Congratulations to the Recipients of the 2011-2012 Faculty On-Campus Grant Awards

Principal Investigator (PI): Dr. Alaeddin Abu-Abed
Co-Principal Investigators (Co-Pls): Dr. Evan Lemley and Dr. Mohamed Bingabr
Title: Innovative Blood Shear Stress Measurement Technique using Liquid Crystal
Regular Grant
College of Mathematics and Science

PI: Dr. Troy Baird
Co-PI: Dr. Michelle Haynie
Title: Sexual Selection, Genetic Measures of Male Reproductive Success, and the use of Chemical Signals in Male Collared Lizards
Regular Grant
College of Mathematics and Science

PI: Dr. David Bass
Title: Distribution of the Recently Introduced Crayfish, Procambarus alleni, and its Impact on Aquatic Community Structure on Grand Cayman
Mini Grant
College of Mathematics and Science

PI: Dr. Jim Bidlack
Title: Use of Exogenous Jasmonic Acid Treatment to Promote Drought Tolerance in Switchgrass
Regular Grant
College of Mathematics and Science

PI: Dr. Robert Brennan
Title: Staphylococcus aureus Biofilms and Chronic Wound Pathogenesis
Regular Grant
College of Mathematics and Science

PI: Dr. Christopher Butler
Title: Combining Geolocators with Multiple Stable Isotope Analyses
Regular Grant
College of Mathematics and Science

PI: Dr. Joselina Cheng
Co-Pls: Dr. Mark McCoy, Dr. Michelle Hepner, and Dr. David Noel
Title: An Emergent Model for Promoting Digital Forensics Career & Workforce Development - e Tutor Pilot Test
Pedagogical Grant
College of Business Administration

PI: Dr. Lilian Chooback
Co-PI: Dr. William Karsten
Title: Mechanistic Studies of Dihydricolinate Synthase
Regular Grant
College of Mathematics and Science

PI: Dr. Trey Cone
Co-Pls: Dr. Brady Redus, Dr. Debbie Traywick, and Dr. Rachelle Franz
Title: Effective Methods to Measure Moderate to Vigorous Physical Activity among Oklahoma Physical Education Students
Regular Grant
College of Education and Professional Studies
PI: Dr. Rachelle Franz  
Co-PIs: Dr. Melissa Powers and Dr. Jerel Cowan  
Title: Functional Intergenerational Training (FIT) Program: Phase Two  
Community Partnership Grant  
College of Education and Professional Studies

PI: Dr. Michelle Haynie  
Co-PI: Dr. Christopher Butler  
Title: Assessing the Dynamics and Extent of a Neotoma Contact Zone through use of Molecular Techniques and Ecological Niche Modeling  
Regular Grant  
College of Mathematics and Science

PI: Dr. Ted Honea  
Title: Comprehensive History of Music Education  
Regular Grant  
College of Fine Arts and Design

PI: Dr. Kuang-Chung Hsu  
Title: The Interaction between International Outsourcing and Labor Union’s Preference  
Regular Grant  
College of Business Administration

PI: Dr. Randall Ice  
Co-PI: Dr. Jessica Sheetz-Nguyen  
Title: The Lloyd’s of London and the Rise of the Information Age: 1850-1914  
Interdisciplinary Grant  
College of Business Administration

PI: Dr. Yuhao Jiang  
Title: Quantitative Image Analysis of Optical Properties of Prostate Cancer  
Regular Grant  
College of Mathematics and Science

PI: Professor Amy Johnson  
Co-PI: Dr. Catherine Webster  
Title: Think Different: Making a Case for Teaching Design Thinking as a Part of Undergraduate Core University Curriculum  
Pedagogical Grant  
College of Fine Arts and Design

PI: Dr. Morshed Khandaker  
Title: Evaluation of Composite Cement Mantles Fatigue Failure of Steel-composite Cement Joints: an experimental hip simulator and a finite element analysis model  
Regular Grant  
College of Mathematics and Science

PI: Dr. Hari Kotturi  
Co-PI: Dr. Umar Shadid  
Title: Novel Effect of Bitter Melon (Momordica charantia) Fruit Extract on Amelioration of colitis in Mice  
Regular Grant  
College of Mathematics and Science

PI: Dr. Lalit Manral  
Title: A Dynamic Model of Demand Competition
**PI: Steven Meier**  
Title: *Synthesis of a NNC Ligated Ruthenium Complex for C-H Activation and Functionalization*  
College of Mathematics and Science  

**PI: Dr. Tracy Morris**  
Co-PI: Dr. Cynthia Murray  
Title: *Continuation of Project SCHOLAR (Statistical Consulting Help for Organizational Leaders and Academic Researchers)*  
College of Mathematics and Science  

**PI: Dr. Melissa Powers**  
Co-PI: Dr. Hillar Klandorf  
Title: *Resistance Training Combined with Balance Training to Improve Body Composition and Functional Outcomes among Older Adults*  
College of Education and Professional Studies  

**PI: Dr. William Radke**  
Co-PI: Dr. Rukmini Ravikumar  
Title: *The Effect of Allopurinol, Uric Acid, and Inosine Supplementation on Xanthine Oxidoreductase Gene Expression in Broiler Tissues*  
College of Mathematics and Science  

**PI: Professor Rukmini Ravikumar**  
Co-PI: Professor Amy Johnson  
Title: *Historical preservation through exhibition design: The Arcadia, Oklahoma Round Barn Project*  
College of Fine Arts and Design  

**PI: Dr. Tess Remy-Schumacher**  
Title: *The interpretation of Ludwig van Beethoven’s Sonata op. 5,1 for Violoncello and Piano: Comparative Analyses and CD recording on Historical instruments versus Modern Instruments and E-Instruments*  
College of Fine Arts and Design  

**PI: Dr. Linda Rittner**  
Co-PI: Dr. Jill Devenport  
Title: *Science and Mathematics Efficacy, Contents and Pedagogical Knowledge of Elementary In-Service and Pre-service Teachers*  
College of Education and Professional Studies  

**PI: Dr. Jessica Sheetz-Nguyen**  
Title: *From Victorian to Twenty-first Century Women Research, Writing, and Creative Activities*  
College of Liberal Arts  

**PI: Dr. Rash Shukla**  
Co-PI: Dr. Elaine Bartgis  
Title: *Understanding Methamphetamine Manufacturing in Oklahoma*
Co-PI: Dr. Brooke Stabler
Title: *Microhabitat characteristics and the distribution of Mediterranean Geckos (Hemidactylus turcicus) across the University of Central Oklahoma Campus*

PI: Dr. Thanh Tran
Co-PI: Dr. Stefan Genchev
Title: *Accepting Consumer Returns in a competitive Business Environment*

PI: Dr. Melville Vaughan
Title: *Myofibroblast and senescence effect on tumorigenesis in a tension-maintaining skin equivalent*

PI: Dr. Ethan Waples
Co-PIs: Dr. Holly Osburn and Dr. Shane Connelly
Title: *Developing a Measure of Ethical Decision-Making in Business*

PI: Dr. William Wardrope
Co-PIs: Dr. Mickey Hepner and Dr. Zhen Zhu
Title: *A Study of Economics Curricula at Universities Accredited by The Association to Advance Collegiate Schools of Business International*

PI: Dr. Brad Watkins
Co-PI: Dr. Gloria Caddell
Title: *Landscape Level Mapping of Eastern Redcedar Encroachment at the Selman Living laboratory*