Thanks to a bequest from Dr. Royal Gray, Jennifer Albers Raines is realizing her dream to become a country doctor. Scholarships are a priority of Campaign Minnesota.  Page 10
C. Walton Lillehei (left) performed the world’s first successful open heart surgery at the University of Minnesota in the early 1950s. Lillehei, who died in July 1999, also helped launch Minnesota’s medical device industry and trained many of the world’s leading heart surgeons. His family recently gave the University $16 million. See story page 8.

* Lillehei is pictured with colleague Richard Varco.
The University’s $1.3 billion capital campaign is the largest in the University’s history. More than a third will benefit the Academic Health Center.

Endowed chairs are helping the Medical School attract and retain star faculty.

The family of heart surgeon C. Walton Lillehei is giving the Medical School $13 million for a heart institute to carry on his work.

Student Jennifer Albers Raines will realize her dream to become a country doctor thanks to benefactor Royal Gray.

The $3 million Katherine R. and C. Walton Lillehei Endowed Chair in Nursing Leadership will honor former nursing dean Katharine Densford.

A General Mills fellowship honors Jim Craig, who devoted his career to the health and well-being of workers.

Student Murugi Mutiga carries on the work of an alum who pioneered U.S. public health nutrition during the Depression.

A productive partnership with 3M began when the company funded an endowed chair during the U’s last campaign.

One couple’s penchant for poodles has grown into a source of hope in the effort to beat cancer.

Wise investments have enabled two brothers who owned a small-town drug store to repay the College of Pharmacy.

Endowed chair honors Medical School professor who saved Eisenhower and E.T.
An historic settlement with Glaxo Wellcome PLC will provide the University with up to $300 million from sales of ZiaGen, an AIDS drug containing antiviral compounds created by Pharmacy Professor Robert Vince and research assistant Mei Hua. Funds will be used for a drug development center and graduate student fellowships.

The Medical School has been awarded a $1.6 million grant from the Howard Hughes Medical Institute (HHMI) for research in immunology and genetics. Matt Mescher, director of the Center for Immunology, and Harry Orr, director of the Institute of Human Genetics, prepared the grant application.

A $1 million gift from Michael and Treva Paparella to the Minnesota Medical Foundation will establish the Paparella Endowed Fund, which will provide support for otolaryngology faculty. Michael Paparella served as chair of the Medical School’s Department of Otolaryngology for 18 years. He is director of the University’s International Hearing Foundation.

The Chiron Corporation has made a leadership gift of $1.5 million over five years to the School of Public Health’s Division of Biostatistics to support a $43 million NIH grant to study the effectiveness of Interleukin-2 in people who are HIV positive.

The Patrick T. Redig Professorship in Raptor Medicine and Surgery has been established with a $500,000 donation from Douglas Dayton. Redig is founder and director of the Gabbert Raptor Center.

Douglas and Louise Leatherdale will make a bequest of $250,000 to benefit equine students in the College of Veterinary Medicine. Douglas is chair of the board of the U of M Foundation and CEO of the St. Paul Companies. The Leatherdales, who raise horses, are long-time clients of Veterinary Teaching Hospitals.

Clayton Bohn, a ’37 dentistry alumnus, has made a cash gift of $100,000 and estate gift of $600,000 to the School of Dentistry for endowed scholarships. A retired Navy dentist, Bohn has made many gifts to students over the years in gratitude for financial assistance while he was in dental school.

Naomi and James Rhode have made a gift of $100,000 to the School of Dentistry to establish the Naomi Rhode Center for Patient Relations in Dental Hygiene. Rhode, a ’57 dental hygiene graduate, and her husband own Smart Practice, a dental practice management firm. Naomi is a nationally prominent speaker on patient relations.

Russell Luepker, head of the School of Public Health’s Division of Epidemiology, and his wife, Ellen Luepker, have made a gift to the Dean’s Discretionary Fund. This gift will qualify them for membership in the University’s President’s Club.

School of Nursing ’41 graduate Dora J. Stohl left her $200,000 estate to support the Katharine J. Densford Center for International Nursing Leadership. Stohl, who served as a nurse in three wars, retired from the US Army in 1970 as a lieutenant colonel. She died in April, 1999.

Ground was broken for the $70 million Molecular and Cellular Biology Building this fall. The ceremony included the opening of time capsules found in the Millard and Owre buildings.
With a blast of fireworks and a shower of confetti, the University of Minnesota last fall announced a $1.3 billion fundraising campaign—the largest in its history. More than one third of the funds raised by Campaign Minnesota will benefit health sciences programs.

Campaign Minnesota

There has never been a better time to invest in health education and research

Today more than ever the Academic Health Center must rely on philanthropy. While the costs of operating world-class research and education programs escalate, traditional sources of revenue—federal funding and clinical revenue—are declining. Across the country, public institutions are turning to local government, corporations, foundations, and individual donors to help them maintain competitiveness and to grow.

Last fall, the University of Minnesota launched the most ambitious campaign in its history. Campaign Minnesota is seeking to raise $1.3 billion to recruit, retain, and develop top faculty; to attract promising students and help them succeed; and to invest in strategic opportunities, research, and ongoing programs. The Academic Health Center’s portion of this goal is nearly half a billion dollars.

