

Tech Topics

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Michigan Tech's Faculty/Staff Newsletter

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Michigan Tech donates State Holiday Tree

Michigan's official State Holiday Tree, a 58-foot white spruce, was harvested Thursday, November 4, during ceremonies at the Ford Forestry Center.

William Clay Ford Jr., chairman of the Ford Motor Company, was on hand for the occasion. Clay Ford is a great-grandson of Henry Ford, who founded the model sawmill community of Alberta in 1934 to provide the wood used in building his automobiles. Ford donated the Ford Forestry Center and thousands of surrounding acres of forestland to Michigan Tech in 1954.

Glenn Mroz, associate dean of forestry and wood products, contacted the state back in July with the idea of donating an MTU tree to serve as Michigan's official holiday tree. The white spruce will be raised at the state capitol in Lansing as part of the city's Silver Bells in the City celebration on November 19.

The tree-cutting ceremonies were attended by students from local schools, who were given cones from the tree and directions on how to plant the seeds from the cones.

The tree is fully mature and was probably planted as part of Alberta's landscaping in 1935. It was replaced by a ten-foot blue spruce, which could be a contender itself for State Holiday Tree in the year 2065, Mroz said.

President Curt Tompkins said that, in recognition of the tremendous support the people and the State of Michigan have provided Tech over the years, it is only fitting that the University return the gesture through a gift of the State Holiday Tree.

Credit Union collecting for Salvation Army

The Michigan Tech Credit Union is welcoming donations of nonperishable food to be distributed by the Salvation Army. Your donations will benefit needy families in our area. "We are collecting food items a little earlier because the Army's food pantry is particularly low this year," Assistant Manager Rich Bezotte said. The Salvation Army is also in need of toys to be distributed for Christmas. Cash donations are also welcome.

We would rather speak ill of ourselves than not talk about ourselves at all.

—FRANÇOIS, DUC DE LA ROCHEFOUCAULD

Peterson's wolves make the cover of *Nature*

Submitted by the News Bureau

The way wolves respond to significant climate changes can have far-reaching consequences for the ecosystems in which they live, according to an article coauthored by Professor Rolf Peterson (SFWP), which is featured on cover of the October 28 issue of *Nature* (see <http://www.nature.com/>).

The article details a study conducted by Eric Post and Nils Christian Stenseth of the Department of Biology, University of Oslo, Norway; Peterson; and Brian McLaren, Department of Forest Resources, Wildlife Division, St. Johns, Newfoundland, Canada. The wildlife data used in the study were collected during a long-term and continuing survey directed by Peterson on wolf-moose relationships on Isle Royale National Park.

Scientists have known that predators at the top of the food chain exert considerable influence on ecosystems, and that responses to climatic change at the top have the potential to shape responses at lower levels. On Isle Royale, wolves regulate such a system by limiting the productivity of moose, which limit productivity of fir trees.

"We investigated the ecological consequences of apex predators' responses to climate change by using data collected over 40 years on wolf behavior and how it affected moose and their impact on fir saplings on Isle Royale," Peterson said. "Wolves responded to increasingly snowy winters by hunting in larger packs, and consequently, were able to triple the number of moose killed per day compared to less snowy years when they hunted in smaller packs."

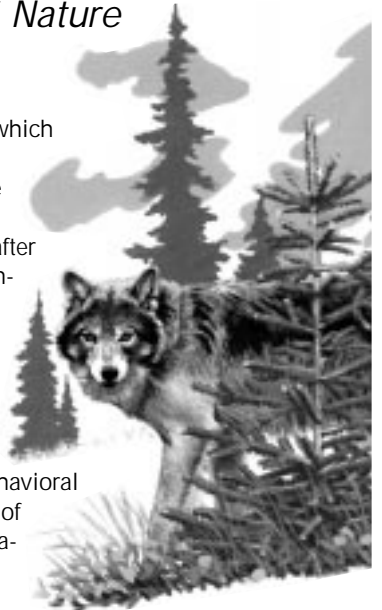
This greater killing efficiency by wolves brought a decline in the moose population that resulted in less browsing pressure on

balsam fir saplings, which showed a noticeable increase one year after snowy winters. "We suggest that this evidence indicates that cascading behavioral responses of apex predators to climatic

change may have a substantial impact on ecosystem function," he said.

The mean size of wolf packs on Isle Royale ranged from approximately 4.5 animals during least snowy winters to 12 animals during the most snowy winters. The increase was due primarily to the fact that grown pups who would normally leave the pack to seek mates of their own remained with their family unit during severe winters. Both wolves and moose found it easier to travel along the shoreline of the island park during heavy snow conditions, and this increased encounters between the two species and made more old moose and calves available to wolf predation.

