

# THE SOURCE

OFFICE OF SPONSORED PROGRAMS

## SWOSU fair features over 200 researchers

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proposals....page 2**

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**JUNE 30**  
**Is the deadline to**  
**submit scholarly and**  
**academic activity**  
**reports for Inclusion**  
**in the FY15 Scholarly**  
**and Academic**  
**Activity Report**  
**published by the**  
**Office of Sponsored**  
**Programs.**  
**Details on page 4.**



SWOSU's 22nd Annual Research and Scholarly Activity Fair included dozens of research projects presented by more than 200 students and faculty. With their poster presentations (photo above), are Corrine Stanley, Venia Trevino, Diamon Miller, Aaron Daugherty, Tashiana Holley, Shelby Bolton, and Sara Robinson. Discussing research projects with fair visitors are Maryam Askar Alkhaibari (below left), Yu-Hsuan Liu (below upper right), and Josiah Langley (below lower right). The event was April 14 in the SWOSU Memorial Student Center. See more fair information and photos on pages 5-12.



**Office of  
Sponsored Programs**

Dr. Yolanda Carr  
Director

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Diane Fitzsimmons  
Grants Specialist

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# GRANTS, CONTRACTS, AND PROPOSALS

## AWARDS

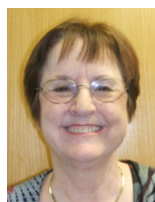
The following grants and contracts were **awarded** to Southwestern Oklahoma State University faculty since the last report:



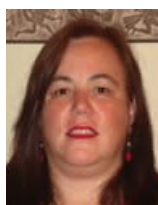
**Lisa Appeddu**, Pharmaceutical Sciences; **Lori Gwyn**, Chemistry and Physics; **Cindi Albrightson**, Engineering Technology; **Jorie Edwards**, Psychology; and **Kristin Woods**, Psychology. *Tech Trek at SWOSU*. \$10,500.



**Madeline Baugher**, Accounting, Computer Science, and Entrepreneurship. *Oklahoma Space Grant Consortium - NASA Scholarships and Workforce Development*. \$16,315.



**Lori Gwyn**, Chemistry and Physics. *Travel to Ames Research Center*. NASA Oklahoma EPSCoR. \$3,000.



**Andrea Holgado**, Biological Sciences. *Analysis of Autophagy on the developing nervous system*. OK-INBRE Mini-Grant. \$25,000.

**Andrea Holgado**, Biological Sciences. Oklahoma INBRE Undergraduate Summer Research Program: *Analysis of Autophagy in Neurons*. Oklahoma State Regents for Higher Education. \$2,200.

**Tim Hubin**, Chemistry and Physics. *Hull Postdoctoral Support*. The University of Hull. \$10,000.

**Tim Hubin**, Chemistry and Physics. *Oklahoma INBRE Undergraduate Summer Research Program: INBRE Summer Student*. Oklahoma State Regents for Higher Education. \$2,200.



**Faruk Khan**, Pharmaceutical Sciences. *SWOSU/University of Dhaka Academic/Research Exchange Program*. UniMed & Uni-Health Manufacturers Ltd. \$10,000.

**Doug Misak**, Center for Economic and Business Development. *Partnership Recognition Program*. Oklahoma State Regents of Higher Education. \$500.



## PROPOSALS SUBMITTED

The following proposals were **submitted** by Southwestern Oklahoma State University faculty since the last report:



**Jamie Novey**, Upward Bound. *Upward Bound Program. Summer Food Services Program for Children*. State Department of Education/U. S. Department of Agriculture. \$6,100.

**Rickey Cothran**, Biological Sciences. *A survey of vernal pools in the Ouachita Mountain-Arkansas River Valley-Gulf Coast Plain Conservation Region with an emphasis on species of greatest conservation concern*. Oklahoma Department of Wildlife Conservation. \$87,991.



**Doug Misak**, Center for Economic and Business Development. *SWOSU Technical Assistance Program. Economic Development Administration*. \$102,000.

Faculty interested in pursuing grant opportunities can contact the Office of Sponsored Programs about conducting a funding opportunity search. The process can be started by completing the Research/Scholarly Activity Interest Profile at the Office of Sponsored Programs web site at [www.swosu.edu/administration/osp/osp\\_interest\\_survey.aspx](http://www.swosu.edu/administration/osp/osp_interest_survey.aspx)



# SCHOLARLY AND ACADEMIC ACTIVITY

The Office of Sponsored Programs has been notified of the following Scholarly and Academic Activities since the last newsletter:



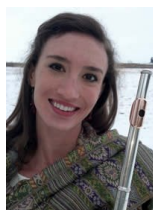
**Fred Gates**, History, recently served as a discussant on “Great Expectations? Curricular and Accreditation Standards in Teaching Economics and History” and as a session chair of “Decisions, Decisions: Economics and American Law” at the Economic and Business History Society annual meeting in La Crosse, WI.

**Barry Gales**, Pharmacy Practice, served as reviewer for “Risk of New-Onset Diabetes Associated with Statin Use” in *The Annals of Pharmacotherapy*. He also was a recent guest speaker on “Drug Interactions” at Great Plains Family Medicine & Integris Baptist Medical Center in Oklahoma City.



**Jacqueline Gregory**, Pharmacy Practice, gave a poster presentation of “Exposing Students to the Importance of Pharmacy Advocacy” at the annual meeting of the American Association of Colleges of Pharmacy in Dallas, Texas.

**Howard Kurtz**, Criminal Justice, is serving as a Peer Reviewer of state-level grants for the National Office of Justice Programs in Washington, D.C. He also wrote a chapter in the Encyclopedia of Corrections, Wiley-Blackwell’s International Encyclopedia Series in Criminology and Criminal Justice. His chapter is titled, “United Kingdom, Corrections.”



**Shelley Martinson**, Music, was recently honored as the winner of the Arts Venture Competition by the National Flute Association and was appointed to the Career and Artistic Development Committee of the National Flute Association. She also served as a judge in the association’s 2015 Newly Published Music Competition in Washington, D.C. Martinson also attended the recent Florida

Flute Association Convention in Orlando, Fla., where she presented “Idea to Action: Implementing & Funding Artistic Projects.” Her performances at the same convention included playing in the Flute New Music Consortium performance of “Music by Living Composers” and in the Traverso Colore performance “Fireworks for Baroque Flute.” Other recent activities included:

- Being appointed as Flute Fair and Grants Chair of the Oklahoma Flute Society.
- Giving a guest performance and presentation at the Florida State University Flute Alumni Festival in Tallahassee, Fla.
- Presenting a guest artist recital and master class at Oklahoma Baptist University, Shawnee, Okla.
- Performing a faculty solo flute recital at Southwestern Oklahoma State University
- Giving a guest artist performance and clinic at the Oklahoma Flute Society in Oklahoma City.
- Presenting a guest artist master class, performance, and clinic at the Kansas State University Flute Day, Manhattan, Kan.



