**Scholarly Endeavors**

During Winter Break John Harris (Assistant Professor, Regional and City Planning) and Lupe Davidson (Director, OU Women’s and Gender Studies Program) traveled to Uganda with a group of OU students. There, they facilitated a photovoice project with 13 women of the Women’s Advocacy Network, a group of women who were abducted during the civil war and forced into marriages with rebels or conscripted as soldiers themselves. Afterwards, the women went out into their communities to take pictures of their everyday realities. Finally, they convened so they could present their photos to the group and tell their stories. More about the Women’s Advocacy Network can be found at [https://blogs.ubc.ca/wanuganda/](https://blogs.ubc.ca/wanuganda/).

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**OU Professor Awarded Highest Recognition by Society for Mined Land Reclamation Work**

University of Oklahoma Gallogly College of Engineering professor, Robert W. Nairn, is the recipient of the prestigious William T. Plass Award from the American Society of Mining and Reclamation. Nairn pioneered wetland technologies to rehabilitate contaminated water at the Tar Creek Superfund site where he has worked for almost 20 years. The award is the highest level of recognition given by the society in the field of mined land reclamation. Nairn transformed mine reclamation work at Tar Creek—one of the Environmental Protection Agency’s top abandoned hazardous waste sites.

“Professor Nairn’s scholarly work has had a huge impact in Oklahoma and around the world,” said OU President David L. Boren. “No one is more deserving of the Plass Award.”

Nairn, the Viersen Family Presidential Professor in the School of Civil Engineering and Environmental Science and the director of the Center for Restoration of Ecosystems and Watersheds, began working to clean up Tar Creek in the late nineties. In 2008, he and his team installed a full-scale passive water treatment system for the contaminated water discharging site near Commerce, Oklahoma. The system treats approximately 20 percent of mine drainage, rendering the treated water safe for discharge into the receiving stream. The success of this passive treatment system led to additional funding to extend the system to other discharge sites.

“It is with great pleasure that I share in the selection of Robert W. Nairn for the William T. Plass Award from the American Society of Mining and Reclamation. With this award, the society recognizes Nairn’s research, teaching and regional, national and international outreach. His career accomplishments in the field of mined land reclamation are huge and have impacted many people, including tribes, non-profits, regulatory agencies, industry and international governments,” said Randall L. Kolar, director of the School of Civil Engineering and Environmental Science.

Nairn’s work has received significant media attention over the years from local, state and national newspapers and broadcast news stations, as well as from the History Channel and Discovery Channel. In 2009, an award-winning documentary film featuring Nairn entitled “Tar Creek” was produced by Matt Myers and screened nationally and internationally. As testimony to his global impact, Nairn has expanded his mitigation work at one of the world’s oldest and largest silver mines in Potosi, Bolivia. His efforts have been widely recognized.

Previously, Nairn received the Richard I. and Lela M. Barnhisel Reclamation Researcher of the Year Award from the American Society of Mining and Reclamation for his work at Tar Creek in northeastern Oklahoma, the Arkoma Coal Basin of eastern Oklahoma, eastern Arkansas and Potosi, Bolivia. The award was given to individuals demonstrating substantive contributions to the advancement of reclamation science and technology through scientific research. Nairn was nominated for the award by his students and voted on by his peers in the society.
OU Receives Andrew W. Mellon Foundation Grant for Native American Arts Initiative

The University of Oklahoma has received an Andrew W. Mellon Foundation grant for $750,000 to support a four-year initiative to increase cultural diversity while seeking to grow a mutually beneficial relationship between OU’s doctoral program in Native American art and the Institute of American Indian Arts. The comprehensive program will increase the representation of Native Americans in curatorial and academic positions through collaboration, creativity and commitment toward the goal.

“The university is extremely pleased to receive this grant from the Mellon Foundation. It is a recognition of OU’s strong reputation in the field of Native American art,” said President David L. Boren. The program will include six core projects, including paid internships for the museum's Native American art collection and pre-doctoral fellowships, accompanied by a teaching assistantship to students dedicated to the study of Native American art and culture. A biannual museology course will provide graduate students an opportunity to study museum theories and practices and learn curatorial skills by building an exhibition from concept to installation using the museum's Native American art collections.

