

# TECH'S TALK

DIVISION OF MEDICAL TECHNOLOGY  
UNIVERSITY OF MINNESOTA

## 75th Anniversary of U of M Medical Technology Program

The Division of Medical Technology, University of Minnesota, is the oldest baccalaureate degree granting medical technology program in the nation. The first two degrees in medical technology were granted by the University in 1923, and 1998 marks the 75th anniversary of this historic event.

Before the founding of our program, most laboratory personnel were trained "on the job" by serving hospital apprenticeships. There were no criteria for either practitioners or performance in the medical laboratory. As the number and complexity of laboratory tests increased, the necessity for formalized training in laboratory principles and techniques became apparent. The University of Minnesota had the foresight to respond to this need. A committee of three medical school physicians, headed by Richard Olding Beard, associate professor of physiology, developed a curriculum leading to the baccalaureate degree in medical technology.

In March 1923, after completing the four-year program, **Kathryn Francis** of Minneapolis became the first person to earn a bachelor of science in medical technology. In December of the same year, **Marjorie Knowlton** of St. Paul also received the B.S. degree in this new discipline.

Kathryn Francis worked for a short time in the Warren, MN hospital, married Ray Stahmann, and moved to Beverly Hills, CA. We were unable to follow her career further, but were fortunate to find her junior year photograph in the 1922 *Gopher* yearbook.



**KATHRYN A. FRANCIS**

Marjorie Knowlton had a long and extraordinary career in laboratory science. For several years she did research at the University, studying the use of fluoride to prevent tooth decay. Following World War II, she traveled to Italy with a UNICEF project to determine the effects of war on the health of the civilian population. She returned to the United States, and concluded her career in hepatitis research at the Walter Reed Army Hospital in Washington, DC. After retiring, she moved back to Minnesota. Many of us were privileged to know Marjorie, who died in 1991 at the age of 90. We were not able to locate a picture of her.

To recognize the graduation of these two pioneers in medical technology, a 75th anniversary celebration will be held on May 11, 1998, at the Radisson Hotel Metrodome on the University campus. The event will begin with recollections from faculty members and representatives from the 50th anniversary (1948), 25th anniversary (1973), and most recent (1997) graduating classes. Following a luncheon at which former and present teachers will be honored, the day will continue with campus tours and exhibits of memorabilia. The celebration will conclude with the traditional annual alumni banquet. There will be ample time to meet and greet classmates, teachers, and other medical technology friends.

Further details, a schedule for the day, and a registration form can be found on page 19 of this *Tech's Talk*. We hope you will be able to join us on this historic occasion.

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## Director's Letter

This year, I have been privileged to serve as president of the American Society for Clinical Laboratory Science. One of my responsibilities as president is to write a monthly column in the Society newsletter, *ASCLS Today*. My November column brought forth a number of positive comments, and I thought that readers of *Tech's Talk* might enjoy it as well.

### 'KEEP AT LEAST ONE IRON HOT'

I grew up on the Iron Range of northeastern Minnesota. In 1900 it was still considered a wilderness, and in my home town of Soudan (currently with fewer than 500 residents), electricity was installed in 1924 and plumbing in 1937. My parents bought their house (formerly a company house of U.S. Steel) in 1948 for \$1100. Thus, my background—surely unsophisticated—provides some perspective for the comments below, which do have historical context.

Over ten years ago, I attended a seminar with a title somewhat similar to the one above. The presenter, a psychologist by background, was speaking to fellow female health care professionals. She began by recalling that in "the old days" when women ironed many of their families' personal items, they had a number of flat irons. These irons, usually three in number, were heated on the top of a wood-burning stove. As one iron became hot, it was used to press a portion of a garment. When it cooled, it was replaced on the stove to be reheated, and a second hot iron was used. Then the third iron was used and reheated. Handling the irons in this prescribed pattern insured that at all times, at least one iron was hot.

Personally, I remember my grandmother using this very same scheme of ironing in the early 1950s to press her family's clothing. Then, as now, I admired the pattern, the repetition, and most of all, the results that ensued. (Could I, today, starch and press a shirt to her standards?)

Using this pattern of ironing as a frame of reference, what were the psychologist/presenter's words to us? She said that at all times of our lives, we need to "keep at least one iron hot." According to her, there are three "irons" or aspects to our lives that impact our time, our psyche, and perhaps even our soul.

- ◆ Our personal life, usually encompassing immediate family and personal values;
- ◆ Our professional life, including our work and professional endeavors;
- ◆ Our friends (extended family)—those who provide us with perspective, humor, honesty and external support.

Her message was this: as we pass through life, we need to keep at least one of these irons hot. That is, when our personal and professional lives may be troublesome, we need our friends to provide the support to keep us going. Or, if our friends have been busy and have not kept in touch, and our job is somewhat crazy, we need our

immediate family's support and our own personal beliefs to keep us on an even keel. Likewise, if our friendships and personal lives are unraveling, we need our professional niche and accomplishments to uphold us.

This presenter reiterated for the third time, "Whatever is happening, you need to keep at least one iron hot." This pattern is essential for maintaining equilibrium, balance, and hope. She also said there are times when we may be fortunate to have two irons that are hot simultaneously. And, if we are truly blessed, even if briefly, we may find all of our irons hot at the same time. (What a bonanza!)

Her message has remained with me for over a decade, and I have often reflected which of my own irons is currently hot, tepid or cold. On different occasions, it has sometimes been my own personal beliefs and close family, at other times my friends, or professional accomplishments that have been there (hot) and sustained me. Rarely have all irons been cold at the same time.


There are a few more morals to this parable. First, while the irons are present, the stove needs to be heated. We as individuals, then, are accountable to provide the firewood and matches to start and keep the fire going. That is, as individuals we need to provide ourselves, friends and our professional life with the fuel to maintain each entity. Ultimately, we and no one else must maintain the support systems in our own lives.

Secondly, it is our responsibility to know which irons are hot at any given time, and which need to be heated. We cannot count on a cold iron—it will let us down.

Finally, we cannot work with any one iron too long; each needs to be returned to the stove for reheating. Thus, we must know when to use our support systems to preserve or restore us, and which ones will help us most in a given situation. And when adversity strikes—which is inevitable—we will be able to meet it with the strength from our own heated irons, ready and waiting to be used.)



Karen R. Karni, Director

	<b>Editors:</b>	
	Helen Hallgren Karen Lofsness	
<b>Contributors:</b>	Claire Bjorklund	Karen Karni
	Nancy Brunzel	Lynn King
	Salli Clysdale	Lillian Sarkinen
	Stella Cook	Pat Solberg
	Joanna George	Barb Streifel
	Bill Gleason	Cheryl Swinehart
	Naomi Hanson	Mike Tsai
	Bob Jechorek	Carol Wells
<b>Division of Medical Technology</b>		
<b>Department of Laboratory Medicine &amp; Pathology</b>		
<b>Medical School</b>		
<b>University of Minnesota</b>		
<b>Box 609 Mayo</b>		<b>Phone: 612/625-9490</b>
<b>420 Delaware Street S.E.</b>		<b>Fax: 612/625-5901</b>
<b>Minneapolis, MN 55455</b>		<b>E-mail: medtech@tc.umn.edu</b>

# Karen Lofsness Wins Distinguished Alumni Award

The fourth annual Medical Technology Distinguished Alumni Award was presented to Karen Lofsness in May 1997. She graduated from the University with a B.S. in Medical Technology in 1959, earned an M.S. in 1975, and is currently associate professor of hematology, Division of Medical Technology.

Karen Lofsness is known as a "teacher's teacher." She joined the medical technology faculty in 1975, and quickly gained a reputation for her expertise and effectiveness in teaching and mentoring students. Over the past five years, Karen has expanded her interests in hematology to include the computer imaging of blood cells and software development. She is the author of two published CD-ROMs on hematologic morphology, and has also developed a hematology Web site. Her main "non-scientific" area of interest is the early history of the University of Minnesota.

In 1992 Karen was chosen to receive the Horace T. Morse-Minnesota Alumni Association Award for excellence in undergraduate education, an honor given to only ten University faculty members each year. Those who have studied with Karen recognize her love of hematology and her enthusiasm for teaching it. Many of our graduates have gone on to earn advanced degrees in hematopathology related fields, and they often cite her influence on their career decisions.

We are proud of the achievements of Professor Lofsness, and equally proud that the Medical Technology Alumni Society's Board of Directors chose to recognize her with this award.



## A Little Bit of History

In 1923, when the first two students graduated from medical technology, the following people were making news at the University. You will probably recognize most of the names—some from buildings on campus and others from their association with the Division of Medical Technology.

- ◆ Lotus Coffman was the president of the University.
- ◆ Cyrus Northrop, second University president, died the previous year.
- ◆ Alfred Owre was dean of the Dental School.
- ◆ Everett Fraser was dean of the Law School.
- ◆ Elias Lyon was dean of the Medical School.
- ◆ Clarence Jackson was director of the Department of Anatomy.
- ◆ Hal Downey, professor of anatomy, published his study on lymphocytes in infectious mononucleosis.
- ◆ Louise Powell was director of the School of Nursing.
- ◆ William A. O'Brien was an instructor in pathology.
- ◆ Owen Wangensteen was president of the Medical School junior class.
- ◆ The yearbook was dedicated to Dr. Henry Williams, "Father of Minnesota Football."

