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MEDICAL BULLETIN

UNIVERSITY OF MINNESOTA

SPRING, 1974



The New
University of Minnesota-Duluth
School of Medicine
"Where Every Student Has a Key"

EDITORIAL

This issue of the *Medical Bulletin* takes an inside look at some of Minnesota's efforts to provide family practitioners for its rural communities.

A tiny new medical school on Minnesota's North Shore of Lake Superior, where students are picked for predisposition to family practice in a small community, and every student has his own key to the front door . . .

An educational program which sends third-year medical students to rural communities for a full year of practice at the side of a physician, for medical school credit, and for pay. (Rural Physician Associate Program) . . .

A scholarship program providing up to \$6,000 per year in state money for students who agree to practice for three years in rural Minnesota when they complete their training.

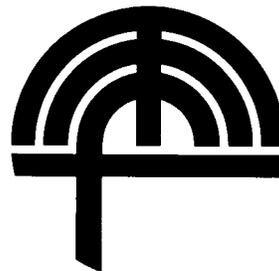
All of the above are real programs in Minnesota's continuing quest for the new country doctor.

There has been no shortage of applicants to any of these programs.

Faculty and students at the University of Minnesota-Duluth School of Medicine all rave about their program.

Students, preceptors, medical faculty and towns involved in the Rural Physician Associate Program are enthused about *their* program. "Without question a unique and fulfilling experience." "The best year of my life." "The most valuable and educationally rewarding experience in my medical career to date." "An excellent program in teaching the art, skills and life of medicine." All are comments from students who have participated in the Rural Physician Associate Program. Rural physicians acting as preceptors have also been supportive. They find the students to be stimulating, as well as a big help with the patient workload.

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THE UNIVERSITY OF MINNESOTA MEDICAL BULLETIN

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UMD School of Medicine . . .

One step in Minnesota's quest for the country doctor

By Pat Monaghan*

The scarcity of young rural doctors has been a subject like the weather — a lot of people talked about it but nobody did anything. But that has changed. Among several things Minnesota is doing about it is a tiny new medical school on the North Shore of Lake Superior.

At the University of Minnesota-Duluth (UMD) School of Medicine, students meet to discuss small-town life in the former home of Sinclair Lewis, author of *Main Street*. They work individually with community physicians who serve voluntarily as preceptors. They enroll in such mini-courses as *Native American Medicine*, *Medical Politics* and *Sexism in Medicine*. The Dean knows them all by name. They are guests of the faculty at occasional beer-and-pizza parties. All this, plus a rigorous curriculum, aimed at encouraging students to seek rural or small town practices.

STUDENT SELECTION

Even before the students arrive at UMD School of Medicine, the odds that they will enter rural practice are pretty good. During the admissions process students are carefully evaluated for potential responsiveness to the positive image of the rural doctor projected by the energetic young faculty and cooperating local physicians.

Dr. Robert E. Carter (Med. '46) came to Duluth in late 1970 as Dean, to prepare the way for the first class of 24 students in the fall of 1972. He began with several associates to enumerate personal qualities and characteristics of rural and urban family practitioners. The resulting article was published in *Minnesota Medicine* in August, 1973. They found that successful long-term rural medical generalists often spent a substantial part of their childhood in small communities. Carter maintains that "the value system of the adult is largely determined in childhood." He feels that the person who lives in an urban area as a child may never be able to understand the values of the smaller community.

Carter found that parental occupation had its effect, as well. Rural family practitioners are likely to be among the first professionals in their families and often have fathers who were farmers or blue-collar workers. UMD considered childhood residence and parental occupation along with academic credentials in selecting its students.

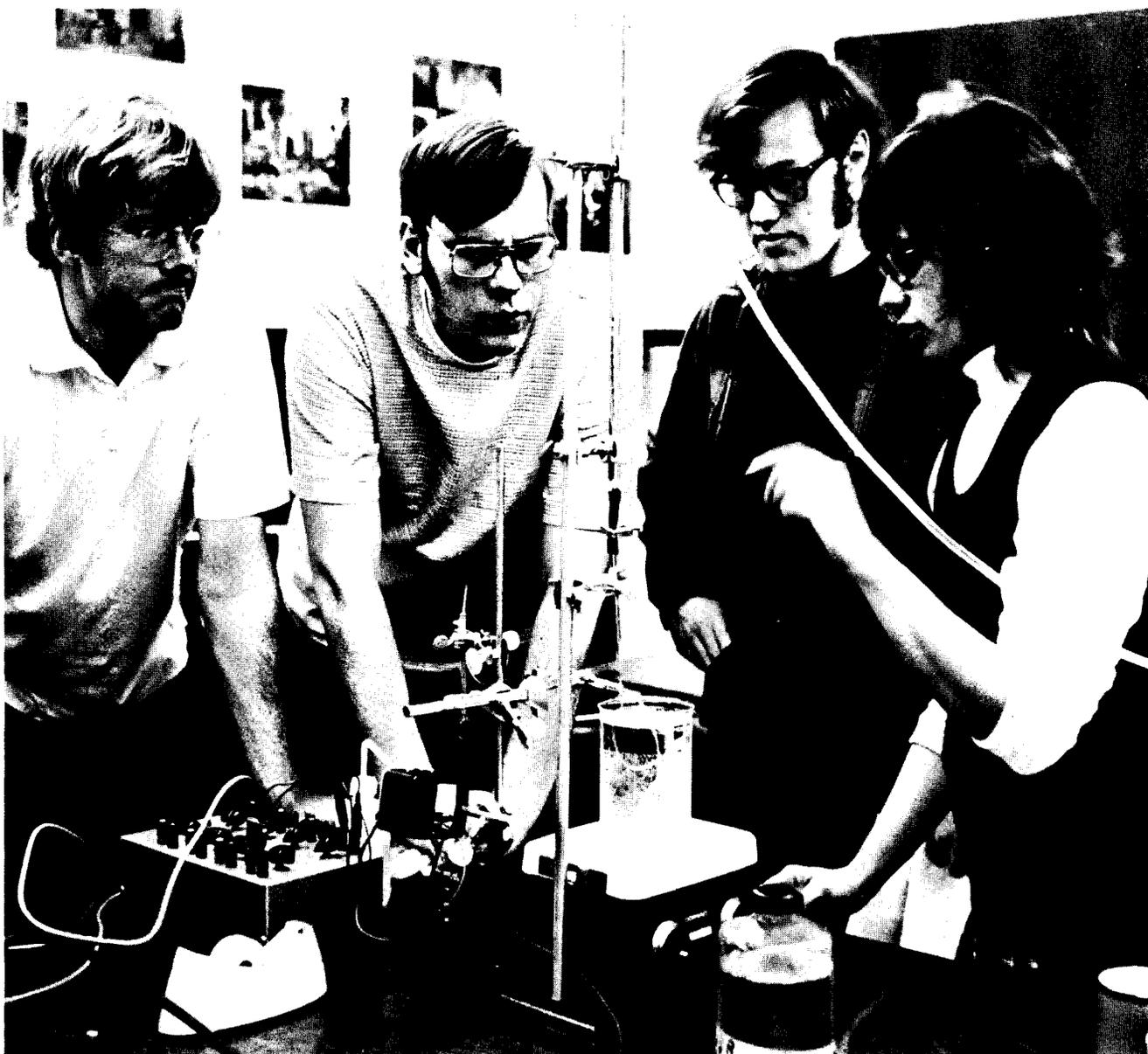


Dr. Robert E. Carter, dean of the UMD School of Medicine, and a 1946 graduate of the University of Minnesota Medical School.

Dr. T. John Leppi, associate professor and head of anatomy and assistant dean, said that the school also had to recognize that some people from big cities might want very much to get out. Leppi said that 75 per cent of the applicants to the UMD School of Medicine were from urban areas but only about 25 per cent of those accepted came from urban backgrounds. There were 429 applicants for the available 24 places in the school's first year, and 834 applicants for the next class of 24. All 24 of the current second-year students will transfer to the Minneapolis campus Medical School to complete their training. The school offers just the first two years of medical training now, with expansion to a four-year program a possibility for the distant future.

(Continued next page)

*Pat Monaghan is a free-lance writer.



All UMD photos by Ken Moran, UMD Photo Service

From left, second year medical students Jon Stephenson, Roger Waage and Richard Roach with Dr. Lois Jane Heller, assistant professor of physiology and assistant dean for student affairs at the University of Minnesota-Duluth School of Medicine.

The intimacy of this UMD medical community is readily apparent to the visitor. Dean Carter greeted several passing students with friendly questions and interrupted our talk to deal with the crisis of a late scholarship check. "This school offers the kind of support that can be gained from a small community," Carter says. "It's a simple and pleasant model for medical education."

Although Carter arrived in 1970, the school's history dates to 1966, when a group of local laymen

and physicians organized the Northern Minnesota Council for Medical Education. Examination of community needs led that group to urge that the University of Minnesota Regents establish another medical school near the Duluth-Superior seaport. The State Legislature appropriated funds in 1969 for establishment of the school. Concurrently, Duluth-Superior was named by the Carnegie Commission on Higher Education as one of nine sites in the nation suitable for a new medical school.

Dean Carter: "We may be the only medical school in the country where every student has a key to the front door."

ONE-THIRD OF STATE PROGRAM

Attempting to stem the rush of doctors away from rural Minnesota, the State Legislature also ordered expansion of freshman places at the Minneapolis medical school, new family practice residencies and establishment of the Rural Physician Associates Program. The latter program is designed to put students to work with non-urban physicians as part of their medical training. Though results of this three-part program will not be seen for several years, Carter points out that these steps should begin to meet a state shortage estimated at more than 800 physicians, mostly needed in Minnesota's rural areas. The State added a fourth step to its efforts in 1973, with establishment of a rural physician student loan program through which students can borrow up to \$6,000 per year for four years of medical school if they agree to practice in rural Minnesota for three years after completing their medical training. If they meet the three-year service obligation, the loans are cancelled.

REINFORCING THEIR CHOICES

While the admissions policies of the UMD School of Medicine are directed toward selection of future rural doctors, the training the students receive reinforces any natural inclinations these students have for small-town practice. Some of this is intangible, what dean of students and physiologist Lois Heller calls "simple positive brainwashing."

Dr. Heller says, "There's no anonymity here. If a student is ill for a day, everyone knows about it. This intimacy means that we can relate one-to-one to the students. That's important because while we have them here we want to positively reinforce the image of the non-urban physician." She also stresses that at the same time there's a large amount of didactic material to be gotten across, as in any other medical school.