The OU School of Visual Arts’ nationally competitive doctoral program in the study of Native American art will be expanded in order to broaden students’ exposure to leaders in the field and improve their critical analysis of current scholarship. Graduate students will manage a symposium on a current topic in the field of Native American art history, museum studies and pedagogy, and a Mellon Foundation Distinguished Lecture Series will be established. Finally, the OU School of Visual Arts will collaborate with the Institute of American Indian Arts in Santa Fe to create a pipeline of institute graduates for OU’s graduate program to study Native American art history.

The program will be led by Heather Ahtone, James T. Bialac Associate Curator of Native American and Non-Western Art at the Fred Jones Jr. Museum of Art; W. Jackson Rushing III, Eugene B. Adkins Presidential Professor of Art History and Mary Lou Milner Carver Chair in Native American Art; and Mark Andrew White, Wylodean and Bill Saxon Director of the Fred Jones Jr. Museum of Art.

“The museum is deeply honored to receive this transformative grant from the Mellon Foundation,” White said. “The Mellon internships will allow the museum to build upon its scholarly commitment to Native American art and to continue to create innovative exhibitions and programs using resources such as the James T. Bialac Native American Art Collection and the Eugene B. Adkins Collection.

The Fred Jones Jr. Museum of Art has one of the most significant collections of Native American art in the country with more than 6,000 objects from artists of diverse tribes and nations that dates from the early twentieth century to present day.

The OU School of Visual Arts is one of the only schools in the nation to have a dedicated concentration in Native American art history, which was first established by Mary Jo Watson (Seminole), Regents Professor and Director Emeritus. In the early 1990s, Watson founded a Native art history curriculum that included a popular seminar on American Indian women artists. The OU School of Visual Arts is the only program which features two named professorships in Native American art history.
Alliance For Integrative Approaches To Extreme Environmental Event

The framework for an informal public-private partnership, involving a wide array of partner-stakeholders focused on reducing societal harm from extreme environmental events, was announced today during the Annual Meeting of the American Meteorological Society in Seattle, Washington.

Known as The Alliance for Integrative Approaches to Extreme Environmental Events, this community-initiated and community-governed framework will bring together a broad group of collaborators—including researchers, operational practitioners, federal agencies including the National Oceanic and Atmospheric Administration, non-profit organizations, philanthropists and entrepreneurs—to improve holistic understanding, prediction of and response to severe and hazardous weather. In addition, the Alliance will facilitate interdisciplinary research, and its associated transition to practice, in ways that advance the community’s collective agenda.

The Alliance was crafted in response to multiple community recommendations, particularly those made in response to several workshops focused on integrating meteorology with social and behavioral sciences. The guiding plan for the Alliance was developed as a community-wide activity led by a “writing team,” drawn from the international community of researchers and practitioners across a diverse array of disciplines. A volunteer steering committee will oversee the Alliance, and a small paid professional staff will provide day-to-day management.

“The strength of the Alliance lies in its philosophy of serving as an organizing mechanism to bring sectors, organizations and individuals together to work in an integrative fashion; in its emphasis on rapidly translating outcomes into operational practice, in its community-based governance, and in its emphasis on supporting activities that provide practical benefits for addressing needs that heretofore have gone unmet,” explained Kelvin Droegemeier, Vice President for Research at the University of Oklahoma and one of the Alliance organizers.

The Alliance is being initiated, in part, by a $3 million private gift from ImpactWX, a private social impact fund based in Toronto, Canada, with the expectation that the Alliance will obtain additional, long-term funding from a wide array of sources for a true multi-sector partnership.

More details can be found at the Alliance web site: http://alliance.ou.edu.

