 1970 will be seated together, so you will have the opportunity to renew friendships.

We appreciate having the correct addresses of alumni. You can help by sending us any addresses of those graduates with whom we have lost contact. Thanks!

Cheryl Scott Named UMHC Employee of the Month

Cheryl Scott, a 1985 alumna and a medical technologist in our virology laboratory, was named UMHC Employee of the Month for May 1994. Nancy Novak, a member of the UMHC Diverse Workforce Council, stated in her nomination letter:



"For the last two and one-half years, Cheryl has been a member of the Diverse Workforce Council. Whatever Cheryl does she does with enthusiasm and commitment. Under her leadership, the first Ethnic Food and Art Festival was held at UMHC. This program heightened cultural awareness and gave us an opportunity to celebrate our different heritages. She was instrumental in coordinating a brown bag session on 'Hmong Addictions to Opium and Its Implications for Treatment,' which looked at alternatives in healing and how culture influences treatment.

This year Cheryl coordinated efforts to organize the 'Celebrate Our Diversity' festival. She also acts as a facilitator for the Twin Cities Black Women's Health Collaborative in their efforts to identify the health needs of black women."

In addition to her contributions to UMHC and the community, Cheryl presents a session on medical technology to eighth grade students in the Health Sciences Minority Recruitment Program. During this day-long session, approximately 50 students participate in a number of laboratory-related activities and learn about careers in laboratory science.

We are proud of Cheryl Scott's achievements and salute her for being the first laboratorian named as UMHC Employee of the Month.

Eileen Rogers Wins First Medical Technology Distinguished Alumni Award

Eileen Leipus Rogers (1971) was chosen to receive the first University of Minnesota Distinguished Alumni Award in Medical Technology in May 1994. The award was granted by the Medical Technology Alumni Society in recognition of Eileen's 15 years of distinguished service on our alumni board of directors. Eileen has chaired or been a member of the committee that has organized the annual Spring Banquet for over ten years. She has also been a faithful attendee and astute contributor to many board meetings.

Currently, Eileen is the Technical Consultant, Transfusion Services of Allina Laboratories, Twin Cities. She is responsible for the development, coordination and implementation of standardized testing in blood banks across all Allina laboratories, which include those of Abbott-Northwestern, Mercy, United, and Unity Hospitals and the Allina Consolidated Laboratory. Along with these responsibilities, Eileen has been an adjunct teaching specialist of the University at

Abbott-Northwestern Hospital, supervising and instructing students in the blood bank laboratories. From 1993-94 she was the president of the Minnesota Association of Blood Banks.

When asked to summarize her professional career, Eileen replied, "In the 20 plus years I have been a medical technologist, I have never been bored with my job, and I have always derived satisfaction from knowing I have been an important part of the health care team. After I developed my technical skills in most areas of the lab, I continued to find challenges that have included teaching and managing, in addition to learning of the exciting new technologies and keeping up with the explosion of knowledge in the field of medical technology and transfusion medicine. I believe that my education at the U of M provided a very solid base on which to build my career, and the Division of Medical Technology continues to provide support for me and my colleagues. Thank you!"



Gerry Anderson Serves as National President of Sigma Delta Epsilon-Graduate Women in Science

Geraldine Havrilla Anderson is the current national President of Sigma Delta Epsilon–Graduate Women in Science (SDE-GWIS). Founded in 1921 at Cornell University, Sigma Delta Epsilon is intended to advance the participation and recognition of women in the sciences.

The objectives of SDE-GWIS include: improving science education for girls, encouraging women to enter specific scientific fields according to their skills and interests, helping qualified women reenter school or the work force and gaining insights into balancing women's personal and professional lives. Honorary members include Nobel prize winners Rosalyn Yalow (Medicine and Physiology, 1977) and Barbara McClintock (Medicine and Physiology, 1983), Past President of the American Chemical Society, Helen Free, and astronaut Sally Ride.

Gerry Anderson is a 1963 alumna of the U of M Medical

Technology program. She has served on the board of directors of the American Society for Clinical Laboratory Science, is a member of Alpha Mu Tau, an honorary national fraternity of medical technologists, and is cited in Who's Who in Science and Engineering, Who's Who of American Women and The World Who's Who of Women. Ms. Anderson was also featured in the publication MS/PhD 1993-94 in the article, "Goals of a Woman in Science."