## Did You Know.....???

The Twin Cities campus of the University of Minnesota is made up of 19 colleges, offers 157 bachelor's degrees, 202 master's degrees, 116 doctoral degrees, and 5 professional degrees. Enrollment in the fall of 1996 was 37,108. The University ranks among the top 10 public universities in voluntary contributions, with \$140 million raised in fiscal year 1996 from alumni, friends, corporations, and foundations.

# 1997 Major Contributors

The following contributed \$100 or more to the Division of Medical Technology in 1997:

## \$1,000-\$1,500

Lorna Henderson Canfield  
Mary Moriarty Galvani  
Angie Sturgeon Skinner

## \$500 - \$999

Ruth A. Cardinal  
Mardie G. Geiser  
Marilyn M. Klein  
Karen and Wayne Lofsness  
Verna L. Rausch  
Ella M. Spanjers

## \$300 - \$499

AETNA Life and Casualty Foundation  
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CIGNA Foundation  
General Mills Foundation  
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Carol Luck Harris  
Jean Houger Hengesbaugh  
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Idelle Hanson Hultgren  
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Karen Soderberg Karni  
Patricia Maser Koors  
Dorothea Poppenberger Kryewinske  
George Kuprian  
Laboratory Medicine and Pathology  
Memorial (Carl Soderberg)  
Vickie Christensen Larson  
Karin Rittgers Libby  
Marlys Lund  
Donna Messerli Meyer  
Diane Olson Michalik  
Shirley Lindquist Michel  
Gerald Mulcahy  
David E. Nevalainen  
Raymond Newman

Elizabeth Hall Perry  
Alice Estes Pierce  
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Kathryn Rantala  
Anne M. Ringgenberg  
John L. Roesler  
Eileen Leipus Rogers  
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Melicent Hane Schmidt  
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Cheryl Lynne Scott  
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J. R. and Harriet Broman Snoga  
Clarice (Phyllis) Foley Stapel  
Dorothy Bennett Trach  
Thomas M. Vesley  
Aija Kancitis Vikmanis  
Bethany Young Walters  
Nettie Conser Warwood  
Verne and Phyllis Hanson Weiss  
Marilee Huisinga Welliver  
Joyce Clarke Wian  
Lori Wischnack  
Walid and Joan Zittleman Yasmineh

# 1997 Graduation Ceremony

The Student Union on the St. Paul campus was the site of the September 27th graduation ceremony for the medical technology class of 1997, the 75th graduating class. Family and friends were welcomed by **Steve Mattson**, president of the Medical Technology Student Council. The graduation address was delivered by **Margaret Perryman**, chief executive officer of Gillette Children's Specialty Healthcare. The senior presentation, a slide show portraying the class members in and out of the classroom, was narrated by **Baochau Tran** and **Nestor Nacionales**.

Traditionally, the graduating class selects the faculty members to present the special awards and lead the oath ceremony. **Robert Jechorek**, scientist, introduced graduates

who received scholarship funds, were named to the Dean's List, and graduated *with distinction* or *high distinction*. This year, two-thirds of the class graduated with these honors. **Kristine Monson-Jobe** and **Timothy Snell** each received a special gift in recognition of achieving the highest grade point average in the professional program. **Karen Lofsness**, associate professor, led the class in reciting the Medical Technology Oath and introduced each class member as they signed the oath. Following the oath ceremony, **Karen Karni**, professor and director of the Division of Medical Technology, conferred the degrees. The new graduates were then greeted by **Barbara Streifel**, president of the Medical Technology Alumni Society. A reception followed on the Student Union terrace.



Medical Technology Class of 1997

Front row (left to right):

- Nestor Socrates Nacionales**, Crystal, MN  
*with distinction*
- Kristine Elise Monson-Jobe**, Bismarck, ND, *with high distinction*
- Baochau Mai Tran**, Eden Prairie, MN  
*with distinction*
- Sammy Ngoc Nguyen**, Minneapolis, MN
- Trang Do**, Minneapolis, MN  
*with distinction*
- Anh Do**, Minneapolis, MN  
*with high distinction*
- Chi Nguyen**, Minneapolis, MN  
*with distinction*
- Julia Nguyen**, Bloomington, MN
- Not pictured: **Denise Edelstein**, Minneapolis, MN

Middle row (left to right):

- Timothy Paul Schmidt**, Nicollet, MN  
*with distinction*
- Brian David Emery**, Boca Raton, FL  
*with distinction*
- John B. deLeon**, Stillwater, MN  
*with distinction*
- Bradley Scott Wigton**, Duluth, MN
- Andrew Ray Sandquist**, St. Paul, MN  
*with distinction*
- Curtis Majerus Forehand**, Cannon Falls, MN, *with high distinction*
- Steven Ronald Mattson**, Duluth, MN  
*with distinction*
- Mustefa Gameda Wako**, Wotera, Oromia (East Africa), *with high distinction*

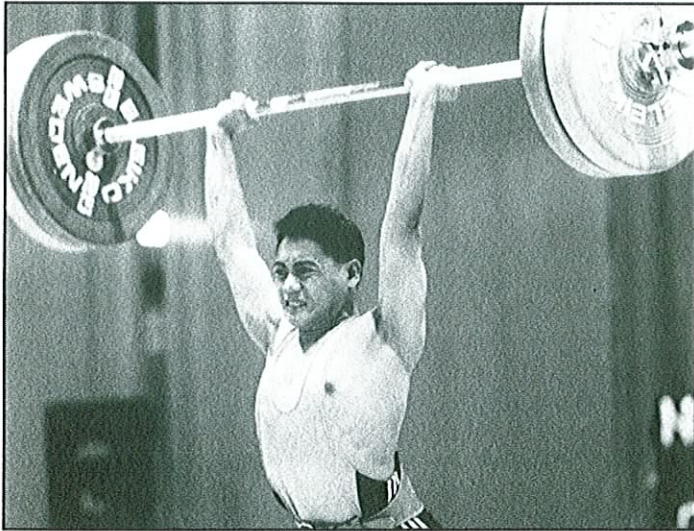
Back row (left to right):

- Inessa Molodan**, St. Paul, MN  
*with distinction*
- Timothy David Snell**, Brooklyn Center, MN, *with high distinction*
- Therese Anne Martin**, New York, NY
- Ann Marie Bothun**, Rochester, MN
- Suzanne Jeanette Christ**, Afton, MN
- Misty Lee Larson**, Brainerd, MN  
*with distinction*
- Hoang Chuong**, Minneapolis, MN  
*with distinction*
- Nikole Ann Rahn**, St. Francis, MN
- Thanh-Hang Dang**, Minneapolis, MN  
*with high distinction*
- Nigussie Bedasso Felema**, Arisi Negele, Oromia (East Africa)

Photograph by **Larson Photography**, Brainerd, MN

## Med Tech Grad Has Weightlifting Goals

Nestor Nacionales, 1997 medical technology graduate, is a nationally ranked weightlifter with aspirations of moving



into international competition. Nestor, who began weightlifting while at Armstrong High School, won the 1994 National Junior Championships. He also won a silver medal at the 1995 US Olympic Festival. Last year, competing in a new weight class (64 kg./141 lb.) at the USA National Weightlifting Championships, Nestor placed third, earning a bronze medal. He plans to continue training in hopes of competing in the Olympic Trials for the year 2000.

Nestor and his family moved to Minnesota from the Philippines more than ten years ago. His sister **Cora Nacionales** is a 1992 graduate of our U of M Medical Technology program, and works in the cytogenetics laboratory of the Mayo Clinic in Rochester, MN.

## Molecular Biology Credential Available from the NCA

A credentialing examination for baccalaureate-degreed laboratory personnel who specialize in molecular diagnostics has been developed by the National Credentialing Agency for Laboratory Personnel (NCA). **Cathie Leiendecker Foster**, senior scientist in the Department of Laboratory Medicine and Pathology at the University of Minnesota, served on the task force that created the new exam, which was first given in July 1997, and will continue to be offered annually in July. Upon successful completion of the 100-item exam, the title and credential of Certified Laboratory Specialist—Molecular Biology, CLSp(MB), is awarded.

## Ella Spanjers Says 'Good-bye'

After spending her entire career at the University of Minnesota, Ella Spanjers, manager of the special hematology laboratory and teacher of medical technology students and residents for the past 50 years, has decided to retire.

Ella, a Minneapolis native, earned her degree in medical technology from the University in 1948, and began working in the hematology laboratory. She moved across the hall to special hematology in 1954, became a senior technologist in 1967, and laboratory manager in 1969. Even though she has officially retired, Ella still works in special hematology as a "volunteer," revising the procedure manual and developing new methodologies to stain bone marrow sections.