The campaign, to be completed in 2003, is described by President Mark Yudof as a defining moment for the University as it strives to remain nationally competitive for top faculty and students, and to meet the needs of Minnesota’s growing economy.

It is also a pivotal time for human biology. One of the most important medical breakthroughs of all time is within sight. In less than a year the sequencing of the human genome—the 100,000 genes that comprise our DNA—will be complete. This will begin a new era of understanding human biology and diagnosing, preventing, and treating disease. As transforming as the innovations of the past century have been, they are small compared to the advances that lie ahead. There has never been a better time to invest in the future of health care and biomedical science.

This issue of Pictures of Health is devoted to showing how philanthropy can help the Academic Health Center fulfill its mission and its promise. We hope you enjoy these personal stories of donors and of the faculty and students who benefit from their generosity. Ultimately, of course, we are all beneficiaries of the commitment they all make to keeping Minnesota healthy.

Sincerely,

Frank B. Cerra, M.D.
Sr. Vice President for Health Sciences
Campbell Minnesota
for the Academic Health Center

Following are campaign goals for Academic Health Center schools and programs. If you would like information about making a gift to medicine, public health, cancer, or bioethics, call the Minnesota Medical Foundation at 612-625-1440. To make a gift to dentistry, nursing, pharmacy, veterinary medicine, or spirituality and healing, call the University of Minnesota Foundation at 612-624-3333. General information may be found on the University’s Campaign Web site at http://www.campaign.umn.edu/ or on the Minnesota Medical Foundation Web site at http://www.med.umn.edu/mmf/

School of Dentistry

Faculty, students, and alumni of the School of Dentistry provide dental care to 80 percent of Minnesotans, develop new dental materials and technology, provide continuing education, and deliver much-needed outreach care.

To maintain excellence and provide for the future, the School of Dentistry is seeking $8 million for:
- new technologies for education and dental practice, such as online courses and computerized patient simulation.
- upgrading clinics and equipment used to train students and provide care for more than 100,000 patient visits a year.
- creating the first endowed chair in rural dentistry in the U.S. to better prepare students for rural practice.
- providing scholarships for dental students.

Medical School

The Medical School trains two-thirds of Minnesota’s physicians, conducts ground-breaking research, and supports the state’s biomedical industry. The school is seeking $33 million to invest in three priority areas. Meeting these goals will ensure that the school can attract and retain top faculty, meet the state’s needs for physicians, find new treatments for serious diseases, equip laboratories with the latest technology, and limit the amount of debt medical students incur to pay for their education.

Discovering the Causes, Developing the Cures, Supporting the Scientists

- $225 million to support faculty and research in ten key areas: aging, cancer (including the Cancer Center), cardiovascular and pulmonary health, children’s health, diabetes, immunology and infectious diseases, neuroscience, new therapies, transplantation, and women’s health. Emphasis will be on creating endowed chairs to attract exceptional researchers. The University began using endowed chairs to build research programs during the 1988 Minnesota Campaign.

Supporting Medical Education and Students

- $50 million to ensure that medical education continues to attract the best and brightest, and to fund important new initiatives. Six key areas are scholarships, graduate education, international health, an education center, biomedical ethics (including the Center for Bioethics), and prevention and wellness.

Funding strategic opportunities

- $60 million to provide the Medical School with the flexibility to adapt to change, develop new ideas, and to meet new demands. Donors may contribute to programs that reflect their concerns and interests or provide unrestricted funds.

School of Medicine-Duluth

Since it was founded in 1972, the School of Medicine-Duluth has brought new life to the practice of rural medicine in small towns and communities throughout Minnesota. U.S. News and World Report has ranked the school among the top four in the nation for rural health.

To build upon that success, the school seeks $5 million to:
- support rural family medicine and other primary care specialties.
- train Native American physicians.
- conduct research on rural health and American Indian Health.
- conduct basic biomedical research.

School of Nursing

As Minnesota’s flagship nursing school, the School of Nursing is committed to shaping new roles for nurses in the changing health care environment.

The School of Nursing seeks $11 million to:
- create a $5 million endowment for the Katharine J. Densford Center for International Nursing Leadership, which will provide a forum for ideas and issues affecting nursing and health care delivery.
- establish named professorships in nursing research on elders, adolescent health, children and families, cross-cultural perspectives in health care, and complementary therapies.
- provide graduate and undergraduate scholarships, fellowships, internships, and mentoring experiences to recruit and retain high-ability nursing students.

College of Pharmacy

Advances in pharmaceutical research, teaching, and service are transforming pharmacy into a primary health sciences discipline. Private funding will be essential as the college continues this work and builds a foundation for educating future pharmacists and pharmaceutical scientists.

The College is seeking $6 million to:
- improve access to pharmaceutical care in rural and underserved communities.
- develop a management and leadership program to train students for roles in health systems and companies.
- maintain excellence in pharmaceutical science by creating a fund to attract top faculty and students, support new projects, and purchase advanced technology.
- recruit a faculty expert in herbal and natural medicines to teach and conduct research on the safety and efficacy of natural remedies.
- provide scholarship funds for students.

