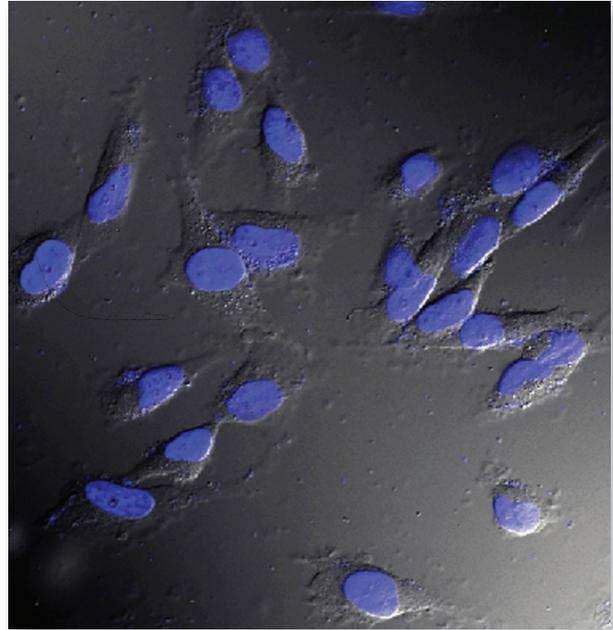
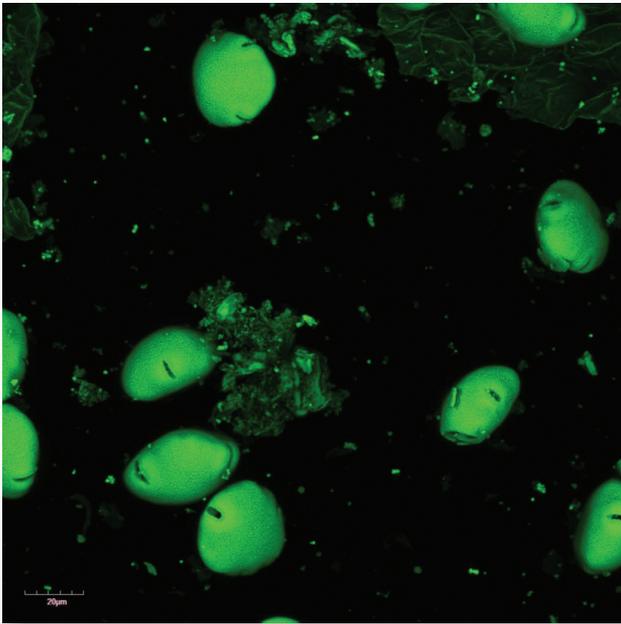


# On campus today



A three-dimensional confocal scan of pollen grains from *Tilia americana*, or the basswood tree, is shown on the left. Notice the surface detail and the slit-like pores, or colpi, from which the reproductive gametes emerge. Glioblastoma cells cultured from a tumor removed from a patient at Marquette General Hospital are on the right. The cells were stained to illuminate nuclei. Imaging of tumor cells with this high resolution will allow NMU's Upper Michigan Brain Tumor Center to explore new strategies to combat the growth and spread of malignant brain tumors.

## New scope captures the tiny world as it is

A **new microscope** in the Biology Department enables faculty and students to section thin layers of cells, tissues and their components to capture multi-color 3D, rotatable images and real-time video. Lasers excite the fluorescent probes in a sample, which can be optically sectioned by a built-in scanner in the microscope.

The \$200,000 Olympus Fluoview confocal, laser-scanning microscope is the kind that's typically reserved for major research universities. "It was a coup that NMU was able to obtain this," says biology professor Erich Ottem. "It increases our imaging capabilities so that we can begin to see and determine the specific cellular compartments a protein or other macromolecule may be localized in. That's leaps and bounds above a traditional microscope, which offers a top-down, two-dimensional view of the surface of a cell. This expands our research capabilities immensely. Its applications also extend beyond physiology to ecology research."

Ottem is quick to credit Michael Broadway, dean of the College of Arts and Sciences, for supporting the confocal microscope purchase and working out the financial arrangements.

"One of my goals as dean of the college is to

promote scholarship and research," says Broadway.

