

January 24, 1997

Luck never gives;  
it only lends.

—Swedish proverb

Vol. XXIX, No. 18

## Senate OKs pilot study for new teaching evaluation method

The University Senate opened the door January 22 to piloting a new teaching evaluation method. The senate voted unanimously to allow pilot studies of new student evaluation instruments, including the Instructional Development and Effectiveness Assessment System (IDEA) developed by Kansas State University.

Fifty-eight tenured faculty have volunteered to participate in the winter-quarter pilot, which will cover about 4,200 students in 100 sections. Professor **Christa Walck** (SBE), who has been active in promoting improved teaching and faculty development on campus, called IDEA "a much improved instrument over what we have now."

The faculty volunteers will be getting a list of learning objectives from KSU, from which they will select their goals for the course, **William Kennedy**, director of the Center for Teaching, Learning, and Faculty Development, said later. Students will evaluate the course based on those learning objectives. Then the faculty will receive the results, as well as a comparison with similar courses nationwide. Thus, calculus teachers will not be measured against music faculty.

Then the faculty volunteers will evaluate the IDEA pilot and the results will be reported to the senate. "Based on that, the senate can decide whether we need to pilot other instruments, adopt this for University trial, or do something else," Kennedy said. A University trial could start as early as fall 1997.

The senate referred a proposed Policy on Violent and Threatening Behavior to committee after questioning both the need for such a policy and its ultimate effect.

Senate President **Ted Bornhorst** expressed concern that the proposed policy includes no procedures beyond the court system, and questioned how the University would handle threats made privately.

Senate Secretary **Janice Glime** said that, though an initial proposal was directed at employees, a second one that the senate replaced it with seems to include students, and perhaps it shouldn't. "What if a student should act up at a game downstate?" she said. Senator **David Shonnard** (chemical engineering) said that inappropriate student behavior should be dealt with by the administration instead of via this policy.

Senator **Robert Keen** (biological sciences) noted that either of the proposed policies would allow MTU to discipline employees for spouse abuse occurring off campus.

Senator **Bruce Seely** (social sciences) questioned the need for an official policy forbidding violent behavior, saying that loopholes would be inevitable and that it could have unfortunate legal repercussions. "I'm concerned about our increasingly legalistic society," he said.

*Continued on page 5*

◆ Senate survey results on page 5 ◆

## United Way giving just short of last year's record

Members of the MTU community pledged or donated \$38,332 during the recent 1996-97 campaign, just a few hundred dollars shy of last year's record \$38,747.

"I sincerely thank all of you who contributed to this year's United Way campaign," campus chair **Cheryl DePuydt** said. "We do care about our community, and I feel confident that next year, MTU will be able to reach the \$40,000 mark."

Several areas had an increase in both the number of contributors and the amount of donations. The areas and their solicitors are Financial Aid, **Lynn Watts**; MTU Apartments, **Debbie Goldstein**; Chemistry, **Fred Williams**; SBE, **Nancy Johnson**; Counseling Services, **Jeanine Sewell**; Mathematical Sciences, **Marge Shannette**; third floor of Administration/Student Services, **Jill Oliver**; IMP, **Allison Hein**; Memorial Union, **Larry Curtin/Carol Asiala**; Civil and Environmental Engineering, **Beverly Kunick**; and Humanities, **Carol Johnson**.

The fourth floor of Administration/Student Services, with solicitor **Sue Yrjana**, had an increase in the number of gifts. And areas and solicitors with a increase in contribution totals are Public Safety, **Louis Fredianelli**; Douglass Houghton Hall, **Dan Salo**; ground floor of Administration/Student Services, **Nancy Heikkila**; IT, **Ted Soldan**; and Metallurgical and Materials Engineering, **Kathe Prince**.



## / 6 airing Winter Carnival live January 29

WLUC-TV Channel 6 will be on campus Wednesday, January 29, doing a live Winter Carnival broadcast of the *News Extra*.

President **Curt Tompkins** will be interviewed early during the half-hour show, which begins at 7:00 p.m. In addition, TV journalist Liz Flynn will be chatting with other members of the MTU community.

Tune in and see your friends!

