October 2016

Investing in the futures of young scientists and engineers
I had the pleasure recently of spending time with Oklahoma State University alumnus Dr. John Niblack and his wife Heidi. Over the past 13 years, the Niblack name has become synonymous with undergraduate research for his funding of the Niblack Research Scholars program. I joined Dr. Niblack and a good crowd of OSU faculty, staff, and students to listen to Niblack Scholar research presentations. It was fascinating to hear Dr. Niblack's questions and see his keen interest in the student's experiments. He didn't avoid challenging presenters about methods and results, no doubt a valuable experience for the young scientists-to-be.

The Niblacks return to OSU each year to attend the student symposium. On this trip (actually, before the game at Boone Pickens Stadium) they had a chance to meet and chat with two former Niblack Scholars, Dr. Jenny Lesley (now a physician) and Dr. Savannah Sayler (now an optometrist). It was quite a treat for all of them. Previous Niblack Scholars are also veterinarians, doctoral candidates, university instructors, and pharmaceutical researchers among many other career paths. Just as Dr. Niblack has said his science career was inspired by experiences in undergraduate research at OSU, many of these Niblack program alums will tell you that their research experiences at OSU opened their eyes and minds to STEM fields as careers. The philanthropy of people like John and Heidi Niblack ensures that the pipeline of future scientists, engineers and scholars continues to flow.

Kenneth W. Sewell, Ph.D., Vice President for Research

2016-17 Niblack Scholars continue excellence in undergraduate research

The Niblack Research Scholars program at Oklahoma State University has opened the doors of cutting-edge research for undergraduates for 13 years. This year, 14 OSU students are receiving $8,000 scholarships and the opportunity to conduct supervised research as 2016-17 Niblack Research Scholars. The annual program is funded by OSU alumnus Dr. John Niblack and his wife, Heidi Niblack. The 2016-17 Niblack Research Scholars program supporters and scholars are (front row, left to right) Dr. John Niblack, Alicia Aguilar, Madison Krehbiel, Indah Merkel, Beata Mackenroth, and Heidi Niblack. (second row) Zachary Helms, Amanda Demackiewicz, Karley Washburn, and KatyAnn Dudley. (third row) Charith DeSilva, Woong Hee Cho, Nicholas Nelsen, and Field Watts. (back row) Program sponsor Dr. Stephen McKeever, Garret Boren, OSU V.P. for Research Dr. Kenneth Sewell, and William Starr. Learn More.

Vanguard: The OSU research magazine
Big data and big computers expand research possibilities: Learn how Nov. 7

Learn from OSU researchers how big data and high performance computing are dramatically changing the research landscape. The next VPR Panel Series discussion includes scientists and engineers who are using resources at OSU's High Performance Computing Center (HPCC) and who will discuss their own use of big data to expand the possibilities of their work. The panel will be moderated by Dr. Dana Brunson, OSU assistant vice president for research cyberinfrastructure and director of the HPCC.

Show us in a video how OSU research is cool
Shoot, enter and win!

Research is a vital part of the mission at OSU. It's amazing to examine the breadth of research happening across the university and the extent to which this research impacts our world. Often people remark about an OSU research project by saying, “Wow! That's really cool!” We want to learn about some of those exciting OSU research stories that you think are really cool. So the Office of the Vice President for Research invites undergrad and grad students to shoot and submit brief videos that respond to the prompt: “The Coolest Research at OSU is ____________!” The video can be of research in any discipline on campus. The winner receives $750 in travel money to attend a professional conference.

Research Profile:
EPSCoR's impact rewarding to Valerie Phillips

As with many Oklahoma State employees, Valerie Phillips worked part time on campus while completing a bachelor's degree. That was nearly 20 years ago and part-time jobs as a student led to full-
time positions following
graduation with
an accounting degree. Today,
she works for the OK EPSCoR
program.

The Oklahoma Experimental
Program to Stimulate
Competitive Research (OK EPSCoR) was established by the
National Science Foundation in
1985 to strengthen Oklahoma’s
exploration and growth in
science, technology, engineering
and mathematics (STEM). OK EPSCoR, based at OSU, supports key research areas at
Oklahoma’s public universities with the goal of stimulating lasting
research infrastructure improvements in the state.

Phillips graduated from OSU in 2001 when her career took a turn
into the world of research support. She worked for a Stillwater
private research company and joined EPSCoR in 2003.

Phillips, the assistant director of sponsored programs and a project
administrator, said she enjoys seeing the impact OK EPSCoR has
on the state.

“Through research that is being conducted, outreach activities, and
partnerships that have been formed, the funding we receive from
NSF and the state regents has had tremendous impact,” she said.
“EPSCoR has provided opportunities to individuals all the way from
kindergarten to industry.”

An example is the annual Women in Science Conference where
more than 800 6th- through 12th-grade girls experience hands-on
STEM activities. At the higher education level, college and
university students, including Oklahoma Native American students,
present research projects each year at Research Day at the
Capitol. The event allows students to showcase their research
projects to state legislators.

Though rewarding, the job also has its challenges, Phillips said. “I
want to be able to provide funding for all worthwhile activities and
research across the state. Unfortunately, there isn’t enough funding
for everything, especially with statewide budget cuts.”

A group of OSU undergraduates discovered novel strains of bacteria
in an introduction to microbiology class. Students isolated
the strains and sequenced genomes to determine that the
organisms had not been identified before. The project was part of the
Howard Hughes Medical Institute program at OSU, which
encourages undergrads to conduct authentic life sciences
research. The HHMI-OSU program is led by Dr. Donald French,
professor of integrative biology. Read More

An research partnership between
the OSU School of Mechanical and
Aerospace Engineering and GE Oil & Gas Technology was featured
recently at GE’s grand opening of
its research center in Oklahoma
City. The OSU unmanned systems
program is developing an aerial
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gas leaks. OSU students
demonstrated the aircraft, called
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Sociologist Dr. Riley Dunlap and
collaborators published a journal
article recently

shortening the stark political divide in the U.S.
over scientific evidence of
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RESEARCH NEWS

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to register beginning Nov. 1
visit the event page.

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Celebrating research with artistic expression

A series of glass disks, each six-foot in diameter, were installed at the Henry Bellmon Research Center in September and dedicated Oct. 24. Each of the installment's six disks represents a research discipline underway in the HBRC. Read More

Faculty Conversations video series

Faculty Conversations is 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. Toby Nelson, assistant professor of chemistry. The Nelson lab is working to develop new organic semiconductors and electronic materials and their application in organic electronics, sensors and bioelectronics.

McCright, Michigan State University, was published in the journal Environment: Science and Policy for Sustainable Development. Read More

See more news on the OSU Research website.

FEATURED EVENT

November 3

State Poet Laureate Dr. Benjamin Myers to read a selection of his work

Oklahoma's 2015-16 State Poet Laureate, Dr. Benjamin Myers, will visit Oklahoma State University Nov. 3 at 7 pm to read his poetry and work collaboratively with a group of OSU staff and students to create a piece together. The event, at the Student Union Theater, is free and open to the public. Myers is a professor of literature at Oklahoma Baptist University. Learn More

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