

UNIVERSITY OF MINNESOTA

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Welcome to
the University
of Minnesota,
a world-class
institution.
We're here to
serve you!

Outstanding Admissions

**The new director of
Admissions takes to
his job with gusto**

Stories by Maureen Smith

A sign just inside the entrance of Admissions in Williamson Hall reflects Wayne Sigler's philosophy: "Welcome to the University of Minnesota, a world-class institution. We're here to serve you!"

Both parts of that message are important to Sigler, new director of admissions on the Twin Cities campus.

The University is a wonderful place, and service is the key to recruiting students.

"We have to showcase our product, our terrific faculty, the outstanding students we have," Sigler says. "We're starting from a position of strength, because the basic product is outstanding. That's a salesperson's dream."

For Alumni,
Faculty,
and Staff

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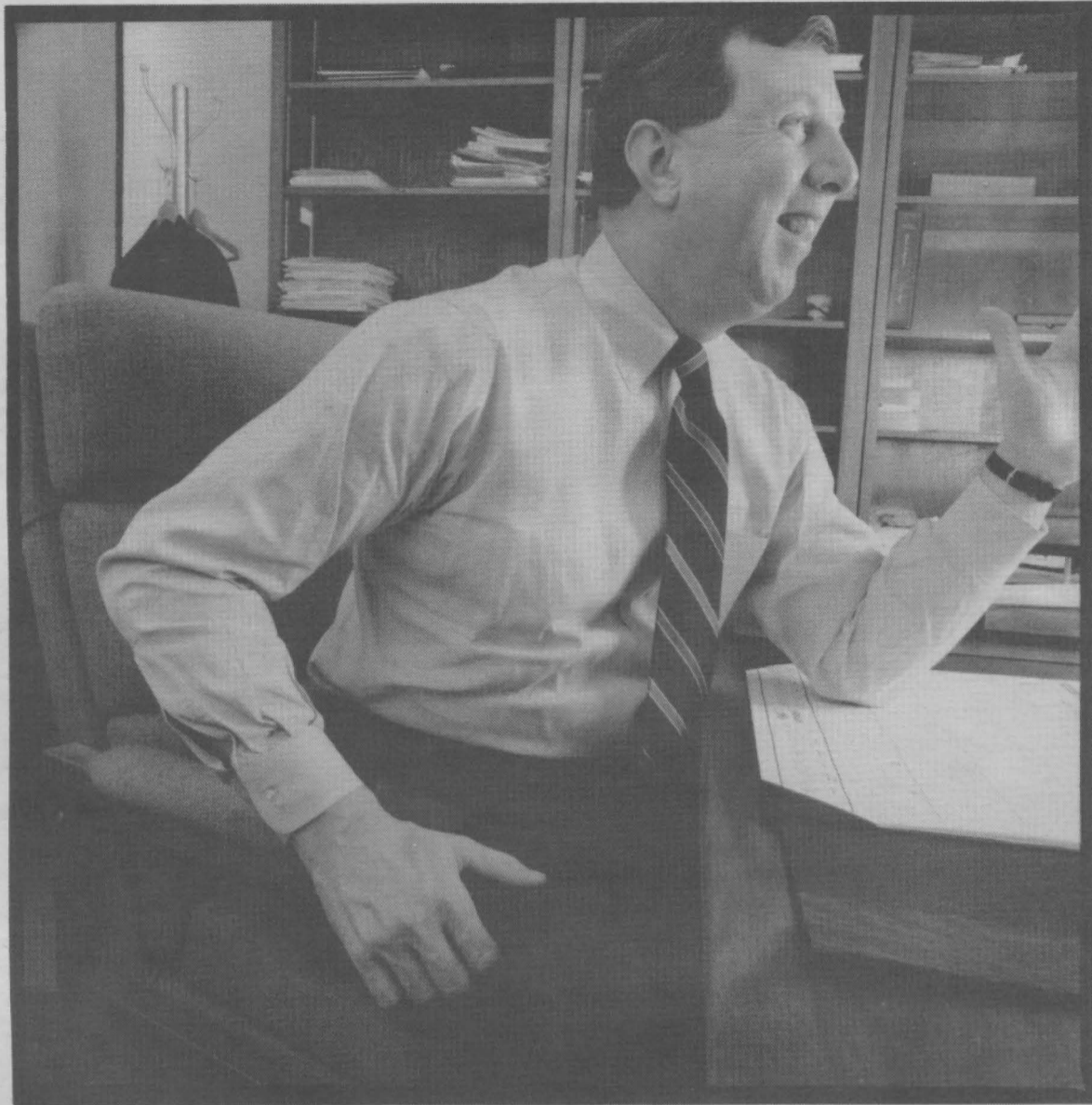


PHOTO: TOM FOLEY

Sigler, who came to Minnesota from the University of Houston, has been surprised that Minnesotans don't brag more about their University. "I've seen this place from afar for 23 years, and I've known how widely respected it is," he says. "I'm amazed how much people at the University and around the state take it for granted. This is not a run-of-the-mill institution.

"One of the things I admire about Minnesota in the brief time I've been here is that when I meet people, almost every time, I'm impressed with their competence and also their modesty. Modesty has its place, and it's very charming and endearing and a wonderful human trait," he says. But not when you're trying to spread the word about how great your University is.

"We need to stand on top of every one of these buildings and proclaim to the world that this is a world-class institution," he says. "In my judgment prospective students ought to be fighting to get into this place. We have not done a good enough job in telling them what's here."

Telling that story is part of Sigler's job as he sees it. Another big part is making the University more understandable and welcoming to students and their parents and counselors.

"Recruitment is often thought of as promotion and public relations, and we're certainly going to do a lot more of that," he says. "At the same time, I'm focusing more on customer service here. Things like direct mail, telemarketing, and school visits are all highly important elements in a recruitment effort, but effective customer service is the glue that holds everything together."

How good should the customer service be? "Our standard is to make our service warm and fuzzy," Sigler says. "You can't quantify that, but we'll know when we get there. We're not there yet."

"We have to showcase our product, our terrific faculty, the outstanding students we have. We're starting from a position of strength, because the basic product is outstanding. That's a salesperson's dream."

with the Office of Student Financial Aid to let prospective students know sooner about the help they'll get in paying for school.

Students who don't qualify for admission based on their combination of ACT scores, high school rank, and course preparation are assured of individual review, a routine part of the admission process. Last year more than one third of all new freshmen were admitted through the individual review process.

More admissions counselors have been hired, and admissions people are forming closer relationships with Minnesota high schools and community colleges. Telephone hotlines have been set up, one for high school counselors and one for community college counselors. "That doesn't mean the counselors are any more important than parents and students," Sigler says, but because they have an impact on so many students "we want them to get through immediately."

Prospective students and parents may call the Office of Admissions at (612) 625-2008 or 1-800-752-1000.

Besides getting a warm and fuzzy feeling from their contacts with the University, Sigler says, students should find the admissions process timely and easy to navigate. "We're offering prospective students one starting point where they apply to become freshmen or transfer students. That's highly important on a large campus. All freshman applications will now be handled through the Office of Admissions."

Another change: prospective freshmen who have their American College Testing (ACT) scores sent to the University and who are judged to have a good chance of success are mailed simplified preprinted application forms. Residence hall housing is guaranteed for freshmen who get their applications in on time, and admissions officials are working

Recruitment is on an 18-month cycle, Sigler says, and the heaviest contacts are with students at the end of their high school junior year. "We're definitely not writing '93 off by any stretch of the imagination," he says, but the big push will be for the class that enters in fall 1994.

In talking with counselors, students, and parents, Sigler has encountered two or three misperceptions. One is that the University doesn't want freshmen. (If you've read this far, you know that isn't true.) A second is that people worry about the size of the Twin Cities campus and don't see all the opportunities that come with size.

A third big concern, especially among parents, is campus safety. "Our FBI stats would not greatly alarm parents," he says. "Any crime is too much, but we're a relatively safe place. The public does not perceive that. That one is haunting us."

People who care about the University's recruiting may still see some glitches for a while, Sigler says. The honor roll student who lives next door may hear from a hundred other schools and not the University. "We cannot do some of this overnight," he says.

Despite all the changes, Sigler wants to make it clear that any problems were never because of the ability or caring of admissions staff. "We have for the most part a very capable, dedicated staff," he says. "Some of our systems are backward, not the people." Computer staff members are highly talented, for example, but they are working with an infrastructure that is 10 or more years behind comparable universities.

"When someone calls now, we go look in the file. You don't do that in 1993. You should pull the file up on screen and see what's happening right away. We should do most of our evaluation of transcripts by computer. We're doing it mostly by hand, and that is not good. We have really got to scramble to catch up.

"It will probably take us about three years before I begin to be satisfied with the type of office we have, and five years before we have an office I'm really proud of. But we have a game plan, and we're confident we'll get it done." ■

Welcome Freshmen

Contrary to public perception, the University wants to enroll more freshmen

program, the University needs to admit a large number of freshmen next year and every year.

The Commitment to Focus goal of reducing enrollment by 6,000 full-year-equivalent (FYE) students has been reached. The FYE total is now about 45,900 on the University's four campuses.

The goal for the next five years is to stay at the projected 1993 level: 31,800 FYE undergraduate students, 7,250 graduate students, and 6,850 professional school students.

More freshmen will be needed to stay even, says associate vice president Peter Zetterberg, because the reductions of recent years have created an unusual student mix, with more seniors than freshmen. Holding down the number of entering freshmen was the only way to achieve the targeted enrollment reduction, he says, but "we knew we were going down lower than we'd want for a steady state."

To keep overall enrollment stable, the number of freshmen needs to go up. Demographics will play some role, Zetterberg says—the number of high school graduates will be up 16 percent in the state and 20 percent in the region that includes the Twin Cities—but it "will also be important for us to recruit more aggressively than we have in the past."

What kind of students are wanted? Good students, students who can succeed, but not just some elite group of students who are at the top of their class, he says.

"We want the kind of students who can take good advantage of the type of institution and the environment that we have here," says Vice President Ettore (Jim) Infante. "We want students who can benefit from faculty at the cutting edge of research, students who are well prepared. In particular we want students who will take advantage of the great richness that this University can offer."

In some cases, Zetterberg says, programs at the University are unique in the state. "If you want to study agriculture, this is where you come, or natural resources, or many of the engineering programs."

The idea that the University didn't want freshmen was an unfounded myth, University leaders say. Another was that the University was setting itself up as an elite school, for the best and the brightest only.

The reality is that, even today, the University is below the Big Ten average in the academic rankings of its entering students. One measure is composite scores on the American College Testing (ACT) assessment, says John Printz, associate director of admissions.

For freshmen who enrolled in fall 1992, the Big Ten average ACT score was 24.7. At the University's Twin Cities campus, the ACT average was 23.6. In the Institute of Technology, the average was 26.8, and in the College of Liberal Arts 24.2. The national average for high school graduates was 20.6.

The reason for reducing enrollment was to improve quality by increasing funding per student. On the Twin Cities campus, funding per FYE student went up from \$5,862 in fiscal year 1988 to \$6,351 in fiscal year 1991. Most of this improvement has since been eroded by recent reduced legislative appropriations, but the 1993 average has not yet been calculated. The goal now is to preserve funding per student at no less than current levels.

Will the University have any trouble getting the students it needs for a larger freshman class? "It won't happen unless we make some fundamental changes," says Wayne Sigler, new director of admissions, whose job it is to lead the recruiting effort (see accompanying story).

Zetterberg doesn't think filling the freshman class will be all that hard. "This is a good place. It has a positive reputation. I don't see why we should have any problem at all in getting the number of students we'd like to have," he says. ■ —M.S.

To some people, it sounds like a turnaround. The University of Minnesota is out looking for freshmen. By fall 1997, University officials want to have 4,000 new freshmen enrolling on the Twin Cities campus, up 25 percent from this fall.

A few years ago, the University entered an agreement with the legislature to reduce enrollment, and some people got the idea that freshmen weren't wanted.

It wasn't true then, University officials say, and it definitely isn't true now. To keep enrollment stable and offer a balanced pro-

gram, the University needs to admit a large number of freshmen next year and every year.

The Rising Tide

A new study suggests that higher education is more and more difficult to afford for less affluent families

Students from middle- and upper-income families are disproportionately represented at the University and other four-year colleges in Minnesota, a recent study shows.

The study, called "Ways and Means: How Minnesota Families Pay for College," says that students from families earning more than \$50,000 are three times more likely to attend college as students from families earning less than \$30,000.

"Access to quality higher education is a Minnesota birthright," President Nils Hasselmo said in November 1992 when the study was released, and if that birthright is eroded "we will be missing something that has been very essential to our society."

Compared to other states, Minnesota once had a high level of participation in higher education by low-income families, said Brian Zucker, principal researcher for the study. "Now we are slipping back toward the median."

Another troubling finding in the study is that families aren't saving enough for college. "Overall, families are doing a poor job" of saving, says David Laird of the Minnesota Private College Council. "Many in the middle class don't save or don't save enough," said Terrence McTaggart, chancellor of the State University System. "Tax policy until recently supported going into debt."

The study, one of the most in-depth surveys of its kind ever conducted anywhere, was released jointly by officials from the Minnesota Private College Council, the State University System, and the University. At that time, all of them agreed on the importance of the problem, and they kept quiet about their different views on a solution.

Sharp differences emerged the next month, however, when leaders of the state's private colleges supported—and leaders of all the public institutions opposed—a December 10 recommendation from the Higher Education Coordinating Board (HECB).

The HECB recommendation would increase state-funded student financial aid by \$33 million, from about \$76 million to \$109 million, to help undergraduate students with financial needs. Money for the increase would come from the state's general fund or, failing that, would be found by reducing the state allocation for public higher education. The result would be to cut programs or increase tuition at the public systems.

Cutting programs for University students would mean what Garrison Keillor has described as "subjecting them to a mediocre education" and "letting public education slide," President Hasselmo said at the regents' meeting in December, and the regents agreed that tuition increases weren't an acceptable answer, either.

The regents voted unanimously to oppose the HECB recommendation. The plan could force a tuition increase at the University of nearly 10 percent, University leaders say, and an increase that large would mean that the percentage of instructional costs paid by Minnesota students would be among the highest in the nation.

Furthermore, raising tuition would hit the University with a "double whammy," because HECB aid is available only to undergraduates but the entire University tuition base would be increased, including tuition for graduate and professional education.

Higher tuition would also cause problems with reciprocity agreements. The current agreements already encourage Minnesota students to attend schools outside Minnesota and discourage students in other states from attending Minnesota schools.

Minnesota students pay the same to attend Minnesota or Wisconsin schools but pay about \$1,000 a year less to attend schools in North and South Dakota. Students from the Dakotas pay significantly more to attend Minnesota schools instead of schools in their home states. Wisconsin students pay the same in Minnesota or Wisconsin.

"While existing reciprocity arrangements have been negotiated with the best of intentions, they present some curious results," says Vice President Ettore (Jim) Infante. "Minnesota must surely be the only state where some nonresidents are charged less than the state's own citizens."

The HECB proposal will go to Governor Arne Carlson and the legislature for a final decision. The regents' resolution requests that HECB work with the public and private higher education systems to find an

Campus Visits

Campus visits, a good way for prospective students and their families to get a taste of the Twin Cities campus, are offered every weekday all year, except University holidays.

A visit includes a campus tour, a group information session, the showing of a campus video, and the opportunity to meet with admissions counselors and college advisers. Special arrangements can be made on request. Visits begin at 11:15 a.m. and 2:15 p.m.

If you're interested, call the new prospective student tour line, **612-625-0000** or **1-800-752-1000**.

Good Works

The School of Social Work celebrates 75 years

By Pamela LaVigne

A grade school. The Minnesota legislature. Your local hospital. Your local neighborhood development group.

What these diverse settings have in common is, undoubtedly, a social worker on staff.

"Social work has become a very rich profession," rich in variety and opportunities, says Jean Quam, director of the School of Social Work on the Twin Cities campus. Just how rich is freshly apparent, since the school just finished looking back over its history, in celebration of its 75th anniversary in October.

The school started out in 1917, the same year *Social Diagnosis*, by Mary Richmond, was published. This book, which offered ideas for training charity organization "society workers" is regarded as the first text of the new discipline. "Our history really parallels the history of the profession," Quam says.

Initially, the two-year "Training Course for Social and Civic Work" was an offshoot of the sociology department. First hired as a faculty member was Mrs. Mildred Mudgett (as she was then known), whose appointment also first broke the University's nepotism rule: her husband, Bruce, taught economics. Mildred Mudgett created the hallmark field placements, in which students gained practical experience interviewing real people. As her memoirs note, selling agencies on the idea wasn't as difficult as getting to them by streetcar.

In the profession's beginnings, Quam says, social workers did two things: one-to-one work—called "case work"—through an agency, or group work. Although government funded some agencies, such as county homes for orphans, most were privately funded charity organizations—Lutheran Social Services, or Catholic Charities, for example.

Group work centered around YM- and YWCAs and settlement houses for recent immigrants. Staff typically lived in the settlement house, in the same neighborhood as the people they were helping. The settlement houses provided immigrants help with jobs, English lessons, and child care.

The Depression overwhelmed the resources of what was essentially a private system. As the school's 75th anniversary booklet notes, in Hennepin County alone, demand for services rose 1,500 percent between 1929 and 1932. Faculty faced dual challenges: trying to keep students in school when job offers—and need—were great outside it, and trying to keep a focus on research in addition to training.

Large federally funded programs of the '60s—Head Start, community action grants—propelled change throughout the profession. The new focus was on organizing not an individual or a group, but an entire community. "Saul Alinsky was the guru," Quam says.

Social workers took to the streets, organizing protests, lobbying at the legislature, helping neighborhoods get housing and day care centers. They started new agencies to fill unmet needs, places like drop-in centers for runaway youth, residential group homes, shelters for battered women.

The '70s also saw mandates to "deinstitutionalize"—to empty out costly, ineffectual, and often abusive institutions for people with mental and



physical disabilities and place the occupants in community sites. Once out of the controlled environment of the institution, people often had a very hard time maintaining changes without their accustomed support. "The whole philosophy now is," says Quam, "if you can work with people in their home community—that's a big advantage."

The social upheaval felt throughout the country also hit the School of Social Work, where there was continual change in leadership during the decade of the '70s. Yet, while applications to social work programs dropped drastically in many colleges—more than 10 percent as a national average—the decrease was only 3.5 percent at the University.

Today, Quam says, the school accepts only one in five who apply for admission. Students tend to be in their early 30s and already have three to five years experience working with people. Many are midcareer changers, she says, such as ministers, or teachers who've discovered they like working with kids and their families better than working with kids in a classroom.

Some 3,000 students have earned master of social work degrees through the school, and 110 have earned the Ph. D. (University president C. Peter McGrath directed the school to drop its undergraduate programs in the mid '70s.) Since 1983 it has been part of the College of Human Ecology (formerly Home Economics).

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The child welfare program was an early specialty of the school. Later it became known as an incubator for leaders, producing more deans and directors than any other social work program.

Minnesota faculty and their research continue to influence the profession.

The textbook *Social Work Processes*, by faculty members Beulah Compton and Burt Galaway, first published in 1975, has shaped social work instruction. In its fifth edition this year, the book is known for promoting the idea of social work as a process that engages clients as equal participants in problem solving.

Jane Gilgun's pioneering work on the roots of violence in individuals has garnered national attention. She conducts in-depth interviews with convicted rapists and murderers and compares their life stories with those of a control group to learn how people's developmental paths differ. Her findings have been heard in testimony before the U. S. Congress.

An unusual "treatment" for juvenile offenders is the subject of research by Mark Umbreit. Called Victim Offender Mediation, the approach has juvenile criminals meet their victims face-to-face and agree on some form of restitution. Data show that in Minneapolis, Albuquerque, and Oakland (three of four cities studied), mediation programs produce outcomes considered fair by offenders and restitution agreements that are fulfilled within one year. Umbreit expands this research to cities in Canada and England this year.

Two developments at the end of 1992 set the course for new ventures for the school.

In December the school signed an agreement with the Moscow Business College to start a Russian-American school of social work. The Russians met the Minnesotans during an international conference held in the U. S. this summer and followed up quickly on the possibility of collaborating. Last month Quam was in Moscow, initiating a series of faculty and student exchanges that will be the first phase of the venture.

A \$250,000 grant from the Bush Foundation (matched by \$1.2 million from state and federal sources) supports training expressly to increase the presence of minorities in the profession. The situation now, Quam says, is that primarily white social workers are working with minority families. "The trust level isn't good," she says.

Because the grant was awarded in October, admission decisions had already been made for this year. "The really interesting thing about this is that next year we should have 34 minority students fully funded by the program. This University has never had that kind of support [for minority graduate students]," Quam says.

She leaves the clear impression that reports about this program and its graduates will be among the highlights of the school's 100th anniversary. ■



Excerpts from "Fringes," a memoir by Mildred Mudgett

My work at the University involved a great deal of travel on street-cars, for the first task was to educate the social agencies in the Twin Cities as to the University standards which would be required, if they were to accept students for field work in their agencies. The other part of the job was monthly conferences with the students. Before the end of the year, we realized that we needed to live nearer to the main campus.

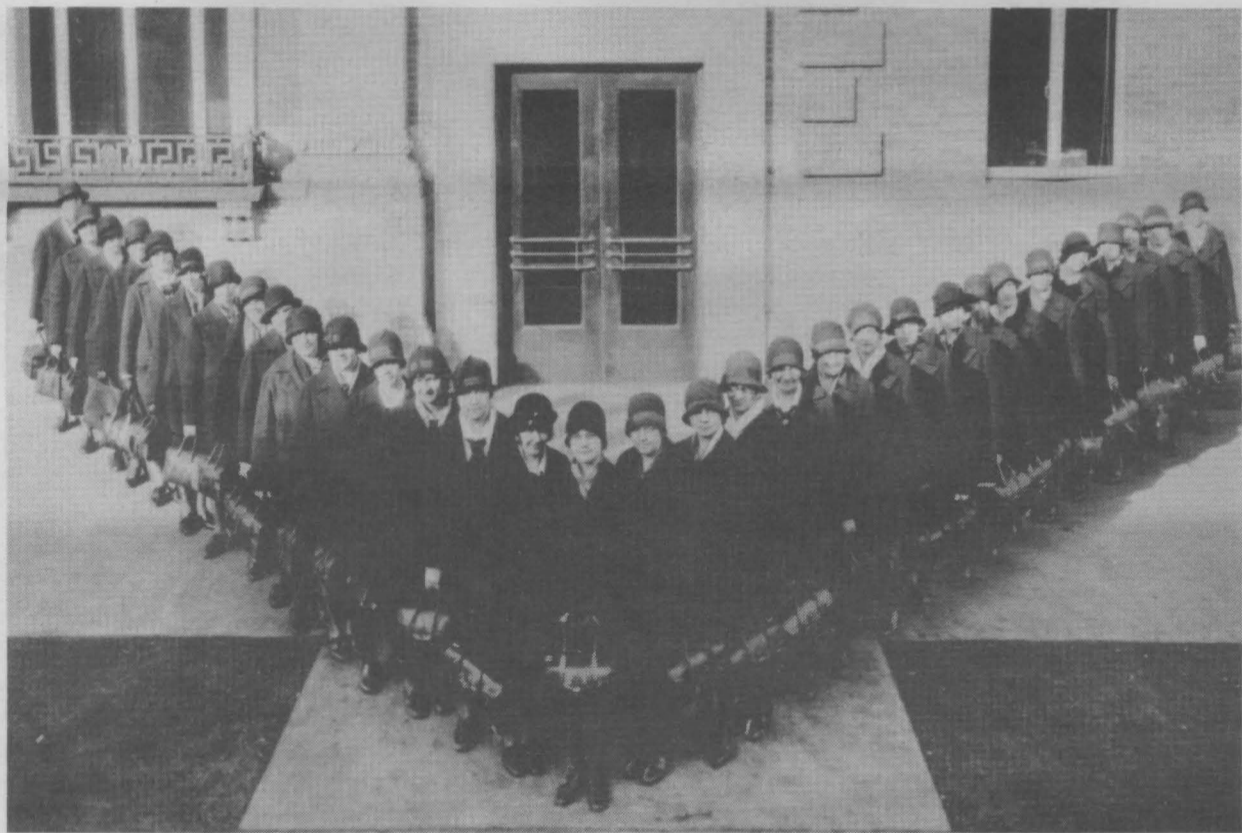
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...I would have to complete the work for my doctorate, now that I had a University position, and I had started work on a thesis....The choice of subject had been simple. Minnesota had established in 1917 a Children's Code, by passing 39 child welfare bills out of 41 submitted. Bill Hodson [later Commissioner of Welfare for New York City] was made director of the new Children's Bureau. He wanted an evaluation of the operation of the laws passed for the benefit of illegitimate children, and asked me to make the study. I had started already to read the 1200 plus case records.

(elsewhere in her memoirs, Mudgett wrote:) The most controversial laws had to do with the protection of illegitimate children. Quite naturally, there were several, if not many instances, where prominent men were involved. Hodson not only had to keep many records locked up in his own home because the locked files in the Capitol were not safe, but he always had to fight for the appropriation after the clock had been stopped at the close of the legislative session.

* *

On the professional side of our lives the year 1928-29 became difficult. For eight years, I have been the exception to the rule that faculty wives could not teach at the University, and President Coffman had been pestered by other wives asking why he let me do so and not them. That year both Bruce and I were recommended for increases in salary. Perhaps it was not surprising that Coffman replied, "There's \$600 and I don't care which one of the Mudgetts gets it. Only they should understand that together they can never have more than the equivalent of the salary for a full professor." It was evident that the time had come for me to look for another job.



The Depression overwhelmed the resources of what was essentially a private system. As the school's 75th anniversary booklet notes, in Hennepin County alone, demand for services rose 1,500 percent between 1929 and 1932. Faculty faced dual challenges: trying to keep students in school when job offers—and need—were great outside it, and trying to keep a focus on research in addition to training.

Kids Come First at Corner House



When an allegation of child sexual abuse is made, Minnesota law requires that two agencies—child protection services and police—respond. Often, doctors and lawyers are also called in. With so many players, an investigation can turn into a tug o' war, with the child in the middle.

That scenario is changing, thanks to Corner House in Minneapolis and University social work graduate Ann Ahlquist. Corner House is an independent center for evaluating claims of child abuse—"where the rubber meets the road," Ahlquist says. For other agencies, Corner House is *the* resource for credible, reliable expertise in interviewing children.

It is a place fiercely committed to putting children first, down to the least detail. Corner House is a house, on a residential street. Signs on the bathroom doors say "women and girls," "men and boys." Interviews are conducted in rooms with fat foam couches; they are videotaped and can be watched live on closed-circuit TVs on a different floor. "Our goal is to be helpful to the child, to allow the child to tell their story."

If Corner House seems an obvious solution to a difficult problem, it took until 1989—and two infamous child abuse cases—for the obvious to become reality.

Child sexual abuse trials in Scott County, Minnesota, and the McMartin preschool case in California drew widespread media attention in the mid '80s. A commission formed to review Minnesota's handling of such cases recommended establishing a "multi-agency evaluation site." Hennepin County was first to act on the idea, and Ahlquist, a child protection worker in the county, was a natural for the interviewer.

Nearly three in four of her cases involved sexual abuse—cases she felt unprepared to handle when she first began interviewing the children. "I was there. I didn't know. I wanted to know." When she couldn't find any resources, she produced her own, a booklet of what to do in five interview situations. Metro police departments began asking her to conduct videotaped interviews of children in their investigations. "We did our work pretty separately," Ahlquist says, "but we knew that we did it best when we did it together."

From the start Corner House was inundated with referrals, so Ahlquist developed a 40-hour class for child protection workers, police officers, and county attorneys. "Now it's become almost the hallmark of Corner House," she says. Each week eight professionals from around the state take the intensive course, which ends with each participant conducting a videotaped interview with a child.

"Not one social worker, cop, or county attorney attending the course has ever had any training in how to interview children," she says. "They don't know what they don't know when they come here." That she calls "unconscious incompetence" and says, "it's the beginning of learning."

The flip side of having those skills, she notes, is being skewered by attorneys questioning the interviewer's competence when the cases go to court. "It's hard to get people to stay in this business with that kind of scrutiny," she says, but it is a powerful motivator. "It makes you want to be excellent. And we aspire to excellence in this program.

