OSU honors faculty for excellence in research

Oklahoma State University has selected eight outstanding faculty members as this year’s Regents Distinguished Research Award winners. These faculty members maintain records of past and continuing excellence in research and are recognized nationally and internationally for achievements in their respective fields of study. Winners will be honored at the Fall Convocation later this year. The winners are:

Dr. Julie Thomas, *Division of Agricultural Sciences and Natural Resources*
Dr. Fuhlendorf’s research focuses on conservation and management of rangeland landscapes dominated by natural plants and animals. His specific goal is to understand the mechanisms responsible for persistence and dynamics of rangeland ecosystems, which aids in the development of management approaches for sustainable food and fiber production and maintenance of ecosystem services. He joined the OSU faculty in 1997 after receiving his doctorate from Texas A&M University. He has produced more than 70 peer-reviewed publications since 1996 and has been PI or co-PI on over 54 million in external grant money since 2009.

Dr. Richard Bunce, *College of Arts and Sciences*
Since joining the OSU faculty in 1985, Dr. Bunce’s research has spanned several areas in the field of organic chemistry. His group is currently working on a collaborative project to develop new antibiotics against anthrax and multi-resistant staph with Dr. Bill Barrow in the OSU Department of Veterinary Pathobiology. He and collaborators Dr. K. Danell-Berlin of OSU and Dr. Dori Benbrook of OU’s Health Sciences Center are also directing efforts toward development of an anticancer drug. The compound is entering phase I clinical trials and shows powerful activity against several types of cancer with no toxicity. Bunce is widely respected for his work with students at both the graduate and undergraduate level. He has mentored nine doctoral and seven master’s students to graduation from OSU. Throughout his career, he has also enlisted the help of more than 90 undergraduates – more than half of which went on to earn a PhD.

Dr. Riley Dunlap, *College of Arts and Sciences*
Dr. Dunlap is widely considered one of the founders of environmental sociology. He and a co-author helped establish the field in the late 1970s through a series of articles that not only defined environmental sociology but also provided an intellectual justification for it. He joined the OSU faculty in 2006. His research focuses on several environmental topics, including tracking long-term trends in public opinion on environmental issues, comparing levels of public concern for environmental quality cross-nationally, and analyzing the politics of climate change. His research is very heavily cited – 38 of his present publications have been cited at least 100 times on Google Scholar. He has been invited to give 23 keynote addresses at various conferences around the world. He has also presented 75 invited talks at a wide range of universities nationally and internationally.

Dr. Dursun Delen, *Spess School of Business*
Dr. Delen is an internationally recognized expert in the area of data mining and analytics. One of his more popular research projects aims to predict the financial success of Hollywood movies before their theatrical release. This project and others, including improving student retention and discovering knowledge from healthcare and medical data, use novel techniques based on data mining, text mining and predictive modeling. Since joining the OSU faculty in 2001, Delen has been PI or co-PI on 17 grant proposals, including one to the Dept. of Defense worth more than $2.5 million. He has authored or co-authored 40 peer-reviewed journal articles and 16 peer-reviewed conference proceeding articles. He has also authored four textbooks in the last 4 years.

Dr. Julie Thomas, *College of Education*
Over the course of her 17-year academic career, Dr. Thomas has received 19 external grants totaling nearly $2 million, published 68 refereed research papers and authored one book all under the same hypothesis: teachers who do not know much science are reluctant to teach it. Since joining the OSU faculty in 2007, Dr. Thomas has worked to position OSU as a leader in STEM education. She is the newly named president-elect of the Council of Elementary Science International and director of the OSU College of Education’s Center for Research on STEM Teaching and Learning, which supports initiatives that encourage transformative research on STEM teaching and learning across multiple colleges and programs at OSU.

Dr. Edralin Lucas, *College of Human Sciences*
Dr. Lucas’ research focuses on the role of nutrition, particularly phytoschemicals, in promoting cardiovascular health and preventing/reducing chronic disease. She uses cell cultures and animal models to understand if and how bioactive food compounds can reduce chronic conditions and then applies the information learned to develop effective prevention strategies in humans. She has been PI or co-PI of more than $4.5 million in external funding to support her work. In addition, she is a co-author of numerous peer-reviewed research articles, six book chapters and a co-editor of a book on arachidonic acid.

Dr. Pamela Lloyd, *Center for Veterinary Health Sciences*
Dr. Lloyd works in the area of cardiovascular physiology investigating mechanisms regulating blood vessel growth and how those mechanisms are altered in disease. Funded primarily by the National Institutes of Health, her lab produced the novel finding that PGI2 protein levels are increased in vascular cells by reactive oxygen species. Since joining the OSU faculty in 2006, Dr. Lloyd’s work has generated 10 journal articles and book chapters and 16 published abstracts with poster presentations at national meetings. Dr. Lloyd has also been invited to make five presentations outside of OSU. Dr. Lloyd has received more than $2 million in external funding to support her work.