"We've got some young faculty in the sciences engaged in some impressive research. What better way to support that than to give them the equipment they need to do their work effectively? This will allow them to publish in prestigious journals."

In a nice show of interdisciplinary cooperation, English Department head Ray Ventre supported Broadway's request to apply some sequestered funds from English toward the investment. Ventre says, "My only two questions were, 'Will it enhance faculty research? And will it create valuable opportunities for students?' The answer to both was yes, so I was all for it." As a sign of appreciation, the name Ray is affixed to the laser array system.

The confocal microscope arrived in November and an Olympus representative spent a few days on campus to supervise hands-on training. At least one student who watched a demonstration was overheard describing its capabilities as "awesome."

Video captures can be viewed on YouTube by searching for Northern Michigan University Confocal Microscope.

WNMU-TV has a new, all-digital production room in the lower level of the Learning Resources Center. The state-of-the-art facility was designed by **Grant Guston '96 BFA** from Learning Resources, pictured standing behind **Mike Lakenen '92 BS, '99 BS, '04 MPA** from WNMU-TV. The new production facility has enhanced the quality of local programs originating at the station and is being used for the studio component of a television production class, providing hands-on experience with equipment in use at many TV stations and large venues such as Lambeau Field.



“Northern students can familiarize themselves with the latest digital technology and in high definition (HD), which will help them learn the 16x9 widescreen format versus the traditional 4x3 format,” says **Eric Smith '95 MA**, NMU director of Broadcast and Audio Visual Services. “There are so many variants, and it’s important students become fluent in digital language so they can start a career knowing what concepts such as letterbox and windowbox mean. For years, I thought it would be cool if some classes were taught in WNMU’s great studio facilities. Working with Communications and Performance Studies we can offer students learning opportunities on equipment that would be expensive for that department to replicate.”

The audio board offers 5.1 surround sound, Pro

## WNMU-TV broadcasts and teaches in truly brand new control room

Tools software that handles editing/mixing and an interconnected audio/video server accessible from multiple points, which provides program storage and file transfer capabilities.

The room is completed with a high-end graphics unit and a Ross Carbonite switcher, which mixes all video sources, facilitates transitions such as cuts, dissolves and wipes and creates digital effects.

“When we installed the switcher, we noticed signatures on the bottom, including company president Doug Ross,” says Smith. “They typically sign the first one off the line, which means we have serial number 1.”

## Theater winners



*Pictured at the Kennedy Center American College Theater Festival, from left to right in back row are Stephanie Baugher, Charlie Jauquet, Ansley Valentine, Andrea Knoll and Tyler Welden; in front row: Jalina Olgren, Abby Ropp, Jacob Barbot.*

NMU theater program alumni, students and faculty won multiple awards competing in the Kennedy Center American College Theater Festival, Region III, at the University of Illinois at Urbana-Champaign in January. The festival featured both team and individual events and included a “Tech Olympics” competition.

Recent graduate **Stephanie Baugher** won the Design Storm Award for scenic design. Professor **Paul Truckey '87 BS** won one of four faculty service awards, and professor Shelley Russell received a certificate of merit for directing. Students won awards for most improved directing and dramaturgy and in addition to awards, the technician teams won more than \$500 of lighting equipment for Forest Roberts Theatre. Student Abby Ropp will go on to participate in the KCACTF National Festival in Washington, D.C., in April.

# On campus today

## National Park App



**Professor Craig Rademacher** recently published a new iPad application about Anza-Borrego Desert State Park in Southern California. Anza-Borrego is the largest state park in California.

The Borrego app is a re-conceptualization of the traditional park brochure for the mobile media era. It is entirely digital and contains original photographs, slide shows, artist profiles and seven original essays by Rademacher. In addition it contains a touch interactive park map and discoverable information about wildlife and park safety. It's available for sale on iTunes.

The project is the outgrowth of Rademacher's ongoing study and research into the growing presence of mobile media in interpreting the value and meaning of recreation resources and public lands. This winter he is teaching a course at Northern titled New and Portable Media in Interpretation.