**W. Steven Pray**, Pharmaceutical Sciences, has recently written several journal articles. They include “Examining Nonprescription Options for Heartburn,” “Preventing Abuse and Addiction with Nonprescription Products,” “Philanthropic Pharmacy: Helping Patients in Need,” “Self-Care of Rhinitis During Pregnancy,” “Urinary Tract and Kidney Warnings on Nonprescription Products,” “Advice for Patients with Tremor,” “Proper Use of Nonprescription Nasal Sprays,” “Counseling Patients with Ingrown Toenail,” “New Statin Risks and the Battle for OTC Status,” “Treating Arthritis with Nonprescription Products and Devices,” and “Advising Patients About Cold Sores,” all published in *U.S. Pharmacist*; “Recent Actions of the Food and Drug Administration Against Illegal Homeopathic Products” in *Focus on Alternative and Complementary Therapies*; “Homeopathic Products Have No Place in the Pharmacy,” “Ten Pharmacists, Two Generations,” and “Fraud in the Pharmacy?” in *Drug Topics*; and “One Solution to the Problem of Unused and Unwanted Medications” in the *Journal of the American Pharmacists Association*. Pray also reviewed the article “Moral Legitimacy: The Struggle for Homeopathy in the NHS” for *Bioethics*.

*continued on page 4*

# SCHOLARLY AND ACADEMIC ACTIVITY, CONT.

continued from page 3



**Cheri Walker**, Pharmacy Practice, recently wrote an article titled, "A Descriptive and Historical Review of Bibliometrics with Applications to Medical Sciences" for *Pharmacotherapy*. She also reviewed "Vasopressor and Inotropic Management in Patients with Septic Shock" for *Pharmacy and Therapeutics* and served as a mentor/facilitator for a poster presentation of "Pharmacist Interventions in and Ambulatory Care Center" in Oklahoma City.

**Randall Sharp**, Pharmacy Practice, recently gave a poster presentation on "Comparing the Impact of Two Omega-3 Products on Hemoglobin A1c Values" at the 49th Annual Meeting of the American Society of Health System Pharmacists in Anaheim, California.



The project was also published as an electronic abstract by the organization.



**Nancy Williams**, Pharmacy Practice, recently was selected to serve on 2015-16 Abstract Review Committee of the American Society for Parenteral and Enteral Nutrition. Williams has also been chosen to participate in the 2015-16 Academic Leadership Fellows Program of the American

Association of Colleges of Pharmacy, with sessions to be held in Virginia, California, and Florida. Williams' other activities include:

- Presenting "Implementing pharmacist led osteoporosis testing and education in community pharmacies" at the American Society of Health-System Pharmacists Midyear Clinical Meeting in Anaheim, CA, and "Exposing Students to the Importance of Pharmacy Advocacy" at the American Association of Colleges of Pharmacy Annual Meeting, Grapevine, TX.
- Coordinating and helping judge the local Clinical Skills Competition of the American Society of Health-System Pharmacists.
- Serving as a reviewer for "Nafcillin 18 gram continuous infusion for the treatment of bacterial endocarditis," "Constructive ways to prevent, identify, and remediate challenging trainees in experiential education," and "Pancreatic

enzymes prepared in bicarbonate solution for enteral feeding tube administration" for the *American Journal of Health-System Pharmacy*.

- Reviewing 46 abstracts for Clinical Nutrition Week 2015 for the American Society for Parenteral and Enteral Nutrition.
- Writing the "Report of the 2013-2014 Professional Affairs Standing Committee: Advancing the Pharmacy Profession Together through Pharmacy Technician and Pharmacy Education Partnerships" for the *American Journal of Pharmaceutical Education* and "American Society for Parenteral and Enteral Nutrition (A.S.P.E.N.), Standards of Practice for Nutrition Support Pharmacists" for *Nutrition in Clinical Practice*.
- Moderating two presentation sessions at the Alcalde Southwest Residency Leadership Conference, San Antonio, TX.



**Ben Welch**, Pharmacy Practice, has been a guest speaker on "Addiction Update" at recent continuing education workshops for pharmacists in Oklahoma City, Tulsa, and Abilene, Texas. He also presented a workshop on "Drugs of Addiction" in Oklahoma City.

## Deadline approaching for annual report

The Office of Sponsored Programs is preparing the annual Scholarly and Academic Activity Report for FY15. June 30 is the deadline to submit reports in order to be included in this year's annual Scholarly and Academic Activity report. The report form is available at <http://www.swosu.edu/administration/osp/scholarly-activity-report.aspx>.

Faculty are encouraged to report work such as publications, speeches, honors, conference participation or facilitation, appointments, reviews, exhibitions, poster presentations, and other such activities.

The annual scholarly and academic activity report is distributed to university and state officials and acts as an archive of such activities at SWOSU.

Sponsored Programs also forwards submissions to the SWOSU Libraries digital repository. Information pertaining to the author's activity will not be placed in the library's digital repository without the consent of the author.



# RESEARCH AND SCHOLARLY ACTIVITY FAIR



University Research and Scholarly Activity Committee members and SWOSU administration: Dr. Richard Tirk, Music; Mr. Ed Klein, Education; Dr. Randy Barnett, Psychology; Dr. James South, SWOSU Provost; Dr. Yolanda Carr, Director, Office of Sponsored Programs; Mr. Jess Parker, Radiologic Technology, SWOSU-Sayre; Dr. Faruk Khan, College of Pharmacy; SWOSU President Randy Beutler; Dr. Jason Johnson, URSAC chairman, Chemistry and Physics; and Dr. Muatasem Ubeidat, Biological Sciences.

## Poster Presentations

**Designing a Test Stand for Solar Pumps.** Jeremy A Weimer, Cassidy Baker, and Matt Mercer (Mr. Brad Fitzgerald), Department of Engineering Technology

**Team Wind Tunnel: Engineering Technology Department.** Thomas C Hooper, Brady H Lutz, and Matthew S Facklam (Mr. Brad Fitzgerald), Department of Engineering Technology

**Participatory Graphic Design for Cultural Heritage Preservation.** Dr. Siriporn Peters, Kyle Brewer, Drew Brower, Rachel Butler, Naveenah Kumar, and Ashley Summers, Department of Art, Communication, and Theatre

**Snake, Mouse, and Hawk Fable Example.** Taylor R Brophy (Dr. Kelley Logan), Department of Language and Literature

**Riddle Me This.** Shannon N Eidenshink and Ashley N Comstock (Dr. Kelley Logan), Department of Language and Literature

**Team Kodak: Engineering Technology Department.** Haden G Hedges, Dalseron C Njie, and Chaz L Mattocks (Mr. Brad Fitzgerald), Department of Engineering Technology

**Improving Female Retention in STEM.** Ms. Madeline L Baugher<sup>1</sup> and Ms. Cindi R Albrightson<sup>2</sup>, Department of Accounting, Computer Science, and Entrepreneurship<sup>1</sup> and Department of Engineering Technology<sup>2</sup>

