

March 7, 1997

We seek the truth
and will endure
the consequences.

—Charles Seymour,
president of Yale,
1937-1950

Vol. XXIX, No. 24

Governor John Engler this week announced the appointment of **Claude A. Verbal** of Flint to the Board of Control at Michigan Technological University. Verbal will replace **Frederick Gonzalez**, of Pontiac, for a term expiring December 31, 2004.

"Claude's successful engineering career and extensive civic involvement make him a great choice for the Board," Engler said.

Verbal, who earned his B.S. degree in mechanical engineering from North Carolina State University in 1964, is manager of the Lansing Service Parts Operations Processing Center for the General Motors Corporation. He has worked for GM since 1964 and previously served as senior product engineer, staff product engineer, assistant superintendent of quality control, general superintendent of quality and reliability, and general superintendent of manufacturing, engineering, quality, and reliability. He has been a registered professional engineer since 1971.

He has been active in the Society of Automotive Engineers for three decades and has held several SAE leadership positions, including chairman. He founded and served as president of the Flint Inner City Lions Club and the Flint Environmental Action Team.

Engler names **Verbal**
to MTU board

All about good teaching: Upper Midwest Faculty Forum April 9-11

Next month, educators from as far as Seattle and as near as the School of Business will come to Michigan Tech to discuss ways to improve teaching at the college level.

The Upper Midwest Faculty Forum, set for Wednesday-Friday, April 9-11, features experts on topics ranging from technology to diversity.

Maryellen Weimer of Penn State, former associate director for the National Center on Postsecondary Teaching, Learning, and Assessment, will give the opening presentation, "Instructional Improvement Issues." In addition, she will give a workshop, "Discovering and Developing Your Teaching Style."

Sheryl Burgstahler of the University of Washington will present "Disability Awareness Preparation for Faculty." She directs Project Do-It, an NSF-funded program that recruits students with disabilities into science and engineering. In addition, Burgstahler is assistant director of information systems for computing and communications at the University of Washington.

Robert Menges, of Northwestern University, will discuss "Promoting Exemplary Teaching" and "The Role of Feedback in Faculty Development." Director of Northwestern's Center for the Teaching Professions, Menges is also editor in chief of the quarterly publication *New Directions in Teaching and Learning*. His most

recent book, *Teaching on Solid Ground: Using Scholarship to Improve Practice*, was edited with Weimer.

"Making the Grade in Graduate School: Roles of Students and Faculty Mentors" and "Focusing on the Campus Milieu: Enhancing the Graduate School Climate" will be presented by Howard Adams, director of the GEM Institute on Mentoring. He specializes in engineering and science education for women and minorities. Among his many publications is the book *Making the Grade in Graduate School: Survival Strategy 101*.

Norbert Hill Jr. will present "Enhancing Enrollment and Transfer for Community College and University Partners." Hill is the executive director of the American Indian Science and Engineering Society and publishes *Winds of Change* magazine.

Presenters from Michigan Tech will include **David Rudd**, **Rodney Michael**, and **Anil Jambekar** (SBE), **Edward Lumsdaine** (ME-EM), **Jim Cross**, and **Patty Lins** (IT). In addition, speakers from Northern Michigan University, University of Wisconsin-Platteville, Oakland University, E&M Consultants, Baker College, and Lakehead University will hold workshops at the forum.

To register, contact Keri Lenz at 487-2263 or klenz@mtu.edu

Five visiting women scholar/lecturers coming to MTU

Five experts in fields ranging from cybercrime to forest ecology will be coming to Michigan Tech, funded through the Visiting Women Lecturers and Visiting Women Scholars series.

Visiting Women Lecturers

Dorothy Denning, a professor of computer science at Georgetown University, is former president of the International Association for Cryptologic Research, chair of the International Cryptography Institute, and is a member of the the National Institute of Standards and Technology Review Panel on Information Technology. She is information technology advisor to the FBI, and her research is primarily in the area of computer and communications security. Denning's sponsor at MTU is **Linda Ott**, interim chair of the Department of Computer Science.