## Call for your calling card MTU collect/third-party phone charges squelched

You soon won't be able to charge any collect or third-party, long-distance calls to Michigan Tech. Until now, employees who are on the road have been able to dial an operator to have long-distance calls billed to certain administration phone numbers, or have been able to call the University collect. Unfortunately, these calls are extremely expensive—up to five times the cost of using an MTU Calling Card.

By the end of February, all such charges will be blocked and the calls won't go through. But take heart! If you travel and need to make long-distance calls on University business, all you need is an MTU Calling Card. For more information or to get an MTU Calling Card, call Telcom Customer Service at 487-2000.

## Staff luncheons resume next month

Nonfaculty employees from several departments across campus are being invited to staff luncheons, planned for February and March at the University residence and hosted by President **Curt Tompkins** and his wife, Kathy.

The luncheons are an opportunity for staff to get together informally and chat with the Tompkins, not to mention a chance for a really good meal. But don't worry if you can't make it. This is fun, not work, and attendance is not mandatory.

Over the next few weeks, individual invitations will be sent to chairs/directors and staff working in the following departments: MTU Bookstore, University Cultural Enrichment, Code, Undergraduate Student Government, Library, Educational Technology Services, Electrical Engineering, Information Technology, School of Technology, Computer Science, Center for Experimental Computation, Seaman Mineral Museum, Mathematical Sciences, Physics, Institute of Materials Processing, Mining Engineering, Metallurgical and Materials Engineering, University Senate, Institute of Wood Research, Fine Arts, School of Forestry and Wood Products, Humanities, College of Sciences and Arts, Athletic Department, Auxiliary Retail Operations, Central Ticket Office, Gates Tennis Center, Golf Course, Physical Education, Ski Hill, Student Development Complex, Summer Youth/Athletic Programs, Keweenaw Research Center, Civil and Environmental Engineering, and Geological Engineering and Sciences.

## Wellness still alive and well

Yes, you can still join the MTU wellness program and live up to those New Year's resolutions to be less fat and more fit in 1997.

To sign up, call the Court House Fitness Center at 482-8201 or e-mail manager Terry Smythe at [terry\\_s@mail.up.net](mailto:terry_s@mail.up.net) and say you'd like to participate in the MTU wellness program. A fitness consultant will evaluate you and set you up with a personal fitness program.

Cost is \$200 for one year, payable over six months using payroll deduction. You can also pay half when you sign up, with three months to pay the balance. Memberships for couples are also available.

And, if you do 72 workouts in a 7-month period (an average of about 2 visits per week), you'll get a \$100 discount on the following year's membership.

This is your chance to get healthier, feel better, and move those stomachs and thighs back where they belong. Call today!

## TECH TOPICS

is published weekly by

### University Relations

Bill Curnow, director, University Relations  
Dennis Walkainen, mgr., Editorial Services  
Marcia Goodrich, *Tech Topics* editor  
Gail Sweeting, composer

Information to be included in *Tech Topics* should be submitted to the *Tech Topics* editor in one of the following ways:

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/jcs/ttopics/index.html>

## MTU notables

Human Resources Director **Ellen Horsch** has been elected to a three-year term on the Government Relations Committee of the College and University Personnel Association. CUPA is the primary U.S. professional organization for human resource managers in higher education.

The five-member Government Relations Committee advises the CUPA Board of Directors on legislative and regulatory issues. It also organizes a national seminar that brings human resource professionals together with key players at the federal level who deal with personnel issues in higher education.

## Getting too many Tech Topics? Tell us!

Is your department getting too many *Tech Topics*? Are you tossing more than you're reading? Want to do your part to save a tree or two each week?

If so, give us a call at 487-3509 or e-mail [ttopics@mtu.edu](mailto:ttopics@mtu.edu) and let us know how many less you'd like to receive. Thanks!

*Tech Topics* is available on the Web from MTU's home page by clicking on "MTU News and Events."

## J. R. Van Pelt Library trying out expanded FirstSearch system

Submitted by the J. R. Van Pelt Library

The J. Robert Van Pelt Library is joining with other Michigan academic libraries in a statewide trial of the FirstSearch information system.

This free trial will be held February 3–April 30. From your own networked computers, users will be able to locate books, magazine and journal articles, facts and statistics, and directory information in more than sixty databases, including WorldCat, MLA, INSPEC, Basic Biosis, GeoRef, Environment, ERIC, and Education Index. The trial includes services that offer full text on line, such as ABI/Inform; off-line document delivery is not included.

