

University of Minnesota
Division of Medical Technology

Shortage of Clinical Laboratory Scientists

In clinical laboratories across the country, both employers and employees are acutely aware of the shortage of qualified clinical laboratory scientists. Between 1983 and 1999, the number of US colleges and universities offering accredited degrees in clinical laboratory science decreased from 638 to 273, while the number of graduates has gone from 5,318 to 2,491.

Because the average age of a medical technologist is 45 years, today's shortage is expected to increase as the population retires over the next ten years. Data from the United States Bureau of Labor Statistics and our accrediting agency (National Accrediting Agency for Clinical Laboratory Science, NAACLS), indicate that the demand for qualified laboratorians will greatly exceed supply for years to come. Until 2008, it is expected that 4,000 technicians and technologists will retire each year while approximately 5,300 new positions are created, resulting in a projected annual need for 9,300 laboratory professionals. This number of available positions is approximately double the predicted number of qualified applicants in the foreseeable future.

The situation at Duke University (Durham, NC) may be predictive of what will occur at many institutions across the country. The Clinical Laboratory Science program at Duke University Medical Center began in 1931 and closed in 1997 following the advice of consultants who were apparently responding to budgetary pressure. (Teaching programs in clinical laboratory science are relatively expensive compared to most other types of teaching programs.) The Duke program was quite similar to our own program at the University of Minnesota, graduating up to 30 medical technologists per year, many of whom were initially employed at the Duke laboratory system. In the recent past, Duke laboratories had 20 open positions and had trouble getting even a single applicant.

Due to a number of factors, including budgetary factors, the number of accredited CLS programs in our state has decreased over the years from twelve to three, and next year will see an additional decrease from three to two. Although many allied health programs are having difficulty attracting and enrolling qualified applicants, our Medical Technology Program does not appear to have that problem this year, possibly due to the reputation of our program coupled with active recruiting by our faculty, staff, and friends. Although the maximum size of our senior class has been 32 students for many years, we anticipate increasing this number in Fall 2001, and we are fortunate to have the numbers of qualified applicants that should make that prediction a reality. Due to space and budget constraints, this increase will require a certain amount of creativity by the faculty and staff.

In addition to increasing the numbers of students in our current program, other initiatives designed to increase the number of qualified clinical laboratory scientists in the state are described on the next page. Consistent with our mission as a land grant institution, we will do everything possible to meet Minnesota's need for qualified health care professionals.

(Information above relies heavily on: Klipp J. Who wants to work in a lab? *Medical Laboratory Observer*. 32:25-29, 2000.)

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Salary Trends

Although the rest of the country may not be keeping pace, we are observing positive changes in salaries in Minnesota. In 2000, a starting salary for a clinical laboratory scientist was about \$17.75 to \$18.00 per hour, or \$37,400 per year. Evening shift and night shift receive a differential of about \$1.00 and \$1.50 per hour, respectively, resulting in starting salaries as high as \$40,000 per year. Some institutions offer sign on, retention, and acute care bonuses. For example, an individual employed on the night shift in acute care may receive an acute care and a retention bonus, resulting in a starting salary of up to \$45,000 per year. (Another employer might pay only an initial sign on bonus of \$1,000.) Other creative approaches will arise as the shortage of clinical laboratory scientists continues. The 2001 salary scales will arrive in May – July 2001, and we expect the positive trend to continue.

Cooperative agreement between MnSCU and the University of Minnesota

Beginning September 1998, the Division of Medical Technology has permitted students from St. Cloud State University and Minnesota State University Mankato to register for our professional courses. These two colleges are part of the Minnesota State Colleges & Universities (MnSCU) system. Individuals apply through the College of Continuing Education and enroll for the fall and spring semester courses in the senior year as well as the clinical courses, for a total of 36 semester credits. The credits and grades are transferred back to their home University for degree completion. An attempt is made to place these students in clinical rotations near their home University. To date, a total of eight students have taken advantage of this opportunity.

Bachelor of Applied Science from the College of Continuing Education

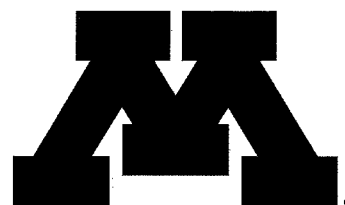
To help meet the demand for clinical laboratory scientists in the state, an articulation program has been designed so those with a two-year MLT degree can obtain a bachelor's degree in a little over two years. This program is administered through the College of Continuing Education (CCE) and students will receive a Bachelor of Applied Science (B.A.S. degree) with a major in Clinical Laboratory Science. At full operation, it is anticipated that 10 to 15 graduates per year will be qualified to take national examinations for certification as clinical laboratory scientists. Additional information can be obtained by contacting www.cce.umn.edu/bas, or bas@cce.umn.edu.

Proposed Expansion to Rochester

This year, the University's legislative request includes an item for funds to expand allied health teaching programs to the Rochester area. The specific programs identified in the request are nursing and medical technology. If funding becomes available for medical technology, the plan is to cooperate with Rochester Community College and the Mayo Clinic to graduate an additional 20 clinical laboratory scientists per year. As proposed, the lecture portions of the senior year course work will be available through long distance learning, the teaching laboratories will be duplicated at Rochester Community College, and Mayo Clinic will provide sites for clinical rotations.

As you receive this newsletter, the legislature is still discussing the University's legislative request. The governor's proposed state budget includes only a fraction of the funds requested by the University. If the governor's proposal becomes reality, it is possible that this expansion program may not be funded. The 2001 legislative session is now at a critical decision stage. We are asking you to contact your legislator and say that you support the University's legislative request.

The web site is www.umn.edu/govrel. Go to "What can you do to help" and select "Find your state legislators with our District Finder". Enter your address and select "Find your district." The names and addresses of your legislators are provided with direct connection to E-mail.



Editor:

Carol Wells

Contributors:

Abye Bekele	Karen Lofsness
Claire Bjorklund	Jan Lorenz
Nancy Brunzel	Peter Mayer
Salli Clysdale	Pat Solberg
Joanna George	Cheryl Swinehart
Karen R. Karni	Kim-Sue Tudor
Lynn King	Mary Jane Yue