Deborah Page-Dumrose is a research soil scientist at Intermountain Research Station in Moscow, Idaho. She is researching the aspects of soil that affect its fertility as part of the National Long-Term Soil Productivity study, a nationwide research project designed to provide a scientific basis for U.S. Forest Service soil quality standards. Page-Dumrose's sponsor at Michigan Tech is Professor **Glenn Mroz** (SFWP).

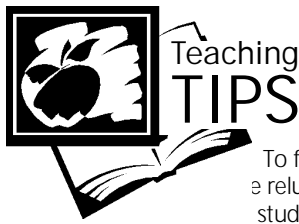
Jane Curry lives in Minneapolis and describes herself as a recovering academic. She has written and

performed nationally in four solo shows, including *Nice Girls Don't Sweat* and *Miz Wizard's Science Secrets*. A recipient of the 1984 Minnesota Independent Scholar of the Year Award, she has published four books, performed with the Minnesota Chautauqua Circuit, taught high school, and, during four summers, was cruise director on the the steamer *Delta Queen*. Curry is sponsored at MTU by Educational Opportunity Director **Chris Anderson**.

Mary Teresa Berry is an assistant professor of chemistry at the University of South Dakota. Her research focuses on physical and inorganic chemistry, and her visit is sponsored by **James Riehl**, chair of the Department of Chemistry.

Visiting Woman Scholar

Marilyn Palmer is a senior lecturer in history and archaeology at Leicester University. Her research specialty is industrial archaeology, and she is a Fellow in the Society of Antiquaries. Palmer's visit is sponsored by Associate Professor **Patrick Martin** (social sciences).



The First Day

Submitted by William Kennedy, director

Students come to the first class session of each term with questions. Generally, these fall into two categories: housekeeping questions and interpersonal questions. Students new to college bring very different versions of these questions to class than do well-seasoned students.

To further complicate the issue, beginning students tend to be reluctant to pose even the most basic questions in front of other students due to anxiety and peer pressure. They often choose, instead, to infer the answers to their important questions.

In a well-organized class, most housekeeping questions will be answered through a brief in-class review of the course syllabus. Afterwards, students can be expected to use the syllabus throughout the course to determine exactly what is expected of them and when. Many questions that sound like course-related questions are really thinly veiled variations on the theme of "what does it really take to get an A in this course?"

Experienced students know that the most concrete measure of academic success in college is their grade point average. There is abundant evidence to suggest that Tech students carefully manage their time and degree requirements to maximize their ability to get good grades. Some carefully select term course load and may drop courses to maintain their average. Being straightforward with students about workload requirements on the first day of class is one helpful way for the professor and the students to assess early on whether a given course can be managed.

The second category of questions that students bring to class on the first day are interpersonal in nature and are commonly answered at the non-verbal level or by reading between the lines. Students want to know how rigid you are, whether you are open and approachable, if you have a sense of humor, and whether or not you are ready to care about them as people. They want to know what you expect of them in class. Do you send the message that you want active learners or passive note takers? Students want to know if you are willing to defend the ideas you teach or if you prefer them to simply remember what you say.

If you expect to see students during your office hours, you have to convince them that coming to your office won't brand them as being below average or "slow" in your eyes. If you want them to use a learning center or a tutor during the term to reinforce their learning, you have to convince them that you truly value these tools and resources.

The first day of class provides a golden opportunity to show your interest in your students. Ask students to take the last two minutes of class to write out and submit their reactions to the first day in class. This exercise, and your subsequent response, sends the message to students that you care about them and their ideas and can set the tone for more-productive interactions throughout the term.

Please feel free to call the Center for Teaching, Learning, and Faculty Development if you have questions or comments on these or other ideas related to your teaching at 487-2046.

