

On campus today

NEW DIRECTIONS



NMU to help jump start businesses

Northern received \$65,000 to establish a Business and Industry Center. It will be located in the Jacobetti Center to take advantage of available space and manufacturing-type equipment. Student interns will assist new business ventures with financial and marketing plans, Web site creation, e-commerce and information technology software. They will also provide design and prototype development services. NMU will complete the package by tapping into the expertise and resources of two local entities: Northern Initiatives and the Lake Superior Community Partnership

It's all part of the Michigan Initiative for Innovation and Entrepreneurship, a new consortium of Michigan's 15 public universities with the goal to raise and distribute \$75 million to help create 200 start-up companies over the next decade.

"This project demonstrates that Northern is making a serious contribution to the economic recovery of the state and the region," says Fred Joyal, NMU's special assistant to the president for regional economic development. "And the consortium's effort on a wider scale reinforces the importance of strengthening the connection between academia and industry. Universities will play a key role in creating diversified, knowledge-based businesses that will enhance Michigan's economy."

The one-stop center is expected to open this winter. For more information, visit <http://bizcenter.nmu.edu>.

Eco-design = Eco-nomics

The School of Art and Design's new Studio for Experimental and Eco-Design (SEED) will assist regional entrepreneurs in developing prototypes for products that are innovative, sustainable and customized. It will also give students career-building opportunities to interact with clients and respond to real-world design challenges, in addition to promoting economic development and community service outreach.

While the studio won't be engineering or manufacturing products, its state-of-the-art digital equipment for 3D development and prototypes will be available as well as faculty expertise.

Professor Peter Pless will determine which product ideas to assign his students. "We're looking for products that will improve people's lives and stimulate economic development," he says. "But sustainability will be a key feature. We've adopted the 'cradle to cradle' philosophy—that every product has a cyclical life and it should return to where it came from. Another important element is the ability to customize products so they have more personal value to their owners."

Pless offers an example of a local woman who wanted help designing

protectors that would shield mailboxes from potentially damaging brushes with snow plows. "I challenged the students to come up with a design for a protector that was durable and effective, yet had some aesthetic

qualities. They came up with 15 different designs. Some could be customized with home addresses or other features, such as a flower pot on top for someone who's interested in gardening."



The "End-to-End" mailbox designed by student Andrew Volpe. At top left is an "Arbor Bench" designed by student Lauren Strpko.

Southern exposure: new programs in Latin America

Brazil, Argentina, Peru... NMU's campus boundaries keep expanding.

Thanks to a federal grant, NMU will collaborate with Western Illinois University and two Brazilian institutions—Universidade Federal Rural da Amazonia and Universidade Federal de Lavras—in an exchange program to prepare U.S. and Brazilian students for highly skilled 21st century jobs requiring expertise in entrepreneurship, corporate social responsibility and sustainable economic development.

The first year of the four-year grant will be used to formalize relationships between the participating universities and develop online courses for combined classes of U.S. and Brazilian students.

“An exciting feature of the program is that it provides scholarships for our students’ study abroad and language immersion,” says College of Business professor Ray Amtmann. “NMU students will learn Portuguese, develop international skills, work with international students in their classes, participate in internships and have a semester abroad in Brazil. This will place our graduates at a distinct advantage when they compete for jobs and it

will help to develop the College of Business entrepreneurship program into one of the leading programs in the country.”

About 20 students from the United States and 20 from Brazil (10 from each university) are expected to participate in the program, providing lasting cross-cultural learning experiences and enormous opportunities for Michigan's businesses and residents.

In another recently signed cooperative agreement with Universidad del Salvador in Buenos Aires, Argentina, and Centro Tinku, an organization that facilitates study-abroad programs in Peru, NMU students may spend two semesters in Latin America: one in Argentina studying Spanish and taking courses related to their academic majors; and one in Peru (based in the city of Cusco) taking native culture and history courses. Another group of advanced Spanish students will spend a month in



Photo of Machu Picchu by NMU student Sara Hartley. More NMU students will experience the ancient site thanks to a new agreement with a university in Peru.

Argentina, studying the language in a totally immersive Spanish-speaking environment, participating in cultural events and visiting archeological and industrial sites.