**TECH'S
TALK**

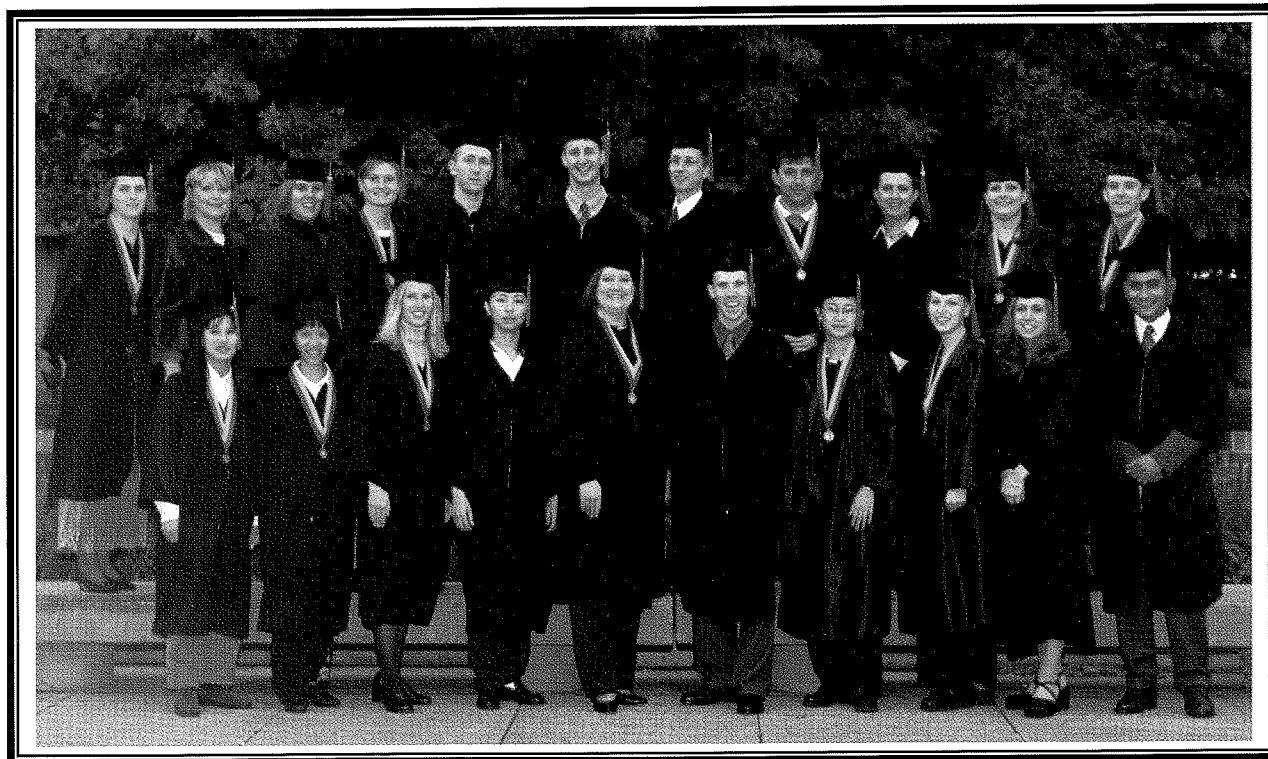
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2000 Graduation Ceremony

The 78th graduating class of the Division of Medical Technology held its commencement exercise at the St. Paul Student Center on September 23, 2000. Senior class president **James Turi** delivered the welcome and presided at the ceremony. **Becky Rose**, Director of Project and Planning at the Memorial Blood Center of Minneapolis, delivered the commencement address.

Margo Murra and **Matthew Collier** presented a slide show of the highlights of the class members' senior year. **Cheryl Swinehart**, assistant professor, presented the special awards, recognizing students who received scholarship funds, or graduated *with distinction* or *high distinction*. **Nina Bui** was presented with a special gift in recognition of achieving the highest grade point average in the professional program. **Helen Hallgren**, associate professor, led the Medical Technology Oath and then introduced each class member as they signed the oath. Professor **Carol Wells**, interim director of the Division of Medical Technology, conferred the degrees. **Billie Anne Juni**, President of the Medical Technology Alumni Society, welcomed the new graduates as alumni of the University of Minnesota. A reception followed in the Student Center Terrace.



Medical Technology Class of 2000

Front row (left to right)

Van Le, Minneapolis, MN, *with distinction*
Tuyetsuong Trinh, Roseville, MN, *with high distinction*
Margo Murra, Andover, MN, *with high distinction*
Jenny Truc Dang, Minneapolis, MN
Colette Riedel, Ottumwa, IA, *with distinction*
Andrew Utzka, Monticello, MN
Nina Nhien Bui, St. Paul, MN, *with high distinction*
Rachel Pfungsten, Atwater, MN, *with distinction*
Melinda Pegel Bye, Milaca, MN

Solon Kidane, Asmara, Eritrea

Back row (left to right)

Laura Howk, New Ulm, MN, *with high distinction*
Stephanie Lyons, Eagan, MN
Jessica Carlson, New Prague, MN
Amy Martin, Lafayette, MN, *with high distinction*
Peter Mayer, Brooklyn Center, MN
James Turi, Falcon Heights, MN
Matt Collier, Coon Rapids, MN
Bakir Helic, Sarajevo, Bosnia, *with distinction*
Gina Haralson, Minneapolis, MN

Joycelyn Smeby, Inver Grove Heights, MN, *with distinction*

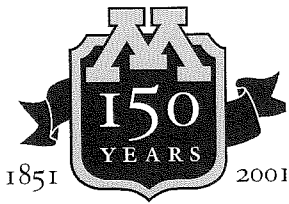
Petter Woll, Veroal, Norway, *with distinction*

Not Pictured:

Wendy Ertl
Denise May
Helene Osnes
Kristin Pederson
Ha Su
Khanh Tran

Photograph by: Anita Sime Jader
(Class of 1977)

U of M Sesquicentennial



The University of Minnesota was born in February 1851 and celebrates its 150th birthday this year. Celebratory events have been held

throughout the academic year, with all events intended to highlight the University's partnership with the state. Founder's week, February 18-25, began with a Martin Luther King Jr. concert. Other activities included the arrival of President Yudof at the State Capitol in a horse drawn carriage, meant to be reminiscent of typical transportation 150 years ago. Governor Ventura declared February 23rd the first statewide Maroon and Gold Day, and all Minnesotans were encouraged to wear the school's colors that day. Maroon (actually pink) and gold bagels were served at Williamson Hall, along with a choice of cranberry or orange juice. An anniversary tribute was held at Northrup Auditorium and included an academic procession and keynote address by the New York Times columnist, Thomas Friedman.

Today, the University has over 40,000 students and plays a key role in fueling the economic engine that helps maintain our quality of life in Minnesota. *Happy Birthday, U of M! Here's to another 150 years!*

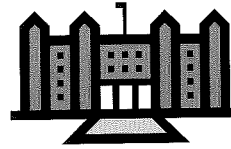
New Hematology CD-ROM Available

Hematography[®] Plus, a new instructional CD-ROM of morphologic hematology, was released last fall and is now available through the Division of Medical Technology. The program, which took associate professor Karen Lofsness more than three years to complete, is a comprehensive tutorial and atlas of blood and bone marrow morphology. It covers normal and abnormal red cells, white cells, and platelets, and contains an extensive section on hematologic disorders.

The new CD-ROM is both Windows and Macintosh compatible, and is priced to be affordable to individuals, at \$45.00. Sales of Hematology Plus have exceeded expectations, and it is already being used as a primary hematology reference in CLS programs, medical schools, and clinical laboratories throughout the US.