School of Public Health

During the past century, public health efforts to improve sanitation and safety, and prevent the spread of infectious diseases saved countless lives and lengthened the average lifespan. Today, new threats defy solutions as straightforward as a vaccination or a bottle of antiseptic. Violence, drug abuse, sexually transmitted diseases, and food safety top the list of new public health concerns.

To address these challenges, the School of Public Health is seeking $5 million for:
- endowed chairs and professorships for faculty.
- student scholarships and fellowships.
- distance education technology.
- lab equipment to support student instruction and research.
- strategic research initiatives.

College of Veterinary Medicine

The past half century has seen a revolution in veterinary medicine as advances in medical science have been applied to improve the health of companion and agricultural animals. To maintain its leading position and to improve the health and well being of Minnesota’s farm animals, companion animals, and wildlife, the college is seeking a total of $28 million for:
- expanding programs in animal genomics, companion animal care, population-based medicine for food animals, and biotechnology.
- providing support and leadership to develop a world class program in comparative behavior and wellness, and completing funding for a chair in comparative oncology.
- professional student scholarships and graduate fellowships.
- a new facility for equine research and renovation of a dairy barn for a Veterinary Education Center.
- expansion of the education, conservation, and wildlife medicine programs of the Gabbert Raptor Center.

Other Academic Health Center programs

The Center for Spirituality and Healing, a national leader in complementary, cross-cultural, and spiritual care, seeks $10 million for several education and research initiatives. These include:
- an endowed chair for faculty leadership.
- recruiting faculty and developing new programs in integrative medicine.
- developing new courses for the Graduate Minor in Complementary Therapies and Healing Practices (such as in culturally-based healing, spirituality and clinical care, and plant-based therapy).
- research on evidence-based complementary methods.

Funds to benefit other intercollegiate programs, such as the Cancer Center and Center for Bioethics, are reflected in school and college goals.
Catherine Verfaillie didn’t really want a new job—but the new job sure wanted her.

A professor of medicine and long-time member of the University’s blood and marrow transplant research group, Verfaillie was happy doing what she’d been doing since she came to Minnesota as a postdoctoral fellow more than a decade ago. She’d been exploring the biology of stem cells—the components of bone marrow that give rise to blood cells—in hopes of developing new, more effective approaches to combating leukemia and other cancers that are treated with blood or marrow transplant. But as her research expanded into exciting new frontiers, such as genetically modifying stem cells to disable cancer-inducing genes, she started attracting the attention of other institutions that hoped to lure her to their labs.

Though Verfaillie enjoyed working at the University of Minnesota, the opportunity to dramatically expand her research program was hard to resist. She was on the verge of accepting an offer from the University of Chicago when Medical School dean Al Michael and Cancer Center director John Kersey pooled resources made available through gifts from private donors and came up with a counter-proposal Verfaillie couldn’t refuse.

“I was very serious about moving,” says Verfaillie. “[But] what they offered me here, plus the fact that this is a good institution, made me decide to stay here.”

What Michael and Kersey offered was a double dose of the most effective brain-drain prevention medicine known to academia—the opportunity to occupy an endowed chair. One chair was created with a donation from the estate of University of Minnesota business school alumnus Edmund Tulloch, the other courtesy of the Andersen Foundation, the charitable arm of Andersen Window Corp.

“The chairs recognize the leadership of Catherine Verfaillie in forging new directions in stem cell biology that will potentially have a broad impact on science and medicine,” Michael says. Verfaillie is just one of an increasing number of exceptional University of Minnesota researchers who have been recruited or retained with the help of endowed chairs. Created with private donations totaling $1 million or more, chairs offer their occupants not only much-deserved acknowledgment of the value of their accomplishments, but also a guaranteed source of funds they can use to carry out research too innovative to garner conventional grants.

“Endowed chairs are valuable not only for attracting and keeping top scientists, but also for laying a foundation for world-class research programs,” Verfaillie, for example, is using the new funds to explore the possibility of using stem cells to manufacture replacement muscle, tendon, bone, or even entire organs. Toward that end, she plans to recruit more than a dozen other promising researchers.

“It’s team building,” Kersey says. “If you have outstanding research leaders, they will bring together teams of people that would do the research more efficiently and effectively.”

The vision of building a world-class research program through the establishment of endowed positions first took shape at the University of Minnesota more than a decade ago with the launching of the Minnesota Campaign. That fund-raising initiative brought two dozen new endowed positions to the Medical School.

Endowed chairs also are a top priority for the University’s current $1.3 billion fund raiser, Campaign Minnesota. As part of this campaign, the Medical School has set a goal of establishing endowed chairs in numerous priority areas. Endowed positions the school hopes to establish include chairs in cancer genetics, nutrition and diabetes, bioethics, and brain injury.

Mary K. Hoff
When Kaye Lillehei was a student at the School of Nursing in the 1940s, she and her classmates regarded their dean, Katharine Densford, with a mixture of awe and trepidation.

“There was no one like Katie,” Lillehei recalls. “She was a very strong leader, which made her seem aloof. But she was also a deeply caring person, and she was always very kind to me.”

The impression that Densford made has remained with Kaye Lillehei for more than half a century. This January she and her family announced that they would honor her former professor’s memory with an endowed chair to support a director for the Katharine J. Densford International Center for Nursing Leadership.