Because her knowledge of bone marrow processing and cytochemical staining is so widely recognized, Ella is frequently consulted by technologists and pathologists throughout the United States. She is co-author of a chapter entitled "Preparation and Evaluation of Bone Marrow" in the textbook *Clinical Hematology: Principle, Procedures, Correlations*, edited by another Minnesota graduate, Anne-Stiene Martin.

Away from the laboratory, Ella is a Gopher sports enthusiast, with season tickets to many athletic events. She is an avid athlete herself, skiing in the winter and golfing and hiking in the summer. Ella plans to leave her volunteer position in special hematology in the near future.

Ella Spanjers has unselfishly shared her knowledge and love of hematology with generations of students and colleagues. She has had a profound and widespread influence on the practice of laboratory hematology. For many of us, Ella is and will always be "special" hematology. Her dedication, expertise, and most of all, her generous spirit will be greatly missed. We wish her the very best.

## Cyber-Connect with Us

Do you have some "news" about yourself or other Minnesota medical technology graduates? Do you have questions or concerns about the medical technology program at the University of Minnesota? Do you just want to say "Hello?" If you have e-mail, send us a message:

[medtech@tc.umn.edu](mailto:medtech@tc.umn.edu)

If you prefer to use ground mail, our address is on page 2 of this newsletter. We'd love to hear from you, and we welcome your contributions and comments.

# A Comparison of the Curriculum: 75, 50, 25 Years Ago and the Present

In keeping with the celebration of the 75th anniversary of the Division of Medical Technology, we thought it might be of interest to you to see how the curriculum has evolved over the years. We still have official bulletins for these years, and the information below is extracted from them.

Two students graduated from the program in 1923, 75 years ago. At that time we had a four-year program leading to a bachelor of science degree. The first two years were spent in the College of Science, Literature and the Arts; the last two years were in the Medical School. All students were required to take inorganic and organic chemistry, qualitative analysis, math, animal biology, and physics. There was a choice of four different tracks:

- ◆ Specialization as a clinical technician;
- ◆ Technical service in pathology, neuropathology or gynepathology;
- ◆ Technical service in bacteriology and serology; or
- ◆ Technical service in anatomy or neurology.

For each of these areas, additional specific course work was taken. Following completion of the academic work, at least one quarter was spent in practical training in associated laboratories at the University Hospital, Minneapolis General Hospital, or Charles T. Miller Hospital. Tuition was \$30 per quarter.

Twenty-five years later, in 1948, the scientific course work remained much the same, with the addition of zoology, histology, anatomy, and bacteriology. The junior year included courses in physiological chemistry, physiology, immunity, medical bacteriology, parasitology, and hematology. The senior year consisted of a full 12 months of practical training in the University Hospital clinical laboratories. Students who had satisfactorily completed the course in medical technology had the option of spending an additional six months of practical training in the X-ray laboratory, for which they received a certificate in

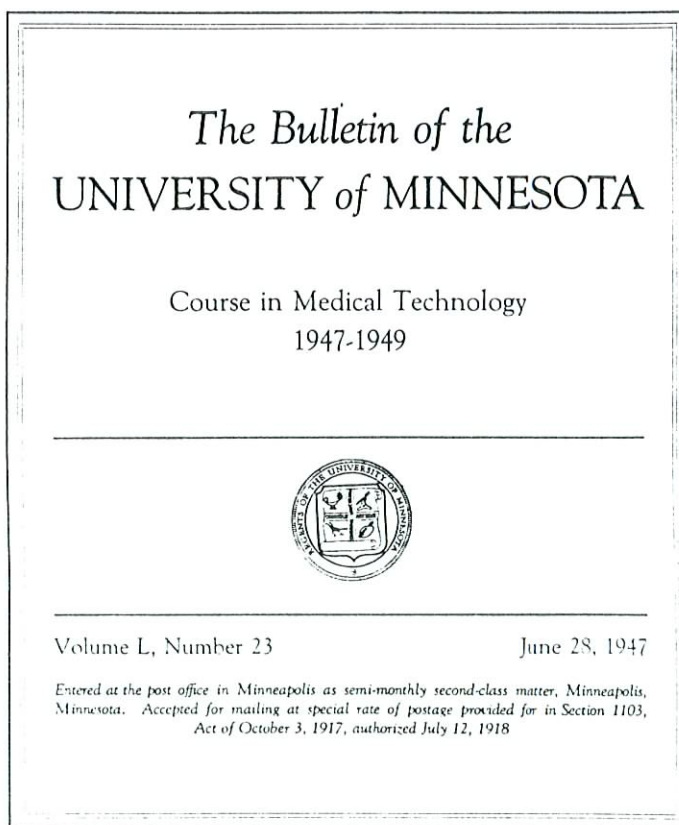
X-ray technology. Tuition had risen to \$42 per quarter for the professional program.

By 1973, the program had already changed to a 2+2 format. Basic scientific requirements in the first three years remained much the same. Pre-clinical courses were added to the curriculum, and the clinical rotations were shortened to 20 weeks. Four weeks each were spent in blood bank/hematology, clinical chemistry, microbiology and special laboratory methods. The change from a 3+1 to a 2+2 format resulted from several initiatives. First, the University required more liberal education courses and the previous curriculum was heavily science oriented. Second, experience with an honors course had

demonstrated that a shortened clinical experience was not detrimental to the professional development of students. Finally, it appeared that the increased workload in the clinical laboratories stifled efforts to provide challenging situations to the students. Tuition was \$19.25 per credit hour for residents or approximately \$250 per quarter.

Currently, our students enter the professional program in the junior year, and they complete their basic science course requirements before entering the senior year for preclinical professional course work and clinical rotations. Histology, zoology and quantitative analysis are no longer required. The clinical rotations consist of 23 weeks in a variety of settings, including

Fairview University Medical Center, Abbott-Northwestern Hospital, Mayo Clinic, Veteran's Affairs Medical Center, Memorial Blood Center of Minnesota and North Central Blood Services. Additional training in virology and a specialty rotation consisting of a week in flow cytometry, tissue typing, cytogenetics, surgical pathology, molecular diagnostics or forensics have been added. For 1997-98, tuition costs are \$90.45 per credit for residents or about \$1200 per quarter.



# Alumni News

**Ruth Potter Potter** (1942) operated a civilian defense blood bank at Luther Hospital in Eau Claire, WI. She also supervised the blood bank at the Veteran's Hospital, Minneapolis and taught at the Medical Institute of Minnesota under Dr. Lucille Hoiland.

**Charlotte Helgeson Hansen** (1944) of Jamestown, ND writes, "I am a 1944 graduate of the program and have always valued what you are doing. When I applied for a job in Texas, years ago, I was told there were no vacancies. However, when they heard in the course of the conversation that I was a graduate of Minnesota, suddenly an opening appeared. I have used that story several times in telling students how important it is to choose a college that is highly regarded."

**Della Kruse Ramsden** (1944) had a long (45 years) and distinguished career in medical technology encompassing laboratories in Long Beach, CA, the Mayo Clinic in Rochester, MN and Seattle, WA, where she is now retired.

**Lorna Roper Brown** (1947) worked in laboratories at the University of Minnesota, Veteran's Administration Hospitals in Minneapolis and Seattle for 16 years. She received a master's degree in library science at the University of Washington in 1996 and served as a library consultant in Bangkok, Thailand from 1968 to 1977.

**Virginia Winkle James** (1947) received a master's degree in microscopic anatomy (hematology) from the University of Minnesota. She worked in special hematology at the Mayo Clinic in Rochester, MN.

**Sharon Malmstrom Bastian** (1959) is assistant professor of life sciences, Center for Clinical Laboratory Science, Indiana State University. She was awarded the Excellence in Teaching Award, Arts and Sciences, in May 1996.

**Mary Hollenhorst Lazarus** (1968) received a master's degree in molecular and cell biology from Penn State University in 1986. She worked as a protein chemist at Genentech, and in data management for Genentech clinical trials. She is currently a manager in the regulatory affairs department at Vivus, Inc., a small pharmaceutical company in California.

**Jan Koepke Ringer** (1972) earned a master's of public health degree in health education from the University of Minnesota. She currently works at the Health Service at the University of Minnesota Duluth and "loves it." She and her husband also raise sheep and spin wool.

**Jerilyn Hagberg Bergdahl** (1972) of Charlotte, VT is currently teaching high school chemistry, biology and ninth grade science. The 11 years before receiving her

teaching degree were spent in research on the apple scab fungus. She developed an ELISA procedure to test for the spore in orchards.

**Marba Sanders Pogue** (1972) is the head of the Fairview University Medical Center Laboratory Information System blood bank project. She also is a member of the Information Systems Committee of the American Association of Blood Banks and a member of the board of directors of the Medical Technology Alumni Society.

**Jeanne Elsen Loeffler** (1974) worked at North Memorial Hospital in Minneapolis and then was chief technologist at St. Elizabeth's Hospital in Chicago. After several years out of the field, she is back in Minnesota working part-time at St. Croix Valley Memorial Hospital. She writes, "My career in medical technology has done for me just what I had hoped. I could choose my jobs according to interest and need. I worked the bench, did supervisory and administrative work, set up a lab, and did teaching."