Further information on Hematology Plus can be found at the Hematology Web site (www.umn.edu/hema). This site also contains 36 illustrated patient case studies in hematology, and more than 7000 visitors currently access it every month.

University of Minnesota Alumni Association



The Medical Technology Alumni Society Board of Directors for 2000-2001 are Billie Anne Juni (president), Marba Pogue (secretary),

Larry Carroll, Nancy Coley, Karen Karni, Diane Rappe, Salli Clysdale, Karin Libby, Pat Solberg, Melissa Fossum, Clareyse Nelson, Barb Streifel, Helen Hallgren.

The board is primarily responsible for organizing the spring banquet and raising money for student scholarships. The University of Minnesota Alumni Association (UMAA) also promotes professional interests of allied health fields, and develops liaisons among undergraduates, prospective students and alumni.

With over 400 members, the Medical Technology Alumni Society is one of the more active alumni groups within the University of Minnesota Alumni Association (UMAA). If you have suggestions for activities you would like to see the Board of Directors undertake, please send them to the Med Tech office along with the "Let's Keep in Touch" form on page 13. We are always looking for new ways to serve our alumni and students.

University Alumni helped the UMAA celebrate the University's 150th birthday by pushing the membership mark to over 52,000! By joining the Medical Technology Alumni Society and UMAA you support both the University and the medical technology program. A strong UMAA has more clout at the legislature, helps support excellent programs, and enhances the student experience. Plus, as a member, you can take advantage of many programs and services that save you money and connect you to the U of M.

This spring, the UMAA welcomes the Minnesota Orchestra back to Northrop Auditorium on Friday, June 29 for the grand finale event of the University's sesquicentennial celebration. Following the orchestral performance, a fireworks display over Northrop Mall and the Mississippi River will send the University's 150th year out with a bang. Mark June 29 on your calendar and make plans to attend. Invitations and ticket information will be sent to all alumni association members and the university community in April and May. To be certain you receive notice, or to join the UMAA, call 612-624-2323 or 1-800-UM-ALUMS or send an e-mail to umalumni@tc.umn.edu. Updates will be posted to www.umaa.umn.edu as they become available. This sounds like a great way to end the University's birthday celebration!

2000 Major Contributors

The following contributed \$100 or more to the Division of Medical Technology in 2000 (received between March 2000, and February 2001). We wish to acknowledge the generosity of all who have contributed over the years.

Endowed Professorship (see next page)

Yvonne Chenoweth Cooke

\$50,000 (see next page)

Constance Olson Bakken

\$2,000-\$4,999

Ruth E. Hanold

\$1,000-\$1,999

William F. Hoeft

\$500-\$999

Lorna H. Canfield
Kathryn Hammer Glen

Carl Rohwer

Karin J. Libby
James G. Ruggles

\$300-\$499

Aetna Life & Casualty Fdn.
Cigna Fdn.
Mary J. Eaves-Raich

Mary E. Jacobson
Todd C. Jacobson
Karen G. Lofsness

John J. Raich
Phyllis J. Weiss
Verne E. Weiss

\$100-\$299

B. P. Amoco Fdn., Inc.
Carol A. Arnason
Fritz Arnason
Helen E. Ashenbrucker
Beckman Coulter Inc.
Elizabeth Bixby
Karna J. Boyer
George Brauer
Ruth J. Brauer
Joseph Budge
Marilyn T. Budge
David R. Carlsen
Kathleen Q. Carlsen
Elise A. Church
Stanford Church
Ann D. Claesgens
Gerry M. Cochran
Frederick W. Coleman
Irma E. Coleman
Robert A. Dahl
Mrs. Cecil E. Damron
Sally J. Economon
Grace Mary Ederer
David J. Fanger
Julie M. Fanger
Linda L. Fredrickson
Margaret A. Gabrik

Thomas M. Gabrik
Mardie G. Geiser Wollenhaup
Andrew J. Giesen
Marjorie E. Giesen
Karin J. Grossman
Ben E. Hallaway
Jacqueline Y. Hallaway
Harris J. Hallgren
Helen M. Hallgren
Jean S. Halvorson
Ronald D. Halvorson
William Harris
Jacquelin A. Heggernes
Anthony A. Hofstede
Diane T. Hofstede
Karen K. Huff
Richard L. Huff
Phyllis Jacobs
Todd C. Jacobson
Carol Kelly Johnson
Dorothy K. Karlen
Patricia L. Koors
Carol Luck Harris
Betty McMartin
Barbara G. Melamed
Diane M. Michalik
Gerald R. Mulcahy

David E. Nevalainen
Jeanne C. Olsen
Helen M. Osborne
Elberta L. Prestegard
James H. Prestegard
Debra C. Rodahl
John L. Roesler
Vincent J. Rogalski
Eileen M. L. Rogers
Ruth M. Rosendahl
Margaret C. Rutherford
Jean M. Rysavy
Norynne M. Schiminsky
Paul C. Schreckenberger
Jean H. Smith
Laton A. Smith
Phyllis F. Stapel
Margaret J. Suess
Grace P. Wagnild
William W. Wagnild
Bethany J. Walters
Mary K. Weimer
Lila Wengler
Joyce M. Wian
Joan L. Yasminch



Yvonne Chenoweth Cooke Endowed Professorship

Last spring, the Division of Medical Technology was honored to receive the Yvonne Chenoweth Cooke Endowed Professorship in Medical Technology. The purpose of this professorship is to help the University of Minnesota Medical School attract and/or retain outstanding faculty in medical technology. Yvonne Chenoweth Cooke is a 1937 graduate of our Medical Technology Program, and this gift is intended to serve as a lasting expression of the value she places on education. Distributions from this fund may be used for research, teaching activities, salary supplement, or other purposes as approved by the Director of the Division of Medical Technology. The holder of the Yvonne Chenoweth Cooke Endowed Professorship will be appointed by the Dean of the Medical School in consultation with the Director of Medical Technology. Because this professorship has been recently endowed, a recipient has not yet been named (although we anticipate this will happen during the upcoming year). We are extremely grateful for this generous donation. We are proud to announce the receipt of this professorship, a gift that will have a lasting impact on the quality of our Medical Technology program.

NOTE: An endowed professorship can be established with a minimum gift of \$500,000. To our knowledge, the University of Minnesota is the only Medical Technology program in the nation with an endowed professorship, and the Yvonne Chenoweth Cooke Professorship is the second such honor for our program, following the Mildred King Rohwer Professorship established over ten years ago.

Karen R. Karni Scholarship Fund

The Karen R. Karni Scholarship Fund was recently established by a generous gift of \$50,000 from Constance Olson Bakken (class of 1946). Connie Bakken was highlighted in last year's edition of Tech's Talk following her contribution of \$100,000 to establish the Constance Olson Bakken Scholarship Fund. This year, she has chosen to recognize the life work of Dr. Karen Karni, a 1963 alumna of the program and our long-time Program Director (recently retired). This generous gift by Connie Bakken is not only a fitting tribute to the illustrious career of Dr. Karni, but will help finance the education of our students for years to come. (On the next page, see the "challenge" Ms. Bakken has proposed to increase the funds in this scholarship.)