Densford, who was director of the school for 29 years, provided national leadership as nurses grappled with care delivery issues of the day, including the mobilization of nurses for World War II and the racial integration of the professional association. The Densford International Center for Nursing Leadership was created by the School of Nursing in 1997 to provide an international forum for addressing current issues in health care and nursing.

The Katherine R. and C. Walton Lillehei Endowed Chair in Nursing Leadership carries a $3 million endowment—the largest gift in the school’s history. It will be used to recruit a leader who can form a community of thinkers, researchers, and policy experts to apply the nursing perspective to contemporary health issues.
“What mankind can dream, research and technology can achieve.”

That quotation, spoken by C. Walton Lillehei and often associated with him, sums up his own career as a surgeon and inventor and sets the course for the Lillehei Heart Institute, where his work will be carried on with a $13 million gift that was announced by his family in January.

When C. Walton Lillehei died in July of cancer at the age of 80, he left a legacy that can be matched by few physicians in the world. One of Minnesota’s most well-known and beloved medical heroes, he performed the world’s first successful open heart surgery, developed techniques to support circulation during surgery, helped develop the pacemaker and artificial heart valve—which launched Minnesota’s medical device industry—and trained many of the world’s leading heart surgeons.

“More than any other individual, Walt Lillehei brought forth the field of open heart surgery,” says R. Morton (Chip) Bolman, who holds the Lillehei Chair in Cardiovascular Surgery in the Medical School. “He was motivated early in his career by the desire to save the lives of children with congenital heart defects. Many of those children and countless other people of all ages are alive today because of him.”

The oldest son of a dentist who also graduated from the University, Clarence Walton Lillehei grew up in south Minneapolis. After finishing Medical School at the University of Minnesota in 1942, he joined the Army as head of a Mobile Army Surgical Hospital (MASH). Following WWII, he returned to the University to study with chief surgeon Owen Wangensteen, and he married Kaye Lindberg in 1946. In 1949, Lillehei was diagnosed with non-Hodgkin’s lymphoma. Wangensteen performed the surgery, which saved Lillehei’s life but left him slightly disfigured. That early brush with death had little impact on the pace of his career.

During an autopsy of a young woman who died as a result of a hole in her heart, Lillehei observed how easily such defects could be repaired if circulation could be maintained during surgery. Thus he began a series of experiments that started with cross circulation—using a healthy adult to support a patient—and ultimately led to the development of the heart-lung machine.

Lillehei also devised an electrically powered heart stimulator. And he inspired young Earl Bakken to design a small, battery-operated pacemaker, which turned Bakken’s garage business, Medtronic, into an international corporation. Lillehei himself designed the first mechanical heart valve, which became a leading product for St. Jude Medical, Inc.

Lillehei extended the reach of his surgical skill and talent by training 134 heart surgeons at the University of Minnesota and 22 at Cornell Medical Center. One was Christiaan Barnard, who performed the world’s first heart transplant. Many went on to head cardiothoracic surgery programs at other institutions. After eyesight problems (which were caused by radiation therapy for cancer) ended his surgical career at the age of 55, Lillehei devoted more time to developing heart valves for St. Jude, where he was medical director until the time of his death.

The Lillehei Heart Institute will be located in the Variety Club Research Center building, which is where Lillehei made medical history. The institute will bring together faculty from several Medical School departments to encompass basic and clinical research initiatives in device development, heart failure, alo- and xenotransplantation, vascular biology, myocardial protection, electrophysiology, and the prevention and treatment of coronary artery disease.

Physicians at the Institute will translate these new therapies into improved care for patients with heart disease. The Institute will seek out the most promising residents and fellows with the goal of training a new generation of physician-scientists to follow in Lillehei’s footsteps.

The announcement of the gift from the Lillehei family kicked off a campaign to raise a total of $25 million to fund the institute.

“It is difficult to imagine a more fitting tribute to the Lillehei legacy and better statement of what philanthropy can do for people,” said University President Mark Yudof. “This gift from Kaye Lillehei and her family is clearly a defining moment in the history of this University because of its potential to improve the lives of people around the world and in generations to come, just as Walt did throughout his career.”

Katherine (Kaye) Lindberg Lillehei met C. Walton (Walt) Lillehei in the early 1940s, while she was a student nurse at Minneapolis General Hospital (now Hennepin County Medical Center), where he was an intern. She became an R.N. in order to work as a stewardess—a requirement at the time. In 1946, after flying with Northwest Airlines for four years, she married Lillehei and shortly after the ceremony got a “pink slip” from the airlines. In those days the airlines required stewardesses to be single, she recalls with a laugh. She returned to the University of Minnesota, where she earned a B.S. degree in nursing education, but gave up her career to devote all of her time to her family. The Lilleheis had four children—Kimberle, Craig, Kevin, and Clark, who died of a brain tumor at the age of 41. Craig and Kevin are both surgeons; Kimberle Lillehei Loken lives in Duluth.

Although she hasn’t practiced nursing full-time in years, Lillehei says the education she received under Katharine Densford has served her in many ways throughout her life, including caring for her husband after he developed lymphoma in 1949, and serving as a Red Cross volunteer for 25 years. And she has retained close ties with the school, serving as a member of the School of Nursing Foundation while Ellen Fahy was dean.