**Lisa Jarvis** (1977) earned a Ph.D. in biochemistry from the University of Minnesota in 1992. She spent four years as a post-doctoral fellow in Tucker LeBien's laboratory at the University of Minnesota and is now a scientist in hematology quality control at R & D Systems Inc., Minneapolis.

**Claire Bruskevitz Catanzariti** (1977) is currently working in virology/microbiology at the London Health Sciences Centre in London, Ontario. She says, "I'm often reminded of and am grateful for my training at the University of Minnesota. Today, we're faced with rapidly changing technology and increasing pressures to reduce costs. Thank goodness for having learned the 'med tech' discipline at the University of Minnesota."

**Sue Rotzien Corby** (1981) was the blood bank supervisor at North Memorial Medical Center before moving to Hutchinson, MN in 1994. She works part time in the Hutchinson Area Health Center laboratory and in the photographic studio that she and her husband own.

**Amos Szajner** (1981) earned an M.D. degree from the University of Minnesota in 1985. He completed a residency in anesthesiology in 1991 and currently works with a group providing coverage for the Health East system and United Hospital.

**Jeanine Holmer Boettinger** (1983) is a medical technologist at the University of Maryland Medical Center in Baltimore. She works primarily in hematology and is a coordinator for the students in that laboratory.

**Brenda A. Baker** (1983) completed the University of Minnesota certificate program in cardiopulmonary perfusion in 1996. She is currently employed at the Veteran's Affairs Medical Center in Minneapolis as a staff perfusionist.



## Laboratory Census: Then and Now

The first available University Hospital Laboratory census is for the fiscal year 1927-28. The names of the tests below are recorded exactly as they were then. For comparison, the total number of laboratory determinations performed last year by the hospital laboratories was 1,180,000.

### Hospital Laboratory Report 1927-28

Determination	Number
Urines .....	3138
Hemoglobin .....	3431
Red blood cell count .....	3340
White blood cell count .....	3500
Differential .....	3311
Smears .....	504
Cultures .....	99
Spinal fluid .....	409
Vandenberg .....	30
Icterus index .....	138
Tissues .....	1636
Metabolism .....	1311
Blood sugar .....	869
Blood urea .....	782
Blood creatinine .....	221
Blood uric acid .....	110
Blood NaCl .....	51
Van Slyke .....	190
Blood grouping .....	120
Cystoscopy .....	107
Stools .....	30
Platelets .....	26
Bleeding time .....	371
Clotting time .....	368
Special .....	719
Blood calcium .....	57
PSP .....	1
<b>Total</b>	<b>24,869</b>

## U of M Graduates Serve on the NCCLS Board of Directors

Two U of M graduates, **Donna Messerli Meyer, Ph.D.** and **David Nevalainen, Ph.D.**, serve on the National Committee for Clinical Laboratory Standards (NCCLS) Board of Directors.

Current treasurer (and candidate for a third three-year term) Donna Meyer is director of community health services, Sisters of Charity Health Care System, Houston, TX. Dr. Meyer received B.S. and M.S. degrees in medical technology from the University of Minnesota, and a doctorate in community health science from the University of Texas. She served as the 1987-1988 president of the American Society for Clinical Laboratory Science and chair of the NCCLS Finance Committee.



David Nevalainen received his B.S. in medical technology and his Ph.D. in hematology/pathology from the University of Minnesota. Following positions in education, management and consulting, he joined Abbott Laboratories in 1981 as a senior hematologist in research and development and is currently director of the Abbott Quality Institute. He has presented over 200 workshops nationally and

internationally, and is considered an authority on quality systems in blood banks and laboratories.

NCCLS is an interdisciplinary, nonprofit organization that promotes the development and use of voluntary consensus standards and guidelines within the health care community. Members include professional and clinical societies, regulatory and scientific government agencies, manufacturers of laboratory products, hospitals, clinical laboratories, and educational institutions. NCCLS has developed hundreds of standards for writing technical procedures, blood specimen collection, and determining reference intervals. Founded in 1968, NCCLS is accredited by the American National Standards Institute.

## Alumni Society Activities

The Medical Technology Alumni Society has had another active year. Current board members are **Salli Clysdale, Nancy Coley, Karen Karni, Karin Libby, Clareyse Nelson, Marba Pogue, Mary Skupa, and Barb Streifel**. Special thanks to Nancy and Clareyse who organized the holiday cookie sale which raised \$320 for the student scholarship

fund. Plans are now in progress for the annual spring banquet, May 11, 1998, which this year will be held in conjunction with the 75th anniversary celebration. See the reservation form on page 19 of this newsletter and please join us.

# Faculty News

Faculty members in the Division of Medical Technology are recognized for their outstanding contributions to the combined missions of teaching, research and service.

**Carol Wells** was recently appointed as a member of the Surgery, Anesthesiology and Trauma Study Section at the National Institutes of Health (NIH). Study sections review grant applications submitted to the NIH and make recommendations to the appropriate national advisory council. Members are selected on the basis of demonstrated competence and achievement in their scientific discipline.

**Nancy Brunzel** is fulfilling a three-year term as clinical chemistry chair for the National Credentialing Agency (NCA) Examination Council. As vice-chair of the council, she also oversees the current job analysis study.

**Michael Tsai** received an American Heart Association grant to continue his studies on the genetic predisposition to hyperhomocysteinemia. This spring he will present his

work at the 2nd International Conference on Homocysteine Metabolism at the University of Nijmegen, The Netherlands. **Naomi Hanson** works with Dr. Tsai in the study of hyperhomocysteinemia in patients with premature coronary artery disease and will also present a poster session at this conference.

Four new faculty members have joined the Division of Medical Technology. **Bill Gleason** and **Michael Wilson**, both in the Department of Laboratory Medicine and Pathology, are now assisting in teaching clinical chemistry. **Lynn King**, a graduate of our program and formerly of the University's clinical chemistry laboratory, is a teaching specialist for our clinical chemistry courses. She replaces **Susan Feist**, who now attends the Carlson School of Management working on degrees in accounting and information systems. **Mary Jane Yue**, who obtained her master's degree in medical laboratory science from Northeastern University, is a teaching specialist in the clinical hematology courses.

## Some recent publications of our faculty are listed below:

**Brunzel N:** Renal Function and Urinalysis section in the ASCLS *Body of Knowledge*, February 1998.

**Brunzel N:** *Focus on Urinalysis* monograph, editor. Sponsored by Boehringer Mannheim Corporation. Published by Medical Economics Company, July 1997.

**Karni K, et al:** Key elements and processes needed in curriculum design. *Clinical Laboratory Science* 11:2, 70, 1998.

Waller K, Wyatt D, and **Karni K:** Scholarly activities among clinical laboratory science faculty. *Clinical Laboratory Science* 10:3, 132, 1997.

**Lofsness K:** Hematology II<sup>©</sup> (v1.0). An instructional program in morphologic alterations of blood cells. Computer software on CD-ROM, University of Minnesota, 1997.

**Lofsness K, Spanjers E:** "Preparation and evaluation of bone marrow." Chapter in *Clinical Hematology: Principles, Procedures, Correlations*, 2nd edition. **A Stiene-Martin**, ed. Philadelphia, Lippincott, 1998.

**Tsai M, Wong P, Garg U, Hanson N, Schwichtenberg K:** Two novel mutations in the cystathionine  $\beta$ -synthase gene of homocysteinuria patients. *Molecular Diagnosis* 2:129, 1997.

Garg U, Zheng Z-J, Folsom A, Moyer Y, **Tsai M, McGovern P, Eckfeldt J:** Short-term and long-term variability of plasma homocysteine measurement. *Clin Chem* 43:141, 1997.

**Tsai M, Wong P, Garg U, Hanson N, Schwichtenberg K:** Identification of a splice site mutation in the cystathionine  $\beta$  synthase gene resulting in variable and novel splicing defects of pre-mRNA. *Biochem Mol Med* 61:9, 1997.

Bostom A, Bianchi L, **Tsai M**, Jacques P, Nadeau A, Rosenberg I: Excess prevalence of fasting and post-methionine loading hyperhomocysteinemia in stable renal transplant recipients. *Arterioscler Thromb Vasc Biol* 17:1894, 1997.

Cattaneo M, **Tsai M**, Bucciarelli P, Taioli E, Zighetti M, Bignell M, Mannucci P: A common mutation in the methylenetetrahydrofolate reductase gene (C67T) increases the risk for deep-vein thrombosis in patients with mutant factor V (Factor V:Q506). *Arterioscler Thromb Vasc Biol* 17:1662, 1997.

Lemaire L, van Lanschot J, Stoutenbeek C, van Deventer S, **Wells C**, Gouma D: Bacterial translocation in multiple organ failure: cause or epiphenomenon still unproven. *British J Surg* 84:1340, 1997.