Medical Technology Scholarships

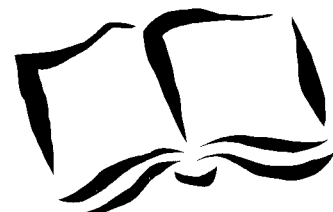
Eight different scholarship funds are administered through the Division of Medical Technology. Only students in the professional program are eligible to apply. Criteria used for selection include scholastic standing, financial need, and professional potential.

Thirty-five medical technology students received scholarships during the year 2000. Students who received the awards were enrolled in the junior and senior years as well as in clinical assignments. More than half of our students received some scholarship support. This is a remarkable achievement, attesting to the dedication of alumni and friends who have given generously over the past several decades.

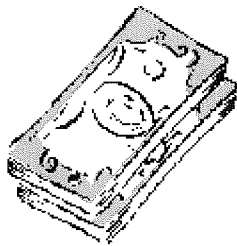
The students sincerely appreciate scholarship assistance. In a recent survey conducted by the Mayo Clinic on entrance into the field of medical technology, several University of Minnesota students discussed the positives of being able to get scholarship assistance. In a time when recruitment into the field can be challenging, these scholarships can help make the difference in someone deciding to be a medical technologist. Tuition for the senior year alone is \$4,075 for a state resident and almost three times as much for a non-resident. This situation forces students to work, on average, 20 hours per week. The awards have enabled many deserving students to complete their education. Available scholarships are:

- Hovde-O'Brien Scholarship Fund
- Yvonne C. Cooke Scholarship Fund
- Gonyea-Stewart Scholarship Fund and Gonyea-Stewart Emergency Loan Fund
- Betty Rae Kramer McConnell Scholarship Fund
- Medical Technology Alumni Scholarship Fund
- Constance Olson Bakken Scholarship Fund
- Hematography ®
- Karen R. Karni Scholarship Fund

With your help, the scholarship funds will continue to grow. Contributions may be sent to the Division of Medical Technology, University of Minnesota, Mayo Mail Code 609, 420 Delaware Street SE, Minneapolis, MN 55455-0374.



Challenge from Connie Bakken



Constance Olson Bakken has made a challenge grant to alumni and friends of the Medical Technology program. All gifts and pledges to the Karen Karni Scholarship Fund made between now and December 31, 2001 will be matched

dollar for dollar. These funds are intended to provide valuable scholarship support for Medical Technology students. For information on how you can make a gift please contact Mark Marshall at the Minnesota Medical Foundation (612-625-8676).

Mildred King Rohwer Professorship

In July 2000, the Mildred King Rohwer Professorship was awarded to Dr. Carol Wells, the interim director of the Division of Medical Technology. Carol teaches clinical microbiology and conducts an active research program that has been consistently funded by the National Institutes of Health for over fifteen years. Carol's research focuses on the mechanisms by which normal intestinal microbes cause systemic disease in high risk patients, such as trauma patients, postsurgical patients, and immunosuppressed patients.

The Mildred King Rohwer Professorship was established in 1988 by Mrs. Rohwer (class of 1933). The first recipient was Professor Esther Freier, a former instructor in clinical chemistry, well known for her innovations in laboratory quality control testing. Professor Helen Hallgren (recently retired), taught immunohematology for many years, and was subsequently awarded this professorship. Helen was also director of our master's program in Clinical Laboratory Science and was widely recognized for her research on the immunology of aging. In establishing this first endowed professorship of Medical Technology in the nation, the generosity of Mildred King Rohwer will foster the excellence of our teaching and research endeavors into perpetuity.

Director's Message from Carol Wells

I have been honored to serve as the interim program director for the Division of Medical Technology this past year. I would like to take this opportunity to formally thank each of the faculty and staff for their continuing hard work. Due to their dedication, as well as the excellence of our students and the generosity of our alumni and friends, the Medical Technology Program remains strong and vital as we enter the new millennium.

Alumni News

On February 5th the University of Minnesota's English Department presented the 1st Annual Esther Freier Endowed Lecture in Literature. The guest speaker was the celebrated author Jamaica Kincaid. **Esther Freier (1946)** wished to leave a legacy that would benefit the public and inspire emerging authors. Many of you will remember Esther as a teacher, friend, and mentor in clinical chemistry.

Carol McLimans (1958) has moved to Asheville, North Carolina. Since 1996 Carol has had a new career as a program specialist and job developer with an area agency focusing on our aging population. Some of you may remember Carol when she was employed at the Mayo Clinic and was one of our early education contacts involved in clinical rotations in Rochester.

Susan Thoren Danisch (1976) returned to college to earn a degree in Chemical Engineering. Susan is currently employed at 3M as a test method and systems engineering specialist in the Occupational Health and Environmental Safety Division.

Nancy Bayer Dean (1976) lives in Brookfield, Connecticut and has been employed for 19 years as the Director of Marketing and Self Testing in the Diagnostics Division of Bayer Corporation. This Division markets systems used by diabetics to monitor blood glucose levels.

In 1999 **Judith Fresk Winter (1967)** received a Ph.D. from The Union Institute in Cincinnati, OH. Her doctoral degree is in Healthcare Management with a Managed Care specialty. Judith owns and operates a medical consulting business called Great Plains Medical Consulting.

Elizabeth Tsang Grabowski (1972) completed a Master's Degree in Theology from The College of St. Catherine in St. Paul, MN and was certified by the Association of Professional Chaplains in 1998.

Brad A. Feltis (1987) received a \$40,000 research fellowship for 2000-2001 from the Surgical Infection Society. Brad received his M.D. degree from the University of Minnesota in 1997, and he is currently a resident fellow in the Department of Surgery. The fellowship was awarded for research on intestinal disease caused by the bacterium *Clostridium difficile*.

Margaret Gross Whiting (1976) lives in Iowa. For five years, Margaret has been making artist's books about environmental issues. Book making allows her the opportunity to combine handmade papers, photographs, drawings, prints, natural materials, and text.

Student Profiles

The University of Minnesota's Medical Technology Program is widely known for the excellence of its student body. The class of 2001 continues this rich tradition. Although space constraints do not permit us to profile each student, the following profiles are presented to give our readership a better understanding of the quality and diversity of our students.



Jody Dalberg, originally from Wisconsin, entered the program after pursuing a major in chemistry. Jody became interested in medical technology after hearing a lecture on the discipline. He immediately switched the focus of his education and applied to our program. Jody currently gains additional experience in clinical laboratory science by working part-time as a phlebotomist at Fairview-University Medical Center. He enjoys this aspect of medical technology because it gives him the opportunity to interact with patients, and he hopes to have a positive impact on their medical care. Although he has a busy schedule, Jody takes time to be involved in extra-curricular activities. He is an accomplished singer and participates in youth oriented activities in his church. Jody is aware of the numerous career and educational opportunities available to medical technologists. In addition to graduate medical education, he is considering opportunities in pediatric hospitals as well as mission work abroad. Jody also serves as president of the class of 2001.