CURRICULUM

During the first year, this material is presented in interdisciplinary blocks organized around organic systems. First-year students study biochemistry, anatomy, physiology, behavioral science, preventive medicine and biostatistics, putting in 30 to 35 class hours each week. Class scheduling changes every week during the first year.

While first-year courses concentrate on healthy system functions, the second-year curriculum is geared toward abnormalities and disease, with more time spent in clinical settings.

"Throughout the curriculum, family practice is constantly stressed," Heller says. She feels that

family practice suffers from a "reverse pecking order," with the family practitioner being low on the "prestige totem pole," when the generalist should instead be seen as the first line of defense against disease.

In addition to in-class stress on family practice,



Dr. T. John Leppi, associate professor and head of anatomy and assistant dean.

(Continued next page)

UMD Medical School continued

students are also exposed to real-life generalists through special preceptorships in both years. First-year students spend from three to five hours weekly with a local physician, assisting in routine medical functions. Second-year students spend one day each month with a physician in one of Northern Minnesota's small towns, experiencing firsthand the workload and patient needs of that type of practice.

UMD also favors general practice with a curricular stress on behavioral science. Social psychologist Dennis Brissett and medical sociologist Robert Gibson were joined on the UMD Medical School staff late this year by a third behavioral scientist, James Boulger. With the aid of humanities faculty from UMD's main campus, Brissett, Gibson, and Boulger coordinate a program that gives students a solid behavioral science background. Each entering class takes an intensive orientation course that stimulates consideration of philosophic issues in medicine, as well as providing instruction in basic skills. "Microinterviewing" techniques are taught, with each student being videotaped as he or she takes an imaginary case history. The tapes are then used for self-analysis. Second-year students discuss rural lifestyles in a humanities course that includes readings from American novelist Sinclair Lewis and poet-doctor William Carlos Williams. In addition, a death and dying course was held this year with an instructor from a nearby college and guest appearances by chaplains and morticians.

AN INDIAN EFFORT

One of Dr. Gibson's minicourses this year is entitled "Native American Medicine," and grows out of UMD's commitment to training Indian doctors to practice on Minnesota's reservations. A program called "Native Americans into Medicine" (NAM), spread among the University's Duluth, Morris and Bemidji campuses, is designed to recruit Indian students into graduate study in health-care delivery.

Behind the NAM program lies the fact that there are only 25 American Indian physicians in the nation, and none are residents of Minnesota, despite the fact that Minnesota has 11 reservations with a total population of 11,273 (as of June, 1973) and an urban Indian population of 3,359. Current Indian enrollment at the

UMD School of Medicine is four students, two in each class. According to physiology head Robert Pozos, one of the NAM coordinators, the need to recruit Indian students who are likely to return to the reservations is especially important when one considers that most of the Indian population is rural and isolated and that Minnesota's neighboring states also have large Indian populations.

BROOK SETS MOOD

Even the physical setting of the UMD School of Medicine helps set the proper mood of non-urban living. The school building's most significant architectural feature is a conduit cut through its center to allow passage of a small brook. That the building was once the education department's laboratory elementary school is scarcely noticeable, save for the kid-sized fixtures in the restrooms. The building has 15,000 square feet of laboratories, lecture rooms, study areas and offices.

The Medical School's single building is separated from UMD's more modern main campus by several blocks of private 19th Century style residences. Construction of a facility on the main campus is projected, attendant upon expansion of enrollment and personnel. But now the isolated school forms a compact mini-community of 26 faculty members, 48 students and several dozen supporting staff members within the overall UMD population of 6500 students and staff.

Faculty and students of the UMD School of Medicine are enthusiastic about the UMD experiment. In casual conversation with students, the subject frequently turns to rural practice.

Several students mentioned feeling a strong sense of community, within the school and the city of Duluth. "I feel we have a special niche in this community," says freshman Mike Mancina. He mentioned that Duluth residents have helped locate student housing and that community physicians often aid in laboratory work.

"The exciting part of being here is working directly with doctors, really learning the practice of medicine," said Mancina. "You can learn to hate your textbooks but UMD really reinforces my liking for medicine, especially for general practice." □

QUEST FOR THE COUNTRY DOCTOR

RURAL PHYSICIAN ASSOCIATE PROGRAM

By Jack Verby, M.D. (Med. '47) and Joseph Connolly, M.D., Co-Directors

The Rural Physician Associate Program (RPAP) is a Medical School sponsored program, implemented by the Department of Family Practice and Community Health at the University of Minnesota, supported and funded by the people of the state through the legislature. Medical students in their third academic year spend one year with practicing physicians in the rural areas of the state and are paid \$10,000 — \$5,000 from legislative funds and \$5,000 by the physicians who are extended faculty members of the Family Practice Department.

Physician-preceptors provide 100,000 teaching hours a year to supplement the classroom and clinic experience at the University of Minnesota Health Sciences Center.

Two years ago, 25 students were the initial physician associates for the program. This past fall 40 students were placed around the state. At the end of the year's experience each student receives two quarters of academic credit and returns to the Medical School for the opportunity to strengthen any areas of weakness.

The program is a step towards relieving the shortage of physicians in Minnesota's small towns by providing interested medical students with an extensive exposure to clinical medicine under the direct guidance of the local practicing physicians. The physician (or group) is selected for interest in medical education and ability to relate to and teach students.

Support and encouragement from the preceptor is all important. The student soon sees the importance of multiple involvements with other health professionals in the community. He learns to develop sensitivity to the needs and costs involved in health care delivery. He learns about consulting and referral, and that they are only temporary — he always gets the patient back.

RPAP extends the positive image of the University around the state. It's an opportunity for faculty outreach, where they can focus on more common health problems and get a clearer understanding of the relationships among patient, patient's family, and



Dr. Verby



Dr. Connolly

physician. Education and service are the most important components, for the student, the physician, the patient, and the community.

As a physician associate the student contributes to the care of a patient population while learning the principles of primary health care delivery. He sees and experiences a physician's life in a non-urban setting. He sees a physician's place in society, his social and civic obligations, and his responsibilities to patients. At the same time the student develops ideas about his own values and goals.

The student observes how allied health personnel function in the community and support the delivery of primary care. He can study families in depth, evaluating individuals and their roles within the family.

Students learn to relate to the community's power structure and, professionally, learn how to live with their own therapeutic failures — how to admit they don't know.

They discover the qualities that affect the doctor-patient relationship — being a good listener,

(Continued next page)

RPAP Continued

skillfully telling a patient what is important for them to know and understand, the value of a simple explanation, and the importance of good follow-up care.

After two years of reading, laboratory work, and limited patient contact at the Medical School and a year as a physician's associate, a medical student returns to the University better able to apply himself to those areas where he needs the most work.

The program also provides the seedbed for professional growth, stimulation and objective feedback for the preceptor. By becoming an effective teacher he improves his own skills, knowledge, and attitudes.

Besides the opportunity to more fully understand

his role as a doctor-teacher, we plan in the future to offer the physician the opportunity to periodically return to the medical school as a faculty member. A senior resident from the University's family practice residency program would provide replacement coverage in the physician's community.

With their year of community health care experience we're sure the students will be more comfortable, confident, and proficient in most phases of health care delivery. They will recognize the importance of personal organization and management in relation to professional commitments.

The program clearly benefits the community, the physician and the student. It is unprecedented in medical education.

DR. EDWARD CIRIACY ON NEED, PROBLEMS & FUTURE OF RPAP

Seventeen years as a family practitioner in Ely should qualify Dr. Edward Ciriacy to comment on the vicissitudes of medicine in rural Minnesota.

Dr. Ciriacy, chairman of the University's Department of Family Practice and Community Health, knows both sides of the supply and demand picture. In addition to directing an expanding undergraduate curriculum and the largest graduate medical program in the country, his department also helps support the experimental Rural Physician Associate Program (RPAP).

"Experimental" because it's only in its second year and no one knows how successful it will be in getting young physicians to practice in non-metropolitan areas of the state.

Traditionally, according to Ciriacy, physicians have offered several reasons why they would not practice in a non-metropolitan area:

- They wouldn't be able to maintain their professional capabilities.
- There wouldn't be sufficient consultative support.
- Health facilities were considered inadequate.
- Communities lacked cultural opportunities and quality schools.

"We have some concern about what the Program's exact effect will be," Ciriacy said. "It is possible that it may turn off more students than it turns on. But I doubt it."

"However," he cautioned, "We are not encouraging solo practice. More and more physicians are seeking a group with two or three others because of the increased free time; the time available for continuing education; the intellectual stimulation working with a



Dr. Ciriacy

group, and the fact that it allows for a certain amount of specialization."

Ciriacy also cited the importance of interaction between practitioners and medical school faculty to improve the teamwork approach to medical care. "University Hospitals see only one per cent of the state's hospitalized patients. Before the RPAP, the faculty had little contact with the 99 per cent of patients cared for at the local level. Our faculty is now getting a better appreciation of hometown facilities and capabilities," he said.

The communities themselves, he added, realize they are often competing for a valuable commodity and are more protective of a doctor's time and are considerate in accepting a rotating schedule to allow time for vacations and continuing education.

Besides providing opportunities for medical students to live and learn in outstate towns, Ciriacy suggested more attention be paid to delineating the characteristics of physicians who are already attracted to rural practice and encourage that type of student to enroll in medical school.

Looking at the future of health care delivery in rural Minnesota, Ciriacy calls the next 10 years critical.

FEWER RURAL DOCTORS

While the state's population has shown a gradual increase over the past 20 years, the family practitioner population has had a steady decrease.

According to a recent department study, the state's primary physician to patient ratio is 55.8 doctors to 100,000 persons. In the rural areas it is 48.3/100,000 and in the urban areas it is 60.7/100,000.

Although some primary care is delivered by other medical specialists such as pediatricians, internists, obstetricians and gynecologists, their total contribution to primary care, as opposed to consultative care, is relatively small, according to Ciriacy.

Whatever projections might be made about the ratio of family physicians and population in 10 years, the fact remains that in 1970 there was already a total deficit in the state of 722 family physicians, Ciriacy said.

The University's Affiliated Hospitals Program, Hennepin County General Hospital and St. Paul Ram-

sey Hospital will be producing about 60 family practice residents each year. Based on experience, about 65 per cent can be expected to remain in Minnesota to practice, he said, adding, "Careful selection of residents may increase this retention rate but there are many other factors which enter into the picture."

The net loss of family physicians (retirement, death, moving) from 1960 to 1970 was 11 each year. In the past two years it has averaged 37 physicians a year. This increased rate of loss may be attributed, Ciriacy says, to the rapidly increasing number of family practitioners who are reaching retirement age. Nearly 40 per cent are over 55.