**Wells C**, van de Westerlo E, Jechorek R, Erlandsen S: Cytochalasin-induced actin disruption of polarized enterocytes can augment bacterial internalization. *Infection & Immunity* 66: In press, 1998.

**Wilson M**, Sinha A: Human prostate tumor angiogenesis in nude mice: metalloprotease and plasminogen activator activities in neovascularization of subcutaneously injected Matrigel impregnated with human prostate tumor cells. *Anat Rec* 249:63, 1997.

**Wilson M**, Kirby J, Zhao Y-D, Sinha A, Cooke P: Neonatal hypothyroidism alters the pattern of prostatic growth and differentiation as well as plasminogen activator and metalloprotease expression in the rat. *Biol Reprod* 56:475, 1997.

# 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 1948 (50th Anniversary)

Jean Skonseng Ahnmark	*Elizabeth Lienna England	Florence Misjuk
Mary Fasbender Barham	Marie Harrigan Frensko	*Tena Manolis Nelson
Jean Rath Beck	**Florence Swensen Grandchamp	*Leonette Neslund
Barbara Bruner Berg	Mary Peterson Hayward	Jean Grantman Peterson
Ruth Edelson Boyd	Shirley Fink Hill	Bernadette Eveslage Reilly
Elizabeth Andrews Bradburn	Mary Stuhlfauth Hoyer	**Verna Gartland Rundle
**Joyce Tanem Bredemeier	Jean Smaltz Hulbert	Marlys St. Cyr
*Evelyn Bricker	Ruth French Ingersoll	Mary Munekata Sakamoto
Jeul Eide Byfield	Joyce Shellbach Johnson	*Zelda Smidt Sawyer
*Joan Champion	*Gertrude Marsh Johnston	Gloria Kinney Schwarz
Leone King Chapman	Phyllis Lund Kelsch	Blanche Schneider Scribner
Barbara Gray Cunningham	Marjorie Nelson Kerns	Beverly McCord Shaw
Joanne (Sister Roland) Davey	Marion Dallman Kohlmeyer	Ella M. Spanjers
Eleanor Bougas Demopulos	Betty Dreesman Koppes	Joan Schlosser Spanjers
Ruth Mlekoday Downing	Jacqueline Lewis	Marian Brunsdale Thiele
Sally Scherven Economan	*Joyce Huffman McCormick	Charlotte Rohr Treanor
Bernice Theissen Elert	Jean Oleson Mickle	Julia Glavon Waller

## Class of 1973 (25th Anniversary)

*Carol May Anderson	Monna Marolt Grotte	Sheryl Fisher Olson
Louise G. Bintz	Jean Houger Hengesbaugh	Susan R. Olson
Gloria J. Boettcher	Donna Migglar Hero	*Penny Paris Rogers
Doreen Olson Bragstad	Patricia Charlton Hickey	Christine Senn
*Marilyn J. Cahoon	Rosemary A. Hoffman	Elizabeth Knees Kern Shade
Carolyn Lakin Casey	Eleanor H. Johnson	Cynthia Dean Skare
Nina Y. Chin	Mary Elander Johnson	Judith Hawkinson Skoog
Ruth A. Christeson	Susan Nelson Johnson	Gail Weiss Van Heel
Patrick Colford	*Terry Marcum Johnson	Ruth Goldberg Viste
Edward Daigle	*Patricia Murphy Julkowski	Marlene Johnsrud Vogelsang
Kathleen L. Dailey	Joann L. Kappel	Janice M. Vogt
*Mary A. Devorak	Janet Trandem Kasper	Barbara Waldkirch
Pamela Rose Elliot	Joann Hlavac Keller	Marilee Husinga Welliver
Nancy Gregory Field	Nancy M. Kochevar	Colleen Jensen West
*Patricia A. Foran	*James Larter	Mary Lou Slominski Wetter
*Max Fung	Patricia Hilliker Long	Gayla Gordon Williams
Mardie G. Geiser	William H. Nelson	Sharon Frisbie Wilmuth
Kristine Ulrich Gray	Pamela Mikkelson Olsen	Sharon Weiss Zeiler

\*Address unknown

\*\*Deceased

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If you are a member of either class, please make a special effort to attend the 75th anniversary celebration and the annual alumni banquet. The reservation form is on page 19. Classmates from 1948 and 1973 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!

# Esther F. Freier

## 1925-1997

Esther F. Freier, chemist in the laboratories of the University of Minnesota Hospital and Clinic and Rohwer Endowed Professor of Medical Technology, died of cancer on December 17, 1997 at the age of 72.

Professor Freier was born on March 3, 1925 in Hibbing, Minnesota, the daughter of Rabbi Ephraim Freier and his wife Regina. Her family moved to Minneapolis when she was a child. She graduated "with distinction" in medical technology from the University of Minnesota in 1946 and earned an M.S. degree from the University in physiological chemistry in 1956. Esther spent her entire career at the University—45 years in the clinical chemistry laboratories and as a faculty member. She rose through the academic ranks of the Medical School, achieving the rank of professor in 1969. When she retired in 1991, she held the only endowed chair in medical technology in the nation.



She later received a Professional Achievement Award from the American Society for Medical Technology for outstanding contributions to the profession, and the G. T. Evans Award for scientific achievements from the Academy of Clinical Laboratory Physicians and Scientists. Her honor societies included: Orbs, Sigma Delta Epsilon, Iota Sigma Pi, Alpha Mu Tau, and Sigma Xi. Esther also served as president of the Minnesota Society of Medical Technologists (1958-59); editor of the *Journal of Medical Technology* (1952-1972); ASMT representative to the Board of Schools (1966-1970); and president of the Academy of Clinical Laboratory Physicians and Scientists (1992-93), the only woman to hold this position.

Professor Freier was a perfectionist who had high expectations for herself and others. The research by her graduate students was impeccable, and their theses reflected excellence in research design, data collection, interpretation, and writing. Many will remember Esther as a highly competent, but rather quiet individual. Nevertheless, she was a champion of many causes, especially those involving women. She mentored many for academic and scientific positions, some of whom are currently employed at the University of Minnesota.

Esther Freier was one of several great women who brought this program forward into national prominence. Her life, personally and professionally, was marked by the highest standards. Graduates of the Division of Medical Technology owe her a debt of gratitude. Her legacy remains.

Among her many achievements was the first paper dealing with quality control in clinical chemistry, co-authored with Verna Rausch (1958). This paper won four awards at the 1958 Annual Meeting of ASMT, including the Hilkwitz Award for original research and the Scientific Products Foundation Award for contributions to clinical chemistry.

of this change was a more adaptive technologist with better conceptual skills.

## Items from Previous Issues of *Tech's Talk*

**1948**—Four new instructors and nine assistants were added to the laboratory staff. Dr. Gerald Evans was in charge of the Medical Technology Department and Ruth Hovde '38 was head instructor. Allie Smith '42 was the Supervisor of Student Techs and Jane Weber '41 was the Administrative Technologist.

**1958**—The Medical Laboratory Assistant program was in its fifth year and appeared to be fulfilling its objectives of providing well trained laboratory assistants for limited areas of work. To date 62 students had completed the course and approximately 80% of them were actively working in clinical laboratories.

**1968**—The curriculum was changed to a 2+2 format. The major change was a decrease in the amount of time spent in the hospital clinical laboratories. The anticipated result

of this change was a more adaptive technologist with better conceptual skills.

**1978**—Following withdrawal of the American Society of Medical Technology from the activities of the Board of Registry of the American Society of Clinical Pathologists, a new certifying agency was established. The National Certifying Agency for Medical Laboratory Personnel offered its first certifying examinations in July.

**1988**—"Clinical Laboratory Trivia," a game developed by several medical technology faculty members, won the Scientific Creativity Award at the national meeting of the American Society for Medical Technology. The game was used in various ways: as a method for continuing education, sales incentives, gifts, and for students to review their laboratory knowledge prior to certification examinations.

# Minnesota Co-hosts 1998 Clinical Laboratory Educators' Conference

The 14th Annual Clinical Laboratory Educators' Conference (CLEC) on February 26-28, 1998 returned to the site of the first meeting: the Minneapolis Radisson Metrodome Hotel. Sponsored by the American Society for Clinical Laboratory Science (ASCLS) and co-hosted by the University of Minnesota, the conference drew 337 participants—the most ever for a CLEC meeting. **Pat Solberg**, Division of Medical Technology administrative associate, chaired the conference.

In an opening administrative session, Rick Panning, Fairview Health System director of laboratories, and Elissa Passiment, executive director of ASCLS spoke on "Regulatory Issues: Future Directions." A panel discussion of "Administrators' Expectations of New Graduates" followed. In addition to Panning, the panel included Minnesota laboratory directors Nancy Butala (Health Partners), Denny Rollman (Community Memo-

rial Hospital), and Kathy Hansen (Fairview University Health Center).

**Nancy Brunzel**, laboratory manager in the Division of Medical Technology, hosted a luncheon roundtable discussion on chemistry case studies, one of more than 20 presented. Ten different "break-out" sessions dealt with contemporary educational issues. **Karen Lofsness**, associate professor in the Division, presented one of them: "An Odyssey in CAI: From Concept to CD-ROM."

