

BROADCASTERS: Taped actualities of task force chair Robert Holt can be obtained by calling (612) 376-7676 from 4:30 p.m. Wednesday (5/2) until noon Friday (5/4).

UNIVERSITY OF MINNESOTA  
NEWS SERVICE, 6 MORRILL HALL  
100 CHURCH ST. S.E.  
MINNEAPOLIS, MINNESOTA 55455  
MAY 1, 1984

NEWS PEOPLE: For further information contact PAT KASZUBA, (612) 373-7516

WAYS FOR MAKING U OF MINNESOTA GRAD SCHOOL  
ONE OF TOP 10 SUGGESTED IN NEW REPORT

(FOR RELEASE THURSDAY, MAY 3)

To become one of the the top 10 research institutions in the United States, the University of Minnesota must find ways to attract the best graduate students and faculty, who will be at the heart of tough competition during the coming years.

Recommendations for improving the prospects of the university's Graduate School have been made by the Task Force on the Quality of Graduate Education and Research in its report released this week. The 18-member panel made its suggestions in four parts: faculty recruitment and retention; graduate student recruitment and support; a review of programs; and a review of facilities, such as libraries, that are central to graduate education.

The panel is one of five appointed by President C. Peter Magrath to examine various aspects of the university and to recommend ways to improve planning.

With graduate school enrollments leveling off or declining during this decade, the University of Minnesota will face stepped-up competition for top faculty and students. "In trying to attract good graduate students, it's going to become enormously more competitive ... it's going to become really rough in the late 1980s," said Robert Holt, dean of the Graduate School and head of the task force.

"Major research universities have the source of their vitality in graduate education and research," Holt said. "If that is strong, it can have ramifications throughout the institution."

The quality of faculty and graduate students are interdependent components that determine how good an institution will be, Holt said. "When you have a first-class faculty, you have a large number of students who are clamoring to get into that

(MORE)

university to study with that faculty," Holt said. "On the other hand, if you have a reputation for having really good graduate students, then it's much easier to attract first-class faculty."

The University of Minnesota ranks 15th or 16th among research institutions in the United States, but "the economy and society of the state of Minnesota require a graduate school that ranks in the top 10," Holt said.

Compensation and the quality of research facilities are among the most important keys to attracting the best faculty, said Holt, who stressed the need for the university to be competitive with comparable institutions -- both public and private. UCLA, MIT, Yale, Princeton, Stanford and the universities of Michigan, Wisconsin and Illinois are among the institutions with which Minnesota must compete for faculty and students, the report says.

The competition comes not only when the institution is trying to attract newcomers, but also when it is trying to retain its best faculty. That's where the need for revitalization is important. The report recommends research professorships, sabbaticals and awards for faculty research as additional ways to increase faculty satisfaction.

A "cafeteria" of fringe benefits for faculty to choose from -- such as university support for home mortgages and tuition grants for the children of faculty -- could add an enormous and effective competitive advantage when trying to recruit and retain faculty, the task force report says.

Closer monitoring of tuition rates and student aid to keep Minnesota competitive is also needed. The report calls for "a dramatic increase" in the number and size of fellowships and teaching and research assistantships during the next four or five years.

Other recommendations for attracting top graduate students include setting up a fund to bring prospective students to campus and establishing work/study space within departments for use by graduate students.

(MORE)

The task force based its work on several principles "that must permeate university planning and decision making" if graduate education and research are to be improved. Among those assumptions are that "excellence in some fields cannot survive alongside mediocrity in others" and that at the graduate level, there is no difference between major private and public institutions.

The report makes a distinction between the way the university must run its undergraduate and graduate programs, saying: "Many taxpayers tend to view the public university as a place where their children have special access to a quality, low-cost education. However appropriate this view may be for undergraduate colleges, it is the death knell for a graduate school."

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MAY 1, 1984

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KERLAN AWARD WINNER  
ANNOUNCED

(FOR IMMEDIATE RELEASE)

Clement Hurd, a well-known children's book illustrator, will receive the 1984 Kerlan Award for Children's Literature on behalf of Margaret Wise Brown, her editors and illustrators, at a noon luncheon May 15 at the Campus Club.

Brown, who died in 1952, was a prolific and popular writer of children's books. She wrote more than 90 picture books, at least a dozen of which are acknowledged classics. Her better-known books include "The Little Fireman," "The Runaway Bunny," "A Child's Good Night Book" and "Red Light Green Light."

Hurd, who illustrated many of Brown's books, will deliver a lecture at 4:15 p.m. that day in 109 Walter Library. The lecture is free and open to the public. A reception and autograph party for Hurd and his wife, Edith, an author with whom he also has collaborated, will be held from 3 to 4 p.m. in 109 Walter Library. Books will be available for autographing. Reservations are necessary for the luncheon, which costs \$8 per person.

For more information on the luncheon, reception or lecture, call (612) 373-9731.

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MAY 3, 1984

NEWS PEOPLE: For further information  
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(612) 944-2880,  
or LYNETTE LAMB, (612) 373-7504

WILSON LEARNING, U OF MINNESOTA FORM  
\$1 MILLION 'LEARNING ALLIANCE'

(FOR IMMEDIATE RELEASE)

The University of Minnesota's College of Education and Wilson Learning Corporation announced Thursday (May 3) the establishment of an educational research and development alliance, which will be supported by an initial \$1 million grant from Wilson Learning.

The Wilson Alliance for Research and Development will provide the university with scholarships and fellowships, research and consultation funds and visiting professorships.

With its emphasis on adult learning, a critical issue for business, the alliance is expected to attract additional grants from other major corporations. Since almost half the knowledge in many fields is obsolete within five years, the need for continuing adult education is growing.

"This alliance is a significant step forward in which a major college and a major company join their two staffs to work together in an unprecedented fashion," said university President C. Peter Magrath. "We are pleased to be working with a company of Wilson Learning's stature and look forward to an open, free-flowing exchange of ideas and opportunities between our faculty and Wilson's staff."

The alliance will be used to encourage research on the emerging, long-term learning needs of society, such as retraining of displaced workers and finding better ways to use new technologies in education, according to William Gardner, dean of the College of Education, and Wilson executives.

"Traditionally, learning was geared to help the new generation master and maintain the existing body of knowledge," said Larry Wilson, founder and chairman of  
(MORE)

Wilson Learning, now a subsidiary of John Wiley and Sons. "Such maintenance learning is still necessary, but isn't enough in these times of rapid change."

Wilson officials said they hope the alliance will pick up the challenge enumerated in "No Limits to Learning," the 1979 report of the Club of Rome: "Maintenance learning must be complemented by more 'anticipatory' learning if we are to solve the many emerging crises, not just in business and the economy, but in energy, the environment and world politics, for which our traditional learning orientation has left us unprepared."

Under the alliance agreement, university faculty members can submit proposals to use the research funds. Wilson personnel will participate in some of the research.

The grant will also establish Wilson Learning Fellowships for undergraduate, master's degree and Ph.D. candidates and a Wilson Learning Visiting Professorship, which will bring nationally recognized educational researchers to the campus to consult and give seminars.

"As a leading educational publisher, we are delighted by the initiative Wilson Learning is taking with the university in the vital area of adult learning," commented Andrew H. Neilly Jr., president and chief executive officer of John Wiley & Sons, Wilson's parent company.

Wilson Learning researches, designs and produces learning systems to solve business problems for organizations. In addition to seminars and audiovisual programs, the company has recently begun developing computer software and interactive video material.

Wilson Learning Corporation develops programs in executive leadership and strategic planning for senior management, and also trains clients in supervision, management, sales and customer service. Based in Eden Prairie, Minn., the firm has 23 offices in the United States and 12 international offices. In 1982, the company was acquired by John Wiley and Sons, the New York-based publisher of educational and professional books and journals.

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U OF MINNESOTA RANKED THIRD IN  
NATION IN PRIVATE SUPPORT

(FOR IMMEDIATE RELEASE)

The University of Minnesota ranked third among the nation's public and private higher education institutions in the amount of private support given by alumni, corporations, foundations and others in 1982-83. Minnesota was the only public university ranked in the top 10 in voluntary private support.

The \$62.7 million donated to the university placed it behind only Harvard and Stanford universities, which received total donations of \$126 million and \$91.9 million, respectively. The University of Michigan, ranked 11th, was the public institution with the second highest level of private support, with \$50.6 million in donations.

Dale Olseth, president of the Minnesota Foundation, called the ranking "a tremendous achievement considering that Harvard and Stanford have a large group of wealthy and prestigious alumni." He credited Robert Odegard, executive director of the foundation, the university's fundraising arm, Steve Roszell, director of the Minnesota Alumni Association, and others for much of the growth in private support.

"This is a reflection of the underlying strength of a major research university that serves the state and the nation," Odegard said. "We have in Minnesota an extremely enlightened community that has supported education to a greater degree than any other state in the union. Great support from our foundation trustees and from President Magrath and his administration have also played a major role in our success."

"To appreciate the university's success, one must realize that there are approximately 1,500 public colleges and universities and a total of 3,200

(MORE)

institutions of higher learning across the United States," said President C. Peter Magrath. "To rank No. 1 (among public) and No. 3 (in public and private) among such competition is downright incredible."

The Council for Financial Aid to Education (CFAE), based in New York, reported that private donations to higher education topped \$5 billion last year. The rankings, compiled by CFAE, are based on a survey of 1,137 institutions across the nation.

The University of Minnesota, which ranked seventh in 1981-82 with \$54.9 million from donors, has been included in the top 10 each year since 1973-74 and has been in the top 20 for the past 11 years.

For the first time corporations donated more than \$1 billion to colleges and universities in the United States, with contributions of \$1.11 billion, a 14 percent increase over the previous year. Alumni, non-alumni, foundations, religious groups and others account for the rest of private support.

Odegard cited strong ties with such service groups as the Variety Club, the Masonic Lodge, the Lions Club, the American Legion, the VFW and many others as key reasons for the university's success in attracting private support. He said the university's strength in areas such as health sciences, high technology, agriculture and law have also been factors in voluntary support.

"Donors are like savers: They put their money into institutions that offer the best return on investments," Magrath said. "Fortunately for all Minnesotans, the university's diverse and talented faculty have consistently provided one of the richest returns to be found anywhere."

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(AO, 12, 12a, 15; B1; CO, 12, 12A, 15)

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MAY 3, 1984

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BROADCASTERS: Taped actualities from the news conference can be obtained by calling (612) 376-7676 from 1 p.m. Monday (5/7) until noon Wednesday (5/9).

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NEWS PEOPLE: For further information contact RALPH HEUSSNER, (612) 373-5830

MEMO TO NEWS PEOPLE

The University of Minnesota Hospitals will unveil the Thermotron-RF, a Japanese-made hyperthermia or heating unit designed to sensitize hard-to-treat cancer tumors for radiation and chemotherapy, during a press briefing Monday (May 7) at 10 a.m. in the Hegman Conference Room on the ground floor of the Masonic Cancer Center.

Following the press conference, reporters and photographers will be taken into the new therapeutic radiology facility in Unit J -- the University Hospital under construction -- to view the device. The therapeutic radiology section, which will open later this month, is the first section of the hospital to be built. The remainder of the hospital is being built around the unit's 3-foot concrete walls and will not open until 1986.

The clinical use and planned research for the hyperthermia machine, only the second of its kind to be used in the United States (the first is at Duke University) will be explained by Dr. Seymour Levitt, professor and chairman of therapeutic radiology, and Dr. Chang W. Song, a professor and radiation biologist in the department.

Hyperthermia works on the principle that the temperature in tumors rises higher than in normal tissue, resulting in greater damage to tumors.

"Hyperthermia used alone or in combination with radiotherapy, chemotherapy or surgery has emerged as a potentially useful approach to cancer treatment during the past several years," said Song. "In fact, recent clinical investigations at a number of institutes throughout the world indicate that the combination of hyperthermia with radiotherapy significantly improves the control of malignant tumors without increasing normal tissue complications."

(MORE)

The two Japanese scientists who were instrumental in developing the Thermotron-RF will lecture on campus next week and are expected to be available at the press briefing.

Dr. M. Abe, professor and head of the Department of Radiology at Kyoto University Medical School, will lecture on "Clinical Hyperthermia with Thermotron-RF" at 4:30 p.m. Monday, May 7, in 2-620 Malcolm Moos Health Sciences Tower, formerly Unit A. Dr. T. Sugahara, emeritus professor and former dean of Kyoto University, will lecture on "Inhibition of Repair of Potentially Lethal Damage in Cancer Treatment" Wednesday, May 9, at 4:30 p.m. in 2-520 Moos Tower.

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(AO,23,24;B1,4;C23,24)

UNIVERSITY OF MINNESOTA  
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MAY 4, 1984

NTR  
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3:44p

BROADCASTERS: Please see end of memo for information on obtaining radio actualities from this month's regents meeting.

NEWS PEOPLE: For further information contact PAT KASZUBA, (612) 373-7516

MEMO TO NEWS PEOPLE

The University of Minnesota Board of Regents will meet in Duluth Thursday and Friday (May 10 and 11) and are expected to vote on a plan that would raise tuition an average of 13.3 percent next year.

The tuition plan, which would generate \$84.4 million, will be up for a vote Friday during the 8:30 a.m. committee of the whole meeting in the Rafters in the Kirby Student Center on the Duluth campus.

An update on the proposal for the \$4.5 million covered football practice facility on the Twin Cities campus will be given Thursday during the 1:30 p.m. meeting of the physical plant and investments committee in the Garden Room, which is also in the Kirby Student Center.

Here is a schedule of meetings and a sample of agenda items for the Duluth meetings:

--Faculty, staff and student affairs committee, 1:30 p.m. Thursday, the Rafters, Kirby Student Center. Discussion of student fees on all five campuses.

--Physical plant and investments committee, 1:30 p.m. Thursday, Garden Room, Kirby Student Center. Discussion of football practice facility for Twin Cities campus.

--Educational policy and long-range planning committee, 3 p.m. Thursday, the Rafters, Kirby Student Center. Review of engineering programs and the Natural Resources Research Institute at Duluth.

--Budget and legislative coordinating committee, 3 p.m. Thursday, Garden Room, Kirby Student Center. An overview of bills from the 1983 legislative session that have implications for the University of Minnesota.

--Committee of the whole, 8:30 a.m. Friday, the Rafters, Kirby Student Center.

(OVER)

REGENTS

-2-

Vote on tuition plan and on a resolution that points out inequities in legislative policies on tuition, such as the reciprocity agreement with Wisconsin that allows Wisconsin students to pay lower rates at the university than do Minnesota students.

--Full board meeting, 10:30 a.m. Friday, the Rafters, Kirby Student Center.

Final action on votes taken by committees.

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(A0,1;B1;C0,1)

BROADCASTERS: A taped report and actualities from this month's regents meeting can be obtained by calling (612) 376-8000 from 3 p.m. Friday (5/11) until noon Monday (5/15). Call Scott Elton at (612) 373-7518 by 4:30 p.m. Wednesday (5/9) with requests for coverage of specific items and individual feeds.

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MAY 4, 1984

NEWS PEOPLE: For further information  
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LOTS OF MILK AND COOKIES  
ARE PART OF U OF M EVENT

(FOR IMMEDIATE RELEASE)

All the milk and cookies you can consume, contests and door prizes will be part of the fourth University of Minnesota "Cower," to be held on the grassy area across from Coffey Hall on the university's St. Paul campus Wednesday (May 9) from 2 p.m. to 6 p.m.

Sponsored by Christians at the U, the Minnesota Cower is part of the College of Agriculture's Minnesota Royal, a festival held every spring on the St. Paul campus. The Cower will feature a milk chugging contest, a mooing competition and several other events, including a drawing for the \$100 grand prize.

An entrance fee of \$2 per person covers the cost of unlimited milk and cookies and entrance fees for all contests and drawings. Over 70 prizes worth between \$5 and \$25 have been donated by local businesses; drawings will be held every 15 minutes. There will be live bluegrass music from 4 p.m. to 6 p.m.

For more information, call Jim Coleman at 722-4604.

-UNS-

(AO,7,25;B1;CO,7,25)

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MAY 4, 1984

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NEWS PEOPLE: For further information  
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MEMO TO NEWS PEOPLE

Sister Frances Russell, well-known leader of the opposition to the MX missiles in Wyoming, will speak at the University of Minnesota campus May 16. A briefing for the media will be held May 15 at 1:30 p.m. in B-12 Morrill Hall.

Russell heads Western Solidarity, a coalition of eight states opposing MX missile funding and basing plans. She is a controversial figure in Wyoming, where many citizens support their state's role as home to MX missiles. Winner of the 1983 National Association of Social Workers' Social Worker of the Year award, Russell is also founder of Sienna House, a shelter for homeless women in Cheyenne.

Russell's May 16 speech, "Living Under Nuclear Threat: Empowering Human Service Professionals," will be at 5 p.m. in the Earle Brown Center for Continuing Education on the university's St. Paul campus. It will be followed by a 6 p.m. dinner, a 7 p.m. film and a 7:45 p.m. reaction panel made up of human service professionals. The dinner is \$6.50 per person; the rest of the program is free.

For more information on the speech or the press conference, call Fran Guminga at 373-9786.

-UNS-

(AO,3,13;B1,8;CO,3,13)

FEATURE STORY FROM THE  
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MAY 8, 1984

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QUIETING THE BRAIN'S ELECTRICAL STORM;  
U OF M TACKLES WORST CASES OF EPILEPSY

By Ralph Heussner  
University News Service

(EDITOR'S NOTE: This is the first of two parts examining recent advances in the diagnosis and treatment of epilepsy at the University of Minnesota.)

Ten years ago, the University of Minnesota launched a unique program for the diagnosis and treatment of epilepsy. It began with a Promethean goal: The complete control of all types of epileptic seizures.

The idea was unconventional and, according to some in the medical field, unattainable. Yet, about 80 percent of all persons with epilepsy are now seizure-free and 15 percent have some control.

The University-based Minnesota Comprehensive Epilepsy Program (CEP) was one of six regional centers established by the National Institutes of Health in 1974 to study and treat patients with intractable epilepsy.

"These patients had generally been written off by doctors who felt there was nothing more to be done to help them. But we figured that if we could help that group, then the lessons we learned would be very useful in cases that were not so difficult," said Dr. Robert J. Gumnit, a neurology professor in the Medical School and director of the Minnesota CEP.

Today, Gumnit and his colleagues are still confident that ultimately everyone with epilepsy will be seizure-free, including the 5 percent who now have no control. Optimism is based on improved diagnostic methods, new anti-convulsant drugs and refined surgical techniques.

"Although we can't say every patient has total control yet, we are able to say that we're doing an awful lot of good," Gumnit said. "In 1984, we are in a position

(MORE)

to help people we couldn't help just a few years ago. By 1989, we'll be helping people we can't help in 1984."

What, exactly, is epilepsy? The illness is defined by continuous seizures that result from an "electrical storm" inside the brain. There are generally two types of epilepsy: partial and general, depending on the extent of the misguided electricity in the brain.

The human brain has millions of nerve cells, called neurons, working in delicate balance to control our thoughts and actions. Each neuron transmits a tiny impulse of electrical current produced by the interaction of chemicals inside the cell. Each electrical impulse sends a message through the brain and nervous system, instructing the body to perform a particular function.

In epilepsy, those impulses go awry because of a temporary buildup of excessive electrical charges. As a result, the brain loses control over muscles, senses, consciousness and thoughts. The loss of control is manifested in muscle convulsions, unusual behavior and lapse of consciousness.

The cause of epilepsy is unknown in about half of all cases. But scientists do know that the disorder can result from tissue damage from infection, lead or mercury poisoning, tumors, strokes and brain injuries. In cases where there apparently is no tissue damage, some scientists speculate seizures may result from an unknown abnormality of the chemistry of the brain.

University Hospitals was the first in the nation to create a nursing ward especially for the care of people with epilepsy. But Station 49 bears little resemblance to a traditional hospital ward. The 11-bed unit has carpeting, a living-recreational room, a kitchen and a common dining area. Patients often prepare their own meals and plan their own evening activities.

"We concentrate on making a precise diagnosis. First to determine that the patient does have seizures and, second, what kind," Gumnit said. "This requires an intensive look at what is going on in the brain."

The evaluation begins by reducing medication and depriving the patient of one  
(MORE)

night's sleep. When the brain is irritated, tired and low on medication, the true nature of the illness is revealed.

"We sometimes try to recreate a situation in which seizures will occur and then record them. We ask the patient to do whatever seems to provoke a seizure, such as jogging or sleeping," said nurse-clinician Sue Whalen.

The patient is monitored 24 hours a day. In radiotelemetry, the patient is able to move freely through Station 49 with electrodes attached to the scalp that send EEG -- electroencephalograph -- signals to the remote monitoring station where technicians can record brain activities, even minor seizures. During a seizure, the EEG shows bursts of energy coming either unusually fast or unusually slow. In the more severe cases, patients experience as many as 200 seizures a day.

Seizures are also videotaped, providing both a closeup and a full view of the seizure. Because of the intermittent nature of seizures, continuous videotaping and radiotelemetry give doctors a more exact understanding of the severity and kinds of seizures the patient is experiencing.

At the end of the patient's 10- to 12-day in-hospital evaluation, the medical team confers. Surprisingly, they find that about 20 percent of patients have normal EEGs, meaning there is no epilepsy; another source such as emotional strain is causing the seizures. The majority of people with confirmed cases of epilepsy are discharged after their seizures have been controlled by drugs.

"We find that many patients who come to us with a lot of seizures can be helped with the same medicines that they're on," Gumnit said. "But we dose them differently, and make some other adjustments."

Development of new anti-convulsant drugs has been painstakingly slow, partly because of the nature of the disorder. "Epilepsy is an episodic event," Gumnit said. "It's not like you can give an injection, watch what happens and see how the medication works." Months of observation may be necessary.

**Next: When All Else Fails: The Surgical Control of Epilepsy.**

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FEATURE STORY FROM THE  
UNIVERSITY OF MINNESOTA  
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MAY 8, 1984

WHEN ALL ELSE FAILS IN EPILEPSY CONTROL,  
U OF M DOCTORS MAY TURN TO SURGERY

By Ralph Heussner  
University News Service

(EDITOR'S NOTE: This is the second of two parts examining recent advances in the diagnosis and treatment of epilepsy at the University of Minnesota.)

Annette was only a toddler when her first epileptic seizure occurred. "It was a frightening experience for the whole family," her father recalled.

As the problem worsened during the next few years, doctors experimented with various combinations of anti-convulsant drugs before the severe attacks were effectively brought under control.

But when she was 17, for no apparent reason and despite medication, the seizures returned with even greater frequency and intensity. Annette suffered from intractable epilepsy, experiencing frequent "drop attacks" -- she would suddenly lose consciousness and fall to the ground -- that caused deep cuts on her forehead, bruises on her skull and a broken jaw. There were days when she fell 20 or 30 times. As many people with this unusual illness must do, Annette eventually resorted to wearing protective headgear resembling a hockey helmet to prevent further injury.

After another round of experimental medicines failed to control seizures, doctors advised Annette and her parents that a surgical procedure -- performed at only a few hospitals in the United States -- offered the last hope of curing the baffling illness.

In late 1983, 21-year-old Annette underwent the special surgery, called the corpus callostomy, at University of Minnesota Hospitals in Minneapolis. The four-hour operation involved cutting the corpus callosum, a band of connective fibers located deep inside the brain between its two hemispheres. The aim was to confine future seizure activity to one side of the brain, thus lessening its impact.

(MORE)

The surgical control of epilepsy is dramatic, sometimes controversial and always the treatment of last resort. Less than 10 percent of patients who are evaluated by the Minnesota Comprehensive Epilepsy Program (CEP) are considered for surgery.

There are two types of epilepsy surgery: the temporal lobectomy with persistent temporal lobe seizures, where the electrical misfiring is confined to the brain's temporal lobes, and the corpus callostomy for patients such as Annette with uncontrolled drop attacks.

The University of Minnesota was a pioneer of the temporal lobectomies in the 1940s. The surgery involves removing a tiny section of the temporal lobe at the site of the seizure's origin.

"To be successful, we must show that seizures are coming from only one of the temporal lobes," explained university neurosurgeon Robert Maxwell. "If you remove part of one lobe and the other is damaged, the patient can have a problem with memory and speech."

Locating the exact site of the seizure used to be one of the most stressful operations -- for both neurosurgeon and patient. The patient had to be kept partially awake during open-brain surgery while the surgeon used electrodes to test for seizures. An anesthetized brain won't reveal seizures, but the seizures detected in the operating room were often caused by stress and weren't typical of the patient's problem.

In the past year, Maxwell modified the electrode monitoring so the patient can be completely anesthetized. Now the origin of the seizures is probed during a period of everyday living following a preliminary operation. The procedure is illustrated by the following patient history.

Jeff, a 24-year-old patient, had seizures in the form of aimless, unconscious walking. The seizures also involved the lip-smacking and fidgety movements more typical of temporal lobe epilepsy.

(MORE)

On the day of his surgery, Jeff was strapped into a surgical chair, his head encased in a steel support. After removing a four-inch square piece of Jeff's skull, the neurosurgeon connected 64 tiny electrodes to sites of the temporal lobe. The electrode-conductor plate, placed between the scalp and the skull, was covered with protective gauze.

Within a few days, Jeff was taking short walks on the nursing station. Dangling from the ceiling, about every 15 feet, were surveillance wires hooked into elaborate electronic equipment located in a nearby room where technicians monitored Jeff's brain activity. The electrodes can detect the slightest seizure and pinpoint its origin in the brain within a few centimeters.

Back in the operating room two weeks later, the neurosurgeon, armed with an electrical roadmap of Jeff's brain, reopened the skull, disconnected the electrodes and removed a tiny piece of the temporal lobe identified as the source of the disorder. Jeff's epilepsy was cured.

By analyzing the occurrence of seizures in a relatively natural living environment for a two- or three-week period, physicians can more accurately determine their origin.

"We can map out where the seizure originates. We know the pattern of spread, and how it relates to speech, movement and sensation," Maxwell explained. "When we go back in, we know exactly what's important and what's not."