**Educators: An Examination Of Teachers And Choices Made During The Holocaust.** Sarah Caffey and Kiley Brennforder (Ms. Patricia Perkins), Department of Education

**Crisis In Corrections.** Dr. Dan R Brown, Department Of Social Sciences

**Civil Forfeiture.** Evan J Edler (Dr. Dan Brown), Department of Social Sciences

**Chaos in Capital Punishment.** Mary C Iliff (Dr. Dan Brown), Department of Social Sciences

**Quality Ladder and Firms' Survival.** Dr. Jieun J Chang, Department of Social Sciences

**Corporate Inversion.** Matthew J Mauldin (Dr. Hank Ramsey), Department of Finance, Management, and Marketing

**CEO Thrives, Market Dives.** Angie M Deviney (Dr. Hank Ramsey), Department of Finance, Management, and Marketing

**The Best Method to Determine Whether Sterile or Clean Technique is Needed While Performing Wound Care.** Kendra D Case, Sara D Elkins, Kassie R Jackson, Morgan C Nance, Paisley Sperle, and Morgan Wermey (Dr. Kathy Wolff), School of Nursing and Allied Health

**Best Practice: Metered Dose vs. Nebulizer for Treatment of Asthma.** Shelby Bolton, Tashiana Holley, Talesha Kittler, Andrienne Lapewe, Nikole Mingura, D'Lisa Pool, and Sara Robinson (Dr. Kathy Wolff), School of Nursing and Allied Health Sciences

**Best Method for Physical Restraint for Children Ages 2-6.** Brianna Clark, Joel Curtis, Aaron Daugherty, Franki DeLuca, Diamon Miller, and Cheyenne Mitchell (Mrs. Angela Gore and Dr. Kathy Wolff), School of Nursing and Allied Health Sciences

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# RESEARCH AND SCHOLARLY ACTIVITY FAIR

**Best Shift Hours for the Health and Safety of the Nurse and Patient.** Erin Fields, Julie Johnston, Tonya Pollman, Kourtney Speece, Corrine Stanley, Rachel Stout, and Venia Trevino (Mrs. Angela Gore and Dr. Kathy Wolff), School of Nursing and Allied Health Sciences

**Soothing Methods for Patients From Birth to Up to Two Years.** Nichole M Brandt, Valerie Chain, Kylee Craddock, Kristi Eirwin-Winters, Jennifer Shelburne, Anna Smith, Rachel Taber, and Jordan Wayland (Mrs. Angela Gore and Dr. Kathy Wolff), School of Nursing and Allied Health Sciences

**The Best Method to Prevent Burnout in the Nursing Profession.** Shaylon Bishop, Jim Enoch, Joshua Hall, Dajona Lewis, Shane Martin, Alicia Richey, and Baylee Sheperd (Dr. Kathy Wolff), School of Nursing and Allied Health Sciences

**Music Therapy Service for K-12 Institutions in Tulsa, Oklahoma: A Proposal.** Jacqueline E Cox (Dr. ChihChen Sophia Lee), Department of Music

**How Rhythm Facilitates the Mind of a Child with Autism.** Alexandra G Robison (Dr. ChihChen Sophia Lee), Department of Music

**The Effect of Early Intervention Music Therapy and Preventing Eating Disorders.** Madison B Steh (Dr. ChihChen Sophia Lee), Department of Music

**Rationale for The Neural Associations of the Brain with Sound and Synesthesia.** Kyle S Chai (Dr. ChihChen Sophia Lee), Department of Music

**Rationale for Music Therapy in the Neonatal Intensive Care Unit.** Jacie L Hutcherson (Dr. ChihChen Sophia Lee), Department of Music

**The Effects of Caregiver-led Music Therapy Interventions on the Emotional States of Dementia Patients.** Hunter D Stevens (Dr. ChihChen Sophia Lee), Department of Music

**The Utilization of Music Technology in Music Therapy.** Richard Lindsey (Dr. ChihChen Sophia Lee), Department of Music

**Music Therapy and Schizophrenia.** Josiah T Langley (Dr. ChihChen Sophia Lee), Department of Music

**The Effects of Group Creative Arts Music Therapy Interventions on College Freshmen Facing Adjustment Difficulties.** Wei-Hsuan V Tu (Dr. ChihChen Sophia Lee), Department of Music

**Music Therapy Techniques that Address Anxiety within Eating Disorders.** Brooke A McCullough (Dr. ChihChen Sophia Lee), Department of Music

**Effect of Gender on Perception of Pain in Those Being Bullied.** Christopher J Stevens (Dr. Stephen Burgess), Department of Psychology

**Learning by Doing: Project-Based Introductory Statistics.** Ms. Kristin R. Woods, Department of Psychology

**How Fatherly Involvement Relates to Teenage Pregnancy and Perception of Sexual Behaviors.** Alexis A Schroeder (Ms. Kristin Woods), Department of Psychology

**The Association between Religious Practices and Substance Use Among American Adolescents.** Alexandra K Jordan (Ms. Kristin Woods), Department of Psychology

**The Association of Adolescent Drinking Behavior with Relationship to Parents.** Rachel M Yarnell (Ms. Kristin Woods), Department of Psychology

**Career Decision Self-Efficacy Assessment: Are scores consistent across two administration formats?** Morgan P Bressman, Aileen Aiello, and Jackie M Bivins (Dr. Jared Edwards), Department of Psychology

**How Students View Diversity in Their Education: A Qualitative Examination.** Catherine J Schubert, Aileen Aiello, and Maci Glasscock (Dr. Jared Edwards), Department of Psychology

**Values & Career Decidedness: Do extreme expectations equal career indecisiveness?** Jackie M Bivins, Aileen Aiello, Morgan P Bressman, and Maci Glasscock (Dr. Jared Edwards), Department of Psychology

**Stress Management in Relation to Coping Style.** Gwendolyn E Burgess (Dr. Randy Barnett), Department of Psychology

**The Relationship between Stress, Sexualization, and Salivary Hormones.** Laura A Burleigh, Gwendolyn E Burgess, Patra Kositchaiwat, and Ashley Murray (Dr. Lisa Appeddu<sup>1</sup> and Dr. Melinda Burgess<sup>2</sup>), Department of Pharmaceutical Sciences<sup>1</sup> and Department of Psychology<sup>2</sup>

**Mapping the Invasion: Extent of the Tree of Heaven Population in Weatherford, Oklahoma.** Zach R Godwin, Jay S Stinson, Rachel L Wallace, and Maryanne Dantzler-Kyer (Dr. Lisa Castle), Department of Biological Sciences

**Five Years in the Life on a *Cyclanthera dissecta* Population.** Allison D Statton (Dr. Lisa Castle), Department of Biological Sciences

**Johnsongrass: Terrestrial Invaders.** Alexandra K Jordan, Emily D Morgan, Austin D Beisel, and Catherine Patron (Dr. Lisa Castle), Department of Biological Sciences

