
TECH'S TALK

Editor: Helen Hallgren

Contributors:	Marty Bazluke	Stella Cook	Karen Lofsness
	Larry Bowers	Esther Freier	Pat Solberg
	Barbara Bruer	Karen Karni	Cheryl Swinehart
	Douglas Christie	Jean Linne'	Carol Wells

The 1987 Tech's Talk issue continues our tradition of keeping in touch for the 41st consecutive year. We hope you enjoy this annual effort and welcome suggestions for articles and comments on what you would like to see in future issues. This year, we have instituted two new features, Student Highlights and Whatever Happened To....??? (featuring one graduate from each decade), which we would like to continue each year. Suggestions for individuals to be featured would be appreciated. Write or call the Medical Technology office with your ideas.

NEW HOSPITAL NEWS

Utilization of the new University Hospital dedicated about one year ago has exceeded everyone's expectations. The occupancy rate has been running about 70%, which is considered quite good in today's prospective payment environment. In fact, the news is even better than that indicated by the 70% figure, since three units in the new hospital are experiencing quite low occupancy rates while others such as the Transplantation Unit have waiting lists for the available beds.

Due to some below-expected costs on construction of the hospital, several additional features have been added to make the University Hospital more accessible. A new parking ramp for clinic patients and visitors to the hospital has been built on Delaware Street between Harvard and Walnut Streets. Opened in January of this year, the new ramp still seems to be somewhat of a secret, since it is the only parking facility on the University Campus that is not full to overflowing as yet! If you've been in the area of the new hospital, you've noticed that Harvard Street was torn up for construction of a tunnel connecting the new parking ramp to both the VFW Cancer Research Center and the new hospital. The tunnel is not open yet, but should we get a real Minnesota winter again next year, it will be quite useful for both clinic patients and hospital visitors.



Unfortunately, not everything else has gone as smoothly. Of the laboratories, only the Central Specimen Receiving and Processing Unit (CSRP) and a portion of the Chemistry lab were moved to the new facility. The plan was that a tube and conveyor system would allow rapid exchange of samples between the floors and CSRP, and between the CSRP and the laboratories which remained behind in the Mayo building. Unfortunately, the tube system continues to lyse erythrocytes during transport and only recently have the cars in the conveyor system been able to negotiate the tracks between the new and old building without losing their way. This, in combination with the initiation of a new laboratory computer system, has contributed to keeping the UMHC laboratory personnel on their toes, as usual.

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 1937 (50th anniversary)

Beulah Agre Hebbel	Veda Huston Birkenshaw
Doris Baker Gilmer	*Ruth Jensen Anderson
*Catherine D. Carlson	*Frances Forslund Jilk
*Louise Casey Graves	Harriet Peterson Jorris
Yvonne Chenoweth Cooke	*Delores Kaely Peterson
Margaraet Cowperthwait Rutherford	*Nell Heino Ketchum
*Vallera Davis Whiteside	*Marjorie Hill Ketelle
*Zora D. Dragich	*Audrey Olson Kuehn
*Ruth Sault Drapiewski	*Dean Little Steele
*Elizabeth Erb Higgs	*Elizabeth Higgs McLaughlin
*Ethel Erickson Hofer	*Helen McNair
*Beulah Feldner Gray	*Dallas Virginia Mick
Barbara Fishbein Friedell	*Helmi Rimpila
Beryl Gray Planer	R. Dorothy Sundberg
*Beatrice Stevens Hagen	Elsie Stampe
Dorothy E. Hansen	Charlotte Teschan Merrick
*Ruth Brimhall Heatley	Muriel Vanderbilt
*Virginia Henneman Dorn	Ruth Welton Agnich
*Frances Hill Frommer	Harriet Wilson
*Priscilla Hobbs Medler	*Margaret Zalesky

Class of 1962 (25th anniversary)

Sally Fischbach Carl	Wendy Malin Kline
Barbara Chapman Getchell	Janet McDonald Svardal
Ruth Ann Carlson	Karen Munson Ringsrud
Ruthann Carpenter Lockman	Kay M. Newton
Donna Fadden Wieb	Don Ella Novak Whitney
Katherine F. Freitag	Loreen Pelowski Nash
Sharon Shields Gelperin	Sally Fredrickson Pratt
Lura Gesme Anderson	Carolyn Ramaker Wemple
Ferdinand J. Gunther	Charlotte Maki Sandstrom
Phyllis Hanson Weiss	Barbara Schmidt Herman
Marlene George Helgesen	*Susan Sprage Stroebel
Lois Kohler Harris	Raymond E. Stanley
Marlys Nelson Jensen	Joyce Steindorf Bloomquist
Audrey Nelson Kondrak	James I. Stephens
Joanne Krueger Deden	Thomas D. Stoebe
*Mary Sogard Lagerquist	*Ann Louise Toddie
*Elizabeth Roettger Lang	*Carol Velz Nelson

*Address unknown

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

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

WHATEVER HAPPENED TO.....???