The trial will measure the level of interest in specific databases at individual institutions, determine the feasibility of consortium licensing, and determine the level of access necessary to meet the simultaneous demands of sixty institutions.

## Time management seminar still open

Registrations are still being taken for the Franklin Quest time management seminar "Increasing Personal Productivity through Value-Based Time Management," which will be held Friday, February 7, at the Super 8 Motel. The cost per person is \$184, or \$144 for those who already have a Franklin planner. Refreshments will be provided. For more information or to register, call the Office of Student Affairs at 487-2212.

## In print

Graduate student **Mingde Xia** and Professor **Dallas Bates** (chemistry) published a paper, "Reactions of Benzyl Aryl Sulfides with Excess Active Halogen Reagents," coauthored by former graduate student **Shaowu Chen**, in the *Journal of Organic Chemistry*, Vol. 61, No. 26 (1996).

Associate Professor **Young Huang** (ME-EM) published a paper, "A Model Study of Thermal Stress-Induced Voiding in Electronic Packages," coauthored with K. X. Hu, C. P. Yeh (Motorola), N. Y. Li (ALCOA), and K. C. Hwang (Tsinghua University), in *ASME Transactions—Journal of Electronic Packaging*, Vol. 118.

## You're invited

### Post-game Winter Carnival party January 31

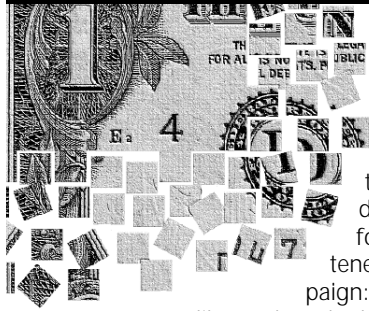
You're invited to a Winter Carnival Party on Friday, January 31, in the Student Development Complex.

The party, sponsored by the Huskies Club and the Keweenaw MTU Alumni Chapter, begins at about 9:30 p.m., after the hockey game against Minnesota–Duluth. Admission is \$2 and includes pizza, pop, assorted munchies, and coffee. You can also buy beer and wine at the cash bar.

The game starts at 7:05 p.m., but even if you don't go to the game, stop by the SDC and party! Just come to the varsity gym. If you have any questions, call Darcy Way at 487-2400 or Paula Eilola at 487-3324.



# The University's Capital Campaign: How you can help



Tip O'Neill, the late Speaker of the House, used to say that no candidate should ever forget one basic tenet of the campaign: Everybody

likes to be asked.

A twist on this bit of political wisdom holds true in fundraising: People are waiting to be asked. The trick is to find the right people.

Michigan Tech's upcoming Capital Campaign is now trying to find those right people. **Kimera Maxwell**, executive director of development and executive director of the Michigan Tech Fund, has no doubt that they're out there.

"We have lots of graduates who have started their own companies and been very entrepreneurial," she said. "We want to find those successful people who've had very positive experiences at Michigan Tech and translate those experiences into action."

For help, Maxwell is calling on many members of the University community who've never so much as borrowed an egg from their neighbor, let alone asked for donations into six figures. And, like the potential donors, she knows they're out there.

"There's a lot of interest in helping with fundraising, but people don't know how," she said. "We want to take advantage of their enthusiasm and point it in the right direction."

As the veteran of a very successful \$25 million campaign at Emporia State University, in Kansas, Maxwell knows fundraising, and she's willing to teach. She'll be presenting a short workshop, fundraising 101, on February 20 to deans and chairs, which, includes "The Tech Top 10 Ways You Can Make the Campaign a Success":

- **Help identify major donors.** Faculty and staff who have maintained friendships with alumni can be especially helpful, she says, so please pass their names on to the Tech Fund.
- **Share the good news about Michigan Tech.** People give to an institution they feel good about, where positive things are happening
- **Help get information.** At alumni functions, pass out alumni update cards to be used in drawings—MTU stuff makes great door prizes.
- **Know the campaign priorities**, so you can support them when you talk with potential donors.
- **Let the donor choose.** The greatest idea in the world won't be funded if the donor isn't interested.
- **Become a donor yourself.** Nothing speaks louder to MTU's friends than the support of its employees.
- **Consider volunteering your time and talents.** A friend sharing with a friend is the highest level of cultivation.
- **Help maintain contacts** by writing follow-up notes to former students or colleagues with whom you have a connection, just to thank them for the involvement with MTU. They want to hear from you.