The corpus callostomy is done in rare cases on very debilitated patients like Annette who suffer frequent drop attacks that can result in multiple injuries. They are so heavily sedated that they may appear to be retarded, and most remain at home.

In the early 1940s some patients with generalized seizures -- the kind where misguided electrical activity spreads across the entire brain -- underwent experimental surgery to sever the corpus callosum. The corpus callosum is the connective pathway through which the two sides of the brain communicate. By cutting this connection, the excessive electrical activity could be kept on one side of the brain.

(MORE)

Although these early patients showed improvement and few side effects, the technique was not generally accepted until it was refined in the early 1970s. Today, the University of Minnesota is one of a handful of medical centers where it is performed.

Of the 21 patients who have undergone the surgery at the university, 17 found that their seizures had been controlled. Seizures continued in the other four cases.

The side effects of the surgery are minimal, doctors point out. There may be some postsurgery weakness and speech impairment, caused by the swelling of the brain, but they usually clear within a month after surgery.

Who should undergo seizure surgery, and when, are questions of continuing debate and research.

"There are an awful lot of people who could benefit from seizure surgery who aren't getting it," Maxwell said. "The surgery has been shown to be effective in about 75 percent of cases -- 45 percent completely free of seizures -- with only a 1 percent mortality dating back to 1929. These patients were felt to be hopeless without surgery, but the operation gives them the chance of reaching their full potential."

Robert J. Gumnit, a neurologist in the Medical School and CEP director, foresees that more patients will be referred for surgery in the future. But he believes that advances in other areas will also contribute to the ultimate goal of complete control of all seizures.

"Like anything else in medicine, it's hard for people to understand that it might not be something that's new out of the bottle, but perhaps a better way of organizing the care," he said. "So what I'm preaching is referral to medical centers with modern techniques and special expertise. It may not be as dramatic as a new drug or new vaccine, but I think it is going to make a big difference."

-UNS-

(A23,24;B1,4;CO,23,24;D23,24;E23,24;I23)

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MTR  
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contact LYNETTE LAMB, (612) 373-7504

HARVARD PROFESSOR TO GIVE  
GUY STANTON FORD LECTURE

(FOR IMMEDIATE RELEASE)

Franklin L. Ford, McLean Professor of Ancient and Modern History at Harvard University and nephew of former University of Minnesota president Guy Stanton Ford, will give the Guy Stanton Ford Memorial Lecture Thursday (May 10) at 3:15 p.m. in the West Bank Auditorium on the Minneapolis campus.

Ford has taught at Harvard for 32 years, where he has won a Fulbright Faculty Research Fellowship, a Guggenheim Fellowship and a Harvard University Press Faculty Prize. This year he is a fellow at the National Humanities Center in Triangle Park, N.C., and is completing a study titled "Murder and Politics: From Tyrannicide to Terrorism."

Guy Stanton Ford also was a history professor, as well as a renowned scholar of European history, dean of the Graduate School and president of the University of Minnesota from 1938 through 1941. He is credited with playing a crucial role in the development of the University of Minnesota, persuading great scholars to teach here and finding the resources to build a strong research library. The Guy Stanton Ford Memorial Lectureship, which brings to campus distinguished scholars from various fields, was established in his honor in 1942.

-UNS-

(A3;B1,8)

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TIMING MAY BE KEY IN GIVING  
TWO ANTI-CANCER DRUGS

(FOR IMMEDIATE RELEASE)

Harmful side effects from two anti-cancer drugs can be minimized by giving the drugs at certain times of day, according to University of Minnesota researcher Dr. William Hrushesky, whose study is the first to demonstrate a daily rhythm in the human body's susceptibility to such drugs. He presented his findings Tuesday (May 8) at the American Society of Clinical Oncology meeting in Toronto.

A combination of the drugs adriamycin and cisplatin is a potent treatment for ovarian or bladder cancer, but side effects sometimes force physicians to lower the dosages, resulting in less effective treatment. The side effects include kidney damage caused by cisplatin and a reduction in the number of infection-fighting white blood cells, an effect of adriamycin. However, Hrushesky found that the damage was minimal in patients who received adriamycin at 6 a.m. and cisplatin at 6 p.m. In patients receiving the drugs on the reverse schedule -- adriamycin and cisplatin at 6 p.m. and 6 a.m., respectively -- kidney damage was 25 percent higher and the reduction in white cell numbers was 43 percent greater.

The explanation lies in the phenomenon of circadian rhythms. These daily activity patterns govern a host of bodily functions, including heart rate, blood pressure, temperature and urine production. Hrushesky's study extended the list to the human body's sensitivity to anti-cancer drugs.

"For many years, scientists have known that the circadian rhythms of mice and rats affect the susceptibility of the animals to the bad effects of more than 10 of the most important anti-cancer drugs," he said, "but this knowledge has only very recently been applied to the treatment of patients."

(MORE)

Patients who received the drugs at the optimal times reaped several benefits. They had fewer bleeding episodes, missed treatments and infections and needed reductions in their drug dosages less often than patients on the reverse schedule.

Although circadian rhythms influence the body's response to every drug, the timing of drug treatments is not always crucial. For example, penicillin may work better against the bacterium that causes pneumococcal pneumonia at certain times of day. But whenever it is given, it works very well and does so little damage to the patient that the timing of dosages is not an important consideration.

Treating cancer with drugs is entirely different from treating bacterial infections, though. Cancer cells are so similar to normal cells that anti-cancer drugs always damage and even kill some normal cells. These side effects can sometimes cause a patient to become seriously ill. Thus, there are powerful reasons for finding ways of keeping the drugs on target without reducing their effectiveness.

Hrushesky said that his studies with mice and rats indicate that the time of day influences the success of anti-cancer drugs. The same dose of each of the top 10 such drugs can kill either all or none of the groups of mice treated at different times of day. In fact, the time of drug administration can make the difference between mice dying of experimental cancers and being cured.

"While it is much too early in this study to be able to know if one time schedule is more effective against ovary or bladder cancer than the other, the overall results have been excellent," Hrushesky said. "Over 80 percent of patients with advanced ovary cancer and about 60 percent of patients with advanced bladder cancer have had marked shrinkage or complete disappearance of their cancers. Although it is still early in the study, it seems as though some of these patients with very advanced cancers may be being cured." He added that the effectiveness of his specially timed treatments is at least as good as the best non-timed regimens.

Hrushesky has studied 55 patients, but he said he needs many more to determine whether the time of day anti-cancer drugs are given affects the curability of the cancers. A medical oncologist, Hrushesky subspecializes in the drug treatment of cancers of the bladder, ovaries, kidneys, prostate, uterus, cervix and other cancers of the urinary and reproductive organs. His study is funded by the National Institutes of Health.

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NINE U OF M PROFESSORS  
RECEIVE FACULTY AWARDS

(FOR IMMEDIATE RELEASE)

Nine University of Minnesota faculty members will receive the 1984 Horace T. Morse-Amoco Foundation Award for Outstanding Contributions to Undergraduate Education.

Recipients of the award are selected in university-wide competition by a faculty-student subcommittee of the Senate Committee on Educational Policy. Winners are judged to have made outstanding contributions to undergraduate education through teaching and advising, curriculum development and leadership within the teaching profession.

The award carries a \$1,000 gift and a numbered, limited-edition sculpture designed to symbolize the striving for excellence in teaching. The sculpture was created by the late Katherine E. Nash, professor emeritus of studio arts and a former recipient of the Morse-Amoco award. Awards will be presented at the commencement ceremonies of the winners' respective colleges.

The award is named for a former dean of the General College and is made possible through a grant from the Amoco Foundation. This year's recipients bring to 125 the number of Morse-Amoco winners over the past 19 years.

Recipients for 1984 are:

-- Wilbert H. Ahern, professor of history, Division of Social Sciences, University of Minnesota, Morris, who is a nationally recognized expert on minority history, founder and director of the West Central Minnesota Historical Research Center and an active proponent of close student-faculty relationships.

(MORE)

-- C. Eugene Allen, professor of animal science and food science and nutrition, College of Agriculture, who is an expert evaluator of meat animals and carcasses, noted for his commitment to teaching, his enthusiasm and his support of student activities such as the Meat Animal Evaluation Team and the Animal Science Academic Quadrathlon.

-- Thomas F. Brothen, associate professor of psychology, Division of Social and Behavioral Sciences, General College, who is author of numerous articles on undergraduate curriculum design and new teaching techniques. Brothen is known for his efforts to improve and assess the quality of education at the university and to provide advice and support to students.

-- Clarke A. Chambers, professor of history, College of Liberal Arts, who is considered one of the most distinguished historians of social welfare in the United States. Chambers's "intellectual commitment, wit and genuine interest in students have made him one of the most popular teachers and sought-after advisers at the university," according to the award committee.

-- Gerald M. Erickson, professor of classics, College of Liberal Arts, who is credited with keeping Latin alive in high schools in Minnesota. He is committed to bringing the classics to a wider audience through his innovative use of computers, television and audio cassettes, and is a devoted teacher and valued adviser.

-- Harlan S. Hansen, professor of curriculum and instruction, College of Education, who is known for his accessibility to students. His efforts on behalf of students have resulted in new orientation programs, simplified admission and registration procedures and improvements in undergraduate courses.

-- Patrick A. Kroll, assistant professor of business, Division of Science, Business and Mathematics, General College, who is an expert on curriculum design, a popular adviser and creator of innovative teaching and advising programs designed to meet the needs of the increasing numbers of students seeking career information.

-- Verna L. Rausch, professor of laboratory medicine and pathology, Medical School, who, in her 40 years at the university, has guided the medical technology education program from its infancy to a fully integrated program, and whose deep interest in students is evident in her stimulating courses, her helpful advice, and her editorship of "Tech's Talk," an alumni newsletter.

-- D. Peter Snustad, professor of genetics and cell biology, College of Biological Sciences, who is a researcher in molecular genetics who is equally committed to undergraduate education. He is known for his ability to present complex information in clear and exciting ways, his enthusiastic and able guidance and his co-authorship of the most widely used genetics textbook in the country.

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U OF M REGENTS SET TUITION  
INCREASE AT 13.3 PERCENT AVERAGE

(FOR IMMEDIATE RELEASE)

DULUTH -- A tuition plan that will increase the amount students pay next year by an average of 13.3 percent met with an unenthusiastic and lopsided approval by the University of Minnesota Board of Regents Friday (May 11).

Under the plan, which will generate over \$84 million in revenue, tuition increases will range from 9.5 percent to 20 percent, with 40 percent of the students in the five-campus system paying the lowest rate.

In recommending the plan, which passed by a 10-2 vote, President C. Peter Magrath said it was "done without great relish." Most board members seemed to agree with his assessment that, although the increase is unpleasant, it is essential to fulfill the legislative mandate that tuition income account for 32 percent of the cost of educating students at Minnesota colleges and universities.

Twin Cities regents Mary Schertler and David Roe voted against the plan. "That's my way of protesting on my own behalf and on behalf of the students and the thousands of working people in this state who are finding it increasingly difficult to send their daughters and sons to the university," said Roe, a well-known Minnesota labor leader.

Much of the board's discussion centered on ways to approach setting tuition rates in the future. Under the present system, the budget is proposed first and the tuition rate is then determined based on the budget. Duluth Regent Erwin Goldfine suggested that in the future this process be reversed, so that the tuition increase and projected revenue dictate what the university spends. Regent Charles Casey of West Concord echoed that idea.

(MORE)

David Lebedoff, a regent from Minneapolis, had other ideas on how to deal with the problem. "I think we've been too polite," he said. "We have to go to the Legislature and tell them that tuition is as high as it is going to go and that we need a bigger piece of the budget pie. I have always thought that the University of Minnesota is the goose that laid the golden egg for Minnesota, but right now I think it's a sick goose. We need to make our case in a more dramatic way."

Part of the increase -- \$500,000 -- was necessary because of the reciprocity agreement with Wisconsin that allows students from that state to pay "substantially lower tuition" than Minnesota students, according to Kenneth Keller, vice president for academic affairs.

In a move they hope will remedy that and other inequities in current legislative policies, the regents voted to direct the university administration to seek financial relief during the next legislative session. Their resolution, which passed unanimously, will seek for the university exemption from the mandate requiring that 32 percent of instructional costs be paid through tuition, because under the current system, high-cost professional programs like medicine, dentistry, pharmacy, public health and veterinary medicine are being subsidized by lower-cost programs.

The board also set student service fees, which range from \$46.25 per quarter at Waseca to \$84.11 per quarter at the Twin Cities. Other fees will be \$53.75 at Crookston, \$70 at Morris and \$61.30 at Duluth. Regent Charles McGuigan of Marshall expressed concern that the fees, which student boards recommended, increased more than the cost of living.

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(A0,1;B1;C0,1;E15;G15)

Feature story from the  
University of Minnesota  
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Minneapolis, MN 55455  
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May 15, 1984

TEEN SEX: RESEARCHERS LOOK AT DECISIONS  
GIRLS MAKE AND WHY THEY MAKE THEM

By Lynette Lamb

Despite the availability of more sex education and birth control options than ever before, the number of pregnancies among teenage girls went up 13 percent during the past decade. By keeping their babies -- as 96 percent of those who have babies do -- these girls are making a series of decisions that most adults would label disastrous.

In an effort to understand why these girls make the choices they make, University of Minnesota public health researchers Michael Resnick and Robert Blum have since 1980 been studying teenagers' sexual decision making. What they have found is that information -- on contraceptives, on abortion, on adoption -- is not the all-important factor it was once thought to be.

"There is an incredible gap between the knowledge and the application of that knowledge," said Resnick, Adolescent Health Program research coordinator, adding that only a third of sexually active teenagers consistently use birth control. "In so many instances it's heartbreaking -- they have the knowledge, the awareness and the understanding, but somehow it doesn't apply to them."

If lack of knowledge alone cannot account for the rising numbers of teenage mothers, what can? Resnick and Blum have concluded that an important answer is cognitive development -- that is, how far along the girls' thinking and reasoning skills are.

"It's clearly a developmental ability to be able to link actions now with consequences in the future," said Resnick. "That's why health education is very hard with these kids. If they're still concrete thinkers they can't think hypothetically or of the future ramifications of their actions. For them, all the

(MORE)

birth control information in the world may be meaningless unless it is presented in a way they can relate to."

In a recent study, Resnick and Blum looked at six areas of cognitive development in 206 sexually active teenage girls. At the time of the study, 29 percent were using contraceptives, 24 percent had undergone abortions, 24 percent were pregnant and 23 percent were already mothers. The six factors they studied were ego development -- which included self-esteem as well as the girl's ability to think complexly; locus of control -- the extent to which the girl felt she had control over her own life; future time perspective -- the extent to which she could project herself into the future; moral development; sex role socialization; and irrational beliefs -- anxiety, helplessness, dependency and rationality in decision making.

Girls who chose abortions were best at considering the future and had the lowest demand for external approval and the lowest dependency needs of all the groups studied. Girls in this group recognized that they weren't ready for motherhood, could look ahead to the problems and complications childbearing would have for their future, and saw the abortion decision as ultimately their own.

Teen mothers, on the other hand, were the least able to consider the future, had the highest levels of anxiety and the least sense of being in control of their own lives and had accepted the most traditional notions of female sex roles. "There is a strong tendency (in this group) toward inaction, passivity and an inclination to let 'whatever happens, happen,'" wrote Resnick and Blum.

The ability to project herself into the future, said Resnick, seems to be closely related to whether a girl uses contraceptives. "Risk, susceptibility, prevention and comprehension of the future -- these are very adult characteristics," Resnick said. "The decision to contracept is much more complicated than we thought. It is much more than just knowledge."

Even if a girl is able to truly consider her future, said Resnick, for many of these girls that future doesn't look so bright. "For a sizable segment of our

(MORE)

adolescent population we as a society offer few viable alternatives to parenting and thus little impetus to delay childbearing," Resnick and Blum wrote.

Because of the Reagan administration's interest in adoption as one solution for the rising number of teenage pregnancies, Resnick is currently working on another study, in which he is comparing girls who have chosen to keep their babies with those who have chosen to place their children for adoption. The percentages in these two categories have shifted dramatically since the 1950s: Thirty years ago, 95 percent of all pregnant teen-agers gave up their babies for adoption; in 1984 that figure is just 5 percent.

Although he is still collecting the data through a series of written tests and lengthy interviews, Resnick does have some preliminary findings. "We're finding something we thought we'd find," he said, "and that is that developmentally, the kids who place (their children for adoption) are very similar to the aborters in the previous study. They're more sophisticated and developed cognitively than the parenters are."

Adopters also "almost uniformly held strong anti-abortion attitudes," had more well-developed career and educational objectives and tended to be more future-oriented thinkers, said Resnick. "They can frame their reasons for not parenting in terms of the good of the child and their own well-being," he said. "It takes a certain amount of understanding to think that through, and we don't always see that understanding in teen moms.

"I think if teenagers are encouraged to engage in a thoughtful decision-making process we may see adoption chosen more frequently as an option," Resnick said. "But having a decision forced on them could have disastrous psychological effects on adolescents.

"Kids are very capable of making decisions," he continued. "What is important is that they feel they own the decision. They need a supportive, caring adult

(MORE)

network to guide them, but pregnant teenagers should make their own decision about what to do."

Sex education is a very important part of the overall sexual decision-making process, said Resnick, but he emphasized that it must be "more than just an organ recital." "Sex education must be developmentally appropriate," he said. "It must be embedded in the context of the kid's everyday life."

Parents, too, must be willing to talk with their children and answer their questions as soon as kids bring them up, Resnick said. "What we see," he said, "is parents who don't, won't and don't know how to talk to their children about sex. This is critical."

Despite the dramatic increase in teenage sexual behavior and the promotion of teenage sexuality in advertising and movies, Resnick, who has talked to hundreds of teenagers, believes that "kids are not callous and jaded about sex."

"I see a lot of fear, insecurity, embarrassment and ignorance," he said. He added that although most teenagers aren't ready to handle sexual relationships, he believes that punitive attitudes toward their sexual experimentation is bad.

"We have to give teenagers a chance to fall down and get up in order for them to grow and develop a sense of who they are."

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(AO,6,17;B1,16;CO,6,17;DO,6,17;EO,1,6,17)

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MICHIGAN GOV. BLANCHARD TO RECEIVE  
U OF MINNESOTA ALUMNI AWARD

(FOR IMMEDIATE RELEASE)

Michigan Gov. James J. Blanchard will receive the Outstanding Achievement Award from the University of Minnesota's Board of Regents during Law School commencement exercises in Minneapolis Saturday (May 19). The award, which is given to alumni in recognition of unusual professional achievements and outstanding leadership, will be presented at 2 p.m. in Northrop Auditorium on the Minneapolis campus.

Blanchard received bachelor of arts and master of business administration degrees from Michigan State University before earning a law degree from the University of Minnesota in 1968. After graduation he became an assistant attorney general of Michigan and resigned after five years to enter private practice. He was elected to the U.S. House of Representatives in November 1974 and served until his election as governor of Michigan in November 1982.

In the fall of 1979 Blanchard introduced a bill in Congress to provide loan guarantees to the financially ailing Chrysler Corp. Passed the following year, the legislation was instrumental in saving the automaking giant from bankruptcy. Blanchard received the Walter Reuther Award for outstanding public service from the United Auto Workers in appreciation of his efforts.

"Gov. Blanchard has accomplished an extraordinary record of public service in the U.S. House of Representatives and in the governor's office in Michigan in the 16 short years since his graduation from law school," said Robert A. Stein, dean of the Law School. "We're delighted that he has been selected by the regents to receive the highest award that the University of Minnesota can bestow on an alumnus."

Blanchard also serves on the U.S. Holocaust Memorial Council and the National Commission on Neighborhoods.

(AO, 11, 12; B1, 6; CO, 11, 12; D11; E11)

-UNS-

AUDIO ADVISORY: Taped actualities regarding this information can be obtained by calling (612) 376-7676 from 2 p.m. (CST) Friday (5/18) to noon Monday (5/21).

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NEWS PEOPLE: For further information contact PAT KASZUBA, (612) 373-7516

MEMO TO NEWS PEOPLE

Nigeria's ambassador to the United Nations, Maj. Gen. J.N. Garba, will be on the University of Minnesota Minneapolis campus Friday (May 18) for a press conference and reception.

Garba, who is acting ambassador to the United States and chair of the U.N. special committee against apartheid, has been the second highest ranking member of the Nigerian government since the military coup late last year. He is the top military official in the African nation. He has a master's degree in public administration from Harvard and has been a fellow at Harvard's Center for International Affairs and at the John F. Kennedy School of Government.

Garba will meet with reporters in B-12 Morrill Hall at 11 a.m. Friday. From 3 to 4:30 p.m. he'll attend a reception at the library in the Campus Club in Coffman Union.

Since Nigeria is one of the biggest suppliers of oil to the United States, you might be interested in asking Garba what his country and other OPEC nations have in store for us.

You also might want to ask him about problems colleges and universities around the world have had in collecting government payment for Nigerian students since 1977. Of the 153 Nigerian students at the University of Minnesota, 33 are authorized by Nigerian government agencies to bill tuition and fees to the government. As of March 15, the Nigerian government owed the university \$77,599 for those 33 students and additional bills for spring quarter have been submitted to the Nigerian government.

The December military coup that overthrew the civilian government, which stayed

(OVER)

GARBA

-2-

in power through what has been called one of the most corrupt elections ever, is something else you might want to ask Garba about.

If you want more details on Garba's visit or on Nigerian students at the university before the press conference, call Josef Mestenhauser, director of the International Student Adviser's office at 373-4094.

-UNS-

(A8,8c,12,13;B1,17;C8,8c;G1,2,3,4,5,6)

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9,000 U OF M STUDENTS  
ELIGIBLE FOR COMMENCEMENT

(FOR IMMEDIATE RELEASE)

Terrel H. Bell, U.S. secretary of education, will be among the speakers at commencement exercises for approximately 9,000 graduates of the University of Minnesota, Twin Cities, which will begin Saturday (May 19) and will continue for 18 schools and colleges over the next several weeks.

Bell will deliver the commencement address at the Graduate School graduation exercises June 9. Other speakers include St. Paul Mayor George Latimer, who will address General College graduates June 2; well-known trial lawyer Irving Younger, who will speak at Law School exercises May 19; and H. Brewster Atwater, chairman of the board and chief executive officer of General Mills, who will address School of Management graduates June 10.

Because spring commencement is the only graduation ceremony for some colleges and schools, students who have completed their studies in those units at any time during the year may participate.

Commencement dates and locations are as follows:

May 19 -- Law School, 2 p.m., Northrop Auditorium.

June 1 -- College of Home Economics, 7 p.m., Willey Hall Auditorium

-- Institute of Technology, 7 p.m., Northrop Auditorium.

-- Medical School, 2:30 p.m., Northrop Auditorium.

June 2 -- College of Forestry, 5:30 p.m., St. Paul Student Center Theater.

-- General College, 2 p.m., Willey Hall Auditorium.

-- University College, 1 p.m., Coffman Union Great Hall.

June 3 -- College of Liberal Arts, 1 p.m., Northrop Auditorium.

(MORE)

COMMENCEMENT

-2-

- June 5 -- College of Agriculture, 7 p.m., Northrop Auditorium.
- June 7 -- College of Education, 7:30 p.m., Northrop Auditorium.
- June 8 -- School of Dentistry, 7:30 p.m., Northrop Auditorium.  
-- Mortuary Science, 7:30 p.m., Coffman Union Great Hall.
- June 9 -- College of Biological Sciences, 7:30 p.m., St. Paul Student Center,  
North Star Ballroom.  
-- Graduate School, 7 p.m., Northrop Auditorium.  
-- School of Pharmacy, 2 p.m., Willey Hall.  
-- School of Public Health, 1 p.m., University Club, St. Paul.
- June 10 -- School of Management, 2 p.m., Northrop Auditorium.  
-- School of Nursing, 2 p.m., Mayo Auditorium
- June 16 -- College of Veterinary Medicine, 2 p.m., Northrop Auditorium
- June 22 -- ROTC, 7 p.m., Mayo Auditorium.

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(AO,4,23;B1,4;CO,4,23)

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NEW DEVICE CAN MEASURE  
BIOLOGICAL AGE OF THE HEART

(FOR RELEASE MAY 25)

A device that can measure the biological age of the heart by detecting and quantifying a subtle heart-lung biological rhythm has been invented at the University of Minnesota. A description of the highly technological yet overtly simple medical device and the research into the body rhythm that makes it work will be published in the June 1 issue of the journal Science.

The device, called a Sine-o-graph pulse monitor, provides a measure of heart function and general cardiovascular fitness and can also be used to assess the effects on the heart of various diseases and of drugs, especially those used in cancer treatment. It should ultimately prove useful in locations as diverse as research centers and hospitals and health clubs, according to inventor William Hrushesky, chronobiologist and cancer researcher at the University of Minnesota's Masonic Cancer Research Center.

The device provides results non-invasively and in less than two minutes. Through attachment to a computer, a small sensor clipped to the ear lobe measures the pulse and a mouthpiece measures breathing rate. A video display screen instructs the person being monitored when to deliberately inhale and exhale into the mouthpiece depending upon the heart rate registered simultaneously. The software designed into the computer provides a number value for the heart-lung rhythm, called the respiratory sinus arrhythmia. The results are compared to a table of scores gleaned from some 500 healthy adults of all ages; scores on the first 25 in this sample are reported in the Science article. Higher numbers characterize younger people, lower numbers older people.

The result yields the heart's biological age not only because of the comparison  
(MORE)

sample but also because of information about the respiratory sinus arrhythmia, which has been assembled over the past 250 years and added to only recently by Hrushesky. First noted in 1733, this rhythm has long been known to show -- somehow -- changes in heart rate during breathing. Quantifying these changes was begun by Otto Schmitt, biophysicist at the University of Minnesota, and completed by Hrushesky.

Breathing creates a partial vacuum in the chest as the lungs inflate. Blood then flows toward this relative vacuum and into the heart from areas of higher pressure within the body. In a younger person the heart muscle is pliable, supple and quick to act. But in older people or those with hypertension, whose hearts have had to work much harder, this suppleness gradually becomes stiffness and slowness instead. The result is a lower rhythm for people with "older hearts."