All graduate medical technologists engaged in research are eligible for membership in Sigma Delta Epsilon. For more information contact:

Sigma Delta Epsilon, Graduate Women in Science, Inc. Headquarters

P.O. Box 19947

San Diego, California 92159

Phone: (619) 583-4856

Email: dcbrown@crash.cts.com

Marisa Peterson Wins All-University Award



Marisa Peterson, one of our 1994 graduates, recently received the President's Student Leadership and Service Award from President Nils Hasselmo. This award is presented to one-half of one percent of the student body for exceptional leadership and service to the University of Minnesota and the surrounding community. Only 157 students received the award this year.

Marisa was honored for her activities and leadership in several areas. She was vice-president of her class, and helped organize the annual Junior-Senior Luncheon that gives medical technology students the opportunity to meet and exchange information and experiences. She also served on the Graduation Committee. Marisa was chosen as one of three peer tutors in the Division of Medical Technology. She completed a formal training program, and spent several hours each week helping her fellow students with their studies.

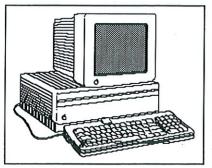
Marisa is also involved in several community activities. She is on the board of directors for the Community Child Care Center and has served as maintenance director and secretary for the Center. In addition to these activities, Marisa maintained an excellent grade point average, and graduated with high distinction. Congratulations to an exceptional student!

Did You Know...???

The Minnesota State Survey reported 81% of the respondents expressed favorable or very favorable views of the University as an educational institution. Over the 20 years the poll has been conducted, positive views of the University are at an all-time high.

Hematology Computer Program Expands

Students of hematology now have a new way to learn blood smear differentials. HEMATOGRAPHY™, an interactive computer tutorial in normal white cell morphology and the "diff" procedure, was developed last



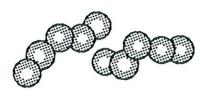
year by Karen
Lofsness. The
program utilizes
scanned images from
photomicrographs of
actual blood smears.
As the student
identifies individual
white cells on the
computer monitor,
immediate feedback

is provided as to the correct identification.

HEMATOGRAPHY is now part of the curriculum for our senior medical technology students, as well as that of second year medical students at both the Twin Cities and Duluth Medical Schools.

Recently, Karen received the Herz Faculty Teaching Development Award to begin work on the second phase of HEMATOGRAPHY. The new program will cover cells that are not normally seen in the peripheral blood, such as reactive lymphocytes, toxic and immature neutrophils, and nucleated red cells.

In March of this year, Karen demonstrated HEMATOGRAPHY to more than 200 medical technology educators at the Clinical Laboratory Educators' Conference in Albuquerque. Plans are now being made to distribute the program commercially.



U of M Part of Career Recruitment Video

The University of Minnesota is featured in a recruitment video, *Your Future, Your Choice: Careers in Allied Health*, produced by the National Health Careers Information Center at Thomas Jefferson University. The 15-minute video focuses on four allied health professions: occupational therapy, radiography-sonography, nutrition and medical technology. Other schools represented are the University of Southern California, Thomas Jefferson University, and the University of Kentucky.

The video is designed to acquaint students with career opportunities that exist in health care. It highlights young professionals who not only enjoy their work, but also have interesting lives outside of their professions.

Several technologists from UMHC screen-tested for the medical technologist role. The director chose **Wendy**



Oien, a 1992 graduate who works in the neutrophil laboratory of UMHC. Videotaping was conducted for two days in May 1994 and included filming Wendy at work, at home and roller-blading around Lake Calhoun. The medical technology portion constitutes about four minutes of the entire video. The University of Minnesota Academic Health Center and the neutrophil

laboratory are prominently included, and Wendy is seen as an articulate, highly competent professional.

This recruitment film is available free as a public service offering from Thomas Jefferson University, and is accompanied by written materials, including information for guidance counselors. Counselors or science teachers who wish to obtain a copy of the videotape may call (202) 333-7001 or write Hr Productions, 2233 Wisconsin Avenue N.W., Suite 300, Washington, DC 20007. (Due to production costs, the video cannot be sent to individual students.) Allow three weeks for processing and delivery.

Did You Know...???

- The average lower division class size on the Twin Cities campus is 27 students.
- Of this year's incoming freshman class, 70% live in residence halls.
- Only 28 cents of every University dollar spent comes from the state. Faculty within the University bring in \$270 million each year in research funding, over \$100,000 per faculty member.

Near-Patient Testing

Jayne Funk Gillen (1980) was featured on the front cover of the February 1995 issue of *CAP Today*. She has worked for two years with Dr. Michael Steffes in a special laboratory utilization project to assist physicians in appropriate test selection and utilization. The *CAP* article dealt with glucose bedside testing, but also addressed larger issues such as: who should be performing bedside testing; who will monitor quality control; who will ultimately oversee the process? In the article, the philosophy of UMHC laboratories in near-patient testing is described:

At the University of Minnesota Hospital and Clinics, there was never any question of responsibility being placed other than with the laboratory, while at Johns Hopkins Hospital in Baltimore, it took the clinical laboratory to convince administration that the laboratory must blanket all diagnostic testing no matter where in the hospital it was performed.

