Student Achievements

- Amber Neely (Ph.D. student, Anthropology) received an NSF Doctoral Dissertation Improvement grant to conduct fieldwork with the remaining Kiowa speakers. Neely’s dissertation is on the structural changes in the Kiowa language since it was first recorded in the early 20th century discussing how these changes are influenced by language decline, and how the Kiowa community interprets these changes.

- Laura Brunson (Ph.D. student, CEES) is the recipient of the 2011 EPA Science to Achieve Results Fellowship for research on safe drinking water with a focus on the Rift Valley area of Ethiopia. Brunson will receive up to $42,000 per year for a three-year period to support her demonstrated commitment and ongoing research on safe drinking water solutions for developing countries.


- Gina Hodges (M.S. student, CEES/ARRC) was awarded a 2011 National Science Foundation Graduate Research Fellowship Program Fellowship to research flash flood prediction. Hodges will receive $30,000 a year for the next three years to investigate her proposed research topic, Prototyping a Flash Flood Prediction System Using Next Generation Radar Observations and Storm Scale Rainfall Forecasts.

Faculty Fellowships

- Professor Jonathan B. Forman (Law) was recently awarded an Abe Greenbaum Fellowship by the Australian School of Taxation and Business at the University of New South Wales (UNSW). Professor Forman spent most of his fellowship time working with UNSW Senior Lecturer Gordan Mackenzie on a paper and speech entitled Pension Reform: What Can the United States and Australia Learn from Each Other?

- Dr. Jennifer Saltzstein (Music) received a two-month residential research fellowship awarded by the Huntington Library Foundation. Saltzstein will conduct research on medieval manuscripts housed at the Huntington Library in San Marino, California.
President’s Monthly Research and Development Highlights

New Books

- Cambridge University Press has published *Geoinformatics: Cyberinfrastructure for Solid Earth Sciences* by Dr. G. Randy Keller (Geology & Geophysics).

- Wiley/IEEE Press has published *Free Space Optical Networks for Ultra-Broadband Services* by Dr. Stamatios Kartalopoulos (Telecommunications Networking).

- Counterpath Press has published *Yínghēlìshi: Sinophonic English Poetry and Poetics* by Dr. Jonathan Stalling (English).

- SUNY Press has published *Mortality in Traditional Chinese Thought* by Dr. Amy Olberding (Philosophy).

- Emerald Group has published *Women of Color in Higher Education: Contemporary Perspectives and New Directions* by Drs. Brenda Lloyd-Jones (Human Relations) and Gaetane Jean-Marie (Education Leadership and Policy Studies).


- Routledge has published *The Decline of Regionalism in Putin’s Russia* by Dr. J. Paul Goode (Political Science).

- John Wiley & Sons, Inc. has published *Porous Media Transport Phenomena* by Dr. Faruk Civan (P&GE).

- New York: John Wiley & Sons has published *Carbon Nanotube-Polymer Composites: Manufacture, Properties, and Applications* by Dr. Brian Grady (CBM&E).

- UK: Palgrave Macmillan has published *Post-Wall Berlin: Borders, Space and Identity* by Dr. Janet Ward (History).

- Leiden: Brill Academic Publishers has published *A Companion to Marie de France* and Amsterdam and New York: Rodopi has published *Li premerains vers*: Essays in Honor of Keith Busby by Dr. Logan Whalen (Modern Languages, Literatures, and Linguistics).

Recognition

Kyle Bergersen (Asst. Prof., Broadcast & Electronic Media) won the faculty screenwriting competition at the University Film and Video Association for his script, *Bertolt Brecht Goes Hollywood.*
President’s Monthly Research and Development Highlights

Faculty Recognition

- Dr. Robert Nairn (CEES) and the OU Center for Restoration of Ecosystems and Watersheds was featured in the U.S. Environmental Protection Agency publication, “Technology News and Trends,” 2011. Successful water quality improvement by the Mayer Ranch passive treatment system was highlighted.

- Dr. Paul Minnis (Anthropology) has been selected for a Sigma Xi Distinguished Lectureship for 2012-1013.