The greater food supply for wolves during snowy winters made them healthier and able to reproduce more successfully, according to Peterson.



The Campus Campaign: Why I give

I have regularly supported the campus campaign because it is, for me, anyway, a matter of enlightened self-interest. If I believe in what this university can become, particularly when it is supported strongly from within by the Tech community, then I should do my part, however small. As much as we depend on the state for support, we still have to try to take care of ourselves. By so doing, we offer a model of internal commitment that can only help us as we look to external sources for additional financial assistance.

Finally, it comes down to a few core beliefs. I believe in our students, I believe in the value of a university education in the fullest sense of that concept, and I believe any family has an obligation to help itself. If it takes some giving from my own resources to support those beliefs, then it is money well spent.

—PROFESSOR RANDY FREISINGER, DEPARTMENT OF HUMANITIES

RFP: Perspectives on Inquiry

The new first-year seminar, Perspectives on Inquiry, will be required for all first-year students in fall 2000. The success of the course will rely on the participation of excellent teachers from across the University. The Perspectives committee, which is coordinating the course, invites proposals from faculty who are interested in teaching sections next fall.

As it is developing, Perspectives will be an exciting course to teach: individual sections address a topic chosen by the instructor (as well as to students); the course focuses on inquiry that is intellectually stimulating to both instructors and students; and sections are capped at twenty students.

Any permanent faculty who are interested in teaching a section of Perspectives in fall 2000 are strongly encouraged to submit a proposal. Submitting a proposal is an indication of interest; it does not commit you to teaching a section. If you are interested, please address the following questions in a brief proposal (500 words maximum) and e-mail it to mmcooper@mtu.edu by December 1.

- Why do you want to teach Perspectives?
- What general topic do you propose as the focus for your section? Include a discussion of your interest in and approach to the topic.
- What question or questions will guide the inquiry of the course?
- What different perspectives on the question will be addressed? Preferably, these are expressed in terms of further questions.
- Optional: If you have ideas about specific outside sources (books and articles, films, videos, field trips, etc.) you will use, mention them.

The committee may consult the Center for Teaching, Learning, and Faculty Development to ensure the selection of effective teachers. An orientation meeting and workshop will be offered in spring quarter for all instructors of Perspectives sections.

For more information on goals, guidelines, support structures, and on the pilot sections that are being offered this year, contact Cooper.

MichiganTech

Bill Curnow, executive director, University Relations
Marcia Goodrich, Tech Topics editor
Gail Sweeting, electronic marketing assistant

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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
- 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. for publication the following Friday.

Making the grade or passing the buck, part 1

Center for Teaching, Learning,
and Faculty Development

By William Kennedy, director



Eighty-three percent of our first-year students said that "getting a better job" was a central reason they decided to attend college. Seventy-nine percent felt "making more money" was also a key factor in prompting their college studies. Not surprisingly, 83 percent chose MTU because Tech "graduates get good jobs."

Similar national surveys of college students thirty years ago would have painted a significantly different picture of entering students' interests and motivations. Nationally, 80 percent of the students surveyed in the late sixties said that "developing a meaningful philosophy of life" was an essential or very important reason they entered college or university study. By 1996, only 42 percent saw this as an essential or very important objective. Like it or not, more and more students are being drawn to the University for pecuniary rather than more broadly educational purposes.

"Creeping vocationalism," as it has been termed, has predictably heightened student concerns about accumulating an appropriately grandiose record of academic achievement that will ensure them an opportunity for lucrative employment offers after graduation. Wanting high grades, and being willing to buckle down and work hard to achieve them, however, may be two entirely different things. Although 93 percent of our entering class reported "B" or better high school GPAs, less than half reported studying more than five hours per week during their senior year to earn those grades.

Today's college students openly admit to "grade management": the practice of enrolling for many credits with the idea of intentionally dropping those courses that might negatively affect their GPAs. "Cribs" and "scoop files," arguing with professors over points on exams, increased incidents of plagiarism, and reports of students cheating without feeling guilt are all symptoms of our students' educational ends justifying their means and their ethics.

Another trend noted in the national survey data has to do with high school grade inflation. In 1969, less than 13 percent of entering college students reported having an "A-" or higher grade point average in high school, compared to 30 percent last year. At MTU, over 60 percent of our entering class reported an "A-" or better high school GPA. Comparatively flat ACT and SAT scores over the same period would seem to suggest that grade inflation is a continuing problem in our high schools.