- **Help solicit gifts.** If you have a strong relationship with a prospective donor, the University needs your help!
- **Accept Michigan Tech's appreciation.** Thanks for being the kind of person that has left such a good impression on students and friends. You are the reason they give.

MTU's Capital Campaign has a little more breathing room now, since a consulting firm recommended that the launch date be postponed one year, to 1999, while recordkeeping is upgraded and other issues are addressed. "We already have other major projects on the table, including the Dow Building, the Performing Art Center, and the Meese Building," Maxwell said. "We need to finalize them and then move forward, so that when we start the campaign, we won't be distracted by building projects."

In the meantime, advancement officers will be joining the staffs of the College of Engineering and the School of Business and Economics. "We want to capitalize on the very positive relationships faculty have developed with alumni," she said. And the best way to do that is put the advancement officers in contact with the faculty.

By the end of 1997, a feasibility study will be completed and Advancement will finalize the dollar amount of the campaign.

But why do a campaign at all? Why not just keep raising funds day by day?

"A campaign allows us to organize ourselves, so we can have a clear voice and explain who we are and where we're going in the future," Maxwell said. "A campaign is a mindset, a philosophy, and approach."

"And campaigns are neat from two perspectives. They are great motivators—we work extra hard because we're in a campaign. And they also set the stage for other activities by helping identify a pool of people who will continue to be involved in the University long after the campaign is over.

"So, when we're ready for the next big step, we'll have plenty of people who can help."

## More about Kimera Maxwell

**Kimera Maxwell** joined the Advancement staff October 15 as executive director of development and executive director of the Michigan Tech Fund.

At Michigan Tech, she will lead fundraising efforts, reporting to Vice President for Advancement and University Relations **John Sellars** and serving as liaison to the Michigan Tech Fund Board of Trustees.

Maxwell comes to Michigan Tech from Emporia State University, in Kansas, where she held a similar dual responsibility, as chief executive officer for the ESU Foundation and assistant to the president for institutional advancement. As ESU's chief fundraiser, she spearheaded a \$25 million capital campaign that reached its goal four years ahead of schedule. The campaign saw alumni giving double and recorded the best fundraising year in ESU's history.

Previously, she was ESU's director of university relations, serving as the university's official spokesperson and media relations advisor. In Emporia, Maxwell was active in the community as was the first woman chair of the board for the area Chamber of Commerce.

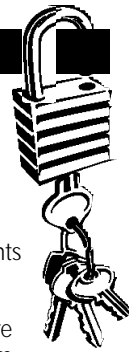
Before joining the ESU staff, Maxwell was coordinator of public information at Cottey College in Nevada, Missouri, where she earned an AA in Humanities. She received a BS in Journalism from the University of Wyoming and an MA in Communication Studies from the University of Kansas. Maxwell is active in the PEO Sisterhood.

"I think we're very fortunate at Michigan Tech to have Kim here," Sellars said. "Her experience of many years in public relations and development work is a tremendous asset to the University. In addition, she's very thoughtful, she has special gifts in communications, and she's already connecting with the alumni of the University."

## On the road

Several faculty and students from the Department of Civil and Environmental Engineering presented papers at the meeting of the American Geophysical Union held December 15–19 in San Francisco. PhD candidate **Matt Peterson** presented "The Arctic Outflow Study—Measurements of Photochemically Significant Species at a Newfoundland Surface Site During February through April 1996," coauthored by Assistant Professor **Richard Honrath**, MS student **N. Badhwar**, S. B. Bertman, D. Ellyea, and G. Noumie (Western Michigan University), D. R. Hastie (York University), R. B. Norton, D. D. Parrish, and M. Warshawsky (National Oceanic and Atmospheric Administration), J. T. Merrill (University of Rhode Island), J. L. Moody (University of Virginia), P. B. Shepson (Purdue University), and V. L. Young (Ohio University). PhD student **Amy Hamlin** presented a poster, coauthored by Honrath, "A Modeling Study of Ozone and its Precursors in Winter—Spring Arctic Outflow." Peterson presented a poster, coauthored by Honrath, "A Simple Subsidence-Driven Model of Remote MBL Trace Gas Levels and Correlations."