“Our goals for future growth in Latin America include faculty/student exchanges and research collaborations,” explains Marcelo Siles, NMU's director of international programs. “We are trying to develop a strong presence in Latin America for several reasons. Latinos represent the fastest-growing ethnic group in this country, so there is added motivation to study their language and culture. Also, Latin America offers diverse international experiences close to home and it is relatively affordable.”

Intel onsite

Intel products have powered notebook computers at Northern since the university launched its technology program in 2000. But the vendor relationship has recently expanded to include student internships at the corporation's Oregon facility, on-campus testing of new products and direct access to Intel technical support.

Seniors Cory Perry and Joe Manier were the first NMU participants in the Intel Wireless Internship Program.

“I learned a lot about how a corporation works and what programming in the real world is like with large and

small teams,” reports Perry. “It was perfect for the dream career I have in mind as a 3D computer simulation engine designer. I also worked alongside some of the most knowledgeable people in computer networking and I must say a little rubbed off on me.”

The students were paid by Intel for their full-time summer training so that they could return to campus and serve as company contacts for tests of new wireless cards and drivers. Other NMU students, faculty and staff also will be invited to test new Intel products.

On campus today

Amazing analyzer

It's not everyday you receive an automated immunoassay analyzer, but for NMU's Clinical Laboratory Sciences department, it's a very good day when that happens. The \$127,000 piece of equipment is a donation from Abbott's "Labs are Vital" program. This large instrument will provide research opportunities for NMU faculty and allow students to be trained on the same equipment they will find in most hospital laboratories.

"These analyzers are workhorses for hospital chemistry labs," says Kevin Foley, department head. "They are used to measure analytes in blood and serum; analytes such as chole-

sterol, hormones, metabolic products, vitamins—anything we can target with antibodies.

"Very few universities have them because they're so expensive. In fact, NMU is one of only four in the world to receive an analyzer from Abbott. The company has generously donated a variety of state-of-the-art instruments, but this is the biggest award they give. We had to apply for it and show that we have a quality, accredited program that would integrate the analyzer into its curriculum."

NMU also receives the reagents—chemicals—used with the analyzer and technical support from Abbott.

Enrollment rebound

The 10th-day enrollment report showed a total headcount of 9,123, an increase of 12 students over last fall's 10th-day figure.

Paul Duby, associate vice president of institutional research, says, "We had been anticipating a 0.5 percent to 1 percent drop in enrollment because of Upper Peninsula high school demographics; the dismal state of the economy; and the high cost of driving. The fact we've made a small gain is a testament to the effectiveness of our recruiting and the academic strength of the institution."

One of the main reasons for the turnaround is new graduate student enrollment, which increased sharply from 96 to 148. Total graduate enrollment is up by 10 percent to about 785.

Scrubs



A critical need in health care that NMU is helping to fill is for surgical technicians. To highlight NMU's excellent one- and two-year tech programs, the department held an open house during National Surgical Tech Week in September. Student Jackie Froiland (in scrubs, above) says she was a dental assistant and really liked passing the instruments, and was attracted to how quickly she could earn a degree in a new field and get a job. She'll graduate next year and has already been offered a position, close to home.

Clinical supervisor **Jason Prunick '01 Cert.** says, "You can graduate here and go anywhere in the world and do this. My favorite part is to see a patient I've assisted with in the OR doing great a few weeks later."

Sustainable living

Another residence hall has gone green. NMU can now claim two of eight campus residence hall renovations in the United States to achieve sustainability benchmarks set by the U.S. Green Building Council.

Van Antwerp Hall has joined Meyland Hall in receiving certifications through the national Leadership in Energy and Environmental Design (LEED) rating system. Hunt Hall, which was renovated this summer, is also expected to achieve the LEED rating. Each facility was recognized for performance in sustainable site development, materials selection, water savings, energy efficiency and indoor environmental quality.

More than 250 tons of metal piping and wiring were recycled between the two projects. Many of the materials are made of recycled content and were regionally manufactured. Regulated water use has been reduced by up to 60 percent, and energy savings have been increased by putting occupancy sensors or timers on lights and by adding windows to increase natural light.

The new furnishings are made with environmentally farmed, quickly renewable Malaysian hardwood and were manufactured in Indiana. The replaced beds were donated to a nonprofit organization that supports residents on the Pine Ridge Reservation in South Dakota. Other furnishings were donated to Marquette's Habitat for Humanity.