If high schools are simply passing off the mediocre academic performance of their students by inflating grades to help students meet the admissions criteria of colleges and universities, thus pleasing students and their tax-paying parents, what are we to do? It would appear that the answer is that colleges and universities continue to sustain the practice of grade inflation, with most college and university average GPAs inching steadily upward over the last thirty years.

Next week, we'll review some of the schemes that colleges and universities have explored to rein in the raging grade inflation bull and rebuild some credibility in our classroom assessment practices.

C²E² grants announced

On the recommendation of the Century II Campaign Endowed Equipment Fund Committee, the provost has approved the following equipment requests.

On behalf of the Department of Chemistry, Assistant Professor **Paul Charlesworth** received \$1,000 for "Educational Technology Development at MTU." His department contributed an additional \$1,000.

Fritz Erickson, chair of the Department of Education, received \$3,200 from C²E², \$5,000 from his department, and \$500 from the Department of Social Sciences for "Modeling Instructional Technology in Education." **Patty Lins**, manager of Educational Technology Services, received \$1,840 for an ETS equipment purchase.

Assistant Professors **Gordon Parker** and **John Schulze** (ME-EM) received \$2,160 for "Control System Demonstration Platform," with the ME-EM department contributing \$8,922.

The C²E² program funds small equipment purchases. Proposals may be submitted anytime. For more information, visit <http://www.sas.it.mtu.edu/rgs/graduate/c2e2.htm>

Newcomers invited to taste gourmet treats

The regular Newcomers Group meeting will be held at 7:00 p.m. Wednesday, November 10, at Portage Lake United Church. Members will sample gourmet entertaining treats from the Melting Pot.

All who are new to the area are welcome, as well as members of the University Women's Club. For more information, contact Kathy Lekvin at 482-6584 or Hilary Sproule at 487-6970.

Y2K at Tech Tea Time

Submitted by University Cultural Enrichment

Just what is going to happen at midnight on December 31, 1999? Will planes fall from the sky? Will we be without power? Will supermarket shelves be empty, the result of panic buying? Or will we experience only minor inconveniences? **George Fox**, chair of the MTU Year 2000 Compliance Committee and the director of administrative computing at Michigan Tech, will be the guest at Tech Tea Time on Wednesday, November 10. His presentation, "Y2K: Are We Ready?" is at 4:00 p.m. in the Memorial Union Alumni Lounge.

Thousands of companies and individuals in international banking, health care, pension and mutual funds, and telecommunications who rely on sophisticated date-driven equipment have spent millions of dollars in working towards compliance. "My goal is to reassure people that great efforts have been made to remediate the problem," Fox said. While he believes that a major disaster is unlikely, he does think it is necessary to prepare for potential disruptions in services, "though such preparations are those that we should make anyway in an area that periodically experiences blizzards and ice storms." He will offer ways of testing date-driven household equipment such as camcorders, satellite dishes, and VCRs, explain to PC owners how to test for Y2K compliance, and have some free software on hand to test computers. In addition, he will provide several helpful Red Cross pamphlets, including one titled "Y2K: What You Should Know," which explains in very clear language exactly what the Y2K bug is and why people are concerned, and offers advice on how to prepare.

Fox recently took part in a public forum organized by the Houghton County Y2K Task Force. Based on reports from local banks and utilities, he believes that local infrastructure providers have made major efforts to avoid any disruption in service.

Proposals in progress

Investigators, their proposals, and their potential sponsors are

- **Sheila Grant** (Biomedical Engineering), "CAREER: Development of a Multianalyte Sensor to Detect Chronic Renal Failure Markers," NSF
- **Jean Mayo** (Computer Science), "CAREER: Development and Control of Distributed Computations in a Global Time Frame," NSF
- **Claudia Nassaralla** (MME), "Correlation Between Microstructure of 55, 75, and 95 wt%Si Ferrosilicon Alloys on Crumbling," Norwegian Ferroalloy Association

The latest on gen ed

The General Education Council has developed a report with the latest information on the General Education Core Curriculum, including some changes from the original recommendations. Some of the high points are summarized below. If you'd like more information, go to <http://www.admin.mtu.edu/admin/vpinst/minutes/geupdat1.jpg> or see the full report, which has been sent to deans and department chairs.

Perspectives (UN1001)—3 credits

The Perspectives subcommittee, chaired by **Marilyn Cooper** (Humanities), is preparing faculty to offer fifteen pilot sections (twenty students each) of this first-year seminar during 1999–2000 winter and spring terms. Perspectives will require 40-70 faculty from departments and schools throughout the University. Perspectives is a prerequisite for Revisions.