Previously, the respiratory sinus arrhythmia was thought to disappear entirely by middle age. What Hrushesky has found is that it diminishes gradually instead -- and at about the rate of 10 percent for every decade of life. With the Sine-o-graph, the rhythm can be detected at very low levels even in the hearts of people in their 80s, Hrushesky said.

The most unusual scientific aspect of the study, he said, is its confirmation that this biological rhythm measures an inherent property of the heart, not nervous system activity near the heart. As reported in the Science article, the heart of a heart transplant recipient, whose heart nerves had been cut, beat to a normal rhythm even without the heart's normal nervous system connections --which once severed can never be truly re-attached. A diabetic patient, known to have damage to the same small nerves around the heart, also showed a normal respiratory sinus arrhythmia.

Even these two examples show that this body rhythm is vastly more useful and reliable than it would otherwise be, Hrushesky said. In fact, the rhythm can be accurately assessed in a subject at rest, during or after exercise and before and after various drugs have been taken, he added.

The rhythm, though still somewhat mysterious, seems to provide an objective look at the suppleness, compliance and elasticity of the heart, the best measure now  
(MORE)

available of normal human biological aging, Hrushesky said.

The medical relevance for seriously ill patients is what first piqued Hrushesky's interest. As a doctor treating cancer patients, he knew that the most common drugs used in chemotherapy are literally heart poisons, as are quite a few other powerful drugs. Some 5 to 10 percent of certain chemotherapy patients suffer the side effect of a severely damaged heart, a condition that can be fatal. "I wanted to be able to predict which patients would get these heart problems so that I could prevent them -- it was driving me crazy," Hrushesky said.

Long, frequent and complicated heart rate measurements, assembled with a method Hrushesky developed earlier, could predict the damage in time to prevent it, but the process was too cumbersome to be practical. Results of this study will be published in an upcoming issue of the American Journal of Medicine. Other methods of assessing heart damage -- heart biopsy, X-ray scan and even electrocardiogram (EKG) -- are either dangerous or slow or not entirely accurate, he said. "But once I invented this device, using a true physiological signal, I could finally get a fix on the problem in a few minutes for each patient," Hrushesky said.

First uses of the Sine-o-graph will probably be in research and then in patient treatment, Hrushesky said. Among the research professionals who could use it are cardiologists, endocrinologists, gerontologists, pharmacologists, toxicologists, pharmaceutical inventors and exercise physiologists. Many of them could be provided with a model under a special Food and Drug Administration provision for research use. Later models, requiring FDA approval, which will be less complicated than drug approval, could be used in hospitals for monitoring many kinds of patient care, and in clinics and doctors' offices for the routine screening of cardiovascular health. Much later, Hrushesky foresees developing a small model for health clubs and sports teams -- for personal fitness monitoring -- and even for home use. He is now forming a small corporation and expects to be awarded a patent soon.

More research needs to be done, Hrushesky said. He would like to conduct a broad longitudinal study on this biological rhythm, to investigate sex differences in the rhythm and conduct special studies on trained athletes, young children, very old people, patients taking different kinds of heart and experimental cancer drugs, heart transplant patients and others.

-UNS-

(AO,4,23;B1,4;CO,4,23;DO,4,23;EO,4,23;I4,23)

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UNIVERSITY OF MINNESOTA  
NEWS SERVICE, 6 MORRILL HALL  
100 CHURCH ST. S.E.  
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MAY 17, 1984

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MEMO TO NEWS PEOPLE

The official opening of Phase I of the new University of Minnesota Hospitals building and a meeting of university and 3M scientists are possible newsworthy events on tap for next week.

Phase I of the new hospital houses the department of therapeutic radiology. Dedication ceremonies will be held Tuesday (May 22) at 2 p.m. in Room 2-470 of the Phillips-Wangensteen Building, followed by tours of the new facilities.

Located on the first level of the new hospital, the radiation treatment facility comprises 21,000 square feet of space, including three treatment rooms and seven examining rooms.

Construction of the department began in October 1982 following legislative approval of the new \$125 million hospital. The remainder of the hospital, which will be called Unit J until it is formally dedicated, is being built around the concrete walls of the radiation unit.

The program will include presentations by C. Edward Schwartz, hospitals director; Dr. Seymour Levitt, chairman of the department of therapeutic radiology; Dr. Neal Vanselow, vice president for health sciences; and C. Peter Magrath, president of the university. A scientific program with lectures on the history, current application and future implications of radiation therapy will be held earlier in the day in Room 555 Diehl Hall.

In an effort to encourage greater interaction between academia and private industry, scientists from the University of Minnesota and 3M will offer an overview of 122 research projects now under way in the physical, medical and biological sciences.

(OVER)

OPENING

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Summaries of the research at the two institutions will be presented Wednesday (May 23) between 1 and 5 p.m. at the Earle Brown Center for Continuing Education on the St. Paul campus.

The research represents a broad cross section of projects, including adolescents at risk for eating disorders, microcomputer-based cooking, the consequences of ischemia -- localized anemia caused by obstruction -- on transplanted organs and changes in groundwater chemistry during aquifer thermal energy storage.

The meeting and a poster session are free and open to both university staff and the general public.

-UNS-

(A0,4,23;B1,4;C0,4,23)

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MAY 22, 1984

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NEWS PEOPLE: For further information  
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U OF MINNESOTA SURVEY SHOWS  
COMPUTER KNOWLEDGE GAP

(FOR RELEASE THURSDAY, MAY 24)

Reducing the inequity in access to computers is the greatest challenge for learning and living in an information age, according to a survey by the Minnesota Center for Social Research at the University of Minnesota. The report, which was sponsored by the Control Data Corporation, warns that the growing disparity in computer literacy can lead to polarization of economic and social groups that are segregated from interaction with the computer.

Because of the computer's complexities and multiple functions, its rapid diffusion into society produces this "knowledge gap." Education offers one possible solution to the problem by supplying individuals with computer literacy training using non-technical, comfortable and practical approaches.

The survey, conducted in October and November, consisted of telephone interviews with more than 1,100 persons selected at random from the seven-county Twin Cities metropolitan area. It was designed to measure the extent to which the general public is involved with computers and whether the public perceives specific needs for learning about computers. The survey also included sections measuring housing satisfaction, knowledge of possible hazardous waste disposal sites and attitudes toward crime and the police.

The demographic data indicated home computer use was highest among young, college-educated, white-collar or craft workers living in suburban areas and making over \$25,000 a year, and lowest among city dwellers with less education and incomes under \$15,000. By the end of 1983, about 80,000 households -- representing approximately 218,000 people -- had a computer and computers were appearing in homes

(MORE)

at the rate of 3,000 per month. Ownership rose from 6 percent to 11 percent of households in the 12 months since the last such survey. Families with children showed the largest surge in computer buying -- from 7 to 17 percent -- which may indicate that growing numbers of parents see the computer as an investment in their children's education. In fact, about 50 percent of the home computer owners had purchased educational software and three-fourths of the home computers were used for education.

"The data show that the proportion of homes with computers is rising dramatically and it may be a matter of only a few years before half of the households have computers," said Ron Anderson, director of the center.

There was a definite link between income and home computer ownership. Between 1982 and 1983 the ownership rate among households with less than \$15,000 annual income remained about 3 percent, while in homes with incomes over \$40,000 the rate climbed from 9 to 21 percent.

"This disparity is significant in that not only are the poor deprived of a tool for improving personal productivity, but the children in these households do not have the computer literacy advantage that is increasingly available to children in wealthier households," Anderson said.

Computers are also invading the workplace. Fifty-six percent of workers interviewed used computers or computer reports on the job and 37 percent reported hands-on involvement as users or programmers. People who work with computers tended to hold white-collar jobs and have a college background and were also more likely to have a home computer or interest in buying one. Many, but not all, of those who worked with computers had had training. Overall, 37 percent of adults had received computer education in workshops or longer-term programs on the job or in school.

The desire for computer literacy cut across many societal subgroups and different levels of experience with computers. Fifty-six percent of interviewees

(MORE)

were willing to commit time and money to learn about computers, but only 12 percent chose to learn by buying computer magazines. Those who did tended to be home computer owners or programmers at work with higher incomes and educational levels. Almost twice as many men (16 percent) as women (9 percent) bought computer magazines. Respondents living in married households with children also had a high rate of computer magazine purchase (18 percent).

People wanting to learn about computers were asked which of several topics appealed to them. Their choices involved a mix between learning about the role of computers in society and learning how to use them. The most popular topics included computers and education, the impact of computers on society, computer programming, word processing, using data files and how to buy a computer.

"The people seem to be saying that they feel a need to learn about computers because the computer is an entity whose time has come," said Linda Harris, a research associate at the center. "But relatively few are convinced of the computer's utility to the extent that they have bought a computer, taken computer courses or bought a computer magazine. Apparently, most people see computer magazines as too technical for their tastes and computers too costly for their perceived utility.

"Unless a workable approach to computer literacy education is provided, the benefits of computing will not be realized throughout all sectors of society. Such problems cannot be solved without greater attention to the issue and continuous monitoring of the situation through studies such as this one," she said.

A copy of the full report is available from the Minnesota Center for Social Research, 2122 Riverside Ave., Minneapolis, MN 55454. For further information call the center at (612) 373-0150.

-UNS-

(AO,4,4d;B1;CO,4,4d;DO,4,4d;EO,4,4d)

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MAY 22, 1984

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U OF M MAGAZINE  
EXPLORES FAMILY VIOLENCE

(FOR IMMEDIATE RELEASE)

Family violence has been covered in the media fairly extensively in recent years, but typically in a piecemeal fashion: one month a news magazine will cover child abuse, the next month the local paper will write about wife battering. But the connections between forms of family violence and the emotional consequences of each are rarely looked at as a whole.

A new magazine called "A Silence Too Loud: Family Violence" takes a look at the overall picture of domestic violence. Members of a University of Minnesota magazine production class explored the way domestic violence manifests itself, the Twin Cities families it affects and the local programs designed to help those families out of the cycle of abuse, pain and silence.

"A Silence Too Loud" deals with child abuse, incest, women's shelters, a crisis nursery, violent men and why they batter, the police and legal systems' connections to family violence, the emotional violence of shame and Illusion Theater's program to teach kids about sexual abuse. Also included are personal essays on family violence, the connection between family violence and social class, the story of a local couple who stopped their family violence and saved their marriage and the words of an anonymous battered woman.

"A Silence Too Loud" was planned, researched, designed, written, illustrated and photographed by journalism students at the University of Minnesota. Camera-ready pages were produced in the School of Journalism and Mass Communication graphics laboratory.

(MORE)

Production costs were paid through a fund established in memory of Milton Kaplan, who was president of King Features Syndicate until his death in 1972. Kaplan was a 1943 graduate of the University of Minnesota. Previous publications made possible by this fund are: "Closing the Circle, The Indian in Minneapolis: A New Era"; "The Discerning Eye, Minnesota Innovators"; "Minnesota's Mississippi"; "Age, A Minnesota Perspective"; "Liberal Arts, Making the Grade"; "...And A Time to Die"; "Survivors, Political Refugees in the Twin Cities"; and "Work in Progress."

Copies of "A Silence Too Loud: Family Violence" may be obtained by sending \$1.50 plus 75 cents for postage and handling to Student Publications, School of Journalism and Mass Communication, 111 Murphy Hall, 206 Church St. S.E., University of Minnesota, Minneapolis, MN 55455.

-UNS-

(AO,6,7,17,36;B1,14,16;CO,6,7,17;  
DO,6,7,17;E6,7,17,20)

(FOR RELEASE ANY TIME)

Feature story from the  
University of Minnesota  
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Telephone: (612) 373-7514  
May 23, 1984

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LUCKY COINCIDENCE SAVES ALL THAT JAZZ  
FOR U OF MINNESOTA COLLECTION

By Deane Morrison, University News Service

Patricia Bratnober tried for eight years to find a good home for her late husband's collection of nearly 200 78 rpm jazz records. She asked her four grown children, several record stores and jazz magazines and placed an ad in the newsletter of the Twin Cities Jazz Society, but found no takers. Finally, faced with moving to quarters too small to accommodate the collection, she left it for the garbage collectors.

The next day she got a call from Reginald Buckner, a jazz studies professor at the University of Minnesota. Buckner had just heard about the collection and wanted to give it to the university's music library. "I told him I was terribly sorry, but he was a day too late," said Bratnober. "However, unbeknownst to me, my friends Bob Anderson and Randall Egan had spotted the records sitting in my alley and retrieved them. When I found out, I called Dr. Buckner back."

Bucker picked up the collection, which turned out to be a gold mine of original recordings. A list of the artists represented in the collection reads like a who's who of jazz greats from the 1930s through the early 1950s -- Harry James, Benny Goodman, Duke Ellington, Lena Horne, Meade Lux Lewis, Fats Waller, Count Basie and the big bands of Artie Shaw and Glenn Miller. Many of the records feature the piano, which isn't surprising since Bratnober's late husband Harry was an accomplished amateur jazz pianist.

His collection now rests in the music library rooms of Walter Library at the university's Minneapolis campus. Although others have contributed jazz records to the library before, Buckner hopes the Bratnober collection will form the nucleus of

(MORE)

an extensive jazz collection by encouraging more people to donate large numbers of records.

Harry Bratnober's connection with the university began in 1941, when he and his friends Ken Green, Bob Baker and Leigh Kamman organized the Boogie-Woogie Club. Their first concert drew an audience of 3,000 to the newly built student union. In attendance was Dmitri Mitropoulos, conductor of the Minneapolis Symphony Orchestra -- now the Minnesota Orchestra -- who said he was deeply touched by Green's rendition of his composition, "Beat Me, Dmitri."

The club held a reunion in February 1978, after it had been learned that Harry had cancer. But, said Patricia, they didn't treat it as a memorial to Harry -- they just insisted that he play for them and had a good time listening.

Harry's passion for jazz was one of his numerous interests. He achieved native proficiency in French and taught the language in several area colleges. He found that his technical skill -- picked up while a mechanical engineering student at the university -- came in handy about 25 years ago, when language labs equipped with tape recorders were first being introduced as aids in foreign language instruction. He smoothed the way by conducting summer seminars for teachers who were bewildered by this complicated new technology.

"Harry made friends from all age groups and all walks of life," said Patricia. "He was the kind of person who kept other people's babies from crying on airplanes."

His broad interests are mirrored in his jazz collection. Most of the major styles from the heyday of jazz -- big band, boogie-woogie, stride piano and progressive jazz -- are represented. Included with household names like Goodman and Basie are influential artists who never achieved much fame outside of jazz circles. Two such giants are Art Tatum, whose virtuosic playing has been a model for jazz pianists for the last 50 years, and pianist Mary Lou Williams, who was one of the first to produce written arrangements of jazz pieces.

"When I met Williams about seven years ago, she told me she had the history of

(MORE)

jazz in her hands," Buckner said. "When she sat down to play I saw what she meant. She played early New Orleans, stride, boogie-woogie, be-bop, free jazz and even the very difficult jazz rock. Her phrasing and interpretation were absolutely authentic in every style."

Buckner knows quite a bit about the history of jazz too, having taught the subject through the Afro-American and African studies department at the university. He said that jazz crossed the color barrier in the 1930s, when it rode the airwaves into homes across the continent. Many people who didn't go to nightclubs to see the jazz greats became radio fans. "I often heard of kids being punished by being stuck in their rooms. They discovered jazz on the radio," he said.

Although jazz has widened its appeal, there are many "closet" fans who are reluctant to admit their fascination with jazz. They need to "come out" and support American music, Buckner said.

Jazz is probably the fastest-evolving type of music. In the short 80 years it has progressed from simplistic melody, rhythm and harmony to some of the most complicated of all musical creations. Because jazz is so young, many of its pioneers are still alive. Thus jazz musicians have an opportunity for exchanging ideas with the immortals of their art -- an opportunity long lost to classical musicians. This change should not be wasted, Buckner said.

Classical players do have one advantage, though: Their music is written down, whereas jazz demands creativity and improvisation of the performer. But this should not pose an insurmountable obstacle to the study of jazz, said Buckner. He pointed out that creativity is also needed to write English compositions or poetry.

"It is a real challenge, but we need to provide all of our students with the creative experience in music as well as in the language arts. Jazz should not dominate the musical curriculum, but it and other indigenous American forms of music -- Indian and country-western, for example -- should have a place. For American music to be a mystery to its own people is ridiculous," he said.

(FOR RELEASE ANY TIME)

Feature story from the  
University of Minnesota  
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Telephone: (612) 373-7514  
May 24, 1984

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THE BRIGHTEST YOUNG PEOPLE ARE THE BEST  
AT MOST THINGS -- EVEN SUICIDE

By Deane Morrison, University News Service

The best and the brightest young people tend to be the most successful at everything -- including suicide, according to a University of Minnesota psychiatrist who has studied young people who commit suicide and those who attempt it.

Dr. Barry Garfinkel found that adolescents who were doing well in school were more successful in suicide attempts than those having difficulty. And, although girls tried to kill themselves three times as often as boys, boys were much more likely to succeed.

Garfinkel studied records of completed and attempted suicides in the Canadian province of Ontario to identify patterns of experience and behavior that put people 10 to 24 years old at risk. He examined records of suicides among this age group throughout the province between January 1971 and August 1978 and emergency room charts for young people treated at a Toronto hospital from January 1970 to January 1977 following suicide attempts. He conducted additional studies in southern New England, and believes that his findings apply throughout the United States.

"Typically, adolescents who kill themselves tend to have stable relationships and goals and, if in school, to be good students," Garfinkel said. "But then they encounter depression for any number of reasons and, turning to alcohol or drugs, find no relief and no one to turn to."

Suicides were rare before age 16, but increased sharply between ages 15 and 17. The rate then rose more slowly, levelling off at his highest point at age 20. Boys outnumbered girls by 4-to-1, partly because they tended to choose more lethal means that offer little chance for interruption and rescue. For example, boys were 12 times more likely than girls to use guns, seven times as likely to hang themselves

(MORE)

and twice as likely to jump to their deaths. Drug overdose was equal for both sexes.

However, beginning in 1975, girls showed a trend toward more violent methods. "This could reflect the changing sex roles in society, with girls relating more to guns -- a symbol of power," Garfinkel said. Firearms account for half of all U.S. suicides and are the leading means of suicide in North America.

Adolescents who tried to kill themselves presented a different picture from the completed suicides; three-quarters were girls, most chose drug overdose and most had a history of unstable family and social relationships. The average age was 15.

When Garfinkel compared the suicide attempters' records to those of a matched group of adolescents admitted to the hospital for other reasons, he found that the fathers of 50 percent of attempters -- but only 14 percent of the matched group -- were absent from the home. Both parents were absent for a quarter of the attempters, but for only 3 percent of the matched group. The mothers of attempters were more likely to work outside the home. Most attempts came in the wake of a conflict -- usually with family members, sometimes with boyfriends or girlfriends, school or police -- which may have been exacerbated by parental absence.

"When an adolescent is depressed or troubled and has no available adult, that compounds the situation," Garfinkel said. "An adolescent may see suicide as the only way out, whereas adults could provide alternatives. The absence of responsible adults didn't create the trouble, but it doesn't help to resolve the situation."

Although most of the attempts occurred in the home, suicidal adolescents were much less likely than the matched group to be accompanied to the hospital by a parent. Instead, they often arrived in the company of a social worker, child-care worker, police officer or other professional. Many attempters had been living in group homes, which partly accounts for the lack of parental support.

Adults should be aware of warning signs and be ready to provide assistance, Garfinkel said. Things to look for are changes in mood or behavior, such as altered

(MORE)

sleep or eating patterns, decreased ability to concentrate in school, periods of crying or moodiness, irritability and loss of energy. But the most significant warning sign is a previous suicide attempt by the adolescent or a family member. Suicide tends to run in families, but whether genetic factors or learning is the cause is not known.

Child abuse is also a factor in some cases. People who have been beaten by others often have a low regard for their own well-being, and are thus at risk for self-injury. But there are no statistics to indicate the extent to which such abuse contributes to suicidal behavior.

Garfinkel thinks that perhaps eight or nine out of 10 unsuccessful attempters actually want to be saved, or at least experience a great deal of ambivalence about their actions. But if those youngsters do not resolve their conflicts, a goodly number will try again and ultimately succeed. Therefore, he said, even attempts that appear halfhearted should be taken very seriously. Another important precaution is not to leave potential means of self-destruction lying around in easy reach of children or adolescents. Old medicines should be discarded and guns locked up securely.

Suicide attempts tend to be financially as well as emotionally costly. Hospital personnel generally treat such cases as serious medical conditions, often requiring admission to the hospital and stays of three days or longer. This puts a heavy burden on health care resources. But the situation is likely to worsen. Garfinkel detected a 32 percent rise in the suicide rate between 1971 and 1977, and thinks that adolescent depression is more commonly recognized today.

"We have to learn to recognize depression in young people very early," he said. "Parents must sometimes rely on other people's impressions of their children. For example, a teacher, coach or clergyman might notice depression. And although it is normal to think about suicide occasionally, talk of suicide should always be taken seriously, especially if the person has done some planning. The greater the detail of the plan, the greater the danger."

-UNS-

(AO,6,17;B1,16;CO,6,17;DO,6,17;EO,1,6,17)

UNIVERSITY OF MINNESOTA  
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JUNE 4, 1984

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STEPHEN ROSZELL NOMINATED FOR  
ALUMNI AND DEVELOPMENT POST

(FOR IMMEDIATE RELEASE)

Stephen Roszell, executive director of the University of Minnesota Alumni Association, has been recommended to replace Robert Odegard, who is retiring as the university's associate vice president for alumni and development.

University President C. Peter Magrath nominated Roszell to the Board of Regents over 54 other candidates from across the country. The board will vote on the nomination Friday (June 8).

"Steve Roszell is absolutely the right choice to build on the excellent work that Bob Odegard and the university development office have established," said President C. Peter Magrath. "He will provide dynamic leadership to our fund-raising and alumni outreach activities."

Roszell said it would be a challenge to succeed Odegard, 63, who has been the associate vice president for alumni and development since 1977.

"My work with alumni and friends of the university over the past five years has led me to conclude that the University of Minnesota and the people it educates are our state's greatest treasures," Roszell said.

Since 1979, Roszell, 35, has managed and implemented programs for the university's alumni association, which has 31,500 members and a \$1.2 million budget this year. He oversaw the growth in association membership from 19,500 to 30,400 in four years, and increased the number of alumni collegiate groups from 16 to 22.

Before coming to the university, Roszell served for three years as assistant director and for four years as director of alumni activities for the University of Missouri in Columbia. He graduated from the University of Missouri in 1971 and did graduate work there from 1977 to 1979. Roszell, married and the father of three children, was born in Peoria, Ill.

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JUNE 4, 1984

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BROADCASTERS: A taped report  
containing actualities from  
this month's regents meeting  
can be obtained by calling  
(612) 376-7676 from 4 p.m.  
Friday (6/8) until noon  
Monday (6/11).

MEMO TO NEWS PEOPLE

Proposals for a new telecommunications system for the University of Minnesota Twin Cities campus and volume discounts on microcomputers for university students, faculty and staff will be discussed by the Board of Regents during meetings Thursday and Friday (June 7 and 8).

Both telecommunication and microcomputers will be discussed Thursday during the physical plant and investments committee meeting at 1:30 p.m. in 300 Morrill Hall. The committee will discuss options for the \$20 million to \$25 million telecommunications system. The proposals were requested by the university in December. The committee will also discuss arrangements made with several computer companies to sell computers at discounts of up to 40 percent.

Here is a schedule of meetings and a sample of agenda items:

--Faculty, staff and student affairs committee, 1:30 p.m. Thursday, 238 Morrill Hall. Discussion of funding of men's and women's intercollegiate athletics on all five campuses and of status of university faculty who are affiliated with St. Paul-Ramsey and Hennepin County medical centers.

--Physical plant and investments committee, 1:30 p.m. Thursday, 300 Morrill Hall. Discussion of telecommunications system and microcomputer discounts.

--Budget and legislative coordinating committee, 3 p.m. Thursday, 300 Morrill Hall. Update and forecast on legislative issues affecting the university.

--Educational policy and long-range planning committee, 3 p.m. Thursday, 238 Morrill Hall. Discussion of task force report on remedial education.

--Committee of the whole, 8:30 a.m. Friday, 238 Morrill Hall. Preliminary discussion of the university's 1985 legislative request, which will be up for action in September.

(OVER)

REGENTS

-2-

--Full board meetings, 10:30 a.m. Friday, 238 Morrill Hall.

Annual meeting -- Election of Hubert H. Humphrey Institute Advisory Committee members and officers.

Monthly meeting -- Results of evaluation of Magrath's presidency, which is in its 10th year, and final action on committee votes.

-UNS-

(A0,1;B1;C0,1)

UNIVERSITY OF MINNESOTA  
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JUNE 5, 1984

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HEAD OF U OF M AG INSTITUTE  
REVIEWS PROJECTS IN MOROCCO

(FOR IMMEDIATE RELEASE)

Richard J. Sauer, deputy vice president of the University of Minnesota's Institute of Agriculture, Forestry and Home Economics recently visited Morocco to review the university's agricultural program there. Sauer's visit came at a critical time in this 15-year project, when negotiations are nearing completion for a five-year extension to 1990. The project, with anticipated funding totalling \$27 million, is designed to help develop Morocco's Institute of Agriculture and Veterinary Science (IAV) Hassan II and its faculty.

The University of Minnesota was selected in 1970 to give collaborative assistance to IAV-Hassan II because of its academic excellence among land-grant universities. Because of the program's success, the university was selected again in 1980 by the Moroccan government and the U.S. Agency for International Development (AID) to continue its effort under an expanded five-year contract.