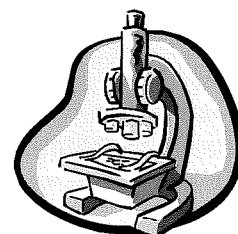
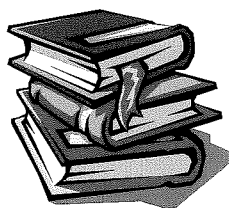
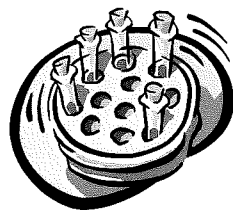
Anne Stemper is a Minnesotan who has lived in the Twin Cities area most of her life. Anne comes to us with a strong background in microbiology. She earned a bachelor's degree in this discipline prior to entering our medical technology program. Anne is following in the footsteps of her mother, who is a graduate of our program and has been a medical technologist in the microbiology laboratory of Fairview-University Medical Center for many years. In fact, Anne will be the third member of her family to graduate from our program. Anne decided to enter medical technology based on her specific interest in medical microbiology. She is considering a variety of career options in areas such as public health, food service, and drug development. Given her broad interests, the degree she earns in medical technology will allow her to apply her practical skills to any of these areas. Like many of the students in our program, Anne enjoys activities not related to medical technology. She has been involved in track and field, and she ran cross-country in college and enjoys downhill skiing.



Gail Carlson is currently living in Brooklyn Park and has been going to college for a total of 27 years, beginning in 1972 and taking time off for the birth of her two children. Gail now has bachelor's degrees in both biology and physiology. She discovered medical technology while doing an independent study project in a laboratory with a focus on anesthesiology. Her sister-in-law is Jan Blair, another graduate of our program. Gail's whole family has either graduated or is currently attending the U of M, resulting in a steady stream of tuition checks flowing from her family to the bursar's office. Gail's daughter is in electrical engineering and her son is the managing editor of the Daily, the highly respected campus university newspaper. Gail is looking forward to working in the field, possibly on the evening shift because she is not a fan of early mornings.



Victor Gromoff grew up in Moscow, Russia and came to this country in 1993 with his entire family, including four brothers and sisters. Victor currently resides in Lakeville. He began our program in his senior year after taking prerequisite course work at Inver Hills Community College as well as the University. Victor has worked for Allina Health Systems as an interpreter and he enjoys singing in his church choir. After graduation, Victor would like to work for a year or two and then go on to a Physician Assistant's program.



Anniversary Classes Honored

Each year we continue our tradition of honoring the 75th, 50th and 25th anniversary classes.

Class of 1926 (75th Anniversary)

Craig, Alice Neukamp** Hansen, Alice Schmid*	Karlstrom, Eunice Nyholm Kasler, Rozelle Aronvitch*	Kliver, Caecille Feyerabend* Patton, Avis Beyer*
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Class of 1951 (50th Anniversary)

Alexander, Carolyn Johnson** Amble, Marlys Sandford Andrews, Margaret Nichols* Aumiller, Helen Jensen* Bailey, Susan Scriver Bredesen, Janet Eklund Clayson, Kathleen Coolidge, Bonita Warner Donahue, Mary Hart Fritts, Harriet Darling Goblirsch, Marie Kiefer Gross, Carmen Doeksen* Haxton, Joan Held** Hedenstrom, Marlene Johnson	Johnson, Phyllis Gadbois Kelly, Dorothy Miller Knutson, Rita George Leavitt, Margaret Angle* Malmstrom, Betty Hallberg* McDonald, Rose Alar Meiners, Lois Bratschi Miller, Florence O'Toole, Rita* Odenbrett, Peter* Peterson, Ann Lowry** Peterson, Donovan Peterson, Robert Reid, Jean Setterberg**	Ripley, Donna Hult Rozeske, Marion Fozniak Rude, Laura Grette Russell, Edith* Schultz, Janet Bauer Steinmetz, Julia Peterson Streeter, Sally Scriver Thorson, Joan Walden, Marion Langlie* Williams, Donna Campbell* Yates, Helen Jernberg Zimmel, Virginia Blackmore
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Class of 1976 (25th Anniversary)

Abzug, Deborah** Agrell-Doehring, Janet Ahlness, Patricia Klotz Barrett, Kathy Bednicek, Barbara Coleman* Bell, Marcia Berger, Patricia Clymer Berndt, Mary Munsterteiger Blackburn, Julie Prlina Bolduc, Paula Chang, Betty Danisch, Susan Thoren De La Rosa, Sherri Schuster Dean, Nancy Bayer Dey, Rebecca Lutz* Elder, Bonnie Laurel Fulgham, Laurie Warner Giesen, Marjorie Gigeay Hawkinson-Hickey, Marilyn Heger, Marcine	Holdgrafer, Linda Holmgren, Robin Amundson Hopper, Mary Rung Hughes, Michael E. Johnson, Pamela Jorgensen, Laurel Holsman Krueger, Lynn Kusz, Christine Kondel Lerick, Mary Mismash Lundquist, Janet Poole Lundy, Theresa McCorkell Maijala, Susan Ahonen Mayer, Gretchen Mielke, Steven Moskalyk, Ann McDonald Moyer, Yvonne Mulder, Ross Nelson, Jacquelyn Laferriere Niftico, Patricia Roden Norman, Lucy Butzke	Olson, Steven* Pence, Barbara* Pfleghaar, Kathleen Roberts, Gail Russ, Shelly Lepisto Russell, Wendy Schellekens, Anne Schleevogt, Mary Beth Schmidtke, LuAnn* Smith, Barbara Stern, Illona Lefebvre Suess, Peggy Walin Taylor, Mary Jane Miller Vukad, Gail Thorson Wagnild, Grace Haagenson Webber, Colleen Grotz Weinreis, Monica* Whiting, Margaret Gross
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*Address unknown

**Deceased

If you are a member of an anniversary class, please make a special effort to attend the annual alumni banquet. The reservation form is on page 15. Classmates from the anniversary classes 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!

Follow Your Heart



Peter Mayer, a current student with a double major in Music Performance and Medical Technology, has written the following.

Pursuing two separate career paths can often be very difficult if not nearly impossible. This became clear my freshman year at the University of Minnesota when I was taking classes in both the Medical Technology and Music Performance programs. At that time, I thought life could not get any busier, but the difficulty increased as each year progressed. As many students know, it is important to keep a good relationship with departmental advisers so scheduling and dealing with other intangibles can be handled properly. Fortunately, I had the privilege of dealing with two flexible individuals, namely Pat Solberg and Rod Loeffler, who helped me manage my complex schedule. I thank them both immensely.