Proposals in progress

Researchers, their proposals, and their potential sponsors are

- **Alex Mayer** (geological engineering and sciences), "Multiobjective Decision-Making for Environmental Remediation," NSF/EPA
- **Russell Alger** (KRC), "Study of Safety Enhancement Devices of Snowmobilers," Snowmobile Education Safety Research Association
- **Tony Rogers, Andrew Kline** (chemical engineering), and **James Baker** (CenCITT), "Enhanced Analytical Hierarchy Processing (AHP) Applied to Sharply Reduced Data Inputs in Pollution Prevention . . ." EPA/NSF

TECH TOPICS

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By e-mail to 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/jrel/ttopics/index.html>

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 10: Hewitt & Associates (Viewnet), Michigan DNR, Oscar Meyer Foods
- Tuesday, March 11: Anchor Coupling, Inc., The Budd Company, Cummins Engine, Marathon Oil Co., Marquip, Michigan DNR, Oscar Meyer Foods, Tri-Media
- Wednesday, March 12: Marquip, Minnesota DOT, Prince Machine, Robert Bosch, Variation Systems Analysis
- Thursday, March 13: EDS, F. H. Paschen, Ganton Technologies, Halliburton, Slater Steel, Stryker Instruments
- Friday, March 14: Diecast, Ganton Technologies, Kimberly-Clark, Laser Machining, Stryker Instruments

Tech Jazz Invitational Road Show concerts March 14–15

Submitted by the Department of Fine Arts

Michigan Tech's Jazz Lab Band and JazTec Combo, just returned from a statewide tour, host two guest bands in their second annual invitational Road Show concerts in Walker Theatre on Friday–Saturday, March 14–15, at 8:00 p.m. The Northern Michigan University Jazz Ensemble and the local Jazz Explorers band join MTU's best for two evenings of lively, innovative jazz.

Jazz Lab Band and Jaztec will play selections polished in eight concerts presented on the road during spring break. Highlights of the show, according to Director of Jazz Studies **Mike Irish**, include a Jeff Lorber composition, "City," with trumpeter Doug Jefferson and bassist Tim Havens as featured soloists; plus "Night Train" and "Bear Bones," both of which showcase the trombone section. **Andy Gabrielski** on tenor sax will front the band for the haunting ballad, "We'll Be Together Again."

NMU's Jazz Ensemble is an eighteen-piece big band directed by John Cooper. This exchange concert renews a tradition which stretches back to 1967, but has lapsed in recent years. Cooper, currently assistant professor of trumpet and jazz studies at NMU, is a 1996 graduate of New York University, where he was a Eubie Blake Scholar in jazz composition. He has performed with Bob Hope, Joan Rivers, Carl Fontana, and Chico O'Farrill.

The Jazz Explorers are local high school students who have formed a rehearsal band under the direction of **Rick Brown**, a pianist, bridge expert, and instructor in the Department of Electrical Engineering. They will appear at the Friday concert only.

Tickets for this Department of Fine Arts event are available at the Memorial Union Box Office (487-3200), SDC Central Ticket Office (487-2073) and at the door for \$7 general public, \$5 senior citizens, and \$3 students.

Come and comment/complain!

Blue Key to hold debriefing on Winter Carnival

Blue Key is holding an open forum on Winter Carnival 1997 on Thursday, March 20, at 7:00 p.m. in M&M U115.

Everyone is invited to come and ask questions, give suggestions, raise concerns, or voice complaints.

Name contest

Blue Key is also holding a contest to decide the theme of next year's Winter Carnival. The deadline for submitting entries to the Blue Key Office, Memorial Union 106, is April 17.

Book donations needed

The Friends of the Library are asking for donated books to be sold during the FOL Annual Book Sale, set for April 3. To donate, just drop your books off at the library in the receptacle. The Friends will pick up large donations—contact Faith Morrison at 487-9703 or fmorriso@mtu.edu

All proceeds benefit the J. R. Van Pelt Library. So clean off those shelves and help the library! That dusty tome could be somebody's cherished collectable.

Pilobolus the next Great Event at MTU

Submitted by University Cultural Enrichment

They are theater and mime artists, comedians, storytellers, and acrobats. Their stunning, gravity-defying physical feats and visual surprises transform the essence of dance into the art of sculpture. Above all, they provide an evening of entertainment that is both upbeat and offbeat.

They are Pilobolus Dance Theatre, a major American dance company of international influence, appearing at the Calumet Theatre on Sunday, March 16, at 8:00 p.m.