The university began assisting Morocco in 1970, two years after the Institute was founded. Since then the university has advised Moroccan educators in crops and soils as well as in horticulture, animal science, veterinary medicine, fisheries and other critical areas of Moroccan agriculture. The university's program focuses on giving the Institute's faculty advanced training in teaching, research and extension. The project's goal through 1990 is to train up to 150 -- or about half -- of the Institute's faculty to the doctoral level. Currently about 65 of the Institute's faculty are involved in the doctoral program and an additional 20 are involved in master's degree programs, according to Jim Sentz, project training officer. A unique program feature is the doctoral research work conducted in

(MORE)

Morocco under supervision of U.S. academic advisers, he said. An additional 30 IAV-Hussan II faculty members have applied for fall 1984 postgraduate study at the University of Minnesota and at other universities throughout the United States, Sentz said. Training 150 faculty by 1990 is reasonable given the history and this rate of progress, he said.

The University of Minnesota was honored for its excellence in agricultural science and education in the international sector in January 1984 when Roy Wilcoxson, project director on the St. Paul campus, Sauer and Delane Welsch, acting assistant dean for International Agriculture Programs, presented and discussed significant aspects of this project before the Board for International Food and Agricultural Development with guests from U.S. AID and the U.S. Congress.

In addition to reviewing the progress and future goals of the university's program in Morocco, Sauer, a well-known entomologist, expressed great interest in seeing firsthand the progress against Hessian fly infestation in Morocco's cereal crops, which are the backbone of its food production chain.

In addition to training at the doctoral level, the University also has been providing a year of beginning graduate training for about 25 students annually, for a total of 175 to date, while the Institute in Morocco develops its programs to assume this function.

The University of Minnesota and the Morocco Institute of Agriculture and Veterinary Science, in addition to the U.S. AID technical assistance contract, signed in January 1983 a mutual agreement to "collaborate in cooperative scientific and cultural exchanges between faculties and students in agriculture and related fields."

The university's project in Morocco is supported by a team of five agricultural scientists led by Donald W. Johnson, professor of veterinary medicine.

-UNS-

(AO,35;B1;CO35)



**PROSPECTS FOR  
PEACEMAKING**

*Rethinking National Security  
and Arms Control*

*A continuing program  
of the Hubert H.  
Humphrey Institute of  
Public Affairs of the  
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JUNE 6, 1984

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**PUBLIC SERVICE ANNOUNCEMENT**

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**FOR IMMEDIATE RELEASE**

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30 SECONDS      IS PEACE AN IMPOSSIBLE DREAM? JOIN NATIONAL AND LOCAL EXPERTS TO DISCUSS U.S./SOVIET RELATIONS IN A NUCLEAR WORLD MONDAY, JUNE 11 AT 2:30 P.M. AT CENTRAL LUTHERAN CHURCH IN DOWNTOWN MINNEAPOLIS. THIS FREE PUBLIC FORUM IS THE FOURTH IN A SERIES CALLED "PROSPECTS FOR PEACEMAKING: RETHINKING NATIONAL SECURITY AND ARMS CONTROL," SPONSORED BY THE HUMPHREY INSTITUTE IN COOPERATION WITH THE COMMITTEE FOR NATIONAL SECURITY, HONEYWELL AND THE LEAGUE OF WOMEN VOTERS OF MINNESOTA. PARTICIPATE. OUR WORLD DEPENDS ON IT.

15 SECONDS      IS PEACE AN IMPOSSIBLE DREAM? JOIN NATIONAL AND LOCAL EXPERTS AT A FREE PUBLIC FORUM TO DISCUSS U.S./SOVIET RELATIONS IN A NUCLEAR WORLD, MONDAY, JUNE 11, AT 2:30 P.M. AT CENTRAL LUTHERAN CHURCH IN DOWNTOWN MINNEAPOLIS. PARTICIPATE. OUR WORLD DEPENDS ON IT.

-UNS-

Hubert H. Humphrey  
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University of Minnesota  
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UNIVERSITY OF MINNESOTA  
NEWS SERVICE, 6 MORRILL HALL  
100 CHURCH ST. S.E.  
MINNEAPOLIS, MINNESOTA 55455  
JUNE 8, 1984

NEWS PEOPLE: For further information  
contact DEANE MORRISON, (612) 373-7514

U OF M GRADUATE WINS  
ROYAL SOCIETY MEDAL

(FOR IMMEDIATE RELEASE)

Becky Lynn Hoover, a 1984 distinguished graduate of the University of Minnesota's School of Management, was awarded a Royal Society of Arts Silver Medal at the university Board of Regents meeting Friday (June 8).

The award is presented every year to American college students by the Royal Society for Encouragement of Arts, Manufactures and Commerce of London, which is headed by Britain's Prince Philip. Recipients of the medal must be receiving a baccalaureate degree with an outstanding academic record and demonstrated leadership abilities.

Hoover has been an active member of Beta Gamma Sigma, the national honor society for business students, a founding member of West Side Women's Political Activists, an organizer of the Metro Area Grape Boycott and acting director of the Minnesota Bicentennial Commission. She has also held business management positions in the Minnesota Department of Administration and served as a teaching assistant in the management sciences department in the School of Management.

Hoover is currently serving as project coordinator for the State Information Systems Project at the Legislative Reference Library. She plans to attend graduate school sometime in the future to study management information systems. She is the 13th University of Minnesota student to receive the award since the Royal Society invited the university to participate in the program.

-UNS-

(A7;F20)

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JUNE 8, 1984

INTR  
M  
9:24 P

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U OF M REGENTS BEGIN PLANNING  
FOR 1985-87 BUDGET

(FOR IMMEDIATE RELEASE)

Preliminary plans for a 1985-87 University of Minnesota budget that "is prudent, but not bashful" were discussed for the first time Friday (June 8) by the Board of Regents.

University President C. Peter Magrath, who said there are no budget figures on paper yet, outlined a timetable for arriving at the amount the university will ask the Legislature to appropriate. He said increased faculty salaries and graduate student support are likely to be among the top priorities. The university's capital request will be discussed next month. At the same meeting in July, the board will hear the administration's six-year plan for setting priorities. In August, the regents will hear plans for setting the university's operations and maintenance budget and for special requests for state funding. Action on the plans is expected in September.

"We're not asking our units for wish lists," Magrath said. "We will recommend a 1985-87 budget that is prudent, but not bashful."

Nine proposals for building a modern telecommunications system for the university's Twin Cities campus were presented to the board. The companies -- AT&T, Continental Telephone, FirstTel Information Systems, InterCom, Northwestern Bell (with Telco), Universal Communications Systems and Northwestern Bell and Sonecor in a joint venture -- have complex, complicated plans for the \$20 million to \$25 million system.

In December the university sent a request for proposals for a system that would include telephones, data transfer and closed-circuit television. Plans call for the system to be completed by late 1986.

(MORE)

Centel Communications has filed suit asking U.S. District Judge Miles Lord to overturn the university's contention that its proposal for the telecommunications system was submitted too late. Centel's suit claims the university would not accept the 160-page proposal because it was filed six minutes past the deadline of 2 p.m. June 1. Centel contends it was filed two minutes before the deadline. A hearing on the lawsuit is scheduled for Monday.

Duluth Regent Erwin Goldfine reported to the board about an evaluation of Magrath's administration, which is in its 10th year. Goldfine said there will be no written report on the results of interviews with university administrators, faculty, legislators and community leaders.

-UNS-

(AO,1;B1;CO,1)

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JUNE 11, 1984

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SUNDER NAMED HONEYWELL  
PROFESSOR OF ACCOUNTING AT U OF M

(FOR IMMEDIATE RELEASE)

Shyam Sunder has been named to the new Honeywell Professorship in Accounting at the University of Minnesota. The professorship was established this year with financial support from the Honeywell Foundation to promote excellence in accounting teaching and research, especially in issues related to accounting in industry.

Sunder received his Ph.D. from Carnegie-Mellon University and taught at the University of Chicago, where he researched the economic theories of accounting and rational expectations equilibrium in asset markets. He joined the accounting department at the University of Minnesota in 1982 and has pursued research interests in the economics of accounting, the role of information in competitive markets and the development of a mathematical theory of inflation accounting.

A prolific writer, Sunder won the Gold Medal for Notable Contributions to Accounting Literature from the American Institute of CPA's and the American Accounting Association in 1982. He has served as consultant for many industrial firms and is currently on the editorial boards of two major accounting journals and is a member of numerous professional associations.

"Professor Sunder is a senior faculty member who provides a link between various research and teaching interests on our faculty and also with the business community," said department chairman Andrew Bailey. "Because of his wide interests and accomplishments he is the perfect choice to fulfill the objectives of the professorship."

-UNS-

(F20)

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JUNE 14, 1984

NEWS PEOPLE: For further information  
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MEMO TO NEWS PEOPLE

Surgeon General C. Everett Koop and Assistant Secretary of Education Madeleine Will will be among the featured speakers at a national invitational conference called "Youth With Disability: The Transition Years," June 20 through June 22 at Spring Hill Conference Center in Wayzata.

The conference, sponsored in part by the University of Minnesota's Program in Maternal and Child Health and the Adolescent Health Program, is intended to establish the state of knowledge, make policy recommendations and form strategies to assist adolescents with chronic illnesses and disabilities and their families to make successful transitions to adulthood.

Will is scheduled to speak at 8 a.m. on June 21 and Dr. Koop will address the conference at 8 p.m. that same day. There will be an opportunity for the media to question both Will and Koop on the conference subject following their talks.

-UNS

(G1,2,3,4)

UNIVERSITY OF MINNESOTA  
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JUNE 18, 1984

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U OF M PRESIDENT MAGRATH RESIGNS;  
WILL BE PRESIDENT OF U OF MISSOURI SYSTEM

(FOR IMMEDIATE RELEASE)

University of Minnesota President C. Peter Magrath announced Monday (June 18) that he will become president of the University of Missouri. The appointment, effective Jan. 1, 1985, was approved Monday morning by the University of Missouri Board of Curators at the four-campus system's central office in Columbia.

Magrath, who has been University of Minnesota president since 1974, was president of the State University of New York at Binghamton and served several teaching and administrative roles at the University of Nebraska, Lincoln, and Brown University in Rhode Island.

In a statement released in Minneapolis, Magrath said: "The decision to leave Minnesota, which developed over the past six months, was not easy, but it is the right one, both for me personally and for the University of Minnesota." Citing the importance of the university's nationally recognized planning efforts, Magrath said, "The university is fundamentally healthy, having come through a difficult fiscal period -- perhaps the worst in its history -- with its core programs intact, its educational ideals still vibrant and sound plans for its future."

Planning was also emphasized in Magrath's statement to the Missouri Board of Curators. "I cannot overemphasize how important the planning and priority-setting process is, if we are serious -- as I am -- about strengthening the university's ability to serve the state," Magrath told the board, commending its commitment to planning.

Missouri's four campuses enroll 56,000 students; each campus -- Columbia, Kansas City, Rolla and St. Louis -- offers doctoral-level programs and is headed by

(MORE)

its own chancellor. Magrath will head the land-grant system from a central office near the Columbia campus. Magrath stressed his personal commitments to the land-grant university missions of instruction, research and public service.

Magrath has been active in national and international education organizations since coming to Minnesota, serving on the executive committees of the Association of American Universities and the Association of Urban Universities. Beginning this fall, he will chair the National Association of State Universities and Land-Grant Colleges, and he currently chairs the American Council of Education's commission on international education and the National Commission for Excellence in Teacher Education, a follow-up to "Nation at Risk," a report by the National Commission on Excellence in Education. He was appointed by President Jimmy Carter and served six years on the Board for International Food and Agricultural Development.

Magrath's wife, Diane Skomars Magrath, has been active in university, community and national organizations, and currently serves as co-executive director of the Minneapolis Council of Camp Fire.

Commenting on Magrath's tenure as president, Board of Regents chairman Lauris Krenik said: "I know that Peter confided with close associates last fall that the 10-year mark might be the right time to complete any university presidency, but we are all sorry to find that he meant it. Minnesota is losing a recognized educational leader who has worked harder than any of us has a right to expect. His work and his leadership have pulled the University of Minnesota through 10 years of drastic change and nearly disastrous state budget crises, and we have emerged not only with less damage than we once feared, but in a strong position to build on the university's real strengths.

"I know Minnesotans are not losing the Magraths as friends, because their commitments to the university and the state went far beyond the job, but their move is still our loss and Missouri's gain."

No plans have been announced by the regents for conducting the search for a replacement for Magrath.

Magrath's presidency is the 11th for the University of Minnesota, excluding a three-month period in which E. W. Ziebarth served before Magrath's arrival.  
(AO,1;B1;CO,1;E15)

Text of Statement by  
C. Peter Magrath

On Jan. 1, 1985, I will assume the presidency of the University of Missouri, a four-campus system of another public land-grant university. I am excited and stimulated by this new challenge.

My decision to leave Minnesota, which developed during the past six months, was not easy, but it is the right one, both for me personally and for the University of Minnesota. I believe my work here is completed. The University of Minnesota is fundamentally healthy. It has come through a difficult fiscal period -- perhaps the worst in its history -- with its core programs intact, its educational ideals still vibrant and sound plans for its future.

Our process of planning and priority setting has become a national model. It helped chart the university's course these past few years, and it has now also produced a series of creative task force recommendations for a University of Minnesota move toward even greater excellence. An agenda for action was finished last week, ready to be crystallized and implemented by my successor. The university has a strong Board of Regents, superb individuals in leadership positions, one of the best private funding campaigns in the country and excellent working relations with our state government and Legislature.

This, then, is a good time for me to accept a new challenge in a new place. It is also a good time for the University of Minnesota to benefit from the perspectives and judgments that a new leader can bring. Change is healthy and invigorating both for complex institutions -- and for individuals.

Diane and I will miss Minnesota and our many friends, but this change feels right and good for us. I am confident the University of Minnesota's future will be one of increased excellence and service to its state.

I am proud to have been a part of its history.

## REGENTS' COMMENTS

### Regent Willis Drake (Edina)

"As the regent with the most obvious ties to 'high-tech' concerns, I'm particularly grateful for Peter's efforts to revitalize the Institute of Technology and other science programs. He's positioned us where Minnesota can really develop the kinds of scientists, engineers and technological industries this state needs. Almost every state is pushing for high-tech industries now, and they're finding that the competition is pretty steep. You just have to have a strong university at the center to move in that direction. Peter made remarkable progress in a difficult rebuilding job in this area, and he's been working hard to involve the private sector.

"He'll leave us in a much better competitive position than might well have been the case, and we all owe him a great deal for his foresight and the good, common-sense planning that he was able to accomplish."

### Regent Erwin Goldfine (Duluth)

"Peter Magrath became president shortly before I came on the board. During these 10 years, I've learned to admire and respect him, both professionally and as a friend. At all times, he has a very genuine concern for the feelings of others. Everybody always has the opportunity to be heard on all issues affecting the university.

"Peter's fight to upgrade faculty salaries, while at the same time being forced to make drastic budget retrenchments, is the classic balancing act of our times.

"The University of Minnesota is truly blessed to have had Peter and Diane. They will take with them the gratitude and love of thousands of Minnesotans."

### Regent Charles Casey (West Concord)

"I'm sorry to hear about Peter's move. I knew he wasn't going to be here indefinitely, but I'm still surprised at the timing. Someone told me that Peter's term at Minnesota has been longer than about 40 of the 50 major university presidents serving around the country. That's quite a record for somebody 51 years old.

"Peter led us through tough times. He can take credit for keeping us in shape to keep on going now. He has the university poised to take advantage of all the planning he made possible. He had to take some shots from just about any direction, but he really tried to balance all the competing groups' interests within the total picture. No single group got everything it wanted, but he engineered effective compromises that were appropriate to the total interests of the university and the state."

### Regent David Lebedoff (Minneapolis)

"I've worked with Peter on the Board of Regents for over six years, and I've been impressed repeatedly by his intelligence, integrity and administrative skills. It's hard to single out isolated examples of his style and attitude, but two come to mind right now.

(MORE)

"The University of Minnesota, in my view, has as fine a group of vice presidents as any university in the country and at any time in our own distinguished past. I think Peter, more than anyone else, is responsible for that. One of the highest skills of a first-rate administrator is the ability to attract other first-rate people, and Peter is very good at that.

"Another of his traits is his receptivity to new ideas. I remember speaking to him shortly after my election to the board about the desirability of the university establishing ties with educational institutions in the People's Republic of China, then recently opened to the West. Peter succeeded in establishing links unsurpassed by any institution in the country. This gets little publicity in the short run, but in the long run it will be of immense importance to this area.

"I know he was considering new opportunities and challenges for some time, and I wish Peter and Diane much and inevitable success in their new and important assignment. They have been extraordinarily kind to me and my wife -- a kindness so genuine and warm that a few comments like these are insufficient thanks."

Regent Mary Schertler (St. Paul)

"Certainly one must credit Peter for his great planning accomplishments, his successful relationships with the Legislature and his leadership through the state budget crisis. I'm especially gratified, though, about his openness to students and his genuine commitment to their interests and concerns. Peter Magrath's presidency marked the beginning of genuine student involvement in University decision making. He opened up the regents meeting process to student participation, and time has proven that students were ready and able to play a constructive part in university governance.

"Peter was also one of the nation's most effective spokespersons for student financial aid, both at the state and national level. He was often called upon to testify at congressional hearings on student issues and other national educational policy questions, and he was always a respected and effective voice. Minnesota was always well represented, and that is also reflected in the major leadership roles Peter played in the most important national educational associations."

Regent Wally Hilke (St. Paul)

"Over the past 10 years, C. Peter Magrath has made a tremendous difference at the University of Minnesota. He stabilized our relations with the Legislature and other groups in the community. He has been wonderfully attentive to the concerns of students and faculty, and he dignified their participation in the university's governance process.

"President Magrath leaves us with an outstanding long-range planning process in place -- ready to face the challenges that lie ahead. His contributions to the university will become even more apparent as we move into our next phase of growth and development."

Governor Elmer L. Anderson, former chairman, Board of Regents

"Peter Magrath has made a substantial and lasting contribution to the university. His nationally recognized strategic planning system made it possible for the

university to survive the crises in state budgets and the university budget outbacks with a minimum impact. Orderly study has established priorities and choices and provided the framework for future development.

During his 10 years, Peter improved relationships with the Legislature, fostered effective working ties with the business community and encouraged the expansion of a fund-raising program that put Minnesota in third place among all universities, behind only Harvard and Stanford in the total amount of money raised.

I've known for several months that Peter had concluded that his work here was nearly finished and that he was starting to look for new challenges. The University of Missouri is fortunate to be able to recruit him at the peak of his career, and the Minnesota Board of Regents has a considerable task ahead to find a worthy successor."

Regent William Dosland (Moorhead)

"I feel that President Magrath's leaving is a great loss to the University of Minnesota and to the people of the state of Minnesota."

Regent Verne Long (Pipestone)

"I hate to see President Magrath leave. I think overall he's done a good job. He understands a very complex university. It's a job that, no matter who has it or will have it, it takes a long time to understand thoroughly. Overall, I think Dr. Magrath has responded to vast interests within and without extremely well in some really difficult times, particularly the last few years. I just wish for him nothing but the very best."

Regent Wenda Moore (Minneapolis)

"I worked with Peter for six years as chair of the board, and I know history will show he brought the university through some of its most challenging times. Future presidents will be able to build on the foundations he kept strong.

"Peter's presidency has been one of absolute integrity. He did a great deal to improve the university's credibility with state government, his careful and deliberate planning process got us through turmoil with a clear sense of direction, and he encouraged the university to look outward, not just in the campus communities, but also paying attention to our obligations to share knowledge with the world. He was aggressive about building new and productive relationships with industry and agriculture, and he also played a major role in developing the university's research and training programs in the great issues of public policy.

"One of my own great pleasures was working with Peter and Hubert "Skip" Humphrey from the earliest days of developing the Humphrey Institute, and I knew, firsthand, their mutual respect and admiration. As Peter reflects on his Minnesota experiences, I know that one will give him great satisfaction; he certainly deserves it.

"I'm going to miss Peter and Diane, both professionally and personally. Diane brought new creativity to her activities as Peter's partner. I can't imagine bringing 4,500 people a year into a home, and she did it with grace and refreshing openness."

Regent Charles McGuiggan (Marshall)

"President Magrath's published strengths in public relations, fund raising and planning will have a profoundly positive effect on the University of Minnesota in the future. The national rankings by many sources have consistently placed Minnesota in the top 10 or 15 in nearly every comparison category, and his leadership has made this possible.

"In addition, Dr. Magrath's many other accomplishments and personal strengths will make his absence very difficult for me personally and will make an enviable record for his replacement to follow. I believe the university has had superb leadership during these difficult past 10 years, and I'm sorry to see him leave."

Regent David Roe (Minneapolis)

"Our loss is Missouri's gain. I'm sorry to see Peter leave. He's been a fine president, who's had the full respect of the university family and the Board of Regents.

"Soon after he came to Minnesota, he hosted the first group of labor leaders ever invited to the university president's home, and it was an impressive event, attended by both Sen. Walter Mondale and Sen. Hubert Humphrey. Those positive first impressions have remained over Peter's 10 years, and he's well respected by members and leaders of Minnesota labor."

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JUNE 20, 1984

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BOOK LOOKS AT LIVES OF  
SPOUSES OF U PRESIDENTS

(FOR IMMEDIATE RELEASE)

Spouses of university presidents, like the spouses of diplomats and other government officials, take on jobs when their partners do. But unlike that of their mates, the spouses' role is usually unpaid and often unrecognized.

As more women are taking their place in the working world, this "invisible" quality of the university president's spouse is becoming problematic to more of them. To explain the nature of the job and the dilemmas it can create for presidential spouses, Diane Skomars Magrath, wife of University of Minnesota president C. Peter Magrath, has organized and co-edited a book called "The President's Spouse: Volunteer or Volunteered?" The Magraths will leave Minnesota in December for the University of Missouri, where Dr. Magrath will become president Jan. 1.

"There is no doubt in my mind that it is work, even if it is enjoyable work," Magrath said in a recent interview. "Writing this book is a way of telling others about this job. No one can imagine what it's like to do it."

Magrath co-wrote the first chapter of the book with Dr. Roger Harrold, associate director of the Student Organization Development Center at the university. This chapter was based on the results of a national survey they sent to 138 spouses of presidents or chancellors who are members of the National Association of State Universities and Land Grant Colleges (NASULGC). The survey, to which Magrath and Harrold had a 75 percent response rate, included 109 questions, about 20 percent of which were short answer or essay.

Broken down into sections on community, campus, home, family role and job with president/chancellor, the spouse and the future, the survey demonstrated how broad

(MORE)

the role of president's spouse is. The majority of presidential spouses -- 99 percent of whom are female -- function as hostesses, supervisors of staff maintenance, entertaining coordinators, directors of the official house (85 percent live in an official house), food arrangers, campus correspondents and representatives at national meetings, tour guides, community leaders and all-around public relations persons. Seventy-five percent of the respondents reported entertaining more than 1,000 people each year in the official residence; almost 30 percent work for pay outside the role of spouse. Those who do choose to take on additional work admit that it is difficult but important to their self-identity. As Magrath, who last year began a half-time job as executive director of the Minneapolis Council of Camp Fire with Jane Hanger Seeley, put it, "Somewhere I had to find another place outside this role, which can be so all-encompassing."

The 12 other chapters in the book were also written by presidential spouses, their topics following along the same lines as those of the survey. Chapters included "A Day in the Life: Some Reflections" by Karen O'Neil, wife of Robert O'Neil, head of the University of Wisconsin system; "Family Considerations," in which Polly Davis, who has been a presidential wife at three colleges discusses the impact of that life-style on the children; and "Self-Identity in the Campus Spouse," by Ina Fitzhenry-Coor, who is a psychiatry professor at the University of Vermont where her husband is president.

Authors were given no guidance other than topic areas, according to Magrath. They had the opportunity to have input into the survey, and all authors received the survey results. About six of the authors requested additional cross tabulations, said Harrold. "We trusted them," Magrath said. "This was a very special group -- talented and well educated, and we had heard their presentations at NASULGC meetings so we knew which people were tuned into which subject matter. I never worried about their chapters."

Magrath hopes that readers of "The President's Spouse" will "have a sense of the contributions that spouses make on their campuses and a little more sensitivity  
(MORE)

to those people as individuals." Part of that sensitivity, Magrath believes, means giving presidential spouses a choice about living in the official house and doing any of the typical spouse duties such as entertaining and supervising staff. If the spouse does agree to this, Magrath is in favor of providing that person with a job description, support and remuneration.

Both the job description and the financial compensation are controversial ideas in university circles, with only a third of respondents agreeing that a job description would have been helpful and more than two-thirds of respondents actually objecting to payment of spouses.

Formerly an avid proponent of pay for presidential spouses, Magrath, who is paid from her husband's salary, said she has tempered her opinion on this subject somewhat recently. "I've backed off pay as the only solution because I know what people are asking for first is recognition of the role and support to do the job," she said.

On the issue of job descriptions, however, Magrath remains firm. She hopes that university regents and trustees from across the country will read the book and take its message to heart. "I hope they'll be more at ease when negotiating with new presidents and spouses and more up front about expectations, what support there is, and more clear about what they have in mind for the spouse. I think this book will help because a lot of things are said in it that haven't been said before."

Although the book is specifically about the issues of life as the spouse of a university president, Magrath and Harrold think the book's messages can be generalized to spouses of other visible people, such as public officials or corporate chief executive officers. "I expect that some of the real frustrations expressed in this book exist across the spectrum of executive spouses and are too often unexpressed," Harrold said. "This book gives readers the chance to reexamine those feelings and deal with them."

"The President's Spouse" is available for \$15 from NASULGC, Suite 710, No. 1 Dupont Circle N.W., Washington, D.C. 20036, (202) 293-7120.

-UNS-

(AO, 15, 17; B1; C15, 17; D15, 17; E15, 17)

UNIVERSITY OF MINNESOTA  
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JUNE 29, 1984

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MINNESOTA INTERNATIONAL CENTER,  
WORLD AFFAIRS CENTER TO MERGE

(FOR IMMEDIATE RELEASE)

The Minnesota International Center and the World Affairs Center of the University of Minnesota will merge July 1 to consolidate their efforts to promote international education and intercultural understanding throughout the state. The new joint organization will be a private, non-profit group and will not be affiliated with the university.

Frances Paulu, currently executive director of the Minnesota International Center, will serve as executive director of the combined organization. William C. Rogers, who has served as director of the World Affairs Center for 35 years, is retiring from the university faculty.