Faculty Recognition

- Cameron Siler (Curator of Herpetology at the Sam Noble Oklahoma Museum of Natural History, and Assistant Professor of Biology) received the Irene Rothbaum Award as Outstanding Assistant Professor in the College of Arts and Sciences. The award was established with a generous donation from Julian Rothbaum in honor of his wife. The recipient will receive a one-time award that may be used either as a salary supplement or in support of teaching and/or scholarship. The recipient also will have their name placed on a plaque for permanent display in the college office. The award is presented annually.
- Jizhong Zhou (Professor, Microbiology and Plant Biology) was appointed a Senior Editor for The ISME Journal. The three-year appointment was effective February 1, 2017.
- Fred Carr (McCasland Foundation Presidential Professor Emeritus, Meteorology) presided over the 97th Annual Meeting of the American Meteorological Society held in Seattle, WA, Jan. 21-26. Carr, who served as President of the AMS during the past year, created the theme “Observations Lead the Way” for this annual meeting. This annual meeting was attended by over 4,700 people, the largest gathering ever of atmospheric and related scientists. Over 80 School of Meteorology faculty and students attended the meeting.
OU Psychology Professor Recipient of Early Career Impact Award

A University of Oklahoma psychology professor, Edward Cokely, is the recipient of a 2017 Early Career Impact Award from the Federation of Associations in Behavioral & Brain Sciences. FABBS is a coalition of 19 professional societies representing more than 150,000 scientists worldwide. Cokely, a Presidential Research Professor and associate professor of psychology in the OU College of Arts and Sciences, is one of six scientists who received the 2017 award honoring early career professionals for major contributions to the science of mind, brain and behavior.

“It is a great tribute to Professor Cokely that he is one of only six recipients of this award in the entire nation,” said OU President David L. Boren.

Cokely has made significant advances in the psychology of skilled decision making, with applications in risk communication and adaptive technology. He is recognized as one of the world’s foremost experts on risk literacy and inclusive decision education. His research has advanced frontiers in the scientific understanding of user-friendly decision support, visual aids and training programs, including adaptive computerized tutors designed to improve high-stakes decision making of diverse and vulnerable individuals who vary widely in ability, proficiency, education background and country of residence.

“Receipt of this highly competitive award clearly indicates the quality and impact of Dr. Cokely's research, and we are most fortunate to have him at OU,” said Kelvin Droegemeier, Vice President for Research.

Cokely led the international research team that developed the Berlin Numeracy Test at the Max Planck Institute and co-founded www.RiskLiteracy.org, the multinational “science for society” project involving research groups from 28 universities in 13 countries. Today more than 100,000 people from 166 countries have taken one of the Berlin Numeracy Tests. Hundreds of recent studies by researchers in business, psychology, economics, political science, law, medicine, social work, forestry and other fields have published decision-making research using Berlin Numeracy Tests, improving understanding of the needs and processes of diverse decision makers in more than 50 countries.

“The award reflects the courage and sacrifice of so many brilliant collaborators, students and mentors. Words just can’t express my gratitude,” said Cokely.

In less than 10 years after earning his doctorate degree from Florida State University, Cokely has published more than 60 papers which have been cited in excess of 2,000 times. He has mentored 10 doctoral students and secured more than $2 million in funding for research and student support. His research has been featured in Scientific American, New Scientist magazine, Chronicle of Higher Education and other media outlets, such as The New York Times and The Wall Street Journal online. He has received major awards like the 2013 National Science Foundation CAREER Award and the American Psychology Association's Award for Best Research Paper in Applied Psychology in 2012.

Cokely is co-founding faculty of the National Institute for Risk & Resilience, an umbrella organization that facilitates collaboration among OU research centers, individual scholars and external partners on risk-related teaching, research and outreach.
Student Recognition

• OU Interior Design students, Neha Natha (second prize), Carleigh Henderson (third prize), and Nida Hyder (honorable mention), recently earned top honors in the Illuminating Engineering Society (IES) Dallas Student Lighting Competition. This is the fourth year in a row that the OU Interior Commercial Design Studio has had students place in the IES Dallas student competition. Their faculty advisor is Hepi Wachter.

• Paulina Baeza (Graduate Student, Urban Design) was awarded the 2017 Monica Pegues Graduate Leadership Scholarship by Women’s Transportation Seminar (WTS) International.

• Adam Pitluk (Doctoral Student, Journalism and Mass Communication) received the top national honor, a grand prize of the North American Travel Journalists Association Awards for Excellence in Travel Journalism.

• Kalyn Clark (Interior Design) received an honorable mention in the Steelcase NEXT competition, which asks students to “imagine the design studio of the future.” Kalyn made it into the “Top 10” out of over 800 students from 65 universities. Her faculty advisor is Natalie Ellis (Assistant Professor).