Helen L. Knudsen, following graduation from the program in 1934, worked for five months on nights at the University of Minnesota with responsibility for all laboratory and X-ray services, for which she received a salary of \$25/month plus room and board. In 1936, after working in the tissue and main laboratories, she became the first and only instructor in Medical Technology, working with Dr. William A. O'Brien. Helen also established the O'Brien Loan Fund in 1938 with the help of University Vice President Middlebrook. In 1940, she entered medical school at the University of Minnesota and had a long and successful career at the Minnesota Department of Health. Helen retired in 1974, and has travelled extensively since then, including a trip to China a couple of years ago. She is also active in the activities of Becketwood, her residential cooperative.

Ruth Cardinal, one of the ringleaders of the strike of the class of 1946, has chosen to retire from her associate scientist position at the end of March 1987. After knocking around in a few jobs in the early years (Mason City, Iowa, and serum iron research work with Dr. Roy Holly and later Dr. Robert Howard), Ruth joined Dr. C. J. Watson's porphyrin laboratory in 1951. The laboratory has continued to function as the Watson laboratory even after Dr. Watson's death in 1983, being eventually transferred from Northwestern Hospital back to the University. Ruth is a co-author on many papers and attended by invitation four Gordon conferences in New Hampshire and two in the Seattle, Washington area as well as a New York Academy of Sciences conference during her 36 year tenure. She participated in the basic work on the use of hematin in the treatment of porphyria.

Kathleen Clayson, one of the last of the bootstrap puller-uppers who worked and taught in the Chemistry laboratory at the University of Minnesota hospital, earned a Master's degree in Medical Technology in 1968, but still regards herself as a member of the class of 1951. Kathy left Minnesota in 1969 after 18 years at the University to join the faculty at the University of Washington in Seattle. This year marks the completion of equal time for Kathy at that institution where she functions as an Associate Professor and Coordinator of the Graduate Program. She still teaches chemistry to undergraduates and is also associated with the enzyme section of the Clinical Chemistry service laboratory there. The two Medical Technology programs, at Minnesota and at Washington, share national prestige so, on balance, Kathy has traded shoveling snow for growing roses.

Betsy Perry is a physician who truly understands the importance of a good laboratory. Part of the reason for this is her background in Medical Technology (class of 1966). After graduation, Betsy worked in the chemistry lab at the University of Minnesota, specializing in immunochemistry and helping to develop the pediatric chemistry laboratory. In 1975 she left the lab to enter medical school at Minnesota. An internship and residency in Albuquerque, New Mexico, followed graduation. In 1981 Betsy returned to the University of Minnesota for a pediatric residency and internship. In 1983 she joined the staff of the coagulation lab at the University, where she remained until 1985. Then it was back to New Mexico where she is currently studying pathology. Betsy plans to return to the Twin Cities this fall. Along with doctoring, Betsy's husband, Jeff, her 17 month old son, Andrew, and her dachshund dog keep life very busy.

Mindy Einarson could not have foreseen how far (literally) her career would take her when she graduated from the program in 1974. After working in the Immunology laboratory at the University of Minnesota, she moved to the Dana-Farber Cancer Institute in Boston, to work with Dr. Edmond Yunis. She later continued her career in immunology and tissue typing at the University of Texas Medical School in Houston, Texas. In 1985, Mindy made a major career move, accepting a position at the King Faisal Hospital in Riyadh, Saudi Arabia. She has been in Saudi Arabia for two years, and recently agreed to continue working there for another year in the tissue typing laboratory.

ALUMNI CONTRIBUTIONS

We wish to thank the generous alumni who have contributed to the University of Minnesota Foundation during 1986. Last year over \$10,000 was collected for Medical Technology from over 350 donors. We would especially like to recognize the following individuals, who according to available records, contributed \$100.00 or more this past year.