In addition to monitoring bedside glucose testing, our laboratories have also established a mini-laboratory adjacent to three patient ICUs (intensive care units). Technologists from clinical chemistry come to these units every hour to perform stat testing. This change in patient care has resulted in faster turnaround times, decreased blood requirements, and better communications between the laboratory and nursing staffs.



Reorganization of UMHC Laboratories

This past year, the University of Minnesota Hospital and Clinic Laboratories, responding to the rapidly changing environment in health care and continued pressures for cost-cutting, embarked on a comprehensive plan of reorganization. While in recent decades UMHC clinical laboratories grew in numbers and FTEs, the past few years have seen reductions in personnel.

Because further pressures are likely in the future, Dr. Jeff McCullough, Director of Clinical Laboratories, organized a comprehensive study to develop a plan for reorganization. Input was received from a management consultant firm and two directors of prominent laboratories in academic health centers. In addition, a work group consisting of UMHC medical directors and administrators was formed. Key members of this committee visited several other large university hospital laboratories to observe their organizational structures.

The final plan that emerged from this process reorganizes the 21 existing laboratories into five groups. Each group will be managed by one administrator and several group leaders working closely together with the medical director. Recruitment and hiring of an administrator for each group has been completed. The new group administrators are: Kathy Hansen, Karin Libby, Clareyse Nelson, Susan Preston and Chris Senn.

In addition to reducing the management structure, the reorganized laboratories separate the acute 24-hour laboratory (including general hematology, general chemistry, general coagulation, specimen receiving and venipuncture) from the non-acute specialty laboratories. It is expected that the reorganized groups will be more cost-effective and also be more responsive to the needs of patients and health care providers within UMHC.

Can You Help Us?

For the past several years, we listed the names of alumni with whom we had lost contact in the preceding year. We are asking for your help again this year. If you know any of these individuals, or any other alumni who are not receiving *Tech's Talk*, and can supply us with a current address, please call or write to the Medical Technology office.

Mary Ann Riter, 1972 Kathleen A. Miller, 1971 Nancy Levenson Gordon, 1970 Devonne Ostman Nilsson, 1969 Susan Wood Hoff, 1966 Judie Mull, 1964 Kathleen Olson Thompson, 1963 Don Novak Whitney, 1962 Kathleen Dahle Moss, 1960 Carolyn Miller Hakim, 1955 Hazel Lenhardt Dickson, 1939 Vivian Young Bennett, 1934 Mildred Whitaker Hansen, 1928

If you have changed your address, please let us know so that we can continue to send out as many *Tech's Talks* as possible. This year we are mailing newsletters to nearly 2,100 out of a possible 2,575 alumni. Thank you for your assistance!

Master's in Clinical Laboratory Science Update

Our graduate program in Clinical Laboratory Science continues to attract excellent students, who perform significant research and represent our department well in publications and presentations. Included among these individuals is Ellen Voss who submitted an abstract describing the results of her thesis research "Utility of Serum Cardiac Troponin T and CK-MB for Assessing Canine Myocardial Infarct Size" to the American Association for Clinical Chemistry (AACC). In recognition of her work, she received a travel award to attend the annual meeting, and also won "honorable mention" in the student poster contest.

The following five students completed their master's degree programs this year:

Sharon Bydlon Hasslen (Medical Technology class of '82) is currently a research associate at Stanford University, following the successful defense of her thesis, "Detection and Spatial Distribution of Cell Adhesion Molecules on Human Neutrophils." Sharon, advised by Dr. Robert Nelson, had the opportunity to present this research at an International Congress in Sydney, Australia.

Tripat Pal Kaur, advised by Dr. Walid Yasmineh, completed her studies of "Catalase and Tumor Necrosis Factor

(TNF) Compared as Possible Markers of Graft Versus Host Disease (GVHD)." This work was presented at the World Congress of Medical Technology in Hong Kong in July 1994. Tripat is employed as a medical technologist in the UMHC laboratories.

Siew-Teh Lee is working as a research associate in Singapore, Malaysia, following the successful completion of her thesis, "Determination of Clonality Utilizing X-Chromosome Methylation Patterns and the Polymerase Chain Reaction." This research, advised by Dr. Craig Litz, was also presented at the World Congress of Medical Technology.