An evening reception at the Weisman Art Museum featured Scandinavian cuisine and tours of the galleries.

Evaluations and comments from participants indicate that CLEC '98 was an unqualified success. Thanks to the many Minnesota laboratorians (especially Pat Solberg) who contributed to the quality of the conference.

## Computer-Assisted Instruction in Hematology Expands

Hematography II, an interactive CD-ROM tutorial that teaches the identification of abnormal and immature blood cells, was completed last fall by associate professor **Karen Lofsness**. This new program is the sequel to Hematography I, a CD-ROM covering normal morphology and the procedure for examining a blood smear. Both programs contain hundreds of scanned images of actual blood cells, with detailed instructional text and simulated leukocyte differentials that provide immediate feedback to learners, allowing them to assess their own proficiency.

Hematography II is published by the U of M, and distributed through the Division of Medical Technology. The Hematography tutorials are being used by more than 150 laboratory science programs, medical schools, and hospitals throughout the nation.

In conjunction with the release of the new CD-ROM, a Hematography Web site has been developed

([www.umn.edu/hema](http://www.umn.edu/hema)). The site contains information about the Hematography programs and features a "Case Studies" section illustrating different hematologic disorders. The cases are designed to be used by educators and laboratory managers for teaching and continuing education activities, and a new case is added every month.

Last October, Karen was invited to demonstrate her new Hematography CD-ROM and Web site as part of the "University Showcase" at Educom '97, a national conference on information technology in higher education, held at the Minneapolis Convention Center.

Professor Lofsness plans to develop one more hematology CD-ROM, a comprehensive atlas of blood and bone marrow morphology, tentatively called "Hematography Plus." She has been awarded a Faculty Instructional Technology Grant from the University to begin work on this project.

## On the Lighter Side.....

- ◆ Isn't it a bit unnerving that doctors call what they do "practice?"
- ◆ If a turtle doesn't have a shell, is he homeless or naked?
- ◆ Why isn't there mouse-flavored cat food?
- ◆ Where do forest rangers go to "get away from it all?"
- ◆ If a deaf person swears in sign language, does his mother wash his hands with soap?
- ◆ Why don't sheep shrink when it rains?

# Clinical Laboratory Science Master's Program

The Clinical Laboratory Science master's degree program continues to successfully prepare medical technologists and basic science students for positions in research, teaching or industry. The program is multidisciplinary, offering advanced education in one of five major areas of laboratory medicine: clinical chemistry, hematology, immunology, molecular genetics and microbiology. Twenty students are currently enrolled, and six students earned their degrees this year.

**Michelle Bignell** received her degree following completion of her research study, "Genetic basis of hyperhomocysteinemia in patients with premature occlusive vascular disease." Her adviser was Dr. Mike Tsai.

**Yi Chen**, advised by Dr. Gary Dunny, completed her research on "Genetic analysis of genes involved in binding substance formation in *Enterococcus faecalis*."

**Kehan Li**, advised by Dr. Peter Plagemann, completed her studies of "Identification and significance of neutralization epitope in persistent infection by lactate dehydrogenase-elevating virus."

**Lisa Pierson**'s research project, "The development of a method to determine the affinity of IgE antibody," completed the requirements for her master's degree. Her adviser was Dr. Andreas Rosenberg.

**Susan Sonntag** presented her research, "A neo-self antigen model for studying B cell tolerance and selection," at her final oral examination. Susan's adviser was Dr. Ron Jemmerson.

**Margaret Suess** (B.S. 1976) successfully defended her thesis research, "Molecular analysis of p53 in human breast lesions: A comprehensive evaluation of whole systems analysis for clinical laboratory testing." Her adviser was Dr. Ron McGlennen.

This year our students published and presented their work at national and international meetings, including:

Cattaneo M, Tsai M, Bucciarelli P, Taioli E, Zighetti M, **Bignell M**, Mannucci M: A common mutation in the methylenetetrahydrofolate reductase gene (C677T) increases the risk for deep-vein thrombosis in patients with factor V (Factor V:Q506). *Arterioscler Thromb and Vasc Biol* 17:1662, 1997.

Bender J, Hedberg C, Besser J, **Boxrud D**, MacDonald K, Osterholm M: Surveillance for *Escherichia coli* 0157:H7 infections in Minnesota by molecular subtyping. *N Eng J Med* 337:388, 1997.

Danilla R, Rainbow R, Lexau C, Triden L, Besser J, **Boxrud D**, MacDonald K, Osterholm M: Statewide increase in meningococcal disease due to serogroup Y: Epidemiologic and laboratory investigations. 37th Interscience Conference on Antimicrobial Agents & Chemotherapy, 1997.

Chen Z, **Li K**, Rowland R., Plagemann P: Neuropathogenicity and susceptibility to immune response are interdependent properties of lactate dehydrogenase-elevating virus (LDV) and correlate with the number of N-linked polylactosaminoglycan chains on the ectodomain of the primary envelope glycoprotein. VIIIth International Symposium on Coronaviruses and Arteriviruses. Spain, March 1997.

**Li K**, Chen Z, Plagemann P: The neutralization epitope of lactate dehydrogenase-elevating virus is located on the short ectodomain of the primary envelope glycoprotein. (In press) *Virology*, 1998.

**Pierson L**, Jackola D, Rosenberg A, Blumenthal M: Investigation of the affinity and serum levels of allergen specific IgE and IgG4. American Association of Allergy, Asthma, and Immunology Annual Meeting, Washington, DC, March 1998.

**Pierson L**, Allauzen S., Blumenthal M, Rosenberg A: An automated method for determination of antibody affinity distribution functions with nanogram quantities. *J Immunol Methods* 111:97, 1998.

**Suess M**, McCormick S, Mendiola J, Davis K, McGlennen R: Comparison of molecular and immunohistochemical methods for p53 mutation analysis in breast cancer. Annual Meeting of the Association for Molecular Pathology, San Diego, CA, November 1997.

**Suess M**: Mutational analysis of the p53 gene: Assessment of methods for routine clinical molecular genetic testing. Workshop at the Annual Meeting of the Association for Molecular Pathology, San Diego, CA, November 1997.

McGlennen R, **Zaidi N**, Shew M, Westerheim M: Quantitative analysis of estrogen receptor transcripts in ectocervical cells: Relationship to HPV infection in very young and sexually mature women. 16th International Papillomavirus Conference, Sienna, Italy, September 1997.

Shew M, **Zaidi N**, McGlennen R, Westerheim M, Ireland M: Estrogen receptor transcripts: High association with cervical HPV infection. 16th International Papillomavirus Conference, Sienna, Italy, September 1997.

# Update on Semester Conversion

In the fall of 1999, the University will officially convert its academic calendar from quarters to semesters. The conversion effort will have taken more than four years and cost approximately 4 million dollars. This change will bring the University in line with most of the nation's colleges, facilitating transfers between institutions.

What does this mean to the Division? All courses were redesigned to fit into the semester system, and the number of courses in the Division was reduced from 49 to 28. Overall, the University reduced its total number of courses

from 22,000 to 13,240. Our medical technology students now take 3 courses in fall quarter, 5 in the winter, and 3 in the spring. Under the new system, they will take 4 courses fall semester and 5 courses spring semester.

With the new schedule, the University will begin the fall semester the day after Labor Day, with completion the third week of December. The spring semester will begin in mid-January and finish in mid-May.

## Interesting Web Sites

For those of you who "surf the net," we are listing the addresses of some Web sites that you may enjoy. These sites cover all types of interests, and were contributed by faculty, staff, and students.

### [www.virtualflorist.com](http://www.virtualflorist.com)

You can send a virtual bouquet to anyone from this site.

### [www.table.mpr.org](http://www.table.mpr.org)

The Splendid Table Web site from Minnesota Public Radio. Recipes and cooking ideas.

### [www.bulb.com](http://www.bulb.com)

The Netherlands Flower Bulb Information Center. Information on bulbs and garden trends.

### [www.bluemountain.com](http://www.bluemountain.com)

Send any kind of a personalized musical electronic greeting card via the Internet.

### [www.ascls.org](http://www.ascls.org)

The American Society for Clinical Laboratory Science home page.

### [www.usps.gov](http://www.usps.gov)

The postal service home page. Zip codes, rate calculator for packages, letters etc.

### [www.mbbnet.umn.edu](http://www.mbbnet.umn.edu)

Minnesota's virtual biomedical and bioscience community. Lists and describes 450 companies.

### [www.unitedmedia.com/comics/dilbert](http://www.unitedmedia.com/comics/dilbert)

The Dilbert zone. Fun and games from a favorite comic.

### [www.umn.edu](http://www.umn.edu)

The University's home page. Everything you might want to know about our alma mater.

### [www.umn.edu/hema](http://www.umn.edu/hema)

Try the Hematology case studies to see how much hematology you remember.

### [www.benjerry.com](http://www.benjerry.com)

A great commercial site. Guaranteed to make you hungry (recommended by a senior student).