One Year of High-Quality Early Education Improves Outcomes for Low-Income Infants & Toddlers

Fewer than half of children from low-income families are considered ready for school at age 5. Since 85% of brain development occurs by age three, early child education is vital to a child’s future success in school.

A new study by OU-Tulsa and four other universities have found that infants and toddlers from low-income families who attended a high-quality, center-based early education program do better in language and social skills after only one year than children who do not attend the program. Children who participated had better language skills, fewer problem behaviors, and more positive interactions with their parents than children who didn’t participate in a program.

The study appears in the journal Child Development. It is based on research conducted at the University of North Carolina at Chapel Hill, the University of Chicago, OU-Tulsa, the University of Nebraska Medical Center, and the University of Wisconsin-Milwaukee.

“This study shows high-quality early childhood programming starting in infancy makes a difference in the lives of young children who are growing up in poverty,” said Diane Horm, Ph.D., director of the OU-Tulsa Early Childhood Education Institute. “The achievement gap has been a critical problem and this study shows the power of starting in infancy and toddlerhood, and how it will set children on a path to short- and long-term success.”

Researchers randomly assigned 239 infants and toddlers (ages 6 weeks to 19 months) from low-income families to attend or not attend local Educare programs at five schools (Chicago, Milwaukee, two in Omaha, and Tulsa). About half of the children were
High-Quality Early Education (cont’d)

African American and about a third were Hispanic. One year later, they measured the children’s language skills, observed them playing with their primary caregiver (usually mothers), and asked parents to rate their children’s social and emotional skills.

The differences between children who attended Educare and children who did not attend were larger than differences seen in previous studies of similar programs, such as Early Head Start or home visiting programs. The findings from this study extend those of the Abecedarian Project and other research suggesting that starting a comprehensive early childhood education program early can improve the outcomes of infants and toddlers from low-income families. The study will follow the children’s progress through age 5 and at that time, assess their abilities in academic areas that predict later success in school.

The research was funded by the Buffett Early Childhood Fund, the Brady Education Foundation, the George Kaiser Family Foundation, the Bill & Melinda Gates Foundation, the Ounce of Prevention Fund, and an anonymous foundation.

The ECEI is part of the OU Jeannine Rainbolt College of Education. It is one component of the Early Childhood Education research and academic programs available at OU-Tulsa.

Summarized from Child Development, Child and Parenting Outcomes After One Year of Educare by Yazejian, N (University of North Carolina at Chapel Hill), Bryant, M (University of North Carolina at Chapel Hill), Hans, S (University of Chicago), Horm, D (University of Oklahoma-Tulsa), St. Clair, L (formerly at University of Nebraska Medical Center, now at Omaha Program Evaluation Services), File, N (University of Wisconsin-Milwaukee), and Burchinal, M (University of North Carolina at Chapel Hill). Copyright 2017 The Society for Research in Child Development, Inc. All rights reserved.

New Publications

- Anthem Press published South-South Trade and Finance in the Twenty-First Century: Rise of the South or a Second Great Divergence by Omar Dahi and Firat Demir (Associate Professor, Economics) (October 2016).
- Palgrave Macmillan published Political Socialization of Youth: A Palestinian Case Study by Janette Habashi (Associate Professor, Human Relations) (January 2017).
- Architectural Engineering Institute published Torsional Bracing of Cold-Formed Roof Systems by Shideh Shadravan (Assistant Professor, Architecture) and Chris Ramseyer (Director, OU Fears Structural Engineering Laboratory) (2017).
- Utah State University Press published The Meaningful Writing Project: Learning, Teaching and Writing in Higher Education by Michele Eodice (Associate Provost for Academic Engagement and Director of the OU Writing Center), Anne Ellen Geller, and Neal Lerner (March 2017).
- Springer published A Mathematical Perspective on Flight Dynamics and Control (SpringerBriefs in Applied Sciences and Technology) by Andrea I’Afflitto (Assistant Professor, Aerospace and Mechanical Engineering) (March 2017).
- The International Journal of Education and Human Development will publish “Cognitive Health, Education and Adult Development” by Hans-Peter Wachter (Associate Professor, Interior Design). The article will be published in the March issue of the journal.
## January New Awards