A 10-year projection by Ciriacy for meeting the increasing needs of the population and the normal attrition of family practitioners indicates Minnesota will need:

-An average of 25 physicians a year to serve an additional half million people by 1983.

-70 more family physicians a year to eliminate the current deficit each year.

-30 more family physicians each year to replace those lost through retirement and death.

These 125 physicians a year for the next 10 years, according to Ciriacy, are probably a conservative estimate since all of the State's official planning areas report a considerable higher than normal percentage of family physicians over the age of 55.

Where are these family practitioners going to come from? The Rural Physician's Associate Program is one answer.

KEEPING IN TOUCH WITH RPAP

Students on the Rural Physician Associate Program are not just forgotten by the Medical School for a year. Once a month each associate is visited by a faculty representative from the family practice department, a consultant from another department of the Medical School, or another specialist, such as a marriage counselor or psychologist. The visitor is there to hear the student present a case.

Professor Don Cassata, communication director for the program, packs over 60 pounds of video tape equipment and sees each student at least twice during the student's year in the program. The student is filmed while taking a patient history and is filmed again later to see how he has improved.

In counseling patients with the physician associate, the Rev. Elof G. Nelson, assistant professor in the family practice department, tries to emphasize the importance of relating both to the patient and his family. He estimated that as many as half the patients a physician sees may be worried, depressed or disenchanted in addition to having a physical complaint or disorder.

Like Dr. Nelson, Dr. Harry Ireton, a clinical psychologist, tries to get the students to recognize and deal with psychological factors in illness.

Dr. Ireton recalled a situation where the physician associate got the physicians and clergy in two towns talking together for the first time as a group with common problems.

Dr. Nelson said that he felt that the local preceptors had the knowledge to deal with the emotional needs of their patients, but didn't always have the counseling skills or the time.

Dr. Richard Ebert, chairman of the department of medicine, has travelled to out-state Minnesota under the associate program and says that he has been very impressed with the level of care around the state and the number of specialties represented at the various hospitals.

The student gets the benefit of two kinds of teachers. The Medical School comes to the student and the preceptor shows him what the day-to-day practice of medicine in rural Minnesota is really like.

ONE STUDENT'S REACTION TO RPAP

By Joel Thompson, Med. '73

My year as a Rural Physician Associate was without question a unique and fulfilling experience.

As I remember, I had a few doubts about how successful the year would be before it started. I questioned whether I could, with only two years of medicine behind me, function as a GP within a year; or whether I could ever satisfy the clinic financially. (They paid \$5,000 for my services). However, the doubts were erased early during the year. My time, as far as gaining practical experience and seeing patients, was extremely profitable.

My main preceptor was one of the major reasons the year was so fruitful and enjoyable. He was always ready to take time out to explain a question or to give advice. He patiently taught me skills and procedures and would always seek to increase his and my understanding of medicine. In fact, the entire clinic and hospital were extremely helpful and cooperative in all aspects.

I was a working, active member of the health team. Common everyday procedures, as well as more intricate ones, were learned firsthand. As I gained experience my confidence increased and I was able to attain levels of patient-care responsibility I never expected.

I was not only seeing roughly 20 patients a day, but I had my own group who considered me *their* doctor. On the majority of patients, I decided on the treatment, lab studies or x-rays, and if referral was necessary. I also had a few of my own OB patients whom I followed from their first prenatal visit to their six-week check.

In addition, I was actually serving a useful function in the O.R., usually first assistant. I was tying knots instead of cutting them, suturing instead of retracting, and planning instead of watching. Enough skill and confidence was obtained toward the end that I was the surgeon on a few appendectomies and tubal ligations.

It wasn't until after my first week back at the University on a three-week orthopedic rotation that I realized I was just a lowly medical student again, holding retractors, cutting knots, and observing surgery.

I can hardly begin to explain all the benefits I gained from the RPAP, but to me the most important thing was the confidence achieved to be able to see patients

alone, assess them, and be able to plan and examine them quickly and accurately. It took but a couple of months before it became natural to see patients alone as a doctor.

Before the program I had little idea what and how much a GP does or what kind of patients he is likely to see. I soon became aware of the diversity of patients seen each day. Nearly every day something entirely different presented itself.

Of course the U.R.I.'s and otitis media's in children and minor trauma was seen quite often, but along with the relatively common day-to-day routine comes the unusual and even rare cases seen seldom by anyone. Most of the time the GP is the first to see these patients and to plan their course or work-up or therapy.

Another benefit was seeing the GP's life style. Hours generally are good. Except for weekend call duty, evenings for the most part are free.

Occasionally I did feel somewhat separated from the most up-to-date academic methods available. However, this rarely became much of a problem, as the library facilities of the clinic, hospital and myself usually would have the answer to any unsolved question. If not, a consultation was usually obtained.

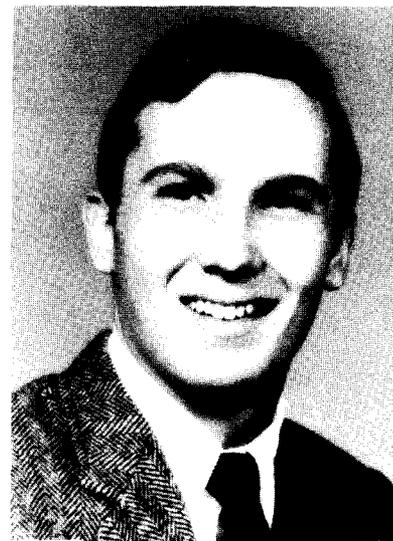
Only rarely did I find myself overloaded seeing patients during the day. Although I usually did some reading during office hours, the majority of my personal study was done at night.

When I returned to Medical School I was amazed at the basic knowledge that I'd accumulated in the past year. What a short time ago was totally unfamiliar was now understood. I found numerous cases were similar to what I saw and worked with during the RPAP. I knew facts about these subjects from firsthand experience and could see areas where I was weak and needed further study.

I believe the program put me ahead of other students when it comes to broad medical knowledge and basic surgical skills. I became aware of what the various specialties are like and especially how the GP functions. And, very important for me, I had a real taste of the practice of medicine and can better decide which field I have most interest in, which size of community I would like to live in, and in what type of practice I want to be involved.

A MEMORIAL TRIBUTE TO RICHARD S. COLE, M.D. '74

By Tom Patterson



Dick Cole in 1969, graduating from Carleton College.

In the spring of 1969, when life was coming back to dormant lawns and trees at Carleton College in Northfield, Minn., students Dick Cole and Patricia Martens were planning a life together in medicine. They were engaged and both had been accepted to medical school. Then, doctors told them Dick had Hodgkin's disease.

Until then, they thought their only serious problem would be being accepted to different medical schools. They settled that problem by deciding that their first consideration would be to stay together. Pat admits that it wasn't very "liberated" of her, but she had decided she would go wherever Dick went, even if it meant postponing her medical education. They had their answer ready even before the University of Minnesota Medical School solved their problem by accepting them both. Then came the stunning diagnosis.

Older medical texts say that 90 per cent of Hodgkin's patients die within five years. Newer books consider it a treatable disease. Dick and Pat decided to live by the newer, more hopeful medical opinion.

PLANNING HOW TO LIVE

Again they discussed their options. Did she want to marry him? He might not have long to live. Radiation treatments, which were begun immediately, would probably mean they couldn't have children. Her commitment was certain. They were married in June of 1969.

What of medical school? Should they just go off somewhere together and forget about studying medicine? No. They had many things they both wanted to do and medical school was one of them. They both considered the opportunity to go to medical school to be a privilege — a chance to learn about the mysteries they had always wondered about. The Medical School, which had accepted Dick before the diagnosis, had to be told and had to decide whether he was still welcome. The school also decided on the more hopeful diagnosis and said, "Come if you will."

MANY INTERESTS

Throughout the course of his disease, Dick continued as many of his activities as he had the strength to manage. Leading interests were medical school, hunting and fishing, and development of his own personal wildlife sanctuaries.

Dick Cole probably knew more about what ducks like and need to eat than the ducks themselves. He planned and continually improved duck ponds at both his parents' home and the family cabin at Fish Lake. He read everything he could about the feeding habits of the ducks and other wildlife he wanted to attract. He planted arborvitae for the deer and highbush cranberries for the birds.

When he decided it would be fun to raise beef cattle, he began by reading thoroughly about how to feed and care for them. He got a veterinarian friend to help him pick out healthy stock and his parents to agree to his raising them on their acreage.

From the time of the diagnosis of Hodgkin's until his death, his day to day health saw many peaks and valleys. Eight or nine times over five years he suffered major traumas with the disease. A vacation trip to Germany with Pat in December of 1972 was beautiful. Late the next January he had surgery.

After the initial radiation treatments, he felt well for a year. He gave his young bride a pair of waders for a wedding present and took her on a fly-tying, fishing expedition to Alberta, Canada for their honeymoon.

Each time he recovered from a downslide in his health, he used his many interests to return to normal. First he would start reading. When he was stronger, he would begin working on his duck ponds, or tying flies. The labor of planting new shrubs and trees was often done by Pat's brother, Jeff, or Dick's brothers, John and Bill. The physical weakness he felt could not slow
(continued, next page)



Student-Doctors Cole, at the University of Minnesota, 1971.

his plans. When his doctors said that surgery to remove a painful tumor on his spine might cause paralysis, he remarked that he could always go to his duck ponds in a wheelchair.

MEDICAL SCHOOL

Medical School was as interesting as he'd hoped it would be. He wanted to practice pediatrics. But, if he wasn't to have the chance to practice, the learning would be enough. One of the more difficult feelings Dick had to deal with was the knowledge that when he needed it the Medical School would move a few hurdles for him. Give him more time. Make special concessions he wouldn't have had to accept if he had been healthier. He decided to appreciate it instead of worrying about it.

In the latter months of his illness, he sometimes felt deep regret over the fact that he would not be able to practice medicine. He knew and admired many physicians. Dr. Vern Smith (Med. '31) was a friend and the man who made the initial diagnosis of his disease. Dick and Pat and their families were guests for a long weekend at Dr. Smith's home on Rainy Lake. A time together they all enjoyed. Dick carved and painted a set of decoys for Vern as a special thanks for his friendship. Dick's grandfather, H. B. Cole, Sr., had practiced medicine for many years in Redwood Falls, Minn. Among his patients had been Vern Smith's mother.

Dick's paternal uncle and aunt are ophthalmologists in New York. Very special to Dick and Pat was Dr. Irv Lerner, private internist, oncologist and chemotherapist, who made weekly visits to their home when Dick was sick. They talked honestly with Dr. Lerner about prognosis, and he helped them learn to talk honestly to each other. Dr. Lerner became the major medical influence and support in their lives. And a good friend, as well. He seemed to them to handle the dual roles of physician and friend extremely well. Dr. Donn Mosser, who directed Dick's radiation therapy, was also both physician and friend.