Greater than \$500.00

Cooke, Yvonne
Rohwer, Mildred

Greater than \$100.00

Brauer, Ruth
Budge, Marilyn
Canfield, Lorna
Chamberlain, Richard
Duffell, Dorothy
Glen, Kathryn
Grewe, Mary
Hallgren, Helen
Jacobson, Mary
Karni, Karen
McClintock, Dora
Miller, Aldora

Misjuk, Florence
Mohn, Marba
Patty, Diane
Rausch, Verna
Ripley, Donna
Robinson, Ruth
Spanjers, Ella
Steffes, Mike
Warwood, Nettie
Weiss, Phyllis
Wengler, Lila

These donations were used in various ways. The Division acquired a new Macintosh computer and printer, which is used constantly. The students are learning on a refurbished Cytospin centrifuge and Coulter Z.B.I. purchased in 1986. The Medical Technology Conference Room has new photographs of people important in the history of our program and our hallway has enlargements of some of the favorite slides used by the faculty, including an E.M. of a platelet and a swarming Proteus culture. The frames for all of these photographs as well as the binding for the ASMT journals which were not already bound were purchased with these funds. Part of the money contributed was transferred to scholarships for Medical Technology students.

If you have made a donation of any size this year, we thank you. Our 1987 drive will continue, with students trying to reach all of our graduates by phone. When you receive your call, please consider a gift. Private support from alumni is invaluable to the Medical Technology program.

FACULTY TRIVIA

You've probably heard of Musical Trivia, Minnesota Trivia and even Catholic Trivia. Why not a medical technology trivia game?? Several faculty members decided that the trivia format was ideal for the field of laboratory science. In their "spare time", they have formed a company, Medical Dimensions, Inc., to develop, produce and market an educational game, which they are calling "Clinical Laboratory Trivia."

Clinical Laboratory Trivia consists of 500 cards with 3000 questions covering the major areas of clinical laboratory science. There are six categories: Immunology, Hematology, Chemistry, Microbiology, Laboratory Practice and Diversity (miscellaneous scientific knowledge). All items were content validated by outside experts in each area. The game is being promoted as an enjoyable way to review laboratory knowledge, and it has been enthusiastically received by both students and practicing Medical Technologists throughout the country.

CURRICULUM REVISION IN MEDICAL TECHNOLOGY COMPLETED

Last year's Tech's Talk promised you an update on curriculum revision in Medical Technology. In 1967, the present 2+2 integrated program in Medical Technology at the University of Minnesota was begun, spearheaded by Verna Rausch. The 2+2 represented the first nationwide break from the traditional 3+1 curriculum of 3 years in college and one year in a hospital clinical laboratory. Since 1969, over 100 medical technology programs have followed the University of Minnesota model.

In 1986, 19 years following the inception of the 2+2 model, we once again undertook major curriculum review. Much of the impetus for this review came from President Keller's Commitment to Focus, a "plan for excellence," which includes the following statements:

- Commitment to Focus is a plan for the University to enroll fewer undergraduate students,
- Commitment to Focus is a plan that recognized the importance of having top flight graduate and research programs if the University and the State are to remain competitive.
- Commitment to Focus calls for the University to renew its commitment to undergraduate education,
- Commitment to Focus is a plan requiring each college and department to reassess its programs and to focus resources on its highest priorities.

The review process involved interviews with over sixty laboratory directors, managers and supervisors within the University as well as affiliate institutions to gain their impressions of strengths and weaknesses of the program as well as future directions for it. Questionnaires were also sent to recent graduates. From September 1985 through July 1986, meetings were held to reshape the philosophy, goals and objectives for the program. An in depth examination of all pre-professional courses, pre-clinical courses, and clinical rotation areas was made to determine their relevance.

The goal and some of the objectives used throughout the process were:

GOAL: To provide a curriculum in medical technology that is futuristic yet realistic and that maintains the University of Minnesota as the flagship program in the United States.

OBJECTIVES. To have:

1. A program and curriculum reflective of the University's "Commitment to Focus".
2. A curriculum that is flexible in preparing a generalist or specialist, the latter having a strong research orientation.
3. Faculty members teach no more than two quarters per year, to allow them more time for research, publication, and service.
4. A curriculum that prepares graduates to hold positions in traditional clinical laboratories, basic and applied research, and industry.
5. A curriculum that provides flexible entry to the professional program, following 2, 3 or 4 years of college.
6. Graduates capable of providing increasing contributions to the health care team, rather than having an emphasis on the development of individual technical skills.
7. Students carry a lighter load throughout the program, in view of high tuition costs, and students outside work requirements. (A recent study by the University found that the majority of students took five years to complete a baccalaureate program).

The curriculum that emerged is seen on the following page.

