

March 14, 1997

Love must be learned, and learned again and again: there is no end to it. Hate needs no instruction, but waits only to be provoked.

—Katherine Ann Porter

Vol. XXIX, No. 25

## Tompkins testifies at higher ed appropriation hearing ■■■■■■■■■■

President **Curt Tompkins** was joined by six other state university presidents in urging the House Appropriations Higher Education Subcommittee to significantly increase Governor **John Engler's** proposed 2.5 percent budget increase for higher education.

Tompkins, who also chairs the President's Council of State Universities, told the panel March 12 that a 5 percent increase would be required to keep pace with rising costs and to meet the technology needs of students. "Universities such as Michigan Tech

require an even greater commitment for laboratory and computer needs."

Representative **Paul Tesanovich** of L'Anse supported a larger increase. "If some goal or direction has high enough priority, the funds are always found," he said.

The Senate will not take up the issue until May. The Senate Appropriations Higher Education Subcommittee will be meeting on the Michigan Tech campus on May 16.

## Dobney presents "final, best" TIAA-CREF retiree health proposal

Provost **Fred Dobney** presented another TIAA-CREF retiree health benefit program to the University Senate March 13.

"This is my final, best offer," he quipped, noting that the issue has been under consideration for four years.

The latest proposal includes a phased-in 2-plus-2 matching program and a subsidized retirement health-care premium, to be phased out over the next ten years. Plus, retirees would be guaranteed the right to participate in the health-insurance program; no individuals could be singled out to pay higher premiums or be removed from the program.

Under the 2-plus-2 part of the program, the University would begin matching TIAA-CREF participants' contributions to their retirement plans, up to 1 percent of their salaries, starting in 1997-98. In 1998-99, MTU would begin matching up to 2 percent of employee contributions.

"This is strictly because of budget problems," Dobney said, explaining the one-year phase-in. "It's what we can afford to do," based on current budget projections.

Governor **John Engler** has recommended a 2.5 percent state-appropriations increase for all fifteen of Michigan's public universities, including Michigan Tech. President **Curt Tompkins** has urged the state legislature to consider raising that amount. (See *related story above*.)

Dobney is recommending a minimum 1 percent across-the-board pay increase for MTU employees. Thus, those participating in the matching program would see no reduction in their take-home pay.

MTU currently puts the equivalent of 10.55 percent of employees' salaries into their TIAA-CREF retirement accounts. Under the 2-plus-2 program, participants would be saving the equivalent of 14.55 percent of their salaries, near the magic 15 percent experts say workers should save to maintain their standard of living when they retire.

To participate in the retiree health-care program, TIAA-CREF participants would need 80 points (age plus years employed at MTU). Anyone retiring on or before June 30, 1999, would pay 20 percent of their premium. Each year, the co-pay percentage would rise 10 percent, until July 1, 2006, when new retirees would be paying 100 percent of their premium.

The percentage retirees pay would remain constant. If you pay 20 percent when you retire, you'd pay 20 percent indefinitely. When you qualify for Medicare, the rate would stay the same, but the dollar amount would decrease, since you and the University would be providing Medigap coverage instead of the entire cost of health-care.

Under the plan, the University's annual cost to provide the retiree health benefit would rise from about \$101,400 in 1998 to about \$322,000 in 2014 and then drop to zero by 2032. "This is why I think the Board will support [the latest plan]," Dobney said.

Compared to the two other proposals under consideration by the Board of Control, this latest version spends the least on health care by far: \$5.9 million over the next 60 years. Another plan, under which employees would have a 60 percent co-pay for insurance until they qualify for Medicare, would cost \$106.9

*Continued on page 4*

## Sci-fi novel on engineered world picked for Earth Week study

*Submitted by the Earthweek Committee*

The MTU Earthweek committee has chosen *Terrarium*, by Scott Sanders, for campus-wide study during Earth Week, April 20-27.

The novel is set circa 2050. People live in a totally engineered, global network of "enclosures." A rebel band awaits their chance to escape to the wilds of Terra. Can they escape, or will they be "rehabilitated"? If they escape, can they survive?