**The Effects of Johnsongrass (*Sorghum halapense*, Poaceae), On Surrounding Vegetation; An Ongoing Investigation.** Humberto H Cervantes, Paage Nicoll, Huxley Owens, and McKenzie Smith (Dr. Lisa Castle), Department of Biological Sciences

**Invasive Characteristics of the Tree of Heaven.** Kristen T Howard and Amber L Rinestine (Dr. Lisa Castle), Department of Biological Sciences

**Pollinators in Urban Environments.** Amber R Rymer (Dr. Lisa Castle), Department of Biological Sciences

**Guilty by DNA Fingerprinting.** Paage F Nicoll (Dr. Muatasem Ubeidat), Department of Biological Sciences

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# RESEARCH AND SCHOLARLY ACTIVITY FAIR

**Comparative Analysis of *Dictyostelium discoideum* and *Myxococcus xanthus*.** Canisia B Tatah (Dr. Muatasem Ubeidat), Department of Biological Sciences

**Autophagy Plays an Essential Role In Neuronal Development and Maintenance.** Ashley Powers and Matt Abbott (Dr. Andrea Holgado), Department of Biological Sciences

**Lanthionine Ketimine Is a Neurotrophic Agent that Promotes Axonal Elongation and Autophagy.** Elizabeth Jansing, Ashley Rodriguez, and Lyly Van (Dr. Andrea Holgado), Department of Biological Sciences

**Determining the Toxic Effects of Silver Nanoparticles Using *C. elegans*.** Jake Gregston<sup>1</sup>, Abby McKisson<sup>1</sup>, and Anthony Sanchez<sup>1</sup> (Dr. Andrea Holgado<sup>1</sup> and Dr. Carey Pope<sup>2</sup>), Department of Biological Sciences at Southwestern Oklahoma State University<sup>1</sup>, Oklahoma State University<sup>2</sup>

**Effects of Sugar Mixtures On Feeding In Fruit Flies.** Marianne E Dantzler-Kyer and Jessica L Huffman (Dr. Jimena Aracena), Department of Biological Sciences

**The Expression and Purification of the Recombinant Magnetosome Associated Protein Mad2 from *Desulfovibrio magneticus* Strain RS-1 in *Escherichia coli*.** Emily R Kessler and Bradly Burke (Dr. Denis Trubitsyn), Department of Biological Sciences

**Nutrients and Nuisances: Environmental Diet and Its Effect on Female Defense Mechanisms.** Shanna M Simmons (Dr. Rickey Cothran), Department of Biological Sciences

**The Cost of Courtship: Effects of Male-Male Competition On Harm Experienced By Females In *Hyallolella* Amphipods.** Ashna Dhoonmoon (Dr. Rickey Cothran), Department of Biological Sciences

**Evaluation of the Physicochemical Properties of a Novel Antimalarial Drug Lead, Cyclen Bisquinoline.** Mohammad F Hossain, Anjuli Shrestha, and Apoorva Rudraraju (Dr. M. O. Faruk Khan), Department of Pharmaceutical Sciences

**UV-Metric, pH-Metric and RP-HPLC Methods to Evaluate the Multiple pKa Values of a Polyprotic Basic Novel Antimalarial Drug Lead, Cyclen Bisquinoline.** Mohammad F Hossain, Anjuli Shrestha, and Cassandra Obi (Dr. M. O. Faruk Khan), Department of Pharmaceutical Sciences

**Towards the Synthesis of N4O2-Type Metal Complexes of Antimalarial Macrocyclic Polyamine Ligands.** Mohammad F Hossain, Apoorva Rudraraju, Prabhjyot Saluja, and Alina Shrestha (Dr. M. O. Faruk Khan), Department of Pharmaceutical Sciences

**Development and Validation of the Stability Indicating Test Method to Determine the Content of Salmeterol Xinafoate and its Organic Impurities in Pharmaceutical Inhaler Dosage Form by RP-HPLC.** Mohammad F Hossain (Dr. M.O. Faruk Khan, SWOSU Department of Pharmaceutical Sciences, and Dr. A. S. S. Rouf, Department of Pharmaceutical Technology at University of Dhaka

**Synthesis, Structural Studies, and Oxidation Catalysis of the Late-First-Row Transition Metal Complexes of a 2-Pyridylmethyl Pendant-Armed Ethylene Cross-Bridged Cyclam.** Donald G Jones and Anthony D Shircliff (Dr. Tim Hubin), Department of Chemistry and Physics

**New Ethylene Cross-Bridged and Side-Bridged Tetraazamacrocycles Featuring Acid and Amide Pendant Arms and Their Transition Metal Complexes for Oxidation Catalysis.** Michael J Gorbet, Michael B Allen, and Anthony D Shircliff (Dr. Tim Hubin), Department of Chemistry and Physics

**Transition Metal Complex Dual CXCR4/CCR5 Antagonists.** Dustin J Davilla (Dr. Tim Hubin), Department of Chemistry and Physics

**1,7-Dimethyl-1,4,7,10-tetraazacyclododecane Complexes of Mn, Fe, Co, Ni, Cu, and Zn: Synthesis and Characterization.** Megan A Ayala and Ashlie N Walker (Dr. Tim Hubin), Department of Chemistry and Physics

**Copper Ligands as a DNA Cleavage Component for use in Artificial Nucleases.** Sequojah O'Neal-Johnson (Dr. Tim Hubin and Dr. Lori Gwyn), Department of Chemistry and Physics

**Cobalt Chelates as Potential DNA Cleavage Agents for Artificial Nucleases.** Megan Oertel (Dr. Tim Hubin and Dr. Lori Gwyn), Department of Chemistry and Physics

**Semi-Quantitative Analysis of Soluble Dyes in Hard Candies.** Louise Esjornson and J. Nyema Elliott (Dr. David Esjornson), Department of Chemistry and Physics

**Reactions of Metal Dimers with 1,4,8,11-Tetraazacyclotetradecane.** Gareth Crispin (Dr. David Esjornson), Department of Chemistry and Physics

**Role of H57 in Synchronizing Ammonia Transfer within *E. coli* CTP Synthetase.** Matt R Abbott (Dr. Jason L Johnson), Department of Chemistry and Physics

**Functionalization of Carbon Fibers for Use in Composites.** Phuong D Bui (Dr. David Martyn), Department of Chemistry and Physics

**A Scientific Analysis of Release and Regulation of Toxic Chemicals and Their Effects on the Health of People and Nature.** Ashlie N Walker and Marianne E Dantzler-Kyer (Dr. Sylvia Esjornson), Department of Chemistry and Physics

**Scientific Analysis of the Harmful Effects of BPA, Where It Is Found, and How Its Effects Can Be Avoided.** Lon D Ford II and Winston L Brown (Dr. Sylvia Esjornson), Department of Chemistry and Physics