"That's why I think it's so successful—it simply and truly meets a need. [Corner House] has widened the scope of social work. It's widened me—it's stretched me to maximum capacity." ■ P. L.

UNIVERSITY OF MINNESOTA

Glorious Campaign

“...one of the
glories
of this State.”

Garrison Keillor

By Geoff Gorvin

It all started so innocently. Garrison Keillor was returning to his alma mater last April as the guest speaker at the University of Minnesota Alumni Association's annual meeting.

Nobody, not even the alumni association, knew what Keillor would talk about. The only hint was the title of his speech, “The Culture of Minnesota.” Some expected tales of Lake Wobegon, the mythical town he created for his radio show, “A Prairie Home Companion;” others figured he might just talk off the cuff about nothing in particular. Few, if any, guessed that Keillor would spend 45 minutes praising the University, Minnesota's public education system, and the state's commitment to higher education, or that he would warn of the consequences of offering a second-rate public education.

Keillor's remarks were a pleasant surprise for the University, but more importantly, they became the basis for a full-blown, multimedia institutional ad campaign that targeted Minnesotans in every corner of the state.

Most of the credit for initiating the “Glory Campaign” goes to Bill Brady, assistant managing editor for University News Service. As Keillor spoke, “I kept hearing all these great sound bites,” he says. “I thought to myself, ‘We gotta be able to use this somehow.’”

Brady's initial idea was to use parts of the speech for public service announcements (PSAs), which are basically ads that radio and TV stations run at no charge but only when the stations have unsold advertising time, like in the middle of the night. Each year, the University produces PSAs around a central theme. The last two years, the theme was “...hats off to thee,” after a line in the “Minnesota Rouser.”

“We wanted to do a new PSA and we were looking for the magic bullet,” Brady says. “Nothing had really clicked until Keillor's speech.”

Brady started seeking permission to use segments of Keillor's speech. The trickiest part, Brady and his colleagues thought, would be getting permission from Keillor himself because he tends to be reserved and shuns publicity. But not only did Keillor permit the University to use his speech, he offered to help the University in any other way.

Brady and University Relations director Marcia Fluer then listened to the speech again to find phrases that would work for broadcast PSAs. The phrase that hit them like a box of rocks was, “The University is...one of the glories of this state,” the phrase that became the campaign theme.

Brady produced the TV PSAs with Janis Stallings of Media Resources. One of the problems they faced was that the only videotape of Keillor at the podium during his speech was made for the University's archives and had color that wouldn't reproduce well. Stallings suggested reproducing the footage of the speech in a textured, artsy, black-and-white format.

Footage of Keillor was woven into footage of University life that had been previously shot for a different promotional video. The audio was recordings of some of Keillor's comments with a soft piano version of the “Minnesota Rouser” as background.

By late July, Brady had drafts of six TV PSAs and showed them to Pat Kaszuba, University News Service managing editor. “These are too good to play at 3 a.m.,” she remembers saying. “We should make an ad campaign out of it.”

Within weeks, President Nils Hasselmo had seen the tapes, agreed that an ad campaign was in order, and decided that he would lead an effort to raise private money to fund the \$190,000 project. No public money or money raised for general purposes was used for the Glory Campaign.

Some of the biggest guns in the Twin Cities advertising and public relations industries were brought in as consultants, most on a pro bono basis. The University hired Mona Meyer McGrath & Gavin to create a logo, and Fallon McElligott donated its staff to buy media time, which involves determining when an ad runs on TV or radio.

Despite the level of involvement the ad campaign required, the University felt its timing and newsworthiness were important. That's why the University kept the campaign a secret until a week before it hit the airwaves and the newspapers. “We wanted to keep it under our hat until it broke because we wanted it to be news—and it was,” Kaszuba says.

The Glory Campaign kicked off November 15 after a week of positive news coverage by the Twin Cities media. “We timed it right after the presidential election,” Fluer says. “It turned out to be good timing for a feel-good campaign because everyone was sorta feeling good after the election.”

The print ads ran in 27 daily newspapers and one weekly paper statewide. TV stations in the Twin Cities, Duluth, and Rochester carried the ad, as did radio stations in the Twin Cities, Duluth, Crookston, Morris, Rochester, Alexandria, and affiliates of the Minnesota News Network. Nearly all of the TV and radio stations that aired the ads agreed to match the purchased time with free time.

The TV ads ran during prime programming, such as *60 Minutes*, *20/20*, the Timberwolves/Bulls basketball game, *Monday Night Football* in Duluth and *Northern Exposure* in Rochester. In all, the three-week campaign involved more than 1,000 ads that reached the average Minnesotan an estimated 11.1 times during the campaign.

The Glory Campaign eventually found its way onto merchandise as well: T-shirts, sweatshirts, mugs, buttons, magnets, and posters. Keillor's speech is also available on video and audio tapes.

Proceeds from sales will go back into a fund for future ad campaigns because you never know when the University will get hit with another magic bullet. ■

Geoff Gorvin is a writer in University News Service on the Twin Cities campus.

UNIVERSITY OF MINNESOTA



Sheila Gilman is a research fellow at the Center for the Study of Public Policy at the University of Minnesota.

(Aero)dynamic Professor

By Deane Morrison

It started out as an ordinary night at the movies, if any night can be called ordinary in a city like divided Berlin. Amy Alving, then a postdoctoral fellow at the Technical University in West Berlin, and her friends left the theater at 9 or 10, only to find themselves in a crowd scene worthy of a Hollywood epic. Cars and people flooded the streets, generating a rush of business for the bars and restaurants. Seeing that they would never get into one, Alving and her friends decided to call it a night.

"We didn't realize the cars and people were from East Berlin," she says.

"She's one of a group of talented young faculty members hired in IT in the last few years who ensure the continuing high quality of our college."

By the next night, she had found out. The revelers had defeated the big gray monster and breached the defenses of the East, a case of will over wall. Alving joined the second-night crowd and climbed the wall near the Brandenburg Gate, where she danced with the rest of the deliriously happy throng.

Shortly after the eventful fall of '89, Alving moved to the Twin Cities, as an assistant professor of aerospace engineering and mechanics at the University, specializing in fluid mechanics and turbulence.

"When the Germans asked where I'd go if I got a real job, I said the west or the east coast," says Alving, who was born in Florida, grew up in Chevy Chase, Maryland, and received undergraduate and graduate degrees at Stanford and Princeton, respectively. "But I read great things about Minneapolis, so I applied here, and now I feel very much at home."

Part of the reason may stem from Alving's ability to carve out her own niche in the research world. "One of her strongest features is her mathematical and analytical ability, and here she really shines," says Alexander Smits, her doctoral adviser at Princeton. "She is also extremely adept at designing complicated data acquisition and control equipment. In Berlin she established a new experimental program, and now that she is at Minnesota, she has already demonstrated success in the difficult task of establishing a first-class funded research program."

In scarcely three years at the University, Alving has garnered an impressive string of grants and awards, including a five-year, \$500,000 fellowship from the David and Lucile Packard Foundation of California. Since Packard taps only 20 fellows from the ranks of young U.S. science and engineering professors each year, the award puts Alving in enviable company. But not in an ivory tower. Alving's willingness to share her talents comes through clearly in the persistent rave reviews for her teaching, as well as in a Mondale Fellowship in the Humphrey Institute of Public Affairs.

"My colleagues and I were delighted that professor Alving decided to continue her career in fluid mechanics in Minnesota," says Gordon Beavers, acting dean of the Institute of Technology. "She's one of a group of talented young faculty members hired in IT in the last few years who ensure the continuing high quality of our college."

Devoted as she is to engineering, Alving picked her career partly because it wasn't medicine.

"My family on my father's side is all doctors," she says. "My dad, uncle, grandfather, great-grandfather, and sister are M.D.'s. My mother got a physician's assistant degree. The dinner-table conversation was always about medicine, and I thought they were the most boring conversations ever. I wanted to do something different."

Alving's chosen specialty—turbulence—has a well-deserved reputation for posing tough problems. Fluid mechanics could be blood moving through tiny capillaries, air flowing over a wing to lift a bird or a 747, a torpedo spiraling its way toward an aircraft carrier, or even the flares of hot gas thrown up thousands of

miles from the surface of the Sun. These are the playgrounds of chaos, where the tiniest quirk can, if undetected, lead to such an unexpected outcome that the entire system becomes unpredictable, as weather forecasters are reminded only too often.

"We know all the equations that govern the behavior of fluids, but that doesn't mean we can describe the motions of fluid in every single case," Alving says. "If we change the shape of a wing or a boat hull slightly, we may change the air- or water-flow pattern drastically."

Take sailing, for example. Picture a ship slicing through a calm sea, its bow flanked by neat, smooth layers of water. But the smoothness doesn't extend very far. As the ship passes, water behind the bow begins to churn and bubble in disorganized fashion, a state of affairs that contributes to drag. "It's been useful to think of this kind of disorder in terms of vortices, which are tornadolike swirls of water that form along the hull," says Alving. When these spinning tubes of water interact with each other, they create more disorder and more drag.

To reduce these effects, 3M has manufactured riblets—microscopic grooves that run lengthwise in the skin of a hull. Riblets reduce drag, perhaps by trapping some of the vortices and keeping them from interfering with their neighbors. But can they work on another ship's surface, namely a sail? Alving, along with a former 3M engineer, is tackling that question by studying the performance of sails covered with riblets.

"We're trying to get the right spacing of the riblets to decrease drag," she says. Using her department's wind tunnel, Alving looks for arrangements of riblets that provide the most lift and the least drag on sails when the wind is turned on. How riblets will affect lift—the force that makes airplanes rise and allows sailboats to tack into the wind—on a curved surface like a sail remains to be seen. Whatever the outcome, the study breaks new ground in research on sail design and is sure to interest sailing buffs around the world. It also fits Alving's idea of what makes engineering fun.

"Engineering is a spectrum from the completely theoretical to the nuts and bolts," she says. "I'm interested in the middle ground, which uses theory to solve practical problems. That's what I like to do most."

But her interests also extend deeper, to such fundamental questions as, What happens to a drop of fluid as it rushes along a wall and suddenly runs into—the unexpected?

"Normally, the layer of fluid right next to a wall doesn't move," she says. So vortices usually swirl around and interact with their neighbors while sliding over a stationary layer of fluid. Alving's idea is to change this by moving a portion of the wind tunnel wall, sliding it along in the direction of air flow. "The interesting thing will be to see what happens when the vortices suddenly find the fluid layer next to the wall moving." If it sounds complicated, it is, but the work will tell her something about the basic nature of fluids, and other researchers have already investigated how moving surfaces can, for example, improve truck design.

"Scientists have found that spinning cylinders at the front and back of big, square truck bodies can decrease fuel consumption," Alving says. The cylinders, aligned along the front and back edges of the body, roll with the air flow. "They seem to help the air negotiate the sharp curves of the truck."

She's also studying what goes on when two fluids flow over a surface at once; for example, when a plane flies through a storm. "It's been observed that in a heavy rain, airplane wings get coated with a thin layer of water, and this measurably decreases the lift on the wing as a whole," Alving explains. "We don't understand why this happens. In my lab we're studying this on a smaller, localized scale by concentrating on the interaction between the water and the air."

Apart from her own research, Alving has taken a keen interest in how science is done at home and abroad, and how public policy can make a difference. In Germany she saw vivid examples of how university science can get bogged down by government red tape.

"The final [hiring] decisions there are made by the government," says Alving. "I heard a rumor that it took 10 years from the time one faculty position was created to the time it was finally filled." In the United States, no job candidate would wait that long for the paperwork to come through. But German researchers enjoy less mobility, she says, so a good person is less likely to be snapped up by a rival outfit in the meantime.

"Engineering is a spectrum from the completely theoretical to the nuts and bolts. I'm interested in the middle ground, which uses theory to solve practical problems. That's what I like to do most."

Her stint in Germany also brought home to Alving the precarious balance of many European nations, poised at the painful crossroads where old meets new. The old order was apparent in friends' stories of the monotonous East German existence. Constantly exposed to images of the good life through West German TV, the Easterners faced daily deprivation.

"You could always tell when the stores got bananas," Alving recalls. "You'd see people leaving the stores carrying as many as they could. When the

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Hampl on Hampl

By Richard Broderick

**Author and English professor
Patricia Hampl talks about her
latest book**

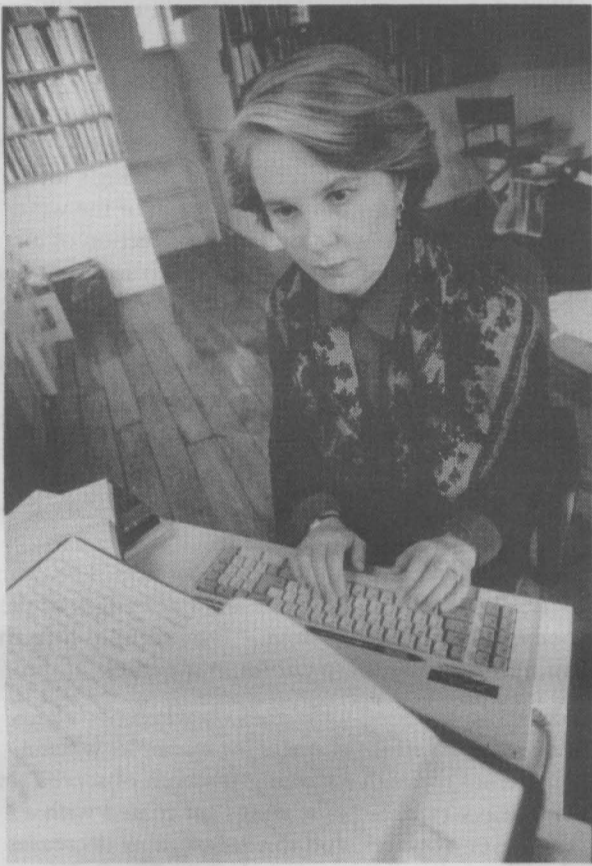


photo: TOM FOLEY

Patricia Hampl, a professor in the Department of English and Literature, is the author of a best-selling memoir, *A Romantic Education*, and several collections of poetry. She is a recipient of a prestigious MacArthur Fellowship as well as numerous other grants and awards.

Her newest book, *Virgin Time: In Search of the Contemplative Life*, was published this fall to praise and criticism for its reflections on contemporary monastic experience, Hampl's Catholic upbringing, loss of faith, and renewed interest in her religious background. In writing the book, Hampl made several "pilgrimages," as she describes them, to Assisi, the shrine of Our Lady of Fatima, and contemplative communities in the U.S.

In December, a couple of weeks before Hampl delivered the Graduate School commencement address, *Update* interviewed the author in her home on St. Paul's Cathedral Hill.

UPDATE: *What did you intend the book to be when you started out?*

Hampl: This book had its genesis in a novel that never got written, which began as a story about a friendship between two girls. I originally wanted them to be like two sisters but for various reasons didn't want them to be sisters but to have that feeling. So I placed them in a Catholic girls' school, although the book was to take place much later and there was to be betrayal and love and sex and good stuff like that. But as I began establishing the world they had come from I became so fascinated by it that the novel started to break off and wither and their background got brighter and more intriguing.

I went in the direction of the energy and the novel blew away and doesn't interest me now. So the book had its roots in fiction. Beyond that, the other issue that interested me—and this has to do with my background in poetry—is the whole human experience of wonder, that response to the world that is "ah." Not the "ah-hah!" response, which is intellectual—"Ah-hah! I figured it out!"—but the wordless response that is often the human response to something incredible.

That led me to consider the contemplative experience. And because of my own personal background, which is Catholic, that is the context in which I pursued it.

UPDATE: *When you started going on these pilgrimages, did you feel any diffidence about writing this kind of book in this day and age?*

Hampl: I knew I would get myself in hot water for writing it. This is not a subject that is greeted warmly in the late 20th century. But there is a certain perversity in every writer. I knew I had a subject and there was part of me that thought, Let's see what's going to happen, it's time I got in some trouble. The only thing I wanted to make sure of was that I wrote the book I wanted to write, because I knew the response to it would be complicated, perhaps negative, perhaps really hostile.

UPDATE: *Have you had really hostile response?*

Hampl: I have had the best and the worst response to this book of any book I've published. There are people who have understood *Virgin Time* beyond anything I would have expected. You can't expect people to share your vision as a writer. You can only hope that certain parts of it speak for them. One reviewer, Dan Cryer, at *Newsday*, made me feel so understood and honored by his reading. And I get interesting letters from readers. Of all my books this one seems to have found its readers faster than any other.

UPDATE: *How long did you work on it?*

Hampl: From gleam in the eye to holding the book in my hand, it was probably seven years—but I wrote two other books in that period. In addition, I did a lot of traveling for this book, a lot more than it appears. It looks like I went to Assisi once, but I went five or six separate years. I collapsed or telescoped experiences from different trips and also left out whole years in order to make a narrative. It appears I went to Rosethorn [her pseudonym for a contemplative community in Northern California] once, but in fact I went two different years. I had lots of experience and lots of research I didn't use, but in some way that became the ground I could stand on even though I don't speak about it in the book.

UPDATE: *One book review editor was recently quoted as saying he was "awash" in books about spirituality. Do you have any thoughts on why there should be this interest in spiritual matters now?*

Hampl: I think this has been an instinct for some time. When you look back to the '60s, you see a whole generation that defined itself in part in spiritual terms. People did not read Allen Ginsberg back then because he was smoking dope but because he was meditating and teaching people what it meant to have a mantra. Once people experienced the collapse of the power of organized religion in their lives—which my generation certainly did—the human impulses that lay beneath those religions did not disappear. So you had a lot of people making trips to ashrams and going to gurus—all those experiences we associate with pop culture.

But you have to remember, books like *Pilgrim at Tinker Creek* and other books that touch on spirituality have been around for 20, 25 years. Maybe one difference today from back then is that some reviews of *Virgin Time* felt the predictable part is that I would have rejected my Catholic upbringing but the unpredictable part was that I went back into that world to seek again.

UPDATE: *There is a tension in the book between aesthetic and spiritual values—sometimes they are congruent, sometimes in conflict. What do you see as the relationship between aesthetic values and spiritual values, and is there a way in which the "merely" aesthetic can get in the way of the spiritual?*

Hampl: The whole question of beauty and what it means is something that interests me a lot. I wrote about it in *A Romantic Education*. I wouldn't be surprised if it surfaced here, although I wasn't conscious of it. At one point I say it was beautiful to stand in a certain monastery and listen to the antiphonal recitation of the Office. But it wasn't the beauty that kept me there; it was the sense of rightness. The sense of a kind of equilibrium and balance.

Aesthetic values can be overplayed. At the same time we are led to love what is beautiful, so it can be a useful guide. But you can't just be an esthete or you turn into a ninny.

UPDATE: *Still, it seems that aesthetic matters have their own valuation and spiritual matters have their own system and at times those systems overlap.*

Hampl: I think it is interesting that most people who devote themselves to the contemplative life are characterized by simplicity. That is the aesthetic of choice: simplicity. And they are characterized by a capacity to withhold judgment in the face of the ugly, the awful, the evil. They have a tendency to be detached—not passionless, quite the opposite—just capable of allowing the world to exist as it does, in all its contradictions, which include astonishing beauty and frightful evil.

Monasticism is a system of encounter with reality rather than a system of the construction of forms. As an artist I am in the business of constructing forms. That's a somewhat, perhaps radically, different thing from what contemplatives are about. They are in the business of being harbingers or bellwethers or experiencers of ultimate reality. They're a sniff in the wind for the real. That's perhaps why their aesthetic is so simple: not because they are otherworldly but because they need simplicity to create a ground that will receive the universe's complexity. They need to be simple so that the world can be complex to them and within them.

UPDATE: *In Virgin Time you define a romantic sensibility as one in which life is based upon desire rather than a sense of duty, a life in which one is drawn forward by what one desires rather than pushed by what one is obliged to do. Yet in the book, one thing that comes across strongly is the degree to which you yourself are very dutiful, as a writer. Your notebook is always there, you are always taking down things. Did you feel that duty to your writing stood in the way of being able to immerse yourself in what was going on around you?*

HAMPL: I hit on the idea of emphasizing that notebook as a way of poking fun at myself, and of creating this faintly ludicrous figure running after this evanescent experience with her butterfly net. Remember, my character in the book is, after all, a protagonist. The notebook is a real thing, writers really use them, but at the same time it's a very inappropriate item to be dragging around into this kind of experience. But I don't have anything else to drag around. I am a writer. That's who I am. I'm not ultimately going in there as they are.

UPDATE: *You mean you're not going to become a contemplative.*

HAMPL: Right. I do, however, believe that each person in the world can be and inevitably is contemplative. But since I'm not entering that life I wanted to show what it is like to pursue it but at the same time be unable to find it because of this habitual effort to express it in language. I was trying to show in a lighthearted way how ludicrous it is for a writer to be trying to describe this life.

UPDATE: *I'm wondering if at any time in the seven years you worked on this you ever really felt that you "got it". That you had really lost yourself and were receiving ultimate reality in some unmediated way.*

HAMPL: In the book, I give an example of that kind of mystical experience from childhood. That was about as good as I got, I'm afraid, the big mystical experience, which, of course, was not really a mystical experience at all.

But mystical experience isn't so much what the book is about. It's about prayer, the contemplative life, and all the things we're talking about. It's not about seeking what in Eastern religions is called "nirvana," or enlightenment. Yet in a way maybe you're right. Why else put that incident [describing my childhood experience] at the end of the book?

UPDATE: *At one point in Virgin Time, one of your fellow pilgrims at Assisi makes a comment about the "other religion," that of poets. Can you comment on what poetry has in common with the religious impulse?*

HAMPL: In the Western tradition, we are wedded to the word. It's no anomaly that Christianity talks about the Word made Flesh. That's a pretty weird thing to say when you think about it. Monastic life is based on something that's called the Office, the liturgy of the hours. That liturgy is based largely on poetry—the psalms. Monks essentially run through the wheel of the psalms, seasonally and over a series of cycles that are quite complexly organized. Their thrice daily immersion in poetry is a profound experience. Imagine, devoting your life every day—at seven in the morning, at noon, and then at seven in the evening—to this great, anonymous, ancient poetry.

You see, they don't devote themselves to going to Mass three times a day. No. Their life centers on the cycle of the Office. It has to do with the seasons, with being grounded in the cycle of the seasons, or weeks, or hours, taking seriously that there is a morning and a night. Again, a simple aesthetic. An organizational principle so simple it seems nonexistent to most people, yet monastic people devote their lives to it. In some way that's very hard to explain, they become poetry. I try to talk about that in the book. What I wanted to get across is how these people, by making this choice, are living poetry. When I realized that, it took my breath away.

UPDATE: *They are poetry in the sense that poetry is symbol and image and deals with the ineffable, and what monastics do is ineffable and their lives symbolic?*

HAMPL: Exactly. If, of course, you live in a world where the word "symbol" sounds like it was made up in the English department, then that is going to sound rather silly.

UPDATE: *It seems that the Office and the monastic regimen in general are trying to create time that is outside historical time, outside the dailiness of life. With Gregorian chant, for example, the purpose seems to be to move the chanters into a sacred place. The words themselves are sacred but they are also a way of entering into a sacred state, a doorway out of profane and into sacred time. Is that what the cycle and repetition and constant prayer are all about?*

HAMPL: Yes, and also the recognition of the sanctity of every instant in history.

UPDATE: *Poetry itself is exactly that, isn't it, an attempt to recognize what is sacred and eternal?*

HAMPL: Also what is immediate—the immediacy and dumbness and smallness of our lives has an astonishing sacredness at its core. That is what contemplatives are constantly trying to experience, again and again. When mystics talk about the "dark night of the soul," they are describing the dry periods when they are unable to experience that sacredness. All this makes even more poignant the faithfulness of monastics in following the liturgy of hours.

At this time in our social history—when our own religious system has ceased to exercise much political or social power—it's of great interest to reinvestigate the sources of our tradition. The cultural creations and discoveries of the monastic life are of extraordinary value.

I believe that the rediscovery of their spiritual and religious traditions among Native Americans needs to be done by all of us with our own traditions. Ironically, if we would pay our own cultural heritage the respect we keep reminding ourselves to display toward the cultural traditions of others, we might possibly become more genuinely respectful of other cultures. Too often, I hear people talk about how much they respect Indian religion while being very eager to remind everyone that, of course, they personally don't have anything to do with organized religion. I understand why people say that, but at the same time I find a real duplicity there, a one-upmanship I don't trust. I trust the Indians,

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Pilgrim's Progress

In "Virgin Time," Hampl sets off from her Minnesota home to Old-World sacred space (Assisi, Lourdes) and New (California) in pursuit of perspective on her unsettled religious life. After a rebellious adolescence and agnostic adulthood, she hasn't come quite full circle back to the orthodox Catholicism of her girlhood. But in her mid-40s, she can't help being borne along on wings of wonder. With the guidance of Sister Mary Madonna (a dear friend whom Hampl calls Donnie), she is irresistibly drawn to the life of the spirit, and the timeless, unfathomable world of prayer...

Despite Hampl's assertion early on that she usually confuses belief in God with a mere opinion, "as if God were a candidate who may or may not get the vote of my focus group," she strikes this observer as profoundly religious. She herself concludes that Catholicism "had ceased to be the imprisoning cell of sterilized thought and repressive habit...It became, very simply, my most intimate past."

At the age of 5, Hampl explains to Andre, an elderly Flemish monk, she experienced a strange, out-of-body connection with the objects about her. The old man, in a rebuke worthy of a Zen master, is unconvinced that she has touched the divine. For the most transcendent experience, he emphasizes, simply cannot be put into words.

Granting that, Hampl's skill with the language remains outsized. Joining generosity of spirit with broad intelligence, her words unerringly capture the essence of her subject. You don't have to care one whit for religion to appreciate her carefully sculpted prose. "It's how I see my job, describing things," she wrote in "Spillville." And how she describes in "Virgin Time"!

—Excerpted from a review by Dan Cryer in *Newsday*, August 2, 1992.

Information Please

Minnesota small businesses get the answers they need

By Maureen Smith

You're an entrepreneur with a great idea. If it's as good as you think it is, it will mean profits for your company, jobs for your community, and a valuable product for the public.

The faster you get your product to market, the better your chances for success. But then you run into a stumbling block. A strip of metal in your product is corroding. You need expert technical advice, maybe from a professor whose research is on corrosion.

Minnesota Project Outreach (MPO) was created for people like you. Its goal is to help Minnesota entrepreneurs and small businesses by providing rapid, authoritative answers to technical and business questions. The first link is by computer, but before you get too far you're almost sure to be talking by phone to a person, asking your questions and getting the answers you need.

Now the Project Outreach model, started at the University of Minnesota, is being copied around the country and may become the heart of a national effort to aid small businesses. In a book published during their campaign, President Bill Clinton and Vice President Al Gore proposed creating a small business Technical Extension Service, "based on the successful Agriculture Extension and Minnesota's proven Project Outreach program, to give small businesses easy access to technical expertise."

The idea for MPO began with Tony Potami, associate vice president for research and technology transfer, who kept hearing from small companies "that getting technical information out of the University was the major problem they faced in trying to deal with us." Before the University could really help these companies, Potami decided, "we needed to develop a system they could use at their convenience to find out exactly what we had to offer."

MPO began as a collaboration by the University, the state, and the Greater Minnesota Corporation, with a third of the funding from each. Now the University and the state have had to cut their funding, and all the money comes from Minnesota Technology, Inc., the successor to the Greater Minnesota Corporation. "The University created it, and in the last couple of years it's sort of lost its University of Minnesota signature," Potami says. "We've got to keep saying we started it and be proud of it. Everyone talks about the information age and knowledge transfer, and we created the first program of some magnitude."

The MPO service is provided by Teltech Resource Network Corporation (Teltech), a private company located in Bloomington, Minnesota. Big businesses were already getting answers to their technical questions through Teltech. What MPO does is

make the same information available and affordable to small- and medium-sized companies. "Some people say we're improving Teltech's business," Potami says. "That's great. They're a Minnesota company. We were fortunate to have the national leader in this field here in Minnesota."

Small companies can benefit especially from the service, says Joe Shuster, chairman of Teltech. "They represent the greatest growth in new jobs, but they're protecting cash so vigorously. They're subject to the problem of not knowing what they don't know. They don't know that there's a world of knowledge out there to help them."