The book deals with the importance of nature to quality of life, protecting nature from humans, and

alternative designs for communities. It is well written and will be a quick read for students. A reading/discussion guide will be included with each copy. One student from each participating class will summarize class discussions for posting on MTU's Earth Week Web site. A series of free films will be shown during Earth Week to complement *Terrarium*.

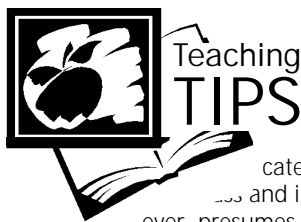
If you'd like to use *Terrarium* in your class spring term, please contact Stephen Bowen at shbowen@mtu.edu with the course number and title and an estimate of the number of books needed.

## MTU halting all third party, collect calls

All third-party billed and collect calls to administrative telephones are now being blocked.

Previously, employees who were on the road could dial an operator to have long-distance calls billed to certain administration numbers, or could call the University collect. But because these calls are extremely expensive—up to five times the cost of dialing direct—the practice has been discontinued.

Don't worry—you can still stay in touch. MTU travelers can get an MTU Calling Card from Telcom Customer Service. Just call 487-2000 (direct).



## Encouraging student learning

By William Kennedy, director

Several major themes have emerged from educational research over the last decade in the area of encouraging student learning. Here's a summary of recommendations based upon these research findings:

- Set high but realistic standards and clearly communicate those standards to your students from the very first day of class and in the course syllabus. Setting meaningful standards, however, presumes on-going, faculty-based curriculum mapping, as well as an accurate grasp of the range of abilities represented by our student body.
- Active learning has more impact than passive learning. Research suggests that student learning is a function of the level of involvement or engagement that the student experiences. Classroom strategies should include activities that have students do something more than passively sit and take notes.
- Since it is clear that different people learn differently, we should intentionally and systematically vary our teaching styles. Well-designed courses should contain lectures, discussions, question-and-answer periods, targeted use of media, demonstrations, etc. Using different strategies forces us to leave our "instructional comfort zone"; and building successful classroom experiences takes time, planning, and practice.
- We know that students benefit from interaction with faculty, and we should encourage this. For some, this means using in-class discussions while others may choose to meet with students outside of class or schedule e-mail or chat sessions.
- The majority of learning occurs outside of the classroom. Consequently, we need to carefully design out-of-class learning activities that maximize the impact of the course.
- Our learning centers have proven that students learn more when they engage in learning activities with one another. Group assignments, team projects, and planned interaction with the appropriate learning center put students in touch with other students in a productive learning environment.
- Provide prompt feedback that is evaluative and formative. Ideally, feedback from assignments, exams, papers, and projects would be immediate and would include specific suggestions for improvement. Realistically, we should design assignments that can be returned quickly to students. Grades provide students with a relative measure of their performance (evaluative), but assignments will be more useful if the feedback includes an analysis of what went wrong and how to get back on track (formative).

In the weeks ahead, we'll explore these issues in more detail. If you have any questions or comments about this or other ideas related to your teaching, please call the Center for Teaching, Learning, and Faculty Development at 487-2046.

## New in town? Newcomers' Group meets March 19

If you've moved to the local area within the last three years, you're invited to the first meeting of the Newcomers' Group, set for Wednesday, March 19, at 7:00 p.m. in the Portage Room of the Ramada Inn in Hancock.

The group, organized by the University Women's Club, is being formed to welcome newcomers and introduce them to many community resources, as well as the challenges presented by life in the Copper Country.

The group expects to get together monthly at various local points of interest, and speakers will be invited. For more information, call Hillary Sproule at 487-6970 (off-campus number) for more information or reservations.

## TECH TOPICS

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- By e-mail to [ttopics@mtu.edu](mailto:ttopics@mtu.edu)
- By campus mail, send typed copies to *Tech Topics*, University Relations.

Each week, the deadline for submitting information is **Friday at 5:00 p.m.** or publication the following Friday.

Our URL is <http://www.sas.it.mtu.edu/urel/ttopics/index.html>

## Videoworkshop March 19 on protecting drinking water

Submitted by the GEM Center

If we are what we eat—and drink—we all have a stake in protecting our drinking water. The MTU Regional Groundwater Education in Michigan (GEM) Center has arranged a campus downlink for a national videoworkshop, "Tools for Drinking Water Protection," on Wednesday, March 19, at 2:30–4:00 p.m. in EERC Room B11.