World Cultures (UN1002)—4 credits; Activities Lab (UN1003)—1 credit

Larry Lankton (Social Sciences) chaired the World Cultures subcommittee. The requirement that World Cultures be team taught has been dropped, though team-teaching remains an option.

Originally, lectures for World Cultures were to be supported by approximately sixty recitation sections run by TAs. These recitation sections will be replaced by a World Cultures activities lab. This lab will supplement the course lectures with films, speakers, and live performances throughout the semester. **Susan Martin** (Social Sciences) has been named to the post of course coordinator for World Cultures.

First-year students who complete two semesters of the same modern language will be exempt from taking the lecture component of World Cultures. However, these students will still be required to participate in the activities lab portion of World Cultures (UN1003). Students taking this option cannot use the same modern language credits toward their distribution requirement. World Cultures is a prerequisite for the following Distribution Lists: Language Thought and Values, Aesthetics and Creativity, and Histories and Cultures.

Revisions (UN2001)—3 credits

Dennis Lynch (Humanities) chairs the subcommittee planning Revisions. In order to begin offering Revisions (a second-year course) in fall 2000, the humanities department is offering HU101t (transition) as part of the effort to offer pilot sections of Perspectives.

Institutions (UN2002)—3 credits

Barry Solomon (Social Sciences) chairs the Institutions subcommittee. Faculty from Social Sciences and Business have met to discuss

common concepts and some common readings for all sections. This course will be offered in both fall and spring semesters in sections of approximately 60–75 students.

Institutions is a prerequisite for the following Distribution Lists: Science, Technology and Society; and Economic, Political and Social Institutions.

Distribution Lists

The Distribution Subcommittee, chaired by **Pat Joyce** (SBE), has developed the current Distribution Lists (see page 15 of the Transition Guide). The deadline for submitting appeals for the 2000-2001 academic year is November 12.

International Study Option

Because international study accomplishes goals similar to those of the gen ed curriculum, students may meet their distribution course requirements with courses taken in MTU-approved university programs outside the United States, under certain conditions. See the report for more information.

Eliminating Computer Science from Math/Science Requirement

The requirement that students take a course in computer science has been eliminated as part of the gen ed curriculum. However, it remains a requirement in many departmental programs.

2000-level Distribution Courses

In order to ease scheduling problems, students will be able to take a number of 2000-level distribution courses during the first year, in the same term as Perspectives and/or World Cultures.

Students can count a maximum of two 2000-level courses toward their distribution requirement.

Departments must send their lists of distribution courses that may be taken in the first year to Helene Hiner in the Office of the Vice-Provost for Instruction by November 12.

Co-Curricular Units (PE)

Three co-curricular units are required for graduation. Co-curricular units are pass-fail and are not included in the calculation of the GPA or in the number of credits required for graduation.

Members of the General Education Council are **Bill Bulleit**, **Bonnie Gorman**, **Nancy Grimm**, **Kim Hoagland**, **Pat Joyce**, **David Landon**, **Dennis Lynch**, **Cheryl Malgay-Heath**, **Glenn Mroz**, **Lee Oberto**, **David Olson**, **Warren Perger**, **Tom Snyder**, and **Diana George**, chair.

Alumni join SBE academy

Six alumni(ae) of the School of Business and Economics were inducted into the Academy of Business on October 2. The academy honors outstanding graduates of the SBE, and election recognizes excellence and leadership in business and civic affairs.

The new members are listed below:

Margaret M. Buchmann—BSBA, 1960, MTU
Buchmann is administrator and part owner of Brown County Cabinets, Inc., of Green Bay, Wisconsin. Brown County Cabinets manufactures custom wood cabinets for residential use and has approximately \$5 million in annual sales. Her previous affiliations include Upper Lakes Coal Company and Blue Line Coal Company. Buchmann is a member of the American Association of University Women and active in many civic organizations. She has a son and daughter who are MTU graduates and a son who is a Purdue University graduate.

Robert D. Carnahan—BS, METALLURGICAL ENGINEERING, 1953, MTU; PH.D, MATERIALS SCIENCE, 1963, NORTHWESTERN UNIVERSITY

Carnahan was a founder and past president/CEO of Thixomat, Inc., of Ann Arbor. His past affiliations include executive positions with University Science Partners, Partec, Inc., Gould, Inc., and several other firms. He is author of more than 60 publications and holder of 14 patents, and has sponsored the School of Business and Economics Endowed Chair of Business of Technology. He is a fellow of ASM International and a member of MTU's Academy for Metallurgy and Materials. He was married to Judy Isola from Calumet for thirty-nine years before her passing in 1992. They have three sons and one daughter.