The honesty with which Dick and Pat communicated took many forms. Sometimes Pat would drop out of her own medical studies to be with Dick full-time. Other times she would lose herself in her work. Often, after visitors had gone, they would talk together about how the visitors had dealt with his pending death. They found that friends and relatives each accepted the finality of his illness in their own time. Some knew when to quietly hold his hand and when to vigorously pat him on the back, and some didn't. He understood that it was hard for them and he loved them for coming.

THE LAST DOWNSLIDE

The last few months were spent at Dick's parents' home, where he had grown up. He wanted to be home, not in a hospital. Pat's bed was next to his so that he could reach out for her if he needed anything in the night. Both Pat and Dick were grateful to his parents for understanding and complying with their needs.

Dick was feeling well last August and doing an externship in pediatrics at Hennepin County General Hospital. Pat was working in family practice at Fairview-St. Mary's. They both moved in with his parents in October, when the disease had invaded a lung, leaving Dick short of breath with the slightest exertion.

He put his affairs in order and prepared to live his last days at home. He provided in his will for establishment of a Dick Cole Memorial Swamp.

The Medical School decided that despite many delays in his training, while he paused to fight Hodgkin's disease, he had learned medicine well enough to be granted his degree. He was notified that his M.D. would be granted in March.

On March 1, Richard S. Cole, M.D., age 26, died in the home where he grew up, with his ducks in the backyard and his wife an arm's length away. □



Dick, left, at Fish Lake with his brother, John, a wildlife biology student. Dick trained the dog.



Feeling good in Germany, a month before surgery.

Memorial contributions are invited to the Richard S. Cole Student Loan Fund, in care of the Minnesota Medical Foundation, 5412 Powell Hall, University of Minnesota, Minneapolis 55455. All contributions to the fund will be used for loans to needy medical students.

PLUGGING IN PATIENT CARE . . .

A New Learning Experience for Medical Students

By Lisa Agan, University of Minnesota Staff Writer

It has been a long day for the physician, and at 10:30 p.m., he is getting ready to go home and have his first meal since breakfast.

But the phone rings, and the caller from University of Minnesota Hospitals tells him that an infant has just been brought in from outstate Minnesota for diagnosis. The baby's hometown physician has noted that the baby hasn't eaten well for several days and he can't decide what's wrong.

The case apparently isn't urgent, so the physician can either go for a bite to eat and return later or go straight to the hospital to look at the baby.

This is the first of a series of choices presented to medical students in this imaginary case history. It's offered as a computerized learning program for medical and health sciences students at the University of Minnesota's Learning Center.

For a student playing the part of the physician in this "case," each choice he or she makes presents new difficulties in the case — which call for more choices. Ultimately, the imaginary infant dies or survives, depending on what options the student-physician has selected in managing the case.

The Learning Center offers this and other kinds of audio-visual programs designed to enhance textbook and classroom learning. Computers, video cassettes, slide projectors, models, and Viewmasters enable the student to experience close up and at his or her own speed areas of medicine that often can't be presented as well in lectures or textbooks.

In addition to the audio-visual materials, the Learning Center provides students with periodicals, lecture notes and reference texts.

Students can watch dissections, see examples of blood cell abnormalities, hear the sounds of healthy and defective heartbeats and examine oversize plastic models of the brain, the heart, and other parts of the human anatomy.

And, with the computer learning programs, the students can participate in a case and make choices to guide its outcome.

Medical history and questions are spelled out on a computer terminal, and slides of x-rays are shown on an adjacent screen. Students then type their diagnosis and answers and get immediate feedback from the computer. Pick the worst possible answer of five choices and the computer might say, "I know why you are here," and then offer a reading list.

Medical students learning about iron metabolism



Paul Feiss, first-year medical student, studies larger-than-life color plastic models of human organs.

Photos by Tom Foley, University Relations

last year were split into two groups by their instructor so that half attended traditional classroom lectures and half learned from the computer. Final examinations showed no difference between the two groups, according to their teacher, Dr. James McArthur, formerly associate professor of medicine.

The students preferred human teachers in small group tutorial sections for this unit, McArthur said, but generally they were in favor of computer instruction.

McArthur, now at the University of Washington in Seattle, said that the crowd of students usually found at the Learning Center is an indication of its success. He calls Minnesota's Learning Center one of the most successful centers he has seen in the country.

Continuing education for physicians and other health professionals, particularly in outstate areas, could be based on resources available through the Learning Center, according to Dr. Robert McCollister, assistant dean for Medical School curriculum affairs.

Depending on the kind of equipment available locally, he said, a program requested by the area's health professionals could be sent by the Learning Center for viewing at their convenience.

"It's a very handy resource to have," one student said. "A lot of our material is visual, and here we can see what we're reading about."

The Learning Center is located in Diehl Hall on the University's Minneapolis campus.



BULLETIN: The Learning Center, subject of this article, is no more. A late evening fire on May 28 gutted the center and caused extensive damage to Diehl Hall. This photo shows the same equipment as the picture below, but after the fire.

Vicki Wojcek, student assistant in the Learning Center, demonstrates a computer instruction program for medical students.



EDITOR SUFFERS 15-YARD PENALTY FOR DROPPING BALL ON STAR 'JOCK DOCS'

The editor of the *Medical Bulletin* has assessed himself a penalty of 15 giant steps backwards and two hours of reading old Gopher Yearbooks for missing some prominent doctor-athletes in the December issue article, "Jock Docs."

Following are some of the many letters received from readers. First to respond to the article was Wallace D. Armstrong, M.D., professor and head of biochemistry:

"In the list of Minnesota graduates who were noted athletes when in college, I note the omission of Dr. Malvin J. Nydahl. Mally received his M.D. degree in 1934 and was a noted football player on the Gopher teams around the period of 1927, 1928 and 1929. Dr. Nydahl actually played professional football for a while and put himself through Medical School in this way. This accounts for the fact that his degree was not obtained until 1934. Dr. Nydahl later took a residency in orthopedics and practiced in Minneapolis until quite recently, when he retired and moved to Arizona."

Dr. Armstrong's letter was the first of many about the omission of Dr. Nydahl and others . . .

To the editor:

I have read with interest the list of former "M" men who became medical doctors. I don't know how he was missed but Dr. Malvin Nydahl belongs on the list. He has retired and lives in Brainerd or Bemidji. 'Mally' won eight letters, two in football, three in basketball and three in baseball. He played his football under Dr. Spears.

Incidentally, two Gopher grid coaches were doctors, Dr. Spears and Dr. Henry L. Williams (1900-1921 coach). Neither were Minnesota graduates.

You might also check on the Salovich brothers, Wally and two or three others. Wally is not a doctor but I think one or more of the brothers is a doctor. They played basketball."

Stan W. Carlson, Librarian
Unity Hospital Library
Fridley, Minnesota

Editor's Note: We'll try to sort out how many letters Mally Nydahl got and in which sports as we progress through other letters and research. Dr. Clarence W. Spears coached Gopher football from 1925 to 1929 and had a 28-9-3 record. A third doctor-coach for football was George W. Hauser, who coached from 1942 to 1944. He was a tackle in his playing days at Minnesota. Elmer Salovich (Med. '58) lettered in basketball in 1949.



"Mally" Nydahl in Gopher football days. Minneapolis Star photo.

To the editor:

That was an excellent *Medical Bulletin* for December — especially the article on Dr. J. A. Myers, one of my former teachers by the way. Among the "M" Docs, I miss the name of Dr. Mally Nydahl, one of Minnesota's great athletes in football, basketball and baseball. Great picture of my friend Tiny Drill!

Dr. Bror F. Pearson
Shakopee, Minnesota



Dr. Malvin Nydahl more recently. After lettering in three bruising sports, he devoted his medical career to repair of damaged bones.

To the editor:

The December issue of the *Medical Bulletin* was read with great enjoyment. The lead story about Dr. J. A. Myers was especially appreciated. The story about the changes in medical fraternities was interesting also. It is saddening to read of contemporaries who have died and nostalgic to see my old friend Tiny Drill in his football uniform. How could you overlook Mally Nydahl, the star halfback of the late twenties?

Anyway, thanks for the *Bulletin*, it is like a refreshing letter from home.

Paul C. Leck, M.D. '31
Palm Desert, California

To the editor:

How could you miss Jock Doc Malvin J. Nydahl — 11 letters in football, baseball, basketball, track or something? He was the jockiest doc of all.

James A. Blake, M.D. '34
Hopkins, Minnesota

To the editor:

I was considerably interested in your Jock Docs, however, I was quite alarmed that you missed one of the most famous ones, namely a classmate of mine by the name of Malvin J. Nydahl, who practiced orthopedic surgery in Minneapolis and who is now my neighbor in Sun City, Arizona. I believe that he was one of the few nine major lettermen to ever

graduate from the University of Minnesota, besides being a foremost M.D. He lettered in baseball, football and basketball and was one of our top halfbacks.

Also, you should add a little more about Robert J. Tenner who was an All American end, and I saw him practically single-handedly beat Pittsburgh in a very crucial game. Hoping you can document these things for your next *Bulletin*, which is very well done, I am . . .

F. T. Becker, M.D. '34

Editor's Note: Robert Tenner, who caught the winning touchdown pass in one of the great games of the century, was named All Big 10, but not All American.

Mally Nydahl received eight varsity letters from the University of Minnesota, for football in 1926 and 1927, for basketball in 1926, 1927 and 1928, and baseball in 1926, 1927 and 1928. He was also a star athlete at Minneapolis South High. He made high school All City teams in basketball and football. At the University of Minnesota, he was captain of the baseball and basketball teams. As a football halfback he was named to all-conference teams and received an honorable mention as All-American. He played halfback with the Minneapolis Redjackets professional football team 1929-30 and with the Frankford Yellow Jackets 1930-31. He played professional basketball with the Rochester Aces in 1929. He played baseball at Little Falls in 1930, in the Mississippi Valley League, 1931, Denver of the Western League, 1932, Elmira, New York-Penn League, 1933, Oklahoma City in the Texas League, 1933, and Omaha in the Western League, 1933. He was second in the Western League batting championship in 1932, with a batting average of .368.

Dr. Nydahl practiced orthopedic surgery in Minneapolis until his retirement in 1972. He has retired to his lake home near Brainerd in the summer and spends winters in Sun City, Arizona.

We don't know how we missed him, either.