Pilobolus will also be offering a Dance Master Class on Saturday, March 15, from 11:00 a.m. to 1:00 p.m. in the Student Development Complex Dance Room. Call 487-2844 for further information and to register.

Pilobolus will perform several works from their extensive repertoire, including the pratfall-driven, tube-navigating solo from "The Empty Suitor" and "Walklyndon," a whimsical and comical piece. The second half of the program will be devoted to "Day Two," danced to the music of the Talking Heads.

This critically acclaimed ensemble has successfully reached out to a popular audience. If you know someone who has never been to a dance performance, this is a particularly good company to see; the acrobatic antics and humor always win over the crowds. Pilobolus has performed for two seasons on Broadway, and they present a month of performances at the Joyce Theatre in New York City every year. They have played to full houses from London's Sadler's Wells Theatre and Rome's Teatro Olimpico to Copenhagen's Tivoli Gardens and Paris Theatre de la Ville. They've been featured on PBS's *Dance in America* and *Great Performances*, on the *Tonight Show*, and on *Sesame Street*. The company has received numerous commissions from the American Dance Festival, and their works are presented in the repertoires of major dance companies including the Joffrey and Feld Ballet companies.

Pilobolus was founded in 1971 by Moses Pendleton and Jonathan Wolken, two undergraduates who met in a Dartmouth dance class. Over the years, dancers from Pilobolus have left the company to start their own companies. Three of them—Momix, ISO, and Peter Pucci—have appeared and have been enthusiastically received in past MTU Great Event seasons.

The Pilobolus performance and master class are made possible through funding from the Katherine M. Bosch Endowment with additional funding from Arts Midwest members and friends in partnership with the National Endowment for the Arts. Production assistance is provided by the MTU/Suomi Student Entertainment Board and the event is coordinated by the University Cultural Enrichment Department.

The event is the 1996-97 Katherine M. Bosch Performance and is part of the Michigan Tech Great Events Series. Tickets are on sale at the SDC Central Ticket Office (487-2370, Monday-Friday, 3:00 a.m. - 6:00 p.m.) and at the Memorial Union Box Office (487-3200, Monday-Friday, 10:00 a.m. - 2:00 p.m.).

Cockpit Display System Could Reduce Mid-Air Collisions—

Submitted by the MTU News Bureau

A cockpit display system being developed at Michigan Technological University would alert pilots of small planes in the vicinity and drastically reduce the number of mid-air collisions.

"Currently the United States records about twenty-five mid-air collisions a year," says project leader **Jeffrey Burl** of Michigan Tech's Department of Electrical Engineering. "We believe we can develop low-cost avionics that will reduce that number to zero." Burl's project is being funded by a two-year, \$90,000 grant from the Federal Aviation Administration (FAA).

Burl says large commercial aircraft use Traffic Collision Avoidance Systems (TCAS) to keep track of other aircraft in the vicinity. These systems allow the computers in those planes to "talk back and forth to one another" and afford a high degree of safety. But they are also very expensive, costing about \$100,000 per unit.

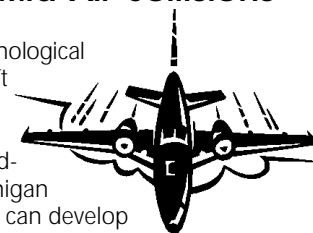
"These systems are obviously beyond the means of most small aircraft owners," says Burl. "Yet we have the technology to provide much of the same information available through TCAS to smaller planes at a much lower cost. If you want to save lives, you have to get a lot of collision-alert systems out in the field. To accomplish that, the cost must be reasonable. Our goal is to develop a cockpit display system that can be purchased and installed for about \$3,000."

Burl says the system he is developing includes passive radar that detects and decodes Global Positioning System (GPS) squitter signals transmitted by other aircraft and is also capable of decoding Traffic Information System (TIS) uplink data received from ground radar units.

The system will primarily use TIS information where ground radar is available, according to Burl. In these environments, GPS squitter data will serve to validate TIS information and serve as a backup to the TIS system. In non-radar environments, GPS squitter information is used as the primary source of traffic information.