**A Study of the History of Arsenic Standards in Drinking Water in the United States and the Effects of Arsenic on Human Health.** Zeb D Foster and Tony Maxville (Dr. Sylvia Esjornson), Department of Chemistry and Physics

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# RESEARCH AND SCHOLARLY ACTIVITY FAIR

**Analysis of The Potentially Toxic Ingredient In Sunscreens, Oxybenzone, and Studies of Its Effects On Humans.** Nicol J Jellison and Walter Esjornson (Dr. Sylvia Esjornson), Department of Chemistry and Physics

**Scientific Analysis of the History of Evidence Relating to the Use and Regulation of Phthalate, a Common Plasticizer, and Analysis of the Risk to Humans from Exposure to Phthalates.** Will R Davis, Cassidy J Baker, and Brandon Wrobbel (Dr. Sylvia Esjornson), Department of Chemistry and Physics

**The Effect of Hand Washing Solutions on Bacteria.** Rebecca D Gonzales (Ms. Emily Campbell), Western Technology Center

**The Effects of Toothpaste and Mouthwash on Bacterial Plaque.** Hadleigh M Summers (Ms. Emily Campbell), Western Technology Center

**Caffeine and Its Effect on Reaction Time.** Pamela J Cole (Ms. Emily Campbell), Western Technology Center

**The Effect of Surface Temperature on Fingerprints.** Alesa J Tovar (Ms. Emily Campbell), Western Technology Center

**Scar Reduction: Prescription, Over-the-Counter, or Home Remedies.** Madison B Moore (Ms. Emily Campbell), Western Technology Center

**Movie Clips Affect upon Heart Rate.** Colton H Sims (Ms. Emily Campbell), Western Technology Center

**Auditory Attention in Children.** Katelynn R Adams (Ms. Emily Campbell), Western Technology Center

**Range of Motion in Age & Gender.** Sarah L Miller (Ms. Emily Campbell), Western Technology Center

**How Age and Gender Affect New Year's Resolutions.** Harley K Heard (Ms. Emily Campbell), Western Technology Center

**The Effect of Radiation On Plant Cell Growth.** Regan N Loyd (Ms. Emily Campbell), Western Technology Center

**Overpopulation in Guppies, Rosy Reds, and Goldfish.** Kara K Stout (Ms. Emily Campbell), Western

**How Do Video Games Affect Your Heart?** Tad A Deffenbaugh (Ms. Emily Campbell), Western Technology Center

**Hearing in Headphone Users vs. Non-headphone Users.** Ariana E Duarte (Ms. Emily Campbell), Western Technology Center

**Neuropsychology: The Perception of the Length of Time Amongst Different Age and Gender Groups.** Ryan Yang (Ms. Emily Campbell), Western Technology Center

**The Effect of Nitrogen on the Growth Rate of Wheat.** Bradley J Hall (Ms. Emily Campbell), Western Technology Center

**Retaining Mold: Home Remedies, Household Cleaning Products, & Antibacterial Spray.** Mariah R Courtney (Ms. Emily Campbell), Western Technology Center

**An Introduction to the Cultures of Taiwan.** Shu-Ching Wang

(Ms. Tee Kesnan), Department of Language and Literature

**An Introduction to a Very Special Person.** Maryam Askar Alkhaibari (Ms. Tee Kesnan), Department of Language and Literature

**International Students' Struggles: A SWOSU International Student's Narrative.** Madubueze Izuchukwu Chibueze (Ms. Tee Kesnan), Department of Language and Literature

**An Introduction to Mexico.** Ana Laura Gomez (Ms. Tee Kesnan), Department of Language and Literature

**A Research Observation/Compare-and Contrast Study on Farmers' Markets in the United States and in Malawi.** Salome Sanga (Ms. Tee Kesnan), Department of Language and Literature

**An Introduction to Sweden.** Stefan Eric Bo Idstam (Ms. Tee Kesnan), Department of Language and Literature

**Class Magazine by COMP 11 ESL International Students (Section 1936), Fall, 2014.** Yousuf Haji Alghazali and Ali Ibrahim Alkuabiy (Ms. Tee Kesnan), Department of Language and Literature

**To Drive or Be Driven.** Ms. Rachel Hurt, Ms. Madeline Baugher, Ms. Cindi Albrightson, Amanda Adney, and Ingrid Law, Computer Science and Engineering Technology.

**Challenges That Saudi Students Face in Higher Education in the United States.** Ms. Rachel Hurt, Lama Alsharif, and Safa Alshareef, Computer Science.

**Mobile Device Analysis Corpus:** Mike Morrison (Ms. Rachel Hurt), Computer Science.

**Vehicle Tracking Via Mobile Apps:** Mary Ann Phillips (Ms. Rachel Hurt), Computer Science.

## Podium Presentations

**Late Effects of Multiple Concussions.** Darolyn L Nyhan, Jessica Rauschenberg, and Michael Adefolarin (Ms. Anne Pate), School of Nursing and Allied Health

**Hawkeye: The Embodiment of the Frontier Thesis.** Kaila D Lancaster (Dr. Kevin Collins), Department of Language and Literature

**Virtuous Women in Uncle Tom's Cabin.** Taylor R Brophy (Dr. Kevin Collins), Department of Language and Literature

**Career Preparation: Participating in Faculty Research Projects Helps to Build Undergraduate Students' Résumés.** Khanh B Nguyen (Dr. E. K. Jeong), Department of Art, Communication, and Theatre

**Secrets.** Lori R Webb (Dr. Victoria Gaydosik), Department of Language and Literature

**SWOSU Art Educators in New Orleans: Form, Function, and the Future.** Nicole Laitran, Cheyanne Floyd, Candice Baker, and Kori Cameron. (Dr. Joana S Hyatt), Department of Art, Communication and Theatre



# RESEARCH AND SCHOLARLY ACTIVITY FAIR



Maryam Askar Alkhaibari and Hyejin Kim



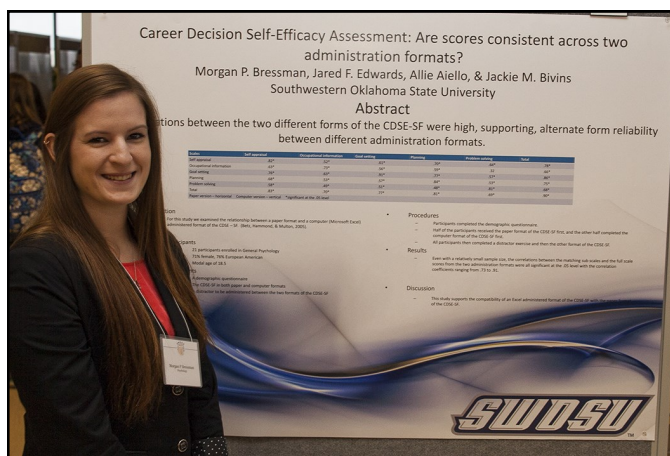
Nichole Brandt, Valerie Chain, Jordan Wayland, and Rachel Stout