To the editor:

I loved the Jock Docs story, but you missed Louis C. Lick Jr. '46, an outstanding golfer. He headed a Gopher team that lost the best team title to Notre Dame by one stroke. He was the NCAA individual champion in 1944.

Robert Bjornson '44
St. Paul

Editor's Note: Yes, he lettered in golf in 1943-44-45.

To the editor:

I read the recent *Medical Bulletin* with great interest — as usual. The story about athletic letters and awards was most interesting. You asked for additions. I got a varsity letter in ice hockey in 1944, add me to the list, please. Kind personal greetings to all there.

R. G. Norby, M.D. '46
Shaker Heights, Ohio

To the editor:

I lettered in baseball at the University of Minnesota in 1944.
A. P. Rusterholz, M.D. '44

(Continued next page)



Editor's Note: We also failed to mention Dr. Reuben M. Rosenwald, who died February 22, 1974. He was captain of the basketball and football teams in 1911 and was definitely one of Minnesota's all-time great athletes. He received his medical degree in 1913. In 1963, "Rosey" held a 50th reunion at his home for his medical classmates. He is shown in the center, holding the scrapbook. To his left is Dr. E. J. Engberg and on his right is Dr. W. G. Nuessle. Doctors standing, left to right, are: G. I. Badeaux, George Ghostley, Martin Nordland, William Kucera, H. W. Woltman, W. D. Brodie and A. J. Wentworth.

To the editor:

In your article "Jock Docs," my name was inadvertently omitted. I earned varsity letters in tennis in 1944, 1945, 1946 and 1947. It is my belief that I was the youngest person to ever earn a varsity letter at Minnesota, being 16 years of age at the time. I now practice vascular surgery in New York.

Bernard E. Herman, M.D. '51

Editor's Note: Yes, you were the youngest and probably will hold that record until you are a lot older.

To the editor:

My family physician, Dr. Miles L. Strathern, Gilbert, Minn., was not listed in your article. He was captain of the football team in 1904 or 1905. He was a wonderful man and a great physician who had a lot to do with my own future. I would appreciate it if you added his name to the list.

Edward Zupanc, M.D. '46
Monroe, Wisconsin



Dr. Louis Lick, Med. '46, NCAA golf champion, 1944.

Editor's Note: As long as we're on a letters kick, we'll take this opportunity to print some others — old and new. We don't always have the space to print letters to the editor, but we love to get them. Whether you're for us or against us, it's nice to know you're listening.

To the editor:

The article on Dr. Scheie is outstanding — a sight for sore eyes.

Jay Jacoby, M.D. (Med. '41)
Philadelphia

To the editor:

Congratulations on one of the best articles I've seen on Dr. Scheie. In fact, it was *the* best . . . thoroughly accurate and interesting. I've read so much about Dr. Scheie that whenever a new article comes out I usually just skim for facts. But I read every word of your story. Great anecdotes!

Lois Sack
Public Relations Director
Scheie Eye Institute

To the editor:

The piece by Tom Patterson in the January-February issue of the *Medical Bulletin* is first-rate; the bright and colorful account of Dr. Harold G. Scheie much reminded me of some of Damon Runyon's and Herb Caen's writing. The drawing on the cover is, I think, deficient, compared to the high quality of the account of Dr. Scheie.

Since I know so little about laser-beam energy, I am not qualified to judge the account of retinopathy except obliquely: as one who knows nothing about the subject I found the piece both instructive and attractive.

I always like to see the news department flourish in vigor. I think that is one of your strongest links with the alumni. Best wishes.

Jim Eckman, Ph.D.
Mayo Clinic

To Tom Patterson:

I am utterly delighted with your article *Eye Man* and wish to extend my deepest appreciation to you and your editors, Dr. Fifer and Mr. Hoff for the excellence of your work. I do admire your lively and informal style.

The response to the article has been greeted with great enthusiasm by all who have read it.

Please know how much we enjoyed your visit.

Many thanks and best wishes.

Harold G. Scheie, M.D. (Med. '35)
Philadelphia

To the editor:

I enjoyed your article about Dr. J. Arthur Myers. You certainly have a way of bringing people to life in your writings. Congratulations on a wonderful *Medical Bulletin*.

Although not a Minnesota graduate, I always find it interesting.

Charlotte Beurer
Scheie Eye Institute

Editor's Note: Many readers wrote directly to Dr. J. Arthur Myers about the *Medical Bulletin* article on his life. Dr. Myers has kindly shared his letters with us. Following are excerpts from some of them.

Dear Dr. Myers:

The *Bulletin* piece on J. Arthur Myers is really great. I am delighted to see it and more delighted to have it. I shall certainly prize it as a happy memento of impecunious but really pleasant days of little wine and no roses at all except those in my ears when I shuffled down Nicollet Avenue to your office in the LaSalle Building with a load of *Journal-Lancet* manuscripts when the temperature dipped to 30 below zero and the north wind almost bent me double. Then by streetcar up to John Gelman's Flour City Box Company on North Broadway where the *Journal-Lancet* was printed. I well remember the tons of thoracic roentgenograms heaped on your desk, sent in, I believe, from all directions by practitioners who sought your diagnostic counsel.

I retired on July 1, 1973. I must say that the Mayo Clinic is kindly toward emeritus members of the staff. We each have an office on the tenth floor and there is a cadre of secretaries to take care of our typing needs. With best wishes,

Jim Eckman, Ph.D.
Mayo Clinic

Dear Dr. Myers:

We arrived home in Fairmont from California to find you on the cover of the *Medical Bulletin*. A fine tribute, most richly deserved by a truly great man dedicated to his field . . . We have very pleasant memories — when your lovely wife, Faith, used to play the piano and the girls would join her in singing. We would be very remiss if we didn't mention your piano "recitals" on Sunday mornings. Then, of course, each Decoration Day was appropriately celebrated in helping you paint the Ford. We shall never forget those memorable years. With warmest regards and wishes for your continued good health,

Harvey and Mabel Langman
Fairmont, Minnesota

Dear Dr. Myers:

Let me tell you how pleased I was to read the wonderful article about you in the University of Minnesota *Medical Bulletin*. The article is very well done and exhibits a great deal of that which we who have known you so long have understood. I was particularly pleased with the photographs.

Wallace D. Armstrong, M.D.
Professor and Head, Biochemistry

(Continued next page)

Letters Continued

Dear Dr. Myers:

Upon reading the article about you, many fine memories came to the fore and I enjoyed learning of those bits of information with which I was unfamiliar. The writer truly did a tremendous job in paying honor to you and the only regret was that the article was not long enough, nor was there as much detail as one would like to see. Your humor was portrayed throughout, which is another tribute to the writer.

Gloria Held
Hennepin County Services

Dear Jay Arthur:

I think what I enjoyed most was the picture of you walking down the hall to the Campus Club. Anyone who knows you would identify you from that picture instantaneously . . .

Carl O. Rice, M.D.
Minneapolis

Dear Jay:

Sunny sent me the *Bulletin* (bless her heart) and there I saw the current version of an old friend. I was delighted to have these pictures of you. Your dogged pursuit has always been an inspiration to me.

Incidentally, I was flabbergasted by that picture of Nu Sigma Nu. Hippocrates would not understand it. I'm not sure that I do.

Edward Allen Boyden
Seattle, Washington

Dear Dr. Myers:

I read with interest the article by Tom Patterson. I am glad to know that you are well and active. So many times we away from Minnesota read of people only when they die. You have acquired a mustache and a little more weight. Now I know that you've conquered your TB! I am sure that thousands of Minnesota medical students wish you continued happiness and good health.

Fritz D. Hurd, M.D. '23
Great Falls, Montana

Dear Dr. Myers:

What a wonderful article. Ironically, it came in the mail the same day I had my annual check-up x-ray in St. Cloud. My reports are good and I continue to keep well and busy. From your picture in the *Bulletin* you look remarkably well, even to your mustache. Thank you my dear doctor and friend for remembering me among your many, many friends. You did so much for me as a patient. God bless you and keep up the good work.

Mavis Ford and Family

Dear Dr. Myers:

Time flies. It has been more than 38 years since I came to you for treatment when I developed tuberculosis. I remain very grateful for the care you gave me. I join a number of former students and current friends in thanking you for things done in the past and wishing you well for the future. I remain in private practice. I have not had a chest x-ray for about 15 years. The fact that my right lung did not re-expand never bothers me. Again, it was nice to read in the *Bulletin* that people besides myself appreciate the wonderful asset you have been to the University of Minnesota.

John E. Skogland, M.D. '35
Houston, Texas

Dear Dr. Myers:

. . . In nearly 30 years as a radiologist I have watched as tuberculosis has become ever more rare. I'm sure I've seen no more than two or three active cases in the past 10 years in a very busy practice. All through the years I have been very much aware of the magnitude of your contribution to that change. As the article says, it is indeed a monument to a life's work.

Marvin J. Shapiro, M.D. '43
San Francisco

Dear Dr. Myers:

What wonderful things you have done for tens of thousands of people, abstractly in your scientific work and concretely in your clinical work and teaching. You were one of the most effective teachers I had in Medical School (1942-45) and we had most pleasant contact when I was on the pediatric staff (1949-53).

I have not been in Minneapolis since I left to come to Connecticut early in 1954. After over 16 years of solo pediatric practice, I accepted an attractive offer from Iowa to be a part of their pediatric department and school for severely handicapped children. But my wife and I found that we'd put down roots here that simply could not be pulled up. So, after a little over two years in Iowa, we came home to Darien. You were so wise, after having put down roots in Minneapolis, never to accept the many tempting offers you had over the years.

I'm sure you'll get hundreds of letters as a result of the story in the *Bulletin*. I'm chagrined that I had to wait for the article to write to you. Few of us make others aware of how much they've meant to us.

Spencer F. Brown, M.D. '45
Darien, Connecticut

Dear Jay:

I had only one regret on the *Bulletin* article, that it did not refer specifically to your book "Invited and Conquered" which is unique in its field . . .

William B. Tucker, M.D.
VA Hospital, Consultant
Gainesville, Florida

Dear Jay:

A superb article about a great man! How well I remember your office one day when we popped in to see you. Without even a smidgen of a smile in response to my question, "Does your office always look like this?" you answered, "Someone left the window open and the papers were blown all over."

As you know, Jim Perkins is my uncle. It was good to see him referred to in that article as well.

Antoni M. Diehl, M.D. '47
Professor of Pediatrics,
Director of Pediatric Cardiology
University of Kansas Medical Center

Dear Jay:

Just a note to tell you what a kick I got out of the *Medical Bulletin* with your picture on the front, looking as young as ever. And the excellent article. I was particularly surprised and pleased to see that the writer used some of my comments at the celebration of your "first" retirement in 1957. And congratulations on your being 85 years young. That's a pretty sporty mustache you have there.