Professor **G. David Mendenhall** (chemistry) presented a poster, "Search for Chemiluminescence from tert-Butyl 9-Fluorenyl Peroxide and 9-Fluorenyl Hydroperoxide," at the Ninth Inter-American Photochemical Society Winter Conference, held January 1–8 in Clearwater Beach, Florida.



## Tech Tea: waste, academia, and plastic forks

Submitted by University Cultural Enrichment

From mission statement to environmental engineering program, Michigan Tech has taken strides toward becoming a more Earth-friendly institution. However, recent policy changes have caused many to question the relationship between education and action within the campus community.

Topics such as recycling, pollution, and sustainability are becoming increasingly important for a large segment of the student body, faculty, and administration. The next Tech Tea Time, "Waste, Academia, and Plastic Forks," at 4:00 p.m. on Wednesday, January 29, is intended to renew discourse on campus decisions that affect our planet. Coordinated by the MTU chapter of Student Pugwash, the forum will feature a number of faculty and staff involved with emerging environmental issues at Michigan Tech.

If you are disappointed at the lack of recycling on campus, concerned about the switch from reusable to disposable tableware in the Memorial Union, and interested in learning more about campus policies and the reasons behind the decisions, you are encouraged to attend.

Tech Tea Time, held in the Memorial Union Alumni Lounge, is free and open to all.

Student Pugwash USA is a national, educational, nonprofit organization based in Washington, DC. The programs, which are nonpartisan and non-advocacy, stress the resolution of critical global challenges through informed decision making and the responsible use of science and technology. Through activities focusing on leadership development and interactive learning, Student Pugwash USA educates young people on the relevance of science and technology to their own lives and on its ability to shape the future of the global community.

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

## Register now for OpEx

The Office of Student Affairs reminds all departments to register by Monday, January 27, to participate in the Opportunities Exposition (OpEx) set for Wednesday, February 12.

During OpEx, representatives from MTU departments and schools will have a chance to discuss their programs with students who haven't chosen a major or who may be changing majors. OpEx is also an opportunity to introduce students to extracurricular activities. If you have questions or want to reserve a table, contact Donna Eddleman at 487-2212 or dmeddlem@mtu.edu

## Goal 5 Committee: thanks to staff

Over 50 percent of MTU staff responded to the recent Goal 5 Committee survey, which measured satisfaction with the MTU work environment.

"We would like to thank all of you who participated in filling out the Goal 5 staff survey," committee members said. "This will help us in our effort to complete our evaluation of the criteria for the NCA study."

The high level of participation will help the committee draw more valid conclusions from the survey results. When completed, the results will be shared via *Tech Topics*, Staff Council, and a brown-bag lunch.

## Ford engineer to speak Jan. 28

Cynthia Hodges, a product design engineer at Ford Motor Company, will speak on ethical dilemmas and leadership in industry on Tuesday, January 28, at 7:00–9:00 p.m. in M&M U115.

Hodges' presentation is part of the Leadership and Ethics In Action series, and all members of the MTU community are invited. For more information, contact Jon Henkel at 487-3057.

## GEM Center asks, return your survey

If you received one of the GEM Center surveys sent to Houghton County residents, the GEM Center asks that you please return it.

The survey, printed on goldenrod-colored paper, deals with the future of Houghton County. You can return it via campus mail and save the center some postage, if you like.

The results will be printed in *Tech Topics* and the *Daily Mining Gazette* in April.

## Companies coming

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

- Monday, January 27: Imation (summer), Spectrum Network Communications (co-op)
- Tuesday, January 28: A. O. Smith, Armond Cassil (full-time/summer), Dart Container
- Wednesday, January 29: Armond Cassil (full-time/summer), Dart Container, Schlumberger, Vistawall Architectural Products
- Thursday, January 30: Novamax Technologies

## Reception for student photography exhibit rescheduled

The reception for Underexposed: Photography from Michigan Tech, will be held Friday, January 31, at 7:00–9:00 p.m. at Omphale Gallery in Calumet.