## Exhibit of alumnus architect draws national attention, state award

NMU's DeVos Art Museum was recently featured on NPR's "Morning Edition" for a story on architect John Lautner. Museum Director Melissa Matuscak was interviewed by Edward Lifson about Lautner's connections to growing up in Marquette. You can read or listen to the entire story, "Nature and Design Meet in Lautner's Modern Homes," on NPR's website.

Matuscak and Kaye Hiebel, executive director of the Marquette Regional History Center, were also spotlighted by the Michigan Museums Association, with a Quest for Excellence award. The duo and their complementary exhibits won the Most Awesome Experience award for their work on the *John Lautner: A Life in Architecture* exhibits. **Lautner, '33 AB, LC** studied with Frank Lloyd Wright at Taliesin then settled in Los Angeles where he became well known for designing innovative structures, particularly residential buildings that demonstrated a true sensitivity to location, space and structure. He received the Gold Medal of the American Institutes of Architects in 1993.

## Korean talks

NMU is among the first 17 U.S. universities to partner with the Teach and Learn in Korea (TaLK) program, which offers paid internships to undergraduates who teach English in rural elementary schools in South Korea. The program is sponsored by the National Institute for International Education under the direction of the South Korean Ministry of Education, Science and Technology. NMU International Programs screens and recommends candidates, then forwards their applications to the TaLK offices in Seoul. Those selected receive paid airfare, housing, health insurance and a monthly stipend. No Korean language skill is required. Students admitted to the program complete a four-week orientation addressing Korean culture, education and basic teaching methods.

On a related note, Northern has signed a memorandum of understanding with Myong Ji University in Seoul and is working on a bilateral exchange agreement with Hallym University, also in South Korea. Students pay tuition to their home universities and can study at any of the other consortium universities.



Joshua White



## Artwork acquired by The Great China Museum

*Ceramicist Brian Kakas in his studio that was located in a brick and tile factory in Fuping, China.*

**Art and design professor** Brian Kakas was selected to exhibit recent works from a residency in China at the 2011 Kaolin Grand Prix for International Ceramic Arts. His ceramic sculptures were juried into the exhibition along with works of other professional artists from 25 countries in conjunction with the largest ceramics festival held annually in China, showcasing innovative ceramic designers and artists.

Kakas received an award of excellence and one of his works has been acquired by the permanent collection of The Great China Museum.

Jurors included internationally acclaimed artists such as Fumio Shimada, Tokyo University of the Arts in Japan; In Chin Lee, Hong-ik University, South Korea; Nancy Selvage, Harvard University; and Tapio Yli-Viikari, Aalto University School of Art and Design, Finland.

Study-abroad programs are currently being developed for a greater exposure to the ceramic art and design field throughout Europe and Asia.

To see Kakas' sculptural ceramic vessels, visit [www.briankakus.com](http://www.briankakus.com).

## Building health care opportunities with U-M

NMU has joined forces with the University of Michigan to allow our students to complete a certificate in the foundations of public health online from the University of Michigan and apply it toward their master in public administration degree at NMU. The partnership permits NMU students to transfer credits from the University of Michigan into the MPA program, enhancing their professional skills and expanding the potential number of graduate students in this area. For more information, contact NMU's Political Science and Public Administration Department at 906-227-2019 or [polisci@nmu.edu](mailto:polisci@nmu.edu).

## Can you help?

**In the spring/summer** issue of *Horizons* we'd like to journey back through time to look at how social mores and traditions have changed on campus over the years.

What rules or unusual traditions do you remember from your days at NMU? Also, we hope to highlight our unique residence hall structure of "houses" and get in touch with roommates who have kept in touch or have a special story. Please send a note to [horizons@nmu.edu](mailto:horizons@nmu.edu) if you have a memory, tale or suggestion to share.

## LPN lives on

NMU **ended** the licensed practical nursing (LPN) program last year, but its legacy lives on. As part of the pinning ceremony for spring 2011 graduates, the Central Upper Peninsula and Northern Michigan University Archives produced a short documentary on the history of the program at NMU, which began in 1948. Former archives student assistants **Megan Warnos '11 BFA, Maggie Newberry '11 BA** and current student Christopher Kern produced the documentary. It can be viewed on the archives' website or at [www.nmu.edu/LPNhistory](http://www.nmu.edu/LPNhistory).



NMU and Central U.P. Archives