(Continued on page 5)

Econo Foods Night set for Saturday

Submitted by Dave Fischer

Econo Foods presents Kids Night at the MacInnes Student Ice Arena Saturday, November 6, as the Hockey Huskies host the Alaska Anchorage Seawolves.

Econo Foods has purchased 500 tickets for kids 14 and under and is giving them away free at their service desk. Parents are invited to pick up the tickets for kids, but are reminded the tickets are only good for those 14 and under. Tickets are available on a first-come, first-serve basis.

Following Saturday's game, and as part of Econo Foods Kids Night, the Blueline Club presents Skate With The Huskies. All fans are welcome to join members of MTU's team and coaching staff following the game on the ice for a post-game skate. The 1999–2000 Michigan Tech Hockey Face Posters will be handed out at Skate With The Huskies, and players will be available to autograph them.

Also as part of Econo Foods Kids Night, a number of Econo Foods grocery grab bags will be given away as well as Econo Foods gift certificates.

Good news for Windham Hill enthusiasts

Submitted by University Cultural Enrichment

Communities from Torrence, California, to Houghton will be treated to an exceptional lineup of Windham Hill recording artists on a 14-state, 22-city, all-star, nationwide tour beginning in November and ending in January 2000. In Houghton, the Winter Solstice concert is scheduled for 8:00 p.m., Sunday, December 5, in Fisher 135. For tickets, call the Performing Arts Ticket Center at 487-3200 (Tuesday-Saturday, 11:00 a.m.–7:00 p.m.) or stop by the Memorial Union Box Office (487-3200, Monday-Friday, 11:00 a.m.–3:00 p.m.), or the SDC Central Ticket Office (487-2073, Monday-Friday, 8:30 a.m.–6:00 p.m.).

The tour is anchored by veteran Windham Hill recording artists David Arkenstone and Liz Story, who will be performing solo sets. Harpist Lisa Lynne will also perform, and guitarist Sean Harkness will present a short cameo performance as well as playing in an ensemble with the other artists. Harkness and Lynne will be substituted for the Angels of Venice, who were included in the original tour lineup

announced in the Michigan Tech Great Events Calendar and other earlier press releases.

Harkness released his first album, "Aloft," for Windham Hill in September. Lynne has recorded two albums for the label, "Daughters of the Celtic Moon" and "Seasons of the Soul."

In addition to the live performances around the country, this year's Winter Solstice tour will coincide with the first ever "Winter Solstice On Ice" television special, a two-hour program filmed in Finland, that teams world class skaters such as Brian Boitano and Yuko Sato, with live performances by Windham Hill stars. The program premieres on the A&E Network on Saturday, December 4, the day before the concert at Michigan Tech.

The Winter Solstice concert is made possible by funding from the Committee for Campus Enrichment and the Michigan Tech Fund and is presented with the assistance of the Student Entertainment Board. For more information, contact the University Cultural Enrichment Department (487-2844).

Geological engineering and sciences academy inducts new members

The Department of Geological Engineering and Sciences inducted four distinguished alumni into its academy on October 4.

Ron Christie received his BS in Geological Engineering in 1968. He began his career with Tenneco Oil Company, where he was employed for twenty-one years. In 1989 he moved to Amerada Hess Corporation in Houston, where he was manager of US offshore exploration. In 1996 Christie assumed his current position as president and chief operating officer of Cockrell Oil Corporation, an independent, privately held company with primary focus in the Gulf of Mexico basin. Christie is involved in several professional societies and is a certified geologist and registered petroleum engineer.

Becky Smits received her BS in Geological Engineering in 1986. After graduation she began her career as a geological engineer with EC Jordan Company in Portland, Maine. In 1988 she moved to Traverse Group Inc. in Traverse City as a field engineering supervisor. A year later she became a project engineer with Otwell Mawby, PC in Traverse City, and after four years she assumed her current position as president and managing engineer of Inland Seas Engineering, Inc. in Traverse City. Smits serves on the Northwestern Michigan College technology center planning task force and in 1998 received the Outstanding Young Alumni Award from the Michigan Tech Alumni Association.

Hal Fitch received his BS in Geology in 1972. He began his career as a geologist with the US Geological Survey in Denver. Fitch then returned to his home state and joined the Michigan Geological Survey division, where he has been ever since, except for a two-year interval at the University of Arizona. Since 1996, Fitch has been chief of the Geological Survey Division of the Michigan Department of Environmental Quality. He is responsible for assuring the conservation and efficient development of mineral resources and for protecting property, natural resources, the environment, and public health and safety associated with development of these resources for the state.