Graduation for Music Performance occurred last fall, and I finished Medical Technology on March 16, 2001. I hope to obtain a job in medical technology, in or out of state, and will pursue my ultimate goal of becoming a professional and/or famous musician. Without the effort of Pat, Rod, and the many fine University professors and personnel, none of this would have been possible. I hope others who follow their hearts will have the opportunities and great experiences I have had, so their dreams too can someday become reality.

New Faculty and Staff

Kim-Sue Tudor, Ph.D., joined the Department of Laboratory Medicine and Pathology as a tenure track assistant professor in November of 2000. She is a faculty member in our Medical Technology Program and is responsible for teaching Immunohematology in the spring semester. Kim-Sue received her medical technology training at Rockingham Memorial School of Medical Technology in Harrisonburg, Virginia. She received her doctoral degree in Pathology and Molecular Medicine from the University of Cincinnati in 1997. She comes to us from two postdoctoral fellowships, one in the laboratory of Dr. Paul Kincade at the Oklahoma Medical Research Foundation and another most recently at the University of Washington in Seattle. Since her arrival at the University of Minnesota, Dr. Tudor has been busy setting up her research laboratory which focuses on murine and human B cell development. We welcome Kim-Sue to our program and anticipate she will have a long and fruitful career at the University of Minnesota.

Abye Bekele is a 1990 graduate from our program and has eleven years experience in the Clinical and Diagnostic Microbiology Laboratory at Fairview-University Medical Center. Abye has joined the Division of Medical Technology as a teaching specialist, and he is involved primarily in our microbiology courses. During this first year, Abye has taken a

primary responsibility for the laboratory sections in our microbiology course entitled Diagnostic Microbiology. He also helped coordinate another microbiology course entitled Mycology, Virology, and Parasitology, where he presented the lectures on Parasitology. In addition, Abye has been a teaching specialist in the Hematology and Immunohematology teaching laboratories. Abye's broad knowledge base and extensive clinical experience makes him an excellent addition to our program.

Stephen Wiesner graduated from our program in 1995 and was subsequently employed as a medical technologist in a variety of clinical settings, most recently as supervisor of the Hematology Laboratory at a local community hospital. Last September, Stephen entered the U of M's graduate program in Microbiology, Immunology, and Cancer Biology (MICaB). He is pursuing a doctoral degree in cancer biology and has just begun his thesis research in the field of tumor immunology. Stephen has been available on a part-time basis to act as a Teaching Assistant in our student laboratories. In the past year, Stephen has helped guide the students in their laboratory exercises in several courses, namely Diagnostic Microbiology, Chemistry, and Hematology. We are fortunate to have such an experienced and qualified person as Stephen in our teaching laboratories.



Where do graduating clinical laboratory scientists go?

Placement data for new graduates over the last five years (1995-1999) reveals the following:

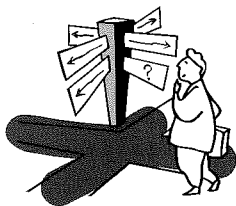
- ❖ The majority (57%) is initially employed at one of the affiliate institutions that instruct our students during their clinical rotations. These affiliate institutions have an inside track on hiring these students after graduation.
- ❖ Of those who remain in Minnesota, employment outside the Minneapolis-St. Paul area averages 14% and varies from 0% to 36%. These placements are likely influenced by the student's clinical rotations in areas such as Mayo Clinic in Rochester, Immanuel-St Joseph's Hospital in Mankato, St. Cloud Hospital, etc.
- ❖ Approximately 11% seek employment in another state. These graduates are usually returning to their home state.
- ❖ A majority (69%) is employed in the Minneapolis/St. Paul area, and 87% remain in Minnesota. Thus, the Medical Technology Program helps the University fulfill its mission of providing a well-trained professional work force.
- ❖ Nearly all students initially seek a "traditional" career in a clinical laboratory. However, each year, approximately one student goes to medical school or graduate school, is employed in industry, or seeks a position in research.
- ❖ Recently, graduates are finding more opportunities in specialty laboratories such as Molecular Diagnostics, Cytogenetics, etc.
- ❖ In the last 10 months, more positions are available at more sites in a given community, and more students are able to find employment on the day shift rather than starting with an evening or night shift.



Can you help us?

Last year *Tech's Talk* was returned for incorrect addresses on the following individuals. If you can help us with current addresses, please call or write to Claire Bjorklund (see page 2). If you have changed your address, please let us know so we can continue to keep in touch.

Marjorie Dale Looman, 1938
Lucille Larson, 1940
Kathleen Weiland, 1940
Mary Geddes Randall, 1941
Carol Marquard Holcomb, 1958



Judith Morrissette Grout, 1966
Elizabeth Eyrich, 1980
Halyna Zubar, 1984
Reeman Ansari, 1996

Computer-based testing for certification examinations

In today's high-paced environment, the National Credentialing Agency for Laboratory Personnel (NCA) sought to help meet the demand for professionals by offering credentialing examinations in a more efficient and effective manner. Beginning April 1, 2001, the NCA changed its examination from traditional paper and pencil to computerized testing. Candidates take the examination at their convenience, at over 100 H&R Block offices nationwide.

There are many advantages to computerized testing. Candidates now have increased access to examinations with the convenience of location and scheduling. Candidates know whether or not they passed the examination before they leave the testing location, facilitating a more rapid response for job-related benefits such as promotion or salary increases.

Although a computer is used, the NCA examination has a traditional format. For example, the Clinical Laboratory Scientist (CLS) exam consists of 150 questions distributed across the six laboratory areas of chemistry, hematology, immunohematology, microbiology, immunology, and laboratory practice. Each candidate answers the same number of questions and the distribution of questions is consistent. This scenario differs from the Board of Registry Examination (ASCP), which uses a computer adaptive format where the number of items changes with the candidate's answers, i.e., if initial questions are answered correctly, the difficulty increases and the number of items decreases.

Because the demands and expertise within the profession have been changing over the years, a job analysis for CLS and CLT was completed by NCA in August of 1999. This analysis enabled NCA to base its current examinations on validated entry-level job-competencies assuring *certification of the profession BY the profession*.



Robin H. Mendelson Award

Dr. Karen Karni (class of 1963), the recently retired director of our Medical Technology Program, was presented with the Robin H. Mendelson Award at the ASCLS national meeting in 2000. This award was given in recognition of Karen's many outstanding achievements in clinical laboratory science. Karen is known throughout the world as a leader and educator in CLS and is one of the most respected members of our profession. The Medical Technology Program was fortunate to have her as our director from 1984 to 2000. Congratulations, Karen, on this richly deserved award!

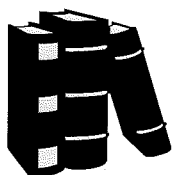
Medical Technology Alumni Award

In May of 2000, recently retired **Professor Helen Hallgren** (class of 1965) received the seventh annual Medical Technology Distinguished Alumni Award. Helen joined the faculty of the Division in 1975, following completion of her master's degree in Laboratory Medicine at the University of Minnesota.