The event, originally scheduled for last week, was postponed due to the weather. The exhibit features the work of MTU photography students.

Omphale Gallery is located at 215 Sixth Street in Calumet. For more information, call 482-9534.



researchers, their proposals, and their potential sponsors are

- **Peter Laks** and **Dana Richter** (IWR), "Soil Block Tests of IP/Masonite Hardboard Siding," International Paper
- **Surendra Kawatra** (MME), "Prevention of Self Heating of Swarf," GM
- **Kawatra** and **Timothy Eisele** (MME), "A Study of Building Mechanisms of Fly-Ash in Foundry Sands," NSF
- **Warren Perger** (electrical engineering), "Determination of Noise Sources in Automobile Audio Systems," General Motors
- **Jurgen Bierbrauer, Alphonse Baartmans, Donald Kreher, and Vladimir Tonchev** (mathematical sciences), "Third Upper Michigan Combinatorics Workshop on Codes, Designs, Geometries, and Their Applications," NSF
- **Mohan Krishnamurthy** (MME), "Characterization of Single and Coupled Quantum-Dots Using Far Infrared Radiation" and "Reliability of Resonant Tunneling Diodes," University of Notre Dame
- **Chandrashekhhar Joshi, Vincent Chiang** (IWR), and **Xiaoqiu Huang** (computer science), "Dendrogenes: A Database of the DNA and Protein Sequences from Trees," USDA
- **Patrick Martin** (social sciences), "Proposal to Support the Completion of the 1996 Phase of an Archaeological Excavation on State Lands," Michigan Historical Center
- **Rolf Peterson** (SFWP), M. S. Boyce (University of Wisconsin), L. D. Mech (University of Minnesota) and B. F. Tracy (Syracuse University), "Wolves in Yellowstone: Multi-Trophic Level Responses to the Addition of a Top Carnivore," NSF
- **Michael Mullins** (chemical engineering) and **Marv McKimpson** (IMP), "Highly Processible Precursors for Preparation of K-Beta Alumina Solid Electrolytes for AMTEC Systems," TDA Research/DOE
- **Chris Anderson** (educational opportunity), "Michigan Technological University/Gogebic Community College/Bay de Noc Community College Partnership," Michigan State Department of Education, Office of Equity
- **James Riehl** (chemistry), "Theoretical and Experimental Studies of Chiral Discrimination in Energy Transfer and Luminescence Quenching," NSF
- **Laks**, "IB, Thickness-Swell and Field Termite Evaluation of Simulated Timberstrand LSL Containing Griffin Products," Trus Joist MacMillan; "Preparation of Chlorpyrifos-Treated Boards for a Dislodgeable Residue Study," Dow Elanco
- **Richter**, "Ability of Soybean-Based Adhesive to Support or Resist the Growth of Fungi," Omnitech International
- **Jim Mihelcic** (civil and environmental engineering) and **Don Lueking** (biological sciences), "Selective Separation of Mercury Using Immobilized Proteins," EFX Systems

Continued on page 5

"Why is this necessary?" asked Senator **Barry Egg** (humanities).

Benefits Manager **Ingrid Cheney** said that people on campus have been threatened, and a policy is needed to provide redress.

Walck said that, according to staff in Counseling Services, "such things do happen" at Michigan Tech.

The matter was referred to committee, which was directed to clarify the need for the policy and assure that any proposal does not duplicate existing University policy.

**On other business, the senate**

debated a proposal to create an MTU Research Foundation, which would be responsible for research policy and oversee research administration. Opponents said the foundation would simply add another layer of bureaucracy to research administration, while supporters said it would give researchers a forum to which they could bring their complaints and problems. Other issues include adequate representation from faculty and research units on the foundation board of directors. The senate will ask for more information on the proposal from University administrators.

**Senate survey results**

The University Senate received the results of its retiree health benefit survey January 22 and will present them to the Board of Control January 24.

A total of 799 surveys were sent to senate constituents, and 324, or 40.6 percent, were returned.

- 81.5 percent said MTU contributions to the TIAA-CREF and MPSERS plans should be comparable.
- 80.1 percent said the 80-point retirement eligibility should be maintained.
- 74.7 percent said the co-pay for retirees with 80 points who are under age 65 should not be increased.
- 69.1 percent said TIAA-CREF retiree health care should be prefunded.
- 49.4 percent said employee compensation should have the same weight as other budget items, 41.7 percent said it should have more weight, 0.6 percent said it should have less, and 8.3 percent did not respond to the question.