The videoworkshop, sponsored by the League of Women Voters Education Fund, will feature case studies of successful community protection efforts. Topics include land-use decisions within drinking water source areas, water quality monitoring programs, local contingency plans for contaminant releases, educating the community on land use and drinking water quality, and building leadership and securing funding for protection activities.

"Taking steps to prevent contamination of our drinking water makes sense for both local economies and public health," GEM Center Coordinator **Kristine Bradof** said. "Paying for replacement water supplies and cleanup of contamination is never cheap or convenient."

The videoworkshop has a Web site at [www.drinkingwater.org](http://www.drinkingwater.org). A videotape of the workshop will be available from the GEM Center for classroom or community use. For more information, contact Paula Olson at the GEM Center (487-3341, [paolson@mtu.edu](mailto:paolson@mtu.edu)) or Bradof ([kbradof@mtu.edu](mailto:kbradof@mtu.edu)).

## Chemistry colloquium March 21

Assistant Professor **Kirk Schulz** (chemical engineering) will give a seminar, "Hydrodesulfurization Surface Reactions on Single Crystal Model Catalysts," on Friday, March 21, at 3:00 p.m. in Chemical Sciences and Engineering 102. All interested persons are invited. Schulz' talk is part of the Department of Chemistry's Colloquium Series for spring quarter.

## Credit union meeting March 26

All members of the Michigan Tech Employees Federal Credit Union are invited to the 43rd Members' Annual Business Meeting, set for Wednesday, March 26.

The meeting will be held at the Houghton High School Multipurpose Room. Refreshments will be served at 6:30 p.m., with the meeting to follow at 7:00 p.m.

The Board of Directors has two vacancies. Come and cast your vote, hear about future plans, and maybe win a prize! Join your fellow members and take an active part in your credit union.

## MTU notables

Assistant Professor **Mary Durfee** (social sciences) has been named an Annenberg Scholar. She will be in residence at the Annenberg School for Communications at the University of Pennsylvania for the fall 1997 semester. The common topic of research for the scholars in residence will be "Dynamics of Diffusion." Durfee's project is titled "The Diffusion of Pollution Prevention Knowledge in the Great Lakes: People, Networks, or Rules?"

The appointment carries a stipend of \$30,000, as well as office, computer, and library support while at the Annenberg School.

## Companies coming

Representatives from the following employers will be recruiting on campus next week. If you'd like to meet with any of them, call the Career Center, 487-2313.

- Monday, March 17: GM, Sargent & Lundy
- Tuesday, March 18: GM—Janesville, Plastipak, Procter Gamble
- Wednesday, March 19: Procter & Gamble, RES Manufacturing
- Thursday, March 20: RES Manufacturing, River Valley Testing Corp.
- Friday, March 21: Lunda Construction Co., Mercury Marine, River Valley Testing Corp.

## Environmentalists speak at Tech Tea Time

Submitted by University Cultural Enrichment

Environmental and native-rights activist Walt Bressette, a Red Cliff Chippewa from northern Wisconsin, is the guest at Tech Tea Time on Wednesday, March 19. His presentation, "A Tree, A Community, A Mine," is scheduled for 4:00 p.m. in the Memorial Union Alumni Lounge. Admission is free.

Bressette will discuss the controversial mining operations by INMET Mining Corporation at White Pine. As the former chair of the indigenous subcommittee of the National Environmental Justice Advisory Council, Bressette authored an NEJAC resolution that temporarily halted U.S. EPA authorization of the pilot phase of the White Pine solution mining project early last summer. Later, however, when full authorization for the project came through from the EPA, Bressette was approached by members of the Bad River Band requesting assistance in preventing the rail transport of sulfuric acid across the Bad River Chippewa reservation. As a result of a series of traditional ceremonies, Bressette and members of the Bad River Ojigichida organized a rail blockade halting the acid transport. Eventually they were also able to force the EPA to re-examine the overall mining operations at White Pine.