Peter Coyle, director of government markets at Teltech, spent three years as staff director for the Senate Small Business Committee in Washington, D.C.

"It's an absolute proven catalyst for economic growth, and the University was the initiator of the whole program."

"One of the comments that was a constant from the small companies was that they feel they're out of the loop, particularly the rural companies," he says. With MPO the small rural companies "can be as competitive as either their larger cousins or their big-city cousins," Coyle says. "The knowledge explosion isn't going to pass by Fairmont, Minnesota. It isn't going to pass by International Falls. There is no other system in the world that provides that kind of capability that I know of."

"It's an absolute proven catalyst for economic growth," Shuster says, "and the University was the initiator of the whole program. The University of Minnesota is a strong, strong supporter of it, still is."

Of the 10,000 scientific and technical experts in the MPO network, 261 are University of Minnesota faculty. "We've tried to steer the companies to the Minnesota experts whenever we can," Coyle says. "Ultimately we tell them, we'll give you access to the best. They have to decide what's best for them."

"If you're in Deer River, Minnesota, running a little company, you could call a professor at Stanford," Potami says. "This is what large companies can do with or without Teltech."

Three of the main services offered by MPO are the Science and Technology Expert Network ("direct and confidential access to thousands of hand-picked experts to act as your personal assistants," as Shuster describes it), literature searches, and vendor searches. "Quickly locating vendors of difficult-to-find products and services is very important to small companies," Shuster says.

Jim Hanley, founder of the Hanley Company in Minnetonka, Minnesota, turned to the expert network when he was developing a new product to combat allergies by killing mold and dust found in the air. He wasn't sure how long his machine would

have to hold air particles containing mold before rendering them harmless.

*Through MPO, Hanley was connected with Robert Brambl, professor of plant biology at the University. "He was a very, very nice fellow," Hanley says. "He's the mold specialist, and he told me he loves to talk about molds." Brambl confirmed Hanley's hunch that his machine would only need to hold the airborne mold momentarily to destroy it.

Brambl's contribution trimmed a month off the development time on the project and saved the Hanley Company several thousand dollars. "I possibly could have found the same information eventually, but it would have taken much longer and cost much more," Hanley says.

Not all MPO users are looking for technical information. Larry Wannebo, account manager at Nelson Graphics Design, a small advertising agency in Brainerd-Baxter, Minnesota, has turned to MPO primarily for marketing and strategic purposes, using the literature search service for easy access to previously published studies. "We helped a Minnesota distributor of food products introduce and target a pizza product to supermarkets nationally. We helped a Minnesota vending machine manufacturer introduce a new soft-freeze vending machine," Wannebo says. For his MPO research, Wannebo goes to Brainerd Technical College, one of 73 public access sites across the state.

The one time Wannebo used the expert network, he was referred to Akshay Rao, an expert in consumer behavior from the University. "He took a lot of time to talk to us," Wannebo says, and "he called me back the same day."

The experts are paid a small fee by Teltech for answering each telephone question and are required by contract to respond to the request within 24 hours and to hold each exchange in confidence. They sign a promise not to use what they learn in their own work or pass it on to anyone else. An average client-expert interaction consists of two telephone conversations lasting a total of 30 minutes.

"This is a database system, but it all turns out to be interaction with people," Potami says. "You almost always end up with somebody, either somebody at Teltech or a consultant. You're talking back and forth. It is a really effective way of transferring knowledge. It's people doing it."

"Over the phone you tell the searcher what you're looking for as you see the information scrolled on the screen. We can direct the search much more effectively than if we just sent in a request," says Kip Thacker of Lifecore Biomedical. This Chaska, Minnesota, company manufactures a substance called hyaluronic acid, used in cataract surgery, and is developing a line of dental implants. Lifecore has used both the expert network and the literature search service extensively.



photo: TOM FOLEY

MPO receives about 45 inquiries a day, Shuster says, ticking off just a few examples that were recorded one day: design of hydrostatic drives, patents on carbon monoxide sensors, material fatigue modeling, Swedish standards on video display terminals, power takeoff standards for trucks, effect of helium on materials, abrasion and tear resistance of rubber, incentive programs for innovation.

With an identification number, businesses can gain access to MPO services by dialing a toll-free number. In addition, 404 companies involved in manufacturing or developing a product with growth potential received charter subscriptions and can connect to MPO by modem at their own work sites.

Businesses using MPO tend to be small and young, and more than 600 businesses located outside the

Twin Cities have used MPO services. Companies outside the Twin Cities represent nearly two thirds of the users at public access sites and half of the charter subscribers.

"It's performing beyond

anyone's expectation.

There's such a pent-up need

for quick information."

All charter subscribers received the service free for the first year. Those with annual sales under \$2 million could renew at no charge, those with sales between \$2 million and \$5 million had to pay \$800 to renew, and those with sales between \$5 million and \$10 million had to pay \$1,600. One measure of client satisfaction is that 94 percent of all subscribers chose to renew for a second year, and 67 of the 80 companies that came up for renewal and had to pay decided to renew.

Another measure is a survey of MPO charter subscribers conducted by Jonathan Baron, staff counsel to the U.S. House of Representatives Committee on

Small Business, who selected 30 of the companies at random and heard from 29 of them. All described the quality of MPO service as "good" to "excellent," and 97 percent described MPO as "valuable" or "extremely valuable" to their company.

Even more impressive were the clients' estimates of increased current and future profits as a result of MPO services. Four companies reported more than a \$1 million increase. The average (mean) estimate was \$770,000, and the median was \$55,000.

"We're not talking about something that will pay 10 percent or 20 percent. We're talking about a 20-to-1 payback," Shuster says. "It's enormous. It's performing beyond anyone's expectation. There's such a pent-up need for quick information." ■

Companies wanting to learn more about how to become a Project Outreach user can call the MPO Help Staff at 1-800-338-7005 (outside the Twin Cities) or 851-7750 (in the metro area).

(Aero)dynamic Professor

(continued from page 9)

wall came down, the East Germans wanted tropical fruits—they looked for pineapples, mangoes, and so on. American friends living in East Berlin had a telephone, but not everybody did, and they didn't always work. Actually, we think they got one so fast because the Stasi [the East German security police] wanted to be able to listen to their phone conversations."

When her parents visited in January 1989, the three Alvings found themselves caught, literally, in the clash between old and new during a visit to Prague, Czechoslovakia.

"Back in January 1969, a young man [21-year-old Jan Palach] set himself on fire to protest the Soviet invasion," Alving recalls. "We didn't realize we were visiting during the 20th anniversary of his death. There was a protest in his memory. We were leaving a castle across the Danube from the old town and saw a lot of people milling around there. When we got down into the town we saw militia in riot gear, with water cannons and tanks. We were in the middle of it. It was an amazing show of defiance. My mother dashed into a doorway to avoid being hit by a water cannon. I saw four policemen jump out of a little car, grab a protester and stuff him in, and speed off. It was just like a spy movie. I saw both democracy—the new world—and the crushing of it—the old world.

"In 1989 I also saw the last May Day parade with Erich Honecker reviewing the East German workers. A friend, who was a reporter for the *Wall Street Journal*, and I wanted to get a look at him, so we crashed the parade and marched past the reviewing stand. On the West German side of the wall, the celebrations were different. Every May 1, skinheads would pick a fight with the police. Why? Because they're anarchists. Recently, the world saw another example of these anarchists at work. They disrupted the demonstration for tolerance in Berlin last fall. Three hundred thousand people were there in support of tolerance, but the few hundred skinheads got the publicity."

Alving had a small difficulty with German police herself once, partly on account of a lapse in the vaunted German efficiency.

"I was trying to be super law-abiding, but I forgot about driver's licenses because I didn't own a car," she says. "But after you live there a year, you must have a German license. After living there about 15 months, I got a rental car and drove with some friends from Berlin to the West German border. Border guards pulled us over and asked for my license. The people at the rental agency must have overlooked the fact that I didn't have a German license. I got a hefty fine."

In August Alving received a letter from Geri Joseph, director of the Mondale Policy Forum in the Humphrey Institute of Public Affairs, inviting her to apply to become a Mondale Fellow for the 1992-93 program year. She did, and soon became one of 30 "emerging leaders," as participants are called, to delve into public policy issues through the forum, set up in 1990 by former Vice President Walter Mondale and the institute. She'll attend conferences at the institute in February and May, the first examining the social contract between Americans and their government, the second focusing on the fate of American workers in the global economy. Even better, she might also attend a few conferences on the road.

"They may send all 30 Fellows to Germany for a week this summer," Alving says with obvious relish. "The point will be to talk about education, the health care setup, and national service in Germany, which is usually done before college age."

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A long-running public debate in the United States concerns how science can be better taught. As a teacher, Alving has become acutely aware of the need to do it well, not just because students deserve it but for the sake of national competitiveness. She put that conviction into practice during the past academic year, when she took part in the University's Bush Program in Teaching Excellence.

"It's an outstanding attempt by the University to help its newest faculty members find out how to become good teachers early in their careers," Alving says. It matches young faculty members with older "resource teachers" who have been recognized for classroom excellence. Each resource teacher works with five newcomers, all from outside his or her field. The lack of common ground keeps the talk focused squarely on teaching *per se* rather than slipping into a discussion of subject matter.

Working with Terry Collins, a professor of writing and the humanities in General College, Alving got some pointers on how to get students more involved in their own learning. As she puts it, the experience reinforced the reason to have a teacher at all, which is to give students something different from what they get from a book.

"Terry pointed out that when teachers ask questions they often don't give students enough time to answer. Terry watched me ask a question once and timed how long it took them to respond, and encouraged me not to be afraid to take the time to let them think."

In the view of Toni McNaron, English professor and coordinator of the Bush program, Alving was among the most active participants.

"The fact that she's in aerospace engineering and mechanics makes her of special value to us for two reasons. First, scientists often think new teaching techniques can't be applied in their fields because of the heavy content. But she cuts against this kind of thinking and uses new methods besides lectures and memorization—methods like active and cooperative learning. Second, her resource teacher recommended her to be among six out of 50 participants who went to a daylong retreat in June to tell the people running the Bush program what was good about it and what wasn't."

As Collins sees it, Alving "got outside the trap that too many faculty fall into, that is, they teach the way they were taught." Instead, she was willing to take risks and do unconventional things like stopping in the middle of teaching a class of 120 students and asking if the complex material was making sense. "I talked to several of her students, and they told me she was doing a great job," Collins says.

When she was going through college and graduate school, Alving never paid much attention to the fact that she was one of few women in her field. As a teacher, however, she especially tries to encourage female students. She now has four working on projects in her laboratory.

The next two years may find Alving working more closely than ever with students doing projects. The Graduate School has awarded her one of its 10 annual McKnight-Land Grant Professorships, which provide \$16,500 a year for two years. The second year, 1994-95, she is eligible for a research leave, a chance to trade formal teaching for the more intense milieu of one-on-one explorations with students in the laboratory. It will give her more time to shape the way engineering students think about their work and, more fundamentally, about how all knowledge is gained—a perspective she tries hard to instill.

"My advice to students is always to ask, How do you know?" she explains. "In any endeavor, not just scientific knowledge, how do we know anything is true? I want my students to be prepared for the real world, where they'll have to decide for themselves whether they've solved a problem. They need to learn to rely on themselves, because the universe doesn't come with an operator's manual." ■

The Rising Tide

(continued from page 3)

alternative source of financial support for undergraduate students with financial needs.

Different positions taken by the public and the private schools are understandable. Advocates of the public systems say the proposal would represent a transfer of funds from the public to the private institutions. The private colleges support the proposal because more financial aid would be available to private college students and the difference between tuition at private colleges and at public institutions would be smaller.

One approach to paying for higher education that hasn't worked, leaders of all the systems say, has been the federal government's increasing reliance on loans instead of scholarships. "Families will not tolerate the debt burden that the federal government finds acceptable," researcher Brian Zucker said when the "Ways and Means" report was released.

Low-income students in particular will not go to college if the only help available to them is loans, Hasselmo says. "These are students from a world where loans are scary," he says. University leaders and others have lobbied heavily with the federal government, but until now without success.

"A large number of us have been shouting in Washington for the last 10 or 12 years and not getting a good ear," says David Berg, assistant to the president. "The new administration offers a new opportunity."

The problem is a reduction in the public investment in higher education, both at the state and federal levels, Hasselmo says. "The cost squeeze is familiar to all of us," he says, to students and their families and to colleges and universities. "The cost of education has outstripped inflationary increases." ■ M.S.

Hampl on Hampl

(continued from page 11)

I trust their reliance on a spiritual tradition, and I want to find out what mine is, too. I want to have the humility and the interest and the fascination to discover some of the secrets of our own cultural history. I tell people that if you are interested in the future, study the Middle Ages, because I think a lot of what will sustain us is still back there, when we were all native people.

UPDATE: In the book, you talk about the dichotomy between Christianity and Christendom.

Hampl: Yes. I wanted to make that distinction very clear, because most people don't.

Christendom still has enough power so that it makes a lot of sense to be mad at it and fight it. It has power, for example, over women's lives in ways we needn't enumerate.

At the same time, I've always found that it takes more nerve to go into the cauldron of one's experience than it does to rebel against it. Oddly enough I feel much freer than I used to when I was much angrier at the Church. Being Catholic feels very much like being an American—an absolutely unconscionable kind of position in many ways, a favored position full of contradictions and unfairness to other populations. But if you're born with this, you must play the hand you were dealt. Still, I don't want to create the impression that *Virgin Time* is about my past. It's really a book about a search today in the middle of the dark woods. ■

LETTERS

I would not write you this, except that I can't otherwise get it out of my head how much I disliked "Those Knowing Ways" (October 1992).

This article leaves me with the impression that the "Ways of Knowing" course is something of a 30-week rollicking picnic where a spectacular, eminent, and passionate professor from each department produces a kind of dog-and-pony show evoking "gee whiz" reactions from the other spectacular, eminent, and passionate participants, to the self-aggrandizement of one and all.

More specifically, how is it that an eminent professor can be so surprised, evidently, to find out that other subjects than her own also offer much to learn and to challenge her?

Why are there battles between disciplines?

Why is there so much discussion about determinism versus free will? We are not Hindu. Professor Norm Bowie says, "People who are poor and oppressed don't want to be told they have no agency."

EDITOR'S NOTE

Unlike commercial publications that devote much of their resources to market research, we have the luxury (if that is the right word for it) of operating free from the pressure to "deliver" an audience to advertisers. Instead our mission is, and always has been, to produce a publication that keeps alumni, faculty, and staff informed of the issues, events, and people shaping the University community. Our aim is to present this information in the form of lively narratives, with an emphasis on the kind of writing that engages rather than insults the reader's intelligence. To this end, we have a distinct advantage not shared by other publications: the knowledge that our readers are graduates of a leading public university.

The editorial freedom we enjoy (which includes, among others, freedom from the need to be perpetually defining our readership) speaks well of a university, secure enough about itself, and respectful enough of its stakeholders, to allow us wide latitude in what we publish. But no freedom comes without risk; in our case chiefly the risk of losing touch with our readers. Hence our readership survey, a random sampling of 800 of our alumni readers conducted last summer for us by the Minnesota Center for Survey Research.

When we embarked upon this first ever survey of *Update* readers, we had no idea what to expect. The results of the survey reinforce much of what we are already doing while pointing toward changes that would increase *Update's* relevance and readability. By overwhelming margins, survey respondents say they like the publication (although most believe there's room for improvement), especially its in-depth articles. We were also pleased to discover that more than 70 percent of the respondents say that *Update* makes them feel better about the University of Minnesota, and nearly the same percentage believe the

But professors, environmentalists, professional baseball players, psychologists, stockbrokers, lawyers, or the other peoples of the Western world don't want to be told that they have no agency, either. Our legal definition of murder is "premeditated" killing; of negligence, failure to use "reasonable" care. Our modern Western civilization is predicated upon free will, so much so that we don't even see determinism as an alternative idea. Or is that the point, or is there a point?

You describe Professor Bowie's use of the book *Fate*. How can anyone take this seriously, or does your article report it incorrectly? Saying that "the truth about the future is analogous to the truth about the past" is simply starting out with false use of words. "Truth" is not a word about the future; it refers only to the quality of accuracy of a description or depiction of things or happenings of the past. What a bunch of fallacies! Anyone can try to erect a controversy misusing words. It's surprising that the learned participants in this discussion, as well as your reporter, seem to have been taken in.

On another subject, "Not bad!" she retorts. "I'm a professor at a major Midwestern university!" Well, I'm sure it was OK and probably funny for her to say it in the course of that discussion, but in print by itself it conveys elitism.

Robert Koerner, Law, 1938
Madison, Connecticut

publication is an objective source of information about the University community. We have operated on the assumption that our readers are not interested in seeing articles that ignore or sugar coat the sometimes vexing issues facing the University and other institutions of higher education. It is gratifying to see that assumption borne out in such striking fashion.

Other valuable information we gained from the survey: our readers rate *Update* highly in overall quality, and especially the quality of writing; they would like to see more of a mix of short and long features; they favor stories about science and technology, health and medicine, and society and human behavior above other topics; they would like to see humor and "how-to" articles. All of these preferences are already helping to reshape the pages of *Update*.

Under the category of troubling information, the survey also told us that almost half of our readers think we do only a fair or poor job publishing articles relevant to their lives. While troubling, this information, too, is valuable. More than any other finding, it helps define our mission in the months ahead. We see our job as more than keeping readers informed. It is also to make our readers feel that, no matter how far they have travelled since the day they graduated, they are still part of the University community with a vital role in its future. — Richard Broderick

SHORT TAKES



Alfred E. Neuman used with permission from MAD Magazine. Copyright 1993 E.C. Publications, Inc.

leave 'em laughing

University Art Museum closes out its almost 60-year "temporary" location in Northrop Memorial Auditorium with a grin—the unmistakable gap-toothed grin of Alfred E. Neumann, mascot and irreverent muse of MAD magazine.

"Humor in a Jugular Vein" features original drawings, paintings, and cartoons from MAD magazine artists, along with toys and other memorabilia, all from the collection of Mark J. Cohen, a California realtor.

Although no subject is safe from MAD's blend of satire, caricature, and parody, its contributors have included many mainstream artists such as one of Hallmark Cards' best-known illustrators and the ad man who created Tony the Tiger. On the other hand, Antonio Prohias, who draws the "Spy vs Spy" feature, is a native Cuban forced to flee because of his editorial cartoons.

Accompanying the MAD exhibit is a small show of images from the Soviet humor magazine *Krokodil*. Selections range from the 1920s to the present.

Both shows close (when else?) on April Fool's Day. For more information, call 612-624-9876.

Before you go . . .

Members of the class of '93 are invited to celebrate their graduation at Eastcliff, the University president's residence, on Saturday, June 12.

President and Mrs. Hasselmo will host two receptions, from 10 a.m. to 12:30 p.m. and from 4 to 6 p.m. There will be refreshments, live music, and Goldy Gopher for your picture-taking pleasure. Family members and friends are welcome.

Graduates will receive invitations through their colleges; tickets are not required. If you plan to attend, please RSVP to University Relations on the Twin Cities campus at 612-624-6868.

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UNIVERSITY OF MINNESOTA

UPDATE

For Alumni,
Faculty,
and Staff

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FLYING HIGH | PAGE 8

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Update is published six times a year. Three issues a year are directed to faculty and staff of the four-campus University system. Three issues a year address subjects of broader interest and are also sent to alumni and friends of the University.

Update welcomes ideas and letters from all readers. Write to *Update*, 6 Morrill Hall, 100 Church Street S.E., Minneapolis, Minnesota, 55455-0110, or call 612/624-6868.

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MOVING? New name or address? Please clip the address label and send it with your changes to *Update* at the return address shown below.

Update
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6 Morrill Hall
100 Church Street S.E.
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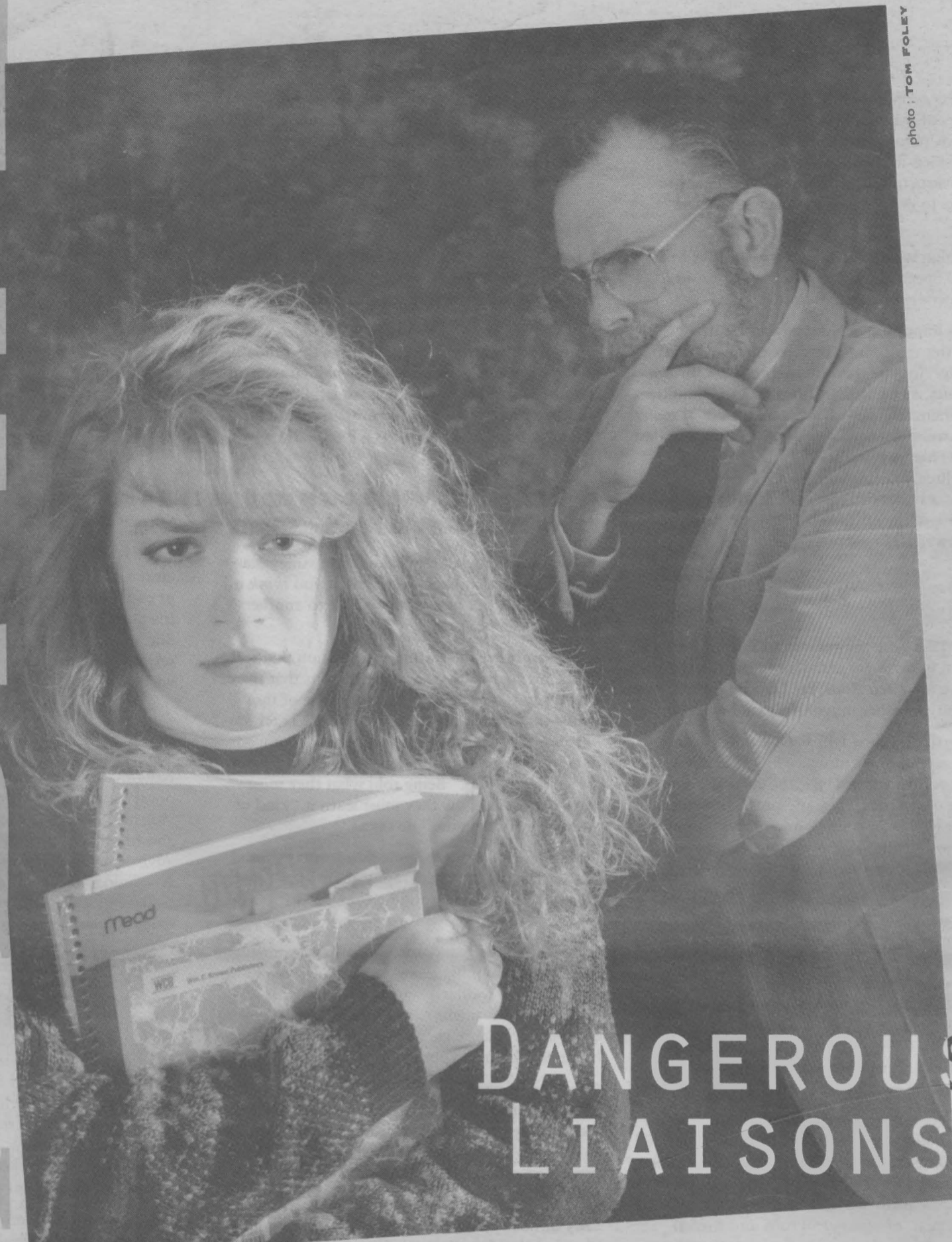


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DANGEROUS LIAISONS

**TRAINING
ON SEXUAL
HARASSMENT
AND VIOLENCE
BEGINS
FOR ALL**

BY PAMELA LAVIGNE

For Faculty
and Staff

Sex and violence. We know how much these themes dominate news and entertainment in our culture, but what about their presence at the University, where we work and study?

This summer and fall, the University begins extensive training activities to increase our awareness of sexual harassment and sexual violence: causes, incidence on our campuses, and University policy against them.

The impetus is last year's Omnibus Crime Bill, in which the Minnesota Legislature directed the state's postsecondary schools to present mandatory training about sexual harassment and sexual violence to all faculty, staff, and students.

The University's first step in compliance with the law was to prepare an extensive report of what is now being done to promote campus safety (lighting improvements in parking areas, escort services), plus inventories of courses and training resources already addressing those topics. Also developed was a proposal for future training to extend and strengthen those activities.

A six-member group including Janet Spector, assistant provost and chair of the Commission on Women, prepared the reports. The legislation, Spector says, is "an effort to reduce the incidence of violence" by providing "better information about the causes and effects of sexual harassment and how it affects work and educational experience."

The training proposal envisions a total of about three hours of training over time, using many different methods tailored to various audiences. The approach starts at the top, with the University's leadership structure. It will be up to the deans to decide how to deliver the message within their colleges.

"Any training we do has to be very sensitive to the audience," Spector says, "because in any room... you have people on all sides of this issue."

"It's really important that faculty and staff approach this matter in a positive manner," said Ettore "Jim" Infante, senior vice president for academic affairs, at a Faculty Consultative Committee meeting where the proposal was discussed. "I really hope that we're going to try to offer a program that is one, sensible, two, sensitive, and three, that's going to make us a better community because of the attitude we take toward it."

Since July 1990, the person responsible for dealing with sexual harassment complaints and for providing training has been Anne Truax, who for 20 years was a faculty member in women's studies.

The University's sexual harassment policy was drafted as a temporary measure in 1981. Revised and made permanent in 1984, the current policy is a strong one, Truax says, and puts Minnesota among the leaders in colleges and universities. (A policy for victims of sexual violence was set forth last year, following the new state law.)

Court settlements further strengthen the University's own policy. A 1984 decision in Hennepin County, in fact, provided one of the most compelling legal precedents. In the case, a female student brought suit against a male instructor in a technical institute. Yet three male administrators who heard the woman's story and did not help were fined *more* than the harasser. "We warn all our administrators that they could be personally fined for mishandling such cases," Truax says.

Since the equal opportunity and affirmative action office began keeping records in 1984, it has decided some 1,100 cases, she says. More than half of them involve sexual harassment; in 95 percent of these, women accuse men. She also fields roughly 200 inquiries a year, of which 150 turn into formal complaints. At any given time she is investigating 50 to 75 cases.

"Sexual harassment covers the whole spectrum from very impersonal, relatively innocuous forms all the way through rape," she says. "Being here, I have a healthy understanding that this behavior is distributed across the whole population of the University. No one is immune from it." The impact on the victim, not the intent of the harasser, is critical, she says. All harassing acts, "even the impersonal ones like posters," she says, "serve a definite societal purpose—to remind vulnerable people that if they don't stay in line, something worse will happen—that's the power in sexual harassment."

"When you talk only about 'the look,' you can make it seem very silly. But what [people] don't see is that that look, when given to a vulnerable person, is going to be interpreted in a very different way. The more elements of power and possible pain are involved, the more someone's going to react to what's done to them."

Her work is changing, Truax says, from a focus on two individuals to a much broader perspective on how sexual harassment affects the work unit. "What is the aftermath of a sexual harassment case when both people want to go back to the same place and everybody knows? How will [the

accused] be treated? It's not just the people in the complaint and their supervisors who are affected. We're looking now a lot more at organizational management and stress control."

A poorly handled training session in the College of Liberal Arts (see separate story), although unrelated to the proposed new training, heightened faculty wariness about it.

History professor Jim Tracy believes the fundamental issue for faculty accused of sexual harassment is in the language surrounding its definition in the University's policy: "Sexual harassment can be as blatant as rape or as subtle as a look." "It seems

POLICY
"Sexual harassment can be something that happens to you if you think it happens—it's not necessarily visible to another person....That's a problem."

to me," says Tracy, "that sexual harassment can be something that happens to you if you *think* it happens—it's not necessarily visible to another person....That's a problem."

Also a problem: the statute's stipulation that training be mandatory. "One of the reasons that the University is a peculiar place is because of the whole tradition of academic freedom," Tracy says. "Professors—and students too—are encouraged to cultivate intellectual independence and not to march in lockstep." Being told what they must learn about and how they must learn it "kind of goes against the grain," he says.

"I think the phrase *academic freedom* is misused and overused," says geography chair John Adams. "It pertains to inquiry and teaching; it doesn't pertain to taking liberty with your job responsibilities." Adams can readily picture how departments might conduct this training: sexual harassment might be the topic of a regularly scheduled faculty meeting, or departments might pair up for a special session, or a video could be checked out. Still, he is critical of the legislature's approach.