Helen has always been a supporter of both the Medical Technology Alumni Society and the University of Minnesota. A major contribution was serving as the editor of Tech's Talk from 1987 to 2000. Under Helen's guidance, Tech's Talk became a polished publication winning recognition from UMAA as an outstanding alumni newsletter. Helen retired from the Division in July 2000 and is keeping busy remodeling a retirement home in Arizona.

Thank you, Helen, for all your hard work. We hope this year's Tech's Talk is up to your high standards. Congratulations on this well deserved award!

Clinical Laboratory Science Master's Program



Dr. Michael Tsai is the new Director of Graduate Studies for our master's degree program in Clinical Laboratory Science. Under Dr. Tsai, the program is as vigorous as ever, and the faculty has commented that the students are likely among our most qualified to date. Currently, the program has twelve active students, and each has chosen one of five areas of special emphasis, namely clinical chemistry, hematology, immunology, microbiology, or molecular genetics. Graduates fulfill a need in the state for clinical laboratory scientists with advanced training.

MNSCLS Service Award

Kathleen Lawler Hansen was presented with the MNSCLS Service Award for 1999-2000 at the May 2000 Minnesota Collaborative Laboratory Meeting in Bloomington, Minnesota. Kathy, a member of ASCLS/MNSCLS since 1964, has been honored twice before as Minnesota's "Member of the Year," (1974 and 1984), and this third award marks her long-standing contributions to the profession, ASCLS, and certainly MNSCLS. Among her many accomplishments are the following:

- ◆ ASCLS president, 1995-1996
- ◆ NCA president, 2000-2001, Board of Directors 1997-2003
- ◆ ASCLS Government Affairs Committee, 1997-2003, Chair 2000-2001
- ◆ ASCLS liaison to JCAHO, 1996-1999
- ◆ ASCLS Region V Director, 1991-1994
- ◆ MNSCLS Executive Secretary, 1984-94 and 1998-2000
- ◆ MNSCLS president, 1974-1975

Kathy graduated "summa cum laude" from Macalaster College in St. Paul in 1963. She interned at the Charles T. Miller Hospital, St. Paul, under the supervision of Frieda Claussen, the 4th national president of ASCLS.

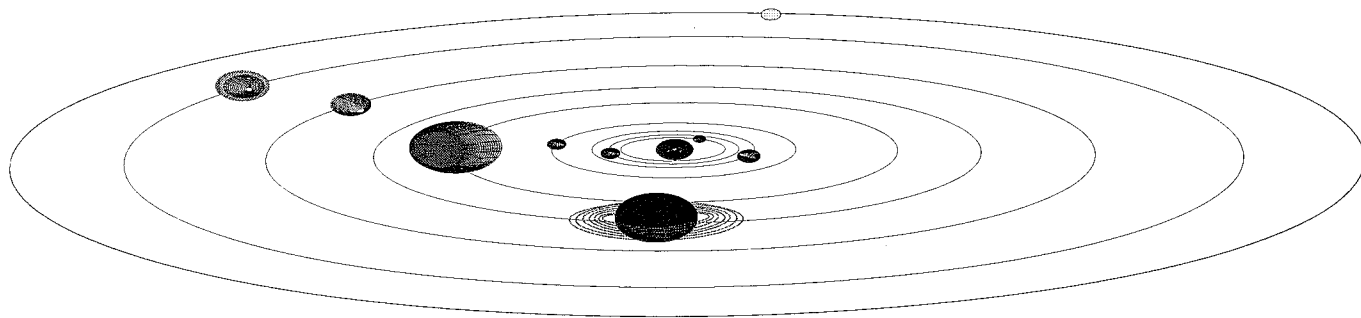
Kathy has spent her entire career associated with Fairview-University Medical Center (FUMC), formerly the University of Minnesota Hospital and Clinic. Currently, she is the Director of Laboratory Operations at FUMC. Here she provides administrative direction for the laboratories, including over 383 full time employees and an annual operating budget of \$41 million. She is well known for her knowledge of, and presentations concerning compliance, continuous quality improvement, accreditation, and cost containment.

Kathy also has a commitment to her community, serving as president and member of the Board of Directors as well as the Board of Trustees for First Congregational Church of Minnesota, chair of the Water Quality Survey Committee of the Friends of the Eau Claire Lakes, and as a volunteer at St. Stephen's Shelter for the Homeless.

Many of us know Kathy for her quiet mentoring, gracious manner and wonderful smile. She has given much to our profession and richly deserves this year's Service Award.



State Spring Meeting



The 2001 Minnesota Spring Collaborative Meeting, "A Laboratory Odyssey," will be held on May 16-18 at the St. Cloud Civic Center. This year's meeting will provide many opportunities to enjoy this odyssey (defined as extended adventurous wandering). Each day will feature a keynote speaker:

- ◆ Bill Dwyer: "Technology Futures Report"
- ◆ Brad Beard: "The Leader's Role is Customer Service"
- ◆ Lisa M. Van Getson: "Ethical Issues in Healthcare in the 21st Century"

There will be over 40 educational seminars, including: gene chip technology, pertussis resistance, managing point of care testing programs, healthcare systems in Rostov, Russia, AABB potpourri, and many others. Thursday morning will feature breakfast roundtable discussions. Wednesday evening will feature a silent auction, sponsored by MNSCLS, held among the numerous vendors and exhibitors. Thursday evening will feature the space invaders social and job fair among the exhibitors. For complete information or a registration brochure for the meeting contact:

Marian O'Keefe
5630 River Road NE
Sauk Rapids, MN 56379

work phone: 320-255-5632

Let's Keep in Touch

As in the past, we are asking you to send us an update on what you've been doing, both personally and professionally. Contributions, including letters and pictures, will be displayed at the alumni banquet. Pictures will be returned if you wish. Please be sure to have your name and address on the back. Thanks for keeping in touch.

Name: _____ (_____) Year of Graduation: _____
Name while in school if it has changed.

Address: _____

E-mail address: _____ Phone Number: (_____) _____

Career Information: _____

Family Information: _____

Special Interests: _____

Please mail to the address on page 15

ITEMS FROM PREVIOUS ISSUES OF TECH'S TALK (A Trip Down Memory Lane)

1951: Dr. Gerald T. Evans is in charge of the Medical Technology Department. Ruth Hovde, '38, is head instructor. Allie Skoro, '42, is the counselor of the students in Medical Technology and Jane Weber '41 is the Administrative Laboratory Technologist.

Fee for annual MT banquet is \$1.75

1961: Due to increased demand on laboratory services, changes have been made in the internal organization of the laboratories. New civil service classifications have been instigated to confirm these changes. Most laboratories now have:

- ◆ Student Technologist Supervisors
- ◆ Senior Medical Technologists
- ◆ Principal Medical Technologists

This is the first time that Medical Technologist has appeared on the civil service classification list.