Named "environmentalist to watch in the 90s" by the *Duluth News-Tribune*, Bressette was an early organizer of local Green Party politics. He has acted as an international observer on indigenous issues and remains active with the Indigenous Environmental Network. He has also worked with many different agencies and institutions as a consultant/trainer to improve multicultural understanding.

Bressette's visit is made possible by funding from the Center for Teaching, Learning, and Faculty Development and the Department of Humanities. Tech Tea Time is coordinated by the University Cultural Enrichment Department. For further information, call 487-2844.

Monday, March 17, is St. Patrick's Day, and we're celebrating with a scenic tour of Ireland at a special Tech Tea Time at 4:00 p.m. in the Memorial Union Alumni Lounge.

Last year, **Tom Grimm** (Thomas D'Grimm for the day), associate professor in the ME-EM department, spent four months in Ireland on sabbatical leave at Trinity College in Dublin. This was his third visit to the Emerald Isle. His presentation, which he'll illustrate with slides and music, is based on his experiences at Trinity and on his travels around Ireland. All are invited to sip a drop or two of Irish tea, eat Irish scones and watercress sandwiches, and enjoy the sights, sounds, and people of the land of forty-two shades of green.

Grimm's St. Patrick's Day tour will take the Tea Time audience on a route that echoes the places named in an old Irish song. You'll travel "from



### A St. Paddy's Day tour of Ireland

Submitted by University Cultural Enrichment

Bay up to Derry Quay and from Bay to Dublin Town."

"Well not quite to Derry Quay," says Grimm, "but from Bantry north to County Clare and the magnificent Burren and Cliffs of Moher, and on to Galway City and from there to County Mayo, and up to Donegal and the highest sea cliffs in Europe at Slieve League. We'll then head southeast to the Newgrange and from there to the sea coast at Malahide." If you're out of breath at Malahide, restore yourself with a bite of good Irish soda bread, and enjoy a visit to Dublin and on to Glendalough, in County Wicklow, the end of the tour.

To celebrate the great traditions of Irish music, Grimm will play some recordings he collected while in Ireland. He's chosen a number of songs sung in Erse, the Irish language, and some jigs, reels, and airs.

Tech Tea Time is coordinated by the University Cultural Enrichment Department and is free and open to the public. For further information, call 487-2844.

## "Takes on the Technical"

### How to communicate when the going gets tough

Submitted by Jennifer Daryl Slack, Humanities Colloquium coordinator

What brings together a Native American environmental activist, a feminist high-tech multimedia specialist, and an expert on communicating complex, controversial science? They are all participants in "Takes on the Technical," a series of lectures and workshops exploring alternative ways to understand, relate to, and communicate technical problems. The series takes place March 19-April 4. Open to everyone, the series is sponsored by the humanities department with support from the Visiting Women Scholars Series and the Center for Teaching, Learning, and Faculty Development.

#### Jobs vs. Environment

Walt Bressette, a Chippewa from the Red Cliff Band, begins the series by discussing the complex communications in conflicts between the interests of the environment and the interests of extractive industries in Michigan, Minnesota, and Wisconsin. Bressette, who has been a popular speaker at Tech in the past, provides penetrating analysis of the current situation as well as workable alternatives. His lecture, "Jobs vs. Environment—A Failed Paradigm: New Approaches to Economics, the Environment, and Sustainability in the Great Lakes Region," will be held Thursday, March 20, at 1:00 p.m. in Walker 108. A reception will follow.

#### Cultural impacts of multimedia

The second speaker, Anne Balsamo, from Georgia Institute of Technology, is director of graduate studies in the School of Literature, Communication and Culture. Balsamo specializes in both the technical and socio-cultural aspects of the new communication technologies and recently published the book *Technologies of the Gendered Body*. She has been especially active in multimedia and recently directed Georgia Tech's role in the Apple Web Center at the Olympics. She will highlight that experience in her lecture, "Myths of Information: The Cultural Impact of New Communication Technologies," on Friday, March 28, at 4:00 p.m. in Walker 109. A reception will follow.