"The goal is worthy—the goal is essential—but the idea of commanding people to attend in an environment where things don't get done that way is likely to get people's backs up and they'll object to a procedure rather than to a worthy goal, which is unfortunate."

"My difficulty is not that I don't think it's a good idea, but that I don't know how you can do it."

The University, unlike other large, complicated organizations, has two characteristics that make it difficult to get things done, Adams says: an organizational model with weak leadership at the unit level, and no established training function.

Department chairs and deans have little direct managerial control over their colleagues, he says: appointments often are short, and tradition accords

AWARENESS
"This behavior is distributed across the whole population of the University. No one is immune from it."

substantial authority to professors. "You hire people, you tenure people, you set them free to do their jobs," he says. "Faculty really don't have bosses, any more than legislators have bosses."

Nor does the University have a structure for faculty development, he says. "We don't seem to have good vehicles for...letting [faculty] know that they work for the University...and the state...and the people of Minnesota. They get irritated when you tell them that. [Faculty will say] their job is to be a physicist, or an English professor. Their colleagues, the students in their classes are who they work for and to whom they owe their allegiance." Thus, dancing to the legislature's tune, even for faculty members who find its cause worthy, gives pause.

One of the University's few faculty development efforts is a yearlong program for new department heads. Karen Seashore Louis, chair of educational policy and administration, received training on sexual harassment through that program. In small groups, she and her peers learned about University policies and procedures and, through case presentations, had a chance to discuss "gray areas." "It was a very useful session," she says.

The legislative mandate may not be the best strategy to reach everyone, Louis says, but "we ought to do it as well as we can" and "treat it with respect."

The bill for the University's proposed plan comes to \$330,000, largely to pay a coordinator and acquire new materials.

"I did worry that no funds were attached to this," says Judy Garrard, professor in the Institute for Health Services Research. Garrard studies how health care regulations are implemented, and she has seen how lack of cash constrains action. "Something's got to give. It's unrealistic to lay these requirements on us without providing resources. Either [legislators] are not serious, or they think we have the resources, which we don't."

Now that regents have accepted the faculty proposal for training about sexual harassment and violence, the process of deciding the content and format of that training is in the hands of an advisory group coordinated by Jane Ollenburger. A sociology professor and associate dean in the College of Liberal Arts on the Duluth campus, Ollenburger is on the Twin Cities campus this year as an American Council on Education (ACE) Fellow, associated with the president's office.

Ollenburger has convened a 21-member advisory committee representing faculty, undergraduate and graduate students, PA&A and civil service staff, administrators, and coordinate campuses. During April the group heard from experts in the field and held an open forum for members of the University community. May 24 the group will hold a one-day retreat to preview materials, try out some of the programs on themselves, and recommend a "menu" of choices for the University as a whole.

"Our intent is to compile the best available sources of information," Ollenburger says. With every other higher education facility in Minnesota tackling the same assignment, it is only prudent to find out what already exists before leaping in to create something new.

At the end of the group's work, she envisions a matrix of possibilities, matching topics, their applicability to various audiences (date rape with student audiences, for instance), and the materials that could be used to address them (video, or video and peer discussion, a trainer).

"Our committee is just putting forward the options," she says. "We're not telling the coordinate campuses how to conduct their training. We just want to make sure that they're in on creating the options."

And when all is decided, will this training be mandatory? Ollenburger pauses and selects her words carefully before answering.

"The law is ambiguous. It says mandatory, it doesn't say how. The way I see it as a coordinator is, the University will take every positive effort possible to make sure that every faculty member, student, and staff member shall attend the training." ■

Portions of this article have appeared in the faculty newsletter Footnote.

YES, IT CAN HAPPEN HERE

Complaints about sexual harassment are investigated by the University's Office of Equal Opportunity and Affirmative Action. The following incidents, from 1987 to 1992, come from the office's annual reports of cases closed.

- * Civil service staff member complains of sexually offensive calendars in office. OUTCOME: Director removes calendars, circulates memo re: University policy.
- * Two civil service staff members complain that tenured faculty member makes inappropriate sexual jokes very frequently despite requests to stop. OUTCOME: Written agreement between University and faculty member, who agrees not to tell such jokes and to receive counseling. Written letter of reprimand.
- * Undergraduate student complains that teaching assistant attempted to kiss student after a tutoring session. OUTCOME: Oral warning by equal opportunity/affirmative action office.
- * Graduate student complains of unwelcome sexual conversations and attention from tenured faculty member. OUTCOME: Written agreement for no further contact.
- * Member of civil service bargaining unit complains that civil service member creates a hostile atmosphere, makes persistent sexual jokes and comments, gives unequal access to training, equipment, student help. OUTCOME: Written warning, three-day suspension to civil service worker. New work policies developed by department head.
- * Undergraduate student complains that tenured faculty member makes lewd and suggestive comments during class. OUTCOME: Written agreement: special evaluation of subsequent class; review by department heads; counseling for faculty member.
- * Graduate assistant complains that tenured professor makes inappropriate and overly personal comments and touching, and gives unusual attention with sexual overtones. OUTCOME: Written agreement: apology; 12-month consultation with dean; no female advisees for two years; no contact with complainant; pay summer tuition and counseling fees.
- * Civil service staff member complains that undergraduate student is sexually harassing and threatening violence. OUTCOME: Restraining order.

In addition to these complaints, more information on sexual harassment and how people respond to it comes from a survey conducted at the University in 1989. More than 4,000 randomly chosen faculty, staff, and students responded.

Participants were given a list of seven behaviors (from "unwanted teasing and jokes of a sexual nature" to "actual attempted rape or assault") and asked first to check which they had experienced and then which behaviors they consider sexual harassment. A final open-ended question asked what people did in reaction to the worst episode they had encountered.

Patricia Frazier, assistant professor of psychology, and graduate student Caroline Cochran analyzed the survey results; their paper is under review for publication.

Women were more likely to have experienced at least one of the behaviors than men, the survey found; undergraduates were more likely than other groups to experience them. Men were less likely than women to call a behavior sexual harassment.

The most common response was to ignore the behavior and avoid contact with the person. Very few individuals lodged a formal complaint with the University.

A BOTCHED EFFORT IN CLA

While the University, in response to the legislature, was preparing campus safety information and a proposal for sexual harassment training, two training sessions on sexual harassment took place in the College of Liberal Arts (CLA) on the Twin Cities campus. The content and handling of these sessions created a furor among faculty and colored reaction to the training that was called for in last year's state legislation.

Anne Truax, who handles sexual harassment complaints at the University, and Julia Davis, CLA dean, spoke candidly about the sessions.

Separate training for teaching assistants (TAs) and faculty was part of an out-of-court settlement of a sex discrimination suit brought by four female graduate students against five faculty members in Scandinavian studies. (The University had earlier found no basis for the women's complaints of sexual harassment in the department.)

Truax and equal opportunity/affirmative action director Patricia Mullen decided to add to these sessions "other CLA departments where we had active complaints, because they could all use some education, and would take some of the onus off those nine individuals involved in the suit," Truax says. Plus, she says, "we threw in history," a big department where faculty are used to a lot of discussion and where the chair, Sara Evans, would be supportive.

For this mixed group of departments, Truax decided to forgo her usual talk and instead present a panel discussion, with panelists handpicked by Mullen for their experience, including service on the Faculty Senate board hearing sexual harassment complaints. A memo from Susan Noakes, CLA associate dean and the college's EEO officer, said faculty attendance was mandatory.

After panelists were introduced, the program was open for questions from the audience. One of the first concerned a line from the University's sexual harassment policy: "as blatant as rape or as subtle as a look." Like a beach ball at a Jimmy Buffett concert, the word *look* was tossed around. Someone held up a tape recorder to capture the play. Defensiveness was felt on many sides.

"We did a bad job in terms of the mechanics of it," Truax says. "If I had just gone in there and done my usual lecture, it probably would have been much better. We were relinquishing control of the agenda. If you know you have a hostile audience, then you don't do that. It really was an unmitigated disaster."

CLA dean Julia Davis, meanwhile, was out of town. Informed by phone, she was startled to learn that the format was a panel, not a talk by Truax. "I think if it had been the usual sexual harassment training, we would not have had any problems. That's the thing, there was no *training*."

"In retrospect, I should have said not 'No,' but 'Hell no. You're not going to do this in CLA.'"

Faculty reaction afterward was "all negative, all negative," she says. "Men feel like they've been accused. Women feel the problems have been minimized." Women in one department told her that hostility in the halls was palpable, with longtime colleagues not talking to each other. "I have considerable anger about this because I think the college was run up the flagpole."

Much of what the University is aiming for already exists in CLA, Davis says: it has the most female faculty, and in powerful positions; it has much diversity among staff. Yet, in the flap over the sessions, these points have been obscured, along with other details. Few know, for instance, that the presence of undercover cops at the faculty session was requested because a panelist was attacked just before the TA session. Assistant dean Noakes received late-night harassing phone calls.

Davis has since invited a small group of faculty to meet with her about repairing the damage that's been done and continuing to offer training about sexual harassment. "I have to be an integral part of planning from now on," she says.

"Everybody makes a mistake in judgment sometimes," she concludes. In this case, "CLA is a victim, not a perpetrator, of it."

"The University will take every positive effort possible to make sure that every faculty member, student, and staff member shall attend the training."

Respondents' own words describe the effect these incidents had on their lives and work:

- * I avoided a faculty on campus which has caused me huge hassles in my graduate program. If I didn't have to avoid this person, school would have been much easier.
- * The man was my advisor. Thus by avoiding him I was unable to obtain much assistance/guidance on my academic plans, etc. He was also the department head.
- * Avoided class, unable to study or concentrate, triggered posttraumatic stress, unable to take tests, flashbacks, nightmares, health suffered, etc.

- * Avoided person who is a key player in my work place. Felt uncomfortable when I had to meet with person alone. Feared reprisal.
- * I was very angry. I came to work but was unable to concentrate.
- * I was a nervous wreck and didn't sleep much.
- * I had to move in with friends and was afraid for my life.
- * I was distanced, felt unsupported, couldn't concentrate. If I wasn't valued or respected, how could my work have value? I was totally demoralized for a year.

AN HONEST DAY'S WORK

GRAPPLING WITH THE FACULTY WORK LOAD ISSUE

BY RICHARD BRODERICK

The images have the jerky, grainy quality of hidden cameras witnessing street corner drug deals or mid-night Mafia assignments. The sense of late-night police work is heightened by the framing of much of the shots—a round opening in an otherwise blacked-out screen suggestive of peepholes or an I-spy view through the scope of a high-powered rifle.

But the video that aired on WCCO-TV's newscast during the height of February sweeps doesn't provide a rare peek at the underworld. No, it reveals the halls and classrooms of the Twin Cities campus, where reporter Tom Steward went "undercover" to capture evidence that some undergraduate classes are taught by—gasp!—teaching assistants.

A wag once described Leonard Bernstein as possessing a genius for revealing musical secrets that have been known for centuries. By the same token, the 'CCO *Dimension* report manages to "uncover" information readily available to anyone who cares to inquire: some 2,500 TAs are employed by the University to assist with classroom instruction. (There is also something rather loony about watching a couple of news anchors—both commanding six-figure salaries—shaking their well-coiffed heads and tutting over the notion that some University professors may not be earning their keep or contributing sufficiently to the commonweal.)

Still, the WCCO report did touch, at least peripherally, on an issue taking on nationwide significance in this era of belt tightening and budget crunches—faculty work load. For almost a year now, the University has been grappling with questions such as, What is the proper balance in the time faculty spend on research, teaching, and service? How can work load be determined and evaluated?

Last year, the Minnesota Legislature directed the Higher Education Coordinating Board to compile a report on faculty work load throughout the state's systems of higher education. The HECB report included a University study which shows that, on average, University faculty spend more time in the classroom—about nine hours a week—than their counterparts in other research institutions. By an ironic twist, the House education committee opened hearings on the report the day after the *Dimension* report aired on 'CCO.

"That was unfortunate," says Virginia Gray, political science professor who serves as the faculty legislative liaison.

Unfortunate, but not fatal. For despite this session's committee reorganizations and reassignments, legislators on committees concerned with higher education are more knowledgeable of the University's

tripartite mission of teaching, research, and service, as well as of the University's role as a research institution, a role fundamentally different from that of other state-supported universities and colleges.

Rep. Lyndon Carlson (DFL-46B), who represents the northwestern suburbs of Minneapolis in the Minnesota House, did not see the 'CCO reports. But from comments he has heard as chair of the education committee (and immediate past chair of the education division of the appropriations committee), Carlson does not believe they made a tremendous impact in the legislature despite their inflammatory tone and distorted view of the TA system.



photo: TOM FOLEY

"I think it reinforced the concern some legislators have about the utilization of TAs," he says.

Next stop for the HECB report is a Senate hearing sometime this session. Beyond hearing and noting the information contained in the report, Carlson does not expect the legislature—as has happened in some other states, notably Texas—to adopt measures dictating the minimum amount of time University faculty must spend in the classroom as opposed to the laboratory.

"At this point," he says, "it's important to keep in mind that the legislature's role is to question and raise issues about higher education. When we talk about what is or is not the appropriate mix of teaching, research, and service among faculty members, we are really discussing a management issue that is up to the central administration and the Board of Regents to decide, not us."

But Carlson admits that the understanding legislators have is not necessarily shared by the general public. For most Minnesotans, being a faculty member—whether at the University, a community college, or a technical institute—means teaching and that means teaching in a classroom.

"Personally, I think the issue ties into a broader cultural tendency," says Virginia Gray. "In Japan, the

businessman who is quietly working at his desk is never interrupted because it is assumed he is thinking. In America, it's just the opposite. Only when faculty are up and moving around in the classroom do people think they are 'doing' something."

Meanwhile, far from the glare of TV spotlights, the University has quietly gone about the review and rationalization of faculty work load.

Shortly after the faculty work load study was completed, a Faculty Consultative Committee group chaired by management professor Carl Adams produced a faculty work load report. The culmination of months of work, this report both recommended

creating a University-wide system for assessing and evaluating faculty work load and outlined the steps needed to implement such a system.

Central administration has been quick to follow up these recommendations. A deadline of Christmas, 1993, has been set for all academic units to submit their plan for determining and evaluating to Vice President Infante's office—although that deadline, officials admit, is "soft."

"We don't want to shoot blind," says Vice President Anne Hopkins, who has the job of overseeing the report's recommendations are implemented. "I am truly amazed by the variability among colleges, campuses, departments, and academic units. Even among the units that report to me, there is a wide variety in relative weight of the different missions. That's why I think it was good to adopt a general policy for the whole University system that allows individual units to formulate plans specific to their needs."

Nonetheless, she adds, each unit and faculty member's work load plan must conform

to the overall mission of the University: teaching, service, and research.

"A unit can't determine on its own what its mission is," she says. "It has to fit in with the University's mission. That's why participation by the vice presidents and deans is so important."

To date, Hopkins has met with every dean and vice president throughout the system to explain and discuss how to implement the recommendations.

In some units, the job of determining the unit's mission has already been completed in all but a formal sense. In Health Sciences, for example, faculty have been engaged in a lengthy process of strategic planning, a prerequisite of which is, of course, formulating a mission statement. In other units, the job has just begun.

"After reaching consensus on their mission, each unit must then come up with a strategy for accomplishing that mission," she says. "Both are collective decisions. Only then can we make individual [work load] assignments and presumably tie them to some kind of reward system."

"What's important to keep in mind," Hopkins adds, "is that this work is not simply a response to political concerns. It is a matter of good management and responsible faculty self-governance." ■

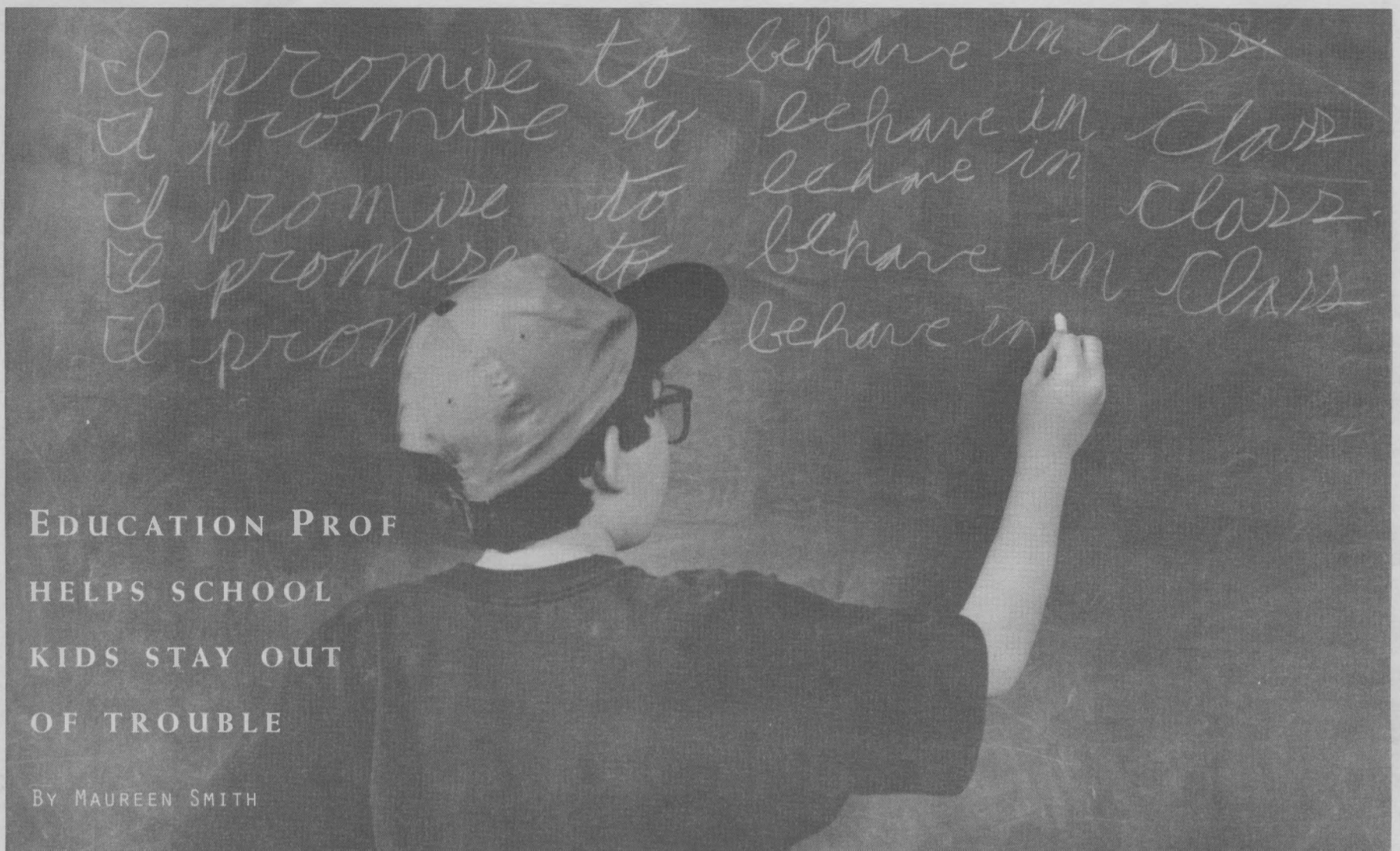


photo: TOM FOLEY

EDUCATION PROF HELPS SCHOOL KIDS STAY OUT OF TROUBLE

BY MAUREEN SMITH

When a child starts school and doesn't know how to read, nobody thinks it's a problem. Teaching that child to read is the school's job.

But if a child starts school and doesn't know how to behave, teachers may blame and label the child.

"Even at the age of kindergarten, teachers often have the idea that all the kids are capable of adult behavior and for some reason they are not exhibiting it," says Harlan Hansen, professor of curriculum and instruction in the College of Education. Instead of seeing discipline as an intrusion into the curriculum, Hansen says, schools should make it part of what they teach.

Hansen doesn't just sit in his Peik Hall office on the Twin Cities campus thinking up theories about what the schools should do. Each year for the past four years, he has worked with a school, helping teachers teach kids how to behave. After working three years with primary schools in Minneapolis, this year he is at an intermediate school in St. Louis Park.

"I spend a minimum of half a day a week in the school," he says, working with administrators, teachers, and kids. "You end up being a problem solver for everyone." Problems have included behavior in the hall and the lunchroom, on the playground and the bus, as well as in the classroom.

All the help Hansen gives the schools is free. "I'm out there to help them, and of course they're helping me," he says. "The more I test my ideas, the more effective my courses are, and the more effective my writing is. When you're in the schools you find out what the real problems are."

The prevailing system of discipline in Minnesota schools is a punishment-reward program that Hansen characterizes as "shaming kids into good behavior." With the first misdeed of the day, the child's name is written on the board. More misbehavior leads to a progression of punishments: checks on the board, a visit to the principal's office, time in a time-out room, a call to a parent, suspension, expulsion.

"The problem was that this worked on the kids who were generally good behavers, but not the 5 to 15 percent of kids who simply don't know how to act appropriately," Hansen says. For these kids, every act of punishment may become a badge of courage.

Instead of punishment, Hansen recommends giving children chances to practice behaving. In the lunchroom, for example, kids who are misbehaving can be assigned to a practice table. "Others might say a punishment table. When you separate kids, you do it with a smile. It's a whole different attitude.

"Kids don't like the practice table, especially if they're there with kids of other ages," Hansen says. By contrast, kids who are causing trouble may be proud to be sent to a punishment table. At a practice table, the message to the kids is, "It's your responsibility to let us know when you want back in the mainstream. If you aren't ready, don't worry, we'll just practice a couple more days."

A big part of discipline is prevention, Hansen says. "Some teachers don't see the relationship of a boring lesson to misbehavior."

In looking at playground misbehavior, Hansen saw that the playground equipment, although it was bought just two years ago, wasn't appropriate for the students' age. With the principal's agreement,

**"Punishment worked on the kids
who were generally good behavers,
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to act appropriately."**

he went out himself and bought a backboard and put it up with the help of the physical education teacher. Then the whole grade level had a meeting to talk about behavior on the playground.

"It was amazing. The behavior just settled down," he says.

Not all rules in schools are good rules, Hansen says. Requiring students to raise their hands before they speak isn't the best approach, he says. "With young kids, sometimes they just blurt out the answer because they're excited. Some of the behavior we were punishing was just spontaneous."

What Hansen encourages for classroom discussion is the every-pupil response. The teacher asks a question and tells students to talk in pairs and

agree on an answer. After maybe 10 seconds, the teacher calls on one pair. "It doesn't take any longer, 100 percent of the kids are talking, and even if we call on a pair and they're wrong, there's a shared wrongness," Hansen says.

Planning ahead can make a big difference in teaching good behavior, he says. In today's mobile society, teachers can expect new students to join a class in the middle of the year. Hansen recommends talking with the students in advance about how they will make a new child feel welcome, working with them to put together new-student kits, and giving them assignments. One child will be the greeter, one will present the new-student kit, one will be a buddy for the first couple of days.

Families today move for all kinds of reasons, some of them unhappy reasons, Hansen says. A friendly welcome can make a huge difference for a new child in class. With the right planning, he says, the new child can go home beaming the first day. "That's the way it should be, but you have to teach it."

Sometimes teachers invite Hansen to teach classroom lessons on behavior. "A sixth-grade teacher had a problem where the students were putting one child down. I went in and did a lesson on why people put others down. At one level it makes us feel superior, but it's a way we deal with our own insecurity.

"Two days later when somebody puts somebody down, you can ask, 'Why are you doing that, and do you really want to be perceived that way?' We have to address the problem head on."

The theme for much of what Hansen teaches is "helping children insert reason between impulse and action." As much as anything they learn in school, this is a lesson they need if they are going to be successful in life, he says.

"Impulses are one thing. We all have them. If they lead to inappropriate behavior, we have problems. The school along with the home needs to help children develop a value mechanism and teach them how to make decisions.

"More kids these days have more opportunities to get in trouble with drugs, sex, alcohol, shoplifting, than any generation in the past. The real measure of success is how the kids learn to deal with the pressures outside of school." ■

Classical Math



REGENTS' PROFESSOR
JAMES SERRIN
STILL DOES MATHEMATICS
THE OLD-FASHIONED WAY

BY RICHARD BRODERICK

photo: TOM FOLEY

On the evening of December 7, 1992, hundreds of distinguished scholars from Italy and around the world filed into a gilded hall, its overpowering splendor a testimony to the wealth and arrogance of the High Renaissance, and took their places in a rustle of academic robes.

The occasion was a celebration honoring the 400th anniversary of the first lecture delivered at the University of Padua by a young professor named Galileo Galilei. Born in Florence, Galileo would go on to perfect the telescope and virtually create the modern science of astronomy. Later, he would become a symbol of the conflict between free scientific inquiry and religious belief.

Under a huge chandelier that still seemed to shine with the golden sunlight of Medici wealth, the assembled guests watched as seven scientists received honorary doctorates from the University of Padua and delivered short lectures about their work. Among the seven were three physicists, two chemists, a historian, and—even though Galileo held the mathematics chair at Padua—only one mathematician, a trim, soft-spoken, 66-year-old regents' professor from the University of Minnesota named James Serrin.

Serrin, a self-described "slow thinker" who must labor to understand the theories and equations of other mathematicians and sometimes even has trouble comprehending his own early papers, had worked long and hard to distill his thoughts about the discipline that has absorbed his professional life for more than 40 years.

How to sum up a pursuit that, for him, encompasses all that is mysterious, elegant, and beautiful about the universe? A field that has enabled him to live in what C.P. Snow described as the "two cultures" of the Western world—the culture of science and the culture of literature and the arts? A field he has repaid with significant contributions to the classical areas of mathematics, in particular thermodynamics and fluid mechanics?

In the end, he delivered a talk whose simplicity and heartfelt eloquence were more than a match for the opulent surroundings. Titled "Reflections on Mathematics," it managed to sum up the learning and discovery that have been poured into his 150 published papers, his deep indebtedness to the great mathematicians who came before him, his sense of history in the continuum of scientific inquiry, his vision for future generations.

"Beyond the practical uses of mathematical science," he said, "are other issues that play a major role in how mathematicians conceive their science.

"These directions, it seems to me, arise directly from the same cultural, intrinsically humanistic drives found in other avenues of artistic or intellectual life: precision and economy of thought; a desire for beauty, for clarity, for certainty; a pleasure in creativity and elegance; and an intensely human satisfaction, which can hardly be motivated from outside ourselves, in logical and unassailable argument...

"This permanence [of mathematical discovery] must be viewed exactly as the permanence of great works of musical composition and pictorial art.... Mathematicians naturally pay a price for the abstract nature of their thought—mathematics is indeed a quiet solitary subject, for the most part without those aspects of 'popularity' associated with medicine, physics, astronomy and cosmology, or engineering. The rewards of beauty, elegance, certainty and permanence, and the pleasure of creativity are the other side of the coin."

Born in 1926, James Serrin grew up in the northern end of Evanston, Illinois. "It was an affluent neighborhood," he recalls, "although I have to point out that we lived in the poorest house on our block." Nonetheless, he describes as idyllic the childhood he and his younger brother, an artist who has lived in Italy for 25 years, spent there.

On both sides of his family, Serrin's midwestern roots reach back 150 years. While there is no evidence of scientific leanings in the family, there is what Serrin calls "a very midwestern entrepreneurial tradition," albeit without much to show for that enterprising spirit. His great-grandfather owned and piloted a steamboat, the *Wildwood*, on the Ohio River between Louisville and a little town upstream from Cincinnati called Maysville. In his home office, Serrin displays an 1881 photo of the *Wildwood*, a graceful double-deck paddle wheeler, and he continues to use the desk from the captain's cabin, an ingenious contraption with a fold-up top.

"I look back on my great-grandfather as a man who had great ambition but who came along at the wrong time," says Serrin. "His business was ruined by the railroads."

If his great-grandfather was a man slightly behind his times, Serrin's father was slightly ahead of his, "which is not always so good for an entrepreneur." He was, says Serrin, one of the first builders of tract houses.

"This was right before the Crash," he says dryly. "The financial arrangements under which people mortgaged houses were not helpful to this kind of business. And then, there was the Depression."