James E. Perkins, M.D. '29
Baltimore, Maryland

To MMF:

I would like to express my gratitude and appreciation to you and the Minnesota Medical Foundation for approval of my research project "Experimental and Clinical Study of Pulmonary Oxygen Toxicity in the Newborn."

Oxygen toxicity is a well recognized complication in the newborn infant treated for respiratory distress syndrome and frequently leads to adverse complications. Hopefully our studies, aided by the generous support of the Minnesota Medical Foundation, will advance our understanding of this problem. I am most appreciative for your confidence, interest, and support of this investigation.

W. Robert Anderson, M.D.
Associate Pathologist

To MMF:

Now that I've returned to school full-time, I would like to take a moment to thank you and the Minnesota Medical Foundation for the honor of selecting me as recipient of a Minnesota Medical Foundation Student Achievement Award.

The Minnesota Medical Foundation is to be commended for its very progressive stance in recognizing students who contribute to the very important area of medical education and community service. The country is crying for im-

provement in the method in which we deliver health services. Yet medical students get little exposure or encouragement to gain an understanding of these very pressing problems while they are in their "formative" years.

I encourage you to continue this program and to continue to emphasize its significance to the Minnesota medical community.

Once again, many thanks for the honor.

George M. Blatti
SAMA Past President

To MMF:

I am writing to acknowledge receipt of your notice of grant award SMF-134-74. Funding of this grant request was particularly important to our research at this time, since it gave us the means to cope with a turn of events that otherwise would have been crippling.

My coworkers join me in thanking the foundation for this timely award.

Don B. Wetlaufer

To MMF:

I am writing a much delayed thank you letter for the beautiful maroon and gold Minnesota tie presented to me October 26 as the representative of the class of 1918 at the medical alumni reunion — our 55th. I wear it with pride on special occasions.

Also to thank you for the list of survivors of the class of 1918. And to add a name, Don McCarthy. I received a Christmas card from him, with no return address, unfortunately.

W. W. Hall, M.D. '18
San Diego, California

To MMF:

There's a thank you from MMF sitting in front of me from my transatlantic donation to the Scholarship Appreciation Fund. It's a joy to send it back to you. But it makes me chuckle because right now I'm trying to build a hospital here in the middle of Ethiopia. You probably thought I'd end up in South America again but God has sent me here. We are two doctors — Dr. Adolph is an excellent surgeon and has been here six years. Then there's me. The present hospital is 110 beds. In clinic we see upwards of 150 patients a day. The lab does six texts: CBC, stool exam, UA, sed rate, malaria smear and sputums (watery vs. thick!) The new addition sports two operating rooms, an OB delivery room with a real surgical light (which delights me — at present the only socket in our delivery room has come out of the wall. These things happen easily when the walls are made of mud).

So if you run into any extra money — or friends of mine — or if there's really anyway that I, as an alumna of the U of M Medical School, can apply for funds to help our building projects, would you please let me know? Thanks a heap.

That Swedish blonde, Peruvian conchita, now serving in the highlands of Ethiopia,

Susan Gardin, M.D. '71

ALUMNI DEATHS

It is the policy of the *Medical Bulletin* not to report cause of death in obituaries. Readers may direct inquiries or comments to the editor.

Milton Abramson—1928

Died Nov. 5 at age 68. He was an obstetrician and gynecologist in Minneapolis, and was a member of the national, state and Hennepin County medical associations.

Lee R. Alderson—1929

Died in Missoula, Mont. Oct. 30 at age 72. He was founder of Missoula's Western Montana Medical Clinic.

John W. Aughenbaugh—1959

Died Nov. 27. He was an obstetrician in Minneapolis and a member of national, state and Hennepin County medical associations.

Murray Bates—1927

Died in April.

He was a staff physician at the University of Minnesota Student Health Service.

Clifton E. Benson—1932

Died July 18, 1973, at age 65, in Bremerton, Wash. He was certified by the American Board of Ophthalmology and the American Board of Otolaryngology.

Nathaniel J. Berkwitz—1924

Died Nov. 13 at age 74. Dr. Berkwitz practiced psychiatry in Minneapolis, was a former instructor at the University of Minnesota, a consultant at the Glen Lake Sanatorium, and a staff member of Hennepin County General Hospital. He was a member of AMA and the Minnesota State and Hennepin County medical societies.

Chauncy Borman—1931

George W. "Jack" Clifford—1932

Died in January. He opened the Alexandria, Minn. Clinic in 1940 and practiced in Alexandria throughout his career.

Sumner S. Cohen—1927

Died Dec. 9 in Minneapolis at 70 years of age. He was a specialist in respiratory diseases. He retired in July, 1973, from his post at Glen Lake. He had been a consultant to the U. S. Public Health Service and the VA Hospital. He was a past president of the Minnesota Rehabilitation Association and had been a member of the Governor's Advisory Board of the Division of Vocational Rehabilitation, a regional president of the National Rehabilitation association and president of the Minnesota Trudeau Association.

Lucian G. Culver—1924

Died Feb. 20 at age 75. He was an ophthalmologist and otolaryngologist and was a life member of the Ramsey County Medical Society.

Benjamin Dvorak—1921

Died May 3 at age 78. He was a Minneapolis surgeon for 52 years and former chief of staff of St. Mary's Hospital. He was a life member of the International College of Surgeons, a member of the national, state and Hennepin County medical associations, and a member of the University of Minnesota "M" Club. He received his Minnesota "M" for football in 1921.

Edward K. Endress—1923

Died Feb. 26 at age 75.

William W. Engstrom—1939

Died Jan. 22 at age 58. He was professor of medicine and retired chairman of the department of medicine of the Medical College of Wisconsin, Milwaukee. He was also medical director at Milwaukee County General Hospi-

tal. The week before he died he was present to receive an honorary membership and a citation from the Milwaukee Academy of Medicine. After graduating from Medical School he earned a master of science degree in medicine and biochemistry from the Mayo Graduate School of Medicine. He discovered a strain of vivax malaria called the Chesson Strain, which has been used throughout the world for experimental purposes. He joined the faculty of the Yale University School of Medicine in 1946 and joined the former Marquette University School of Medicine as its first full-time professor of medicine in 1950. In 1961, he established a clinical research unit at Milwaukee County Hospital for the study of metabolic diseases. He contributed more than 70 articles to professional journals and belonged to many professional societies, including the Royal Society of Medicine, London, and the Association of American Physicians. He was the first Milwaukee physician to be asked to join the American Society for Clinical Investigation. He received the Outstanding Achievement Award of the University of Minnesota in 1964 and the Irwin R. Schmidt Interstate Teaching Award of the State Medical Society of Wisconsin in 1971. He received the Phi Chi Teaching Award of the Medical College of Wisconsin in 1957.

Emil J. Fogelberg—1929

Died Dec. 13 at age 73. He practiced in St. Paul until his retirement several years ago. He was a past president of the Minnesota Chapter of the American Academy of Family Practice and was a member of AMA, state and Ramsey County medical associations.

Gilbert S. Frank—1954

Died May 1 in Mercer Island, Wash.

Richard W. Giere—1925

Died Feb. 16 at age 75. He practiced in Minneapolis for nearly 50 years before his retirement in 1972, at one time with his father and three brothers in the Giere Clinic. He was a former Regent of St. Olaf College, Northfield, where he was a soloist tenor in the choir as a student in the 1920s. He gave endowed scholarships at St. Olaf, Luther Theological Seminary, and the University of Minnesota. He was a member of the American College of Abdominal Surgeons. In 1969 he received the Order of St. Olav Knights Cross from King Olaf of Norway for promotion of Norwegian-American relations. He was a former chief of staff at Fairview Hospital. His father, Dr. E. O. Giere, graduated from the University of Minnesota Medical School in 1892. Richard and a classmate, R. T. Soderlind, were the first sons of alumni to graduate from the Medical School. He was a member of several Norwegian-American societies and medical professional societies.

Herman E. Hilleboe—1929

Died April 11 in Tampa, Fla., at age 68. He was a former Assistant U. S. Surgeon General and New York State Commissioner of Health. He had been head of the division of public health practice at Columbia University, where he was a leader in the setting of standards for radiological safety. He received the Sedgwick Memorial Award of the American Public Health Association in 1968. He was president of the association in 1955. Since 1971, he had been consultant on planning and evaluation for Florida's regional medical program and was the chief organizer of the state's emergency medical system.

Emil G. Holmstrom—1937

Died Jan. 22 in Pasadena, Calif., at age 62. He was a former Duluth resident and faculty member of the University of Minnesota Medical School.

Edwin G. Hubin—1928

Died Sept. 4, 1973, at age 79. He had practiced in Sandstone, Minn.

Catherine Welch Johnson—1930

Died Nov. 19 at age 69. She was certified by the American Board of Obstetrics and Gynecology and served on the staff of the Washington Hospital Center, Washington, D. C., where she died.

David Hjalmar Johnson—1920

Died Dec. 10, four days before his 81st birthday.

James R. Kingston—1929

Died Jan. 11 at age 66. He was a retired Navy Captain and former special assistant for medical and allied sciences in the Office of Naval Research. He received a doctorate in public health from Johns Hopkins in 1951. In 1955 he was awarded the Legion of Merit for a study that discovered the organism responsible for primary atypical pneumonia. His speciality was virology.

Nathaniel Lufkin—1925

Died Dec. 6 at age 75. He was founder and senior partner of Lufkin Medical Laboratories. He was past president of both the Minnesota Pathological Society and the Minnesota Society of Clinical Pathologists. He retired from the Navy Reserve in 1958 with the rank of rear admiral, and was a recipient of the Navy Cross, the Silver Star, the Croix de Guerre, and other decorations. He served in the Marine Corps in World War I and in the Navy in World War II. He was a former associate professor of pathology at the University of

Minnesota Medical School. He was a staff pathologist at several hospitals, including Hennepin County General and North Memorial.

Myron Matz—1938

Died Dec. 2 in Boston at age 60. He was certified by the American Academy of Dermatology and was president of the Boston Dermatological Club. He was affiliated with the Massachusetts General Hospital, Cambridge Hospital and Mt. Auburn Hospital.

Philip McIntire—1909

Died April 8 in Tucson, Ariz.

Hugo E. Miller—1928

Died Dec. 11 at age 69. He was certified by the American Board of Urology and had been on the clinical faculty of the University of Minnesota Medical School. He was affiliated with Eitel, Methodist, Mount Sinai, Hennepin County General and St. Mary's Hospitals.