#### Communicating complex research

Katherine Rowan, from Purdue University, will complete the series with a workshop on "Communicating Controversial, Complex Science" and a related lecture on "The Theory and Research on Communicating Controversial, Complex Science." Rowan, who has conducted many such workshops, provides a unique opportunity for scientists, engineers, and technical communicators to consider the dilemmas and possibilities for communicating scientific knowledge and information. If you are interested in participating in the workshop, Rowan would like to establish e-mail contact in advance to begin sharing questions and problems. If you're interested, contact Jennifer Daryl Slack, [jdslack@mtu.edu](mailto:jdslack@mtu.edu)

Rowan's one-hour workshop will be held Friday, April 4, at 2:00 p.m. in Walker 134. After an hour break, the lecture begins at 4:00 p.m. in Walker 109. A reception will follow.

For further information, or if you are interested in spending additional time with the speakers, contact Slack at 487-3228 or [jdslack@mtu.edu](mailto:jdslack@mtu.edu)

## ADD workshops March 19, 26

Two workshops for the parents of elementary school children will be offered by the Employee Assistance Program.

Both will be held Wednesdays from noon to 1:00 p.m. in Memorial Union 105B. The first, on March 19, will focus on home-school communication, homework, and supporting the school program.

The second, on March 26, deals with classroom success, participating in school events, and preparing for a teacher conference.

The workshops are led by Susan Donnelly, administrator of the U.P. Training, Prevention, and Wellness Institute.

To register, contact the Benefits Office, 487-2517.

## Career Center stories

All the job candidates and recruiters at Michigan Tech doubtless have fond memories of the University Career Center's cheery cubicles, its luxurious location in the Ad Building basement, and the unmistakable scent of Brut wafting through those hallways. Please share your golden Career Center moments with Tech Topics. We are publishing anecdotes about the center, since it will be moving out of its current quarters this summer to the soon-to-be-remodeled and far-ritzier Harold Meese Center—fundraising for the project is under way. Please e-mail your story to [ttopics@mtu.edu](mailto:ttopics@mtu.edu)

### No, they don't always wear black suits

By Dan Raucholz '96, BS in Mechanical Engineering

In the spring of '96 (recent grad, huh?) I went into the Career Center to prepare for an interview that I was supposed to have the next day. I was dismayed to find that my name was removed from the schedule. (The grad date requirement was spring, and I would not graduate until summer).

Since there were still open spots, the Career Center staff suggested that I talk to the gentleman who was interviewing and ask if he would still consider interviewing me. Which I did, and he happily agreed to do.

Feeling relieved, I proceeded to do my research for the interview. About ten minutes later, the interviewer walked up to me and said that he had a cancellation, and that if I wanted to do the

interview right now, I could. Of course, I was in my going-to-class scruffs—faded jeans, Michigan Tech football T-shirt, and a baseball cap. But if he didn't mind, neither did I. It was probably the most relaxed I have ever been in an interview.

The really funny part happened when I walked out of the interview room. I got some pretty odd looks from the three very well-dressed interviewees that were waiting outside.

*(Editor's note: Dan says that, unfortunately, he did not get a job offer from that interview, since that would have made for a much better story. However, he did find work and is now a sales support engineer for E-A-R Composites in Indianapolis.)*

### New TIAA-CREF proposal *Continued from page 1*

million (see October 18 *Tech Topics*). A proposal to give current employees 55 or older health coverage when they retire, with those under 55 qualifying for a 2-plus-2 plan, would spend \$18.1 million on health care.

The 2-plus-2 benefit will cost the University: with 100 percent participation, total costs by the year 2057 would be \$118 million, comparable to the other plans (\$124 million for the 55-or-older plan; \$108 million for the 60-percent co-pay plan).

"The point is not to save money," Dobney said. "The point is to distribute money so that it meets everybody's needs."

MTU computed the average salary for employees 55 or older with 70 points: about \$65,551. At that level, the University's 2 percent contribution would increase an employee's annuity enough so that, over ten years, the interest from that portion alone could fund the health-care costs at retirement.

Senator **Mike Gilles** (Research Services) disagreed, saying that the amount generated by the University's 2 percent contribution would not generate enough interest to pay for health care. Dobney, noting that the plan would benefit those with higher incomes more, said that some employees should expect to spend more of their

retirement income on health care, or save more during their employment.