Peter Van Altena graduated with BS and MS degrees in Geological Engineering in 1950. He then accepted a position with Mountain Geophysical Company, in Denver, and in 1955 joined Cardinal Geophysical Company of Wichita, Kansas, doing reflection seismic in the mid-continent area. From 1959 to 1969, Van Altena worked for United Geophysical Corporation of Pasadena, California. With United Geophysical, he was a supervisor of field operations in Great Falls, Montana, where he checked the suitability of proposed Minute Man Missile sites. From 1969 to 1975, Van Altena was senior staff geophysicist for Dome Petroleum Limited in Calgary, Alberta. He was promoted to exploration manager in 1975, and from 1979 to 1984 served as vice president of exploration. He is currently retired in Sidney, British Columbia.

\$ R us: Award programs seeking applicants

Information on a number of award programs has crossed the *Tech Topics* desk recently. Since the editor has no chance of being picked for any of them, even by fictionalizing her resume, she passes the information on.

National Research Council Associateship Programs

The grants fund about 350 postdoctoral and research associate positions at U.S. research labs throughout the country. Associates pick their own research project, which should fit in with the lab's research interests. Applicants should have PhD, ScD, or MD degrees in science or engineering and be "of unusual promise." Pay ranges from \$30,000 to \$50,000 annually for the one- to three-year awards. For more information, go to <http://www.national-academies.org/rap>

Carnegie Scholars

Carnegie Scholars are chosen from among faculty in biological sciences, education, foreign languages and literature, health sciences, history, law, math, performing arts, political science, sociology, and interdisciplinary fields. The project brings together "a community of scholars to contribute to the scholarship of teaching" who investigate and document "significant issues and challenges in the teaching of their fields." The project pays a \$6,000 stipend and room and board at the project site. The deadline for applying for next summer is December 6. For more information, go to <http://www.carnegiefoundation.org/sept99.htm>

National Defense Science and Engineering Graduate Fellowships

The Department of Defense is awarding ninety of these three-year fellowships to support study and research in pursuit of doctoral degrees in, or closely related to, any of the following areas: biological science, chemistry, computer science, geosciences, math, physics, chemical engineering, electrical engineering, manufacturing science and engineering, materials science and engineering, mechanical engineering, and more. The fellows receive full tuition and fees, plus stipends of \$18,500 the first year to \$20,500 in 2002-03. The application deadline is January 19. For more information, go to <http://www.asee.org/ndseg>.

NAB Grants for Research in Broadcasting

The National Association of Broadcasters awards a total of \$25,000 to support broadcast research, particularly as it relates to economic, business, social, or policy issues that are important to commercial broadcasters. Last year, the NAB gave six awards. For more information, go to <http://www.nab.org/research/grants.asp>

MTU inducts new members into ME-EM academy

Submitted by the News Bureau

Four Michigan Tech alumni, **Robert Monica** of Midland, **Harold Wiens** of Hugo, Minnesota, **William Hartwick** of Centerburg, Ohio, and **Martin Lagina** of Traverse City, were inducted recently into the Academy of Mechanical Engineering and Engineering Mechanics. The Academy honors outstanding ME-EM graduates, and selection from the more than 8,000 graduates of the department is based on excellence and leadership in engineering and civic affairs.

Monica attended Michigan Tech after serving in the United States Army during World War II. He graduated from MTU with a BS in Mechanical Engineering in 1950 and continued his education at Princeton University, earning an MS in Plastics Engineering in 1952. He retired from his position of vice president of strategic planning, chemicals and performance products from The Dow Chemical Company in 1989. He is a member of the American Society of Mechanical Engineers, the Presidents Club, and the Second Century Society, and established the Robert E. and Dorothy G. Monica scholarship at MTU.

Wiens earned a BS in Mechanical Engineering from MTU in 1968 and began his career with 3M as a process engineer. He currently serves as 3M's executive vice president, industrial markets, where he leads many of 3M's oldest, strongest, and most innovative businesses. He serves on MTU's

National Advisory Board Blue Ribbon Committee and the Michigan Tech National Advisory Board. He also serves as director of the National Association of Manufacturers and from 1989 to 1992 was chairman of the QIC Board of Directors.

Hartwick graduated with honor from MTU in 1948 with a BS in Mechanical Engineering. After completing the required thesis, he received a professional degree of mechanical engineer from Tech in 1955. He became an independent consultant in 1988 where he provided a variety of compressor/compression-related services for a number of large corporations and other clients until his retirement in 1995. Hartwick holds two US patents, has written two journal publications, was an ASME Performance Test Code Committee chair, and was elected to the grade of Life Fellow of ASME in 1997. He is a registered professional engineer in Ohio and a member of MTU's Presidents Club.