By the time World War II erupted, the family was so pinched that it left Evanston and relocated in Kalamazoo, Michigan, where Serrin's father took up yet another innovative approach to home building: pre-fab houses. It too was a little too innovative, and Serrin, who'd started his undergraduate education at Northwestern University, had to transfer to Western Michigan College of Education, which was not only cheaper than Northwestern but offered the added savings of living at home.

Serrin took his degree in engineering—which may explain why he has always been drawn to applied rather than purely speculative or theoretical mathematics—and toyed with the idea of becoming a physicist. In fact, he was offered a scholarship in physics at the University of Iowa but decided instead to accept a scholarship in mathematics from the University of Indiana.

It was a fateful decision. The graduate program was small—a mere 15 graduate students—but boasted what would now be an unheard of student-to-faculty ratio of 1 to 1, as well as a faculty composed of world-class mathematicians, many of them Germans or German Jews who'd fled Hitler and found a haven in Bloomington, Indiana.

For the country as a whole, and for Serrin in particular, a Golden Age of mathematics was building in the United States. It was a period of unprecedented prosperity in the United States. Assisted by the G.I. Bill, Americans were flocking to college in greater numbers than ever before. Driven by Cold War concerns, the federal government poured money into research. New scientific journals were springing up, one of which in 1951 published Serrin's thesis—a paper on fluid mechanics, "the beginning of my interest in material science, particularly the movement of fluids?"

"In a certain sense, I have lived a charmed life," Serrin concedes. "I left Western Michigan with a bachelor's degree, no money, a car that just got me to Bloomington, and a \$900-a-year stipend. Yet I was confident of the future and found myself at a place where it was possible to be on intimate terms with internationally famous mathematicians."

Today that kind of intimacy has all but disappeared. At the University, he points out, the math department has 80 faculty members and 120 graduate students. "Although you can be on intimate terms with your own students, it's hard to know other students. And it's hard for students to get to know other professors beyond the classroom."

Nonetheless, with his own graduate students, Serrin strives to create the atmosphere of collegiality he knew with his own graduate school mentors, mathematicians like his thesis adviser, David Gilbarg—"a very warm man willing to put up with a student like me who was rather argumentative"—or his friend and booster, Clifford Truesdell.

At the same time, he tries to instill in his advisees his own work ethic, and the precision and perfectionism that characterize his approach to the discipline.

"He's very easygoing, personally, but very demanding in mathematics," says Henghui Zou, a native of Hunan province in China, where Serrin's reputation helped the young scholar decide to do his graduate work at Minnesota. Zou wrote two papers with Serrin before receiving his doctorate in 1992 and is now a junior faculty member at Northwestern. "In research, he has very high standards. For example, we worked on many problems together but only published a couple of papers. We got some partial results on other projects, but he didn't think the results were clear enough. Another researcher might have accepted those results and published them."

Six years after his thesis was published, the 31-year-old Serrin was given the singular honor of being asked to write the chapter on fluid mechanics for the revised edition of the prestigious German book, *Handbuch der Physik*, the first tangible sign of his growing reputation in the world of mathematics.

"The work in that book was mostly by very senior people," says Regents' Professor Rutherford Aris, a faculty member in chemical engineering and materials science who also happened to attend two

"The permanence of mathematical discovery must be viewed exactly as the permanence of great works of musical composition and pictorial art."

classes conducted by Serrin in the 1950s. "Jim was not all that old, but he was mature for his age. Already he was a superb scholar."

By then, Serrin was part of the Minnesota math faculty; he would go on to become the youngest regents' professor in the history of the school (he is now, incidentally, the senior regents' professor). He had acquired the dogged, even obsessive, pursuit of solutions to problems he had decided to investigate.

"He's a very energetic fellow, and it can be hard to keep up with him," says Roger Fosdick, professor of aerospace engineering and mechanics and a frequent collaborator with Serrin. (Besides his chair in the mathematics department, Serrin is an adjunct professor in Fosdick's department.) "When he gets involved in a project, he really throws himself into it."

Fosdick relates how on the first paper they co-authored, Serrin was "really itchy" to get it finished. When Fosdick completed the paper, he called Serrin's house only to discover he was playing doubles at the old Minneapolis Tennis Club. Marching out onto the courts, Fosdick, who also plays tennis, committed the unpardonable breach of interrupting the match in order to present the paper to a slightly startled James Serrin.

"He thanked me and went back to the game," Fosdick recalls. But a couple of weeks later, Serrin presented his colleague with a small token of

gratitude: a gold-embossed book entitled *All I Know About Playing Tennis* by Roger Fosdick.

"The book was completely empty," Fosdick says with a chuckle. "Nothing but blank pages. He has this very dry wit."

Fluid mechanics is only one of four classical areas of mathematics where Serrin has excelled. Almost all the rest of his work has been divided among partial differential equations, variational methods—subjects so esoteric that he despairs of being able to describe them to a layperson—and thermodynamics. In this last field, Serrin—the self-described traditionalist—has done revolutionary work. Love of clarity and precision, which Serrin referred to in his Padua lecture, and which Henghui Zou encountered as a graduate student, lay at the heart of his contributions.

Although it is one of the oldest fields of applied math, thermodynamics has also been one of its most problematic in that the foundations of the subject, the First and Second Laws of Thermodynamics, had never been clearly determined mathematically—until Serrin came along to tackle the subject in the 1970s.

"His work clarifying the mathematical principles of the First and Second Law of Thermodynamics is, I think, his most important contribution to science," says Aris. "His work on this may not be appreciated widely outside of mathematics, but because it is so precisely drawn I am sure it will last."

Immortality, however, was not the motive behind the work.

"I just couldn't understand the subject," says Serrin. "In fact, mathematicians have always had a hard time understanding the foundations of thermodynamics. The logic was simply so loose that any mathematical work came to despair."

"The idea, then, was to put the First and Second Law of Thermodynamics on some logical basis rather than imagining that they come full-blown from the mind of God."

The core problem, to Serrin, was that while everyone understood what heat is, no one could explain precisely how heat at 1,000 degrees Kelvin differs from heat at, say, 50 degrees.

"All heat," he explains, "is energy. But the effects of high heat are different from low-temperature heat and it is high-temperature heat that allows you to work. But how you explain that difference in some axiomatic way was not so simple."

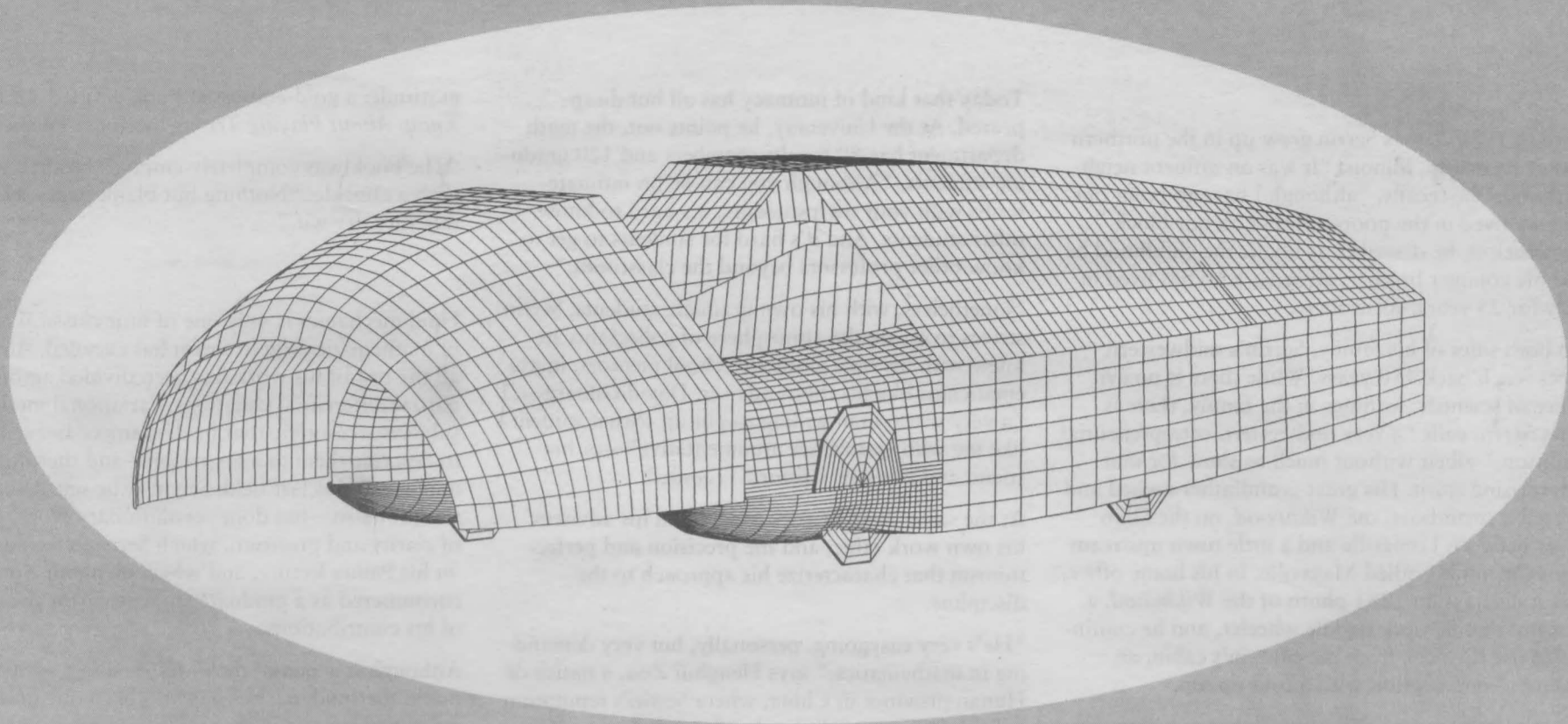
Serrin did just that, elucidating his equations and theories in a number of papers published over the past 15 years. The work, he says, has been "rewarding but searing because I had to revise in my own mind some of the things considered standard in the theory of thermodynamics."

Searing because those revisions have not always sat well with engineers and physicists who were quite comfortable, thank you, accepting the outcome of thermodynamics without necessarily understanding exactly how it works.

"This was not a Copernican revolution, but it still introduced a different way of thinking," he says. "In a classic field like that, it creates a stir."

Lover of art and literature, amateur photographer, world traveler who has delivered more than 300 public lectures in places as remote as China or as near as Evanston, Illinois, scholar in the most arcane of the hard sciences who doesn't even have a blackboard in his office—Serrin is something of an anachronism.

continued on page 9



RACING FOR THE SUN

WITH OR WITHOUT A VICTORY, STUDENTS' SOLAR CAR IS A WINNER

BY PAMELA LAVIGNE

The beached whale in the Northwest Airlines hangar, its plywood ribs, chicken-wire muscles, and coated nylon skin waiting patiently, has a name: Aurora.

Aurora is a solar-powered car designed and built by University students on the Twin Cities campus. It is one of 36 collegiate models competing in Sunrayce 93, a 1,000-mile challenge for solar-powered vehicles. The course starts in Dallas June 20 and ends at the Minnesota Zoo June 26.

The point of Sunrayce is to improve scientific and technological education while promoting use of a renewable and nonpolluting energy source. The U.S. Department of Energy and the Environmental Protection Agency are major sponsors, along with industry giants such as General Motors and Chevrolet.

Unlike most of the entries, the University's project is "student initiated and completely student run," says Brad Schultz proudly. A senior in mechanical engineering, he is one of the project's founding forces and the leader of one of its four design teams. (Virgil Marple and Patrick Starr of mechanical engineering are faculty advisers to the project.)

To prevent an entrant from "buying" the race, rules specify that cars must use commercially available solar cells and electric motors, these roughly the size of golf cart motors. In early April all cars had to show up at the Indy 500 raceway for a qualifying test: complete the course in 2½ hours, meaning an average speed of 20 mph.

Tonight, though, the qualifier is still three weeks away, and the focus isn't driving to victory: it's just getting something that can be driven.

The beached whale at Northwest is actually the mold for the underside of Aurora. Six students and two professional engineers are on hand to build it; only the pros have been through this process before. Rob Miller, aeronautics major, team leader, and the first driver to be named, says he feels a mix of "excitement...accomplishment...and sheer terror."

The design challenge of a solar vehicle is to maximize the surface area exposed to the sun (a big flatbed covered with solar cells, say) but at the same time to minimize drag (maybe that flatbed ought to curve into a cigar shape). The University's design is a long, tall loaf, tunneled out underneath, the top nearly covered with a square-shouldered "jacket" of solar panels.

The building material, Miller says, is a composite of graphite carbon fibers—the extremely lightweight yet strong stuff of tennis rackets, America's Cup sailboats, Formula-1 race cars, and Stealth bombers.

Despite the high-tech material, students use everyday metaphors to explain what they're doing with it. Build a giant gelatin mold (spray it first, like greasing a cookie sheet, to make sure the filling comes out easily), then carefully cover every inch

**"This is just the type of experience
a student needs to get ready for
a job in industry."**

of it with the composite, which has the texture of a fruit rollup. Lay down six layers of rollup, and put in a middle layer of paper honeycombed like an ice cream wafer. Wrap the mold in a giant plastic bag, suck the air out so that it really seals, then pop the whole thing into a 250° oven and bake for three hours.

As work begins, the atmosphere is quiet and concentrated, the learning curve high as people figure out how best to handle a 20-foot strip of sticky, easily torn, really expensive tape.

Strip 1: "Watch it! We're folding over" (as the edges start to curl inward). "Next time, let's lay it down first, then peel the backing off."

"What do I do about this separated spot here?" (The end of the strip looks like tassels on a penny loafer.) "It'll come back once the resin starts to flow," a pro answers. (Tearing continues.) "Aargh. HELP!"

Strip 2: "I have a buckle right here. Maybe we should start at one end and work in one direction...?"

Strip 3: "You might wanna cut the paper backing in the middle and smooth out to the ends." (Advice from a guy who's just dropped by—works like a charm.)

Planning for Aurora kicked off three years ago, Brad Schultz says, after the last national solar-vehicle race. Besides designing and constructing the car, students have to raise their own funds. The total estimated cost is \$443,000—a bargain compared to the \$1 million average the top four finishers spent last time, he says.

Thanks to in-kind donations of equipment, students have access to such sophisticated tools as PRO Engineer software, common in industry but not before available at the University, and a Convex C120 computer used for designing and testing the one-of-a-kind vehicle.

The core group of students numbers about 25, Schultz says, though there have been close to 90 volunteers sometimes. Three out of four participants are juniors and seniors; roughly half are mechanical and aerospace engineering majors, although virtually every major in the Institute of Technology is represented. Women have turned out in roughly the same proportion as in IT overall.

"What it gives students is something that's never been offered before," Schultz says. "People have learned how to work with their hands. They're taking the basic engineering curriculum and they're applying that to building something—and in a huge project besides, where my part affects your part. So this is just the type of experience a student needs to get ready for a job in industry." Students' efforts to organize this project have already made them winners: they received the Saturn Award for Teamwork in 1991.

Back at Northwest, an hour's gone by and students have laid down the first five strips—barely halfway through the first of six plies. At this rate, Rob Miller guesses it'll be ready to put into the oven...in two days.

Is anybody worried? "Ya, a little," says Tim Timmerman, one of the student builders, "but so much has happened already that it would take nothing short of total destruction to stop us now." "And if that did happen," adds Bryce Pier, who's videotaping the work, "we'd all just quit our jobs and start over."

By making classroom learning real, Aurora benefits students enormously, says Brad Schultz. "It's sort of mental athletics and ingenuity, is what it really is. It's not really a bunch of brainiacs." And besides, he says, "it just looks terrific on a resume." ■

Aurora passed the Indy trials, averaging a respectable 35 mph. Stay tuned.

INSTALLING THE SEEDS OF SUCCESS

BY DORIS PRIDE

Ken Foxworth believes the University's Duluth campus is a secret gem—one he is helping many inner-city students find.

"African-American students can come here and have all the benefits of the University of Minnesota, but have the advantages of a small campus, too," says Foxworth, hired last fall as coordinator of African-American Student Services.

Foxworth's goal is to recruit African-American students to UMD and help them succeed there.

"I try to emphasize that African Americans don't have to be athletes to go to college," he says. "This is a hard stereotype to break."

A Gopher football player from 1976 to 1980 on the Twin Cities campus, Foxworth cautions even the best athletes never to rely on sports alone. "Once the sport is over, you're on your own," he says. He knows that from personal experience: after being a free agent for the St. Louis Cardinals—his hometown team—Foxworth was forced out by an early injury.

Of the 12 African Americans in his class who earned football scholarships, Foxworth is the only one to earn a master's degree, from Mankato State in 1990.

But between graduation from the University and his master's degree were 10 long years of struggle, working nights at menial jobs so that he could return to earn his graduate degree. It's given him insight about what it takes to succeed.

"I tell students their obligation is to themselves. Back home in their neighborhoods, people may actually be waiting for them to fail; if they make it, they'll be the exceptions. But what I try to instill in them is the desire to make something of themselves," says Foxworth.

"I want them to think like I did, 'I can't go home until I finish.'"

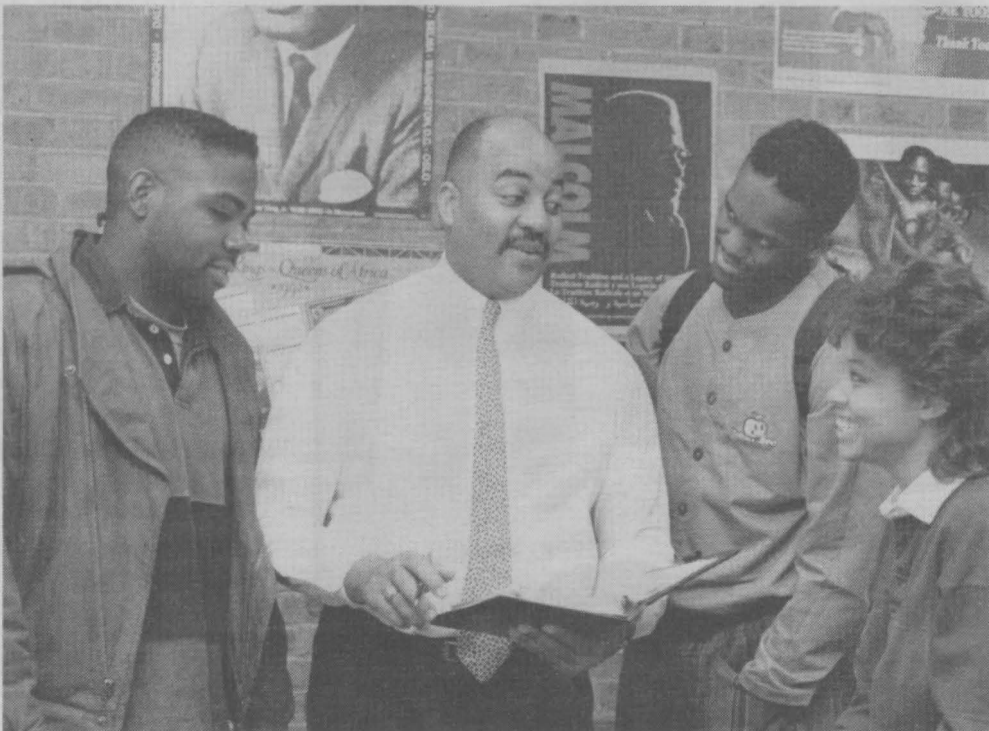
Today UMD has 54 African-American students, just two short of the record a few years ago. "There are no real racial problems here," says Foxworth. "There is a growing support network, and faculty and administrators who really care."

He's been heartened to see faculty members taking a special interest in African-American students and their success. "I've watched as certain professors have gone out of their way to help these students succeed in their classes," he says. "They don't want them to fail."

Foxworth is helping African-American students build networks such as the Black Student Association, which now totals 35 members. He's also promoting Black Alumni as a group whose members will serve as role models.

He hopes the day is not far away that UMD will have a permanent African American on the faculty. "We have a truly supportive administration, and I couldn't ask for more than that right now," Foxworth says. ■

Doris Pride is director of media relations for the Duluth campus.



From left: Alcinoor Hollie, Minneapolis; Ken Foxworth, coordinator of African-American Student Services; Jarvis Smith, St. Paul; and Kris Rainey, Plymouth.

Classical Math

continued from page 7

In a field where the computer has made it possible for mathematicians largely to dispense with pencil-and-paper proofs, he warns against the loss of the precision, the intellectual labor that characterizes his work. It's not safe to turn on the computer, he has been known to tell students, until you already know what the answer will be.

"His choice of classical mathematics, his distrust of computers, is all of one piece," says Rutherford Aris. "Intellectually, he's 'nice,' in the sense of making nice distinctions. In fact, he's the nicest person I know of in that sense. His mathematics is a matter of refining conceptions. There is a real elegance to his work. It's an approach in real danger of extinction."

In Padua, last December, Serrin closed his remarks with a kind of warning, an admonition derived from his sense of himself as a traditionalist lucky enough to have embarked on his career at the dawn of what he believes has been a Golden Age of mathematics.

As with civilization itself, Serrin sees mathematics threatened by forces of cultural entropy, by anti-intellectualism and the rise of the media and mass entertainment, by the inevitable depletion of resources brought by an escalating human population. Even, he would add, by voices within the aca-

"Mathematics is useful and beautiful beyond any of our dreams and expectations—and it has given many a wonderful life, a hope I would have for all the young people who are now intending to make their careers in mathematics."

demic community that, like the Catholic Church in Galileo's day, seek to subordinate free inquiry to the imperatives of faith.

Characteristically, though, since he is essentially an optimist, he concluded his talk on a hopeful note.

"But setting these dark thoughts aside, mathematics still presents a marvelous vista... Mathematics is useful and beautiful beyond any of our dreams and expectations—and it has given many a wonderful life, a hope I would have for all the young people who are now intending to make their careers in mathematics." ■

EMPTY POCKETS?

COMING UP SHORT FOR SALARY INCREASES IS A REAL POSSIBILITY

BY MAUREEN SMITH

By now, the legislature may have decided how much money to give the University. In mid-April, the bill from the House committee called for funding of more than \$910 million for the University for the next two years, and the Senate bill called for just under \$897 million. The House bill included 3 percent in the first year for inflationary increases in supplies and expenses and 4 percent in the second year for supplies, expenses, and salaries. The Senate bill included no money for inflation and targeted \$7.5 million for quality improvements in instruction.

"Given the circumstances, the House bill is not too bad," President Nils Hasselmo said at an open forum for civil service staff April 14. The Senate bill would be "quite draconian," he said.

Governor Arne Carlson's original budget recommendation would have meant serious trouble for the University, Hasselmo told the University Senate April 1, but the prospects in the legislature looked significantly better. "Legislators at this time have not seemed disposed to undertake a renegotiation of the contract" between the University and the state, he said.

Budget actions for this biennium may be stopgap measures, Vice President Ettore "Jim" Infante told the Faculty Consultative Committee (FCC) in March, because legislative leaders want to rethink higher education funding over the next two years. It will be important for the University to take part in the rethinking, said Karen Seashore Louis, professor and chair of educational policy and administration.

"We do not have a two-year respite," Hasselmo told the University Senate. "We have a very heavy agenda."

For most faculty and staff members, the primary question is whether they will be getting salary increases. Carlson's talk of a one-year salary freeze has complicated the picture. Although Carlson talked publicly about a one-year freeze, and the idea gained wide public support, his budget doesn't mandate a freeze. In terms of dollars, he included no money for salary increases in either year of the biennium, the same as in 1991-93.

"I doubt that anything different will happen for the University than is happening with all state employees," says Donna Peterson, the University's main lobbyist. Carlson's people will go to the bargaining table with the unions representing state employees, she says, and a key will be to watch for what instructions they go in with.

The legislature is likely to appropriate dollars and leave it to the University and other funded units whether to reallocate in order to pay salary increases, University leaders were saying in April.

When an improved state revenue forecast was announced in March, Carlson added just short of \$32 million to his budget proposal for the University (and about \$100 million for all of higher education), but none of that money was for salaries.

The University froze salaries for fiscal year 1992 and funded increases through reallocation in 1993, Hasselmo reminded legislators, while the state negotiated contracts that provided increases in both years.

"We're trying to convince legislators that the University did our share," says faculty lobbyist Virginia Gray, professor of political science.

"We at the University of Minnesota have already suffered the pain of over 1,000 layoffs and a wage freeze in 1991-92. This has increased our job responsibilities several fold and eroded our economic welfare," the Civil Service Committee wrote in a letter to Governor Carlson.

If the legislature appropriates money for salary increases, everyone can cheer. If not, the University will be forced to make the tough choice between downsizing and layoffs on the one hand or a salary freeze on the other. "We have by no means ruled out salary increases even through internal reallocation," Hasselmo told the University Senate in April.

In Carlson's revised budget, the new money was soft, most of it intended to buy down proposed tuition increases.

One of Carlson's original proposals, which sent shock waves through parts of the University, was to eliminate state subsidies for practitioner-oriented master's degree programs, resulting in tuition increases ranging from 81 percent (in social work) to 489 percent (in nursing). In his revised budget, Carlson called for removing half of the subsidy.

The governor's effort to micromanage tuition policy "seems to me to be extremely dangerous," Karen Seashore Louis said at a meeting of the FCC. Word of the proposed tuition increases is already spreading across the country and causing damage, she said, citing an article in the student newspaper at the University of Illinois.

To the relief of University leaders and faculty and students in the programs, neither the House nor the Senate bill includes the proposal to eliminate subsidies for the practitioner programs.

Public testimony on campus was effective on this topic, Virginia Gray says. "Faculty in those programs were talking about how they'd go out of business because they wouldn't have any students," and testimony from the graduate students themselves was powerful, she says.

Faculty coffee parties with legislators also went well, Gray says. "They usually ran long, and all the legislators said they learned a lot." At the parties, she says, faculty members have a chance to talk in some depth about their work. "They can say, 'This is what it's like to teach a class of 300 when the most high-tech thing you have is colored chalk. This is what it's like to try to raise millions of dollars in outside money.'"

If legislators go away "having met a faculty member who's in their district, and learning what that faculty member does, that's better than any written material I can hand them or anything I could spend 20 minutes presenting," Peterson says.

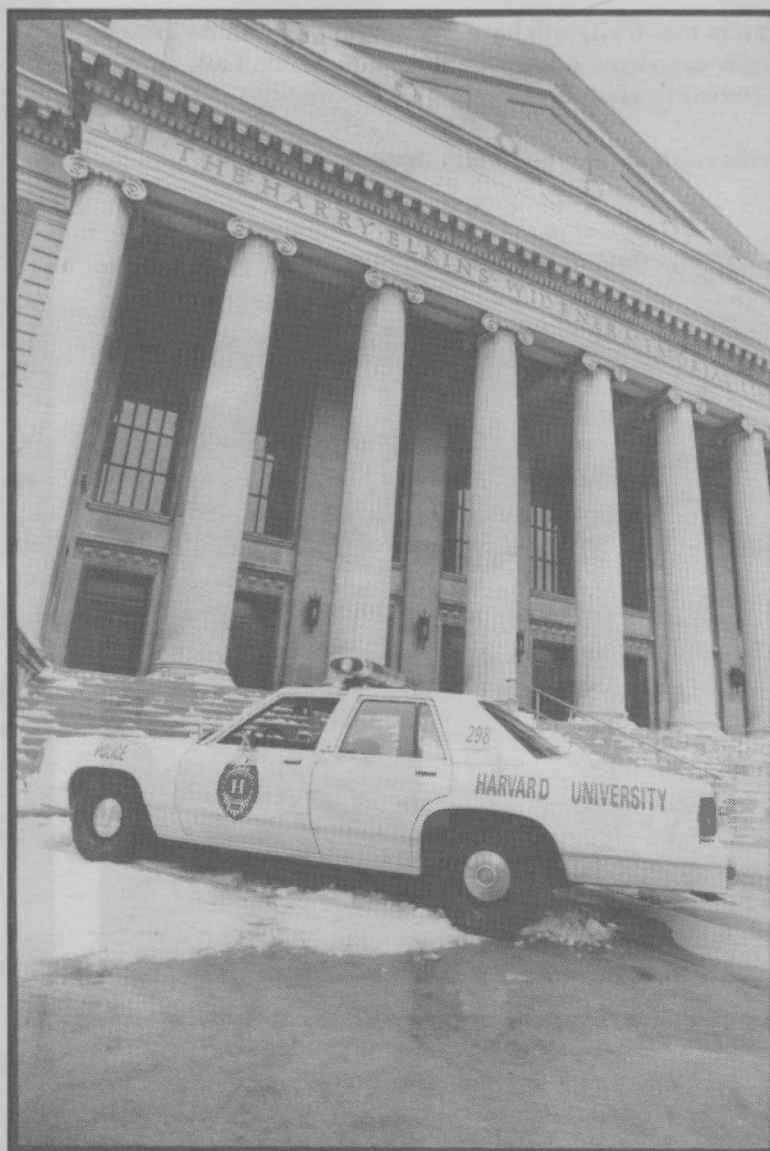
Civil service staff members have also tried to make their voices heard, especially on salaries. "We are sending letters and encouraging people to send letters to their legislators," says Pam Wilson, administrative director of the Natural Resources Research Institute in Duluth and chair of the Civil Service Committee.

