EXTERNAL GRANT RECIPIENTS

FY 2018

Congratulations to all Award Winners

Principal Investigator: (PI)
Co-Principal Investigator: (Co-PI)

PI: Dr. Alaeddin Abu-Abed
Title: Effect of Immobilization of Liquid Crystal with Polycaprolactone for Improving its Biomechanical Performances
Funding Agency: OK-INBRE
College of Mathematics and Science

PI: Dr. Abdella Ait Moussa
Title: Acquisition of a Portable Hand-held Radiography System for Biomedical Research and Education
Funding Agency: OK-INBRE
College of Mathematics and Science

PI: Dr. Abdella Ait Moussa
Title: A Mechanism for Selection of Screw-Type Dental Implants in Patients with Low-Density and Osteoporotic Bone
Funding Agency: OK-INBRE
College of Mathematics and Science

PI: Dr. Victoria Arnold
Title: TRIO Student Support Services Latino Americans Motivating, Educating, and Transforming America (SSS LA META)
Funding Agency: U.S. Department of Education (Year 3)
Student Affairs
**PI: Dr. Victoria Arnold**  
*Title: TRIO Student Support Services Serving Americas Leaders Using Transformative Education (SSS SALUTE)*  
Funding Agency: U.S. Department of Education (Year 3)  
Student Affairs

**PI: Dr. Victoria Arnold**  
*Title: TRIO Student Support Services Student Transformations: Realizing the Importance and Value of Education (SSS STRIVE)*  
Funding Agency: U.S. Department of Education (Year 3)  
Student Affairs

**PI: Dr. Victoria Arnold**  
*Title: TRIO Student Support Services SYNergistic Education, Retaining & Graduating You (SSS SYNERGY)*  
Funding Agency: U.S. Department of Education (Year 3)  
Student Affairs

**PI: Dr. Victoria Arnold**  
*Title: TRIO Student Support Services Transformative Education Achieves More (SSS TEAM)*  
Funding Agency: U.S. Department of Education (Year 3)  
Student Affairs

**PI: Dr. Victoria Arnold**  
*Title: TRIO Student Support Services Transforming Education, Achieving Community Hope (SSS TEACH)*  
Funding Agency: U.S. Department of Education (Year 3)  
Student Affairs

**PI: Dr. Victoria Arnold**  
*Title: UCO Center for Academic Support, Resource Development, Economic Stability, & Student Services (UCO CARES)*  
Funding Agency: U.S. Department of Education (Year 2)  
Student Affairs

**PI: Dr. Victoria Arnold**  
*Title: UCO Veterans Upward Bound*  
Funding Agency: U.S. Department of Education  
Student Affairs

**PI: Ms. Brittany Bannish**  
*Title: Travel to 25th International Fibrinogen Workshop and 3rd International Factor XII Workshop in N. Carolina*  
Funding Agency: OK-INBRE  
College of Mathematics and Science
PI: Dr. Kanika Bhargava
Title: Development and Characterization of Insect Protein Extracts for Food Purposes
Funding Agency: Oklahoma Center for the Advancement of Science and Technology (pass-through entity All Things Bugs, LLC)
College of Education and Professional Studies

PI: Dr. Ines Burnham
Title: Arts Without Limits FY18
Funding Agency: Oklahoma Arts Council
College of Fine Arts and Design

PI: Dr. Christopher Butler
Title: Surveys for Wintering Yellow Rails in Oklahoma
Funding Agency: Oklahoma Department for Wildlife Conservation
College of Mathematics and Science

PI: Dr. Wei Chen
Title: INBRE Travel Grant
Funding Agency: Oklahoma State Regents for Higher Education
College of Mathematics and Science

PI: Dr. Wei Chen
Title: Laser Photothermal Effects on Cancer Cells with Absorption Enhancement by Nanoparticles
Funding Agency: OK-INBRE
College of Mathematics and Science

PI: Dr. Wei Chen
Title: Mechanistic study on synergistic photo-immunological effects of laser immunotherapy for metastatic cancers
Funding Agency: National Institutes of Health
College of Mathematics and Science