The senate developed the above survey after declining to participate in a survey by Provost **Fred Dobney**, which asked all MTU employees to rank various spending options on a scale of 1 to 5 (see story in the January 10 *Tech Topics*).

Some senators have questioned the credibility of the senate survey, saying that it asks respondents if they support a benefit without regard to budget trade-offs. They noted that virtually everyone would prefer to have better benefits and salaries, so that the senate survey only measures the obvious; it doesn't consider employee preferences in the real world of limited budgets.

- **William Bulleit** (civil and environmental engineering), "Load-Duration Behavior of Steel Dowled Wood Connections," USDA
- **Gerard Caneba** (chemical engineering), "Studies of Block Copolymer Formation from the Free-Radical Retrograde-Precipitation Polymerization Process, Goal II," NSF
- **Jong Lee** (MME), "Dynamic Interaction between Coherent Precipitates and Dislocations," NSF
- **Michael Renn** (physics), "Atom Lithography with Atomic Pencils and Holograms," Army Research Office
- **Dae Young, Rudolf Greuer, and Francis Otuonye** (mining engineering), "Graduate Assistance in Areas of National Need: Mining Engineering at MTU," U.S. Department of Education
- **Jeffrey Coleman** (electrical engineering), "LMI-BAsed Optimization of Ultra-Wideband Radar Signal-Processing Systems," Naval Research Laboratory
- **Dan Crowl** (chemical engineering), "Reactivity Study," Dow Chemical
- **David Dixon and Gopi Podila** (biological sciences), "Defining a Novel Role for MADS-Box Genes in the Differentiation and Development of Secondary Vascular Tissues in Trees," NSF
- **Wilbur Campbell** (biological sciences), "Role of O-Methyltransferases in Lignin Precursor Biosynthesis in Wood Species," USDA
- **Riehl, David Leddy, David Mendenhall** (chemistry), **Sarah Green, Michael Gretz** (biological sciences), and **Gary McGinnis** (IWR), "Acquisition of a Liquid-Chromatography Mass Spectrometer," NSF
- **Edward Fisher** (chemical engineering) and **Riehl**, "Michigan Polymer Partnership," Michigan Molecular Institute
- **Peterson**, "Mercury Contamination in Moose in Isle Royale National Park," Isle Royale National Park
- **Mihelcic, Leuning, and Raina Miller** (University of Arizona), "Role of Biosurfactants in the Delivery of Hydrocarbons to Microbial Cells during Biodegradation," EPA
- **John Wang** (IWR) and **Robert Falk** (USDA), "Accelerated Creep Evaluation of Wood-Filled Thermoplastic Composites," USDA
- **Laks, Martin Jurgensen, David Reed, and Jiquan Chen** (SFWP), "Decay Probability Map of the United States," USDA
- **Bruce Rafert** (physics), "Rockets for Schools 1997," ASA

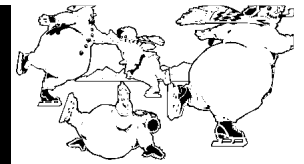
**POSITIONS AVAILABLE AT MTU**

The following positions will be posted Friday, January 24, 1997, at 1:00 p.m. through noon, Friday, January 31, 1997, in the Human Resources Office.

- Auditor—Internal Audit
- Secretary (N3)—Dining Services (REGULAR, FULL-TIME, UAW INTERNAL AND EXTERNAL POSTING)
- Instruction and Reference Librarian—J. R. Van Pelt Library

University employees are reminded to apply in writing prior to noon, Friday, January 31, 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**