The World Affairs Center (WAC) coordinates activities and acts as an information clearinghouse for its member organizations and organizes public programs on world issues. The Minnesota International Center (MIC) arranges professional appointments and hospitality for about 1,100 officially sponsored short-term international visitors each year and helps international students become a part of Minnesota community life. MIC is a statewide organization with affiliates in 49 Minnesota communities.

An advisory council made up of representatives from both organizations will determine an appropriate name and set directions for the new group and will develop the necessary community, corporate and public support. The merger brings together 1,450 MIC members and volunteers and 54 educational and voluntary organizations affiliated with WAC. It will be housed in the MIC facilities at 711 East River Road, Minneapolis.

-UNS-

(G1,4,7,)

Health Education  
J. Wolfson

UNIVERSITY OF MINNESOTA  
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JUNE 29, 1984

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LIFESTYLE CONFERENCE FOR THE  
DISABLED, OTHERS,  
OFFERED BY U OF MINNESOTA

(FOR IMMEDIATE RELEASE)

A conference on Positive Lifestyles for Persons of Varying Abilities will be held July 10 through 13 at Oak Grove Junior High School in Bloomington. The conference, which will include many seminars of interest to disabled persons, will be held in conjunction with the Kaiser Roll, annual 5- and 10-kilometer races sponsored by the Kaiser Roll Foundation. The race also will be held in Bloomington.

Sponsored by Vinland National Center and the departments of educational psychology and conferences and the School of Physical Education, Recreation and School Health Education at the University of Minnesota, the wellness conference will begin with a reception and auction July 10 at 5:30 p.m. Seminars will run from 10:30 a.m. until 5 p.m. July 12, with aerobics and a keynote speaker featured earlier that day, and from 9 a.m. until 11 a.m. July 13, with a closing address concluding the conference that day at noon. Topics will range from cross-country skiing for visually and mobility impaired persons to rehabilitation and protection of athletic injuries. Kaiser Roll races are July 14 -- the 5K race is at 8:30 a.m. and the 10K race is at 9:30 a.m.

Conference fee is \$75; continuing education credit is available. For more information, call Vinland National Center at (612) 479-3555 (voice or TTY).

-UNS-

A3,23; B8;C3,23

BROADCASTERS: Taped actualities from Thursday's Committee of the Whole meeting concerning the presidential search can be obtained by calling (612) 376-7676 from 2 p.m. Thursday (7/12) until noon Friday (7/13). A complete report on this month's regents meeting will be available at the same number from 3 p.m. Friday until noon Monday (7/16).

UNIVERSITY OF MINNESOTA  
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JULY 5, 1984

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MTR  
N47  
9/1/84

MEMO TO NEWS PEOPLE

The means and methods of selecting a new president for the University of Minnesota will be discussed at a special meeting of the Board of Regents at 10 a.m. Thursday (July 12). University President C. Peter Magrath said last month that he will leave to become president of the University of Missouri in January.

The regents, meeting as the committee of the whole during the special meeting in 238 Morrill Hall, will also discuss tuition policy strategy for the 1985-86 school year.

The regents will also be conducting regular committee meetings Thursday, and the full 12-member board will be meeting Friday (July 13). Here is a schedule of meetings and a sample of agenda items for the regular Thursday and Friday meetings:

--Educational policy and long-range planning committee, 1:30 p.m. Thursday, 300 Morrill Hall. Discussion of internal administrative reorganization at the University of Minnesota's Duluth campus.

--Budget and legislative coordinating committee, 1:30 p.m. Thursday, 238 Morrill Hall. Discussion of the university's 1985 request to the state Legislature.

--Faculty, staff and student affairs committee, 3 p.m. Thursday, 300 Morrill Hall. Discussion on the comparative funding of men's and women's intercollegiate athletics for all five campuses and a review of student financial aid.

--Physical plant and investments committee, 3 p.m. Thursday, 238 Morrill Hall. Discussion of a new telecommunications facility for the Twin Cities campus.

--Committee of the whole, 8:30 a.m. Friday, 238 Morrill Hall. Discussion of the third stage of the university's long-range planning process and of recommenda-

(OVER)

REGENTS

-2-

tions made by six task forces appointed by Magrath to examine various aspects of the university.

--Full board meeting, 10:30 a.m. Friday, 238 Morrill Hall. Final action on votes taken in committee.

-UNS-

(AO, 1;B1;CO,1)

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UNIVERSITY OF MINNESOTA  
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JULY 6, 1984

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U OF M MINORITY SUMMER CAMPS TEACH  
TWIN CITIES TEENS ABOUT COMPUTERS

(FOR IMMEDIATE RELEASE)

Fear of computers may be epidemic, but there was certainly no evidence of it among the teen-agers leaning eagerly over their consoles. Most were using their computers to draw complex geometric figures and exquisite designs. Although the graphics were not quite on a level with the special effects of the movie "Tron," they bore witness to the degree of computer literacy that bright youngsters can achieve with just a few days of expert guidance.

The youngsters were participants in the University of Minnesota's first summer Computer Camp for minority students. All the students had just completed ninth grade and an algebra course and are planning to take a higher math course next year. Most had had very little exposure to computer science before attending the camp, but they soon became engrossed in the wonders of programming, computer graphics and word processing.

The students came from inner city schools in Minneapolis and St. Paul. They were chosen by Camp Director Al Lopez, who had asked the schools' principals and math, science and counseling department heads to appoint a contact person responsible for nominating up to 15 students for the camp. Lopez then selected 50 nominees from each city, of whom 66 -- 43 girls and 23 boys -- enrolled.

The Minneapolis students attended the week-long camp at North Community High School in Minneapolis; the St. Paul students attended camp at the Guadalupe Area Project in St. Paul. Both camps employed five teachers, chosen from teachers of high school computer classes who had taught ninth grade and minority students. The camps ran weekdays from 9 a.m. to 4 p.m. Everything was free to the students, including bus transportation, lunch and morning and afternoon snacks.

(MORE)

"Each student has his or her own Apple IIe computer," said Lopez. "They spent almost six hours a day at it, with about five students per teacher. By the end of the week they were doing basic programming."

The students worked from printed handouts that explained step-by-step how to run the computers. Mornings were spent learning basic programming commands with the Applesoft Basic software. In the afternoon, the students developed their computer literacy by trying out various software packages on the market and discovering the variety of feats possible with computers.

They work with four programs: Data Base, LOGO, Bank Street Writer and Master Chart, according to teacher Jeff Wynne, from Franklin Junior High School in Minneapolis. Data Base is useful for arranging information, for example, to alphabetize names or put them in order of birth date. LOGO is a graphics program used to draw pictures and geometric designs. It requires knowledge of a little math. Master Chart can put data in a bar or line graph and can also do graphics. Bank Street Writer is a word processing program, good for writing and printing letters or documents.

The students spent one day working with each of the programs. Some turned out rather fancy drawings on their computer screens, such as a picture of a boat with clouds and scuba divers. Instructions for drawing boats were provided, and many students asked how the commands worked in order to apply the knowledge to drawing other things.

The Computer Camp is part of the University Advance program -- or U Advance for short -- a joint project of the Institute of Technology and the School of Management at the university. U Advance also includes the Math Bridge program for eighth graders, held on four consecutive Saturdays in the spring. Approximately 200 youngsters receive an introduction to computers and to pre-collegiate studies through Math Bridge, which emphasizes selection of college preparatory courses in high school. Next year U Advance is planning to expand to include a series of Saturday Seminars for 11th graders, who will learn about careers in management and

(MORE)

engineering and 12th graders, who will be introduced to the university's programs and procedures. On tap for 1986 is the Pre-College Summer School for students who have been admitted to the university, but who would benefit from such courses as grammar review or pre-calculus.

U Advance was begun by Julieann Carson, former director of undergraduate programs at the School of Management and now associate dean of Liberal Arts, Edwin Stueben, former associate dean of the Institute of Technology, Don Birmingham, director of minority affairs at the Institute of Technology, and Rick Moore, former minority adviser at the School of Management. Carson hired Lopez, the pre-college coordinator at the School of Management, for the Computer Camp. Russell Hobbie joined the project when he became acting associate dean of the Institute of Technology in January, replacing Stueben. University President C. Peter Magrath provided support for this year's camp from discretionary funds, with Hobbie contributing extra money from his budget. Funds for next year's camp have not yet been secured.

"I hope the camp will continue next year," said Lopez. "The biggest advantage to this program is that it gives the students confidence in handling a computer and teaches them about a computer's abilities and what they can make it do. I've heard it costs \$150 to \$450 per student at most computer camps and this one seems to be one of the less costly to produce."

Financial worries seemed far from the students' minds. Besides the excitement of the computers and the break-time volleyball games, they were treated to a tour of the School of Management and the Institute of Technology. Those with perfect attendance received calculator watches and everyone took home a certificate of participation.

"They all seemed to enjoy the camp," said Wynne. "Some of the students wrote their own conversation programs, in which the computer asks questions and the operator answers. One girl in the Minneapolis camp used a quiz program to write a huge trivia quiz about Michael Jackson."

Probably not even the instructors could pass that one.

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REGENTS TAKE FIRST STEP  
IN FINDING NEW U PRESIDENT

(FOR IMMEDIATE RELEASE)

The University of Minnesota Board of Regents took the first step toward replacing university President C. Peter Magrath in a special meeting Thursday morning (July 12).

The board, acting as a presidential search committee, formed a 12-member advisory panel consisting of seven faculty members, three students and two staff members to submit names and provide background information on prospective presidential candidates. In forming the advisory committee, the regents followed a procedure they undertook a decade ago when former university president Malcolm Moos resigned.

Magrath, 51, who has been university president since 1974, will leave that position in January to become president of the University of Missouri.

Magrath's last Board of Regents meeting will be in October, and an interim president will be named until a new president is selected by the regents. Board of Regents chairman Lauris Krenik of Madison Lake speculated that it could be mid-1985 before Magrath's successor is named.

"I think we'd be extremely lucky if we have somebody by the time President Magrath is in Missouri," Krenik said.

The regents welcomed any individuals and organizations to submit names of prospective presidential candidates. An Oct. 15 deadline was established for receiving applications and nominations.

Krenik said it is likely that after the Oct. 15 deadline the committee will meet periodically with the regents to discuss the list of presidential candidates.

(OVER)

Several regents stressed that although they'll consider the advisory panel's list of candidates, the actual selection of a new university president will be their decision. The regents also said they will retain the right to hire a professional consultant at any time during the selection process.

The last presidential search began in September 1973. President Magrath was selected in April 1974, and took office that September. That advisory committee selected 12 candidates from a list of 400 names submitted to them.

Minneapolis regent Wenda Moore stressed that it will be important for the regents to consider qualified women and minority candidates.

The regents also briefly discussed conducting an organizational restructuring of the university during the presidential search. However, Regent William Dosland of Moorhead said he thought it would be a "serious mistake" to undertake both processes at the same time.

-UNS-

(AO,1;B1;CO,1)

Feature story from the  
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CITY LIGHTS AND LIFE CONNECTED,  
SAYS U OF MINNESOTA RESEARCHER

By Lynette Lamb  
University News Service

To geographer Mark Bouman it is not space that is the final frontier, but night. Night for thousands of years was to the human race a symbol of evil, danger and the unknown. But since the advent of street lights, darkness has become as much our province as daytime, says Bouman.

Streetlights and the connection between city lights and city life is the topic of Bouman's doctoral dissertation in cultural geography. And Bouman, who hopes to receive his Ph.D. in August from the University of Minnesota, believes that connection to be a strong one.

"You know the joke, 'Will the last person to leave Detroit please turn out the lights?'" asked Bouman. "Well, that's a very telling joke. It shows how closely lights are associated with civilization. Lights are the last shred of urbanity."

Tracing streetlights all the way back to Mesopotamia was part of Bouman's task for his dissertation. Through his reading of translated texts from that time, Bouman found that there was only occasional street lighting because Mesopotamians equated the night with evil and chaos, so their outdoor nighttime activity consisted only of occasional festivals, where citizens "thumbed their noses at the gods" by frolicking at feasts lit by oil-burning lamps.

In ancient Greece and Rome, nobles attended nocturnal banquets, getting around by the light of lamp-toting slaves. Their nighttime antics were, to some writers of that time, perfect evidence of the nobles' decadence. It was also in this era that Bouman found the first examples of permanent street lighting -- oil lamps strung up between houses.

In the Middle Ages, when cities began to take on more of a mercantile character  
(MORE)

and the urban focus of European civilization shifted to the north, regulations were made requiring citizens to hang torches on their houses. Finally, night light began to be seen as a public good rather than as a sign of corruption, said Bouman.

Also at about this time the watch and the clock were invented, and this development, too, had an influence on cultural injunctions against tampering with nature by lighting up the night. "The watch and the clock allowed people to start dividing time into abstract units," said Bouman. "Making time increments more rational diffused the old fear of the dark somewhat," he said.

As more people and industries moved into cities, the demand for outdoor lighting became acute. Bouman believes that, historically, the demand for lighting has two roots: Providing safety from thieves and other criminals, who had been secure under cover of darkness, and allowing nighttime social life. The latter demand came about, said Bouman, because of the nobles and aristocrats who had moved from the country into the cities and wanted both to promenade and to have evening entertainment, which required lights.

Technology hadn't kept up with demand, however; in the 18th century oil lamps were still the main source of light. Although the lamps' glass, oil and reflectors were superior to those of Mesopotamia, "they were still just tinkering with the same basic 10,000-year-old technology," said Bouman.

It wasn't until 1801 and the advent of coal gas that the first outdoor gas lights were installed, appropriately enough, in Paris, the city of lights. But what really caught the public's imagination was the illumination of London's fashionable Pall Mall district in 1807. In keeping with the history of demand, Pall Mall and others among the first locations to have streetlights, including the Paris Opera, tended to be sites devoted to upper-class promenading and socializing.

The first outdoor incandescent electric lights in the United States were installed on New York City's Wall Street in 1882. They represented a big improvement in outdoor lighting because they lit up an entire district rather than just a small area as previous outdoor lighting projects had. The demand for outdoor city  
(MORE)

lighting was so high by this time that by the end of the decade such unlikely spots as Boise, Idaho, and Denver had systems installed, Bouman said.

By the turn of the century, the illumination of city downtowns allowed nighttime shopping, restaurants, theaters and other entertainment, said Bouman.

"The lighting landscape of the night not only permitted this activity, it also came to symbolize it -- the city's 'distance from nature,'" wrote Bouman.

Just as outdoor lighting came to symbolize city life, it also began to distinguish between sections of a city. Cities like Minneapolis and St. Paul installed streets with fancy lights that came to be known as White Way lighting. Although streetlights were soon installed everywhere in cities, a social dichotomy was apparent -- streetlights in tony downtown areas were clearly distinguishable from those in the seedy parts of town. "It was and is a matter of the style of lights rather than their quantity," explained Bouman. White Way lighting featured beautiful globes on Corinthian-style posts; streetlights installed in the less desirable parts of town were built without attention to these aesthetic details.

And the use of outdoor lighting to distinguish a neighborhood still goes on, Bouman said, particularly in newly restored or gentrified neighborhoods. Clearly, streetlights symbolize something important to many people.

"Outdoor lighting is now used to give newly restored areas instant charm," Bouman said. "Lights are still a good shorthand way to establish elegance. They are an appeal to elegance, urbanity and civilization."

In recent years, rural electrification, suburbanization and the energy crisis have all served to at least partially break down the association between cities and lights, said Bouman. Nevertheless, that association remains and to Bouman is interesting because of how it symbolizes what his adviser, university geography professor Yi Fu Tuan, calls "the city's distance from nature."

"The city's rhythm of daily activity is not natural," said Bouman. "We go beyond sunset regularly in our lives, whereas in earlier times people conducted their lives within the hours between sunrise and sunset."

Streetlights were sold to cities not just as a way to prove their urbanity but as a means to demonstrate the efficiency of their infrastructure and hence the good investment potential of their city, Bouman said. The relationship between social patterns and city infrastructures interests Bouman, who predicts that infrastructure will be an important topic in the next 20 years as the infrastructures of U.S. cities crumble. Cities are going to have to analyze what to do about their antiquated sewer, pavement, subway and other infrastructure systems, he said, and lighting is sure to be among those.

"We need to rethink our need for street lighting," said Bouman. "The historical reasons for street lighting give us some insight into today's needs." Bouman contends that lighting has not always proven to be an effective safety measure. "Crime will not be solved with a technological solution because it's a cultural problem," he said.

If we don't need lights for safety, we're left with needing them for socializing. History as far back as Mesopotamia suggests that reason will always exist.

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REGENTS WANT TO HOLD LINE  
ON STUDENT TUITION RATES

(FOR IMMEDIATE RELEASE)

A University of Minnesota plan to hold next year's tuition increases to 5.5 percent -- the predicted inflation rate -- received a warm reception from the Board of Regents Friday (July 13) as it began work on its request for legislative funding.

Not only would that rate keep pace with inflation, according to university President C. Peter Magrath, it would represent a marked departure from the tuition hikes at the university in recent years.

Miriam Cardozo, a non-voting student representative to the board, said students had suffered from high tuition rates when the state was in a financial crisis, but now that the state economy has perked up, students should be beneficiaries of that recovery.

"Our objective must be to hold tuition to the rate of inflation," Magrath said. He indicated that the 5.5 percent tuition increase was a goal for both the 1985-86 and 1986-87 academic years.

The average student tuition increase at the university from 1983-84 to 1984-85 was 13.3 percent. For freshmen and sophomores, that will mean average tuition will rise 9.5 percent, increasing their yearly tuition to \$1,548, according to David J. Berg, the university's director of management planning and information services. The last time the average student tuition hike was as low as 5.5 percent was from the 1975-76 to the 1976-77 academic year, Berg said.

A tuition increase proposal will be included in the regents' legislative request slated for discussion at the board's August meeting.

(MORE)

The university administration is in the process of outlining those requests now, and administrators are concerned those proposed budgets far surpass what the Legislature will appropriate.

For instance, requests submitted by departments and colleges for the 1985-87 biennium have proposed a \$150 million increase over the budget for the current biennium. Meanwhile, administrators have received capital improvement requests for about \$156 million.

"We think those two figures are still too high," said Stanley Kegler, vice president for institutional relations. Kegler said Gov. Rudy Perpich's office has told state agencies to limit their budget increases to 7 percent a year.

In other budgetary matters, the regents passed the university's 1984-85 hospital budget and consolidated budget for 1984-85. The consolidated budget includes the operations and maintenance budgets, federal allocations, self-supporting systems of the university, special state appropriations and other items.

The consolidated budget was approximately \$950 million, an increase of \$46 million or 5.1 percent over the revised budget for 1983-84. The 5.1 percent increase was almost "wholly absorbed" by wage and salary increases for the university's faculty and staff.

The university's projected hospital budget revenues for 1984-85 were \$174 million and expenses were \$168 million. Neal Vaneslow, vice president for health sciences, said the budget projected a 4 percent decrease in patient admissions from the 1983-84 budget.

In other matters, the regents:

-- Received preliminary bids for a new telecommunications facility. The majority of the facility would be located underground adjacent to Morrill Hall on the university's Minneapolis campus. Depending on which system is selected, the facility could be headquarters for the university's phone, data transmission, broad band cable TV and coaxial cable television systems. If the regents authorize the

(MORE)

project in September, construction on the underground facility could begin in January 1985 and be completed in September of next year, said Clinton Hewitt, associate vice president for physical planning.

-- Were notified of neighborhood concerns about a proposed university transitway linking the Minneapolis and St. Paul campuses. Some residents in the St. Anthony Park neighborhood in St. Paul are concerned that the transitway, which would require \$18 million to build, would be unsightly and cause noise pollution. The Legislature did not appropriate funds for the proposed transitway, and university officials are seeking ways to address the money shortage.

-- Heard Magrath report that a tentative settlement has been reached with the University Education Association, the union representing 350 faculty members on the Duluth and Waseca campuses. The four-year pact calls for a retroactive increase of 5.75 percent for the 1983-84 academic year; 6.5 percent in 1984-85 and salary increases equal to those for faculty on the Twin Cities campus in 1985-86 and 1986-87. The tentative agreement is expected to be voted on by faculty members next week.

-UNS-

(AO,1;B1;CO,1)

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JULY 16, 1984

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VILIS VIKMANIS NAMED  
ASSISTANT HEALTH SCIENCES VP

(FOR IMMEDIATE RELEASE)

Vilis "Vic" Vikmanis, a fiscal analyst and executive in Minnesota state government for over 20 years, has been named an assistant vice president for health sciences at the University of Minnesota.

Vikmanis, 45, will begin his new duties Aug. 1. He will be in charge of governmental relations, space management and supervision of some support services in the University of Minnesota Health Sciences Center.

"His in-depth knowledge of the university, the health sciences and state government should make him a valuable resource to all of us," said Neal Vanselow, vice president for health sciences, in recommending the appointment to the Board of Regents.

After receiving a bachelor's degree in political science from the University of Minnesota in 1961, Vikmanis worked for various Minnesota state government departments before being named fiscal analyst to the Minnesota House of Representatives appropriations committee in 1969. He served in that office until 1980 when he became coordinator of executive affairs in the governor's office.

Vikmanis left state government in January 1983 to become a full-time consultant to the University Hospitals' cost containment task force. After that group's report was submitted in November 1983, Vikmanis joined the university's Office of the Vice President for Institutional Relations as an assistant to the vice president.

-UNS-

(AO,23,24;B1,4;CO,1,23,24;E15;F20)

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Feature story from the  
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July 18, 1984

PHYSICS TEACHERS GET CHARGE  
OUT OF ELECTROMAGNETISM WORKSHOP

By Deane Morrison  
University News Service

Seventeenth- and 18th-century magicians never guessed that the force driving their "dancing" paper figurines would one day light the world. When placed between two metal plates, the figurines appeared to cavort on command from the magicians. The performance may have delighted and mystified audiences, but it was no mystery to Mark Schmiesing, who built a replica of the toy last week.

Schmiesing, Waterville, was one of 17 Minnesota high school physics teachers participating in an unusual workshop at the Bakken Library of Electricity in Life in Minneapolis. The month-long workshop, co-sponsored by the Bakken Library and the University of Minnesota physics department, gave the teachers a chance to experience the thrill of discovery that helped Benjamin Franklin, Michael Faraday and other great physicists to unravel the mysteries of electromagnetism. By learning to build simple devices from such materials as soft drink bottles and aluminum foil, the teachers hoped to bring to their own students the tools with which to learn by doing and thinking for themselves.

The dancing figurines were one of Schmiesing's many projects on electrical curiosities. All he needed was two aluminum pie plates, a metal rod and a device to generate electrical charge through friction. He hung one plate faceup by an insulating rod and placed the other plate facedown just below it on a table. Then he used the rod to transfer charge from the friction generator to the upper plate.

"A paper doll on the lower plate would be attracted by the charge on the upper plate," he said, "so it would hop up and hit it. The doll would then pick up the charge and be repelled from the upper plate, falling down and losing the charge to

(MORE)

the lower plate and the table. After losing the charge it would again be attracted to the upper plate, so as long as you keep the upper plate charged the doll will flutter up and down, appearing to dance. It illustrates the principle that like charges repel each other."

Running the workshop was Samuel Devons, a physics professor at Columbia University who has offered a history of physics laboratory at the New York university for 15 years. Devons hardly fits the image of a cold, jargon-bound physicist lost in a maze of equations. He takes 18th-century historian Giovanni Battista Vico's assertion that "wonder is the daughter of ignorance and the mother of wisdom" as the key to appreciating the processes that replace ignorance with knowledge.

The teachers did many experiments similar to those done by Benjamin Franklin, including the first described in his volume "Letters on Electricity." In that experiment, two people stand on individual wax blocks. One rubs a glass cylinder and touches it to the other, who "takes electric fire to the knuckles." The action is repeated until both become electrified and able to deliver a shock to any third person who touches them. But if the electrified people shake hands before touching anyone else, they become neutral; thus no third person would find it "shocking" to touch them.

"From this, Franklin got the principle that electricity is not created or destroyed, just transferred," Devons said. "Franklin succeeded because he isolated the system he wished to study." Instead of trying to sort out the movements of electric charges by having a great mob of people mill about on a carpet, shooting sparks every which way, he put just two people on blocks of insulating wax. Devons added that Franklin, with his kite, was not the first to demonstrate that lightning is electricity; the electrical nature of lightning was first shown by two Frenchmen who followed Franklin's instructions in designing their experiment.

The workshop was financed primarily with a Teacher Improvement Project Grant

(MORE)

from the Minnesota Department of Education. The project was directed by Russell Hobbie, physics professor and associate dean of the university's Institute of Technology. Hobbie and Merriley Borell, resource development coordinator at the Bakken Library, were the main organizers of the workshop, with library director John Senior providing the facilities. Major goals of the workshop were to improve the quality of science teaching in Minnesota and to open the library's collections to more people through educational programs.

Franklin's experiments were just one part of the workshop's agenda. The teachers delved into the considerable resources of the Bakken Library, which include a large collection of historical documents and devices, in order to compare their insights with those of Michael Faraday, Charles Coulomb, Henry Cavendish and other famous physicists. The diversity of homemade gadgets arranged around the room gave mute testimony to the number of ideas being examined.

At a table next to Schmiesing's sat Jim Colby, Bloomington, Judy Peterson, Askov, and Gayle Bari, Richfield, working with what looked like a golden turntable. A bar magnet hanging above the turntable started spinning when the golden disk was turned. When the magnet was placed over a different section of the disk it began turning in the opposite direction.

"It's called an Arago disk, and it puzzled some of the best scientists until Faraday explained it," said Colby. "The disk is brass plated, and when it spins, eddy currents are induced in the brass. The currents exert a force back on the magnet, making it spin. The magnet spins in different directions over different parts of the disk because of the complex flow of the eddy currents. This principle led to the development of the electric motor and the generator."

The teachers may have been glad they didn't have to follow Faraday's work schedule as well. The English scientist discovered the principles of electromagnetism in 1831 by performing about 400 experiments in three or four months.