"I'm proposing something here that's fair and guaranteed," Dobney said. "This money goes into your pockets and no Board can take it away."

"It may not cover every expense for every person," he said, but it will help make health care affordable for everyone when they retire.

Dobney said he would present the proposal to the Board of Control March 14.

#### **In other business, the senate**

- began debate on a proposed Academic Freedom Policy. Some senators objected to a clause that faculty "have the responsibility to avoid introducing controversial material which has no relation to the classroom subject matter." On the other hand, **Goeff Roeland**, representing the USG, noted that he'd had a professor once that had spent two days "talking politics that had no relation to class"; and **Evan Schemm**, from the Graduate Student Council, said that, if he wanted, he could discuss abortion in his programming classes. Yes, his students could complain or give him bad evaluations. "Maybe something would happen, but the damage would already have been done," he said.

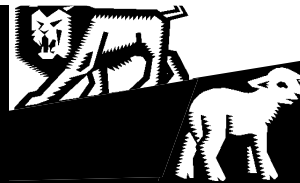
### POSITIONS AVAILABLE AT MTU

The following positions will be posted Friday, March 14, 1997, at 1:00 p.m. through noon, Friday, March 21, 1997, in the Human Resources Office.

Custodian—Memorial Union (PART-TIME, THIRD-SHIFT, 16-HOUR BASE, AFSCME INTERNAL AND EXTERNAL POSTING)  
Challenge Course Facilitator—Student Affairs (Temporary, part-time, one-year assignment with possibility of renewal)

University employees are reminded to apply in writing prior to noon, Friday, March 21, 1997, to be considered as internal candidates. Applicants from the recall pool will be given first consideration for non-bargaining-unit positions. Vacancy announcements are normally posted every Friday at 1:00 p.m. in the Human Resources Office. Complete job descriptions are available in the Human Resources Office or by calling 487-2280. More information regarding employment opportunities is available by calling the Job Line at 487-2895. Michigan Technological University is an equal opportunity educational institution/equal opportunity employer.

Calendar



## March

NATIONAL WOMEN'S MONTH

### 14 Friday

**3:00 p.m.**—Steven Chamberlain, "Light in the Ocean's Depths: Vision in Hydrothermal Vent Shrimp" — ROTC Graduate Student Center

**1:00 p.m.**—Men's tennis, MTU vs. Gannon University—Gates Tennis Center

**8:00 p.m.**—Jazz Bands Invitational Road Show Concert—Walker Theatre

**8:30 p.m.**—Steven Chamberlain, "Biogenic Materials: Living Organisms Make Crystals" —EERC 103

### 15 Saturday

**11:00 a.m.**—Pilobolus master dance class—SDC Dance Room

**noon**—Men's tennis, MTU vs. Mercyhurst College—Gates Tennis Center

**5:00 p.m.**—Men's tennis, MTU vs. Minnesota—Duluth—Gates Tennis Center

**8:00 p.m.**—Jazz Bands Invitational Road Show Concert—Walker Theatre

### 16 Sunday

**8:00 p.m.**—Pilobolus—Calumet Theatre

### 17 Monday

**4:00 p.m.**—Tom Grimm's St. Patrick's Day tour of Ireland—Memorial Union Alumni Lounge

### 19 Wednesday

**noon**—ADD workshop—Memorial Union 105B

**2:30 p.m.**—Videoworkshop, "Tools for Drinking Water Protection" —EERC B11

**4:00 p.m.**—Tech Tea: Walt Bressette, "A Tree, A Community, A Mine" —Memorial Union Alumni Lounge

**7:00 p.m.**—Newcomers' Group meeting—Ramada Inn Portage Room, Hancock

### 20 Thursday

**1:00 p.m.**—Walt Bressette, "Jobs vs. the Environment: A Failed Paradigm" —Walker 108

**7:00 p.m.**—Blue Key forum on Winter Carnival—M&M U115

### 21 Friday

**3:00 p.m.**—Kirk Schulz, "Hydrodesulfurization Surface Reactions on Single Crystal Model Catalysts" —Chemical Sciences 102

**8:00 p.m.**—Jazz singers spring concert—Walker Theatre