**January**

- 24 Friday**  
**7:35 p.m.**—Hockey, Minnesota at MTU—SDC  
**8:00 p.m.**—*Macbeth*—Walker Theatre  
**8:00 p.m.**—Coffeehouse: Charlie Maguire and Gordy Abel—Keweenaw Commons
- 25 Saturday**  
**1:00 p.m.**—Women's basketball, Oakland at MTU—SDC  
**3:00 p.m.**—Men's basketball, Oakland at MTU—SDC  
**7:05 p.m.**—Hockey, Minnesota at MTU—SDC  
**8:00 p.m.**—*Macbeth*—Walker Theatre  
**8:00 p.m.**—Coffeehouse: Charlie Maguire and Gordy Abel—Keweenaw Commons
- 28 Tuesday**  
**7:00 p.m.**—Cynthia Hodges on ethical dilemmas and leadership—M&M U115
- 29 Wednesday**  
**10:00 p.m.**—Winter Carnival recess begins
- 30 Thursday**  
**4:00 p.m.**—John Weaver, "STM Characterization of Surface Processing: Semiconductor Etching"—Fisher 139  
**8:00 p.m.**—*Macbeth*—Walker Theatre
- 31 Friday**  
**7:00 p.m.**—Reception for student photo exhibit—Omphale Gallery  
**6:00/7:00 p.m.**—Club Indigo: Japanese buffet, *Woman of the Dunes*—Calumet Theatre  
**7:05 p.m.**—Hockey, Minnesota-Duluth at MTU—MacInnes Student Ice Arena  
**9:30-ish p.m.**—post-hockey game Winter Carnival Party—Varsity Gym  
**8:00 p.m.**—*Macbeth*—Walker Theatre

# Michigan Technological University Fact Sheet 1996-97

## Enrollment

	Total	Percent of total enrollment
Total Enrollment Fall Term 1996	6,195	
Graduate School (M.S./Ph.D./Total)	373/281/654	(10.6%)
New students fall term	1,076	(17.4%)
College of Engineering	3,977	(64.2%)
School of Business	248	(4.0%)
College of Sciences and Arts	1,243	(20.1%)
School of Forestry and Wood Products	220	(3.6%)
School of Technology	374	(6.0%)
Non-degree seeking	73	(1.2%)
Extended University	60	(1.0%)

## Employees

Number of faculty	403
Number of staff	980
Total employees	1,383

## Financial

1996-97 current fund budget	\$127,358,000
State appropriation	\$45,823,000
Tuition and fees	\$30,601,000
Research funding	\$22,508,000
Auxiliary and other revenues	\$17,500,000

## Graduate recruitment

Number of companies on campus (1995-96)	183
Average number of job interviews per student	8
Total number of interviews	5,682

## Degrees granted 1995-96

Total (associate/bachelor's)	100/1,115
Graduate School (MS/PhD)	154/45
College of Engineering	924
School of Business & Engineering Administration	101
College of Sciences and Arts	221
School of Forestry and Wood Products	47
School of Technology (Associate Degrees)	121
<b>Total degrees granted</b>	<b>1,414</b>

## U.S. undergraduate enrollment rankings

College of Engineering	15
Environmental Engineering	3
Geological Engineering	3
Mechanical Engineering	3
Metallurgical & Materials	2

Michigan Tech also has one of the largest degree-granting programs in Scientific & Technical Communication

## Quality of education

Michigan Tech is included in U.S. News & World Report "America's Best Colleges;" Money Magazine Best Buys in College Education; and Peterson's Guide to Competitive Colleges.

- Accreditation: North Central Association of Colleges and Schools and other professional accreditation bodies
- Quality of incoming students: Percent in upper 10 percent of high school graduating class: 38.0%
- ACT scores

	Average MTU freshman	National average for college-bound high school seniors
English	24.2	20.3
Mathematics	26.2	20.2
Composite	25.6	20.9

(Note: ACT operates on a scale from 0 to 36.)

## Major research agencies

Institute of Materials Processing  
 Institute of Wood Research  
 Keweenaw Research Center  
 National Center for Clean Industrial and Treatment Technologies (CenCITT)

## Student information

Residents of Michigan	4,580 (73.9%)
Non-residents	1,105 (17.8%)
Foreign	510 (8.2%)
Students living in residence halls	2,005 (32.4%)

## Alumni information

Number of alumni	43,914
Alumni working in Michigan	11,947
Alumni annual giving participation rate (1995-96 Fiscal Year)	19.3%

## Miscellaneous information

Campus Information telephone number: 906/487-1885  
 FAX number: 906/487-2338  
 Academic calendar: quarter system  
 Physical plant (main campus): Value, \$300,000,000;  
 143 acres