"Faraday urged his listeners to 'practice the habit of using the hands expertly in chemical investigations, by which the philosopher may successfully acquire experimental truth,'" Devons said. "Sometimes people use only their hands in the laboratory; I want to teach them to think there as well. The best way to teach is to persuade people to think for themselves."

(AO,4,16;B1,12;CO,4,16;D16;E15,16)

-UNS-

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U OF M SCIENTISTS SUGGEST TIGHTER  
ACID RAIN CONTROLS

(FOR IMMEDIATE RELEASE)

University of Minnesota ecologist Eville Gorham and his associates suggest controls on sulfur dioxide emissions even tighter than those proposed by Canada, and intensive examination of how basic substances in the atmosphere act to neutralize acid rain, in a study to be published in the July 27 issue of the journal Science.

Gorham's study is the first detailed statistical examination of the data base produced by the National Atmospheric Deposition Program, which operates stations throughout the country to collect samples of rain and snow for detailed chemical analysis. Gorham's group analyzed data from the eastern half of the United States, which is subject to severe air pollution and acid deposition.

Sulfate -- derived from sulfur dioxide -- was more strongly associated with acidity in rain and snow samples than was nitrate -- a derivative of nitrogen oxides from automobile exhaust and power plants that has been assumed to be equally capable of producing atmospheric acid, Gorham found. Nitric acid -- another derivative of nitrogen oxides -- appears to be neutralized by ammonia and calcium carbonate in the atmosphere to a much greater extent than sulfuric acid derived from sulfur dioxide. One reason may be that nitrate, ammonia and calcium are all emitted into the lower layer of the atmosphere by automobiles, fertilizers and wind-blown soil, respectively, while most sulfur dioxide is transported higher into the atmosphere by smokestacks.

"It is time to decrease sulfur dioxide by a variety of means and to adopt the most stringent of the acid rain control bills before Congress," Gorham said. He contends that sulfur dioxide should be the focus of emission control strategies

(MORE)

because of its association with acidity and because its product, sulfuric acid, is not neutralized nearly as much as the nitric acid from nitrogen oxides. Also, when ammonia combines with sulfate, the resulting compound can acidify soil, but this does not occur with the combination of ammonia and nitrate. However, he warns, recent and predicted increases in automobile emissions may cause problems if they produce more nitrate than can be neutralized by ammonia and calcium.

Sulfur controls aimed at limiting the deposition of wet sulfate to 20 kilograms per hectare per year, as suggested by Canadian and other scientists, may be inadequate to protect highly sensitive bodies of water from acid damage, Gorham further determined. He suggests that controls should aim to keep wet sulfate deposits at or below 14 to 16 kilograms per hectare per year.

-UNS-

(AO,4,18;B1,2;CO,4,18;D4,18;E4,18)

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JULY 31, 1984

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REPORT SUGGESTS WAYS OF IMPROVING  
UNDERGRAD EDUCATION AT U OF MINNESOTA

(FOR IMMEDIATE RELEASE)

Undergraduate education at the University of Minnesota's Twin Cities campus is the domain of many but the province of none, and it's time that changed, says a university task force studying the university's mission.

The 30-member task force, made up of faculty, students and alumni, proposed consolidating undergraduate education responsibilities in the vice president for academic affairs office as a step toward improving the "student experience" for 45,000 undergraduates. "... There must be a clear, authoritative voice speaking for undergraduate education in the setting of priorities at the university," the task force said in its final report.

"Undergraduate education has been virtually everyone's responsibility, and in reality that has meant that it is no one's responsibility," the committee said. "We believe it is imperative to focus that responsibility and to accompany with it commensurate authority."

The task force's recommendations, presented to the Board of Regents at its July meeting, are incorporated in a 64-page report that examined the quality of student services and the quality of instruction and learning methods at the university. In an interim report released in May, the task force suggested that the university do a better job of communicating about itself and that its student services and facilities be made more "user-friendly."

An illustration of where there should be better coordination within the undergraduate framework is in fusing the university's academic mission with the policies of the admissions, financial aid, recruitment and orientation offices,

(MORE)

according to the report.

Among the more "striking" findings of the task force, one of five authorized by President C. Peter Magrath to study the university's mission, is a perception among many that the university's colleges and departments aren't held accountable for the quality of instruction and advising. There is also a perceived accountability gap involving the co-curricular activities, which enhance education outside the classroom, the task force said.

The task force report urged that the vice presidents for academic affairs and student affairs take immediate steps to document the quality of instruction, advising and co-curricular services.

Another method of improving the student experience at the university is to offer expanded honors programs and other "enriched learning opportunities" for undergraduates who want an intense educational experience, the report said.

The interim report concentrated on ways of improving student services, such as establishing a long-range parking plan and providing more campus maps, information booths and common space, but it only touched on the quality of undergraduate instruction and learning methods. The final report details ways of upgrading teaching and learning methods. The report recommends that the university:

--Consider implementing the semester system so that students can engage in more intense study in a particular course. Magrath has said he strongly supports a semester system and will appoint a study group to look at the implementation.

--Provide a clear, easy-to-follow procedure for students to pursue specific complaints about the quality of instruction and advising and developing more rewards for high-quality instructors.

--Revise the current financial aid system so that students can use that aid to study abroad. Additionally, more funding should be earmarked for study-abroad scholarships.

--Improve instruction in large classes by encouraging professors to form smaller discussion groups as part of the course, and establish a committee to

(MORE)

explore better ways of teaching large classes.

Additionally, one-to-one chats with instructors are very important, said Steve Ansolabehere, a student task force member and recent graduate in political science and economics.

"It's not just the one-to-one talks but the smaller group seminars also, because it makes the university feel more human. And this is what students have expressed a need for," Ansolabehere said.

The report comes at a critical time in the university's 133-year history. Enrollments, which have been rising in the past decade, are expected to decline in the coming years. The report, officials say, will influence university planning for the next few years.

Although no funding recommendations were made, the report said the task force is "very enthusiastic about the prospect of fulfilling some of its recommendations at current funding levels." However, the task force recognized that implementing certain recommendations will require substantial funding over a number of years by the state and university.

Several of the task force's recommendations have already been implemented, according to Darwin Hendel, a task force member and research associate in the academic affairs office. For instance, Hendel said, a proposed elimination of a 10-cent bus fare between the east and west banks of the Minneapolis campuses has already occurred.

Hendel said the wide-ranging report was especially noteworthy because of the breadth of its recommendations. "There's a tremendous opportunity for change because there are things everybody can do to contribute to the improvement of undergraduate education," he said.

Other university task forces have also completed their assessments of the quality of graduate education and research, higher education and the economy of the state, international education and information technology's impact on the university.

DATE  
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8/1

UNIVERSITY OF MINNESOTA  
NEWS SERVICE, 6 MORRILL HALL  
100 CHURCH ST. S.E.  
MINNEAPOLIS, MINNESOTA 55455  
AUGUST 1, 1984

NEWS PEOPLE: For further information  
contact PAT KASZUBA, (612) 373-7516

**MOST GOPHER SEASON TICKET HOLDERS  
PREFER DOME FOR FOOTBALL**

(FOR IMMEDIATE RELEASE)

Over half of Gopher football season ticket holders say they would prefer to keep University of Minnesota home games at the Humphrey Metrodome rather than move them back to Memorial Stadium, according to a telephone survey recently commissioned by the university.

The survey of past and present season ticket holders found that overall, 53 percent of those surveyed want the university's football team to continue to play in the Metrodome, 36 percent want the games moved back to Memorial Stadium and 11 percent don't have a preference.

Forty-eight percent of those who made the move to the Metrodome in 1982 are happy with the new location. However, of the those who decided not to renew their tickets when the game locale was changed, 76 percent said they'd like to see the Gophers play in their old home on the Minneapolis campus. A third group -- those who purchased season tickets after the move -- heavily favored keeping the games in downtown Minneapolis by a margin of 4-to-1.

"I think on balance the survey seems to indicate that more people are interested in staying where we are playing the games now than in moving back to Memorial Stadium," said Frank Wilderson, the university vice president responsible for intercollegiate athletics.

The survey results will be used to help the university's Board of Regents decide this fall whether to exercise the last of three one-year options to withdraw from the university's 30-year contract with the Metropolitan Sports Facilities Commission, which was signed in 1982. If the board does not act on the option, the

(MORE)

Gophers will be obligated to play football in the Metrodome for the next 27 years. If the university decides to pull out, the Gophers would likely move back to Memorial Stadium, which would need extensive renovation to bring it up to standards.

"Our final recommendation will be based on many more considerations than just the survey, although the survey is an important piece of information," Wilderson said. "Otherwise, we wouldn't have done it."

University President C. Peter Magrath told the board in a letter that the administration will present information about attendance, income, expenses and other factors before the regents decide -- probably in November -- whether to let the contract stand.

The survey, conducted by the Minnesota Center for Social Research, sampled 1,511 persons representing 20,332 season tickets. The responses of each group -- old purchasers, those who did not buy tickets for the move to the domed stadium (so-called "dropouts") and new purchasers -- were weighted according to the number of tickets that group accounted for. The responses of old purchasers, who make up almost 68 percent of ticket holders, were given a like amount of weight in figuring the overall results. Dropouts carried 6.5 percent of the overall results; new purchasers carried 25.6 percent of the weight.

The survey also looked at plans to buy tickets for the 1984 season and found that 93 percent of old purchasers, 74 percent of new purchasers and 20 percent of dropouts intended to have a reserved seat for Gopher home games.

The survey also sampled 487 of the 4,603 students who held season tickets last year and found that 50 percent of them favored keeping football games at the Metrodome and 41 percent favored Memorial Stadium games. Of 500 students selected at random, 40 percent preferred the domed stadium, 48 percent favored the on-campus location and 12 percent didn't express a preference.

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Copies of the survey are available from the University News Service, 6 Morrill Hall, 100 Church St. S.E., University of Minnesota, Minneapolis, MN 55455, or (612) 373-5193.

(AO, 1; B1; CO, 1; F15)

-UNS-

UNIVERSITY OF MINNESOTA  
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AUGUST 1, 1984

NEWS PEOPLE: For further information  
contact LYNETTE LAMB, (612) 373-7504

U OF M CONFERENCE SET  
ON NON-PROFIT FUNDRAISING

(FOR IMMEDIATE RELEASE)

Looking at non-profit agency annual fund campaigns from a marketing perspective will be the topic of a one-day conference Sept. 12 sponsored by the University of Minnesota's department of conferences. The conference will be held at the Control Data Business and Technology Center, 1450 Energy Park Drive, St. Paul.

Led by Jack B. Fistler, director of University of Minnesota Foundation annual giving, and associate director Jeanne E. Bredholt, the conference will emphasize application of marketing concepts to the annual giving programs of conference attendees. Targeting, segmenting and audience approaches, telemarketing and mail and special events will all be reviewed during the program.

The registration fee is \$85 per person, which includes all instructional materials and coffee breaks. For more information, call Richard Grefe at the department of conferences at (612) 373-0258.

-UNS-

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7/27/84

UNIVERSITY OF MINNESOTA  
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AUGUST 3, 1984

BROADCASTERS: A taped report containing actualities from this month's regents meeting can be obtained by calling (612) 376-7676 from 4 p.m. Thursday (8/9) until 8 a.m. Monday (8/13).

NEWS PEOPLE: For further information contact HARVEY MEYER, (612) 373-7514

MEMO TO NEWS PEOPLE

An interim president for the University of Minnesota is expected to be named by the Board of Regents in a scheduled half-day meeting Thursday (Aug. 9) at the Minnesota Landscape Arboretum in Chanhassen beginning at 8:30 a.m.

The interim president is expected to serve until a new president is selected by the regents. Regents chairman Lauris Krenik of Madison Lake has said it could be mid-1985 before a successor to C. Peter Magrath is named. Magrath has announced that he is leaving to become president of the University of Missouri in January.

The regents, meeting as a presidential selection committee, are scheduled to discuss the makeup of a 12-member university advisory committee, the proposed responsibilities of that committee and presidential credentials.

Here is a sample of the agenda items scheduled for discussion at the half-day meeting:

- A proposed university transitway between the Minneapolis and St. Paul campuses.
- The collective bargaining contract for 350 faculty members on the Duluth and Waseca campuses.
- The university's 1985-87 requests to the Legislature.

The arboretum is about 9 miles west of Interstate 494 on State Highway 5 between Victoria and Chanhassen.

-UNS-

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BROADCASTERS: A taped report containing actualities from this month's regents meeting can be obtained by calling (612) 376-7676 from 4 p.m. Thursday (8/9) until 8 a.m. Monday (8/13).

UNIVERSITY OF MINNESOTA  
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AUGUST 3, 1984

NEWS PEOPLE: For further information contact HARVEY MEYER, (612) 373-7514

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-UNS-

(AO,1;B1;CO,1)

UNIVERSITY OF MINNESOTA  
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AUGUST 7, 1984

NEWS PEOPLE: For further information  
contact RALPH HEUSSNER, (612) 373-5830

WORLD EXPERTS TO DISCUSS CLINICAL ADVANCES  
IN ORGAN TRANSPLANTATION IN MINNEAPOLIS

(FOR IMMEDIATE RELEASE)

The latest clinical and scientific developments in organ transplantation will be discussed at the biennial meeting of the International Transplantation Society, hosted by the University of Minnesota Aug. 26 through 31 at Orchestra Hall and the Hyatt Regency Hotel in Minneapolis.

More than 1,200 transplant surgeons, immunologists, research scientists and other medical professionals from throughout the world will be attending.

The program includes presentations by the pioneers of organ transplantation, such as Dr. Norman Shumway of Stanford University, who performed the world's first heart-lung transplant; Dr. Thomas Starzl of the University of Pittsburgh, who did the first liver transplant; Dr. Robert Good, now director of the Oklahoma Medical Research Foundation, who led the team that achieved the first successful graft of bone marrow transplantation; and Dr. John Najarian, chief of surgery at the University of Minnesota, who heads one of the world's busiest pediatric transplant programs.

More than 400 scientific presentations will be made during the five-day conference. The following subjects may be of interest to medical reporters who have covered transplants:

- Updates on the clinical experience with kidney, liver, heart, pancreas and bone marrow transplantation.
- Methods of organ preservation.
- Recent developments with new anti-rejection medications.
- The quality of life of kidney and heart transplant recipients.
- The current status of organ transplant legislation in the United States.

(MORE)

EXPERTS

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- The comparative benefits of dialysis and transplantation for the treatment of end stage kidney disease.
- Tissue typing.
- The pros and cons of using living related donors.

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Editors: Press credentials are mandatory and may be obtained by contacting Health Sciences Public Relations at the University of Minnesota (612/373-5830) before the conference. A complete schedule of presentations is also available upon request.

(AO,23,24;B1,4;C23,24;D23,24;E23,24)

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Feature story from the  
University of Minnesota  
News Service, 6 Morrill Hall  
100 Church St. S.E.  
Minneapolis, MN 55455  
Telephone: (612) 373-7504  
August 7, 1984

U OF MINNESOTA PROFESSOR  
REVISES MMPI

By Lynette Lamb  
University News Service

It has been acclaimed, indicted and poked fun at. Art Buchwald once lampooned it in his column, others have felt it warranted more serious criticism, still others believe that it is almost mystical in its effectiveness. But whatever the reaction to it, the Minnesota Multiphasic Personality Inventory, the MMPI for short, is the best-known test for determining psychological problems. And now this famous test is being updated at the University of Minnesota, where it came into being almost 45 years ago.

Developed in 1940 by the late psychologist Starke Hathaway and psychiatrist J.R. McKinley, the MMPI is certainly the most widely used psychological test, if a 1984 survey of clinical psychologists and the large enrollments in MMPI training courses can be believed. And its uses have extended far beyond its original purpose of diagnosing mental illnesses to include screening people for high-stress jobs such as commercial airline pilots and police officers, classifying prison inmates and studying personality cross-culturally.

Although it is still considered a highly sensitive measure, the MMPI, by virtue of its age, needed updating, said university psychology professor James Butcher, who is one of the psychologists on the revision team. "We're trying to make some of the questions less offensive to people and we're updating the language of other questions," said Butcher. "We're also developing more contemporary norms." The other members of the team are professors W.G. Dahlstrom of the University of North Carolina and J.R. Graham of Kent State University.

Many of the items among the roughly 20 percent that are being changed because of archaic language or norms are the same ones that must regularly be altered for  
(MORE)

cross-cultural translation, Butcher said. Examples include statements like "I used to like to play drop the handkerchief" and "I often have an acid stomach." The MMPI has been translated into more than 60 languages and is used in about 50 countries, said Butcher, who added that it works "extraordinarily well" in places as culturally different from the United States as Thailand.

Adding some new categories of psychological problems is another important change being made in the revised version, Butcher said. Forty-five years ago eating disorders like anorexia nervosa and bulimia and temperament disorders like Type A behavior were not recognized syndromes. Because the MMPI is widely used with adolescents, the experimental version will have separate adult and adolescent forms with many items on the adolescent form attempting to determine whether the test taker has an eating disorder or a drug, peer, school or parent problem.

More sensitive to long-standing problems than to crisis states, the MMPI has not been strong at showing changes patients have made through therapy, Butcher said. That is another element of the test the revision team is seeking to improve.

Finally, and some would say most importantly, the revised version of the MMPI will be based on a new random sample of normal subjects. The original test, although a huge project for its time, was based on the responses of just 724 people, most of whom were visitors at the University of Minnesota Hospitals. Because of the nature of the typical Minnesota hospital visitor at that time, the original sample is heavily biased toward middle-aged Scandinavian-Americans, Butcher said. The new normal sample will include a population of several thousand people, both adolescents and adults, drawn at random from phone books in four or five states, including ethnic minorities represented proportionately to the general population.

Despite an expanded and improved normal sample, Butcher said he doesn't expect there will be a great many changes in the test. "There is a real timeless element in the largest part of the MMPI," he said, adding that descriptions of psychological problems haven't changed that much over the years. A collector of antique books, Butcher told of reading a 300-year-old description of depression with a list of

(MORE)

symptoms almost identical to those used by clinical psychologists today.

Because of the researchers' faith in the efficacy of the MMPI, the revised version will be tested on the new sample with the new items added to the old ones; that is, because no original items will be eliminated at first, the old MMPI will be within the new one. This will give researchers the chance to see how well the old items hold up. It also means lengthening an already long test: The original MMPI has 566 items and generally requires an hour and a half to take; the new version has 704 questions.

The MMPI revision, which has already been in progress for two years, will require another couple of years to complete, Butcher estimated. But spending four years on the MMPI is nothing to Butcher, who has devoted his entire academic career to the test. "I started working on the MMPI in graduate school in 1960 and it's been a full-time occupation ever since," he said. In 1965 Butcher began giving a national MMPI conference and training workshop; now eight to 10 are held each year to teach professionals how to administer and evaluate the test.

Butcher said he has good reasons for believing in the MMPI. Among them: It takes a therapist less time to discover a patient's problems using the MMPI than it does using just clinical interviews, it is an objective measure with a different domain of error than interviews, it can build rapport between therapists and patients and, perhaps most importantly, it can bring to the surface relevant and important issues that the patient has not yet been willing to bring up. "I couldn't tell you how many times I've interviewed patients and not known what was wrong with them and after looking at their MMPIs have found the answers crystal clear," said Butcher. "It shortens the process and is objective -- with the MMPI there is no human element like a tired therapist or a therapist who is being conned."

Although some some MMPI test takers are concerned about how certain items will be evaluated, Butcher said that no single item is really important; rather, it is a group of items that means something together. "Whereas an interviewer might leap to a conclusion based on the answer to one question, using the MMPI the therapist makes conclusions based on groups of similar items," he said.

It is taking four years and considerable effort, but Butcher still insists that the MMPI revision is not a major one. "It's like we're making an on-course correction," he said. "We're not doing that much to the test because there is still too much there that works."

And the reason it works? "Because 40 years ago they struck upon a very practical, almost simplistic approach to assessing clinical problems," said Butcher on a recent segment of PBS' McNeil Lehrer Report. "If you want to know what is wrong with someone, you ask them. And that's exactly what the MMPI does -- it asks it again and again."

STATE  
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AUGUST 7, 1984

NEWS PEOPLE: For further information  
contact RALPH HEUSSNER, (612) 373-5830

U OF M SEEKS ASTHMA SUFFERERS TO TRY  
AEROSOL FORM OF MEDICATION

(FOR IMMEDIATE RELEASE)

A University of Minnesota physician hopes to determine if a liquid aerosol form of the drug Intal (cromolyn sodium) is an effective treatment for bronchial asthma.

Dr. Malcolm Blumenthal, head of the allergy section in the department of medicine, says the study will show there is an advantage to using the liquid aerosol form of Intal compared to the powder form.

Asthma sufferers between 18 and 60 who have been non-smokers for at least one year and don't have an intolerance to milk products or lactose are eligible for the research program. Patients will receive either the aerosol medication or a placebo for 16 weeks.

For more information, call Beatrice Roitman-Johnson at (612) 373-4328.

-UNS-

(AO,23,24;B1,4;C23,24)

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UNIVERSITY OF MINNESOTA  
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AUGUST 7, 1984

NEWS PEOPLE: For further information  
contact RALPH HEUSSNER, (612) 373-5830

TRANSPLANT COORDINATORS TO FOCUS ON ETHICAL,  
SOCIAL, POLITICAL, CLINICAL ISSUES

(FOR IMMEDIATE RELEASE)

The faces of Jamie Fiske, Brandon Hall, Ashley Bailey, Stormi Greer and hundreds of other children needing transplant organs have slowly faded from the television screen and front page of the daily newspaper.

Yet many of the ethical, social and clinical issues raised by the public appeals and dramatic attempts to save their lives remain unresolved. Questions include:

- What are the ethics of presumed consent in organ donation?
- Should the federal government institute a nationwide system of organ retrieval and allocation?
- How will prospective reimbursement affect transplant patients?
- What is the impact of technology on transplantation?
- What are the socioeconomic implications of using living non-related donors in transplantation?

The North American Transplant Coordinators Organization (NATCO), which represents the men and women involved in clinical transplantation and organ procurement at 150 medical centers, will discuss these and other questions during its annual meeting Aug. 22 through 25 at the Minneapolis Plaza Hotel.

NATCO president Amy Peele, senior organ transplant coordinator at Rush Presbyterian-St. Luke's Medical Center in Chicago, will brief its membership on NATCO's lobbying efforts in Congress, where legislation has been introduced to implement a nationwide system of organ distribution.

Arthur Caplan, associate for the humanities at The Hastings Center, a think tank for the discussion of social and medical issues, will examine the "Ethics of Presumed Consent" in what is expected to be one of the more controversial  
(MORE)

sessions. Jakki Anderson, a transplant coordinator in London, will describe the British experience with presumed consent during a panel discussion following Caplan's remarks.

Dr. John Najarian, chief of surgery at University of Minnesota Hospitals and a pioneer in pediatric transplantation, will deliver a major address on the "Impact of Technology on Transplantation."

Other topics on the NATCO agenda are: the management of multi-organ donors, the impact of diagnostic-related grouping (DRGs) on patients, the future of tissue banking and the pharmacokinetics of new immunosuppressive drugs.

During the week following the NATCO meeting, the International Congress of the Transplantation Society, the professional organization of the world's leading transplant surgeons and immunologists will review advances in surgical techniques and related problems of organ rejection. That meeting will also be hosted by the University of Minnesota and will be held at Orchestra Hall and the Hyatt Regency Hotel.

-UNS-

Editors: A press room will be available for the NATCO meeting. Conference coordinators and public relations staff will assist press in arranging interviews.

Press credentials must be obtained before the meeting by contacting Health Sciences Public Relations at (612) 373-5830.

A press conference is tentatively planned for Wednesday afternoon (Aug. 22) with Peele who will update the media on the present method of organ procurement using NATCO's 24-Alert telephone hotline system.

(AO,23,24;B1,4;C23,24;D23,24;E23,24)

UNIVERSITY OF MINNESOTA  
NEWS SERVICE, 6 MORRILL HALL  
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MINNEAPOLIS, MINNESOTA 55455  
AUGUST 8, 1984

NEWS PEOPLE: For further information  
contact LYNETTE LAMB, (612) 373-7504

U OF MINNESOTA  
CHILD DEVELOPMENT CENTER  
WINS CONTINUING ED GRANT

(FOR IMMEDIATE RELEASE)

The Center for Early Education and Development at the University of Minnesota has been awarded a four-year \$491,943 grant from the Bush Foundation to conduct an early child development continuing education program in selected locations in six Midwestern states.

Called Project CEED (Continuing Education in Early Development), the program will convey results of recent research and its implications for practice to professionals such as pediatricians, nurses, social workers and school administrators who work with young children and their families.

This will be done through graduate-level seminars and short courses, educational events like public lectures and town meetings and such public forums as TV and radio, exhibits and printed materials.

The target sites chosen for Project CEED are Rochester, Minn., Stevens Point, Wis., Pierre, S.D., Billings, Mont., and the metropolitan areas of Grand Forks, N.D./Crookston, Minn., Minneapolis/St. Paul and Omaha/Lincoln, Neb. Project staff will work with local colleges and universities and, when possible, with local agencies.

-UNS-

(AO, 14, 16; B1, 11; CO, 14, 16; D14, 16)

(FOR RELEASE ANY TIME)

NOTE  
1147

Feature story from the  
University of Minnesota  
News Service, 6 Morrill Hall  
100 Church St. S.E.  
Minneapolis, Minnesota 55455  
Telephone: (612) 373-7514  
August 8, 1984

MINNEAPOLIS BUSINESSMAN 'REPAYS' DEBT TO ADOPTED HOME  
WITH \$1 MILLION TO U OF M LAW SCHOOL

by Harvey Meyer  
University News Service

Benjamin N. Berger's got everything in the world. He's got money, power, prestige and a loving family. But he doesn't have peace of mind.

The causes and effects of crime relentlessly gnaw away at this cigar-chewing, 88-year-old Polish immigrant. Berger has interviewed 5,000 criminals hoping to find a solution to crime.

Now he's asking the University of Minnesota Law School to join him in his search. Berger is giving the Law School \$1 million to establish the Benjamin N. Berger Chair in Criminal Law.