NEW CURRICULUM

Suggested Sequence

<u>Fall</u>	<u>Winter</u>	<u>Spring</u>	<u>SS</u>
Year One -			
Gen. Chem. (5) Comp. (5) Math (5) - Area A* MedT 1010 (1)	Gen. Chem. (5) Area C (Soc., Econ., Hist) (4-5) Elective (4)	Quant. (5) Area A (Speech, Logic, Stat)(4-5) Area D (Lit., ArtS, ArtH, Th.) (4-5)	
Year Two -			
Gen. Biol. (5) Organic I (6) Area C (4-5)	Elective (4) Organic II (6) Physics (5)	Anat. (5) Area D (4-5) Physics (5)	
Year Three -			
Elective (4) Biochem (5) Micro. (4)	Comp. (4) Biochem. (4) Phsl. 3051 (5)	Elective (4) Math (5) or Stat LaMP 5177 (Path.) or Elective - (4)	
Year Four -			
Intro. CLS (2) (1 week. prior) Heme. (3) Vir./Mycol./Parasit. (3) Elective (4)	Chem./UA (5) Micro (5) Coag./Inst. (3)	Chem (5) BB - Imm. (5) Heme. (4)	<u>SS</u> Clin. Rot. (8)
Year Five -			
Clin. Rot. (8) Management (2)			

*The University requires that students take at least two courses in four different areas: A (Language, Logic, Mathematics and the Study of Argument), B (The Physical & Biological Universe), C (The Individual and Society), and D (Literary and Artistic Expression).

Give us your thoughts on the revised curriculum. In several years, we'll provide you with data regarding the changes made and the results obtained.

ALUMNI SURVEY

In an effort to determine what our alumni have done following graduation, we are requesting that all of you complete and return the questionnaire found in this issue to us by May 15, 1987. Please help us in this survey; the data are invaluable for a variety of reasons, including our belief that Medical Technology is an excellent entry level profession for a number of career routes.

Just fold the questionnaire, staple and stamp for return mail. If you are attending the Spring banquet, you may enclose the questionnaire with your reservation. Thank you for your cooperation.

UNIVERSITY OF MINNESOTA ALUMNI EMPLOYMENT SURVEY, 1987

(Please type or print)

Name _____
 First MI. Maiden Married

Address _____
 Street

 _____ _____ _____
 City State Zip Code

Phone number: Home _____ - _____ - _____
 Work _____ - _____ - _____

Year of graduation from U of MN - MT Program: 19 ____

Highest degree earned: _____ Field: _____

Certification(s) obtained: _____ Year (s) _____ If licensed by a state, indicate state _____

Total years of experience in laboratory work: _____

Present employment status: Full time Part time Unemployed Retired
(Please circle)
 Work days Work reliefs Work nights

Position / title held : _____

Place of employment: _____

Specialty (if any): _____

In what city did you obtain your first Medical Technology employment? _____

Did you leave Medical Technology for a few years and then return to the field: ___ Yes ___ No

If yes, how many years were you inactive? _____

If presently inactive, do you plan to return to the field? ___ Yes ___ No

If you are not employed in Medical Technology, but working, what field are you in? _____

In chronologic order (most recent job first), briefly list the jobs you have held since graduation:

<u>Position held</u>	<u>Location (institution,city,state)</u>
1.	1.
2.	2.
3.	3.
4.	4.
5.	5.

Thank you for your participation. Fold, staple and stamp for return mail. If you are attending the Spring banquet, you may enclose this questionnaire with your reservation.

Stamp

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

HOVDE-O'BRIEN SCHOLARSHIP AND GONYEA-STEWART LOAN FUND RECIPIENTS

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

Awards for the 1986-87 school year went to seniors Jacinta Foncha (Bamenda, N.W. Province, Republic of Cameroon), Kay Hochsprung (Blaine, MN), Pat McCarthy (Albert Lea, MN), Sharice Michelson (Yankton, S.D.) and Wendy Schmidt (Vesta, MN). The five recipients were awarded from \$400-\$500 for a total of \$2200.

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

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

Two students used the Emergency Loan Fund established by Lorraine Gonyea Stewart last year. Neither student would have been able to continue their Medical Technology training without these emergency funds. The students and the Division thank Lorraine for her gift of these funds.

OUR ACTIVE ALUMNI

The Medical Technology alumni of the University of Minnesota obviously are proud of their education and institution, and retain their ties to the University after graduation. We continue to hold third place in the percentage of our graduates who join the Minnesota Alumni Association. We lag behind only the nurse anesthetists and the dentists. The programs offered by the Medical Technology Alumni Society each year are a credit to our profession. Please join us for our annual Spring Banquet on May 7th at the Minneapolis Women's Club to meet and visit with friends and classmates.

QUOTABLE(?) QUOTES

From the 1930 Medical Technology Bulletin:

"Ability to cook and sew is an excellent assist for would-be technicians. Men are not advised to take the course because of limited opportunities for employment at the present time."