The endowed chair, she says, is very important to her and her family because “education is what holds a society together. The Lilleheis are very well educated and very supportive of education. We are very happy to see the money used in this way.”

Kaye Lillehei has also retained the sense of adventure that prompted her to become a stewardess in the 1940s. To celebrate the millennium, she and her son Kevin, a neurosurgeon, traveled to the Arctic Circle to take part in a Lapplander ceremony. She also skis and skates (“very carefully,” she says) and tap dances with the Rockettes, a group of women 55 and older who perform at community centers and nursing homes.

Katherine (Kaye) Lillehei received her degree from the School of Nursing when Katharine Densford was dean.
Jennifer Albers Raines often jokes that when she gets her medical degree, she’ll have to tear apart her diploma and give a little piece to everyone who has helped her through the past three years. “It’s definitely been a team effort,” she says.

As a single mother with two children, she has found medical school especially challenging. Balancing the tremendous workload of both school and motherhood is, at times, overwhelming. Luckily, she says, she’s had support from friends, family, and a man she has never met named Royal Gray. Gray was a long-time Medical School faculty member.

The Royal C. and Mary H. Gray Scholarship was established to provide a tuition scholarship for motivated students with a desire for self-advancement and potential for a productive career in medicine. Born in the small town of Taylors Falls, Minnesota in 1897, Dr. Gray knew the obstacles facing capable young people from communities with limited financial resources. His vision was to provide them with the economic means to continue their education, and to encourage them to take their skills back to the smaller communities from which they came.

When Dr. Gray died in 1993, he left the University nearly $500,000 to establish this scholarship in his and his wife’s name. Through the investment performance of the Minnesota Medical Foundation, the Gray Scholarship has now grown to more than $1.1 million.

Albers Raines is one of the first students to benefit from this scholarship fund. And, she says, it’s an honor she’s not taken lightly. Now in her third year at the University of Minnesota Medical School, she is participating in the Rural Physicians Associate Program, a nine-month program that places students in non-metropolitan communities under the supervision of family practice and other physicians. The program affords her the opportunity to work with patients, and to learn what it takes to be a successful physician in a rural community. She says that she plans to continue working in a rural area after she graduates, most likely in family practice.

Perhaps more importantly, her internship is in Northfield, the small farming community in which she grew up. This has enabled her and her children to live near her family’s farm while she goes to school. Having the family around helps when she feels the pressure of the program’s workload.

“My family has helped me more than I could have imagined,” she says. “They’re always there when I need them.”

The scholarship, she says, has been a lifesaver. With the skyrocketing cost of tuition, it has become increasingly difficult for rural students to study medicine. In fact, even without the expenses associated with raising children, the average debt for graduating medical students exceeds $75,000.

“Being a single mom, money’s tight as it is,” she said. “It’s really nice to know that at least my tuition is being taken care of.”

Albers Raines says modestly that it’s been an honor even to be considered for the award, but admits that it would have been far more difficult to succeed without the scholarship.

“Medical school has really been a challenge,” she says. “I didn’t start the program as a single parent, but I feel I owe it to a lot of people to succeed.”

This hard work, motivation, and dedication to both family and community is what Dr. Gray felt should be rewarded. With the Royal C. and Mary H. Gray Scholarship, the work of future physicians like Albers Raines will ensure that Gray’s vision of continued University commitment to rural communities continues for generations.

Dan Berglund
Jim Craig had expected some kind words, and perhaps a gold watch. At 65, he was retiring after 24 years at General Mills, the last 22 of them as Vice President and Director of Health and Human Services. Some 150 co-workers had gathered at the Golden Valley Country Club to bid him farewell.

Then General Mills Chairman and CEO Steve Sanger stood and announced a parting gift that was rather different than an engraved watch: The General Mills Foundation was establishing a fellowship in Craig’s name at the University of Minnesota.

“I was totally humbled,” Craig remembers. “I thought, ‘What have I done to deserve this?’

As it turns out, Craig had done plenty—for both the University and General Mills. Craig, who has a medical degree from the University of Tennessee College of Medicine and a master of public health degree from the University of Pittsburgh, served jointly for more than 20 years as an adjunct clinical professor in both the School of Medicine and the School of Public Health. (He continues on the SPH faculty) In the 1970s he helped to create the University’s occupational medicine residency program, one result of which was the Midwest Center for Occupational Safety and Health (MCOSH). And in 1999, he served as chair of the fundraising committee for the Center for Environment and Health Policy.

“That didn’t surprise me at all that General Mills would want to do something significant for him,” says MCOSH Director Ian Greaves, M.D., an associate dean of the School of Public Health, who has known Craig for more than a decade. “He’s a special guy in the corporate world. He’s very interested in doing the right thing. He has strong ideas about public service, and serving the public.”

Craig stumbled upon his specialty in occupational medicine nearly 40 years ago, when he accepted what he thought would be an interim position with the Tennessee Valley Authority, working as the lone physician on a large construction project in a remote area of Kentucky. His superiors at the TVA convinced him to make occupational medicine a career.

“At General Mills, which recruited Craig in 1974, he exerted substantial influence over corporate policy. His approach was deceptively simple. “My philosophy has always been, ‘What’s good for employees is good for the company,’” Craig says, his voice still carrying traces of his Tennessee roots. “Never has anyone at General Mills asked me to do anything different than that. We didn’t go out to reduce costs. We didn’t go out to prevent accidents. We went out to protect the physical, mental, and social well-being of people.”