Lagina graduated with honor from MTU in 1977 with a BS in Mechanical Engineering. He continued his education in the field of law and received his juris doctorate, with honor, from the University of Michigan in 1982. He is a past chairman of the Michigan Oil and Gas Association and is a member of the American Society of Mechanical Engineers, Society of Petroleum Engineers, the State Bar of Michigan, the Michigan Tech Board of Control, and the Presidents Club.

SBE Academy *(Continued from page 4)*

Bruce E. Elmlad—BS, MECHANICAL ENGINEERING, UNITED STATES MILITARY ACADEMY

Elmlad is currently president of Venture Investment Advisors, Inc., of Wellesley Hills, Massachusetts. He is a graduate of L'Anse High School, attended Michigan Tech as a first-year student. Elmlad is also a graduate of the Harvard Business School Advanced Management Program. He received the 1999 Board of Control Silver Medal and is a member of the Century II Campaign Task Force. He was inducted into the UP Sports Hall of Fame in 1992. Elmlad is currently a member of the SBE National Advisory Board. He and his wife, Patricia, have three sons and a daughter.

Robert E. Mark—BSBA, 1972, MTU; MBA, UNIVERSITY OF UTAH, 1976

Mark is currently vice president of finance at Rowe, Inc. in Flushing. Of Rowe's 129 employees, 33 are MTU graduates. At MTU, Mark was a member of the Army ROTC, a member and president of Sigma Phi Epsilon fraternity, served on the Interfraternity Council, and received the University President's Award in 1971. He is also very active in the community, serving on the Flushing School Board for the last six years; most recently as president and treasurer. Mark and his wife, Nancy, have one daughter and two sons.

Mark D. Rottermond—BSBA, 1975, MTU; MBA, 1989, UNIVERSITY OF MICHIGAN, ANN ARBOR

Rottermond is currently a partner in the firm of Mathews, Reich, Perna and Rottermond in Bingham Farms. The firm specializes in auditing, accounting, tax, and consulting services. He serves as a member of the SBE National Advisory Board and is married to Ann Marie Rottermond.

Ronald J. Sayen—BS, ENGINEERING ADMINISTRATION, 1967, MTU; BS, BIOLOGICAL SCIENCES, 1966, MTU

Sayen is president and CEO of Peterson Company, of Battle Creek, which provides specialty pet foods and services and is now marketing worldwide. It is recognized in the pet food industry as a leader in the introduction of new and innovative ingredients. Sayen has been operating the company since he purchased it in 1974. He and his wife, Margaret Sayen, have one daughter and two sons.

November Native American Month

- 5 Friday**
3:00 p.m.—Leland Cseke, "Molecular Biology of Floral Scent Evolution"—ROTC Blue Room
3:00 p.m.—Native American Speakers' Forum
 keynote address by Winona LaDuke—M&M U115
4:00 p.m.—Mark Cooper, "Fractured Carbonate Reservoirs in the Foothills of the Canadian Rockies"—Dow 642
5:00 p.m.—Volleyball, Saginaw Valley State at MTU—SDC
5:45/7:15 p.m.—Club Indigo: Buffet/Kind Hearts and Coronets—Calumet Theatre
7:35 p.m.—Hockey, Alaska Anchorage at MTU—Student Ice Arena
8:00 p.m.—Chamber theater: "M. Butterfly"—Walker Theatre
- 6 Saturday**
9:30 a.m.—Walt Bresette Memorial Run/Walk—Gates Tennis Center
1:00/7:00 p.m.—Grand Entries for Spirit of the Harvest Powwow—Gates Tennis Center
3:00 p.m.—Mark Cooper, "Oil and Gas Fields Associated with Inverted Extensional Faults: A Global Review"—Dow 610
7:05 p.m.—Hockey, Alaska Anchorage at MTU—Student Ice Arena
8:00 p.m.—Chamber theater: "Top Girls"—Walker Theatre
- 7 Sunday**
3:00 p.m.—Keweenaw String Quartet concert—Walker Theatre
- 10 Wednesday**
4:00 p.m.—Tech Tea: George Fox on Y2K—Memorial Union Alumni Lounge
7:00 p.m.—Newcomers Group meeting—Portage Lake United Church

POSITIONS AVAILABLE AT MTU

Job descriptions will be available at 1:00 p.m. on Friday, or by e-mail at <JOBS@MTU.EDU>.