From the "Medical Student Ward Survival Manual", Jeff Gusky, M.D., University of Washington School of Medicine.

"Medical Technologists are among the most hassled people on a hospital staff. Their customers (doctors) are hard to please and want everything 'right now.' They must filter out the clamor and decide whose requests are truly stat vs. semi-stat vs. pseudo-stat. They also tend to be compulsive and know their highly technical business quite well. They can usually spot a doctor who is not current in his practice. The bottom line is that you can't easily throw your technical weight around with these folks because they often know more than you about lab medicine. It pays to be on their good side. Credibility with them will help get your requests honored more rapidly."

NEW DECOR FOR CONFERENCE ROOM

As we reported last year, Professor Emeritus Grace Mary Ederer generously donated the cash portion of her Kimble Methodology Award to provide a glass cabinet in which to display selected items from her collection of laboratory antiques. The cabinet was custom designed and constructed by the Health Sciences Carpentry Shop, and is now a permanent fixture in the Medical Technology conference room, which overlooks downtown Minneapolis.

The antique collection includes such unique items as a candle-powered Dare hemoglobinometer (1915), a dangerous-looking sliding microtome (pre-1900), and a watch glass actually used by Dr. Folin at Harvard for the detection of urinary albumin. Also displayed in the cabinet are more mundane items such as an Evelyn colorimeter (could we ever forget it?) and even a faucet from Jackson Hall. An open house/exhibit recognizing Grace Mary's contributions was held on September 18, 1986.

In addition to the Ederer collection, the decor of our conference room has been further enhanced by portraits of some of the founding fathers and mothers of the Medical Technology program at Minnesota. Smiling down on us from our wall of notable people are professors Benson, Blazevic, Damron, Ederer, Evans, Harvey, Hovde, O'Brien, Rausch, Stewart and Sundberg.

Next time you're on campus, stop by and see our beautiful conference room on the 15th floor of the Philips-Wangenstein building. We'll be happy to give you a tour.

UPDATE ON MEDICAL TECHNOLOGY FACULTY RESEARCH

In keeping with the tenet that the University of Minnesota is a research institution, each faculty member in Medical Technology is involved in one or more areas of active research. The research interests of **Karen Karni** (Program Director) include both the educational and the managerial aspects of Medical Technology. **Larry Bowers** (Chemistry) is investigating specific problems related to enzyme chemistry and he is also developing HPLC (high pressure liquid chromatography) assays for the detection of a number of clinically important substances including cyclosporin, the newest agent in immunosuppressive therapy for organ transplant recipients. **Douglas Christie** (Immunohematology) is attempting to define the process whereby certain drugs induce an unexplained but clinically important thrombocytopenia. **Esther Freier** (Chemistry) continues to develop new concepts in laboratory quality control; she also studies the chemistry of certain chemical compounds, including catecholamines, antitrypsin, and a variety of normal serum proteins. **Helen Hallgren** (Immunology) is defining the relationship between the immune system and the aging process; her work is clarifying some of the mechanisms that are involved in the decline of immune function during human aging. **Naomi Hanson** (Chemistry) is developing methods for the nephelometric determination of apolipoproteins in order to assess their use for identifying patients with coronary heart disease. **Karen Lofsness** (Hematology) is currently assessing the utility of a new, highly sophisticated Coulter counter, the Coulter Model S plus IV, that gives all hematological parameters including an automated white blood cell differential. **Cheryl Swinehart** (Coagulation) is involved in a number of investigative efforts involving abnormal antithrombin III as well as abnormal Factor II in systemic lupus erythematosus. **Carol Wells** (Microbiology) is attempting to define the mechanisms whereby, in immunosuppressed patients, certain normal intestinal bacteria can leave the intestinal tract and cause potentially lethal systemic disease. Although the faculty's research interests are varied, they manage to collaborate informally in small groups (almost daily) and formally (biweekly) in an organized research seminar.