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OSU joins the National Academy of Inventors

OSU’s Technology Development Center never ceases to look for new ways to support researchers and scholars in their endeavors. To that end, this year OSU became a chapter of the National Academy of Inventors and inducted its first 24 members: OSU faculty who currently hold active patents. The NAI’s mission of cultivating an entrepreneurial culture among university researchers compliments that of the TDC and its programs as well as the mission of OSU as a land-grant university to bring knowledge from the campus to the community.

NAI membership not only connects OSU inventors to other member universities and research institutions, but also provides inventors with beneficial connections to the United States Patent and Trademark Office, the National Inventors Hall of Fame, and the Association of University Technology Managers. In addition, OSU faculty members now have the opportunity to publish in Innovation and Technology-Proceedings of the National Academy of Inventors, NAI’s quarterly journal. For more information on NAI, contact the TDC at 744-6930.

OSU to host monthly Science Cafes

Following in a grassroots movement to encourage engaging conversations with scientists, OSU began hosting monthly Science Cafes this fall. Held in the Browsing Room of the OSU Library, each meeting features a different OSU research program followed by lively discussion. The events are co-sponsored by Sigma Xi, NOVA Science Now, the OSU Library and the OSU Office of Research. The meetings are free and open to the public, and refreshments are provided. For more information, contact the Library at 744-2376.

Titanic Discoverer to speak at Research Week

Oceanographer Robert Ballard will be the keynote speaker for OSU Research Week – February 18-22, 2013. One of the world’s most accomplished deep-sea explorers, Ballard has conducted more than 120 deep-sea expeditions using the latest in exploration technology. He is best known for his discovery of the RMS Titanic lost in its watery grave more than 12,000 feet beneath the cold water of the North Atlantic.

Currently a professor of oceanography at the University of Rhode Island, Ballard is also a powerful storyteller and a passionate scientific educator. He founded the Institute for Exploration and has pioneered distance learning in classrooms around the world. Through his JASON Project, 1.7 million students a year join scientists virtually as they experience the thrill of exploration and discovery.

Mark your calendars to attend Dr. Ballard’s presentation on Wednesday, February 20 at 7 pm.

OSU names 2012-13 Niblack Research Scholars

Oklahoma State University has selected 12 undergraduate students to participate in the 2012-13 Niblack Research Scholars program. Funded by a gift from OSU alumnus Dr. John Niblack, each student will receive an $8,000 scholarship and will have the unique opportunity to conduct research in a university lab, assisted by a faculty sponsor and graduate student mentor.

Niblack, who attributes his own pursuit of research as a profession to the experience he received as an undergraduate at OSU, says he funds the program to give young people that same opportunity. Niblack is the former vice chairman of Pfizer Inc. He worked as an active scientist for the multi-billion dollar pharmaceutical company from 1967-1980 directing research into drugs for viral illnesses, cancer and autoimmune disorders. He was appointed director of research for the company’s U.S. laboratories in 1980 and named president of Pfizer’s Central Research Division in 1990. He became vice chairman in 1993 and retired in 2002.

For videos highlighting the students’ research, visit research.okstate.edu/nrs.

The Niblack Research Scholars will make presentations about their findings during OSU Research Week, Feb. 18-22, 2013.

- Erin Best, a microbiology major from Katy, Texas
- Amber Douglas, a zoology major from Lawton, Okla.
- Juliet Ellison, an animal science major from Penfield, N.Y.
- Lauren Foley, a zoology major from Tulsa, Okla.
- Ryan Greenway, a zoology major from Amarillo, Texas
- Colby Gregg, an entomology and plant pathology major from Stillwater, Okla.
- Nick Jordan, a physiological sciences major from Stillwater, Okla.
- Whitney Lisenbee, a biosystems and agricultural engineering major from Jenks, Okla.
- Patrick Paul, a physics major from Tulsa, Okla.
- Forrest Rogers, a zoology major from Stillwater, Okla.
- Pete Storm, a biosystems and agricultural engineering major from Stillwater, Okla.
- Micah Webb, a physics major from Stillwater, Okla.

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World-renowned deep sea explorer CHARLES BALLARD

Discoverer of the RMS Titanic

Wednesday, February 20, 2013
OSU-Stillwater
7:00 pm

www.ResearchWeek.okstate.edu