- Drs. Louis Ederington, Chitru Fernando, Scott Linn (Finance) and finance doctoral student Anthony May presented their final report “Factors Influencing Oil Prices: Current State of Knowledge and Future Research Directions” on their 2010-11 Business Energy Solutions Center (BESC) research contract with the U.S. Department of Energy, Energy Information Administration. A second BESC-EIA research contract on “The Effect of Futures Trading on Spot Oil Prices” led by Louis Ederington and Chitru Fernando, and including finance doctoral student Kate Holland was awarded by the DOE in June 2011. For the second consecutive year, Louis Ederington and Chitru Fernando were invited to represent the University of Oklahoma at the U.S. DOE’s annual “Energy and Financial Markets” workshop in Washington, DC.

- Dr. Teresa Bell (Modern Languages, Literatures, & Linguistics) was elected Foreign Language Teacher of the Year for the state of Oklahoma for 2012.

- Dr. Phillip Chilson (SoM/ARRC) has been appointed to serve on the Unmanned Aerial Systems Council (UASC) by Oklahoma Governor Mary Fallin. The UASC will review all development of Unmanned Aerial Systems (UAS) and related technologies in the state. The council will act as an advisor to the governor on all issues related to UAS, including education, economic development, job creation and investments. Dr. Chilson is a professor in the School of Meteorology and is currently working on developing an unmanned aerial system for atmospheric observations.

- Dr. George Richter-Addo’s (Chemistry & Biochemistry) publication titled “Hemoglobin Degradation Compounds Revealed” was recently featured in the Chemical & Engineering News as a “Science & Technology Concentrate.”
Discovering Oklahoma

Dr. Julia Abramson (MLL&L) recently published “Key Ingredients: Discovering America—and Oklahoma—by Food.” Her article addresses the historical ironies and consequences of the sudden encounter in about 1910, due to the modernizing force of the trains, of the rustic indigenous and homesteader food cultures, with the imported haute cuisine perfected in George Escoffer's France. The article also introduces the Smithsonian Institution exhibit on American food history that will be on display in six different communities in Oklahoma over the next year, and for which, through the Oklahoma Humanities Council, Julia is serving as the State Research Scholar.

Community Service

- Prof. Scott Hodgson (Broadcasting & Electronic Media) just completed eight commercials for the Illinois Emergency Management Agency. The spots are part of a FEMA grant to increase awareness about how to survive earthquakes.

- Dr. Hugh Benson (Philosophy) has returned from seven months as Leverhulme Visiting Research Professor at King's College London. While in the UK, Benson gave a series of lectures at King’s College and elsewhere and worked on a manuscript devoted to an examination of the method of learning or knowledge acquisition promoted in the dialogues of Plato's middle period.

- Dr. Jizhong Zhou (Botany & Microbiology) has been appointed a member of the American Society for Microbiology's Committee on Environmental Microbiology of the Public and Scientific Affairs Board (PSAB).

- Dr. Stephen H. Norwood (History) recently delivered invited lectures on his book The Third Reich in the Ivory Tower (Cambridge University Press) at Hebrew University in Jerusalem, Israel; the U.S. Holocaust Memorial Museum in Washington, D.C.; Yale Interdisciplinary Initiative for the Study of Anti-Semitism, Yale University; and at New York University.
Student Internship

Malcolm Zachariah (Senior, Biochemistry) was recently selected for a 15-week internship at NASA’s Jet Propulsion Laboratory (JPL). At JPL, Malcolm will work closely with NASA scientists to understand how the harsh conditions of outer space influences the structure of DNA, the genetic basis for life. Malcolm will receive a $9000 stipend during his stay.

Dr. Steven P. Wells and Dr. Tonia Caselman (Social Work) served as trainers and consultants in a service contract with Tulsa Cares, Inc., a private not-for-profit, community-based company serving people with HIV-AIDS. Wells and Caselman provided services to the agency social services staff to develop motivational interviewing counseling skills for working with their consumers.

Dr. Donna Nelson (Chemistry & Biochemistry) has created a program in response to the American Chemical Society called "Chemistry Coaches." This is a collaboration between universities and high schools, and in particular, the type of collaboration which supports and benefits the high school. Student volunteers from the CHEM 3153 class "Organic Chemistry 2" are volunteering at Norman High School as tutors and lab assistants in their chemistry classes.