MILDRED KING ROHWER ENDOWED PROFESSORSHIP

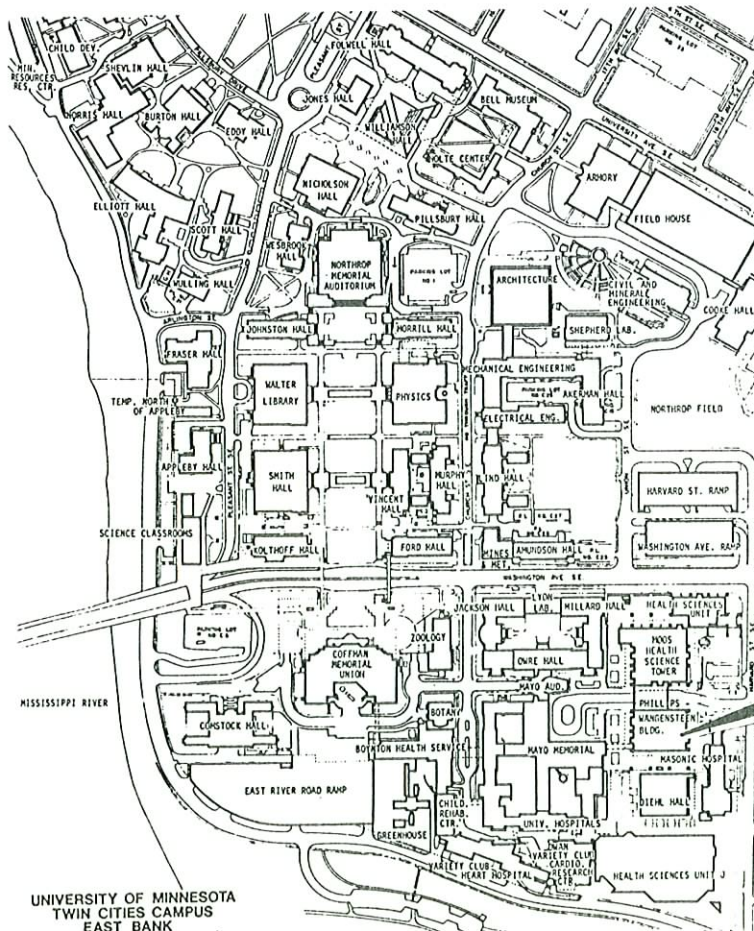
Mildred King Rohwer, a 1933 Medical Technology alumna of the University of Minnesota, has decided to bequeath monies for an endowed chair (professorship) in Medical Technology. This will be the first endowed professorship in Medical Technology in the country - another first for the University of Minnesota. In addition, she will be providing monies for a scholarship in her name.

Many of you may remember Mildred King who, following graduation, worked as a medical technologist at the Gillette State Hospital for Crippled Children in St. Paul and the University of Minnesota (nights). For two and one-half years, she was the only technologist for the Department of Medicine, under Dr. C. J. Watson. She also worked in the Dental School for Dr. C. W. Waldron, and then supervised the hematology laboratory at the University Hospitals. Later she worked at Stephens College, Columbia, Missouri.

In 1951 Mildred King married Carl Rohwer in Wichita, Kansas. Mildred has consistently been an active supporter of Medical Technology through numerous contributions to our scholarship fund. She also attended her 50th Class Reunion here in 1983.

Mildred King Rohwer has made very generous gifts to Medical Technology, and we are most appreciative of them. All of us - faculty, students, staff, and alumni - thank her for her special contributions to our program.

Others, like Mrs. Rohwer, may wish to express their loyalty to Medical Technology by including the Division as a beneficiary in their wills. In addition, any contribution of \$10,000 or more qualifies one to sponsor a perpetual scholarship named in his/her honor. Interest on the principle is used for the Medical Technology scholarship program.



THE CAMPUS IN 1987

If you haven't been on campus for a few years, you have missed many changes. We thought you might be interested in a map of the campus as it exists today, and we have an ulterior motive in pointing out where our offices are located! We enjoy visitors, and would appreciate alumni stopping to see us and visit with us. Our offices are located on the 15th floor of the Phillips-Wangensteen building. The address is: Division of Medical Technology, Box 198 UMHC, University of Minnesota, Minneapolis, MN 55455. Our office telephone number is (612) 625-9490.

Medical Technology
15-170 Phillips-
Wangensteen

STUDENT HIGHLIGHTS

All of us know that Medical Technology students have certain characteristics and have achieved many goals, but they also are unique and special. Here is a sampling of some of our current students.

Charlotte Wetzel not only runs from class to class; she also runs after class. Charlotte is co-captain of the women's varsity track team. She is also one of the best sprinters in the history of the University of Minnesota. This season she has already broken the school record in the 500 meters. Charlotte started racing in junior high school, and this year received a scholarship to run for the University of Minnesota track team. She also plays soccer and says sports are a big part of her life.

Kevin Gildner flies in his spare time; he is a flight attendant for Northwest Airlines. Kevin has worked for Northwest for 11 years and is using vacation time and flying during quarter breaks and holidays to keep his status while he finishes the Medical Technology program. His wife, Rita, is also a flight attendant and does some computer programming. They both have flown all over the world and enjoy it but would now like to "settle down."