PI: Dr. Wei Chen
Title: Oklahoma IDEA Network of Biomedical Research Excellence (INBRE III)
Funding Agency: National Institute of Health
College of Mathematics and Science

PI: Dr. Wei Chen
Title: Summer Mentor 2018
Funding Agency: Oklahoma State Regents for Higher Education
College of Mathematics and Science

PI: Dr. Wei Chen
Title: UCO Fulbright Visiting Scholars Program for Iraq
Funding Agency: Institute of International Education
College of Mathematics and Science
PI: Dr. Joselina Cheng  
*Title: CSI: A High School Summer Forensics Academy*  
Funding Agency: Oklahoma State Regents for Higher Education (Year 2)  
College of Business

PI: Dr. Joselina Cheng  
*Title: Strategies: A Government-University-Industry Partnership and STEM CareerBuilder for the R&D of an Innovative Computer Forensics Program & an Education-Career Pathway for Girls*  
Funding Agency: National Science Foundation  
College of Business

PI: Dr. Lillian Chooback  
*Title: Dihydropicolinate Synthase as a Target for Drug Design*  
Funding Agency: OK-INBRE  
College of Mathematics and Science

PI: Dr. Robert Delano  
*Title: 2018 Statewide Seat Belt & Child Restraint Surveys*  
Funding Agency: Oklahoma Highway Safety Office  
College of Education and Professional Studies

PI: Dr. Jicheng Fu  
*Title: Deep Learning & Statistics – A New Direction for Improving the Quality of Life for Power Wheelchair Users*  
Funding Agency: OK-INBRE  
College of Mathematics and Science

PI: Dr. Jicheng Fu  
*Title: INBRE Travel Grant*  
Funding Agency: Oklahoma State Regents for Higher Education  
College of Mathematics and Science

PI: Dr. Jicheng Fu  
*Title: Summer Mentor 2018*  
Funding Agency: Oklahoma State Regents for Higher Education  
College of Mathematics and Science

PI: Dr. Joseph Grzybowski  
*Title: Cowbird and Black-Capped Vireo*  
Funding Agency: U.S. Army Core of Engineers (Pass thru Gulf South Research Corp)  
College of Mathematics and Science

PI: Dr. Mohammad Hossan  
*Title: Effect of Engineered Surface Topography on the Immobilization of Molecules with Substrates*  
Funding Agency: OK-INBRE  
College of Mathematics and Science
PI: Dr. Mohammad Hossan  
Title: Extraction and Concentration of Prostaglandin E Metabolite in a Microchannel  
Funding Agency: OK-INBRE  
College of Mathematics and Science

PI: Dr. Regenia James  
Co-PI: Dr. Susan Scott  
Title: Prospective Teacher Connection  
Funding Agency: Oklahoma State Regents for Higher Education  
College of Education and Professional Studies

PI: Dr. Vicki Jackson  
Title: Assessment of the Current Distribution of the Eastern Spotted Skunk in Southeast Oklahoma  
Funding Agency: Oklahoma Department of Wildlife Conservation (ODWC)  
College of Mathematics and Science

PI: Dr. Vicki Jackson  
Title: Conference: Identifying Challenges for Elementary Educators  
Funding Agency: National Science Foundation  
College of Mathematics and Science

PI: Dr. Vicki Jackson  
Title: Oka’ Yanahli Nature Preserve Baseline Mammal Survey  
Funding Agency: Nature Conservancy  
College of Mathematics and Science

PI: Ms. Sandra Kent  
Title: Oklahoma A+ NEA Art Works 2018  
Funding Agency: National Endowment for the Arts  
Academic Affairs

PI: Dr. Morshed Khandaker  
Title: Effect of Nanoscale Surface Treatments on the Biomechanical Performances of Titanium Implant  
Funding Agency: OK-INBRE (Pass-through OUHSC)  
College of Mathematics and Science

PI: Dr. Morshed Khandaker  
Title: In Vitro Effects of Bone Growth Protein-immobilized PMMA on Biological Functions  
Funding Agency: OK-INBRE  
College of Mathematics and Science