A salary freeze would mean that University and other state employees would pay double taxes, "once along with the rest of the citizens of the state through payroll taxes and then again through a wage freeze," the committee said in a letter to the governor and to legislators. "We've already had one freeze, while the state has not, so this would be a second time around for us," Wilson says.

Legislators do pay attention to letters and phone calls, Gray says. "People shouldn't be shy. They should write their own legislators and the governor and give in their own words the impact of the cuts."

"We have to be as aggressive as we can in getting more and more of our faculty, staff, and students talking to legislators about positive things at the University," Peterson says. "We have to make higher education a priority, not just for legislators but for citizens, high enough so we can compete successfully for new state tax dollars." ■

SHORT TAKES



harvard of the midwest

When the movie "With Honors" comes to a theater near you, be advised: what looks like Harvard may not be. During spring break in March, parts of the Twin Cities campus stood in for the "Minnesota of the East." So, watch closely. That's Widener Library in name only: Northrop Auditorium is holding up the "engraving." The campus cop's prop car didn't take the stairs to the plaza—it drove up a specially installed ramp. And the snow? Machine-made. "With Honors" stars Joe Pesci and is scheduled for release this fall.

photo: TOM FOLEY

PEOPLE

twin cities

Norma Allewell, head of the biochemistry department in the College of Biological Sciences, has been elected president of the 5,000-member Biophysical Society for 1993-94.

Peabody Institute at Johns Hopkins University will award its Peabody Medal to **Dominick Argento**, Regents' Professor of Music, during commencement ceremonies May 24. Argento, an alumnus of the Peabody Conservatory, will be a commencement speaker. In June Chorus America will honor Argento with its Michael Korn Founder's Award. August 2 the Worcester Three Choirs Festival, the oldest festival in Europe, will give the European premiere of Argento's *Te Deum*, performed by the BBC Philharmonic Orchestra. OPERA America earlier this year recognized Argento with its Award for Achievement.

Jay Cohn, professor of medicine and head of cardiology, presented the honorary George Alexander Gibson Lecture to the Royal College of Physicians of Edinburgh in February. His talk was entitled, "Can we prevent heart failure?"

Medical fellow specialist Paul Crotty and his collaborators in the laboratory of **Chet Whitley**, assistant professor of pediatrics, received the first-place award at the joint meeting of the American Society of Clinical Pathologists and College of American Pathologists for their work on molecular genetic analysis of the gene for Hunter syndrome.

Chemical engineering professor **Edward Cussler, Jr.**, has been elected 1993 vice president of the American Institute of Chemical Engineers and will, by automatic succession, become the institute's 75th president in 1994.

Lois deLeon, a counselor advocate in General College Student Services, was one of 14 college advisers nationwide to receive an Outstanding Advising Award for 1992, sponsored by American College Testing and the National Academic Advising Association.

At the annual meeting of the Minnesota Council on Family Relations in December 1992, **Martha Farrell Erickson** accepted the Ruth Hathaway Jewson Award for Distinguished Service on behalf of the STEEP Program. STEEP (Steps Toward Effective, Enjoyable Parenting) is a preventive intervention program for high-risk parents and infants, developed by Erickson and **Byron Egeland**, professor at the Institute of Child Development. Erickson is coordinator of the All University-Community Consortium on Children, Youth, and Families.

When Kathleen Battle's recording, "Kathleen Battle at Carnegie Hall," won the Grammy award for Best Classical Vocal Performance, it was cause for celebration at the School of Music. Sharing that performance was Battle's pianist, **Margo**

Garrett, professor of music. Garrett joined the faculty in fall 1992 as the Ethel Alice Hitchcock Chair in Accompanying and Coaching. The endowed chair is the first in the country devoted to accompanying.

The Look of the Land by geography professor **John Fraser Hart** has been translated into Japanese by Shozo Yamamoto, professor of geography at Dokkyo University, and published by Taimeido.

Douglas Hawkins, professor in the School of Statistics, has won a nationwide award and a \$1,000 prize for the best paper on quality improvement. The award, in the faculty category, was presented by the Ellis R. Ott Foundation of Englewood Cliffs, New Jersey.

A documentary called "The Corner Drugstore: Then & Now," produced by Media Resources and broadcast nationally on public television, has been recognized with a Certificate of Merit by the 28th Chicago International Film Festival. It was produced with the cooperation of the College of Pharmacy and underwritten by 3M Pharmaceuticals. Executive producer was **Mary Kelley** of Media Resources.

The Robert Wood Johnson Foundation has awarded a grant of \$48,749 to the School of Public Health to study exclusion from insurance coverage due to preexisting conditions. **Nicole Lurie**, assistant professor of medicine, directs the study.

Mark Nesbit, Jr., professor of pediatrics and head of pediatric oncology-hematology, recently became president of the International Society of Pediatric Oncology based in Zurich, Switzerland.

The Royal Danish School of Pharmacy in Copenhagen recognized Professor **Philip Portoghese** for his research in medicinal chemistry by awarding him an honorary doctorate during the school's 100th anniversary celebration last October. He received the degree in the presence of the royal family, and also presented a centennial lecture during the celebration.

Patrick Redig, director of the Raptor Center, has been appointed to the California Condor Recovery Team, based out of the U.S. Fish and Wildlife Service in Sacramento, California.

Richard Weinberg, director of the Institute of Child Development, has been elected to a two-year term on the board of directors of the American Psychological Society, whose members include 15,000 scientists.

Law professor **David Weissbrodt** served as a public member of the U.S. delegation to the United Nations Commission on Human Rights, which met in March in Geneva, Switzerland. The commission, made up of representatives from 53 countries, is the primary political body of the United Nations focusing on international human rights issues.

An endowed chair in the Carlson School of Management has been renamed to honor Professor **C. Arthur Williams**, who is retiring this year. Williams, an international expert on insurance, was named to the Minnesota Insurance Industry Chair in 1980. The chair was renamed in November as the C. Arthur Williams, Jr., Insurance Industry Chair.

duluth

Linda Krug, assistant professor in communication, was appointed to head the Department of Women's Studies, effective winter quarter through 1996.

U. Harold Levy has been appointed affirmative action director and assistant to the chancellor at UMD. He comes from Levy and Levy consultants in Bethlehem, Pennsylvania.

Theater student **Paige Litfin** won a leading role in *Iron Will*, the Disney movie about a turn-of-the-century dogsled race filmed this winter in and around Duluth.

Timothy Mahr, associate professor and director of bands, won a \$5,000 commission from the U.S. Air Force Band for a work to be premiered next year. He was one of four composers chosen nationwide.

Kristelle Miller, associate professor of psychology and mental health, was appointed to the scientific review committee of the National Institutes for Health's Alcohol, Drug Abuse, and Mental Health Administration.

Gary Sanders, lecturer in health, physical education, and recreation, has been chosen Dance Teacher of the Year by the Minnesota Association for Health, Physical Education, Recreation, and Dance.

morris

Thomas Balistrieri, former director of Counseling and Career Services at New England College in Henniker, N.H., has begun his duties as director of Student Counseling.

The new vice chancellor for finance is **Cathleen Brannen**, who was formerly director of finance and administration for the School of Nursing at Vanderbilt University Medical Center in Nashville.

Roland Guyotte, associate professor of history, and **Barbara Posadas**, former visiting associate professor of history, are corecipients of the 1992 Harry E. Pratt Memorial Award, presented by the Illinois Historical Society for the outstanding article published in its journal. Their article was "Aspiration and Reality: Occupational and Educational Choice Among Filipino Migrants to Chicago, 1900-1935."

Chancellor **David Johnson** has accepted an invitation by the North Central Association of Colleges and Schools Commission on Institutions of Higher Education to become one of 94 new consultant-evaluators for 1993. Consultants serve as peer reviewers during the evaluation process to accredit colleges and universities.

Assistant professor of mathematics **Jinghua Kuang** has attained associate status with the Society of Actuaries, after completing 11 exams in mathematics, statistics, actuarial science, demography, and other related subjects.

Assistant professors **Gordon McIntosh** and **Jeffrey Ratliff-Crain** have received research fellowships for summer 1993. McIntosh's project will be a polarization map of the crab nebula at 100GHz. Ratliff-Crain will conduct an assessment of alcohol's role in sexual aggression, using computer simulation.

Jay Mills, former assistant football coach at Boise State University, has been named head football coach. He has also been an assistant coach at Notre Dame under head coaches Gerry Faust and Lou Holtz.

crookston

Glenice Johnson, assistant professor of sociology, received the 4-H Alumni Award at the West Polk County 4-H leaders recognition banquet.

Jacque Normandin, campus receptionist and switchboard operator, was named civil service employee of winter quarter.

George Marx, professor of dairy science, was named to the Red River Valley Winter Shows Hall of Fame in Crookston. The Hall of Fame recognizes people who show outstanding service, dedication, and long-term commitment to the winter shows.

Allen Ward, long-time psychology professor at the recently closed Waseca campus, has transferred to Crookston and will actively seek new students for UMC by visiting schools in southern Minnesota.

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UNIVERSITY OF MINNESOTA



JAMES SERRIN | PAGE 6

UPDATE

For Faculty and Staff

VOL 20 No 2
MAY 1993

Volume 20 May 1993 Number 2

Update is published six times a year. Three issues a year are directed to faculty and staff of the four-campus University system. Three issues a year address subjects of broader interest and are also sent to alumni and friends of the University.

Update welcomes ideas and letters from all readers. Write to *Update*, 6 Morrill Hall, 100 Church Street S.E., Minneapolis, Minnesota, 55455-0110, or call 612/624-6868.

The opinions expressed in *Update* do not necessarily reflect the official policies of the Board of Regents or the University administration.

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UPDATE

The University of Minnesota is committed to the policy that all persons shall have equal access to its programs, facilities, and employment without regard to race, color, creed, religion, national origin, sex, age, marital status, disability, public assistance status, veteran status, or sexual orientation.

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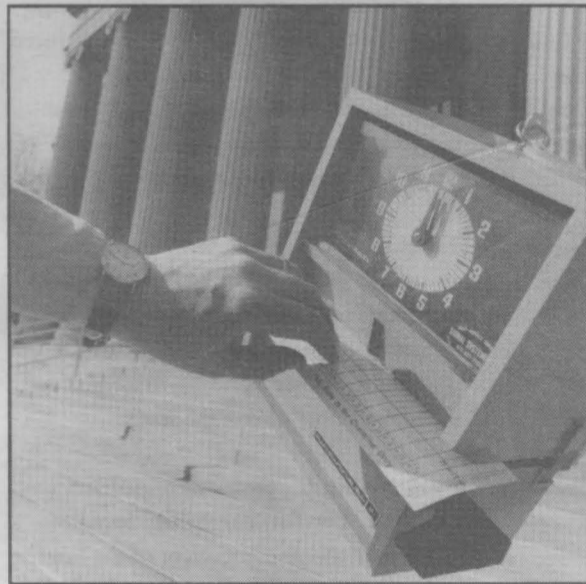


photo : TOM FOLEY

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Mood on Campus

articles by Maureen Smith | photos by Tom Foley

Salaries are frozen for the second year out of three. Parking rates are up. Troubling predictions are being made about changes in health care. More layoffs are coming, but nobody knows where they will hit. Negative stories about the University keep showing up in the newspapers.

It doesn't take tremendous insight to figure out that morale might be suffering.

In fact, the morale of the people who work for the University, both faculty and staff, has been the subject of considerable talk at the University through the spring and summer. Central administrators are greatly concerned about it, we're told by people in the inner circle, but they don't necessarily know what to do. Faculty morale was the subject of a closed meeting of the Faculty Consultative Committee in July. Wherever staff members gather, complaints are heard about overwork, frozen salaries, and lack of job security.

continued on next page

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For Faculty
and Staff

VOL 20 NO 4
OCT 1993

Angry

What makes people angry:

Mood on Campus, from page 1

To find out more about what people across the University are thinking, we decided to ask. The June 30 issue of *Brief* included an invitation to respond, by e-mail or voicemail, to these three questions: What makes you angry about working at the University? What gives you satisfaction or joy? What would you suggest to improve morale?

In early August, responses were still trickling in, and the total was at 72. Most were from the Twin Cities campus, a few from Duluth, and one from Morris. A majority were from staff members, but a significant number were from faculty. Many people requested anonymity.

Comments from 72 people who chose to write or call obviously do not represent a scientific survey, but they do reflect some widespread concerns.

Almost everybody answered all three questions, but most people went on at greater length about their anger than their joy. A few gave reasons for satisfaction that sounded more bitter than joyful: "We now have the ability to strike and shut down the U." "What gives me joy is knowing that I won't be here for very long." At the other end of the spectrum, two people said they honestly couldn't think of anything they were angry about.

As expected, the salary freeze was a source of anger for many people. Increased parking rates and unfavorable news stories were also frequently mentioned. The central administration came in for criticism for spending money at the top and not caring about rank-and-file employees.

Some anger was expressed directly toward the administration of President Nils Hasselmo, but other people expressed support for Hasselmo. One faculty member said "the very top" (Hasselmo) is well respected and the problem is with authoritarian department heads.

Continuing love for the University was reflected in people's reasons for joy. People said they like the contact with students, the chance to work with interesting and caring colleagues, the academic atmosphere, the work they do.

Some people said their own units are wonderful and supportive. Others had complaints about their specific situations. (Because these situations may not be representative of the University as a whole, and because we are not in a position to assess the accuracy or fairness of the comments, we are not including any of these comments among those published.)

Suggestions for improving morale, besides salary increases, included other forms of rewards (extra vacation time was a favorite), more attention given to praise and recognition, and finding ways to ask people for their ideas. A number of people thanked *Brief* and *Update* for giving them a chance to say what they think.

Without trying to put any kind of spin on it, we are publishing here a representative sample of the comments, positive and negative, we received. ■

The thing that makes me angry at the U is the way salaries are frozen but everything else on campus continues to rise in cost. Like parking. When I came to the U, I could park for 50 cents a day. Now the minimum I have to pay is \$1.25. If my salary had doubled I would not complain.... Also the vending machines all raise their prices, too. I am being nicked and dimed to death.—*Lynn Hochsprung, Senior secretary, Physics and Astronomy*

The lack of respect for employees and the pretense that diversity is encouraged when in reality for female and minority workers the U has increasingly become a hostile atmosphere in which to work. For secretaries and other workers at the bottom the impact is severe. Our work is devalued by the professional-class employees and faculty for whom we work.—*Secretary, name withheld*

What makes me angry is the constant negative publicity that we get. I feel there's a lot of positive things going on at the University, and I think President Hasselmo has worked real hard to make the whole University more accountable to the state. I just think it's real unfortunate that we hear so many negative things.—*Maggie Towle, Associate administrator, Minneapolis Student Union*

President Hasselmo is recommending increasing funds for faculty and staff development. Picking the fruit of this benefit will be mostly the faculty and administrators and only a little to the upper-salary staff. Those on the low rungs of the ladder will AGAIN be left out. We, the least important, are remembered how much we are needed when we request to use some of our vacation. Then it's hemming and hawing trying to decide if the office can handle things in our absence.—*Secretary, name withheld*

It makes me angry that everyone has to absorb cuts EXCEPT the administration. For example, the legal staff is apparently being increased from 14 to 24 attorneys.... Every new recommendation or investigation brings more new administrative staff and new layers of bureaucracy. Meanwhile, the administration freezes salaries and insists we must "do more with less."—*Faculty member, name withheld*

What makes me angriest at this point is how resistant to change many people are who work here. Change is needed as we deal with budget cuts and a troubled economy. Civil service staff seem to be angry and have expectations that aren't being met. The reality is that the situation outside the University is often much worse than it is here.—*Debra Haessly, Executive secretary, College of Education*

Psychological Contract

When you work for the University or any other employer, you carry some ideas in your head about what is expected of you and what you can expect in return.

Those ideas add up to your psychological contract.

What is happening to many workers today is that their psychological contracts are being violated or threatened, says Judi McLean Parks, assistant professor of industrial relations. The consequences are damaging, both to them and their employers.

Many of us at the University have had the idea that if we are loyal and do a good job, we are assured lifetime employment. Except for tenured faculty members, not many people believe that anymore. Layoffs and threats of layoffs have taken their toll not only on those who have lost their jobs but those who have survived.

"When you have massive layoffs, other employees feel that their psychological contract is at risk," McLean Parks says.

Survivors may feel guilty that they still have jobs when others don't, fearful that they will be next to go, or overworked as they take on duties of laid-off colleagues. "It's harder to get your job done than it used to be, and more stressful because your work load is increased," she says.

One area of research for McLean Parks is looking at employees' perceptions of justice, both distributive (who gets what) and procedural (whether the process is fair).

If raises or perks are being handed out, they might be based on seniority, performance, or need. "Different people will perceive different rules as fair," she says.

Most research in this area has been on the allocation rules for handing out rewards: the rule of equity (giving the biggest bonuses to high performers), the rule of equality (dividing up the available resources equally), or the rule of need.

"Nobody has looked at what is perceived as fair when we take resources away," she says. Equity is usually perceived as fair when an employer is giving something, such as bonuses, but people may have very different rules of fairness when something is being taken away.

"When tug comes to pull, procedural justice is more important to employees than distributive," McLean

Parks says. "Did we let employees have input? Did we give them fair notice? If the procedure is seen as unfair, people think it could be a random event and it could happen to them."

In any job, she says, people have their in-role duties that can be spelled out in a contract or a job description and "extra role behaviors" that go beyond the job requirements but that organizations depend on. Examples would be helping another employee catch up after an absence, volunteering to help orient a new employee, skipping lunch to get a rush job done.

The extent to which employees are willing to go beyond their job descriptions depends in part on what understanding they have of their employment contract.

McLean Parks looks at employment contracts on a continuum, with transactional contracts on one end and relational contracts on the other. A transactional contract is short-term and calls for specific behaviors. A relational contract is longer term and more broad, calling for whatever needs to be done.

For a variety of reasons—widespread layoffs, the recent trend to hire temporary workers—more and more workers are seeing their contracts as transactional, she says.

"Everybody has always assumed they had a relational contract. Now they find they had a transactional one. The organizations still want a high level of commitment from employees, but they are not returning that commitment. It's kind of like a marriage with one spouse always doing the adjusting.

"Contracts are moving more toward transactional, but the organizations aren't really thinking about what that means—workers who have no loyalty, who aren't willing to stay and work through the lunch hour, who see the job as just a place to come in and punch the time clock and get their paychecks. We need employees to be loyal, to be committed, to take pride in their work."

Laying people off and hiring temporary workers may make economic sense in the short run, she says, but the costs will be high in the long run.

"Maybe this is just a temporary blip because of economic pressures," she says about the trend toward transactional, short-term contracts. "Maybe we will return to long-term contracts. Intuitively I don't think so, but I hope so."

The secretaries always act like they are doing me a favor by doing work that I ask them to do. They have terrible attitudes.

The security in the buildings is nonexistent. I often must work very long hours, and it is dangerous to be on campus then. Anyone can walk into my building.

The public outreach is virtually nonexistent. My neighbors have no idea what a professor does, and they never hear good news about the U. The University has a public relations office, they should USE IT.— **Faculty member, name withheld**

The amount of time spent on committees and meetings without significant progress being made is incredible. Everything is analyzed to death, and any sort of change, no matter how small, needs to be reviewed for at least a year....I've never attended so many fruitless meetings in my life.

Another thing that infuriates me is the job evaluation process here (the infamous JEQ). The process is a farce, as it does not accurately assess the content or level of difficulty of University positions....For me it is by far the most denigrating to staff morale.— **Staff member, name withheld**

The negative publicity that the U of M receives in the press. It is very difficult to feel glory in working for an institution that has such a dubious reputation. It is so discouraging to see units cut back in funding each year...our pride in the University used to keep us going. It takes a lot of effort to hold up our heads in these times.— **Secretary, name withheld**

What makes me angry is the lack of institutional support for setting academic standards.— **Uwe Stuecher, Associate professor, Psychology and mental health, UMD**

I do get tired of hearing how the faculty buying power is decreasing. The buying power of the civil service staff has decreased just as much...Many staff members are trying to raise families on their salaries also. I think it would help morale immensely if the University would start including the staff in their buying power statements.— **Staff member, name withheld**

These make me angry:

1. Gender- and race-based programs and facilities
2. Double talk with respect to promotion criteria. Research, teaching, and service are said to count equally but (certainly in some colleges) only funded research is considered.
3. Strict codes re sexual and racial harassment coupled with weak-kneed enforcement
4. Faculty who blatantly abuse their positions and gutless administrators who let them get away with it
5. Students who do not take advantage of all that is offered them and complain when they do not achieve course objectives

— **W. T. Peria, Professor of electrical engineering**

As you are probably aware, many of us who work for the University are feeling angry about our lack of a pay raise. In particular, I am frustrated at being portrayed in the media as an overpaid and pampered state employee.— **Manager, name withheld**

That there isn't better marketing of the University so that people can understand in dollar and quality-of-life terms what the University brings to the state.— **Linda Charles, Executive secretary, Vocational and technical education**

I dislike a system that allows people to remain in positions for years as long as they don't make waves. Quiet mediocrity should not result in promotion due to years of service.— **Senior office assistant, name withheld**

I have the perception that performance and merit are not adequately rewarded here. Simply stated, the University should encourage and reward those who perform well....My feeling is that I can perform scholarly research and earn respect in my professional community outside of the University much more readily than being rewarded within the University. Why shouldn't I pursue these research goals, then, at the expense of the other goals of the University, namely excellent teaching and service?

The only reason I do not pursue research exclusively is due to my personal feelings about the duties of a faculty member.— **Jeffrey Derby, Assistant professor, Chemical engineering and materials science**

What ticks me off: Being dumped on. I've worked here since 1976, built up a level of expertise at what I do (did), taken pride in my work and my competence. Then CUFs is brought in, without any input from people who have to work with the system, and absolutely everything I've learned is tossed out the window....Then, bam, they dump the invoices on us while [we're] simultaneously being retrenched so it's impossible to hire more people for the increased work load. And while I could probably learn to deal with CUFs as a system, why must the thing generate so damn much paper? I'm drowning in it.— **Senior accountant, name withheld**

I am angered by the managerial vote of "no confidence" in professional staff, specifically when consulting firms such as Coopers & Lybrand get multimillion dollar contracts while professional staff lose theirs.— **Richard Miller, Coordinator, ORTTA**

I am angry that I am a college-educated woman and cannot get ahead financially because we don't get salary increases. I have worked at the U of M for four years and I've received only one raise (2 percent). It is very frustrating and I often think of leaving the University for the private sector.— **Susan Ronchak, Senior secretary, Carlson School of Management**

Rewards seem to be given for screwups—no money is given to departments that provide success stories for the U, but lots of money goes to fix departments that overspend and are poorly managed. The problematic units seem to eat up so many resources while others that do a good job are simply cut away, year after year.— **Unsigned letter**

It seems like workers who do their job poorly get the same amount of raises (when there are any) as us who work our tails off. There's no incentive to work harder to get increased pay or acknowledgment....My only real gripe about this is that it should be easier to get the incompetent workers out of the system.— **Barb Dodge, Principal secretary, Laboratory medicine and pathology**

We are trying to do too much. Everyone is distressed because their "plates are too full," and more is being added with nothing being removed to compensate.— **Staff member, name withheld**

Lower-class employees are treated like we don't count. If it wasn't for us, the work wouldn't get done and we wouldn't be making the upper-class people look good. There is no advancement for people of color, no type of pay increases.— **Paulette Jackson, Office supervisor, Admissions**

President Hasselmo came to this University claiming that he was going to make his number one priority the issue of faculty salaries. He's failed. He has tried to pass this off as simply a kind of disappointment. I'm afraid it's more than that.— **John K. Munholland, Professor, History**

I'm angry about the prospective changes in health care, which were outlined in *Footnote*. That coming on the heels of no raises is really adding insult to injury.— **Staff member, name withheld**

Absolutely nothing makes me angry about working at the U. (Seriously!)— **George (Rip) Rapp, Director, Archaeometry Laboratory, UMD**

Just Say No

It seemed like a good idea when it came up. Along with the articles about morale problems at the University, how about giving some tips on what people can do when they're stressed out or demoralized?

The idea wasn't to gloss over the problems, but to offer some practical suggestions that might help.

I asked around for names of experts within the University, and I decided on the one I would call: David Wark, professor in the University Counseling Service. Would he be willing to talk with me about it? His answer was immediate.

No.

"The 'do more with less' philosophy has just gotten to me," he said. "I don't have any great ideas on stress. There is a way, and that is to say no to things that add more work."

Wark relented a little and talked briefly on the phone. "There are things you can do—exercise, diet, relax, talk to your friends, spend time with your family, keep balance in your life. I want to add to that, Say no. I hate to be a curmudgeon, but I really think that's one way to handle the craziness. You can quote me."

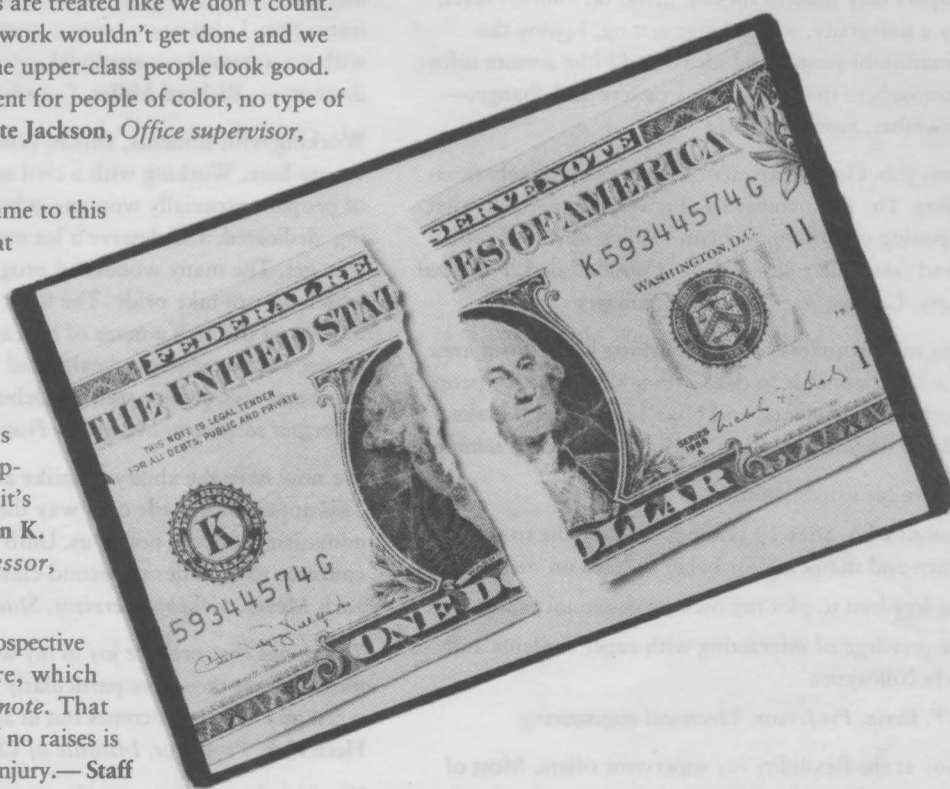
When Wark saw the item in *Brief* inviting people to send or call in with comments on morale, he says, he thought of responding himself. In the end, he didn't, because "I couldn't think of anything good to say."

"Not enough people get enough strokes for the things they do well. We just hear 'Do more, do better.' There are very few rewards and encouragement. Praise is cheap, and it's very effective."