Pocheng Liu is currently enrolled in the Pathobiology Ph.D. program, after completion of his M.S. degree and research with Dr. Stanley Erlandsen. His thesis title was "Microbial Colonization and Degradation of the *Giardia* Cyst Wall."

Ellen Voss received her degree in January 1995 with completion of the work described above, and is currently enrolled in the Pathobiology Ph.D. program at the University of Minnesota. Ellen's adviser was Dr. Fred Apple at Hennepin County Medical Center.

"Port of Call" 1995 State Meeting

The 1995 Minnesota Spring Meeting of laboratory practitioners will be held May 18-20 at the Duluth Entertainment and Convention Center. Jointly sponsored by the Minnesota Society for Clinical Laboratory Science, Clinical Laboratory



Management Association, and the Minnesota State Society of American Medical Technologists, the event's Lake Superior shoreline setting and cruise theme will provide the backdrop for a strong educational program and exhibit display.

Each day will begin with a magnet speaker. Thursday will feature Robert Kisabeth, M.D. from Mayo Clinic, who will discuss "The Laboratory as Gate Keeper—Taking New Competitive Strides." Saturday's magnet speaker will be Linda Johnson, discussing "Today's Formula for Success." Other program topics include: legislative updates, aging, INR, in vitro fertilization, an alternative career workshop, health care economics and body fluids. Social events for the three days start with a Thursday evening cruise featuring live entertainment. Friday will begin with an early morning lake walk and end with an evening at Grandma's Sport Garden. The finale on Saturday will be a golf tournament. A new event this year is the silent auction, with proceeds going to help promote state licensure. Make Duluth your "Port of Call" May 18-20!

For more information contact Cindy Wilson-Nordskog at (218) 725-3352.

The 21st World Congress of Medical Technology

The 21st World Congress of Medical Technology was held July 24-29, 1994 in Hong Kong, with approximately 1,200 individuals from 40 nations participating. Over 40 American laboratory professionals attended the meeting, including **Karen Karni** and **Nancy Brunzel** of the University of Minnesota.

The Congress, which was presented under the auspices of the International Association of Medical Laboratory Technologists (IAMLT), provided opportunities for participants to compare laboratory methodologies, decision-making, instruction and management. All sessions were presented in English. Among the presenters at the Hong Kong meeting were Karen Karni and our CLS graduate students, Siew Teh Lee and Tripat Pal Kaur.

According to Karen and Nancy, one of the most striking contrasts between the West and East was in the poster presentations at the Congress, where incredible high-tech graphics from the United States and Europe stood side by side with graphs and tables from mainland China that were hand-drawn in pencil.

One of the highlights of the Congress was the American Book Donation Project. Over 600 books were donated by American laboratorians to attendees from developing nations. Faculty from the University of Minnesota provided 47 books, which were shipped by boat in February and arrived safely in Hong Kong in May.

The International World Congress of IAMLT is held every two years. Future sites include: Oslo, Norway, in 1996; Singapore in 1998; and Vancouver, Canada, in 2000. All clinical laboratory professionals—including our alumni—may attend these meetings. For those interested in the summer 1996 meeting in Oslo, please contact the Medical Technology Office after October 1995 for more information.

Items from Previous Issues of *Tech's Talk*

1955 – Construction of the Mayo Memorial building was completed in the fall of 1954. All laboratories (with the exception of Bacteriology and Pathology) and the Medical Technology offices were conveniently located together on the second floor.

1965 – The honors program in Medical Technology was established. Fourteen students with grade point averages of B or better were given the option to select individual study for a 14-week period in one of five areas: blood bank, chemistry, coagulation, hematology morphology or microbiology.

1975 – The total number of applications for admission to the Medical Technology program was 107. The average science GPA of the 60 students admitted was 2.96 (range 2.26 to 4.0), and their average total GPA was 2.99 (range 2.38 to 3.98).

1985 – For the first time, the annual issue of *Tech's Talk* was produced on a computer, an Apple Macintosh "Fat Mac" (512 K), purchased with funds contributed by alumni.

Dr. Benson Honored

Dr. Ellis Benson, professor and former head of the Department Laboratory Medicine and Pathology, received the University's highest alumni honor, the Outstanding Achievement Award, at the Medical School's June 3, 1994, commencement. Dr. Benson was also honored in July at the Association of Pathology Chairs (APC) annual meeting when he was elected as one of the first Senior Fellows of the organization.

A Memory of the U

"There were only 45 students in my class at the U which made it easier to get to know my classmates. At that time, tuition and books cost under \$3,000 for four years. When I see how much tuition and rent are today, I want to help students."