Dr. Krishnaiyan Thulasiraman (Computer Science) visited the National Chiao-Tung University (NCTU), Hsinchu, Taiwan supported by the National Council of Taiwan during summer 2011 for collaboration on a network engineering project. Thulasiraman also visited several academic and research institutions in Taiwan to give lectures and explore opportunities for collaboration.

The Council for International Exchange of (CIES) has appointed Dr. Thomas Kang (CEES) to serve on the 2010-2011 Urban Planning Peer Review Committee for the Fulbright Specialist Program.

Dr. Mary Linn (Anthropology) held the Breath of Life/Silent No More Workshop at the SNOMNH May 20-25, 2011. This workshop was for Native Americans from tribes that no longer have fluent speakers on how to find archival materials on their languages, training in linguistics so that they can read and use the materials, and how to renew languages that are no longer spoken.
**Funding**

Dr. Jim Shaffer (Physics) has been awarded a $1.18M grant this year from the Defense Advanced Research Projects Agency (DARPA) for his project titled “A Rydberg Atom Electric Field Sensor.”

Dr. Yun Wang (Physics) has been awarded $230,000 by the DOE Office of Science for a project titled “Theoretical Tools for Measuring Dark Energy from Galaxy Clustering.”

Dr. Patricia Gilman (Anthropology) has been awarded support for a graduate assistant from The Bureau of Land Management, Las Cruces, New Mexico. Gilman and the graduate student will be determining the locations of large archaeological sites in southwestern New Mexico and comparing the roles of the people who lived on such sites in the core area versus the hinterlands.

Dr. Kenneth Nicholas (Chemistry/Biochemistry) has received $438,000 from U.S. DOE- Basic Energy Sciences for his project titled “Catalytic Deoxydehydration of Carbohydrates and Polyols to Chemicals and Fuels.”

Architecture Professor Daniel Butko and Dr. Lisa Holliday have recently been awarded an EPA P3 grant for $14,890 for their project titled “Comparing the Sustainability of a Compressed Earth Block House to a Conventionally Framed House Built to National Green Building Standards.”

A faculty team from the Department of Geography and Environmental Sustainability and the School of Civil Engineering and Environmental Science has begun a two-year project to assess the effects of climate change-induced flooding on urban watersheds in Austin, Dallas, Houston, Oklahoma City and Tulsa. Drs. Mark Meo (GES), Scott Greene (GES), Yang Hong (CEES), and Baxter Vieux (CEES) will incorporate data from atmospheric-oceanic general circulation models into watershed flood models and present visualizations of potential future flood events to focus groups comprised of public works professionals and urban planners in each of the five cities. Results from the project are expected to help cities plan for urban climate adaptation. The $300,000 project is funded by National Oceanic and Atmospheric Administration (NOAA). The project is titled “Climate Variability, Urban Floods and Stakeholder Capabilities: Linking Severe Weather Impacts to Community Users with Modeling and Visualization.”

The Research Institute for STEM Education (RISE), part of the College of Engineering Sooner Engineering Education (SEED) Center, was recently awarded $1.498M from the National Science Foundation Directorate for Education and Human Resources STEM Talent Expansion Program. The RISE team from the College of Engineering comprises Dr. Susan Walden (RISE/SEED), Cindy Foor (RISE), Dr. Deborah Trytten (CS), and Dr. Randa Shehab (IE). Their mixed methods study, “The Privilege of Student, Experiential Learning, Engineering Competition Teams (SELECT),” will investigate the cultures of engineering student competition teams and how those cultures contribute to images of inclusion or exclusion and impact equitable participation in engineering.
Zoology

Dr. Ingo Schlupp (Zoology) ranks as one of the top 20 most cited behavioral biologists from a German-speaking country. Schlupp received the $65,000 award for his outstanding research record and contributions in the field of evolutionary biology, with a special focus on animal behavior. Schlupp will spend one year at the University of Potsdam in Germany beginning Aug. 2011, where he will work on genomics of a unisexual fish, the Amazon molly.

Drs. Yang Hong (CEES/ARRC), Li Song (AME), Renee McPherson (OCS), and Meijun Zhu (Math) have been awarded $118,934 from the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) for their project titled “Developing Standard Procedures for Filling Climatic Data Gaps for use in Building Energy Performance Monitoring and Analysis.”

