Research Day at the Capitol

Research Day at the Capitol is an annual event celebrating the exceptional undergraduate student research conducted on Oklahoma’s college campuses. Twenty-one student researchers represent 15 Oklahoma colleges and universities. The event was held on February 15, 2013 and is sponsored by the Oklahoma State Regents for Higher Education, the Oklahoma Experimental Program to Stimulate Competitive Research (OK EPSCoR) and the National Science Foundation. Student researchers present in a poster session on the rotunda. The University of Oklahoma Norman Campus nominates two students each year. This year’s students were Arian Davis and Hoang Nguyen.

Davis is an Anthropology student working with Dr. Paul Spicer (Center for Applied Social Research). Her work, titled “Obesity and the Environment in American Indian Communities,” addresses the importance of working within communities to solve problems with sustainable solutions. She worked with tribal communities to understand member’s perception of environment and health which were then used to develop plans for changes that promote healthy living.

Nguyen is a student in the Department of Plant Biology and Microbiology working with Dr. Laura Bartley. His research, titled “Agrobacterium-mediated transformation of Setaria viridis by floral dip,” modeled new techniques for accelerating genetic studies of grasses. This will help hasten improvements in cereal yield and biofuels production.
President's Monthly Research and Development Highlights

NSF Graduate Research Fellowships

Rachel Hartnett (Ph.D. student, Biology) has been awarded a highly competitive and prestigious three-year National Science Foundation Graduate Research Fellowship. Hartnett obtained her B.S. from UT-Austin and is currently conducting research in the laboratory of Dr. Lawrence J. Weider (Professor, Biology) on “How life-stage structuring in populations may impact community (ecology) networks using aquatic organisms (i.e. the waterflea, Daphnia) as a model system.”

Maryam Sabeghi (Aerospace & Mechanical Engineering undergraduate student) was awarded the National Science Foundation Graduate Research Fellowship to pursue her graduate education. The prestigious grant provides a stipend of $30,000 per year for three years, plus tuition and money for travel overseas. Sabeghi has chosen to stay at OU and work with her advisors, Dr. Farrokh Mistree (Director, A&ME) and Dr. Janet Allen (I&SE) as a member of the Systems Realization Laboratory at OU. She will be investigating the "Concurrent design of material and product."

American Society for Engineering Education Award

Dr. Deborah A. Trytten (Computer Science), Dr. Susan E. Walden (RISE) and Dr. Anna Wong Lowe (Oklahoma Baptist University) will receive the William Elgin Wickenden Award from the American Society for Engineering Education for their article “Asians are good at math. What an awful stereotype: The model minority stereotype’s impact on Asian American engineering students,” which appeared in the July 2012 issue of the Journal of Engineering Education. Representing the highest standards of scholarly research in engineering education, the annual Wickenden Award recognizes the authors of the best paper among the articles published in the Journal in each volume year.
President’s Monthly Research and Development Highlights

GRAMMY Foundation Grant

The University of Oklahoma’s American Organ Institute Archive and Library will preserve and provide public access to a unique organ recording collection with a first-ever grant from the GRAMMY Foundation. With this funding, the Institute continues its contribution to the legacy of organ music and the GRAMMY Foundation’s mission to preserve the nation’s vast recorded heritage.

“This grant is another example of the national and international stature of OU’s American Organ Institute,” said OU President David L. Boren. “It plays a crucial part in the preservation of the role of organ music in our society.”

The $20,000 grant will allow the Institute to restore the collection’s most treasured items, some of which are made of paper. The collection consists of 760 original and irreplaceable master organ player rolls (weighing in at 16 tons) produced by the Möller Pipe Organ Co. in the early 1920s, including organ arrangements by notable performers of the 20th century.

“This grant from the GRAMMY Foundation recognizes the extreme cultural and musical value of the Möller master rolls held by the American Organ Institute at the OU School of Music,” said Institute Director John Schwandt. “This is an important part of our mission to preserve the musical tradition of the pipe organ and reintroduce it to modern audiences in new and exciting ways, and we look forward to the time when we are able to present the finished product of this project to the public.”
5 Public Anthropology Award Winners

Congratulations to the 5 Public Anthropology Award Winners in Professor Karl Rambo's ANTH 2243 Introduction to Sociocultural Anthropology class who participated in a North American competition involving over 3,500 students from 24 schools.

Jenelle Christiansen, Annie Rischard, Jinnie Pratt, Cedar Floyd, Nicole Beard, and Kellie Seeds

Rambo has played an integral part in Public Anthropology's online student community, showcasing the ability of Oklahoma students to learn effective writing skills while being active global citizens. He demonstrates how combining technology with cultural concerns in academic courses positively engages students to participate in the broader world beyond their academic setting, while gaining the skills needed for a productive, active life after graduation. For the names of the Oklahoma Public Anthropology Award winners as well as their award winning opinion pieces click here.

http://www.publicanthropology.org/CAW/13-Spring/1-PACAP-KROK.htm

Faculty Recognition

- ARRC Research Scientist Dr. Boon Leng Cheong was invited by the Meteorological Research Institute, a division of the Japan Meteorological Agency, to present the research effort of waveform design for solid-state weather radars. With the latest development from the ARRC, there is a potential to significantly increase the radar sensitivity using an improved waveform design. The enhancement can be achieved without any hardware changes, which is highly desirable for existing solid-state based weather radars as their transmit power is limited.