The following position will be posted Friday, November 5, 1999, at 1:00 p.m. through noon, Friday, November 12, 1999, in the Human Resources Office.

Assistant Professor—Mathematical Sciences

University employees are reminded to apply in writing prior to noon, Friday, November 12, 1999, to be considered as internal candidates for bargaining unit positions only. Applicants from the recall pool will be given first consideration for non-bargaining-unit positions only. 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.

News you can use

Melanoma is more than skin deep

(Editor's note: The following information was taken from the Melanoma Education Fund Web site.)

It's the most common cancer in young adults ages 25-29, it's getting commoner all the time, and it's deadly, but most college-age people know little or nothing about melanoma, by far the most dangerous form of skin cancer.

It can strike anyone, regardless of health or physical condition. And while most melanomas are associated with exposure to the sun, wearing sunscreen now may be too late to do much good. Most sun damage linked to melanoma occurs before the age of 18. (Don't put away those SPF86 lotions, though. Even though there is some question as to how protective they are against melanoma, they may help prevent other skin cancers and will definitely keep your skin from looking like a backwoods two-track.)

Stephen and Gail Fine, the parents of Daniel N. Fine, of Massachusetts, who died of melanoma in 1998 at the age of 26, have organized a Web site that provides lots of information about melanoma, including who's most at risk and what to look for, and encourages everyone to do a monthly check of their skin to identify danger signs, particularly changes in a mole.

Melanoma is easy to treat if it hasn't gone beyond the original site on the skin, but once it spreads, it is one of the most virulent cancers around, and the prognosis is not good. For more information on how to protect yourself and your family, visit <http://www.skincheck.com/>

In print

Associate Professor **Vernon Dorweiler** (SBE) published a book review of *The Laws and Legal System of a Free-Market Cuba: A Prospectus for Business*, by Matias Travieso-Diaz, in the spring 1999 edition of the *International Trade Journal*.

Professor **Vladimir Tonchev** (Mathematical Sciences) coauthored a paper with Dieter Jungnickel (Augsburg University, Germany), "Decompositions of Difference Sets," in the *Journal of Algebra*, Vol. 217 (1999).

Martian meteor seminar November 12

Professor John W. Valley from the University of Wisconsin, Madison, will give a seminar, "Low-Temperature Genesis of Carbonates in the Martian Meteorite ALH84001," on Friday, November 12, at noon in Fisher 138. A reception will follow in the Dow Building sixth-floor atrium. Valley is an expert in geochemistry and stable carbon and oxygen isotope analysis. For more information, contact John Jaszczak (jaszczak@mtu.edu, 487-2255).

Library sponsoring bus trip to Northern Michigan

The Library Bar & Restaurant is sponsoring a bus trip to Michigan Tech's November 20 hockey game at Northern Michigan.

Cost is \$35 per person, which includes a reserved seat ticket to the game; a pre-game, all-you-can-eat pizza and pasta buffet at the Library (including your first beverage); and round-trip coach transportation.

The pre-game buffet will begin at 3:45 p.m., with the bus leaving the Library at 4:45 p.m.

Those interested in driving to Marquette themselves can purchase the ticket and buffet portion of the package for \$25.

To reserve space, or for more information, call the Library at 487-5882.

Seminar November 5 on flower scent evolution

Postdoctoral Researcher **Leland Cseke** (Biological Sciences) will give a seminar, "Molecular Biology of Floral Scent Evolution: Characterization of Linalool Synthase (LIS) in Diverse Species," on Friday, November 5, at 3:00 p.m. in the ROTC Blue Room. All interested persons are invited.

New staff

Denise M. Heikinen has joined the civil and environmental engineering staff as a technical staff assistant. She was previously a GTA in the Department of Humanities, where she earned her PhD in Rhetoric and Technical Communication. She is married to Davin Heikinen, has a son, Sam, and lives in Houghton.

Yongsheng Chen has a new position on the civil and environmental engineering staff: research engineer II. He was most recently a postdoctoral research scientist for CenCITT and was previously an associate professor in the Department of Environmental Science at Nankai University in China. He has PhD and MS degrees in Environmental Chemistry from Nankai University and a BSE in Chemical Engineering from the Northern China Institute of Technology. Chen lives in Houghton and enjoys tennis, badminton, table tennis, softball, and collecting coins.

Darlene Persha has joined the SDC Central Ticket Office staff as a senior clerk. She was previously front desk clerk at the Holiday Inn Express. Persha has three children, Barbara, Tracy, and Chad, and lives in Atlantic Mine. She enjoys helping the elderly.