

## **University identifies four Centers of Excellence**

Centers of Excellence in materials science and engineering, applied chemical biology, international business and the study of autism will be formed at YSU under a resolution approved by the Board of Trustees in June.

"While YSU has many outstanding programs with national and even international reputations, we believe these four areas of focus are particularly noteworthy for their current and potential research capabilities and promise to contribute to regional and statewide economic development activities," Provost Ikram Khawaja said.

Under Ohio's 10-year Strategic Plan for Higher Education, Chancellor Eric Fingerhut called for all of the state's public universities to identify by June 30 specific areas of study and research to be deemed Centers of Excellence on each of the campuses. Khawaja, President David C. Sweet and others met with Fingerhut on June 12 on the YSU campus to outline the univer-



### Lights, camera...action!

Photographers will now find the going a little easier in Beeghly Center. Four strobe lights were installed in Beeghly's main arena this spring to help with event photography. The Athletic Department purchased the lights while YSU photographers Carl Leet, pictured here, and Bruce Palmer helped with installation. The strobes, which are versatile and have been placed in each corner, will be used by YSU and local media photographers for graduations, sporting events and various special occasions. The lights sync from a remote receiver on a camera to a transmitter and give a flash of light to help make the action "pop." Such lights are widely used at indoor sporting events across the country.

sity's proposed centers.

While no funding is anticipated for the centers in the new two-year state budget, YSU hopes to commit internal funds to help jump start each of the centers, Khawaja said. The provost said the university will take the next few months to better define and to identify the scope and goals of each of the centers.

Khawaja's office led a four-month Centers of Excellence selection process that started in February with a request for proposals. In all, the provost received 11 proposals, which were reviewed and evaluated by the University Research Council, the Dean's Council, the President's Cabinet and the Office of the Provost staff. *(continued on back page)* 

### Research could make racehorses healthier

Although Michael Butcher has never been situated atop a horse, he's surely been "knee-deep" in equine research.

The assistant professor of Biological Sciences, in coordination with faculty members from Cornell University College of Veterinary Medicine and the University of Calgary's College of Medicine, recently completed an in-depth research project focused on how horses use their lower limb flexor muscles and tendons in different types of equine movement.

While racehorses have a well-known history of suffering performance-related injuries, Butcher's research takes a closer look at horses' vulnerable knee area, studying their digital flexor muscles and superficial and deep digital flexor tendons.

"We think that, when these tendons are injured in racehorses, it's a muscle problem," Butcher said. "When the horse's *(continued on back page)* 

### Comp Sci students at Berkeley for summer research

Three YSU computer science students are working shoulder-to-shoulder with doctoral-level researchers at the University of California at Berkeley as part of a two-month, expense-paid summer research experience.

Adam Magana, Benjamin Christen and Michael Walker won three of the 12 undergraduate student spots available under Berkeley's Team for Research in Ubiquitous Secure Technology, also known as TRUST, a summer research program.

# *eUpdate* exclusives

For more news about YSU, read these and other stories in eUpdate at http://cfweb.cc.ysu.edu/ marketcomm/index.cfm.

- YSU celebrates the Summer Festival of the Arts July 11 and 12; Forte on the Fifty is July 11
- Head football coach Jon Heacock takes a sky ride to benefit the Ohio Valley Teen Challenge
- Two students win the Benjamin A. Gilman International Scholarship to study abroad.
- Rust Fest, a digital arts and new media festival, runs through July 24 in the Mc-Donough Museum of Art.



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Marketing and Communications 133 Tod Hall, Youngstown, Ohio 44555-3519 racole01@ysu.edu 330-941-3519 cevinarsky@ysu.edu "The program only accepts 12 students from all over the country, and YSU got a quarter of the openings; I'm proud of that," said Graciela Perera, assistant professor of Computer Science and Information Systems.

"I'm excited for my students, not only because of the research experience, but also because of the life experience they'll gain by living in a culturally diverse community like Berkeley."

She estimates the grant-funded research experience is valued at between \$4,000 and \$6,000 per student and includes travel costs, food, lodging and a stipend.