Janice Putnam is not only a student, but a wife and mother of three children (ages 8, 10, and 11). She received her MLT degree in 1974. Jan worked in immunology for two years but after her second child was born decided to devote full time to her family and didn't work for nine years. In 1983, after her youngest child went to school, she found herself with too much energy and decided to return to school. Now she is a full-time student and works part time in virology.

Kay Hochsprung received a degree in design in 1977 from the University of Minnesota. She worked at a variety of jobs from designing fabric and signs to tailoring at Dayton's and making costumes at the Children's Theatre. She even owned her own silk screening business. Kay works part time in venapuncture, in hematology on weekends, and in microbiology doing research with Dr. Carol Wells while completing her Medical Technology degree.

Cindy Spearing, now a senior in Medical Technology, is also assistant treasurer and president of Delta Delta Delta sorority. The sorority is very active in charity and community projects. She works part time in the Veterinary Clinic at the St. Paul Campus performing chemistry and hematology tests. Cindy has also just completed an undergraduate research opportunity project (UROP) with Dr. Larry Bowers on cyclosporine kinetic studies. She is planning to go on to graduate school in hematology and hopes to continue doing research and to teach.

Brad Feltis is president of the Medical Technology Student Council. Though Brad has a unique sense of humor, he takes his duties as senior class president very seriously. He has been instrumental in obtaining money for student activities. The student council has also been very active in the preparations for graduation, participated in an open-house day, and a welcome lunch for the junior class. Brad's major interest is science; he is also interested in sales and has been working part time selling computers. He hopes to combine these skills and interests in the future.

THANKS FOR JOURNALS

The Division of Medical Technology wants to thank all of you who contributed to our search for missing journals for our collection of the American Journal of Medical Technology. Many of you responded with your past journals. The ASMT headquarters provided most of the rest of the missing journals when they moved their headquarters this past year. We are now missing only one issue - Jan-Feb, 1958, Vol. 24 #1, to have a complete set from 1935 to the present. If anyone has a copy of this journal, we would really appreciate your donating it to us. The rest of the journals have been bound and are on display in our conference room. Thanks again for your help!!

MEDICAL TECHNOLOGY - OUR PROFESSION IS CHANGING!

Changing economic times have produced changes in the numbers of graduates in Medical Technology. Nationwide, 120 of 630 accredited MT programs have closed in the past three years. Five were located in Minnesota. In a recent survey conducted by Pat Solberg, Administrative Associate in Medical Technology, the following figures were obtained on numbers of accredited programs and graduates in Medical Technology in Minnesota.

	<u>No. of MT Programs</u>	<u>No. of MT Graduates</u>
1977	13	132
1985	10	70
1986	8	61
1987 (anticipated)	6	48

In January 1987, we saw a shortage of technologists in the Twin Cities area. The University Hospital and Clinic which usually hires 10-15 new medical technology graduates each year, had few applicants, a situation also found in other institutions in the area. A year ago we thought there was a "steady state" in numbers of technologists and positions; now, we are seeing a shortage in personnel. What impact this will have on hiring patterns, salaries, and numbers of students and "refresher" students is yet to be seen. We'll keep you posted!

Changes are also seen in the practice of the profession of Medical Technology. At a recent conference, "Managing the Quality of Laboratory Test Results in a Changing Health Care Environment," co-sponsored by the Centers for Disease Control and our Department of Laboratory Medicine and Pathology, developments in the following areas were identified as technological changes to be anticipated in clinical laboratories in the next five to ten years.

Test selection will be improved by using computer assisted/algorithm directed test ordering. Computers will also be used for monitoring therapy. Increased use of noninvasive home testing and also tests for risks of development of diseases were foreseen.

Among the most interesting developments in specimen collection and handling will be the development of in vivo monitoring techniques and the use of robotics for specimen handling.

New analytic approaches in the next few years will include the use of whole blood as a test substrate and the development of transcutaneous sampling and testing. Microbiology will see increased use of non-culture identification methods, and the use of cell culture, cell testing and gene probe technologies will be greatly expanded from their present role in the clinical laboratory. Miniaturization of existing technologies and development of ultra sensitive assay systems will enhance clinical laboratory diagnosis.

Algorithm directed retesting and result validation will improve test reporting. Interpretation and evaluation of results will utilize computer assisted synthesis of data and the use of individual and group reference ranges.

Preparing for, implementing and managing these anticipated changes will be a challenge to all of us. Nevertheless, we are committed to be at the "cutting edge" of progress in the University Hospital and Clinic, in research and in the Medical Technology curriculum.

