



June 2016



Faculty and student researchers bring recognition to OSU



OSU researchers continue to be recognized for exceptional, novel investigations across a wide variety of disciplines. An important role of the *OSU Research In Focus* newsletter is to shine a light on the successes of Oklahoma State faculty and students. This spring, a faculty member experienced wide national media interest in her work while another researcher has been recognized for being continually funded by the NSF for more than a decade. Both stories are included in this

issue along with others about faculty who are making an impression. We also report on two groups of undergraduate student scientists and engineers who are pushing beyond the university classroom to conduct research for NASA and with OSU faculty mentors through the Niblack Research Scholars program. Tell us what you think about our e-newsletter *OSU Research In Focus*; email us at vpr@okstate.edu.

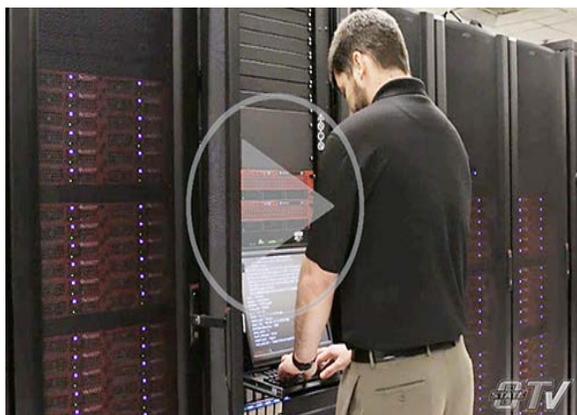
Study of child obesity and emotional health stirs national media interest

OSU's **Dr. Amanda Harrist** and colleagues have generated wide interest with the recent publication of their research of the impact of obesity on the emotional health of children. Harrist studied 1,164 first grade students in 29 rural Oklahoma schools in counties with obesity rates of 28 percent to 41 percent. The study, "*The Social and Emotional Lives of Overweight, Obese, and Severely Obese Children*," was published in the journal *Child Development*. Stories about Harrist's research have been published in print and online media and picked up by television news stations across the country. Harrist is professor and Bryan Close Professor in human development and family science in the College of Human Sciences.



[Read More](#) ➔

High Performance Computing Center provides powerful tools for scientists and scholars



What is the OSU High Performance Computing Center? It is the home of Oklahoma State's

Vanguard: *The OSU research magazine*



Research benefits society and individuals in many different ways. **Dr. Charles Weinert**, OSU associate professor of chemistry, has used his lab to not only tackle unanswered scientific questions but also to

supercomputer Cowboy, but it's also home to resources and help with computational and data intensive research for faculty, students and staff. If a researcher in any field has a project that could benefit from advanced computing, then the HPCC is the place to start. Watch a video of **Dr. Dana Brunson**, HPCC director and assistant vice president for research cyberinfrastructure, explaining what high performance computing is and the services the HPCC offers the OSU research community.



"Part of our mission is to make sure people can use our resources. We offer training sessions, one-on-one help and online tutorials," said Brunson.

"We want to make sure they can focus on their research and not focus on computer issues." [Watch](#) ➔

Tech Development Center realizes 4-to-1 ROI

The OSU Technology Development Center launched a gap funding program 10 years ago that has more than paid for itself based on estimated return-on-investment. The Technology Business Development Program (TBDP) provides financing to developers of OSU technologies with commercialization potential. The funding advances technology facing a financial gap that often occurs between the research and development phase and commercialization. In the decade since the TBDP was begun, it has returned to Oklahoma State \$4.50 for every \$1 invested in OSU technology, according to **Dr. Steve Price**. Price, TDC director, said that since 2005, the TBDP



introduce Oklahoma Native Americans to the possibilities of STEM careers. Read about Weinert and his impact on a young student's academic success in the 2016 issue of *Vanguard*, which highlights the breadth of OSU science and scholarship. [Read](#) this story and others.

RESEARCH NEWS

Oklahoma State University chemistry professor **Dr. Jeffery L. White**



has been awarded a three-year grant in excess of \$400,000 from the National Science Foundation, the fifth such NSF grant. White has now been continuously funded by the NSF since 2002.

[Read More](#) ➔

Dr. Rebecca Greenbaum, assistant professor



of management, and a colleague penned an article in the online Harvard Business

Review based on their research examining unethical employees. Their study suggests a disconnect between otherwise above-board companies and

has invested \$2.37 million in technology and returned \$10.87 million. [Read more](#) financials from the 2015 TDC fiscal year report and [learn more](#) about how the center can assist researchers with tech development, licensing and patents.



In 2015 OSU Space Cowboys team members Steven Asplin, left, and Sage Ellis, right, explain how their sample collection tool works for divers at NASA's Johnson Space Center in Houston.

Space Cowboys return to NASA laboratory

A group of OSU mechanical and aerospace engineering students return to NASA's Johnson Space Center in Houston in June to continue testing a prototype tool to collect rock samples during a future space mission. The group's proposal was accepted by NASA in 2015 as part of a program for university undergraduate teams to design, build and test a tool or device that addresses a space exploration problem. The OSU team first tested its tool prototype last summer. NASA divers will test the device in the Neutral Buoyancy Laboratory at Johnson Space Center, which is described as the world's largest swimming pool. NASA uses the laboratory to train astronauts in the 6-million-gallon pool's microgravity environment.

Niblack Research Scholars selected

organizations' tolerance of unethical behavior if the employee in question is a high performer. [Read More](#) ➔



Rick Wilson



Ramesh Sharda

A paper published 22 years ago has turned out to be one of the most cited in its field to the surprise of its authors. **Drs. Ramesh Sharda and Rick Wilson**, management science and information systems professors in Spears School of Business, recently learned their article "Bankruptcy Prediction Using Neural Networks," is the third most cited in the field of research involving neural networks in business. The paper was published in 1994.

[Read More](#) ➔

See more news on the OSU Research [website](#).

FEATURED EVENT

June 20

Opening reception for the OSU Museum of Art exhibit "Vision of Impressionism: Paintings from the Oklahoma Society of Impressionists"

Undergraduate Niblack Research Scholars have been selected for the 2016-17 school year. This recent class of scholars represents the following OSU departments: microbiology and molecular genetics, physics, integrative biology, psychology, nutritional sciences, animal science, mechanical and aerospace engineering, and chemistry. [Learn more](#) about the Niblack Research Scholars program.

Faculty Conversations video series



Faculty Conversations are a collection of videos of OSU faculty talking about their research. The videos represent a wide cross section of disciplines and novel research projects. [Visit](#) the OSU Research website to see the Faculty Conversations collection, including a video featuring **Dr. Francisco Ochoa Corona**, associate professor of entomology & plant pathology, describing his lab's development of a forensic sampling device.

The reception opens an exhibit of Oklahoma artists who originally met in New Mexico to organize the Oklahoma Society of Impressionists (OSI). The group met in Taos, New Mexico, in 1987 at a plein aire workshop and formed to represent and support Oklahoma artists painting in the impressionist style, to raise public appreciation for plein aire, and to promote excellence in representational art. [Learn More](#) →

Each month *OSU Research In Focus* features an event. To nominate an event for possible inclusion, email details to vpr@okstate.edu.



Follow OSU Research  