"The No. 1 social problem in America is crime," Berger wrote to the Law School. "The crime rate in America is over 100 percent more than in any other country in the world. The only way a problem can be solved is by finding an answer to it, which should not be too hard to do.

"I don't want this commitment to be construed as a gift or contribution. I feel that this is a repayment to America for the opportunity given me to make this commitment possible."

Berger immigrated to the United States in 1913 as a penniless 16-year-old. He parlayed a small savings into a fortune as owner of 16 theatres in Minnesota, South Dakota and Iowa. Berger achieved renown by founding the Minneapolis Lakers basketball team and owning the prestigious Shiek's Cafe and the Minneapolis Millers minor league hockey team.

The endowment, which matches the largest ever given the Law School, will probably be used to attract a nationally recognized criminal law scholar, said Dean Robert Stein.

(MORE)

Stein said the endowment is set up so that the Berger Chair will be permanent. The chair won't be activated, however, until there is enough interest income from the \$1 million to fund a scholar's research and instruction on an annual basis, Stein said. The contribution will be parceled out over a 10-year period.

"The money will allow us to attract the very best," said Stein, who presides over the Law School's 35 faculty and 720 students.

While Berger has put no qualifiers on how the money should be spent, he has his own ideas about how to cut crime in America:

--Eliminate institutions for juvenile delinquents and instead place them back in their homes or in foster homes. The juveniles would periodically report to probation agents, under Berger's plan. "If they're put in an institution, they're definitely educated to become criminals," he said.

--Teach adult criminals a trade in prison and pay them a wage. "So many come out of jail without a trade or profession," Berger said. "When they can't get a job, they commit another crime. We've got to have a real rehabilitation program in prisons and teach inmates a trade."

--Stop what he sees as the blatant abuse of the federal government's Aid to Families with Dependent Children program. Children of these one-parent families are prone to commit crimes in that environment, he says. "It is my most important and shocking suggestion," Berger said.

"The reason for the high percentage of crime in America isn't due to a poor apprehension rate," he says. "You've got to stop the reasons for crime, and these are the three reasons. I would say that if you implemented those three things, you'd cut crime in half."

Berger says he knows from whence he speaks, having interviewed about 5,000 criminals during his lifetime. He was introduced to the criminal element in 1952, when he was appointed to a state advisory panel on penal reform.

In the fashion typical of his business dealings, Berger charged into his assignment, asking that prisoners write to the panel about the state's prison

(MORE)

conditions. Berger was instrumental in passing a 1963 state law that allowed persons serving life sentences to be paroled for good behavior after serving a certain number of years. He later became president of AMICUS, a Minnesota prisoner aid society.

In his 1982 biography, "Thank You, America," Berger told of how his work with prison reform gave him the "greatest satisfaction."

"Talk about people who can't help themselves. There are few people who fit that category more than prisoners," he said.

In 1980, Berger and his wife endowed \$300,000 to a criminology chair at Hebrew University in Jerusalem. A year later, they underwrote \$277,000 for the University of Minnesota's Hubert H. Humphrey Institute of Public Affairs to scientifically investigate cause-and-effect relationships in crime.

"We've got to put our brains to work to solving the problem of crime, the disease of crime -- a manmade disease. In medicine, they do research to find the causes and cure for a disease. We have to do research to help reduce the incidence of crime."

Berger says the endowment to the Law School is the largest contribution he's given. He estimates he has given away over \$3 million.

-UNS-

(AO,11;B1,6;CO,6;DO,6;E1,6)

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UNIVERSITY OF MINNESOTA  
NEWS SERVICE, 6 MORRILL HALL  
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AUGUST 9, 1984

NEWS PEOPLE: For further information  
contact RALPH HEUSSNER, (612) 373-5830

DAVID BROWN NAMED  
U OF M MEDICAL SCHOOL DEAN

Dr. David M. Brown, director of clinical laboratories at the University of Minnesota Hospitals since 1970, will become dean of the Medical School Sept. 15.

Brown, 48, who is a professor of laboratory medicine and pathology and pediatrics on the medical school faculty, succeeds Dr. N. L. Gault, who announced last year his plans to return to the faculty to teach and do research in geriatric medicine.

Brown's appointment was approved by the university Board of Regents Thursday (Aug. 9), after a one-year national search that drew more than 100 applicants.

"Dr. Brown has had a distinguished career as a teacher, researcher and clinician," said Dr. Neal Vanselow, vice president for health sciences, in recommending Brown's appointment.

"His knowledge of the university and the medical school, his experience as a member of numerous hospital, medical school and university committees and his national service as chairman of the Council of Academic Societies of the Association of American Medical Colleges should provide him with the tools he will need to serve as the leader of one of the university's largest and most prestigious academic units."

A native of Chicago, Brown earned a doctor of medicine degree from the University of Illinois in 1960. After completing an internship in pediatrics at the University of Minnesota in 1962, he became a fellow in endocrinology and metabolism, completing the program in 1965.

He served for two years on the staff of the U.S. Air Force Hospital in San Antonio, Texas, before returning to the University of Minnesota in 1967 as an

(MORE)

assistant professor of pediatrics and laboratory medicine and pathology.

Brown is the author of more than 150 scientific articles. His research has focused on diabetes, islet transplantation and vascular and kidney diseases. He said he hopes to continue his research efforts as dean.

In addition to his teaching and research activities, Brown has served on numerous national committees, including National Institutes of Health grant review boards and the science review committee of the Juvenile Diabetes Association.

Brown said of his new assignment, "The major challenge of medical education today is to provide students with the basic tools to think and to understand medicine in terms of science, human relations and societal demands."

Brown said he also will strive to maintain an environment that fosters good faculty research.

"The service, education and research missions of the medical school are indistinguishable. It's clear that the major gains in improving the health care of our nation and the world resulted, in large part, from advances made in medical research," he said.

Brown is married and has three children. He lives in Golden Valley.

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(AO, 1, 23, 24; B1, 4; CO, 1, 23, 24; D23, 24; E15; F20)

UNIVERSITY OF MINNESOTA  
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AUGUST 9, 1984

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ACADEMIC VP KELLER NAMED INTERIM  
PRESIDENT AT U OF MINNESOTA

(For Immediate Release)

Kenneth H. Keller, vice president for academic affairs at the University of Minnesota, will become interim president of the university when C. Peter Magrath leaves to become president of the University of Missouri.

Keller, whose appointment was made by the Board of Regents Thursday (Aug. 9), will probably assume his expanded duties Nov. 1 and will serve as interim president throughout the search for a new president, which could take up to a year.

Several regents discussed postponing the appointment, and David Roe, St. Paul, placed the names of the university's four other vice presidents into nomination. However, the other vice presidents withdrew their names from consideration. Keller will assume the interim presidency with the understanding that he will not be a candidate for a permanent position. David Lebedoff, Minneapolis, nominated Keller, saying he had done an "exemplary job" of filling in for Magrath when the president was on sabbatical in the summer of 1982. The regents' vote was 11-1, with Wenda Moore, Minneapolis, casting a vote for Jeanne Lupton, dean of the General College.

"My greatest concern during the period of the interim presidency will be to continue the university's steady progress in planning its future and, more importantly, in acting effectively on its plans," Keller said. "One of President Magrath's major accomplishments has been to put into place a process of planning that has helped us to see more clearly our complex role as a leading national research university, a land-grant institution and an urban university. We have committed ourselves to setting priorities and making choices that reinforce that role.

(MORE)

"We have a legislative session ahead of us and an academic year is about to begin. I look forward to working with my vice presidential colleagues and with the university community to keep the university healthy and vigorous and attractive to the kind of person I know the regents are seeking as our next president," he said.

"Ken Keller is the ideal choice to serve as interim president," Magrath said. "He can keep University of Minnesota programs and planning moving without missing a beat as the regents go about their task of searching for a permanent president. We'll have an easy transition to Ken on Nov. 1, and the university will do well in 1984-85 even as a new president is being recruited."

Keller, who was educated at Columbia University and Johns Hopkins University, has spent most of his professional life at the university, having joined the faculty in 1964 as an assistant professor of chemical engineering. He was associate dean and acting dean of the Graduate School in the mid-1970s and was head of the department of chemical engineering and materials science from 1978 to 1980, when he became academic vice president.

Keller's main professional interest is in biomedical engineering, especially in the development of artificial organs. He has served as president of the American Society for Artificial Internal Organs and is on the Cardiology Advisory Committee of the National Heart, Lung and Blood Institute of the National Institutes of Health (NIH).

In the early 1970s, Keller was awarded a special fellowship from the NIH and in 1980 he won the Food, Pharmaceutical and Bioengineering Division Award from the American Institute of Chemical Engineering.

He is a member of several boards, including the board of governors of the Argonne National Laboratory and the board of directors of the Walker Art Center of Minneapolis.

-UNS-

(AO, 1; B1; CO, 1; DO, 1, 15; E15)

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AUGUST 10, 1984

NOTE  
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U OF M SEEKS CLOSER TIES WITH  
INDUSTRY THROUGH RESEARCH

(For Immediate Release)

A reorganization of the University of Minnesota's offices of research administration and patent administration should speed up the patenting of inventions by university faculty and help industries seeking information on faculty consultants or the use of university facilities.

The two offices have been combined under the leadership of Anton Potami, former acting director of the patent office, who is now assistant vice president for research administration and technology transfer. John Thuente, a patent attorney, has been director of technology transfer and licensing since February.

"Our objective is to improve the performance of the patent office," Potami said. "We want to encourage faculty to tell us about as many inventions as possible and we'll get them evaluated."

Thuente has hired two licensing assistants to help evaluate faculty inventions, a process that should take a couple of weeks after the patent office is informed of the plans. The university would like to see marketable inventions licensed to companies, but Potami said that both faculty and companies seem to have misconceptions about the patenting process and university policy.

"Some companies and faculty think the patent office won't give an exclusive license to a company sponsoring research at the university or outside the state. That's a fallacy," he explained. "We can, and prefer to, give licenses to these companies, but we must have safeguards that the company will use the license well or else the company will forfeit it." The office of research administration and technology transfer and a university faculty committee are working on guidelines to

(MORE)

govern the university's dealings with industry on such matters as patents, conflicts of interest and the role of graduate students in joint endeavors.

The university's patent policy calls for a patent committee composed of faculty members. The patent office recently received permission from the Board of Regents to expand the committee from eight to 12 members. Potami hopes the committee will establish a network through the various colleges and departments to identify faculty members who may have patentable inventions. He would like the committee to deter-

mine if the patent policy gives incentives for patenting, provides adequate safeguards for inventors and the university and enables the licensing of technology. He also wants to know if the policy restricts interactions with industry.

"There have been problems in the past due to insufficient staff and not putting emphasis on the functioning of the patent office," Potami said. "Now we see the importance to the faculty, the university and the economy. We want to be a focal point for industries with questions on faculty consultants or university facilities."

-UNS-

(A0, 1, 12, 12a; B1, 12, 12a; C0, 1, 12, 12a; D12, 12a; E15)

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11/11

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TRANSITWAY BETWEEN ST. PAUL AND  
MINNEAPOLIS CAMPUSES GETS GO-AHEAD

(FOR IMMEDIATE RELEASE)

Construction of a proposed \$18 million transitway between the University of Minnesota's Minneapolis and St. Paul campuses was given preliminary approval by the university Board of Regents Thursday (Aug. 9).

Final approval for the 2.5-mile corridor hinges on the university's ability to meet the concerns of the St. Paul City Council and some residents living along the proposed roadway, which would be used exclusively by university vehicles and built along a railroad right-of-way, according to David Lilly, the university's vice president for finance and operations.

A section of the transitway would wind through the Langford Park neighborhood of St. Paul, and some residents there worry the project will cause visual and noise pollution. Several neighborhood residents indicated to the regents that the project's design would determine their approval.

St. Paul Mayor George Latimer said acceptance of the project should hinge on a feasibility study of trolley and electric buses, a reduction in the size of a proposed parking lot along the route and the construction of anti-noise walls and landscaping in the Langford Park neighborhood. However, the most important condition outlined by Latimer is establishment of a design review committee composed of neighborhood residents and St. Paul city staff, according to Lilly. The committee would monitor progress on the other conditions.

The regents were urged to commit to the transitway at Thursday's meeting so federal matching funds would not be jeopardized. The Minnesota Transit Advisory Board has set aside \$13.5 million for the project; the university's contribution

(MORE)

would be \$4.5 million, which would be generated from parking fees. The advisory board requested a commitment from the university by its Sept. 24 meeting so the university would not risk losing the federal dollars.

University officials say the transitway would ease parking congestion at the Minneapolis and St. Paul campuses by allowing students to use two new parking lots along the route. The lots would hold up to 2,000 vehicles. Officials say the transitway would also cut in half the current bus travel time between the campuses, and the corridor would provide a right-of-way for other university needs.

Lilly said he would proceed on the transitway "very cautiously and carefully," keeping in mind the concerns of the city of St. Paul and the Langford Park neighborhood.

A project update is expected at the regents' September meeting.

In other business the regents:

--Were informed that the university's tentative operating budget request to the Legislature for the 1986 and 1987 fiscal years represented the lowest percentage increase since 1969. University President C. Peter Magrath said tentative funding requests for the university's operating budget represented about a \$133 million increase over the last biennium. University administrators have pared that figure down from \$170 million. Administrators have tentatively requested \$124 million in capital improvements, the largest of which is \$37.6 million for an electrical engineering-computer science building. The regents are scheduled to act on legislative requests at the September meeting.

--Approved a four-year pact for 350 faculty members on the Duluth and Waseca campuses. The pact calls for a retroactive increase of 5.75 percent for the 1983-84 academic year, 6.5 percent in 1984-85 and salary increases equal to those for faculty on the Twin Cities campus in 1985-86 and 1986-87. The contract has already been approved by the faculty.

--Appointed another member to the advisory committee that is assisting the

(MORE)

TRANSIT

-3-

board in its search for a replacement for Magrath, who will leave the university presidency in October. Another student member was added to the committee, which now consists of seven faculty members, four students, one civil service employee and one university administrator. V. Rama Murthy, a geology professor and former acting dean of the Institute of Technology, will chair the committee, and Neil Sherburne, a former regent, will serve as consultant to the regents during the presidential search. The deadline for receiving applications for the presidency was extended from Oct. 15 to Nov. 15.

-UNS-

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Feature story from the  
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CLEARING UP LAKES: A TRUE FISH STORY

By Deane Morrison  
University News Service

Most swimmers prefer their pea soup in a bowl, not filling their favorite swimming lake. Yet it is an unfortunate fact that summer algal blooms make swimming in many lakes a lot like flying blind. Getting rid of the unwelcome algae is a tricky business, but it can be done with a little help from our finny friends.

The technique is called biomanipulation, and University of Minnesota limnologist Joseph Shapiro has been working at it for 10 years. It means changing the population of various lake organisms in order to eliminate undesirable algae and increase the transparency of the lake. A case in point is Round Lake in Eden Prairie, Minn., which Shapiro and postdoctoral associate David Wright biomanipulated in 1980.

"For some reason, the fish population had changed from bass to crappie in the early '70s," said Shapiro. "Algae had increased and the zooplankton that feed on the algae were small. That was because crappies were feeding on the zooplankton, whereas bass eat fish, crayfish and insects."

The zooplankton in question were the tiny floating crustaceans *Daphnia pulex*, also known as water fleas, which feast on green algae. But unfortunately, crappies had eliminated most of the bigger specimens of *daphnia*, which are most efficient at gobbling up algae. The result was a profusion of algae and a sharp drop in water clarity. Shapiro decided that the lake's fish population should be returned to its original condition.

In the fall of 1980, the Minnesota Department of Natural Resources (DNR) treated the lake with rotenone, killing all the fish. Several weeks later the lake was stocked with bass. The results were dramatic; large *daphnia* reappeared in the

(MORE)

spring and the lake's transparency was restored. But it didn't last.

"In late 1982, the fish the bass were supposed to eat started getting away from their predators," said Shapiro. "The DNR had stocked sunfish as food for the bass, but successful reproduction of the sunfish and bass fishing helped create an over-supply of sunfish. The sunfish ate the big daphnia, and soon the water transparency was back where it was when we started to biomanipulate." Shapiro said the experience taught him two things: That his technique for clearing out algae was correct, but that continuous management of the lake was necessary.

He discovered another curious phenomenon in the process. Levels of phosphorus, a nutrient that has long been linked to algal blooms in lakes, dropped as the transparency was rising but increased as the water became murky again. He theorized that the water fleas were largely responsible.

"We're now testing the theory that when a lake is manipulated, daphnia migrate down to the colder water layers during the daytime to escape being eaten by fish. At night, they migrate up to feed on algae. I think they excrete phosphorus wherever they are, and they seem to spend most of their time down deep. In shallow regions they may go all the way to the bottom, where the sediments trap the excreted phosphorus. The result is that phosphorus is transported from the water to the sediments, and this can have quite an effect on a lake." Shapiro is now studying this phosphorus transport in several lakes, including Square Lake near Stillwater, Minn.

The lower, colder water protects the daphnia because the predator fish cannot tolerate the cold and low oxygen there. Also, it is too dark for the fish to find their prey. However, if the lower water completely lacks oxygen, even the daphnia cannot tolerate it and their refuge vanishes. That was the situation in Minneapolis's Lake Harriet in 1974, when rising phosphorus levels stimulated plant and animal growth, resulting in a large volume of dead material, and bacteria decomposing the sinking material used up all the oxygen in the deeper water. The daphnia, deprived of their refuge, were easy prey for planktivorous fish. The algal

(MORE)

population peaked sharply, causing a drop in water clarity.

Scientists now hope to create refuges for daphnia by aerating the bottom layer of water without disturbing the rest of the lake. This is done with devices that remove bottom water, bubble air through it to introduce oxygen and return it to the same level from which it was taken. Aeration devices that bubble air from the bottom up through the whole water column can sometimes stir up or recirculate a lake, changing its chemistry in ways that favor the growth of pesky blue-green algae, which daphnia cannot eat.

"There are people around the country who sell artificial lake circulation devices without fully understanding the consequences," Shapiro said. "Artificial recirculation with air works in about half the cases by increasing the acidity of the lake and increasing the population of green algae -- which daphnia eat -- in relation to the blue-green population. In the other half of cases it produces opposite effects and doesn't work the way we would like." He added that recirculation is safe in winter to prevent winterkill of fish because of depletion of oxygen under the ice.

A winterkill of fish in Lake of the Isles in Minneapolis in 1976 mimicked the effects of biomanipulation. In spring, the population of large daphnia swelled, the algae were gobbled up and the lake cleared. Unfortunately, the clear water allowed light to reach down and stimulate the growth of water weeds, which grew right up to the surface. Shapiro said that the water weeds also got a boost from biomanipulation in Round Lake, although they didn't interfere with the swimming beach. The weeds are also helped along by phosphorus in the sediments, a condition that may partly result from transport by daphnia.

"We mustn't do too good a job with biomanipulation or we will have weed problems," Shapiro cautioned.

There are certain types of lakes in which biomanipulation may result in blooms of large algae that daphnia find inedible. One type is the shallow lake that is continuously mixed top to bottom by wind and that has a low ratio of nitrogen to

(MORE)

phosphorus, which favors the growth of such algae. On the other hand, the method can be very successful in many instances, including some very large lakes.

A good example is Lake Michigan, which ran into trouble in the 1940s, when the alewife, a type of herring, got in and went to work on the daphnia. Coho salmon were stocked in the 1960s, and last year they put a big dent in the alewife population. Large Daphnia, which had been depleted by alewives, became abundant and the transparency of the water increased dramatically. Also, phosphorus declined by 80 percent in the upper water layer.

Shapiro has also consulted with authorities about Como Lake in St. Paul and Golden Lake in Circle Pines, in which he has found small zooplankton, many planktivorous fish and an abundance of algae. Plans are under way to biomanipulate the lakes this fall. He expressed concern, however, about Square Lake, which the DNR is stocking with rainbow trout, a planktivorous fish.

Biomanipulation is no panacea for soupy lakes, but Shapiro said it is ecologically sound and cheaper than nutrient manipulation, which often involves engineering projects to divert sewage or other rich nutrient sources from lakes. He thinks scientists should be on the lookout for diseases, poisons or other ways to remove perch and crappies from lakes.

"There was a lovely case of a reservoir in England where all the perch died, daphnia increased and the water became quite clear," he said.

-UNS-

(AO, 4, 4b; B1; CO, 4, 4b; DO, 4, 4b; EO, 4, 4b)

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U OF M OPENS  
PEDIATRIC NEUROSURGERY DIVISION

(FOR IMMEDIATE RELEASE)

The University of Minnesota's neurosurgery department has formed a division of pediatric neurosurgery, because pediatric neurosurgery has become a "clearly defined subspecialty of surgery," according to Stephen Haines, assistant professor of neurosurgery at the university and one of the physicians primarily responsible for the division's service.

Haines and Edward Seljeskog, professor of neurosurgery at the university, will perform general neurosurgical services, as well as microneurosurgery and laser neurosurgery, and will treat disorders unique to children, such as hydrocephalus or excessive fluid on the brain.

In addition to these surgical services, special treatment will be available, in cooperation with other medical disciplines, for children with spina bifida, epilepsy and cranial-facial disorders.

Haines said that the division handles approximately 100 cases per year. "We in pediatric neurosurgery are very interested in improving and expanding neurological care for children, especially in facilitating the interdisciplinary care required by complex pediatrics problems," he said.

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SCHUH ELECTED FELLOW OF  
AGRICULTURAL ECONOMICS ASSOCIATION

(FOR IMMEDIATE RELEASE)

G. Edward Schuh, head of the department of agricultural and applied economics at the University of Minnesota, has been elected a Fellow of the American Agricultural Economics Association (AAEA), an honor bestowed on only three or four association members each year. Schuh's election was this month at the association's annual meeting at Cornell University in recognition of his significant lifetime contributions to the profession of agricultural economics.

Schuh will leave the university to become director of the Agriculture and Rural Development Department of the World Bank in Washington on Dec. 1. He will administer the bank's lending programs, which provides billions of dollars annually to developing countries.

C. Eugene Allen, dean of the College of Agriculture called Schuh's new post a once-in-a-lifetime opportunity. "We're sad that he's leaving, but we're proud that he was chosen for this important post," Allen said. "This reflects on his outstanding leadership and professional qualifications."

Born on a farm outside Indianapolis, Schuh received a bachelor's degree from Purdue University in 1952 and a master's degree in agricultural economics from Michigan State University in 1954. Following two years of military service, he entered the University of Chicago, earning a master's degree in economics in 1958 and a Ph.D. in 1961. His dissertation won an Outstanding Doctoral Dissertation award from the AAEA.

Schuh served as senior staff economist on President Gerald Ford's Council of Economic Advisers from 1974 to 1975 and as deputy undersecretary for international

(MORE)

affairs and commodity programs in the U.S. Department of Agriculture under Jimmy Carter. He was an agricultural economics professor at Purdue University from 1959 to 1979 and director of Purdue's Center for Public Policy and Public Administration from 1977 to 1978. He also served as program adviser to the Ford Foundation on Brazilian agriculture and as president of the AAEA. He has been professor and head of the department of agricultural and applied economics at the University of Minnesota since 1979.

An innovator in his field, Schuh pioneered in applying econometric procedures to the understanding of U.S. agricultural labor markets and in exploring the interrelationships between national and international financial and commodity markets. His book on Brazilian agriculture won the AAEA's Outstanding Published Research award in 1971. He was elected a Fellow of the American Academy of Arts and Sciences in 1977.

Schuh lives in Maplewood with his wife and three daughters.

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(A12, 12a, 35; B1, 7; C12, 12a, 35;  
D12, 12a, 35; E12, 35; F20)

(FOR RELEASE ANY TIME)

Feature story from the  
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SALESPEOPLE WILL WORK HARDER FOR THE MONEY  
THAN FOR ANYTHING ELSE

by Harvey Meyer  
University News Service

Salespeople like to get a pat on the back now and then. And they like promotions as well as the next person. But if you really want to know what turns sales people on, give them money.

That's not entirely surprising. University of Minnesota marketing professor Orville Walker Jr. and two University of Wisconsin professors concluded in a study of 481 salespeople a few years ago that money topped any other reward you could give salespeople.

Their second study, which evaluated the kinds of job rewards preferred by 108 industrial salespeople, showed that promotions, opportunities for personal growth and feelings of accomplishment played second fiddle to money. Increased security and formal recognition were the least attractive rewards to the salespeople, who worked for three U.S. industrial goods manufacturers, according to the study, which will be published this fall in the Journal of Business Research.

Walker said that past studies in industrial psychology have indicated that non-sales people generally put other needs above money. While money was, in relative terms, the No. 1 incentive for salespeople, some craved money more than others, the professors' study showed. For instance, money was even more important to the salespeople who had home mortgages. Money was also more important to the approximately 25 percent in the study who were independent sales representatives; about 75 percent in the study were company sales representatives. Additionally, money was more important to older salespersons who were frustrated by their inability to earn promotions, the study said.

(MORE)

Not surprisingly, salespeople who had been on the job for six or more years valued security more highly than those just starting their first selling job.

Young, single salespeople who had less than six years of selling experience were more interested in promotions, according to the study. In fact, the desire for promotions between the old and young produced the widest disparity in the study. Those aged 18 to 34 gave promotions an 84 out of 100 score on a needs scale, those between 50 and 67 gave promotions a score of 52. The researchers hypothesized that the older salespersons' score was influenced by their distaste for relocating, which accompanies many promotions.

Recognition, the study said, is generally not considered a very important reward by most salespeople, regardless of their personal characteristics.

Salespeople who had attended graduate school or earned graduate degrees had the strongest craving for accomplishment.

Personal growth was the most highly prized among young and single persons, women, those with large incomes, and those who don't own homes, according to the study. For younger people, the study said, opportunity for personal growth and career advancement are as important -- if not more important -- than a pay hike.

"Unfortunately," the study said, "while many firms devote a great deal of time to designing financial compensation systems, it is less common for a company to have well-planned career paths for outstanding salespeople or to incorporate opportunities for personal growth and professional development as a formal part of its reward system. More systematic thought will have to be devoted to these issues, not only because today's young salesperson views personal growth and career advancement as crucial rewards, but also because the content of the sales job and structure of the sales organization is becoming more complex in many companies."