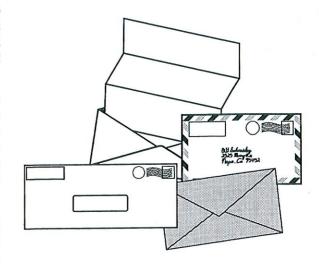
Linda Fredrickson Medical Technology '71

Let's Keep in Touch

Have you often wondered what has happened to the classmates you haven't seen since graduation? Once again, there will be a display at this year's Medical Technology Alumni Society Annual Banquet that will give attendees the opportunity to find out what their colleagues are doing.

Each year, the "Let's Keep in Touch" display is a big success at the Banquet. Please help us continue this tradition by contributing some personal information about your life since graduation. (Even if you sent information last year, please contribute again this year.) Submitted information will be displayed on bulletin boards at the banquet. Whether you can attend the banquet or not, we would like to hear from you.

It is not necessary to limit the information you submit to that requested on the form. Letters and especially pictures would be appreciated, and the pictures will be returned if you wish. Otherwise, we will place the photos in your student file. Yes, we still have a file on each of our graduates!



Name:	(
	Phone Number:				
Career Information:					
		,			
,					
,					

Please mail to: Division of Medical Technology Box 609 UMHC 420 Delaware Street S.E. Minneapolis, MN 55455-0374

Annual Banquet News

for Alumni and Friends

Join us at JAX Cafe for this year's banquet. Friends and spouses are welcome! JAX Cafe is located about three miles from the University, and there is ample free off-street parking.

the Unive	ersity, and there is ample free off-str	eet parking.		
Date:	Monday, May 8, 1995 5:30 p.m. Social Hour (with cash be 6:30 p.m. Dinner with program to fo			
Place:	JAX Cafe 1928 University Avenue N.E. Minneapolis, MN (612) 789-7297			Please note new location.
Menu:	Broiled Top Sirloin Baked Idaho Potato or Chicken Florentine Boneless Breast of Chicken with Spinach and cheese-filled pasta she	ells and marina	ra sauce	
	Broiled Filet of Walleyed Pike Lemon peppered with new potatoes Salad, Vegetable, Bread Basket, Be	verage and Dec	ssart	Note: Tables are reserved for the honored classes: 1945, 1970, and 1995. For others who wish to sit
Cost:	Alumni Association Members Nonmembers Seniors (Age 60 and over)	\$24.00 \$25.00 \$22.00	SSEIT	together, we suggest you arrive a little early to meet your dinner mates and choose your seats.
Program:	The Certainty of Change by Billie An	ne Herranen Ju	ni, Infection Co	ontrol Practitioner, class of 1970
Special rec	cognition will be given to the classes	of 1945 (50 year	rs), 1970 (25 yea	rs), and to the 73rd graduating
Deadline	for reservations: April 30, 1995. Sen	d your reservat	ions in early be	cause seating is limited.
Thi	s is the only mailing that you will re Please mark your ca			
Please res	erve places for me at the Mec	dical Technolog	y Alumni Dinn	er.
I enclose s	\$ as payment. Broiled T	op Sirloin	_ Chicken Flo	rentine Walleyed Pike
Please res	serve seats for me at the 1945	table.		
Please res	serve seats for me at the 1970	table.		M.A.A. Member: Yes No
Name (plea	ase print)		_Class	M.A.A.#
Address			_	
			_	

Make check payable to: Medical Technology Alumni Society

Mail by April 30, 1995, to: Division of Medical Technology

Box 609 UMHC

420 Delaware Street S.E. Minneapolis, MN 55455-0374

As regular readers of this publication are aware, the Division has been publishing the newsletter annually since 1947. We try to inform you of recent happenings within the Division and the Department, current trends in the profession, and to serve as a vehicle for alumninew However, we would really like to know what the readers would like to see in future issue Would you like more features about individual alums, more about the University as a whole news from ASCLS or MNSCLS, less of anything?? We would greatly appreciate your feedback on recent issues and suggestions for future articles. <i>Tech's Talk</i> is really for you, and we need your input.	n s. s. e,
If you have any comments, or ideas for future issues, please fill out the section below and return it to:	n
Editor of <i>Tech's Talk</i> Division of Medical Technology University of Minnesota Box 609 UMHC 420 Delaware St. S.E. Minneapolis, MN 55455-0374	
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Division of Medical Technology Department of Laboratory Medicine & Pathology University of Minnesota Box 609 UMHC, 420 Delaware St. SE Minneapolis, MN 55455-0374

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