Anjali Shrestha, Mohammad Hossain, and Apoorva Rudraraju



Kiley Brennfoerder, Sarah Caffey, and Ms. Patricia Perkins



Morgan Bressman



Kyle Chai, Madison Steh, Alexandra Robison, Jacqueline Cox



# RESEARCH AND SCHOLARLY ACTIVITY FAIR



Shannon Eidenshink, Ashley Comstock, Lori Webb, and Taylor Brophy



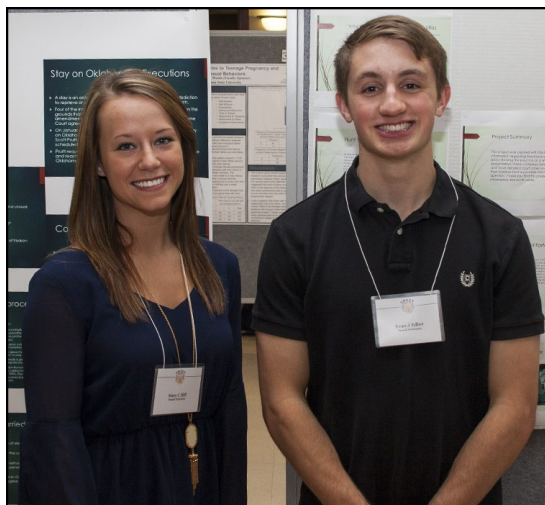
Louise Esjornson and Megan Oertel



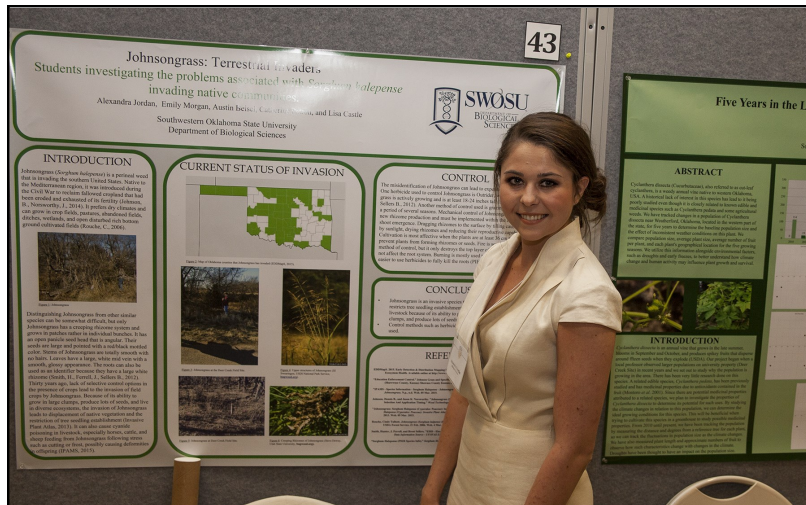
Matthew Facklam and Jeremy Weimer



Joshua Hall, Shaylon Bishop, Baylee Sheperd, Alicia Richey, and Dajona Lewis



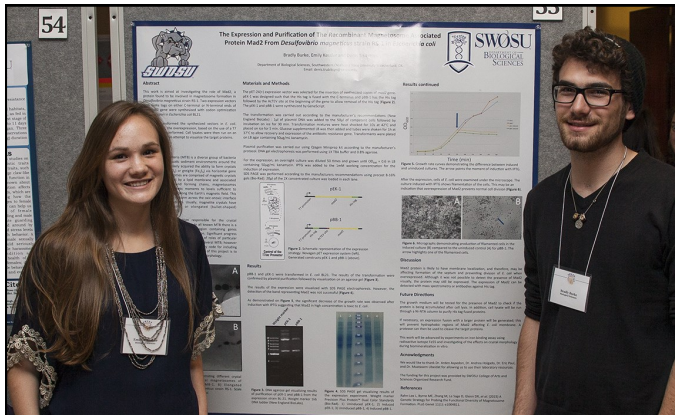
Mary Iliff and Evan Edler



Alexandra Jordan



# RESEARCH AND SCHOLARLY ACTIVITY FAIR



Emily Kessler and Bradly Burke



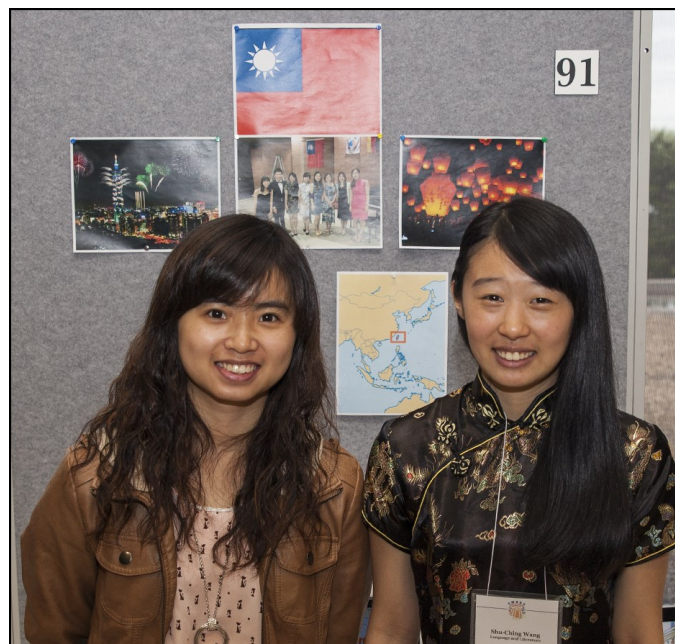
Ingrid Law and Amanda Adney



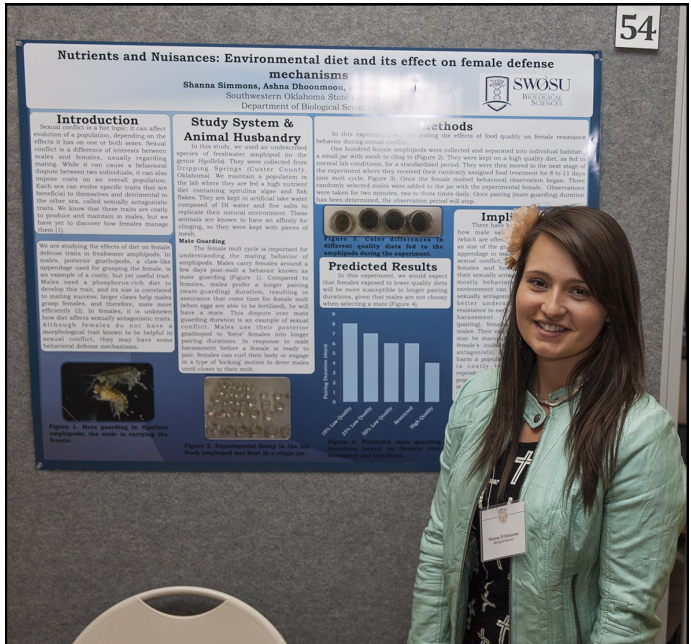
Izuchukwu Chibueze Madubueze



Naveenah Kumar



Yu-Hsuan Liu and Shu-Ching Wang



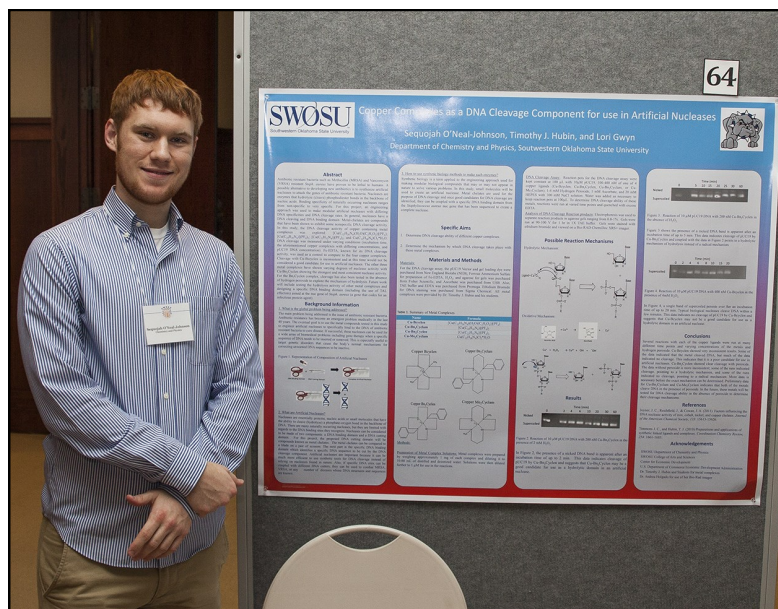
Shanna Simmons



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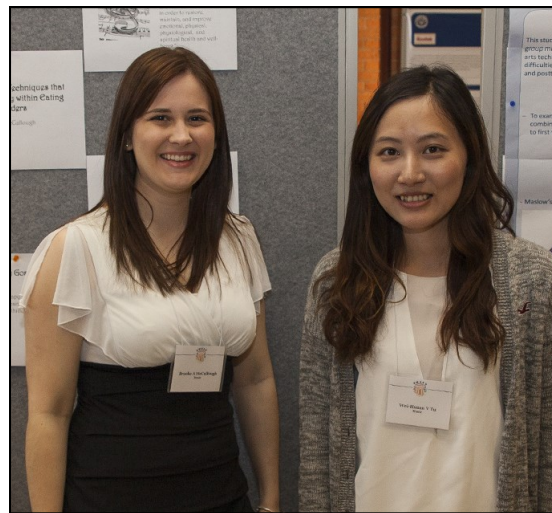
Chaz Mattocks and Dalseron Njie



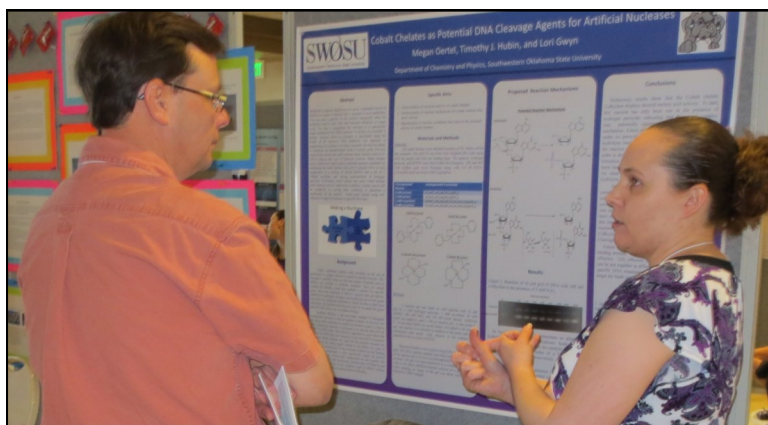
Sequojah O'Neal-Johnson



Salome Sanga explains her research on farmers' markets to Provost James South.



Brooke McCullough and Wei-Hsuan Tu



Megan Oertel and Dr. Rickey Cothran talk about her research.



Students take notes while listening to Jake Gregston answer questions about his research.



# SPOTLIGHTed: Funding Opportunities for SWOSU

## GRANTS FOR HEALTH AND WELL-BEING RESEARCH

- Deadline Date(s):** Open
- Funding Agency:** Robert Wood Johnson Foundation
- Program Title:** Evidence for Action: Investigator-Initiated Research to Build a Culture of Health
- Web site:** [http://www.rwjf.org/en/library/funding-opportunities/2015/evidence-for-action-investigator-initiated-research-to-build-a-culture-of-health.html?rid=73xvfvfviDa7-VPW73P0npVgoyfxxm9nE&et\\_cid=283335](http://www.rwjf.org/en/library/funding-opportunities/2015/evidence-for-action-investigator-initiated-research-to-build-a-culture-of-health.html?rid=73xvfvfviDa7-VPW73P0npVgoyfxxm9nE&et_cid=283335)