Fee for annual MT banquet is \$2.75

1971: One class has completed the Medical Technology program under the new curriculum, which has more structured laboratory courses and a shortened time in the clinical laboratories. Two innovations of the new program are the option for experience at another hospital and an auto-tutorial course in diagnostic microbiology.

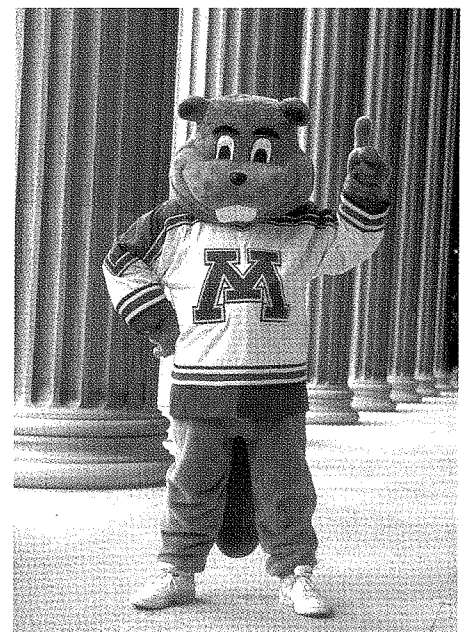
No annual banquet this year

1981: Remember when you graduated and were part of the mob somewhere in Memorial Stadium or Northrop Auditorium? Now each collegial unit has its own graduation exercises. Those for the Division of Medical Technology are planned by a student/faculty committee. Students select the speaker and vote on appropriate dress.

Fee for annual MT banquet is \$15.00

1991: This issue of Tech's Talk marks the 45th consecutive year of publication of this Newsletter. As the oldest baccalaureate degree granting program in the United States, the U of M's Medical Technology Program has earned the respect of many colleagues and friends. However, in these times, the name "Medical Technology" may not be as appropriate as it once was. Would "Clinical Laboratory Science" be a better designator for our program?

Fee for annual MT banquet is \$23.00



Annual Banquet News for Alumni and Friends

Join us at Jax Café for this year's annual banquet. Friends and spouses are welcome! Jax Café is located about three miles from the University, and there is ample free off-street parking. New this year is a silent auction to benefit the Medical Technology Scholarship Fund.

Date: **Monday, May 14, 2001**
 5:30 p.m. Social hour with cash bar, Silent Auction
 6:30 p.m. Dinner, with program to follow

Place: **Jax Café**
 1928 University Avenue N.E.
 Minneapolis, MN (612) 789-7297

Menu: **Grilled Pork Chop**
 Garlic whipped potatoes, chef's vegetable
 or
 Honey Dijon Chicken
 Bone-in breast of chicken, honey glazed, rice pilaf
 or
 Broiled Filet of Walleyed Pike
 New potatoes, chef's vegetables

Salad: Jax House Salad
 Dessert: Carrot Cake



Cost: Alumni Association members.....\$26.00
 Nonmembers.....\$27.00
 Seniors (age 60 and over)..... \$24.00

Special recognition will be given to the classes of 1926 (75 years), 1951 (50 years), 1976 (25 years), and to the 79th graduating class of 2001.

Deadline for reservations: May 9, 2001. Send in your reservations early because seating is limited.

*This is the only mailing you will receive for the Medical Technology Alumni Society Annual Banquet.
Please mark your calendar and return the reservation form below.*

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

I enclose \$ _____ as payment.

Grilled Pork Chop _____ Honey Dijon Chicken _____ Broiled Walleye _____

Please reserve _____ seats for me at the 1951 table.

Please reserve _____ seats for me at the 1976 table. M.A.A. Member: Yes _____ No _____

Name (please print) _____ Class _____ M.A.A. # _____

Address _____ Phone # (area code _____)

Make check payable to Medical Technology Alumni Society. **Reservation should be received by May 9, 2001.**

Mail to: Division of Medical Technology, MMC 609, 420 Delaware Street SE, Minneapolis, MN 55455

NEW BUILDING ON SCHEDULE

Institute of Molecular and Cellular Biology Building on Washington Avenue



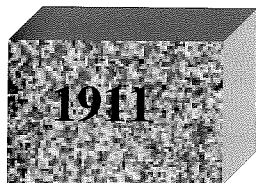
The campus of the Academic Health Center is changing as completion nears for the new Institute of Molecular and Cellular Biology Building on Washington Avenue. A result of collaboration among the Academic Health Center, the College of Biological Sciences, the College of Agricultural, Food, and Environmental Sciences, and the Medical School, the Molecular and Cellular Biology Institute will boost Minnesota's leadership in biomedical technology, health sciences, and agribusiness.

The completion of the human genome project has health science researchers scrambling to use this new information for disease prevention and cure, especially in the disciplines in which the University has been a leader such as cancer, diabetes, neurodegenerative diseases, and immunology. The Institute of Molecular and Cellular Biology will raise the University's ranking in the biological sciences among public universities as well as strengthen both the undergraduate and graduate education in this area.

The new seven level building, located on the old Owre, Millard, Lyon complex between Moos Tower and Jackson Hall, will house laboratories and offices for 60 investigators and 360 research staff. There will also be computer laboratories, teaching laboratories, and classrooms. Completion of the building is expected in April of 2002. Since the fall of 1999, the building project has impacted the Laboratory Medicine and Pathology teaching space in Moos Tower (wherein our Medical Technology program is housed). At that time, the programs in Neuroscience and Histology began sharing the space to teach first year medical students. The movement of nearly 500 students per week through our corridors has turned a busy teaching space into one resembling Grand Central Station. Our storage room now houses brains next to the pathology specimens. Neuroscience and Histology classes will relocate to the Institute of Molecular and Cellular Biology when the building is completed.

You can view live pictures and learn more about this and other construction projects at the University by logging onto www.facm.umn.edu/facm/construction.htm.

A Bit of History



A new Molecular and Cellular Biology Building is under construction on the site that once held the Owre, Millard, and Lyon buildings. Demolition crews discovered two time capsules near the cornerstones of Millard and Owre Halls. University President Mark Yudof was on hand to open the battered, dingy, time capsules.

One capsule, dated 1911 and found near the cornerstone of Millard Hall, contained several yellowed newspapers as well as a copy of the medical school's master plan. This blueprint depicted two structures: the institute of anatomy and an open-air amphitheater that was apparently never built. A second capsule dated 1931 was found near the cornerstone of Owre Hall and contained dental journals, academic bulletins, a set of dentures, and a syringe for delivering anesthesia. These items were likely state-of-the-art for dentistry in 1931. As new buildings are erected on campus, more time capsules are embedded in the cornerstones, to be opened by our successors likely not yet born.

Division of Medical Technology
Dept. of Laboratory Medicine & Pathology
University of Minnesota
Mayo Mail Code 609
420 Delaware St., S.E.
Minneapolis, MN 55455-0374

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