Even though he was a vice president, Craig continued until his retirement to care for individual employees, including many executives. “It gives you credibility. It was also something I enjoyed.”

The James L. Craig Fellowship in Public Health was created in 1998 with a $100,000 donation from General Mills and later supplemented by a gift from Craig and his wife, Bobbi. Beginning in the spring of 2000, it will be awarded annually to one or more students in the School of Public Health who have already earned medical degrees and are pursuing occupational health careers.

According to the fellowship endowment statement, students should exhibit “a passion for public health, an open and inquiring mind, deep compassion, genuine humility and a selfless devotion to the welfare of others.”

In other words, they should be like Jim Craig.
When Murugi Mutiga began attending the University in the fall of 1996, with plans to major in nutrition, she didn’t know exactly how she was going to pay for her education. A native of Kenya, she had come to Minnesota with her husband, a medical resident. From the beginning, she knew it wouldn’t be easy.

After months of cobbling together an assortment of jobs, Mutiga received help the following June from an unexpected source. She became the first recipient of a scholarship named for Marguerite J. Queneau, a 1925 graduate from the School of Public Health who had been a pioneer in the field of public health nutrition. “I was supporting myself through school and I had just made it through the first year,” Mutiga recalls. “I was wondering where the money would come from.”

The fund honors the memory of Queneau—Margot to everyone who knew her. During the Depression, Queneau worked as a nutritionist in New York, teaching public health nurses to integrate nutrition into their work, and teaching women to feed their families healthfully on a limited budget. During World War II, Queneau served in England as an Army lieutenant and chief hospital dietician, for which she received a Medal of Merit. Later in her career, she taught at Harvard and in France. She also worked for the city of Boston and the United Nations. At 83, she was named Honorary Chair of the American Dietetic Association, an organization to which she had belonged for more than 50 years. Queneau’s passion for her work was one of her greatest assets. As a French colleague described Queneau’s work in a letter, “So you studied nutrition like you studied literature, with the complete range of your human passion. Thus you ignited in your students a spark which was able to enlighten a whole life.”

The scholarship fund was established in 1995 by four of Queneau’s siblings, and later enhanced with a $500,000 donation from her oldest brother, Roland. Financial aid is provided for public health nutrition students in the School of Public Health who work as research assistants.

“IT’s very helpful to our students because people don’t go into public health nutrition for the money, they [enter] public service,” says Murugi Mutiga’s adviser, Judith Brown, a professor of epidemiology and nutrition in the School of Public Health.

The endowment is designed to assist students who, like Queneau, take a global view of nutrition.

Although the Queneau family moved frequently—Margot grew up in Pennsylvania, Belgium, and England, as well as other places—they had deep roots in Minnesota. Both of Queneau’s parents attended the University, as did two of her brothers. “We all feel that Minneapolis is our home,” says her brother Bernard, who received his Ph.D. in metallurgical engineering from the University in 1936 and was instrumental in setting up the scholarship fund.

Murugi Mutiga, her husband, and their first child—a daughter, born last fall—plan to return to Kenya next year. There Mutiga hopes to develop nutrition programs geared to women, especially during pregnancy. “In Kenya, women are not regarded very highly as far as health is concerned,” she explains. “[My goal is to empower women, give them control of their health, through education.”

When she returns, Mutiga will bring with her an image of Margot Queneau from a ceremony dedicating a conference room in her name. Bernard Queneau and two of Margot Queneau’s colleagues spoke about her life and work at the ceremony.

“I don’t think she believed anything was impossible,” Mutiga says. “That is kind of my spirit, too.”

Frank Clancy

Scholarship recipient Murugi Mutiga, who hopes to develop nutrition programs for women in Kenya, carries on the legacy of Marguerite Queneau, a 1925 alum who pioneered U.S. public health nutrition.
A successful partnership between 3M and the School of Dentistry began when the company contributed $800,000 for an endowed chair.

Chances are, if you've had a cavity filled in the last 10 years, the restorative material used was tested for toughness and wear at the University’s School of Dentistry.

“We really consider the University of Minnesota as 3M West,” says John Horn, technical director of 3M’s dental division, one of the country’s leading manufacturers of restorative dental biomaterials. “The U is a very important part of our culture.”

In 1989, 3M and the U’s School of Dentistry signed a unique partnership agreement that resulted in the creation of the Minnesota Dental Research Center for Biomaterials and Biomechanics. 3M provided funding—$2.4 million over 10 years—and the U provided the expertise and equipment to test biomaterial products for 3M, while maintaining its ability to conduct independent research on broader subjects.

“It’s a functional relationship,” says William Douglas, U of M professor and head of oral sciences, and director of the research center. Douglas holds the Harvey L. Anderson Research Professorship, which was created with an $800,000 gift from 3M during the 1988 Minnesota Campaign. “The reason it works is because it’s a complementary relationship: Everyone brings different things to the table.”

And everyone comes away a winner.

For 3M, the partnership’s advantages are obvious. Minnesota’s largest company has developed superior dental biomaterial products that were first tested by the brightest minds and the best equipment at the University.