In-person politics

The presidential race isn't just something NMU students are watching on TV or reading about in magazines; they're helping to create those broadcasts, articles and Internet coverage, and casting delegate votes.

At the Democratic National Convention, political science majors Anke Hildebrandt and Lauren Mattioli interned with NBC News and Bloomberg News, respectively. Katie Cox, a media production and news technologies major, worked for *TIME Magazine* and Time.com. Students who gained experience with the Democratic National Committee are Danielle Stein, a public administration major, and Chelsea Smit, a political science and pre-law major. Jason Morgan, political science major, was a delegate to the Democratic convention.

At the Republican National Convention, Neil Passinault worked with NBC News; Keith Voorheis with *TIME Magazine* and Time.com; and Darren Widder with Bloomberg News.

The Political Science and Communication and Performance Studies departments used videoconferencing technology to extend the educational value of the internships to students enrolled in a joint "politics and the press" course. Interns delivered live reports from Denver and Minneapolis, interacting with their peers on campus. They also documented their experiences on text blogs. Links to the blogs and video streams are at www.nmu.edu/politicalscience.

"These internships represent an unbelievable opportunity for some of our best students to witness historic conventions and to network with some of the biggest names in politics and the media," says professor Steven Nelson.



At the Democratic convention in Denver: (from left) Miles Baker '08 BS, Katie Cox, Lauren Mattioli, Tony Tollefson '81 BS, Danielle Stein, Jason Morgan and Steve Nelson.

Branching out with WiMAX

The Federal Communications Commission (FCC) has granted NMU an Educational Broadband Service (EBS) license. EBS is a type of wireless spectrum that supports high-speed Internet access using "WiMAX" technology.

The license will allow NMU to better serve the university's growing commuter and off-campus populations with broadband access to critical course related materials currently available to on-campus students, expand the collaborative efforts between area K-12 schools and NMU students fulfilling course requirements related to student teaching activities, and continue the development of new wireless services that are critical to the NMU's Teaching, Learning and Communication technology initiative.

President Les Wong says, "Northern's TLC technology program began with a bold decision to provide each student with a notebook computer. Building on that concept, our new EBS license takes Northern's technology

to a new plateau by expanding our wireless network in a way that will make handheld and notebook devices truly portable. WiMAX wireless technology is a global standard for cutting-edge technology that will help provide our students and faculty fast, reliable access to the future's multi-media content and communication demands. It means much greater wireless penetration throughout the central portion of the Upper Peninsula.

"Although other schools and universities in the United States have access to EBS spectrum, to our knowledge NMU is among the few to use it to provide a WiMAX-based broadband network solely for education purposes. Reliable broadband Internet connections are not uniformly available in Marquette County, and NMU intends to use this new wireless broadband authorization to bridge the Internet service gap many students face."

On campus today

SPORTS AT NMU



NMU vs. MTU game sets football attendance record

A new **Superior Dome** football attendance record was set during the 2008 Miner's Cup game held on Sept. 18 between the Northern Michigan Wildcats and Michigan Tech Huskies. A crowd of 8,672 was on hand to see the Huskies down the Wildcats 47-21, smashing the old mark of 8,432 set on Oct. 5, 1991, when NMU played Ferris State. The seating capacity of the Dome is 8,000.

"I was proud of the NMU students who were there two hours before the game, painted green and making noise," Hobie Webster, president of the Associated Students of NMU.

The game was televised on CBS College Sports Network and FOX Sports Network-Detroit. The telecast

featured an on-site interview with **Tom Izzo '77 BS**, men's basketball coach at Michigan State, and phone interviews with **Lloyd Carr '68 BS, '70 MA**, former University of Michigan football coach, and **Steve Mariucci '77 BS, '83 MA**, former NFL coach and current NFL Network game analyst.