While computer science students at YSU do get research experience, Perera said, the TRUST program will allow Magana, Christen and Walker to interact with doctoral-level computer science students at Berkeley. She hopes the experience will encourage them to consider pursuing doctorate degrees and university faculty careers.

The YSU students will work together as a team, with a Berkeley faculty member mentor, and will be provided free classes to prepare for the Graduate Records Exam, a prerequisite for entering graduate school in a computer field. Magana, Walker and Christen all said they plan to pursue graduate degrees. Participation in the TRUST research program, which runs June 8 through July 31, will be the second trip to California this year for Magana, a sophomore from Austintown, and Christen, a junior from Hubbard. They accompanied Perera and made a poster presentation at the annual meeting of the Computing Alliance of Hispanic-Serving Institutions, also known as CAHSI, in January at the headquarters of Google Corp., an event sponsor.

CAHSI provided funding for Perera and the two students to attend the meeting and to experience one-on-one interaction with some "extraordinary role models and speakers," she said.

At that meeting, Perera said, she met Kristen Gates, executive director of education for the TRUST program at Berkeley, and learned about the undergraduate research opportunities it offers each summer.

She invited Christen and Magana to apply, along with Walker, a junior from Boardman. All three students have been assisting Perera on technical research projects, particularly in the field of computer network security.



Computer science students participating in a research program at the University of California at Berkeley this summer are, from left, Adam Magana, Benjamin Christen and Michael Walker.

#### July 2009

#### **YSUpdate**

# Students plant seeds of hope on North Side

When the Help Hotline Community Center wanted to plant a garden behind its shelter on Fifth Avenue in Youngstown, YSU student Suzanne Locke knew the perfect group to pull it off.

Locke asked 11 of her fellow students in her communications foundation course to join together and plant the garden to help homeless people at the shelter.

"There is something very rewarding about planting and growing your own food," Locke said. "It brings a great level of self-worth and accomplishment for the people that use the shelter."

The project fits with the group service-learning requirement of the YSU communication foundations course, taught by assistant professor Adam Earnheardt. The course requires small groups of students to find a solution or engage in a solution to a problem plaguing Youngstown.

Students solicited local businesses for donations, such as garden tools, soil, mulch, plants and flowers.

"What's interesting is that most of these students didn't know each other until two or three weeks ago – they had never met," Earnheardt said. "They come from varied backgrounds, majoring in everything from jazz performance to computer science. But they bonded over the idea that they might really be able to help someone have a better life."

Students participating in the project were Locke, Danielle Long, Amy Gregory, Edward Palestro, Danielle Gorby, Brandon DeGennaro, Mike Meszaros, Samantha Adams, Angelina Sodomora, Sarah Navarra, Sam Blakeslee and Randa Hamayel. Sponsors included Home Depot (Austintown, Warren, Boardman), Wal-Mart (Boardman), Briel's Flowers (Youngstown), Subway (Youngstown), Aqua America, Wilm's Greenhouse (Franklin Square) and Turning Technologies (Youngstown).



YSU students Angelina M. Sodomora, left, and Sarah A. Navarra work to put in a garden at the Help Hotline Community Center on Fifth Avenue in Youngstown.

# **Faculty & Staff**

Send items for "Faculty & Staff" to Cynthia Vinarsky at cevinarsky@ysu.edu.

**Fred W. Viehe**, associate professor, History, presented a paper titled "Atavistic Monsters and Hedonistic Culture: A New Definition for American Organized Crime," at the International Conference on New Directions in the Humanities in Beijing, China. The paper traces the development of organized crime from the days of piracy in the early 18th century to the present.

**Bonnie Young Laing**, assistant professor, Social Work, had an article published in the *Journal of Black Studies*. The article is entitled "The Universal Negro Improvement Association, Southern Christian Leadership Conference, and Black Panther Party - Lessons for Understanding African American Culture-Based Organizing."

**Diana Q. Burkhart**, assistant professor, Foreign Languages, presented papers at two conferences this past academic year.