“The advantage for the University is that it funds our ability to innovate—to develop new evaluative methodologies for testing hypotheses,” says Douglas, adding that 3M’s funding has helped the School of Dentistry hire two assistant professors. “One young faculty member is studying connections between oral health and heart attacks.”

Dentists and their patients are winners, too. 3M's Restorative Z250 is a biomaterial product that is replacing amalgam as the leading material for filling cavities. The product looks more natural than amalgam and it’s stronger. “You’re not just plugging a hole, you’re actually rebuilding the tooth, in a way,” says Douglas.

Douglas and the U “provided very important information about wear resistance and fracture toughness” of Z100 during development 10 years ago, Horn says.

Last year, 3M released an improved product, Filtek Restorative Z250, which—along with being tougher and more fracture-proof than Z100—resists shrinking during the filling process. Again, Douglas and the Center for Biomaterials played a key role in its development.

“Bill is involved in just about every product category that we have,” says Horn.

But Douglas and University dentistry professors are involved in much more than just 3M product testing.

“We really consider the University of Minnesota as 3M West,” says John Horn, technical director of 3M’s dental division. “The U is a very important part of our culture.”

“We want to be famous for innovation and evaluative technologies,” Douglas says. “We’ve always tried to grow that, and we’re always thinking of new core competencies.”

The newest innovation is the Virtual Dental Patient, a measuring device created by Ralph DeLong, University researcher in the Minnesota Dental Research Center for Biomaterials and Biomechanics. The Virtual Dental Patient is a software program that mimics an individual’s chewing patterns and allows dentists to predict future enamel wear on a given patient’s teeth. With this knowledge, dentists will be able to take corrective measures years in advance of problems occurring. DeLong has a grant from the National Institute of Dental Research to develop the idea and evaluate it by digitizing the mouths of 20 patients.

“The Virtual Dental Patient gives you a permanent record of a patient at a given point of time,” says DeLong, adding that dentists can use digital imaging to track changes in gum height, enamel wear, and movement of teeth over time. “It has a lot of potential.”

The University-3M partnership has fulfilled at least part of its potential. At the same time, Douglas says he expects it to continue to grow.

“3M is interested in composition of matter. I'm interested in evaluative modeling. It’s a marriage made in heaven.”

Mark Engebretson

Faculty member Bill Douglas with John Horn, technical director of 3M’s dentistry division, and Sumita Mitra, corporate scientist. Yellow light in this lab prevents resin dental materials from hardening as technicians work on them.
Cancer was probably the last thing on Alvin and June Perlman’s minds when they first opened their arms to a wriggling bundle of miniature poodle 36 years ago. But it’s thanks in large part to that rather unconventional wedding gift (“they said they didn’t want to get us a butter dish,” June Perlman recalls) that the couple recently made a major contribution to efforts to understand and conquer the disease in animals and humans alike.

How the Perlman poodles have evolved from a puppy to supporting cancer research has a lot to do with how they progressed through married life—poodle by poodle. First there was Pepe, named best of show in his very first obedience trial. Next came Coke, who won 250 trophies before she retired from the ring. One after another, seven more little balls of curls paraded their way into the Perlman’s lives and hearts. Today poodle number nine, Sassy, claims the title of “the finest dog we’ve ever had”—never mind her appetite for the couple’s white carpet. “They’re sort of ruled our life,” says June Perlman.

Not surprisingly, whenever one did, the loving owners would seek the finest of veterinary care. For problems that ranged beyond the routine, that meant the University’s Veterinary Teaching Hospitals. One Perlman poodle was treated here for an eye disorder, another for bladder problems. Pixie, seventh in the series, received radiation for oral cancer at the Veterinary Teaching Hospitals in 1992 and lived cancer-free until she died two years ago at the ripe old age of 16.

In gratitude for the role the Hospitals played in caring for their pets, the Perlmans decided to give something back. Pleased by Pixie’s triumph over cancer, they funded a residency in oncology at the Veterinary Teaching Hospitals. Then, last fall, they extended their appreciation even further by donating $1 million more to help support cancer research.

“We could think of no better way to honor our animal family for the unconditional love and companionship given to us than to establish a program to further the study and research in overcoming animal diseases.”

“Animals have been such a large part of our life,” Alvin Perlman says. “We could think of no better way to honor our animal family for the unconditional love and companionship given to us than to establish a program to further the study and research in overcoming animal diseases.”

The Perlmans’ gift will be used to strengthen the College of Veterinary Medicine’s cancer research program by endowing a faculty chair in comparative oncology. Funds generated by investing the principal will support a nationally renowned scientist and provide seed money for a research program focusing on cancer in animals as a source of knowledge for advancing diagnosis and treatment of the disease in both pets and humans.

“The Perlmans’ gift is the cornerstone gift for building our comparative oncology program,” says Dean Jeffrey Klausner. “In a couple of years, we hope to be the leading program in the nation. This gives us momentum to move this program forward. It’s a very, very important gift.”

The chair endowed by the Perlmans is one of three chairs sought by the college as part of the University’s $1.3 billion capital campaign. The college also hopes to establish endowed chairs in comparative behavior and neurology/nephrology.

Mary K. Hoff

One couple’s penchant for poodles has grown into a source of hope in the battle to beat cancer in animals and humans.