Wark's most encouraging experience last year, he says, was attending an awards ceremony honoring three recipients of the Academic Staff Awards: Bill Beyer, Jeffrey Hahn, and Joyce Weinsheimer. (In addition to these recipients on the Twin Cities campus, awards went to Michael Lane at Duluth and Thomas McRoberts at Morris.)

"That just made me feel good, so good," Wark says. "It isn't very often around here that people get complimented."

Then he returns to his primary theme. "We've got to say no when we're asked to do more. I don't think it's fair."



Proud

What gives people satisfaction or joy:



Working with students gives me great satisfaction and joy. What else are we here for?— **Jeanne Exline**, *Director of Career Services and Alumni Relations, College of Human Ecology*

I have always enjoyed working with faculty; they have an enthusiasm and excitement for their work that is infectious.— **Alice Tibbetts**, *Assistant to the director, Sea Grant*

For me it's the people at the University. It's such a diverse population. I just love the fact that I can walk out of my office and meet people from so many different parts of the world. I learn so much from all those people.— **Maggie Towle**, *Associate administrator, Minneapolis Student Union*

I cannot think of anything at this time that gives me satisfaction except receiving my paycheck, which I believe I earned.— **M. J. Leone**, *Principal secretary, UMD Graduate School*

My own values, integrity, and dedication in my work keep me going. I work because I can help others solve problems, or get their basic tasks done at the work place.— **Staff member, name withheld**

I receive extreme satisfaction when I know that I have performed my job to the utmost of my capacities....I like to know I've smoothed someone's path a bit in getting back to school, or eased their anxiety about all the forms and papers they need to fill out....And on another level, I enjoy a university, or academic setting. I enjoy the combination of people and ideas, and I like a more informal atmosphere that encourages variety and change.— **Staff member, name withheld**

I like my job. Our department allows us extremely flexible hours. The department head is very involved in what is happening in our department. He listens to our problems and takes them seriously.— **Camille Lund**, *Principal secretary, Cell biology and neuroanatomy*

Making my customers happy. Working in the front area of the office I am able to deal with a lot of outside people from other departments, and I like being able to make their day. I do like my job.— **Staff member, name withheld**

These give me satisfaction:

1. Alumni who, after 10 years or so, take the trouble to return and thank me for being so hard on them
2. The freedom to plot my own professional career
3. The privilege of interacting with eager students and lively colleagues

— **W.T. Peria**, *Professor, Electrical engineering*

I feel joy at the flexibility my supervisor offers. Most of us are given a lot of flexibility and work in an atmosphere that is supportive of our differences.— **Debra Haessly**, *Executive secretary, College of Education*

Working with friendly, considerate, and intelligent people.— **Tracey Benson**, *Program coordinator, Extension Special Programs*

Working with students in a department that demonstrates caring for its students and staff.— **Linda Jagerson**, *Student personnel worker, Electrical engineering*

The freedom of inquiry that the University allows me.— **Uwe Stuecher**, *Associate professor, Psychology and mental health, UMD*

I am especially happy with my colleagues in my own department and with a number of first-class professors in other departments. The University's greatest asset is its high-quality faculty. I hope that these individuals do not decide to leave for greener pastures elsewhere. If not for the particular strength of my department, I believe that I would have given serious consideration to such actions by now.— **Jeffrey Derby**, *Assistant professor, Chemical engineering and materials science*

When I am feeling very low about my salary and/or office policy, the best medicine is actually to get out to participate in one of our courses or to meet the public and talk about what a fine program I work with. That is actually therapy for my job blues at the U.— **Staff member, name withheld**

The University is trying to deal with issues like sexual harassment, homophobia, bigotry—they still exist, but the effort is being made. I have the feeling that there would be a procedure to follow if an incident were to occur. I know for a fact that other organizations "on the outside" are not so enlightened.— **Staff member, name withheld**

I'm proud of the fact I work for the University. As an employee, I have taken advantage of the tuition assistance program to broaden my horizons academically (in spite of the fact I already have a master's degree). That opportunity gave me a front-seat view of the U as a first-class institution. I also enjoy being a member of an institution with unsurpassed occupational, intellectual, and ethnic diversity.— **Richard Miller**, *Coordinator, ORTTA*

Working with students, which, believe it or not, is why we are here. Working with a civil service staff composed of people—especially women—who are bright, interesting, dedicated, and deserve a lot more recognition than they get. The many wonderful programs on campus in which we can take pride. The folks who will try like hell to get you through a maze of bureaucratic red tape. I also appreciate the generous health and other benefits we receive as civil service staff.— **Deborah Drucker**, *Principal secretary, University Foundation*

We now have the ability to strike and shut down the U. This appears to be the only way the president and the administration will notice us. Until we strike, they will continue to consider us second-class citizens.— **Rich Meyer**, *Office supervisor, Student Financial Aid*

The things that provide joy in my work are when students mention that they have particularly enjoyed a course or when an experiment comes out in an interesting way.— **Herb Pick**, *Professor, Institute of Child Development*

Working for an institution I am proud of (that goes for UMM and the U as a whole both!!) Also, the people... fellow workers...so many are such great people and a pleasure to work with.— **Staff member, name withheld**

Teaching, working with students. Forming partnerships with people in industry to help students get jobs.— **Faculty member, name withheld**

In Your Genes?

Not happy with your job? Maybe it's in your genes.

Richard Arvey, professor of industrial relations, has studied the genetic components of job satisfaction by asking identical twins who were reared apart to complete job satisfaction questionnaires.

The data show that about 30 percent of the variance in job satisfaction can be attributed to genetic components. "That's significant," Arvey says.

"But 70 percent is environmental, and that's substantially more," he adds quickly. "We can't run around saying that genetics is the major factor."

To the extent that genetic factors do play a part, he says, it may be that some people are temperamentally disposed to be satisfied. A study by another scholar found that people tended to report similar job satisfaction over time, even when they changed careers.

In his study of 34 twin pairs, Arvey coded their jobs by level of complexity and working conditions. In one case, both twins were fire fighters. ("That was probably not just chance," he says.) In other instances, the jobs were not exact matches but were similar in their level of complexity.

"One of the questions was whether the similarity in job satisfaction was simply due to the job," he says. "I checked for that. They still correlated after correcting for similarity in jobs."

Another study pointing to the same conclusion looked at the job satisfaction of twins reared together. Identical twins showed a higher correlation in job satisfaction than fraternal twins.

"What does that mean? What do we do about it?" Arvey asks. "That gets into deep and thorny ethical issues."

If you're an employer interviewing candidates for a job, you'll probably be wary when "they start telling you they were dissatisfied with their first job and second job and third job," he says, and most people wouldn't question the employer's taking this into account.

"Would you ever use genetic data? Would we ever do any genetic altering?" Arvey asks. "I'm not suggesting that. I'm just throwing these out as things we need to worry about."

I enjoy my work and the people I work with. I think the vacation/sick policy and the benefit packages are excellent.— **Staff member, name withheld**

My greatest satisfaction is to have the freedom to be a "scientific entrepreneur," including being able to raise private funds to support my research interests. Many research universities do not allow this. This may be why the University ranks so high in dollars raised each year. There are thousands of potential donors out there, and it is nonsense to think that only a few people in a central office can handle this.— **George (Rip) Rapp**, *Director, Archaeometry Laboratory, UMD*

It's a real pleasure to work with most of the people I work with, my colleagues in the Extension Service. We've got a very good group of faculty and staff.— **Staff member, Minnesota Extension Service**

The University is very much like a small town, and a very interesting one. There is a fantastic variety of things going on.— **Staff member, name withheld**

What gives me satisfaction (as well as joy) is working with students—teaching, conducting research, engaging with them in intellectual discourse.— **Faculty member, name withheld**

The stimulating intellectual environment and interesting people are what bring joy to my job at the U.— **Librarian, name withheld**

I enjoy basking in the reflected glory of this still wonderful university. We seem to be in various stages of decline, but being a faculty member of the University of Minnesota still means something to many, many people.— **Michael Bennett**, *Professor, Rhetoric* ■

Hoping

Ideas for improving morale:

Maybe President Hasselmo could have a group of civil service and AFSCME employees have a committee on it. We have committees to make committees. Let's have a committee on morale. We won't start at the top. We'll start at the bottom of the barrel and work upward. That would be novel for the University, don't you think?— **Barbara Sullivan**, *Principal secretary, Coffman Memorial Union*

I have two suggestions that are very, very modest. The first is to make it possible for children to attend the University tuition-free. The public would accept this. It's a very understandable thing. It could come under the Regents' Scholarship program. It would not cost very much, but what a boost it would be to those of us who have children who are coming to college. It would boost our pride in the University.

My second suggestion would be to spend \$1 million or \$2 million in lump sum raises of \$2,000 to \$5,000 each for the 200 or 300 most underpaid professors at the University...In the Department of Rhetoric some of us are making \$38,000 a year, and we've been here 16 to 20 years.— **Michael Bennett**, *Professor, Rhetoric*

As a person with a P&A appointment, moving from one-year appointments to three-year appointments would tell some of us that the U and our unit appreciate our work even if a salary increase is not possible.— **Jeanne Exline**, *Director of Career Services and Alumni Relations, College of Human Ecology*

Do like the army and encourage physical fitness. Allow a couple of hours of work a week to work out. Healthier workers are happier workers. You could monitor by having a person show registration for a fitness class. I for one would do the noon-time aerobics classes if I had time to shower afterwards.— **Linda Jagerson**, *Student personnel worker, Electrical engineering*

Clean up the University's grounds and buildings. Everything is dirty, worn out, and falling apart. I am ashamed to ask outstate people to come to our campus to participate in meetings.— **Staff member**, *name withheld*

Since there are limited funds for raises, who not allow employees to have flextime, and/or give employees discounts to various services provided by the U?— **Linda Danley**, *Accounts supervisor*

Compensation for hard work. Salaries fairly distributed in accordance with production, not titles. Remove the titles and give people recognition for work well done.— **Staff member**, *name withheld*

The primary issue among staff at the University may be the lack of an incentive-based promotional and pay-raise system. Currently, at the Carlson School of Management, job performance has absolutely no effect on either a promotion or a pay raise...Ironically, there is probably no professor in the Carlson School who would teach or encourage students to use this system. This system of employee management does not correspond with any company that is successful....Without fixing this underlying problem, the University of Minnesota will never be able to completely improve morale.— **Michael McKinnon**, *Carlson School of Management*

1. Run this institution in such a way that Joe Rigert would have no interest in it.
2. Be honest about the promotion and tenure criteria.
3. Stop catering to noisy special issue groups.
4. Conduct every college, department, program, project, search, and discussion in a strictly gender-blind, color-blind, and affectional-blind manner.
5. Put some teeth in the harassment codes.
6. Dare to fire those who abuse the privilege of being a member of the faculty.

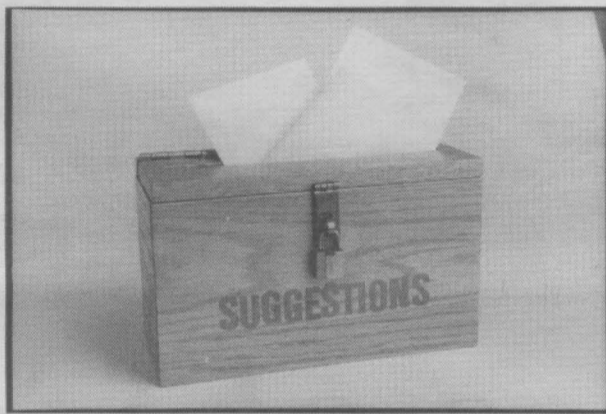
— **W.T. Peria**, *Professor, Electrical Engineering*

At a corporation I last worked for, they had one salary freeze during a 12-year period. The freeze lasted nine months. During the period of the salary freeze, I suggested that everyone receive an extra day of vacation each month while the freeze was in effect...The suggestion was implemented, and it seemed to improve morale. The University might consider a similar program.— **Paul Cox**, *Accountant, Family practice*

The short answer is money. I have a high level of responsibility and give my best to this place, but my family deserves a little more money for my output.— **Dann Adair**, *Research plot coordinator, Plant pathology*

Clear guidelines and support for setting academic standards regardless of race or gender or other factors in order to rebuild the quality of this great University.— **Uwe Stuecher**, *Associate professor, Psychology and mental health, UMD*

How about a sense from Morrill Hall that I'm more than a line item on a budget? I live a comfortable life. I don't expect automatic pay increases every year, but I don't like feeling that I need to fear for my job at the end of every fiscal year...If I hear the vague and ominous phrase "hard choices will be made" one more time in *Brief*, I'll puke.— **Staff member**, *name withheld*



Written thank yous for excellent work are an inexpensive and effective morale booster. If a department could spare about \$200 a year, \$10 or \$25 bonuses or gift certificates could be given to deserving people. It's very important to recognize and reward staff for their hard work.— **Tracey Benson**, *Program coordinator, Extension Special Programs*

If not money, I would enjoy benefits such as flextime, encouragement to attend workshops, and some sort of award or reward (day off, etc.) for all those receiving "more than expected" and above on performance appraisals.— **Staff member**, *name withheld*

Most employees know what kind of things are being done wrong. Most of us also know how to fix those problems. Unfortunately, many employees are afraid to speak out. The U should make an effort to encourage discussion at all levels, not only with faculty. Currently, only faculty are guaranteed free speech. The entire University will be better off when free discussion wins.— **Richard Miller**, *Coordinator, ORTTA*

Stop tossing around the "everyone must sacrifice" jargon and recognize that a clerical worker making \$15,000 annually needs a raise more than an administrator making \$60,000. If any funds can be scraped up, give raises to staff at the lower end of the pay scale. (FYI: I make \$24,000 and do not consider myself in this group. But I've been there...)— **Deborah Drucker**, *Principal secretary, University Foundation*

You are making a good start by asking people for their input. Different people are concerned about different things: salary, working different hours, being asked to do more and more. Problems will always exist, but people seem to feel better if management asks for input and demonstrates and tells people that they are trying to do something about problems.— **Faculty member**, *name withheld*

A more diligent use of Total Quality Management (TQM) would greatly improve morale in the department I work for. By TQM, I mean involving employees of every level in the decision-making process. ...Often it is the people at the lowest levels of the hierarchy who can provide untapped insight and solutions to the decision at hand. But most often their job experience and expertise are ignored, because it is assumed that the "workers" can only work, not think!— **Cynthia Bordes**, *UMD Plant Services*

I suggest the president and administrators give the clerical staff a decent pay increase, so we can pay for food, gas, and rent. I suggest the president talk to some of us. I believe the president is completely out of touch with our predicament, or simply does not care.— **Rich Meyer**, *Office supervisor, Student Financial Aid*

I think it is time for the University to treat ALL employees equal and start to listen to some of the lower-level support staff. We have good ideas about how to improve matters because we are involved in the day-to-day running of departments and we see it all. We have a lot to offer. Just because we do clerical work does not mean we do not have creative minds.— **Staff member**, *name withheld*

Something that might be done to improve morale is for higher administrators to meet with faculty on a department-by-department basis or in some other small-group configuration and discuss problems from the perspectives of both.— **Herb Pick**, *Professor, Institute of Child Development*

Morale here is the lowest I have ever known it to be due to layoffs, cutbacks, and more work being put on less people. Some type of award system is needed to boost employee morale.— **Staff member**, *name withheld*

My department is great. It's the University as a whole that forgets about the little people. Maybe all administration above the dean's office of each college should be eliminated. That would save us lots of money. Where is it written that we have to be united as a whole?— **Camille Lund**, *Principal secretary, Cell biology and neuroanatomy*

The public relations office should do more work to improve the U's image.

Less emphasis on diversity. I'm really sick of this issue.

The faculty are the stars of this show. Let's see more in print and on TV about what they do and how they do it.— **Faculty member**, *name withheld*

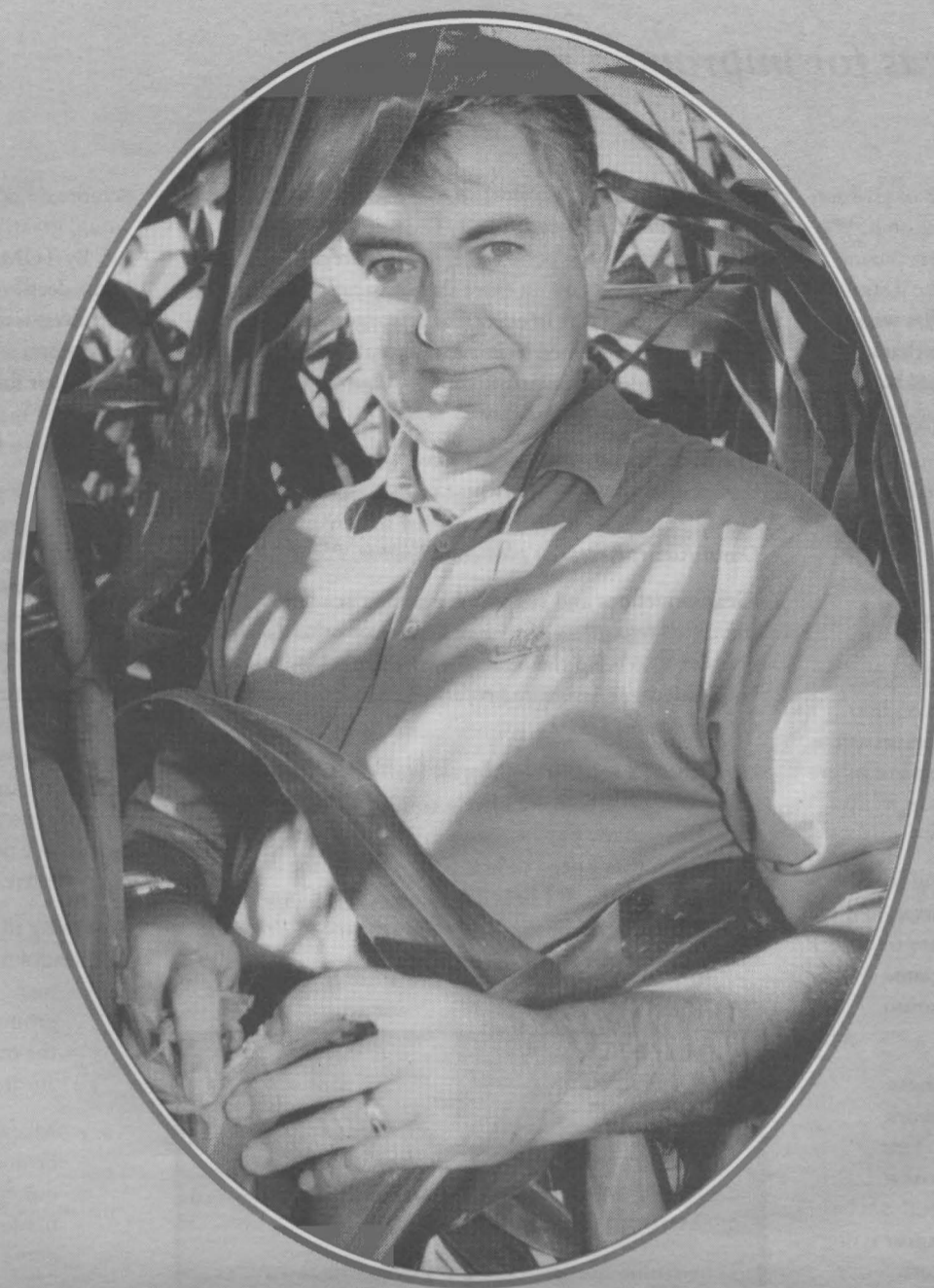
If the administration cut itself instead of expanding while it's cutting everyone else, and if deeds as well as words conveyed value and respect for the faculty, I think there would be a positive effect.— **Faculty member**, *name withheld*

To improve morale, I would make departments more fiscally autonomous. The team would sink or swim together. There would be more incentives, for example, to save electricity or reduce supply expenditures if those efforts could be rewarded. People need incentives, e.g., money, days off, flexible work schedules.— **Staff member**, *name withheld*

Ease up on some costs now and then for staff. Give something to employees—free parking on a work day after a holiday, free Pepsi on the day before a holiday, U of M T-shirts, etc.— **Geri Skogen**, *Assistant to department head, Food Science and Nutrition*

Raises would be the ultimate. Feeling appreciated would also be nice.— **Staff member**, *name withheld*

Ask long-term employees to help solve problems, listen to their suggestions, and promote from within.— **Staff member**, *name withheld* ■



Years of Corn

BURLE GENGENBACH SHOWS QUIET COMMITMENT TO CORN GENETICS LAB AND THE U

By Maureen Smith

Biking from his Roseville home to his Borlaug Hall office in the summer, Burle Gengenbach, professor of agronomy and plant genetics, passes the corn fields that are important in his research. At harvest time, it takes him just a few minutes to walk from his laboratory to the field plots, pick a few ears of corn, and take them to the lab for analysis. Along the way, he's likely to run into colleagues who are also his best friends.

In a day when many people's lives seem scattered, Gengenbach's is striking in its wholeness. Warm and unpretentious, with an easy grin, he seems like a man who is comfortable in his own skin. "I wouldn't want to change much of anything," he says about his life.

Asked to pick one word to say who he is professionally—professor, scientist—Gengenbach chooses geneticist. "That encompasses most of the research, most of the teaching," he says. Alongside his strong identification with his discipline, however, is a deep sense of connection to the University as a whole.

Gengenbach's wife, Lou, a social worker, has a master's degree from the University. His son, Alan, is a junior in the Institute of Technology, a chemistry major who seems headed for a career as a scientist. His daughter, Tara, is a freshman in the

College of Liberal Arts with an interest in art. "If everything goes right, everybody but me will have a degree from here," Gengenbach says.

Gengenbach is "the consummate team member," says his dean in the College of Agriculture, Richard Jones. "He's just an excellent citizen of the University, plus he's an outstanding scientist and faculty member."

"He's very unselfish as a team member," says Mark Brenner, associate dean of the Graduate School and professor of horticultural science. "He's the kind of person who will do things for the good of the group, the kind of person you like having as a colleague."

"If you ask Burle to do something, there is absolutely no concern about whether it will get done," says his department head, Kent Crookston. "Sometimes he'll decline, but once he agrees to it, it's done. That's a benefit to the whole University."

To Gengenbach, being reliable and a team player is nothing remarkable. "Most of it is just pretty much common courtesy," he says. "If you say you're going to do something, or give something to somebody, you should do it."

There's another theme in people's comments about Gengenbach: he is not given to wordiness. "He's sort of a quiet fellow, but when he says something it's very important," says Irwin Rubenstein, head of plant biology. "If Burle does speak, people listen," Crookston says. "It's probably overdue by the time Burle says it, but it's been well thought out

"His wife and my wife are friends. His wife says if they're on a trip, he may go hundreds of miles without speaking," Crookston says. (Gengenbach has heard these comments. "We solved that problem," he says. "We drive at night, and everybody sleeps except the driver.")

Quiet doesn't mean shy, Crookston says. "Sometimes when you're one-to-one with Burle, he'll get going and you have to interrupt.

"What you're going to find with Burle is that you don't have a showy, splashy person. You just have quality to the core."

Growing up on a farm in western Nebraska, Gengenbach was always interested in agriculture, both crops and animals. "Without giving any special thought to it, I ended up an undergraduate in agriculture at the University of Nebraska. There never was much of a decision-making crisis."

His whole career kept going that way. His adviser was working in plant genetics, and Gengenbach worked on a project in his lab as an undergraduate. The experience strengthened his own interest in genetics and showed him what was involved in a scientific career.

"When I was approaching the beginning of my senior year, he said if you want to stay on for a master's degree we'll probably have a spot for you. Once I'd gotten to that stage, I guess the die was cast. One thing sort of led to another."

For his Ph.D. work, Gengenbach went to the University of Illinois, finishing the degree after three years, in 1971, and then staying on for another year as a postdoc. "The job market was fairly tight back then, too," he says. The postdoc opportunity came because of some federal funding for research into a disease epidemic in corn called Southern Corn Leaf Blight. "That gave me a real good chance to do research in an area that was quite interesting to me because of all the damage that had occurred on corn acreage the previous year.

"Any state that had corn those years was at risk to lose some of it," he says, and of course that included Minnesota. When a job opened up at the University of Minnesota, the person who was leaving had been working on this disease. Because of Gengenbach's research, he says, "I guess they figured it was a pretty good match." He joined the University faculty in September 1972.

The research area that's now called biotechnology, or genetic engineering, was just starting about the time Gengenbach came to the University. "Not that I had anything to do with it, but I happened to land at a time when a lot of the changes were happening," he says. "Anybody could probably say that—there are changes in every discipline—but in this particular discipline, the order of magnitude of the changes has been more than normal.

"We were doing genetics with the intent of crop improvement 20 years ago," he says, but it was just called genetics then, not genetic engineering. Plant breeding, plant genetics, and genetic engineering all have the same goals. "The technology that's used is different."

The research today involves extracting DNA from plants, altering it, and putting it back into the species it came from or, in a few cases, into a different species.

Controversy still surrounds biotechnology as an overall approach, but Gengenbach says his own work with corn is not especially controversial. "For the most part, the researchers have a good appreciation of what is safe or not safe, what's reasonable to do and what isn't," he says.

Gengenbach and his students are trying to change corn traits that affect either the composition or the quality of the seeds. "When you're working with corn or soybeans, it's the seed that counts," he says.

Most of the work is in the lab, with occasional trips to the field plots to plant or pollinate or harvest corn. "It's nice to be able to walk for a few minutes and get to your fields and then come back," he says. "For a crop researcher in the middle of a large metropolitan area, it's a great situation. Even some smaller campuses don't have that convenience.

"Most of the time, since we're interested in seeds, we'll pollinate a certain number of corn ears, then come back various days later and harvest the small seeds," he says. "We follow the development maybe as long as 30 or 40 days. We might run out and harvest 20 ears of corn every couple of days."

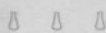
Sometimes the research team analyzes material they've just brought in from the fields, Gengenbach says, but "oftentimes we just bring it in and store it in a freezer until we have enough time to do analysis." Summer is a busy season for the researchers.

"In a normal sort of year, which this year wasn't, we plant corn in early to mid May," he says. "We may make plantings every week or 10 days so everything doesn't happen all at once." Again in a normal year, he says, July is the time to make crosses or pollinations, and harvest begins in August. This summer and last, every phase of growing corn has been behind schedule.

"That's the nonacademic part of the year," Gengenbach says about the summer. In fall, winter, and spring, work continues in the lab and Gengenbach teaches classes.

In research on some other plants, biotechnology has already resulted in crop improvements. "For the things I'm working on, we haven't gotten to that final point yet," Gengenbach says. "Until we actually produce the type of plant we envision, we won't know if it's going to work. If it works out the way we think it should, it will be exciting.

"Most of the time, what one expects is what happens. Not always," he says. "Even if something doesn't work, there's the opportunity to learn. It would be real sad if everything worked the first time, because then you would never be forced to learn anything new. The things that don't conform to what you expect are often where you learn the most."



When Gengenbach was choosing the life of a scientist 25 years ago or so, he probably pictured himself in the lab throughout his career, continuing to do hands-on research. It's work that he loves, but he doesn't do much of it anymore.

True to his nature, though, Gengenbach isn't complaining. "If there were a way to change that, I

Did he expect when he started that he would spend so much of his time looking for money? "The job has evolved at a slow enough pace so things don't take you by surprise too much," he says with characteristic equanimity.

Much of Gengenbach's teaching is with his graduate students in the lab, but classroom teaching is also important to him. His teaching and research strengthen each other. Every spring quarter he teaches an advanced plant genetics course that includes discussion of the literature. "If I do the teaching right, I keep up with the literature," he says. "The course material is closely related to my research."

Because he sees the importance of it, Gengenbach has also taken on administrative and committee responsibilities beyond his own department. As one example, he is director of graduate students for the interdisciplinary plant biology department.

"About this time a year ago, I was saying no to that job," he said in July. Why did he change his mind? "Nobody else would do it," Gengenbach answers, without a trace of martyrdom or self-congratulation.

"It's another way to contribute to the research and education mission of the University, and to be involved in the advancement of a graduate program," he says. "Here at Minnesota, because of the diverse nature of the faculty and the physical location of these plant-related departments, we ought to be able to put together a real good graduate program in plant biology.

"Most of the work is being done by committees. If that weren't the case, it would be a full-time job."