"The system incorporates a cockpit display that presents bearings and range to nearby aircraft, relative velocity and altitude of nearby aircraft, and the relative altitude rate," explains Burl. "Furthermore, collision hazards are identified with visual and audio messages to the pilot. This information greatly increases flight safety by improving the situational awareness of the general aviation pilot."

Additional systems could be developed to suggest collision avoidance maneuvers to pilots based on available information, Burl says. He says the cockpit display would be especially valuable near large airports where most potential problems exist and where ground traffic control personnel may not always have time to deal with small aircraft.



Currently the United States records about twenty-five mid-air collisions a year. We believe we can develop low-cost avionics that will reduce that number to zero.—

Deep-sea life, minerals along a hydrothermal vent

Steven Chamberlain will speak on his research and adventures along the Mid-Atlantic Ridge in "Light in the Ocean's Depths: Vision in Hydrothermal Vent Shrimp," on Friday, March 14, at 3:00 p.m. in the ROTC Graduate Student Center.

Chamberlain, a professor of bioengineering and neuroscience at Syracuse University, explored this mountainous, deep-sea region of geothermic activity in the submersible *Alvin*. His work was featured in the November 1996 edition of *Discover* magazine.

An avid mineral collector, Chamberlain will also present a second lecture, "Biogenic Materials: Living Organisms Make Crystals," at the the Seaman Mineral Museum Society meeting on Friday, March 14. The meeting begins at 8:00 p.m. in EERC 103, with the lecture scheduled for 8:30 p.m.

Chamberlain's visit is sponsored by the Seaman Mineral Museum Society, along with the Departments of Biological Sciences, Geological Engineering and Sciences, and Physics. For more information, contact John Jaszczak at 487-2255 or the museum, 487-2572. Matching funds for Chamberlain's visit are being provided by the Faculty Development Committee.

Chemistry of spider silk March 14

Lynn Jelinski of Cornell University will speak on "Hanging by a Thread: The Molecular Basis of the Strength of Spider Silk," on Friday, March 14, at 3:00 p.m. in Chemical Engineering and Sciences 102.

Jelinski's visit is part of the Chemistry Department Colloquia Series, and all interested persons are invited. Chemistry graduate students are required to attend.

For researchers only: New Research Services policy

Research Services now sends copies of the final proposal (including internal forms) and fully executed contract documents (including an internal activity sheet) to the chair of the principal investigator's department. If investigators want a copy, they should contact their department chair or research coordinator.

Gay-gene discoverer at MTU March 13

Submitted by University Cultural Enrichment

When Dean Hamer told his friends that he was hinking about working on sexual orientation and sexually related health matters, he was warned that he was walking into a mine field. The mine field exploded when he published the results of his research in the journal *Science* in summer 1993.

His two-year study on genetic links to homosexuality and his discovery of the "gay gene" marker for male homosexuality became front page news and started a bitter controversy that shows no sign of abating. The arguments surrounding the profound scientific, social, and ethical issues stirred up by his work will be discussed when Hamer visits Michigan Tech on Thursday, March 13.

An informal discussion session with Hamer, currently chief of the section on gene structure and regulation in the laboratory of biochemistry at the National Cancer Institute, is set for 8:30 a.m. in the Memorial Union Alumni Lounge. His evening lecture, "The Science of Desire: The Search for the Gay Gene," is scheduled for 8:00 p.m. in M&M U115. Both events are part of the MTU 1996-97 Human Relations Series and are free and open to all.

The fact that Hamer's study was performed as part of a multifactorial protocol that was also investigating genetic factors for forms of cancer frequently found in gay men with HIV was overshadowed by the firestorm of criticism. The arguments raged on the ethics of screening for the gay gene and whether there would be a case for gene therapy. If a gay gene is found, it's likely that a predictive prenatal blood test for homosexuality would be developed similar to those currently used to screen fetuses for genetic defects such as Down's Syndrome. Since the initial publication of the research, Hamer has been accused of fraud and challenged by several Harvard professors who consider his work to be "scientifically

unacceptable." Respected scientists have dismissed the charges of fraud and the Harvard professors reversed their opinions after Hamer gave a guest lecture refuting their charges.