- Dr. Maureen Taylor (Journalism and Mass Communication) wrote a report titled “Mitigating Media Incitement to Violence in Iraq” for the United States Institute of Peace Special Report (www.usip.org). This report summarized a four-year project that supported Iraqi media, regulators and civil society media monitors through research efforts to identify, define and measure the prevalence of inflammatory terms on the top five satellite stations. Taylor's research and trainings supported the Iraqi media in efforts to avoid inflammatory language in elections coverage. Additionally, Taylor worked with a network of Iraqi media monitoring NGOs (Adaa) to apply locally generated self-regulatory tools in advance of the next election period (April 2013).

- Dr. Alan McPherson (International & Area Studies) will give the keynote address at the Phi Alpha Theta (History Honors Society) induction dinner at the University of Texas-Commerce on Friday, April 26, 2013. The address will be titled “The Irony of Legal Pluralism in U.S. Occupations in Latin America.”
March New Awards

- Ramadan Ahmed
  School of Petroleum & Geological Engineering
  "Advanced Study on Rheology of Modern Drilling Foams"
  UN-TEES
  $109,619

- M. Altan
  School of Aerospace & Mechanical Engineering
  "Measurement of Thermal Conductivity of Insulation Materials Containing Moisture"
  ConocoPhillips
  $35,000

- Megan Elwood Madden
  School of Geology & Geophysics
  "Mars Brine Attacks: Investigating Mineral Weathering Reactions in Near-eutectic Brines"
  NAS-HDQ
  $91,175

- Jonathan Gourley
  Cooperative Institute for Mesoscale Meteorological Studies
  "NMQ-FLASH-LANDSLIDE (NFL): Utilization of NASA Earth Observations into a NOAA-Coupled Flood and Landslide Prediction System over the U.S.”
  NAS-HDQ
  $173,251

- Scott Hammerstedt
  Archaeological Survey
  "National Register of Historic Places Registration Forms for the Beattie's Prairie Site (2nd site of Fort Wayne), Delaware County, Oklahoma”
  OK-HIST
  $9,570

- Scott Hammerstedt
  Archaeological Survey
  "National Register of Historic Places Registration Forms for Bushyhead Depot Site (1st site Fort Wayne), Adair County in Oklahoma”
  OK-HIST
  $9,570

- Yang Hong
  Advanced Radar Research Center
  "A Research Framework to Bridge Gaps Between GPM Core and Constellation Sensors Using Polarimetric National Mosaic QPE (NMQ) Network”
  NAS-HDQ
  $137,558

- Hank Jenkins-Smith
  Center for Applied Social Research
  "Consent-Based Siting Summary Analysis”
  SANDIA
  $30,000

- Youngsun Jung
  Center for Analysis & Prediction of Storms
  "Development of a Polarimetric Radar Data Simulator for KLAPS”
  IN-KMA
  $176,712

- Kathleen Keranen
  "The 2011 Oklahoma Earthquake Sequence and the Role of Fluid Injection in Triggering Earthquakes: Collaborative Research with the University of Oklahoma, and Columbia University”
  DOI-USG
  $40,300

- Chuanbin Mao
  Department of Chemistry & Biochemistry
  "Complex Nanocomposites for Bone Regeneration”
  DOE-LBL
  $150,000

- Chuanbin Mao
  Department of Chemistry & Biochemistry
  "Genetically Displaying Peptides to Direct Osteogenic Differentiation of iPSCs on Nanopatterns”
  NP-OCASCR
  $67,200
March New Awards

- Jeremy Wance  
  Fine Arts Dean  
  “American Organ Institute Sound Recording Preservation”  
  FD-GRAMMY  
  $20,000

- Steven Wells  
  School of Social Work  
  “Oklahoma LEND: MCH Interdisciplinary Leadership Grant - Core Faculty Member in Social Work”  
  HSC  
  $12,262

- Ming Xue  
  Center for Analysis & Prediction of Storms  
  “Establishment of Precision Weather Analysis and Forecasting Systems (PWAFS) for the Jiangsu Province Meteorological Bureau (JSMB)”  
  IN-NRIET  
  $505,412

- Ming Xue  
  Center for Analysis & Prediction of Storms  
  “Establishment of an Urban-Scale Weather Forecasting System (USWFS) for the Su Zhou Meteorological Bureau (SZMB)”  
  IN-NRIET  
  $126,814

- Yan Zhang  
  Advanced Radar Research Center  
  “Knowledge-Based Wind Turbine Radar Clutter Mitigation”  
  Remcom  
  $52,438

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