<table>
<thead>
<tr>
<th>Name</th>
<th>Dept./Center</th>
<th>Funding Agency</th>
<th>Project Title</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boon Leng Cheong, Robert Palmer, &amp; Tian You Yu</td>
<td>Advanced Radar Research Center/Vice President's Office/Electrical &amp; Computer Engineering</td>
<td>Electronics and Telecommunications Research Institute</td>
<td>Experimental Validation of Coded Weather Radar for Spectrum Sharing Using Two X-Band Systems</td>
<td>$73,910</td>
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<tr>
<td>Patrick Livingood &amp; Shawn Lambert</td>
<td>Anthropology</td>
<td>National Science Foundation</td>
<td>Doctoral Dissertation Research: Ceramic Specialization, Exchange, and Communities of Practice during the Formative Caddo Period: An INAA Investigation of the Arkansas River Basin</td>
<td>$23,493</td>
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<td>Keisha Walters</td>
<td>Chemical, Biological &amp; Materials Engineering</td>
<td>National Science Foundation</td>
<td>Electricity Generation and Enhanced Heat Transfer via Pulsating Ferro-Nanofluid</td>
<td>$90,995</td>
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<tr>
<td>Si Wu</td>
<td>Chemistry &amp; Biochemistry</td>
<td>Indiana University and Purdue University at Indianapolis</td>
<td>Computational tools for top-down mass spectrometry-based proteoform identification and proteogenomics</td>
<td>$43,913</td>
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<tr>
<td>Ulrich Hansmann</td>
<td>Chemistry &amp; Biochemistry</td>
<td>University of Arkansas</td>
<td>Efficient and Accurate Force Fields for Computer-Aided-Drug Design</td>
<td>$73,596</td>
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<td>Patrick Skinner</td>
<td>Cooperative Institute for Mesoscale Meteorological Studies</td>
<td>University Corporation for Atmospheric Research</td>
<td>Quantifying the Value of Radar Data Assimilation in the Community Leveraged Unified Ensemble using Object-Based Verification Methods</td>
<td>$5,000</td>
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<td>Hazem Refai</td>
<td>Electrical &amp; Computer Engineering</td>
<td>State of Oklahoma, Dept. of Transportation</td>
<td>Integration of sensors to monitor and track road surface conditions during adverse weather conditions</td>
<td>$256,000</td>
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### January New Awards (cont’d)

<table>
<thead>
<tr>
<th>Name</th>
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<tbody>
<tr>
<td>Mark White, Heather Ahtone, &amp; William Rushing</td>
<td>Fred Jones, Jr. Museum of Art/Art &amp; Art History</td>
<td>Andrew Mellon Foundation</td>
<td>Native Pipeline</td>
<td>$750,000</td>
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<td>Garret Olberding</td>
<td>History</td>
<td>Chiang Ching-kuo Foundation for International Scholarly Exchange</td>
<td>Designing Space: The Exercise of the Spatial Imagination in Pre-Modern China</td>
<td>$13,000</td>
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<tr>
<td>Ziho Kang, Lei Ding, Randa Shehab, &amp; Han Yuan</td>
<td>Industrial &amp; Systems Engineering/Biomedical Engineering</td>
<td>U.S. Dept. of Transportation, Federal Aviation Administration</td>
<td>Universal Design for Learning and Multi-Modal Training</td>
<td>$186,000</td>
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<td>Jing Tao</td>
<td>Mathematics</td>
<td>National Science Foundation</td>
<td>CAREER: Coarse Geometry and Quasimorphisms</td>
<td>$25,276</td>
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<td>Michael Santos</td>
<td>Physics &amp; Astronomy</td>
<td>Amethyst Research, Inc.</td>
<td>Program Development for Infrared Detectors</td>
<td>$44,150</td>
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<td>John Wisniewski</td>
<td>Physics &amp; Astronomy</td>
<td>NASA–Goddard Space Flight Center</td>
<td>WISE Disks Around Cool Stars</td>
<td>$74,943</td>
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<tr>
<td>John Wisniewski</td>
<td>Physics &amp; Astronomy</td>
<td>Research Corporation for Science Advancement</td>
<td>Precovery of Super-flaring G Dwarfs for TESS using PTF and ZTF</td>
<td>$50,000</td>
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</tbody>
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Number of new awards for the month: 22
Dollar amount of proposals funded: $2,382,137.00