“We could think of no better way to honor our animal family for the unconditional love and companionship given to us than to establish a program to further the study and research in overcoming animal diseases.”
Prescription for prosperity

Wise investments have enabled the Engebretson brothers, College of Pharmacy alums who owned a drug store in Devils Lake, North Dakota, to give something back to the University.

Duane and Glenn Engebretson share marketing instincts, business smarts, a love for travel, and a trust fund that will benefit drug research and discovery at the University of Minnesota. Oh, yes. They also share the same birth date: They’re twins.

“Lots of people couldn’t tell us apart,” recalls Duane about growing up in Devils Lake, North Dakota and working at and owning Devils Lake Drug Co. “We made up some ads with that thought in mind. Just for fun we took a side picture of just one of us. We put it in the paper and reversed it and had them facing each other. Customers would say, ‘I know this one is Glenn, and I know this is Duane.’ Well they were both Glenn.”

That innate marketing sense, coupled with a strong business savvy helped the Engebretson family nurture a small town drug store for 56 years.

Elmer Engebretson, a 1904 graduate of the Drew School of Pharmacy in Minneapolis (subsequently absorbed by the U), bought Devils Lake Drug Co. in 1916 after it had been destroyed by fire. In 1920, he married Ethel, and the next year Duane and Glenn were born. Elmer ran the drug store successfully for decades and employed his sons at the soda fountain beginning at the age of 13.

“Gee wouldn’t it be great if we went to the University of Minnesota?” So we applied and by golly we got in.”

After graduating in 1943, the twins entered the armed services and were separated for the first and only time: Duane enlisted in the Coast Guard and Glenn in the Navy. Upon their return to Devils Lake in 1946, the young men went back to work for their dad. In 1949, they purchased their father’s interest and continued to run the business successfully until selling it in 1972, six years after Elmer’s death.

Over the years, they made careful, smart investments, which gave them the opportunity to retire comfortably in Sun City West, Arizona, where they spend time on the golf course when not traveling the world. Each summer, they return to Devils Lake. Their wise financial investments also gave them the opportunity to give something back to the U of M.

Several years ago their mother, who died in 1996, established the Elmer and Ethel Engebretson Trust, which sets aside money to be shared by the U’s College of Pharmacy, the Mayo Foundation, and North Dakota State University.

“It’s a beginning,” Duane says of his mother’s trust. “It’s a guideline for what they can eventually do with ours.”

On May 18 and 19, the U’s College of Pharmacy is hosting a symposium that “essentially brings together faculty from the three institutions to become familiar with each other’s expertise,” says Yusuf J. AbulHajj, professor in the College of Pharmacy, and head of the department of medicinal chemistry. Elmer and Ethel’s trust supports the symposium.

The primary goal is to support drug development research by faculty and students at the University of Minnesota with research at the Mayo Clinic and at North Dakota State. The Duane and Glenn Engebretson Trust will provide significant funds to that end.

“I think more benefits can be derived from the three of them working together,” says Duane Engebretson. “That way, the dollar spent will go further than if each of them goes their own way.”

Duane and Glenn Engebretson got their money’s worth and then some at the College of Pharmacy.
In May of 1967, just as he was leaving for a sabbatical in Israel, Marvin Bacaner got a phone call from a physician at Walter Reed Hospital in Washington D.C. The doctor had read an article about a new anti-fibrillation drug Bacaner developed and wanted to try it on former President Dwight Eisenhower, who was near death following a severe heart attack.

Bacaner drove to the airport and put a supply of the drug, Bretylium, on a Northwest Airlines flight to D.C. Before hearing about the outcome, he himself headed off for Israel. When he got off the plane in Paris, he picked up a copy of France-Soir and read a front-page headline stating that Eisenhower had been saved by a new drug developed by a University of Minnesota researcher.

The rest, as they say, is history. Bretylium became a widely prescribed, life-saving heart drug. Bacaner enjoyed a successful academic career. The University earned more than $10 million in royalties from sales of the drug. And Bretylium even landed a feature role in a major Hollywood movie—it was the drug that saved E.T.'s life.

Last fall, the Marvin and Hadassah Bacaner Endowed Chair in Cardiovascular Physiology was established to set the stage for that kind of history to repeat itself. Bacaner and the University each contributed half of the $1 million endowment. Earnings will be used to recruit a researcher in the promising new field of molecular cardiology—understanding molecular mechanisms that regulate the heart in health and disease.

“All my life I have believed that when you get something, you should give something back,” Bacaner says. “The University has given me opportunities to do many things I have enjoyed.”

Bacaner says that if he were starting over, molecular cardiology would be his field of choice. Ultimately, he adds, research in this area could lead to gene therapy for heart disease. The new endowed chair dovetails neatly with President Mark Yudof’s plans to build up the University’s molecular and cellular biology research programs and encourage growth of biotechnology industry in Minnesota.

Now a professor emeritus in the Medical School’s Department of Physiology, Bacaner, 76, still comes into his laboratory almost every day. He is working on an oral form of Bretylium that could be carried by people who have heart disease and taken if they experience chest pains.

“More than 150,000 people a year die from heart attacks before they get to a hospital,” he says. “This would give them a very good chance of getting there alive.”

Peggy Rinard