"Religious conservatives reject the research because they think gay people choose their lifestyle," says Hamer, who was accused of fraud in conservative Cal Thomas' syndicated column. He also finds himself under attack from the gay community. Although proving that homosexuality could be biologically caused might make life easier, they object to the possible inference that they could be "victims" of their own DNA. A subsequent 1995 study has produced new evidence that a gene inherited from mothers helps influence whether a man is gay and supports the 1993 findings. "Our result says that genes are involved in male sexual orientation, although they certainly do not determine a person's sexual orientation," says Hamer, who describes other biological factors and variables that are not yet known. Hamer is outspoken about his research and remains undaunted by the criticism and attacks. "I believe that we have far more to fear from ignorance than from new knowledge about human sexuality," he says.

Hamer's book, *The Science of Desire*, recounts the trials and tribulations that led to his discovery of the gene marker. Described by one reviewer as "a fascinating story of scientific research that reads like a detective novel," the book is now available at the MTU Bookstore.

The 1996-97 Michigan Tech Human Relations Series is sponsored by the Office of the President and is coordinated by the Human Relations Series Committee, the University Cultural Enrichment Department, and the Suomi College Office of Cultural Enrichment. Call 487-2844 for further information.

On the road

Several faculty and graduate students attended the Fifteenth International Modal Analysis Conference, held February 2-6 in Orlando. Professor **Sudhakar Pandit** (ME-EM) presented a paper, "Spectrum Analysis of a Mechanical Bolt System Under Impact by Using the DDS Methodology," coauthored by Chairman **Francis Otuonye** (mining engineering) and PhD candidate **Rong Xin Sun** (mining engineering). Professor **William Shapton** (ME-EM) chaired two sessions: "Automotive Testing and Assessment" and "Consumer Industrial Products." Associate Professor **Charles Van Karsen** (ME-EM) presented two papers: "Experimental Modal Analysis and Operating Deflection Shape of an Acoustic Guitar," coauthored by Sun, and "The Strengths of Impact Testing," coauthored by PhD candidate **Eric Little** (ME-EM). Van Karsen also gave a seminar, "Modal Analysis for the New Engineer," and was appointed to the editorial board of the *Mechanical Systems and Signal Processing Journal*. Assistant Professor **John Schultze** (ME-EM) presented a paper, "Adaptive Modal Space Control of Flexible Structures: Applications." Also attending the conference from ME-EM were Professor **Harold Evensen** and graduate students **Christopher Kumaniak**, **Sinan Lacin**, **Dana LaFranca**, **David Soine**, and **Matthew Spisak**.

Donovan Award nominees sought

Blue Key is accepting nominations for the Clair M. Donovan Award. The award is given to the member of MTU's faculty, staff, or student body determined to have demonstrated the most-outstanding service to the University during the previous year.

Nomination forms are available in each department. Blue Key asks that completed forms be returned to the Blue Key Office, Memorial Union 106, by April 21.

POSITIONS AVAILABLE AT MTU

The following positions will be posted Friday, March 7, 1997, at 1:00 p.m. through noon, Friday, March 14, 1997, in the Human Resources Office.

Secretary II (N4)—Biological Sciences (FULL-TIME, UAW INTERNAL AND EXTERNAL POSTING)
Assistant Professor—Mechanical Engineering—Engineering Mechanics

University employees are reminded to apply in writing prior to noon, Friday, March 14, 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

6 Thursday

4:00 p.m.—Jonathan Leitner, "Shipping Mass Copper, 1850-90: Results from the Drier Collection" —Van Pelt Library Archives Reading Room

8 Saturday

10:00 a.m.—5:00 p.m.—Family Fun Day—SDC, Memorial Union

13 Thursday

8:30 a.m.—An informal discussion with Dean Hamer—Memorial Union Alumni Lounge

4:00 p.m.—Lynn Jelinski, "Hanging by a Thread: The Molecular Basis of the Strength of Spider Silk" —Chemical Sciences and Engineering 102
8:00 p.m.—Dean Hamer, "The Science of Desire: The Search for the Gay Gene" —M&M U115

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 dance masterclass—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