### [www.phc.mpr.org](http://www.phc.mpr.org)

Visit Garrison Keillor at the Prairie Home Companion site. Lots of neat options.

## Student Council Activities

The purpose of the Medical Technology Student Council is to promote closer student-faculty relationships, stimulate educational and social activities, unify the students, and foster a professional attitude. To this end, the student council sponsored several activities over the past year. During the introductory course in the fall, students held the annual pizza lunch, enabling senior students, faculty and staff to get to know one another. The student council also sponsored a get-acquainted breakfast for junior students. During the Christmas season, a social event allowed seniors to relax after a busy fall quarter.

Future activities will include a National Laboratory Week fund-raiser in conjunction with the American Society for Clinical Laboratory Science, with the proceeds going to the Children's Miracle Network. The seniors will also host a junior-senior luncheon and a medical technology sweatshirt sale. Juniors on the council will usher and serve refreshments at the graduation ceremony, to be held September 26, 1998.

Membership in the student council is open to all junior and senior medical technology students. This year's officers are: **Jason Boonstra**, president; **Paul Vincent**, vice-president; and **Michelle Holm**, secretary/treasurer.

## Can You Help Us?

For the past several years, we listed the names and graduation dates of alumni with whom we had lost contact in the preceding 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 Lillian Sarkinen (see page 2). Thank you for your help.

Helen Hoff Hansen, 1933

Bernice Hansen Leiden, 1933

Blanche Larson Kolstad, 1939

Betty Anderson Mitchell, 1943

Margaret Andreen Hansen, 1950

Paula Jean Masek Shuart, 1980

If you have changed your address, please let us know so that we can continue to keep in touch. Many of you have been diligent in doing this because this year we are mailing nearly 2,200 *Tech's Talks* out of a possible 2,653 alumni.

# Mark Yudof Named 14th President of U of M

Mark Yudof, former executive vice president and provost of the University of Texas at Austin, became the 14th president of the University of Minnesota on July 1, 1997, succeeding Nils Hasselmo.

Yudof earned a bachelor's degree from the University of Pennsylvania and a law degree from the University of Pennsylvania Law School. He served for 10 years as dean of the University of Texas School of Law before becoming executive vice president and provost at that institution.

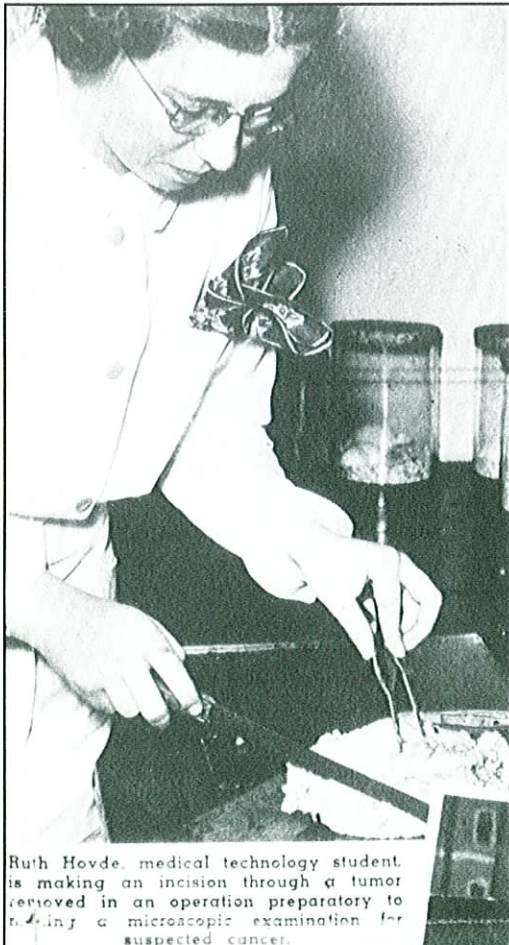
As an administrator, Yudof has gained a reputation for commitment to scholarship. While dean of the University of Texas Law School, he created and raised funding for a program to allow regular sabbaticals for faculty wishing to pursue scholarly activities. In his personal legal work, he is an authority on school finance and has written widely on such topics as freedom of expression and property taxes.



"Mark Yudof was selected by the people of Minnesota," said Tom Reagan, chair of the board of regents at the time Yudof was chosen. "The board traveled the state, listening to citizen concerns about the qualities they wanted in a president. Mark Yudof represents the best of those qualities—a commitment to keeping the University accessible to the people while improving its status as one of the top research universities in the world."

## Medical Technology Scholarship Funds and Recipients

The Division of Medical Technology administers five scholarships that provide funds exclusively for its students. Recipients are chosen on the basis of scholastic standing, financial need, and professional potential. A total of \$16,500 in scholarships was awarded to 14 deserving individuals this year. They were: **Suzanne Christ, Yoseph Dalu, Anh Do, Trang Do, Nigussie Felema, Misty Larson, Steven Mattson, Kristine Monson-Jobe, Thuy Nguyen, Nikole Rahn, Andrew Sandquist, Tuyetlan Trinh, Mustefa Wako, and Neil West.** The following scholarship funds are available to our students:



Ruth Hovde, medical technology student, is making an incision through a tumor removed in an operation preparatory to making a microscopical examination for suspected cancer.

- ◆ The **Hovde-O'Brien Scholarship Fund** is supported by contributions from alumni, faculty, staff, and friends. This fund was named in honor of William O'Brien, medical director of Medical Technology from 1925-40, and Ruth Hovde, professor and director of the Division from 1947-84.
- ◆ The **Yvonne C. Cooke Scholarship Fund** was established in 1990 by Yvonne Chenoweth Cooke, a 1937 alumna. Through this fund, she helps deserving students complete the medical technology program. She asks that awardees repay the funds when they are able to do so.
- ◆ 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. Students may utilize this loan fund to obtain short-term, emergency loans so that they may continue their education in a timely manner.
- ◆ The **Betty Rae Kramer McConnell Scholarship Fund** was established in 1992 in honor of Betty Kraemer McConnell, a 1945 alumna of our program.
- ◆ The **Medical Technology Alumni Fund**, established in 1997, is supported by the Medical Technology Alumni Association.

The faculty, staff, and students in the Division of Medical Technology express appreciation to the many individuals who generously contributed to these funds. Because of rising tuition costs and continued decline in federally funded student loans, it is hoped that our medical technology student scholarship funds will continue to grow.

Contributions to these scholarship funds may be sent to the Division of Medical Technology, University of Minnesota, Box 609 Mayo, 420 Delaware Street S.E., Minneapolis, MN 55455.



## State Spring Meeting

The 1998 Minnesota Collaborative Laboratory Meeting will be held on May 13-16 at the Radisson South Hotel in Bloomington. The theme is "Laboratory Partnerships Achieving Excellence Beyond Tomorrow." The program will feature three keynote speakers:

- ◆ Wednesday: Gail Nelson on "Increasing Your Tolerance for Chaos"
- ◆ Thursday: Charles Pippenger on "Your Radicals, Your Health—The Role of Free Radicals in Health and Disease"
- ◆ Friday: Michele Best on "Leadership for the 90s—Putting First Things First"

The three-day program will feature presentations on current topics such as: hyperhomocysteinemia, vancomycin resistant enterococci, POLs (physician's office laboratories), coding and reimbursement, and genomic imprinting. A reception in honor of Karen Karni will follow her Thursday talk on "History of Clinical Sciences."

On Friday and Saturday, ASCLS, SUNY Stonybrook and Triple G will sponsor the first two courses of a LIS (laboratory information system) certificate program. The remaining two courses can be completed at the ASCLS annual meeting in Chicago, August 1-3.

For complete information or a registration brochure for the meeting, contact Sue Hoehn, 2184 Scheffer Avenue, St. Paul, MN 55116. Her telephone number is (612) 371-5416.

## Jane Swanson Retires

The blood banking community said good-bye to a long time friend and colleague this past year when Jane Swanson retired.

Jane's contributions to the field of transfusion medicine are numerous. She graduated from the University with a degree in Medical Technology in 1947. After working briefly at the U of M Hospital and in Chicago, Jane took a position at the Minneapolis War Memorial Blood Bank. There she collaborated in many studies, including the identification of blood groups of Central and South American Indians, and new specificities in the P system. When she returned to the University in 1969, Jane participated in the early bone marrow transplant research of Dr. Robert Good, as well as other investigative projects.

Jane was the first recipient of the Ivor Dunsford Memorial Award from the American Association of Blood Banks (AABB) in 1968. As a long-time member of AABB, the Minnesota Association of Blood Banks and the Invitational Conference of Investigative Immunohematologists, she has presented numerous papers to these groups. Her professional accomplishments were honored at a symposium at the University on June 20, 1997, entitled "Clinical Relevance of Blood Group Molecules."

Jane and her husband Don live in Minneapolis, and spend much of the winter in Arizona. She was and continues to be a resource to blood bankers as both a mentor and researcher, and will be greatly missed by those who worked with her.