Hugh Owen Morgan—1934

Died in Livingston, Mont., Oct. 22 at age 64. He practiced for years in Amboy, Minn.

Clifford D. Nielsen—1967

Died Jan. 7 while on house staff duty at Mercy Hospital, Coon Rapids, Minn. Mercy Hospital has established a fund for the education of his children. Address gifts or correspondence to Dr. Cliff Nielsen Fund, Mercy Hospital, 4050 Coon Rapids Blvd., Coon Rapids, Minn. 55433.

Justus Ohage—1920

Died June 3 at age 88. He was a surgeon and practiced in West St. Paul until his retirement about three years ago. He was a former president of the Minnesota State Medical Association, as was his father before him.

(Continued next page)

DEATHS continued

Elmer Olesky—1927

Died Nov. 23 in California at age 71.

Milton C. Rosekrans—1928

Died Dec. 19 at St. Mary's Hospital in Rochester, Minn. at age 80. He was married to Sarah Didricksen Rosekrans, a 1927 graduate of the Medical School, who preceded him in death. They established a practice together in Neillsville, Wis., in 1929 and served the area throughout their medical careers.

Reuben Rosenwald—1913

See Letters to the Editor section on Minnesota athletes who entered medicine. Dr. Rosenwald was 85 at his death and had lived in Anoka, Minn.

Lloyd H. Rutledge—1919

Died Jan. 2 at his home in Detroit Lakes, Minn., where he had practiced for more than 50 years before retiring in 1969. He was 82. His son, John B. Rutledge, a 1951 graduate of the Medical School, continues to practice in Detroit Lakes.

Max Schottler—1928

Died Oct. 2 at age 70. He was born in Dexter, Minn. and practiced in Minneapolis.



Dr. John Sebald '62

John R. Sebald—1962

Died April 19 in Scottsdale, Ariz. at age 37. He was a fellow of the American Academy of Orthopedic Surgeons and was a specialist in surgery of the hand. At one time he practiced in Tunisia, North Africa.

W. Ray Shannon—1919

Died Feb. 3. He was a pediatrician and practiced in Faribault and St. Paul, Minn.

James M. Thomson—1931

Died Dec. 8 in Columbia, Mo., at age 73. He was certified by the American Board of Obstetrics and Gynecology and had practiced in Austin, Minn., where he was on the staff of St. Olaf Hospital. He also served on the staffs of Fairview and St. Barnabas Hospitals in Minneapolis.

Leo Van Keulen—1966

Died Dec. 4 at age 33 in Hanford, Calif.

Warner Workman—1912

Died in March at age 86. He practiced in Tracy, Minn. until his retirement and continued to live there until his death.

NON-ALUMNI OBITUARIES

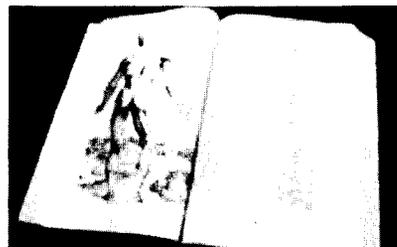
Horatio Sweetser

Horatio Sweetser, former clinical associate professor of medicine at the University of Minnesota Medical School, died May 5 in Minneapolis, at age 76. He was former chief of staff at St. Mary's Hospital and a past president of the Minnesota State Medical Association. He was on the board of directors of the Minnesota division of the American Cancer Society. His father, Horatio Sr., was one of the first surgeons to practice in Minnesota and his brother, Theodore, was a clinical associate professor of surgery at the University of Minnesota. He received his medical degree from Harvard in 1921.

Henry Williams

Henry Williams, former faculty member of the University of Minnesota Medical School, died recently in Minneapolis. He was former chief of otolaryngology at the Veterans Hospital. He was author of *Menieres Disease*, published in 1952, and a number of articles in professional publications. He received his medical degree from the University of Pennsylvania in 1924 and his M.S. degree from the Mayo Graduate School of Medicine in 1932.

RARE BOOK COLLECTION NOT HARMED IN FIRE



The rare books of the Owen H. Wangensteen Historical Library of Biology and Medicine were not harmed in the May 29 fire which destroyed the Biomedical Learning Center and damaged other parts of Diehl Hall. The volume shown here is "De Fabrica," published in 1543. It was the first book to teach human anatomy and dissection. It is valued at \$15,000 and was presented to the Wangensteen Library by Earl Bakken, chairman of the board and chief executive officer of Medtronic, Inc., Minneapolis.



MMF GRANT RECIPIENT GETS \$100,000 AWARD FROM LEUKEMIA SOCIETY

Toni Mariani, Ph.D., a recipient last year of an \$11,000 Minnesota Medical Foundation grant for her leukemia research, has received a \$100,000 Scholar Award from the Leukemia Society of America, Inc. Dr. Mariani, assistant professor of laboratory medicine and pathology, will use the five-year award to further her investigation of the dynamics of viruses and the immune system in leukemia.

She has spent more than eight years in cancer research, exploring immunologic functions pertaining to aging, the acceptance or rejection of tissue and the susceptibility of inbred mice to a cancer-inducing virus. Her accomplishments in the areas of immunobiology, transplantation, tumor immunology, leukemia, and their application to clinical medicine, brought her the award. She is one of only seven medical scientists throughout the country to receive the Leukemia Society's highest honor.

In the late 1950s she was one of the first to overcome skin graft rejection between male and female mice of the same inbred species by injecting the newborn female with viable spleen cells from the male. She was the first researcher to induce "tolerance" to foreign skin grafts in adult mice. Examining the role of aging in tolerance she found that young females did not reject the male skin grafts as frequently as older females. These early studies proved to be the founda-

tion for concepts in human organ transplantation.

For the past five years she has been delineating the theory that a virus that caused leukemia in mice also triggered the skin graft rejections. In her experimental model she proved the virus had no role in the graft rejection, but implicated the viable tumor cells as the causal agent.

She injected a leukemia-inducing virus in newborn mice and then induced leukemia in adult mice by transplanting skin grafts from the baby mice before they showed signs of the disease. She has found at least one direct clinical application from her research model — development of skin graft rejection and tumor growth in the virus system under study closely resembles some of the known characteristics of lymphoma cutis in humans. It is, of course, her goal that continued study of the animal model will provide clues for the treatment of human malignancy.

Dr. Mariani took a predoctoral National Cancer Institute Fellowship at the University of Minnesota in 1958 and obtained her Ph.D. in kidney physiology from the University of Michigan in 1966. In addition to the Minnesota Medical Foundation, she has received grant support from the American Cancer Society, the Minnesota division of ACS, and is a member of the University of Minnesota's Leukemia Task Force.

DIABETES — BREAKTHROUGH AT MINNESOTA?

Dr. Arnold Lazarow, researcher and head of the department of anatomy at the University of Minnesota Medical School, is both optimistic and cautious about a laboratory breakthrough in diabetes treatment.

He is optimistic because years of painstaking step-by-step investigations have resulted in dramatic cures with diabetic rats. He is cautious because it is not his goal to make the world safe for rats and tests in humans may be five years away.

Dr. Lazarow, recipient of the American Diabetes Association's highest honor, the Banting Medal, and his research team have successfully transplanted pancreatic beta cells — some of which produce insulin — into diabetic rats.

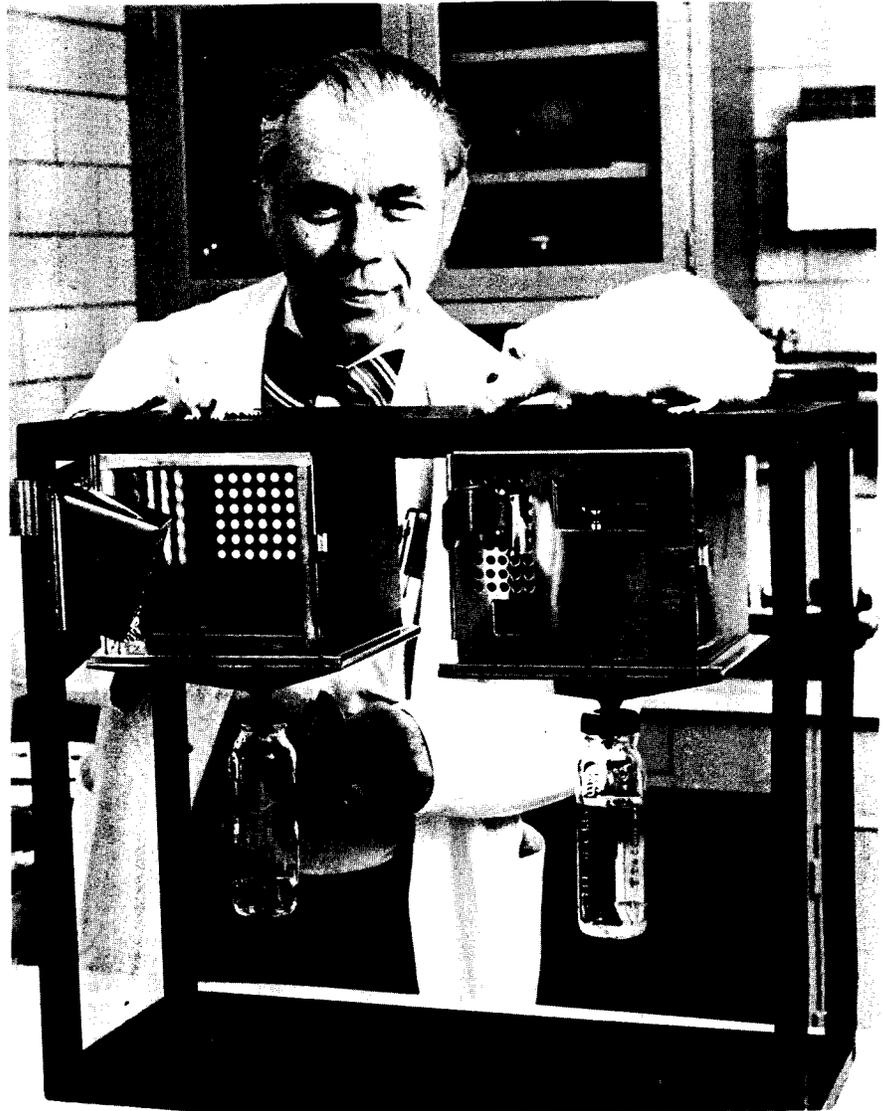
When the transplants were done in highly inbred strains of rats, the diabetes disappeared within five days and the rats remained symptom-free for more than a year. However, when the transplants were carried out in noninbred rats, the animals were cured for only 10 days. Diabetes recurred because the transplanted cells were destroyed by an immunologic reaction.