"The Immortal Cyborgs in *Abre los ojos* by Alejandro Amenábar," was presented at the Society for Utopian Studies Conference in Portland, Maine, and "The Wasted Seed and the (In)fertile Womb: The Obstacles to Integration for Male Immigrants in *Las cartas de Alou* and Female Immigrants in *Flores de otro mundo*," was presented at the Kentucky Foreign Language Conference, Lexington, Ky.

Jake J. Protivnak, assistant professor, Counseling and Special Education, coauthored an article entitled "An Exploration of Themes That Influence the Counselor Education Doctoral Student Experience." The article was published in the journal *Counselor Education and Supervision*.

**Dr. Helene Sinnreich**, Director of Judaic and Holocaust Studies, History, recently presented her research on the

Krakow Ghetto at Western Galilee College in Acre, Israel. She also had a chapter titled "Women and the Holocaust" published in the book *Plight and Fate of Women During and Following Genocide*. Sinnreich will have an article published in the July issue of the *Journal of Jewish Identities*, of which she is editor-in-chief. The *Journal* was recently recognized and included in Project MUSE, an online resource of important journals out of Johns Hopkins University.

Editor's Note: Part of the above listing is revised and reprinted to correct an error that was part of the original version, published in the June YSUpdate.

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#### YSUpdate

### **Centers of Excellence**

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Khawaja said he thought the process of identifying the centers was an "extremely positive exercise" that sparked productive faculty discussion and collaboration. He said all 11 of the proposed Centers of Excellence "help provide a certain level of focus on the university's academic and research strengths and a blueprint as we move forward as an urban research university."

The presentation made for Chancellor Fingerhut, which outlines specifics of each of the new centers, is available online at http://www.ysu.edu/files/final2003.zip.

### YSU CENTERS of EXCELLENCE

- Center of Excellence in Materials
  Science and Engineering
- Center of Excellence in Applied
  Chemical Biology
- Center of Excellence in
  International Business
- Rich Center of Excellence for the Study of Autism

### Research

#### (Continued from page 1)

deep digital flexor muscle gets tired threequarters of the way through a race, it leans on the superficial digital flexor muscle, which gets overloaded and causes its long, thin tendon to rupture."

Famous horses like "Saintly," a champion Australian thoroughbred, and "Might and Power," arguably the greatest thoroughbred in Australian horse-racing in the 1990s, retired as a result of such tendon injuries. Butcher believes it's because horses are evolved to be long distance runners, not high-speed racers.

Butcher, who earned his Ph.D. from the University of Calgary, also said the research has practical veterinary applications for training future racehorses, and his findings could carry into the human prosthetics field.

Members of Butcher's team also studied equine breathing patterns and mechanisms while working to develop a larynx pacemaker, which may eventually have practical applications for humans with laryngeal paralysis or laryngeal implants.

The team's research has garnered interest from the American Physiological Society and numerous equine publications. More information can be found on Butcher's laboratory website www.http:// people.ysu.edu/~mtbutcher/Lab\_Page\_1. html and at www.medicalnewstoday.



Michael Butcher, assistant professor of biological sciences, outside his office in Ward Beecher Hall.

com/articles/122910.php, and http://veterinarynews.dvm360.com/dvm.

Meanwhile, Butcher has received a University Research Council Grant for the 2009-10 academic year to continue his research in limb bone loading and the evolution of limb bone design. The research focuses on stresses and strains experienced by the femur of the Virginia opossum.



#### Sustainable Energy

U.S. Rep. Tim Ryan and Jack Scott, president and chief operating officer of Parsons Corp., talk with reporters after a news conference June 22 to open the two-day Sustainable Energy Forum in Moser Hall on campus. Sponsored in part by YSU, Parsons and the city of Youngstown, the forum brought together more than 100 representatives from government, industry and academe to focus on technologies related to renewable energy and to discuss the role that the Cleveland-Youngstown-Pittsburgh Technology Belt can play in those emerging technologies. "We need to make sure that the Mahoning Valley is plugged into the green revolution," Ryan said. Scott is a YSU alum. Parsons is an engineering, construction, technical and management services firm with 12,000 employees and revenues exceeding \$3.4 billion.