- Synopsis:** *Evidence for Action: Investigator-Initiated Research to Build a Culture of Health* is a national program of RWJF that supports the Foundation's commitment to building a Culture of Health in the United States. The program aims to provide individuals, organizations, communities, policy-makers, and researchers with the empirical evidence needed to address the key determinants of health encompassed in the Culture of Health Action Framework. In addition, *Evidence for Action* will also support efforts to assess outcomes and set priorities for action. It will do this by encouraging and supporting creative, rigorous research on the impact of innovative programs, policies and partnerships on health and well-being, and on novel approaches to measuring health determinants and outcomes.
- Funding Range:** Based on project budget

## EDUCATION SCIENCES LEADERSHIP TRAINING GRANTS

- Deadline Date(s):** 8/20/2015
- Funding Agency:** U. S. Department of Education
- Program Title:** Institute of Education Sciences (IES): Research Training Programs in the Education Sciences
- Web site:** <http://www.gpo.gov/fdsys/pkg/FR-2015-04-15/pdf/2015-08627.pdf>
- Synopsis:** The Institute's purpose in awarding these grants is to provide national leadership in expanding fundamental knowledge and understanding of (1), developmental and school readiness outcomes for infants and toddlers with or at risk for disability, and (2), education outcomes for all students from early childhood education through postsecondary and adult education. The central purpose of the Institute's research grant programs is to provide interested individuals and the general public with reliable and valid information about education practices that support learning and improve academic achievement and access to education opportunities for all students. These interested individuals include parents, educators, students, researchers, and policymakers. In carrying out its grant programs, the Institute provides support for programs of research in areas of demonstrated national need.
- Funding Range:** \$100,000 - \$760,000 up to 5 years