MEDICAL TECHNOLOGY ALUMNI SOCIETY NEWS

The Medical Technology Alumni Society continued its tradition of sponsoring a Fall Program for the Twin City area Medical Technologists. The evening's program on November 13, 1986, was entitled "Meeting the Challenge of Changing Times." A delicious buffet dinner was followed by a keynote address by Dr. Michael Steffes.

A panel of medical technologist professionals involved in various endeavors (Nancy Butala, Marlys Lund, Jane Nichols, and Kathryn Schaeffgen) completed the evening's program by presenting ideas of how and why medical technologists are valuable in positions outside the usual medical laboratory setting. Approximately 140 people attended this annual event. The format for the evening, dinner followed by a program of exploration into the changing practice of Medical Technology, has been well received and future similar events will be planned by the Alumni Society.

UNDERGRADUATES IN RESEARCH

In the summer and fall of 1986, four of our undergraduate students, Lori Horning, Tammy LeGeault, Cindy Spearing, and Lori Wischnack, successfully competed for awards from the University's Undergraduate Research Opportunity Program (UROP). This highly competitive program provides students with a unique educational experience working on a 6-8 week (or longer) research project under the supervision of a faculty advisor. Advisors included Esther Freier (Chemistry), Naomi Hanson (Chemistry), Larry Bowers (Chemistry), and Doug Christie (Immunohematology). Projects involved studies on such diverse topics as the molecular mechanism of drug-induced thrombocytopenia, measurement of plasma and blood levels of apolipoproteins and their involvement in cardiovascular disease, and kinetic analysis of cyclosporine therapy in cancer patients.



Overall, UROP has been a very positive experience for both students and faculty. The work accomplished by students provided the data for abstracts to scientific meetings, publication of research articles, and additional grants to extend the initial studies undertaken. This highly successful program will continue to be an important means whereby students can be introduced to the challenging world of biomedical research.

SPRING EVENTS HONOR SENIORS

This year's reception for the graduating Senior Medical Technology students is scheduled for Monday, June 1 from 3:30-5:30 pm. The reception is sponsored by the Medical Technology Alumni Society and will be in "The Bridges" (8th floor of the new hospital). All alumni are invited.

The graduation and oath ceremony will be held on Sunday, June 7, in Moos Tower 2-620 (East Bank) at 1:00 pm. Karen Lofsness will deliver the commencement address, and a reception for families and friends will follow the ceremony.

We are proud of the class of 1987. Please join us in congratulating them.

ANNUAL BANQUET NEWS

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

Date: Thursday, May 7, 1987
Social Hour (cash bar) 6:00 p.m.
Dinner 7:00 p.m.
Program to follow

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

Menu: Boneless Breast of Chicken with Champagne Sauce
or
Salmon Filet with Lemon Butter
Baked Potato with Sour Cream
Green Beans Almondine
Pecan Torte

Cost: M.A.A. Members \$15.95
Nonmembers* \$17.95

Gratuity and tax are included in price

*Nonmembers may take advantage of a special membership offer in conjunction with the May 7 meeting. Single memberships are available to nonmembers at \$22.00. (Regular annual membership is \$25.00, which includes membership in the Minnesota Alumni Association as well as the Medical Technology Alumni Society.)

Program: *The Past Twenty-five Years in Medical Technology*
Donna Wieb, Laboratory Administrator, University of Minnesota Hospitals

Special recognition will be given to the class of 1962 (25 years) and 1937 (50 years)

Deadline for reservations: April 24, 1987

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

I enclose \$_____ as payment. Chicken _____ Salmon _____

Please reserve _____ seats for me at the 1937 table.

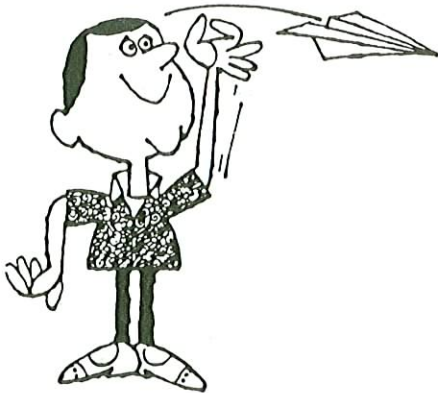
Please reserve _____ seats for me at the 1962 table.

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

Mail by April 24, 1987, to: Medical Technology Alumni Society
100 Morrill Hall
100 Church Street S.E.
Minneapolis, MN 55455

LET'S KEEP IN TOUCH

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



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

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

.....
Name _____ Year of Graduation _____

Address _____ Career Info _____

Family Info _____ Special Interests _____

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