Dr. Yang Hong (CEES/ARRC) has been awarded $40,000 from NASA for his project titled “Automated Tracking of Earth Science Phenomena for Ingest into a Moving Object Database to Enable Systematic Studies.”

Drs. Guifu Zhang (SoM), Ming Xue (SoM/CAPS), Terry Schuur (CIMMS), and Boon Leng Cheung (ARRC) were awarded a $637,727 grant from the National Science Foundation (NSF) to study precipitation microphysics using multi-frequency polarimetric radar observations and data assimilation.

Dr. Guifu Zhang (SoM) received $25,005 from Lockheed Martin Corporation to define performance objectives and technical approaches for developing the future network of multi-mission phased array radars for weather surveillance, air-traffic control, and target detection & recognition.

Dr. Friederike Jentoft (CBME) received $100,000 from the ACS Petroleum Research Fund for her project titled “Novel Mixed Metal Carbide Catalysts.”

Dr. Roger Harrison (CBME) received a 3-year $135,000 grant from OCAST for “Enzyme Prodrug Therapy to Treat Metastatic Breast Cancer.”

Dr. Samuel Cheng (ECE) was recently awarded $376,433 from the National Science Foundation (NSF) for his project titled "III: Small: Reformulating Distributed Source Coding using Graphical Inference for Sensor Networks."

The College of Continuing Education has received awards for the following: Invest Ed from the Oklahoma Securities Commission for $2,436,969 and the Sooner Flight Academy from the Oklahoma Aeronautics Commission for $70,000.

Dr. Yefim Kogan (Som/CIMMS) received a $594,221 grant from the DoD Office of Naval Research titled “Parameterization of Cumulus Convective Cloud Systems in Mesoscale Forecast Models.”

ARRC faculty members Drs. Yan Zhang and Boon Leng Cheong, along with Dr. Victoria Duca Snowden (NASA Space Grant Consortium) received notification from NASA's Experimental Program to Stimulate Competitive Research (EPScoR) that their proposal titled "Solid-State Radar Transceiver Optimization through Adaptive Pulse Compression for Spaceborne and Airborne Radars" was recommended for funding in the amount of $750,000.
**2011 Thomas A. Middlebrooks Award**

Dr. Kianoosh Hatami (CEES), Brian Grady (CBME), and Matthew C. Ulmer’s (former student) 2009 ASCE paper titled “Sensor-Enabled Geosynthetics (SEG)” has won the 2011 Thomas A. Middlebrooks Award which is a prestigious national award in geotechnical engineering by the Geo-Institute of ASCE. This paper was the most-downloaded paper in the Journal of Geotechnical and Geoenvironmental Engineering when it was available online prior to its hardcopy publication in July 2009. Hatami and Grady would like to acknowledge the support they have received from the College of Engineering, the Office of the Vice President for Research, and the Office of Technology Development on their SEG project. They would also like to thank Dr. Muralee (CEES) for nominating their paper for the 2011 award competition.

**OU-Led Research Team Receives $1.28 Million Grant**

Improving energy output from switchgrass plants during conversion to biofuels is the focus of a study being conducted by Dr. Laura Bartley (Botany/Microbiology) and funded by a $1.28M grant from the U.S. Department of Energy. Bartley (Botany/Microbiology) will work with researchers from Oklahoma State University and the Samuel Roberts Noble Foundation to identify ways to boost the efficiency of biofuel production from switchgrass plants. The quality and chemical structure of plant materials, such as leaves and stems, critically impacts the efficiency of conversion of these materials to biofuels.

**Josephson Returns to the Metropolitan Opera in NYC**

Kim Josephson (Music) is on sabbatical this semester and will return to the Metropolitan Opera in NYC, performing in Philip Glass’ Opera *Satyagraha*. Josephson will be singing the role of Mr. Kallenbach. This opera runs from Nov. 4th-Dec. 1st and will be airing at HD Theaters throughout the US, including the Norman’s Hollywood Spotlight 14, OKC’s Tinseltown, and OKC’s Quail Springs Theaters on November 19th at 11:55am.