## OUR TOWN PROGRAM SUPPORT FOR CREATIVE PLACE-MAKING PROJECTS

- Deadline Date(s):** 9/21/2015
- Funding Agency:** National Endowment for the Arts
- Program Title:** NEA Our Town, FY2016
- Web site:** <http://arts.gov/grants-organizations/our-town/introduction>
- Synopsis:** The Our Town grant program supports creative place making projects that help to transform communities into lively, beautiful, and resilient places with the arts at their core. Creative place making is when artists, arts organizations, and community development practitioners deliberately integrate arts and culture into community revitalization work - placing arts at the table with land-use, transportation, economic development, education, housing, infrastructure, and public safety strategies. This funding supports local efforts to enhance quality of life and opportunity for existing residents, increase creative activity, and create a distinct sense of place.
- Funding Range:** \$25,000 - \$200,000 per year

# SPOTLIGHTed: Funding Opportunities for SWOSU

## FUNDING SUPPORT FOR NEW ACADEMICIANS

**Deadline Date(s):** 9/20/2015

**Funding Agency:** National Science Foundation

**Program Title:** Computer and Information Science and Engineering (CISE), Research Initiation (CRII)

**Web site:** <http://www.nsf.gov/pubs/2015/nsf15569/nsf15569.pdf>

**Synopsis:** With the goal of encouraging research independence immediately upon obtaining one's first academic position after receipt of the PhD, the Directorate for Computer and Information Science and Engineering (CISE), will award grants to initiate the course of one's independent research. Understanding the critical role of establishing that independence early in one's career, it is expected that funds will be used to support untenured faculty or research scientists (or equivalent), in their first two years in a primary academic position after the PhD, but not more than a total of five years after completion of their PhD. One may not yet have received any other grants or contracts in the Principal Investigator (PI), role from any department, agency, or institution of the federal government, including from the CAREER program or any other program, post-PhD, regardless of the size of the grant or contract, with certain exceptions noted below. Serving as co-PI, Senior Personnel, Postdoctoral Fellow, or other Fellow does not count against this eligibility rule. Grants, contracts, or gifts from private companies or foundations; state, local, or tribal governments; or universities do not count against this eligibility rule. It is expected that these funds will allow the new CISE Research Initiation Initiative PI to support one or more graduate students for up to two years. Faculty at undergraduate and two-year institutions may use funds to support undergraduate students, and may use the additional RUI designation (which requires inclusion of a RUI Impact Statement).

**Funding Range:** \$175,000 up to 24 months

## STEM WORKFORCE DEVELOPMENT GRANTS

**Deadline Date(s):** 9/30/2015

**Funding Agency:** U. S. Department of Defense

**Program Title:** Science, Technology, Engineering & Mathematics Education, Outreach, and Workforce Program (STEM)

**Web site:** <http://www.onr.navy.mil/~media/Files/Funding-Announcements/BAA/2015/15-0002-STEM.ashx>

**Synopsis:** The ONR seeks proposals for developing innovative solutions that directly support the development and maintenance of a robust STEM workforce. The goal of any proposed effort should be to provide "game changing" solutions that will establish and maintain a diverse pipeline of U.S. citizens who are interested in uniformed or civilian DoN (or Navy and Marine Corps), STEM related workforce opportunities. While this announcement is relevant for any stage of the STEM pipeline, for FY15, funding efforts will be targeted primarily towards High School, Post-Secondary education, and outreach designed to enhance the DoN (or Naval), STEM workforce and its mission readiness. Emphasis will be given both to key engineering and scientific areas outlined in the Naval S&T Strategic Plan such as our National Naval Responsibilities (see ONR website), and to identified STEM related workforce gaps and new strategic goals on the uniformed and civilian side.

**Funding Range:** Up to \$200,000 per year



# UPCOMING EVENTS

## Promoting Undergraduate Research annual meeting planned for Sept. 17-18

The sixth annual Promoting Undergraduate Research Conference and Workshop will be held September 17-18 at the Presbyterian Health Foundation Conference Center, 655 Research Parkway, Oklahoma City.

The workshop topic is “How to Develop Inquiry-Based Learning Activities” and will be presented by Professor Mick Healey, Higher Education Consultant and Emeritus Professor at the University of Gloucestershire, United Kingdom.

The workshop is scheduled for 1 to 4 p.m. Sep-

tember 17, and the fee is \$150.

The conference follows on September 18 and is scheduled for 8 a.m. to 4 p.m. A Continental breakfast and lunch will be provided.

The conference fee is \$50 for faculty, \$75 for administrators, and free for student panelists.

The links below provide more information:

- [Program](#)
- [Call for Presentations](#)
- [Online Registration](#)
- [Poster](#)

## University of Oklahoma to host undergraduate research meeting June 23-25

“Building, Enhancing, Sustaining” is the focus of an undergraduate research conference June 23-25 at the University of Oklahoma in Norman.

Session topics include:

- Undergraduate Research Administration Nuts and Bolts
- Assessment
- Ensuring Access for All
- High-impact Learning: Expanding, Collaborating, Scaling Up and Scaffolding

Session formats vary from panels, 75-min interactive sessions, 10-minute short presentations, and a poster session. For more information: [http://www.cur.org/conferences\\_and\\_events/urpd\\_conference\\_2015/](http://www.cur.org/conferences_and_events/urpd_conference_2015/).

This meeting is hosted by the Council on Undergraduate Research’s Division of Undergraduate Research Program Directors at the University of Oklahoma-Norman.

## Booth space still available for October Women in Science conference in Tulsa

Oklahoma Experimental Program to Stimulate Competitive Research (EPSCoR), is now accepting applications from organizations that wish to host a hands-on science or outreach booth at the Women in Science conference October 13, 2015.

The goal of the conference is to show students in grades six through 12 that careers in science, technology, engineering and mathematics (STEM), are exciting, attainable, and rewarding. Registration to attend is already at maximum capacity, with more than 1,100 students and teachers from 88 different schools across Oklahoma registered to attend.

Organizations can still apply to host a booth. Booth registration is free. More information is available at <http://www.okepscor.org/calendar/2015wis>

The event immerses students in hands-on science activities, helps them discover paths to STEM careers, and provides opportunities to meet representatives from dozens of Oklahoma colleges and universities.

Women in fields such as climatology, engineering, chemistry, zoology and medicine will talk to students about their respective careers.

Teachers participating in the conference will network with other science teachers, gain strategies for supporting students interested in STEM careers, and learn about funding and summer research opportunities available to them.

The 2015 Women in Science Conference is hosted and presented by the National Science Foundation’s OK EPSCoR). Other sponsors are Samson Energy Company, The Williams Companies, Tulsa Regional STEM Alliance (TRSA), Oklahoma State Regents for Higher Education, Oklahoma IDeA (Institutional Development Award), Network for Biomedical Research Excellence (OK INBRE), NASA EPSCoR, Oklahoma Louis Stokes Alliance for Minority Participation (OK-LSAMP), and Oklahoma State University’s Division of Institutional Diversity.