Follow the 'Cats

Wildcat fans are reminded that they can find all the current NMU team rosters, schedules, results and latest team updates at www.nmu.edu/sports. Broadcasts of NMU Wildcat football, hockey, and men's and women's basketball games can be heard on WUPT 100.3 FM, Gwinn-Marquette. Audio streaming over the Internet is also available from WNMU (<http://wnmu.nmu.edu>). Also, Northern Michigan University and B2 Networks (www.b2now.com) have created a partnership to provide

Wildcat fans with live game action over the Internet via broadband broadcasting. The broadcasts feature video from the team's videographer and audio from the team's official play-by-play broadcaster. The cost is \$6 per game. B2 will provide this service for Wildcat men's and women's basketball, football, volleyball and hockey action. B2 Networks' president is former NMU student Greg Bell.



Photos at right courtesy of USA Wrestling and TheMat.com
Bronze medalist Randi Miller (left) and Adam Wheeler.

Two Former USOEC Athletes Win Bronze

Former U.S. Olympic Education Center resident athletes **Adam Wheeler '06 BS** and Randi Miller won bronze medals at the Beijing Games. Wheeler, who graduated from NMU with a degree in criminal justice, competed at 96 kilogram or 211.5 pounds, in Greco-Roman wrestling. Miller, who was an outdoor recreation major at NMU, competed at 63kg, or 138.5 pounds, in women's freestyle wrestling.

On the final day of Greco-Roman wrestling, Wheeler defeated Han Tae-Young of Korea in the bronze medal match, 3-1, 4-1. It was

the first medal won by the United States in wrestling at the Beijing Games. Wheeler won his first two matches, then was defeated in the semifinals by Mirko Englich of Germany, which placed him into the bronze-medal match.

Wheeler was thrilled with his medal adding, "There were 19 people—members of my family and friends—who came here for me, so this can't get any better." Among his contingent was his wife **Marley Garceo '06 BS**.

Miller, the only U.S. women's wrestler to win a medal in 2008, defeated Canadian Martine Dugrenier in Beijing to earn her medal. "It was surreal. It was a dream come true," she said following the Games.

She was the first African-American women's wrestler to win an Olympic medal and only the third U.S. women's wrestler to claim an Olympic medal.

Miller won her first two matches, before dropping a quarter-final match to 2004 Olympic champion, Kaori Icho of Japan. She battled back with a clutch win in the repechage round to earn a spot in the bronze-medal match.

USOEC Athletes in Michigan Sports Exhibit

Several athletes with NMU connections are among those featured in the new exhibit "Faster, Higher, Stronger: Michigan Women in the Olympics" at the Michigan Women's Historical Center and Hall of Fame in Lansing.

Text from one of the exhibit panels reads: "... Another educational institution that has drawn out-of-state athletes is Northern Michigan



Five new members were inducted into the Northern Michigan University Sports Hall of Fame in conjunction with Homecoming 2008. They are: **Hong Shao '93**, swimming—five-time NCAA national champion; **Lori Juntila Rupert '81**, women's basketball—first 1,000-point scorer in NMU history and is currently 10th overall in career scoring; **Timothy Kerwin**, men's swimming and diving team, 1975-79— MVP honors all four years, multiple-time GLIAC champion with 27 NCAA and All-America honors; **Derrick Munos '86**, wrestling—two-time All-American and team MVP, middle school wrestling coach (awarded posthumously); **Bill Schafhauser**, hockey, 1980-84— played with Chicago Blackhawks and Philadelphia Flyers organizations and in Europe; **George Works Jr.**, football, 1978-80-81-82— set a number of NMU records, many of which remain today, including career points and touchdowns, points in one season and touchdowns in one game, also played for former U.S. Football League and Canadian Football League.

University. Some women, like Lindsey Weier and **Lindsay Williams '05 BS**, pursued their Olympic dreams while participating as varsity athletes on the school's cross country ski team. Others, like speedskaters Allison Baver and Caroline Hallisey, took advantage of Northern's U.S. Olympic Education Center: the only Olympic training center located on a college campus. The USOEC has graduated 30 female Olympians since its inception in 1985 and currently offers training for women athletes in speedskating, weightlifting and wrestling."

The exhibit runs until Dec. 28.

The Michigan Women's Historical Center and Hall of Fame is located at 213 W. Main Street in Lansing. The organization's Web site is <http://hall.michiganwomenshalloffame.org>.

Boxing's Back

The boxing program at the USOEC has been reinstated by USA Boxing, after an eight-month hiatus. "We're so excited to have it back," says Jeff Kleinschmidt, program director. "Of all the programs here, this one does more to change the lives of athletes than any other."