Recent studies at the University and in Colorado have demonstrated that some animal tissues are not rejected by the host if the donor transplant is grown in a laboratory culture medium for more than 10 days prior to transplantation.

Lazarow's associates have spent the last five years examining the factors that influence pancreatic cell division. They have found that when fetal rat pancreas cells are grown in a laboratory culture medium there is a significant increase in the number of insulin-producing beta cells.

By adapting the methods used in their rat studies to the preparation of human fetal beta cells and by decreasing the cells' ability to reject, Lazarow's group seeks to prevent the serious complications of diabetes.

"Blindness and kidney disease occur all too frequently despite the use of insulin, special diet and/or the oral blood sugar lowering agents," Dr. Lazarow said.



Dr. Arnold Lazarow and friends.

He estimated that less than 1/100 of an ounce of transplanted beta cells should provide enough insulin to control the symptoms and hopefully the complications in an adult diabetic. More than 4.2 million Americans are known to be affected by diabetes and it may be undiagnosed in another six million.

Dr. Lazarow's research team includes Dr. Orion Hegre, assistant professor of anatomy; Dr. Robert Leonard, research fellow in anatomy;

Dr. Robert McEvoy, resident in pediatrics; and Vesta Bachelder, assistant scientist.

When they're ready to do the first human trial, Dr. Lazarow proposes setting up a nationwide study with a five-to-ten-year follow-up to determine if the transplanted beta cells can actually prevent the disease's serious complications.

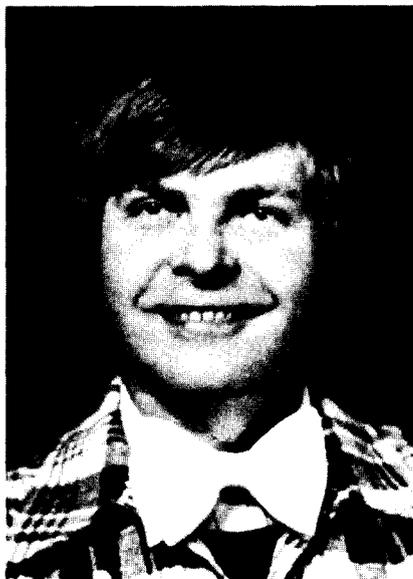
Dr. Lazarow has received much of the financial support for his work from the Minnesota Medical Foundation.

DICK ENGWALL '56 IS ALUMNI PRESIDENT

Richard L. Engwall, Med. '56, is the 1974 president of the University of Minnesota Medical Alumni Association, succeeding George Janda, Med. '47. Other 1974 officers of the Medical Alumni Association are: Donald D. Dahlstrom, '62, first vice president; Irving C. Bernstein, '42, second vice president; John A. Nilsen, '57, secretary, and Charles Crutchfield, '63, treasurer.

Engwall, a Minneapolis anesthesiologist, was the first recipient of the Minnesota State Medical Association Rural Medical Scholarship Award. Following his internship at Bethesda Hospital in St. Paul, he served as a family practitioner in the Southwestern Minnesota communities of Ivanhoe and Tyler for six years. He has served as a member of the public policy committee of the Minnesota Academy of Family Practice and on the family practice committee of the Minnesota State Medical Association. He was also chairman of the anesthesia advisory committee of the Minnesota State Board of Health. He is currently a member of the Minnesota State Medical Association's scholarship and loan, public policy and anesthesiology committees.

While he was in family practice in rural Minnesota, he was elected Lincoln County Republican Chairman and a delegate to the Minnesota Republican State Central Committee. He currently serves as director of the Minnesota Youth Citizenship Fund, a group interested in the political education of the newly enfranchised 18-year-old voter. Since 1964 he has served as a director of MINNPAC (Minnesota Medical Political Action Committee) and has been chairman of the MINNPAC Board for the past four years.



Dr. Engwall

MMF LENDS \$310,000 FOR CONSTRUCTION

The University of Minnesota recently received two interest-free loans totalling \$310,000 from its medical benefactor, the Minnesota Medical Foundation. The loans were \$250,000 for current construction costs of the Cardiovascular Research and Training Center, which is nearing completion, and \$60,000 for remodeling of a cancer research facility already owned by MMF and leased to the University. The latter loan will be used to prepare parts of the Stone Laboratories to accommodate the research efforts of Dr. Elwin Fraley, head of the department of urologic surgery.

The loans will be repaid by the University over the next 10 years, without interest.

DR. JACK SCIARRA LEAVING MINNESOTA



Dr. John J. Sciarra (above), head of OB-GYN at Minnesota, leaves July 1 to head the same service at Northwestern University Medical School. He will also be vice president of Chicago Maternity Center and chief of staff of the Prentice Women's Hospital and Maternity Center now under construction.



Left to right, Eivind Hoff, MMF executive director; Clinton Johnson, assistant vice president and treasurer of the University of Minnesota, and Dr. H. Mead Cavert, associate dean of the Medical School, complete the loan transaction.

MINNESOTA SUCCESSFUL WITH NEW KIDNEYS FOR DIABETICS

Kidney transplantation, a last-ditch treatment for diabetic uremia, has proven successful for 75 per cent of diabetics transplanted at University of Minnesota Hospitals.

According to Dr. John Najarian, chairman of the surgery department, diabetics usually make poor transplant recipients because they don't tolerate anti-rejection drugs, they have a low resistance to infection, and their surgical wounds don't heal very rapidly.

About two-thirds of the diabetics who have received kidneys at Minnesota have been totally rehabilitated, Najarian said. Deteriorating eyesight has stabilized and other complications have improved in the rest.

To date, 53 diabetics have received 59 transplanted kidneys and 38 still have functioning kidneys. Since renal failure, as a complication of diabetes, usually occurs about 20 years after the disease's first appearance, most of the recipients were in their thirties.

Kidneys from living related donors were twice as successful as kidneys from cadavers. Transplants in women recipients were twice as successful as transplants in men, possibly because of more advanced hardening of the arteries in men, Najarian said.

Potential recipients have been turned down only because they were over 50 years of age or because they had a combination of complications from their diabetes. However, blindness or a previous heart attack alone are not grounds for disqualification, Najarian said.

The actual transplant procedure is the same as that used for non-diabetics. Najarian said the patients' surgical wounds heal more slowly and their blood sugar levels must be checked every six hours for four days after the operation. The recipients' insulin requirements may double after getting a new kidney because of the return to normal kidney function and the steroid drugs taken to prevent rejection.

A four year follow-up of the diabetic transplants has shown that none of the recipients have recurrent infections, further vision deterioration, or continued severe hypertension and they have shown considerable improvement with other complications.

"The ultimate therapeutic value of kidney transplantation for the diabetic in renal failure remains to be determined," Najarian said, "but we do not feel they should be categorically excluded from kidney transplantation."

DR. J. WESTERMEYER GETS \$115,000 GRANT FOR DRUG ABUSE STUDY

Dr. Joseph Westermeyer (Med. '61) has received a \$115,000 three-year grant from the National Institutes of Alcohol and Alcohol Abuse and the National Institutes of Drug Abuse to help prepare for expanding training on alcoholism and drug abuse in the Medical School curriculum.

Initially he will focus on providing added training for medical students. Later, he plans to expand the program to include training opportunities for residents, physicians in practice, and perhaps other interested disciplines in the health sciences.

Since graduating from the Medical School in 1961, Westermeyer has received a master's degree in anthropology, a master's degree in public health and a Ph.D. in psychiatry, all from the University of Minnesota.

5 RESEARCHERS RECEIVE \$530,000 IN NIH GRANTS

Five University of Minnesota medical researchers have received grants totaling more than \$532,000 from the National Cancer Institute.

Dr. Lee Wattenberg, University professor of pathology, has been awarded \$143,300 for a three-year study of possible ways to inhibit cancer of the large bowel.

Dr. Wolfgang Bauman, associate professor at the Hormel Institute in Austin, Minn., will receive \$142,553 for a five-year study of unusual lipids in cancer tissue.

Dr. Irvin E. Liener, professor of biochemistry, has been given \$91,331 for a five-year study of how tumors break down and invade surrounding normal tissue.

Dr. Theodor Grage, associate professor of medicine, has been awarded \$88,799 for a two-year continuation of an evaluation of new multiple drug treatments for advanced cancer, and to develop new methods to follow up treated cancers with poor outlooks for recovery.

Dr. Harald Schmid, associate professor at the Hormel Institute, has been awarded \$66,518 for a two-year study of lipid metabolism in normal and cancerous tissue.

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Dear Readers:

To help us keep your classmates, former house officers and faculty, informed of your achievements, we would appreciate your taking a few minutes to fill out the following questionnaire:

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WHEN MAKING YOUR WILL . . .

You are urged to consider an investment in medical education and research at the University of Minnesota through the Minnesota Medical Foundation.

Since conditions and needs change, unrestricted gifts are usually considered to be most advisable. However, bequests restricted by the donor for any medical program at the University will be gratefully honored by the Board of Trustees.

In designating support through a bequest, which should always be prepared with the assistance of an attorney, the following suggested clauses may be used:

Outright, Unconditional Bequest

"I bequeath to the Minnesota Medical Foundation, a charitable, non-profit corporation, the sum of \$_____ or _____% of my estate."

Bequest of Residue

"I devise and bequeath all the rest of my property, real and personal, absolutely and in fee to the Minnesota Medical Foundation."

Your gift or bequest strengthens the charitable work of the Minnesota Medical Foundation at the University of Minnesota Medical Schools and is tax deductible.



WHEN MAKING A MEMORIAL TRIBUTE . . .

You are also urged to remember the important work of the Minnesota Medical Foundation when deciding on an appropriate memorial tribute for a friend or colleague, or suggesting an appropriate memorial gift to a patient or a friend.

The Minnesota Medical Foundation accepts memorial gifts supporting studies of cancer, heart disease, diabetes, leukemia and other medical mysteries under investigation at the University of Minnesota. Memorial gifts may also be designated for Medical Student Aid, any other special program of interest to the donor, or simply for the "area of greatest need."

Your local funeral director (in Minnesota) has special MMF memorial cards, furnished to the funeral home by the Minnesota Medical Foundation.

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COMING NEXT, IN THE SUMMER ISSUE:
GRADUATION 1974
PAUL DWAN, PHYSICIAN AND PHILANTHROPIST
MIDWIFERY GONE MODERN
GRADUATE MEDICAL EDUCATION
and other articles

"Daddy"-Doctor Richard Trinity, Class of '74, paused at Recognition Day ceremonies to diaper his daughter Leah while his wife Lois helped. Full graduation report coming next in the Summer issue of the *Medical Bulletin*.