Walker, 41, a marketing professor since 1970, said that perhaps the most important finding to him was that not all salespeople want the same things. "That's important because it makes me very leery of rules of thumb or motivational programs

(MORE)

that never change," Walker said. "Some motivational programs, to some degree, should change with the types of individuals. And then after a motivational program is in place, it should be periodically readjusted."

Walker suggested that companies poll their salespeople to find out their specific wants and needs. "But you have to be careful. If you say, do you want more money, they'll all say 'sure.' What you've got to ask is which of several alternative rewards you might use."

Some firms probably have already analyzed their sales motivation programs, Walker said. "On the other hand, there are a lot of companies who should but don't. And those (sales) managers rely on their perceptions, and some of those perceptions are wrong."

At least two of the six divisions studied have modified part of their sales motivation program as a result of the professors' research, he said. Follow-up studies are being discussed with Walker's colleagues Neil M. Ford and Gilbert A. Churchill, Jr. "A piece of research like this doesn't mean all the bases are covered, but it may be statistically significant," Walker said.

The two studies were funded by the University of Minnesota School of Management, the University of Wisconsin and Marketing Science Institute, a Cambridge, Mass.-based firm working on marketing issues.

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(AO, 12, 12a; B1, 7; CO, 12, 12a; DO, 12, 12a;  
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SUMMER ENROLLMENT DOWN AT U OF M

(FOR IMMEDIATE RELEASE)

Enrollment at the University of Minnesota declined during the two five-week summer sessions this year.

During the first session, enrollment at the Twin Cities, Crookston, Duluth and Morris campuses was 16,053, a 7 percent decrease from one year ago. Enrollment at Waseca, which operates on a summer quarter system, is not counted until the second session.

Second session enrollment was 8,751, a 7.8 percent decline from the same period last year.

Enrollment at all five campuses decreased during the first session. At Crookston, enrollment declined by 2.4 percent to 244; at Duluth, 8.2 percent to 1,999; at Morris, 9.8 percent to 119; and at the Twin Cities campus, 7 percent to 13,691. However, while 1,017 fewer students signed up for the first session on the Twin Cities campus, the College of Education reported a 7.7 percent increase over 1983 and enrollment at the Medical School grew by 7.4 percent.

Overall enrollment at the university fell by 741 students during the second session. But enrollment increased at the Crookston, Duluth and Morris campuses. Duluth reported four more students enrolled over the 1983 second session, Crookston reported that 74 more students had signed up and Morris experienced a 10 percent increase. At the Twin Cities campus, enrollment fell 848 students, a decline of 11 percent. Waseca's summer quarter enrollment was 539, a drop of 7.8 percent from summer quarter 1983.

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(AO, 1; B1; CO, 1)

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INTERNAL DIALOGUES  
CAN IMPROVE THE REAL THING

By Lynette Lamb  
University News Service

If you've just told your spouse 20 reasons why you're right, but you've done it alone in your car, don't worry. Most people hold at least some conversations in their heads. It's not a sign of mental illness or acute loneliness. Instead, it's a common phenomenon that can help people to better understand themselves and their interactions with others, said a University of Minnesota family social science professor who has studied the process.

"Imagined interactions occur . . . for most people on most days," wrote Professor Paul Rosenblatt and doctoral candidate Cynthia Meyer in a recent and as yet unpublished article on the subject. These two family social scientists see nothing harmful about most imagined interactions; indeed, in their article they point out several benefits people can gain through having them.

Solving a problem is the first benefit the authors mention. "I think we can clarify things in our heads most easily through conversations because we are pre-eminently social creatures," said Rosenblatt. "A lot of our thinking is shaped by interactions we have." The organization, coherence and perspective needed to resolve certain issues are frequently easier to achieve if the problem-solver has an imagined audience, Rosenblatt and Meyer contend. "Having an imagined other can lead to considerable thought that one could not get to without that imagined other," they wrote.

Using internal dialogues to rid oneself of anger or extremely upset feelings before confronting a significant other is another benefit of the process, Rosenblatt said. "It's like trying on different 'me's,'" said Rosenblatt. "Sometimes in the process of trying on different conversations you realize that certain ones don't fit

(MORE)

-- that they make you feel bad about yourself."

Practicing a conversation one plans to have in the future is yet another positive to be gained from internal dialogues, according to Rosenblatt. "It seems to help some people who are anxious about conversations if they can think them through," he said. He added that this is particularly true of high-risk conversations -- ones in which a person plans to tell a loved one something that has previously been difficult to talk about, such as telling someone that you love him or that she has a drinking problem.

And it's okay to own up to having practiced these conversations, said Rosenblatt. In fact, telling people you've rehearsed conversations with them is similar to telling them you've been thinking about them -- it can make them realize they're important in your life.

Some therapists feel that the inherent danger in holding these practice conversations is that all the important interactions and confrontations of someone's life can take place in that person's head instead of in their relationships. Rosenblatt and Meyer don't dispute that, but they also argue that there can be legitimate reasons for not confronting a loved one, and that at least a practice conversation could ". . . be a step toward doing it right in the real world," as Rosenblatt put it. Indeed, added Rosenblatt, "If you're having problems in your relationships a part of it may be that you're not doing a very good job of anticipating what others' reactions may be to what you say."

Whether a therapist believes that imagined interactions are good or bad, they are at least something the therapist should pay attention to, Rosenblatt said. Because important issues like self-esteem, shame and family conflict can be brought out when a patient relays internal dialogues, said Rosenblatt, by not asking about these conversations "Action- and behavior-oriented therapists may be missing something important that they should be paying attention to."

Although Rosenblatt conceded that it is probably better for most people to eventually hold real conversations, the internal dialogues that precede them will not have been a waste of time. The best ones, he said, ". . . can sometimes make you more honest and self-aware of how you react to and feel about something."

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MEMO TO NEWS PEOPLE

The Aug. 15 University News Service news release, "Summer enrollment down at U of M," should have said in the last line that Waseca's summer quarter enrollment was 539, an increase of 4.2 percent.

-UNS-

(AO,1;B1;CO,1)

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AUGUST 20, 1984

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MEMO TO NEWS PEOPLE

Amy Peele, president of the North American Transplant Coordinators Organization (NATCO), will meet with reporters at 2:30 p.m, Wednesday (Aug. 22) in the Summit Room of the Minneapolis Plaza Hotel, 315 Nicollet Mall, Minneapolis.

Peele, a transplant coordinator at Rush-Presbyterian-St. Luke's Medical Center in Chicago, will address the NATCO convention at 1 p.m., in the Cotillion Room on the plaza level of the hotel. Reporters are welcome to attend the lecture; text of the speech is available through the Health Sciences Public Relations Office at 373-5830.

-UNS-

(AO,23,24;B1,4)

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AUGUST 20, 1984

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500 TWIN CITIES CHILDREN TO RECEIVE  
CHICKEN POX VACCINE IN NATIONAL STUDY

(FOR IMMEDIATE RELEASE)

A two-year study of 500 Twin Cities children is under way at the Park Nicollet Clinic to determine the safety of a chicken pox vaccine.

The clinic's physicians, in conjunction with researchers at the University of Minnesota, hope to prove that the vaccine will offer immunity from chicken pox, the most common rash disease of childhood.

"Chicken pox is not a pleasant illness. Some children have severe itching and complications do occur," said Dr. Henry Balfour, a virus expert at the university who serves as co-director of the study with Dr. Don Amren, a Park Nicollet pediatrician. "We believe, but do not know for certain, that this vaccine will protect children from chicken pox."

A preliminary study of 956 Philadelphia children published in the New England Journal of Medicine on May 31 indicated that the vaccine has prevented normal children from catching chicken pox during the follow-up period, which has now totaled two years. But further studies are necessary before the vaccine is licensed for general use. Park Nicollet is one of six medical centers in the United States participating in the second round of testing.

Children between the ages of 1 and 2 years, who are patients of the Park Nicollet Clinic, will receive a vaccine injection. Blood samples will be taken after six weeks and one year to determine if the vaccine stimulates the production of antibodies.

The Japanese developed and were the first to use a chicken pox vaccine about 10 years ago. Since then, approximately 5,000 children in the United States and Japan have been vaccinated without any serious reactions, Balfour said.

(MORE)

VACCINE

-2-

Chicken pox is caused by the varicella zoster virus. About 98 percent of the U.S. population contracts the disease during childhood. Although bothersome, the rash usually heals without complications in about two weeks. Adults have a more serious experience with chicken pox, sometimes developing pneumonia.

Because the chicken pox virus also causes shingles, there is a possibility that the vaccine could increase the likelihood of shingles in the childhood population. However, researchers say there has been only one such case among the five individuals tested so far. The vaccine may, in fact, give children immunity from shingles as well as chicken pox, they speculate.

"We firmly believe that the chicken pox vaccine will prove to be a significant step forward in protecting the health of all children," Balfour said.

Children are being enrolled at two Park Nicollet Medical Centers: 5000 W. 39th St., St. Louis Park, and at 14000 Fairview Drive, Burnsville.

-UNS-

(AO,23,24;B1,4;C23,24)

BROADCASTERS: A taped report containing actualities about this news release can be obtained by calling (612) 376-7676 from 8 a.m. Wednesday (8/22) until 4 p.m. Thursday (8/23).

Feature story from the University of Minnesota News Service, 6 Morrill Hall 100 Church St. S.E. Minneapolis, MN 55455 Telephone: (612) 373-7504 August 20, 1984

### JAPANESE EDUCATION -- NOT A PERFECT MATCH FOR U.S.

By Lynette Lamb  
University News Service

With Japan's recent strides in automobile and computer manufacturing, some Americans have taken to looking at its educational system and are now suggesting that the United States mimic it. But a University of Minnesota education professor, while finding much to admire in the Japanese system, suggests we move with caution.

"Education is culturally embedded," said curriculum and instruction professor John Cogan, who was a Fulbright Research Scholar at Hiroshima University in 1982-83 and visited Japan again this summer. "What works well for one culture might not work for another," he said.

A major difference Cogan points to is that the Japanese are part of a homogeneous culture, one that stresses cooperation, agreement and harmony. For them a standardized national curriculum works well because their culture does not promote individualism, said Cogan. "In the United States -- where individual initiative and independent thinking are highly valued . . . a decentralized educational system better serves these interests," wrote Cogan. "Japan does not promote individualism," said Cogan. "They have a saying: 'The nail that stands out is hammered down.'" Imposing the educational system from a culture like that onto the schools of the United States, where the culture prizes diversity of opinion and open debate, would be a recipe for disaster, he said. "The Japanese system has a lot of good to offer," Cogan concluded. "But we need to pick and choose the elements that will fit."

Its emphasis on examinations is the other major disadvantage of the Japanese system, Cogan believes. Only those students who have attended an academic track high school and have received high enough scores on their college entrance exams to

(MORE)

gain admittance to one of the best colleges will be considered for the most prestigious and high-paying corporate and government jobs. "In Japan you can be shut out of the good life by age 13," said Cogan. "Once you blow it in the Japanese system, you blow it -- there is no room for recovery, for late bloomers."

One of the advantages of the United States system of education, Cogan said, is that "in our system there are many opportunities for reentry -- if you blow it in high school, you can still come back in college." This isn't possible under the Japanese system, he said. There, once a student has repeatedly failed a university entrance exam and given up, there is no place for reentry.

With so much at stake so early on, Japanese schoolchildren are under tremendous pressure, Cogan said. He cites the tendency of the Japanese education system ". . . to change students from happy, carefree children into serious, fatigued adolescents," as one of its most serious flaws.

But Japan's exam-centeredness is also responsible for two of the system's major advantages: the motivation to learn and the production of a well-educated society. "An entrance exam is a tremendous motivational factor for students and their parents," said Cogan. "It is a clear goal to shoot for."

Even more important, he said, is that the exam-based system "produces a society far better educated on the average than ours." Even those students who attend a vocational or commercial track high school -- rather than a more prestigious academic-based one -- go through a rigorous educational process with a curriculum that focuses on mathematics, science, social studies, language development, music, art, physical education and foreign language.

Graduates of Japan's academic track high schools have the educational equivalent of a United States bachelor's degree, Cogan said. Even those who attend the other high schools are grounded much better in academic subjects than are their American counterparts. "Their kids come into industrial and clerical jobs with far superior math and science skills than ours do," said Cogan. "As a result, their employers have to spend less time training them."

(MORE)

It's the quantity as well as the quality of their coursework that makes Japanese students better prepared, Cogan said. Japanese students spend about 25 percent more time in school than American students do, attending classes 240 days a year, six days a week. On top of this, academic track students preparing for college entrance exams often attend private schools called "juku" for three or four hours several nights a week.

A final advantage of Japan's system, and one that Cogan strongly encourages importing, is the national priority the Japanese give to education and the respect they give their teachers. "The respect the Japanese accord teachers goes a long way toward increasing the commitment of everyone in the society to education," Cogan said. Teachers are paid well, have job security and are not expected to serve as sex and drug educators, counselors and social service agents, as they often are in the United States, Cogan said. He added that respect for teachers in the United States won't happen until the profession attracts higher-ability college students, and that in turn won't take place until teacher salaries go up.

Although there are elements of the Japanese educational system Cogan wouldn't want the United States to imitate, such as the lack of opportunity for women, the expense and the emphasis on rote memorization, he does see some real value in their demanding academics. "We need to look at how in the United States we can make education more rigorous and demanding without standardized testing," he said.

Despite our system's faults, said Cogan, it does at least encourage students to study and learn in college. "Japanese college students don't study nearly as hard as do those in the United States," he said, adding that very few go on to graduate school. "It's virtually impossible to flunk out of a Japanese university, and since students at the best universities are guaranteed jobs with corporations that will spend 18 to 36 months training them, their attitude is 'we've earned the right to coast for three years.'"

For students at all levels, said Cogan, the Japanese system's preoccupation with exams reduces the possibility that students will learn sheerly for the love of it or seek out knowledge for its own sake.

But even on this point it is always dangerous to be too critical of another culture, Cogan emphasized. "We have to be careful not to judge someone else's system through our lenses," he said, adding that by the same token, a wholesale adoption of the Japanese educational system would be equally ill-advised.

(AO, 14, 15, 16; B1, 11; CO, 14, 15, 16;  
DO, 14, 15, 16; EO, 1, 14, 15, 16)

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(FOR RELEASE ANY TIME)

Feature story from the  
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August 23, 1984

'HIDDEN' SYSTEM SHUFFLES PROBLEM YOUTH  
FROM ONE STATE INSTITUTION TO ANOTHER

by Harvey Meyer  
University News Service

John, a 15-year-old punk in 1972, found himself tossed into the clink for running away from his Minneapolis home. If John were to run away as a teen-ager these days, he might find himself in a hospital's psychiatric ward.

John's case demonstrates the "hidden juvenile justice control system" in Minnesota, says a University of Minnesota senior fellow. It's a system that appears to have shuffled many problem youth from jails and detention centers to psychiatric, chemical dependency and residential treatment centers, says Ira Schwartz, who conducted a study along with two colleagues for the university's Hubert H. Humphrey Institute of Public Affairs.

The study reports that this apparent widespread shift in the state's treatment of juveniles poses a raft of significant social, legal, political and economic questions, Schwartz said.

The shift, which happened between the early 1970s and now, has bulged juvenile admissions to mental health and chemical dependency centers. Treatment costs have soared during that period, and youths are staying institutionalized longer than adults for receiving similar care, according to the study, compiled by Schwartz, Marilyn Jackson-Beeck, a national health care policy expert, and Roger Anderson, a clinical psychologist for the Wayzata public schools.

Critics say mental health, chemical dependency and residential treatment centers have fattened their pocketbooks by increasing their juvenile admissions in the wake of declines in other service areas. And that may be at the expense of some youths who are either misdiagnosed or simply don't need inpatient treatment. Juveniles branded incorrectly may bear emotional scars the rest of their lives, critics say.

(MORE)

The 20-page study is a follow-up to a national report published last year examining juvenile control systems before and after passage of the federal Juvenile Justice and Delinquency Prevention Act of 1974. That act, the report says, did its intended job of removing young status offenders -- truants and runaways, for example -- from the nation's jails. But the act unintentionally may have caused problem youth to be shunted into psychiatric and chemical dependency treatment centers, said the report, compiled by Schwartz and Barry Krisberg, president of the National Council on Crime and Delinquency.

That report, and Schwartz's testimony before Congress, aided in launching a General Accounting Office investigation into the "hidden" juvenile control systems in Wisconsin, Florida and New Jersey.

The follow-up study, which was published in July's edition of the Journal of Crime and Delinquency, is being used by task forces examining juvenile laws in Minnesota at the state level and in Hennepin County. Also, the Minneapolis Citizens League drew upon the study for its recently released report on institutionalization in Minnesota.

Schwartz, 39, who worked two years on the study, says he was surprised by the size of Minnesota's hidden juvenile control system. "How could a system like this get so big and developed and yet there's no evidence that it even works?" Schwartz asked.

Here are highlights of the study, which relied heavily on private and public data supplied by the Metropolitan Health Planning Board (MHPB), a Twin Cities health systems agency, and Blue Cross-Blue Shield of Minnesota, a private, non-profit health insurance company:

--In 1976, the MHPB said, 1,123 juveniles were admitted for psychiatric treatment in the Minneapolis-St. Paul area, compared to 2,031 in 1983. Blue Cross, which insures about 23 percent of Minnesota's population, reported 441 juveniles admitted for inpatient psychiatric treatment in 1978, compared to 601 in 1982.

--In 1976 juveniles were given inpatient psychiatric care, on average, 44.8  
(MORE)

days, compared to 23.1 days for adults, according to MHPB data. By 1982, juveniles were still receiving treatment far longer than adults -- 38 days for juveniles compared to 21 days for adults.

-- The average charge per juvenile for inpatient psychiatric care increased from \$2,434 in 1978 to \$3,856 in 1982, Blue Cross reported. For adults, the cost rose from \$1,596 to \$2,826.

--Blue Cross found that, from 1978 to 1982, 6 percent of the inpatient psychiatric treatment days for juveniles were unnecessary, compared to 3 percent for adults.

--From 1978 to 1982, Blue Cross reported that the number of juveniles receiving chemical dependency treatment rose from 375 to 480, increasing the juvenile population from 17 percent of the total patient load to 23 percent.

--The average length of stay for Blue Cross juvenile chemical dependents remained the same at 24.7 days from 1978 to 1982, but the average stay for adults dropped from 21.5 to 20.5 days.

-- The average charge per juvenile for chemical dependency care rose from \$1,937 in 1978 to \$2,938 in 1982, Blue Cross reported. For adults, the cost increased from \$1,704 to \$2,227.

--Blue Cross reported that 19 percent of the days spent for juvenile inpatient chemical dependency were "medically unnecessary" and 18 percent of the days for adults were found to be medically unnecessary.

Sometimes, Schwartz said, parents may insist on having their children treated and often costs aren't a consideration since third parties -- insurance companies -- are required under state law to foot the bill for psychiatric or chemical dependency treatment. Unfortunately, some social workers, chemical dependency counselors and psychiatrists have financial motives for confining youths, he said.

"I think there's been an assumption that professionals and practitioners have the best interest of their patients at heart," said Schwartz. "I think we're finding that's not always the case; after all, they need patients. We're talking about the

(MORE)

economic survivability of hospitals."

Connie Levi, a third-term legislator from Dellwood, is concerned about possible abuses in diagnosing juveniles.

"Are we labeling kids as emotionally disturbed or chemically dependent without some type of diagnostic counseling?" asked Levi, who serves on the task force examining juvenile justice laws in Minnesota.

The study said such diagnostic categories as "conduct disorder," "adolescent adjustment reaction" and "emotional disturbance" allow for the "exercising of virtually unbridled discretion on the part of mental health professionals."

"There is a critical need for more research into the need for and effectiveness of inpatient psychiatric and chemical dependency treatment for juveniles," the study said. "For example, we need to find out who really needs inpatient care and under what circumstances."

Additionally, the study said, financial incentives should be developed favoring outpatient care, and other alternatives to hospital-based treatment should be considered.

"For a very, very long time," said David Hunt of the Minneapolis Citizens' League, "we've had the feeling that if you put juveniles in institutions that they'll be cured. But, in fact, taking them out of their native environment may be worse."

The study was funded by the Humphrey Institute, the Northwest Area Foundation and the Blandin Foundation.

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(AO,5,11;B1,6;CO,5,11;D5,11;E5,11)

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AUGUST 24, 1984

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U OF M SCIENTISTS FIND CLUE TO  
STREP THROAT VACCINE

(FOR IMMEDIATE RELEASE)

A team of University of Minnesota microbiologists has made a discovery that may lead to the development of a vaccine against strep throat. Their findings, reported in the Aug. 31 issue of the journal Science, detail the mechanism by which some streptococcus bacteria naturally lose their virulence and describe the cloning of a gene that may be the key to a strep vaccine.

The scientists, Patrick Cleary, Jonathan G. Spanier and S.J.C. Jones, found that programmed changes in genes control the production of proteins that help the bacteria resist being engulfed by white blood cells in the body. "The data suggest that genes for these proteins have a switch that turns them on and off in response to the presence and absence, respectively, of a host organism's immune defense system," said Cleary, who headed the study. In other words, the bacteria drop their defenses after leaving the "battlefield" of the human body.

The proteins, called "M proteins," are attached to the outer surface of the bacterial cells and help fend off the body's white blood cells. The bacteria also produce a carbohydrate coat and a special enzyme, both of which may contribute to bacterial virulence. But a loss of genetic material near the genes for the M proteins causes the loss of all three bacterial weapons -- and the bacteria's virulence. This genetically programmed switching off seems to occur in a regulatory gene, whose function is to control the activities of other genes.

"It has been known since the time of Louis Pasteur that most animal pathogens change from a virulent to a non-virulent form when brought into a laboratory," Cleary said. "This knowledge has been used to isolate less virulent pathogens that have been used as vaccines. But we had no understanding of the genetic basis for

(MORE)

this phenomenon, so we had to wait for it to happen naturally in order to find organisms suitable for vaccines."

Work on a streptococcus vaccine has been hampered by the fact that there are about 80 strains of the bacteria. Persons exposed to one strain develop immunity to that strain only, and so remain vulnerable to the next strain that comes along. The reason is that the body produces antibodies to M proteins, which differ from strain to strain. Thus, antibodies to one strain will not recognize any other strain.

But now Cleary's group has isolated an M protein and cloned its gene, which can be used in future experiments to clone other M proteins. Eventually, said Cleary, this will allow scientists to construct hybrid M proteins. The hybrids would contain fragments of numerous M proteins, each capable of eliciting a human immune response; such a molecule would constitute an effective strep vaccine. The first batch would contain M protein fragments from strains that most commonly cause infections.

The group should soon determine the exact spot on the bacterial chromosome where the genetic changes occur. "Our goal is to find out how streptococcus continually alters its outer surface in order to persist in the face of stiff defenses by its human host's antibodies," Cleary said.

-UNS-

(AO,23,24;B1,4;CO,23,24;DO,23,24;EO, 23,24)

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GRANT TO U OF M WILL DEVELOP  
BIO-PROCESS RESEARCH CENTER

(FOR IMMEDIATE RELEASE)

The University of Minnesota has received a \$50,000 planning grant from the National Science Foundation to develop the proposed Industry-University Cooperative Research Center for Biological Process Technology. The funds will support the planning of a five-year program designed to bring advances in biological process technology to commercial realization.

Biological process technology encompasses a wide range of industrial uses for living organisms' capabilities, with the production and large-scale use of genetically engineered organisms a central feature. Successful commercial application of the scientific techniques has been hampered by lack of communication among scientists, engineers and industries, according to Victor Bloomfield, head of the biochemistry department. The proposed center is an effort to remedy the situation.

"During the first year we want to contact several dozen companies in biological process technology," said Bloomfield, who is also director of the university's Biotechnology Research Center (BRC), which coordinates and stimulates university-wide activity in biotechnology. "The list will then shake down to 10 to 15 companies, which should make a long-term commitment. We hope to generate \$500,000 in research support annually. The research, however, will be basic -- not belonging to any one company's domain -- and so should have applications in many areas."

The proposed center will involve approximately 40 faculty members in biotechnology fields, hailing from 13 departments in seven university colleges. It will have an industrial advisory board composed of industrial scientists and scientific managers who will consult with faculty to establish an initial research agenda. Research areas tentatively scheduled for funding the first year include the micro-

(MORE)

bial breakdown of hazardous waste, genetic engineering of bacteria important in the dairy industry, the chemistry of pulp and paper processes and large-scale preparation and purification of proteins. The center will not be a physical entity, but a system to provide support for collaborative research from industries and NSF on a matching basis. It will complement the Biological Process Technology Institute in the Gortner Lab-Snyder Hall complex, which will operate as a department in the College of Biological Sciences.

"The institute is looking to hire a permanent director this fall," said Darlene Joyce, associate to the director of the BRC. "The new director and five faculty from disciplines such as biochemistry, microbiology and chemical engineering will form the core of the institute, which will provide space for offices and laboratories and funding. But all six will have tenure, graduate students and teaching duties in various departments."

The state of Minnesota provided \$500,000 in initial support for the institute for the year ending July 1 and has given \$420,000 for the current year. The latter sum was matched by \$620,000 in industrial funds secured in direct gifts from local companies -- 3 M, Molecular Genetics and Economics Laboratory -- and from grant money generated by faculty. Joyce said that it is the university's understanding that the Legislature will provide at least \$220,000 per year each biennium and that the BRC has requested an increase to \$550,000 per year starting next July 1.

The university is also embarking on a capital campaign to supply equipment for the institute's central laboratories, which will be available to any university scientist doing research in large-scale bio-process technology and to industrial scientists. The university has secured funds from the state and private corporations and is applying to private foundations and the federal government, Joyce said.

"Minnesota's industrial base is strong in the important areas of food, agriculture, health, medical technology and microelectronics," she said. "The university's biotechnology programs will help develop good people to ease the shortage of trained bioengineers and scientists in related occupations."