## U of M Medical Technology Leaders

Over the 75 years of our existence, Medical Technology at the University of Minnesota has had remarkably few program directors and medical directors. Since 1923, these positions have been filled by the following individuals:

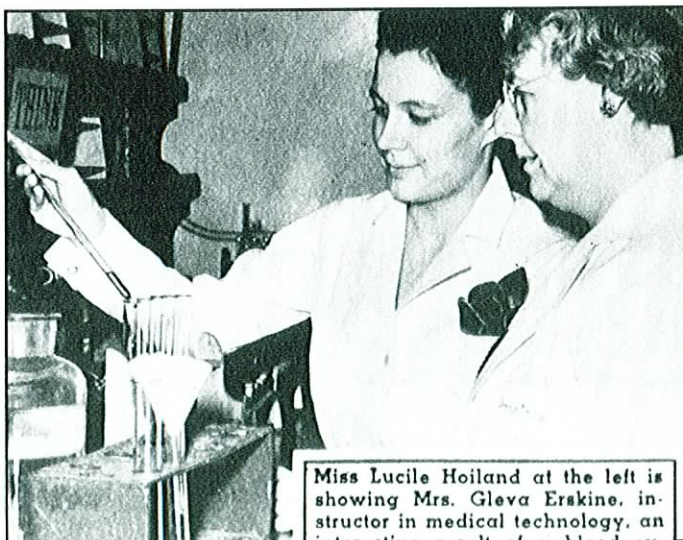
### Program Directors/Heads

Gleva B. Erskine	1924-1936
Helen L. Knudsen, BS	1936-1940*
Betty Jane Hall, BS	1940-1942
Lucille J. Hoiland, BS	1942-1945*
Jane E. Rietz, BS	1945-1947
Ruth F. Hovde, MS	1947-1984
Karen R. Karni, PhD	1984-present

\*MD degree earned subsequently

### Medical Directors

Richard Olding Beard, MD	1923-1925
William A. O'Brien, MD	1925-1940
Gerald T. Evans, MD	1940-1966
Ellis S. Benson, MD	1966-1989
Leo T. Furcht, MD	1989-present



Miss Lucille Hoiland at the left is showing Mrs. Gleva Erskine, instructor in medical technology, an interesting result of a blood examination for excessive sugar in a patient with diabetes.

# Tours Highlight 75th Anniversary Celebration

As part of the 75th anniversary celebration on May 11, afternoon tours of notable University sites will be offered. For the 1:00 p.m. tour, participants will have their choice of visiting the Fairview-University Medical Center or taking a bus tour of memorable campus sites. Options for the 2:30 p.m. tour will be a visit to the Weisman Art Museum or the St. Paul Raptor Center.

## Fairview-University Medical Center

The "new" University Hospital building was opened in 1986, overlooking the Mississippi River on the site formerly occupied by Powell Hall. The merger of the University Hospital with the Fairview Health System became effective on January 1, 1997. Most of the clinical laboratories are now situated in this facility.

## Minneapolis Campus Tour

On a narrated bus tour of the Minneapolis campus, you will see and learn the story of historic old sites, and new and architecturally unique buildings. Join us, and renew your memory of all those hours spent on campus.

## Weisman Art Museum

Designed by architect Frank Gehry and opened in 1993, the museum has become a Twin Cities architectural landmark. The sculptural shape and stainless steel exterior reflecting off the Mississippi River make it a conversation piece. A tour is as much a tour of the building as it is of the art!

## Raptor Center

The Raptor Center on the St. Paul campus is an internationally renowned medical, surgical, and rehabilitation facility for birds of prey. The Raptor Center treats 700 injured raptors a year, many of them endangered species. Visitors will see live eagles, hawks, owls, and falcons.

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## Let's Keep in Touch

Once again we are asking you to send us an update on what you've been doing--personally and professionally. We plan to display all contributions—including letters and pictures—at the alumni banquet. We will return pictures if you wish. Thanks for keeping in touch.

Name: \_\_\_\_\_ ( \_\_\_\_\_ ) Year of Graduation: \_\_\_\_\_  
Name while in school (if it has changed)

Address: \_\_\_\_\_

Phone Number: \_\_\_\_\_

Career Information: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Family Information: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Special Interests: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Please mail to the address on page 19

**'Reflecting our Pride'**  
**Medical Technology 75th Anniversary Celebration**

Monday, May 11, 1998

Radisson Hotel Metrodome, Washington Avenue at Harvard Street  
University of Minnesota Campus, Minneapolis, MN

**Schedule:**

- 8:00 a.m. Registration
- 8:30 a.m. Morning Program
- |                                    |                                     |
|------------------------------------|-------------------------------------|
| <i>Yesterday's University</i>      | Karen Lofsnes, Associate Professor  |
| <i>Recollections: 50 years ago</i> | Sr. Roland Davey (class of 1948)    |
| <i>Recollections: 25 years ago</i> | Ruth Golberg Viste (class of 1973)  |
| <i>Today's University</i>          | Steve Mattson (class of 1997)       |
| <i>Tomorrow's University</i>       | Karen Karni, Professor and Director |
- 11:30 a.m. Luncheon Recognition of past and present Medical Technology teachers
- 1:00 p.m. Afternoon Tour
- Choice of:* Fairview-University Medical Center *or*  
Bus Tour of Minneapolis Campus Sites
- 2:30 p.m. Afternoon Tour
- Choice of:* Weisman Art Museum *or*  
Bus Tour to St. Paul Campus Raptor Center
- Note\** The tours have a limited number of spaces, and reservations will be assigned in the order in which they are received. For those who do not wish to take part in the tours, an afternoon hospitality area will be available in the hotel.
- 5:00 p.m. Social Hour
- Then and Now Exhibits  
University Memorabilia
- 6:30 p.m. Evening Alumni Banquet
- |                                   |                      |
|-----------------------------------|----------------------|
| <i>Choice of:</i> Roasted Sirloin | <i>Cost:</i> \$25.00 |
| Peppercorn Chicken                |                      |
| Canadian Walleye Pike             |                      |

Recognition of the Class of 1948, the Class of 1973, and the Class of 1998.  
Tables will be reserved for these classes.

**Accommodations:** Rooms in the Radisson Hotel Metrodome can be reserved with a credit card by calling the hotel at 800-822-6757 no later than Monday, April 27. To obtain the special rate of \$88 single/double occupancy plus tax, mention that you are attending the Medical Technology 75th Anniversary Celebration.

**Registration:** We must receive this reservation by Monday, April 27. This is the only announcement you will receive.

Name: \_\_\_\_\_ Class of \_\_\_\_\_  
Address: \_\_\_\_\_ Present or former U of M Med Tech teacher? Yes/No  
\_\_\_\_\_ If yes, what & when did you teach? \_\_\_\_\_

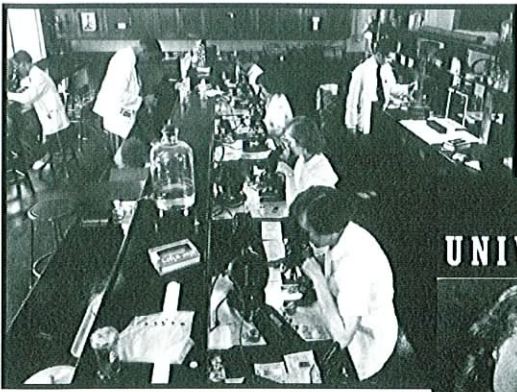
Please reserve \_\_\_\_\_ place/s for me at the daytime activities and luncheon (No charge for alumni; \$15 for guests)

Please reserve \_\_\_\_\_ place/s for me on the 1:00 Tour (circle one): Fairview-University Medical Center *or*  
Bus Tour of Minneapolis Campus Sites

Please reserve \_\_\_\_\_ place/s for me on the 2:30 Tour (circle one): Weisman Art Museum *or*  
Bus Tour to St Paul Campus Raptor Center

Please reserve \_\_\_\_\_ place/s for me at the evening alumni banquet (\$25 per person) \_\_\_\_\_ Roasted Sirloin  
\_\_\_\_\_ Peppercorn Chicken  
I enclose \$ \_\_\_\_\_ as total payment. \_\_\_\_\_ Canadian Walleye Pike

Make check payable to: Medical Technology Alumni Society Mail to: Division of Medical Technology  
Box 609 Mayo  
420 Delaware Street S.E.  
Minneapolis, MN 55455



**Hematology:** the gentlemen are junior medical student "clerks."



**Chemistry:** in the days when we made all our own reagents.

*The Bulletin of the*  
**UNIVERSITY OF MINNESOTA**



**MEDICAL TECHNOLOGY**  
*A Profession for Women*

1943 Bulletin



**Urinalysis:** the sign on the wall says  
*"He who sloppeth, moppeth"*



**Bacteriology:** with "Rosebud,"  
the transport wagon.

Department of Laboratory Medicine & Pathology  
University of Minnesota  
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420 Delaware St. S.E.  
Minneapolis, MN 55455

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**MEDICAL TECHNOLOGY**