Eight or 10 years ago, Gengenbach kept track of his hours and found that he was working 65 hours a week. Since then, he says, "I think I've tried to decrease that. Now I suspect it's probably not far off the University average of 55.

"In the summer I try not to come in on the weekend, except when we're really busy in the fields. In the winter I like to work Saturday morning, because it's a peaceful time around here."

For fun, he likes biking, cross-country skiing, traveling, and attending Gopher sports events.

"Gopher basketball I think is the best sporting entertainment," he says. He bikes to work in the summer, walks in the winter.

"It's the intangibles" that make his job enjoyable, he says. "I've had excellent colleagues to work with up and down the hall, and also in other departments. They are very good at what they do, and easy to get along with. Most of my best friends are colleagues. I don't know if that's usual or not, but I feel lucky."

What are his greatest sources of joy in his work? He thinks right away of two, both centered on students. "I like teaching a really good class of interested students, so we get a two-way or multi-way interaction going. The last several years, we've had classes like that. It makes you feel it's worth doing, and also fun."

Because he isn't doing much hands-on research anymore, he says, "I have to get satisfaction from what others do. It's a little bit of a vicarious feeling. You're not supposed to live through your sons and daughters, and I don't, but it's real nice to see students come in and develop themselves and along the way find out something new and exciting." ■

"It would be real sad if everything worked the first time, because then you would never be forced to learn anything new. The things that don't conform to what you expect are often where you learn the most."

would try to do it," he says. "But given the resource base and the opportunities, I wouldn't be using the state's resources well if I were doing all the lab work myself.

"I sort of have to keep the ship afloat," he says. "It's not a very big ship, a raft or a rowboat."

Keeping the boat afloat—keeping the research program going—means writing grant proposals, bringing in money, identifying students who want to work in the lab, setting students up in their projects, giving them guidance along the way, setting up the postdocs.

"That never seems to end," he says, especially the need to keep bringing in money. "I've never been fortunate enough to get funded on one big grant that carries me for five years." Instead, he has to write proposals several times a year. "The first time we ever did it, it must have taken three months. With experience it becomes less of an ordeal.

"If we run out of funds for someone in the middle of a Ph.D. program, it doesn't affect me directly, but it really affects that person. That's something I want to make sure of, that if a student starts on a program, one way or another I will have the funds. I want to be fair to the students."

Competition for funding is getting more and more intense, he says, with fewer than one grant proposal out of four getting funded these days. "The odds aren't real good." One of Gengenbach's grants was just renewed, but he remembers times when two or three proposals in a row weren't funded.

cause of repetitive trauma or carpal tunnel and affecting the hand, wrist, arm, or shoulder were reported by University workers. So far in 1993, 29 such claims have been reported. The 1992 claims cost roughly \$28,000, with about \$39,000 reserved for further claims; already this year about \$25,000 has been paid, with another \$102,000 in reserve.

Earl Schleske has his own statistical view of the problem. As supervisor of the Adaptive Resource Center, part of Computer and Information Services on the Twin Cities campus, he handles staff members' questions about alternative computer keyboards. For the past year people have been coming in with problems at least once a week. "Before that we had virtually no one. Now people are coming in in splints."

One person who met with him is Kay Taylor, a library manager at Wilson Library, who has teninitis, an inflammation of a tendon in the hand

Today's keyboard operators should consider themselves "industrial athletes," say Stern and Osendorf. Osendorf, a certified hand therapist with Rehabilitation Services of University Hospital and Clinic, has handouts showing warm-up exercises for the wrist and hands and stretches for the neck, shoulders, and back. They're easy to learn and quick to do at the desk, she notes.

The work station should be made ready, too. "This is especially important if you share equipment," says Stern. "It doesn't matter how long you're going to use it. Just like a car—we readjust everything before we start."

Both OTs stress the importance of taking "micro-breaks"—short rests and stretches, many done right at the desk. A break can also be a switch to a different activity, like phone calls or filing or proofreading. In some offices it may even be possible to rotate jobs.

Dangers of Desk Work

*Small, daily doses
of desk stress can add up
to big problems*

By Pamela LaVigne

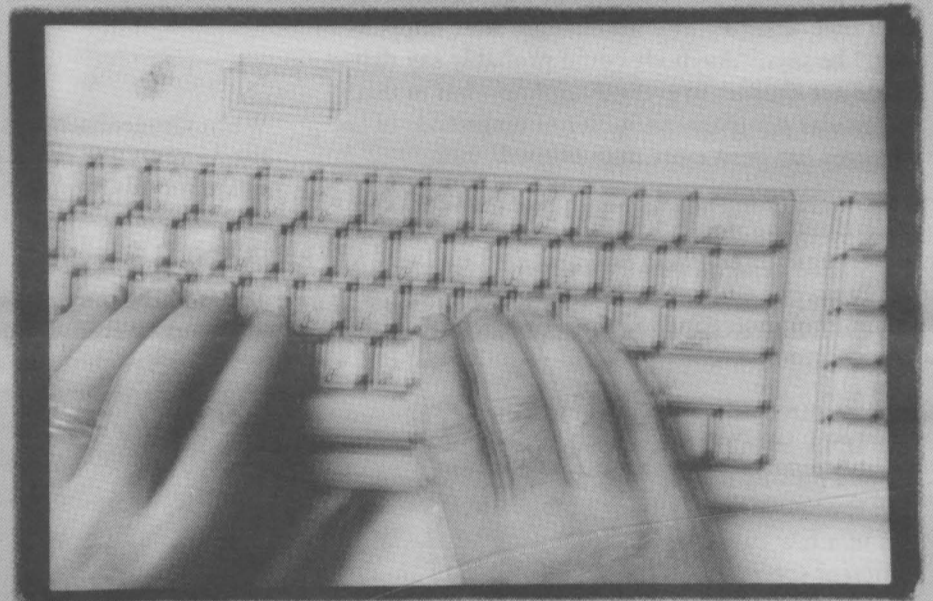


photo: TOM FOLEY

There's probably not a one of us who hasn't wondered what it would be like to lose a critical faculty—the use of our eyes, say, or our legs. Yet rarely do we imagine losing the use of our hands, not because of a dramatic accident but simply by doing our jobs.

Those of us who use keyboards, however, ought to imagine it.

Cumulative trauma disorder (CTD) is an umbrella term for 25 different wrist and arm conditions, the most familiar of which is carpal tunnel syndrome. According to the Bureau of Labor Statistics, disorders associated with repeated trauma have gone up both in number and as a percent of total illness reported. Just over 60 percent—224,000 reports—of new cases of occupational illness during 1991 were associated with cumulative trauma; in 1982, those same problems accounted for just under 23,000 cases.

The situation at the University is similar, according to Greg Casura of environmental health and safety. From 1976 to 1991, Workers' Compensation claims related to repetitive trauma at the University were less than 10 a year, he estimates. In 1992, the University switched to a new insurance carrier for Workers' Compensation claims, a change that enables officials to better define and track problems, Casura says. That year 40 claims with a diagnosed

and forearm. After a week in February of this year when she was using the computer extensively to design forms, she began experiencing tingling pain in her hands; soon it spread toward her elbow. Her doctor advised not using the keyboard for two weeks, anti-inflammatory drugs, and physical therapy. The library also purchased for her a new ergonomically advanced keyboard. By May she had one pain-free week. But she overdid hand exertion and suffered a relapse. It took till the end of July to recover the gains she had made.

"I think we need to stress to people, don't ever forget that you're severely injured," Taylor says.

As occupational therapists, Erica Stern and Amy Osendorf have seen the downside of the computer revolution. With VDTs and their lightning-quick keyboards, now a person can—and often does—sit for hours at a stretch doing work that involves mainly the muscles of the hands while maintaining a static posture.

Contrast that with what work was like with typewriters, says Stern, an assistant professor of occupational therapy. In 1874, when Remington offered the first typewriter, humans could type faster than the machine could react. So the QWERTY keyboard array was designed to be slow down the typist by placing common letter combinations far apart. Using the typewriter also had built-in breaks, like hitting the carriage return at the end of each line and inserting a new sheet of paper.

Above all, Stern cautions, don't self-treat, whether with splints, exercises, or medication. At best you may be doing nothing because the treatment doesn't match your problem; at worst you may be making things much worse. "Some of it's just plain common sense, but it's uncommon."

Although ordinary movements overdone through repetition can lead to symptoms of cumulative trauma disorders, the design of tools and work space and how they fit individual workers—ergonomic factors—can also contribute.

In his seminars on ergonomics for VDT users, Neil Carlson starts with a simple principle: design the job to fit the person rather than get the person to fit the job. Carlson, a certified industrial hygienist with environmental health and safety, says cumulative trauma disorders, along with lower back problems, eyestrain, and "bifocal neck" are among the conditions he sees and teaches people to avoid.

Carlson offers free ergonomics training and work-site evaluations (more than 500 to date) throughout the University.

He begins by checking the keyboard in relation to the typist's elbow. "You want the elbow just a touch below the level of the keyboard, essentially at a 90-degree angle. I adjust everything around that."

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A Time To Grieve



PHOTO: TOM FOLEY

Two years in the making, the new University grievance policy places Minnesota in the vanguard of universities with procedures for resolving employee disputes.

Devised by a committee with representatives from every employment group, adopted by the University Senate last spring, and promptly accepted by President Nils Hasselmo and the Board of Regents, the grievance policy provides a single set of procedures for faculty, professional and administrative (P&A), civil service, student nonacademic, and student academic employees, and covers virtually every kind of employment dispute with the exception of sexual harassment and racial discrimination cases, and disputes over tenure and academic freedom.

It extends the due process and evidentiary rules of the multi-step civil service procedure across the University community and provides for trained advocates to assist grievants, and trained hearing officers to conduct meetings. Last and perhaps most important of all, it includes the option of outside mediation and binding arbitration for employees bringing grievances against supervisors or the University.

In short, the new procedures will revolutionize the handling of grievances at the University of Minnesota. But unlike most revolutions, this one did not happen overnight. The procedures are the result of a laborious process of information gathering, consultation, and consensus building among all groups affected by the policy.

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The Grievance Policy Review Committee—the group charged with creating a standard set of procedures—met over a period of 18 months. “That’s longer than most relationships last,” jokes Judith Garrard, the committee chair.

“We started by looking at the old policy, hearing from people who’d experienced it as grievants and from people who served as grievance officer under the old system,” says Garrard, a professor in the School of Public Health and this year’s chair of the Faculty Consultative Committee. The committee also took information from individuals who’d served on bodies concerned with grievance procedures, such as the chair of the Faculty Senate Judicial Committee.

THE UNIVERSITY’S NEW GRIEVANCE PROCEDURE COULD BECOME A MODEL FOR OTHER INSTITUTIONS

By Richard Broderick

Particularly important was input from civil service employees about the grievance procedure that covered civil service staff. “Much of what we adopted in this policy was the same as that worked out in the civil service grievance procedure,” says Garrard. “On the whole, we found that system to be fair and sensible.”

In addition, the committee reviewed two years’ worth of faculty grievances, first stripping the records of any identification. The aim was to locate problems in the old system. For faculty and other employee groups, Garrard says, the committee

“We wanted to get the lawyers out of the system.”

found problems with the length of time it took to resolve disputes, and—even more troubling—a perception of unfairness on the part of grievants and respondents.

“I emphasize the word perception,” says Garrard. “It wasn’t our job to figure out whether the perception was accurate or not.”

In fact, a perception of unfairness was the charge leveled at grievance procedures at all levels, except in civil service. “Nobody saw the procedures as fair,” Garrard points out, “administrators and grievants alike. We heard that message very strongly.”

Not surprisingly then, one of the review committee’s primary objectives was to design a policy that was fair, both in reality and in perception. “Those are not necessarily the same thing,” she says. “But we had to find a way to satisfy both demands.”

The committee had several other objectives in mind as well. It sought to devise a procedure that would offer comparatively swift resolution of grievances. It decided that the best system would be one that would make grievants and respondents “sit down at a table very early in the game and try to work out problems,” Garrard says. The committee wanted to make sure that grievances were heard within the system, which meant devising a multi-level procedure in which complaints unresolved in initial, less formal discussions could move up a scale toward more—and more formal—hearings

and mediation. To achieve this, the committee proposed incorporating independent arbitration as the finale of the procedure.

Last and perhaps most important of all, the committee wanted to create a policy that reduced the possibility of litigation. “We wanted,” Garrard says, “to get the lawyers out of the system.”

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This is how the new procedure works.

The newly appointed University grievance officer administers the system. For all but specifically excluded categories of disputes, a grievance has to be initiated with a written statement filed with the grievance officer within 30 work days of the action or knowledge of the action being grieved.

Four phases of proceedings follow, each step more formal than the last; a grievance may be settled at any step. Phase I consists of an informal discussion chaired by the grievance officer between the grievant and the respondent. If matters are not resolved, the dispute moves to phase II, a meeting between the grievant and the supervisor of the respondent. Phase III consists of a panel hearing.

The new policy creates a University Grievance Board and Hearing Officers Panel consisting of representatives of each of the University’s employment categories: civil service, faculty, professional and administrative, nonacademic student employees, and academic student employees. These individuals constitute the pool from which peer representatives are chosen for phase III hearing panels.

These panels also include one member of the grievance board chosen by the grievant, one designated by the vice president of the unit in which the grievant is employed, and a trained hearing officer from the Hearing Officers Panel.

If the phase III decision favors the grievant, the University has to implement it unless the senior vice president of Academic Affairs delivers a written notice within 10 work days disputing the outcome, in which case the grievance moves into phase IV, binding arbitration conducted by a neutral mediator from the state’s Bureau of Mediation Services. If a phase III decision favors the University, the grievant can request arbitration or choose to take the case to court. But a grievance cannot go through phase IV and then be pursued in a lawsuit.

At each step of the way, grievants can be represented by an advocate, even in phase I meetings.

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Dangers of Desk Work

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Of course, where hands hit the keyboard depends on seat height. He asks if the chair feels comfortable, and if not, whether the sitter knows how to adjust it: a significant proportion don't. If your feet don't touch the floor when the chair is adjusted for proper elbow angle, then you need a footrest.

"Sometimes you have to retrain people on where their mouse is," he says. Accountants, for example, often have both mouse and 10-key calculator on the same side. They can learn to be ambidextrous, he says, with the mouse on the opposite side.

"The most common adjustment that people don't think about is the relationship of the document to the screen," Carlson says. Both should be at the same height and slope to avoid neck problems; the top of the screen should be roughly eye level with the typist. But people with bifocals should have their screen somewhat lower, because the correction for near work is lower in their lenses.

"I think if people have a concern, they've got to bring it up," Carlson says. "If they're the only one, that's OK. Each person is unique. Each work station should be too."



This fall finding answers to ergonomics questions should be easier for University staff, thanks to actions by two working groups.

The Ergonomics Awareness Project is a coordinated response from environmental health and safety, human resources, purchasing, and University Stores. The group, which has been meeting since March, wants to provide training to help prevent cumulative trauma injuries and to make ergonomically sound products available through University contract prices.

As a result of its research, several new styles of wrist rests will be in the University Stores catalog due out in mid-September. This group has also suggested to the Save Program that the University make the wrist rests available free of charge to staff who request them.

Meanwhile, since September 1992, a joint labor-management committee of AFSCME and University officials has been meeting to explore concerns about health and safety of workers using VDTs. The committee, which submitted its report in June, asks for \$120,000 to produce a resource guide, purchase an educational video, and create central matching funds for purchasing ergonomic work stations and accessories.

"There isn't a template—nothing solves everybody's need," says Carlson. "My advice to management is go slow, experiment with various options." ■

SOME UNIVERSITY RESOURCES

Environmental Health and Safety:
free on-site evaluations of work stations;
consulting on ergonomics.

—Neil Carlson 626-5714
—Greg Casura 626-5338

Purchasing—624-2828
—computer equipment, Jane Thomas
—office accessories, Sonja Sheriff
—office furniture, Tom LaMere

Office of Special Employment—627-1081
Return-to-work services,
worksite accommodations.

A Time To Grieve

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To some, the chief advantage of the new procedure may be the least tangible.

"The system will eliminate politics," says Mario Bognanno, chair of the Grievance Advisory Committee and professor of industrial relations in the Carlson School of Management, "because it provides due process, fairness, and finality to keep these matters on a professional plane."

But there are many other advantages as well, like clear-cut procedures for resolving questions over access to documents, the presence of a trained employee representative as chair of phase III hearings, and time limits for filing and responding to grievances. The use of trained advocates to assist grievants is also perceived as a plus.

"From my point of view, the advocates definitely assist more than they detract from the procedure," says Susan Treinan, director of the student employment center; until now, the only grievance procedure that included trained advocates was the system covering nonacademic student employees. "You have better resolution when the person who's grieving is represented by an advocate. It's very hard to represent yourself, even from the first step. Issues tend to be defined much earlier on when there is an advocate assisting the process."



Despite minor concerns about certain details of the new policy, employees in most classifications will come out ahead.

The one exception is the University administration which, in agreeing to the new policy, has given up significant leverage in settling grievances with some employee groups, notably faculty and professional and administrative.

"The central administration has definitely given up prerogatives within this procedure," says Mary Easterling, vice chair of the civil service committee. Easterling served on the grievance review committee and pushed hard for incorporating the main features of the civil service procedure into the new policy.

Because faculty and P&A grievance procedures were not perceived as fair or impartial, she believes the old policies contributed to the likelihood that a grievance would eventually wind up in court. Coupled with binding arbitration, the new system—if it is perceived as fair—should vastly reduce the number of cases that end up before a judge.

And the very fact the administration was willing to yield some of its power bodes well for the future functioning of the procedures. "It's significant the administration would be willing to do that," says Harriett Haynes, acting director of University Counseling Services and a member of the grievance review committee. "It's not often people give up authority."

The policy adopted by the University has a built-in corrective. The Grievance Advisory Committee is charged with issuing regular reports about the policy and every few years is expected to make recommendations on ways to improve it.

"Alternative dispute resolution systems appear to be the wave of the future," says Bognanno. "We're seeing alternative systems used by the courts, in neighborhood disputes, divorces, child custody disputes, and more."

"My bet is the University's system will be watched very carefully by Universities around the country. If it succeeds, as we expect, it will be imitated." ■

SHORT TAKES

you could use a map

Car won't start? Locked out? Got a flat?

Next time you run into car trouble on the Twin Cities campus, try using the MAP—the Motorist Assistance Program.

Starting Friday, October 1, Parking Services will offer this helping hand free to University staff, faculty, and students. Service covers the Minneapolis and St. Paul campuses. Hours are 7 a.m. to midnight Monday through Thursday, 7 a.m. till 10 p.m. on Fridays. Service will not be available on official University holidays.

Write this number down in a good spot (not the glove compartment): 625-6566.

the ever-growing gopher

Remember the "Star Trek" episode where a furry little animal called a tribble reproduced so fast it virtually took over the *Enterprise*? Now there's computer software reproducing so fast it's turning up on monitors around the world. It's not a tribble. It's Gopher.

Gopher is a tool for navigating the Internet, a global web of computer networks (see *Update*, Dec. 1992). If Internet is a technological superhighway, Gopher is an on-ramp. It's a way to sift through the vast multitude of Internet documents easily, so easily that even folks with two left mice are soon cruising like techno-jocks.

Developed in 1991 by a team from University Computer and Information Services, Gopher was originally set up for the consultants staffing the University's internal computer helpline. "Eventually we put it out there so that users could find the answers themselves," says associate vice president and associate provost Don Riley. "It wasn't long before people all over the University, and all over the country, were providing information through Gopher servers. Now, it's a worldwide phenomenon."

Gopher's burrowing power has made it the ninth most popular Internet protocol in the world. Its menu has entries from widely diverse sources from the Library of Congress to the Wellington (New Zealand) City Council. "We never envisioned it would take off like this," says Riley. At last count, Gopher was handling 98,000 accesses per day.

The University has just released Gopher Plus, which can handle digital images, compressed audio, and compressed video.

For help to access the Internet Gopher, call Computer Information Services at 612-626-4276. To place information on Gopher (for a fee), call Software Services, 612-625-2303.

PEOPLE

twin cities

Patricia Bauer, assistant professor in the Institute of Child Development in the College of Education, has received the 1993 American Psychological Association Distinguished Scientific Award for Early Career Contribution to Psychology in the Developmental Area. Bauer also received the Robert L. Fantz Award from the American Psychological Foundation, an award intended to encourage the careers of promising young investigators of psychology.

Humphrey Institute senior fellow **Arvonne Fraser** was one of 14 members of the U.S. delegation at the world conference on human rights in Vienna in June. **Marsha Freeman**, also a Humphrey Institute senior fellow, chaired a panel on women's human rights.

Judith Gaston, director of University Film & Video, is the recipient of two awards: the Lillian H. Williams Award for her work in equal opportunity at the University, and the Gold Ribbon Award from the American Film & Video Association "in recognition for her outstanding service and many contributions to the media field." Gaston is currently on reassignment as academic personnel/EEO officer in Continuing Education and Extension and quality improvement specialist in Academic Affairs.

Daniel D. Joseph, Russell J. Penrose Professor in aerospace engineering and mechanics, will be presented with the 1993 Bingham Medal of the Society of Rheology in Boston in October. The medal singles out scientists who make considerable contributions to research "dedicated to the development of the science of the deformation and flow of matter." Joseph has also received an unrestricted research grant of \$20,000 from the Schlumberger Foundation.

Hennepin Parks presented its Distinguished Outdoor Education Award to **Leo McAvoy**, professor and division head of Recreation Park, and Leisure Studies.

Paul Meehl, Regents' Professor Emeritus of Psychology, is the 1993 recipient of the American Psychological Association's Award for Distinguished Contributions to Professional Knowledge.

Patricia N. S. Olson, adjunct associate professor in the Department of Small Animal Clinical Sciences in the College of Veterinary Medicine, has been selected from more than 100 applicants as one of three 1993-94 Congressional fellows sponsored by the American Veterinary Medical Association.

Paul Quic, Regents' Professor of Pediatrics, received an honorary degree in May from the University of Lund in Sweden.

Ellen Schuster, coordinator of the Expanded Food and Nutrition Program in the Minnesota Extension Service, spoke at a national forum on hunger June 17 in Washington, D.C. She discussed her work to make nutrition educational materials more readable for the public, including persons with limited reading ability.

E. Kenneth Weir, professor of medicine, has been awarded a Senior International Fellowship from the Fogarty International Center to support a sabbatical at the University of Leeds, England.

duluth

Chemistry professor **Ron Caple** has been elected secretary and chair-elect of the National Council on Undergraduate Research.

Linda Deneen has been appointed director of the Department of Information Services effective July 1993, following a year as acting director. She is associate professor of computer science and has headed the Department of Computer Science since 1989.

Dean **Ronald Franks** of the School of Medicine won the second annual President's Award from the Minnesota Academy of Family Physicians. The award is given to an individual who makes a difference in family practice.

Robert Heller, chancellor emeritus of UMD, died July 11 in Duluth. He joined the faculty in 1950 and served as professor and head of geology, then as assistant to the provost, associate provost, acting provost, provost, and chancellor.

Women's basketball head coach **Karen Stromme** has been appointed to a four-year term on the Player Selection Committee for USA Basketball. In 1996, the 12-member board will choose the players for the women's Olympic basketball team.

Honored at spring 1993 commencement were **Albert "Bill" Tezla**, **George "Rip" Rapp, Jr.**, and **James Maclear**, all winners of the Chancellor's Distinguished Service Award. In addition, **David Smith** of sociology-anthropology won the Albert Tezla Scholar/Teacher Award, and **Douglas Dunham**, computer science, won the Jean G. Blehart Distinguished Teaching Award.

morris

Christopher Cole, project director and assistant professor of biology, and **Van Gooch**, professor of biology and health, have received a grant from the National Science Foundation for their project, "Molecular Biology: an Undergraduate Curriculum."

Gary Donovan, director of the Career Center, was honored for 20 years of outstanding service to the Minnesota College and University Placement Association during its annual meeting at Breezy Point.

An article titled "Marguerite Yourcenar" by **C.F. and Edith Farrell**, French professor and chair of the Division of Humanities, and associate professor of French, appeared in the reference book *French Women*

Writers. The book, republished this year by the University of Nebraska Press, was named by the book review magazine *Choice* as one of the outstanding academic books of the year.

Karen Fischer has been named head librarian of the Rodney A. Briggs Library. Her previous position was director of Library/Media Services at Central Oregon Community College in Bend, Oregon.

Professor of German **Liselotte Gumpel** received a personal invitation from Guido Kung, professor of recent and contemporary philosophy at the University of Fribourg in Switzerland, to visit the institution this summer. In addition to presenting a paper titled "Reference in Literature: the Ultimate Phenomenological Solution," she will moderate a special session at the Modern Language Association in Toronto in December.

Chancellor **David Johnson** was one of three who received honorary doctorates during commencement ceremonies at Luther College in Decorah, Iowa. He received a doctor of laws degree and delivered the commencement address. Johnson was a member of Luther's sociology faculty from 1957 to 1969.

Wrestling head coach **Doug Reese** has been selected to the National Governing Body of USA Wrestling, representing the National Association of Intercollegiate Athletics.

crookston

Distinguished Teacher for 1993-94 is **Philips Baird**, assistant professor of natural resources. Distinguished Civil Service/Bargaining Unit Award recipient is **Maria Sommerfield**, agriculture division secretary.

UMC staff receiving awards from students were **Charlie Bailey**, business administration instructor, Outstanding Teacher; **Marv Mattson**, associate professor of agronomy, Most Supportive of Student Activities; and **Lynnette Mullins**, assistant professor of communication, Faculty/Staff Service Award.

Don Cavalier, director of counseling and of the Career Center, was elected a delegate-at-large on the Minnesota College Personnel Association's Board of Directors.

Glenice Johnson, assistant professor of sociology, was selected Outstanding 4-H Alumni for Minnesota.

Sharon Neet, associate professor of history, presented a research paper on "The Spelling Reform of 1906" at the Missouri Valley History Conference in Omaha, Nebraska, and a paper on "Kate Richards O'Hare: Writings from the Honeymoon" at the 10th annual Women's Conference at the University of South Dakota in Vermillion.

Marsha Odom, director of the Academic Assistance Center, has been appointed chair of the newly organized technical studies division (formerly arts and sciences).



new at the bijou

Movie buffs have long counted on the University Film Society to present and often premier the finest in films from around the world. They also counted on viewing these gems in, shall we say, fatigued surroundings.

Not anymore. An overhaul of the Bell Museum Auditorium is now complete, and clarity and comfort are its hallmarks.

The screen image is sharper thanks to new projector lenses; the sound is much improved thanks to more and better speakers. Brand-new seats and fewer of them mean more legroom and cushion. And for the first time, there's carpeting underfoot.

But not all that was old has been replaced. Notes of coming attractions are still produced on arguably the world's oldest working typewriter.

a book is a present you can give again and again

Book number 5 million has entered University Libraries: *American Hunger*, an autobiography by Richard Wright. This rare first edition, one of an undisclosed number of copies made for private circulation, was reproduced from the author's typescript circa 1945. A regularly published edition of the book was not printed until 1977.

The book will be part of the Archie Givens, Sr., Collection in Wilson Library, a deliberate choice to underscore the University's and the library's commitment to diversity, say library officials.

At the invitation of McKinley Boston, Jr., director of men's intercollegiate athletics, Archie Givens, Jr., will present the volume to President Hasselmo October 2 during halftime of the Indiana game. That, says Boston, will emphasize the strong relationship between academics and athletics at the University.

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UNIVERSITY OF MINNESOTA



UPDATE

For Faculty
and Staff

VOL 20 NO 4
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Update is published six times a year. Three issues a year are directed to faculty and staff of the four-campus University system. Three issues a year address subjects of broader interest and are also sent to alumni and friends of the University.

Update welcomes ideas and letters from all readers. Write to *Update*, 6 Morrill Hall, 100 Church Street S.E., Minneapolis, Minnesota, 55455-0110, or call 612/624-6868.

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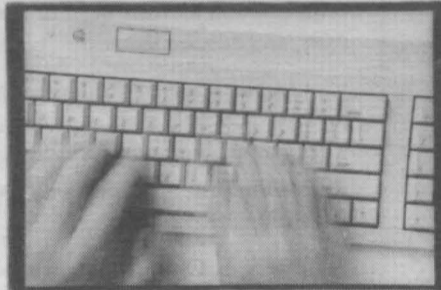
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