PI: Dr. Morshed Khandaker  
Title: INBRE Travel Grant  
Funding Agency: Oklahoma State Regents for Higher Education  
College of Mathematics and Science
**PI: Dr. Ryan Kiggins**  
**Co-PI: Dr. Justin Olmstead**  
*Title: Public Leadership: Will Democracy Survive Artificial Intelligence and Social Bot?*  
Funding Agency: Oklahoma Humanities Council  
College of Liberal Arts

**PI: Dr. James Killian**  
*Title: Subcontract for Program Evaluation of Tribal Mental Health and Substance Abuse Programming*  
Funding Agency: Oklahoma Department of Human Services (Pass-through entity Substance Abuse and Mental Health Services Administration (SAMHSA))  
College of Liberal Arts

**PI: Dr. Chad King**  
*Title: A Study of Historic Fire Regimes at Boehler Seeps and Sandhills and Hottonia Preserve*  
Funding Agency: Nature Conservancy  
College of Mathematics and Science

**PI: Dr. Jeff King**  
*Title: The Official Transformative Learning Record: Assessing Student Transformation*  
Funding Agency: U.S. Department of Education  
Academic Affairs

**PI: Dr. Hari Kotturi**  
*Title: In Vivo Evaluation of a Novel PEGDA-PCL Scaffold for Cartilage Generation*  
Funding Agency: OK-INBRE  
College of Mathematics and INBRE

**PI: Dr. Hari Kotturi**  
*Title: OK-INBRE Travel Grant (The Effect of Mycobacteriophage on Planktonic and Biofilm Populations of Mycobacterium smegmatis)*  
Funding Agency: OK-INBRE  
College of Mathematics and Science

**PI: Dr. Hari Kotturi**  
*Title: Summer Mentor 2018*  
Funding Agency: Oklahoma State Regents for Higher Education  
College of Mathematics and Science

**PI: Mr. Barry Loften**  
*Title: GEAR UP Summer Partnership 2018 – Girl Power*  
Funding Agency: Oklahoma State Regents for Higher Education  
Student Affairs

**PI: Mr. Barry Loften**  
*Title: TRIO Talent Search Program*  
Funding Agency: U.S. Department of Education (Year 2)  
Student Affairs
PI: Mr. Barry Lofton  
*Title: UCO McNair Scholars Program*  
Funding Agency: U.S. Department of Education  
Student Affairs

PI: Mr. Barry Lofton  
*Title: UCO – Upward Bound Math & Science*  
Funding Agency: U.S. Department of Education  
Student Affairs

PI: Dr. Scott Mattison  
*Title: Development of Hybrid Optical Coherence/Fluorescence Confocal Microscope*  
Funding Agency: OK-INBRE  
College of Mathematics and Science

PI: Dr. Scott Mattison  
*Title: Investigation of the Developing Biomechanics of the Avian Inner Ear*  
Funding Agency: OK-INBRE  
College of Mathematics and Science

PI: Dr. Ronald Miller  
*Title: Be an Engineer: Change the World*  
Funding Agency: Oklahoma State Regents for Higher Education  
College of Mathematics and Science

PI: Dr. Justin Olmstead  
*Title: Reform, Dissent, and Toleration: The Reformation as a Crisis of Authority*  
Funding Agency: National Endowment for the Humanities (Pass-through entity Oklahoma Humanities Council)  
College of Liberal Arts

PI: Ms. Leigha Pemberton  
*Title: Adaptive Sports Programs for Disabled Veterans and Disabled Member of the Armed Forces Grant*  
Funding Agency: U.S. Department of Veterans Affairs  
Student Affairs

PI: Ms. Leigha Pemberton  
*Title: IPC Sanctioning*  
Funding Agency: U.S. Olympic Committee  
Student Affairs

PI: Dr. Melissa Powers  
*Title: Center for Active Living and Learning Health Promotion*  
Funding Agency: Department of Health and Human Services & Oklahoma Department Human Services (Pass-through entity Areawide Aging Agency)  
College of Education and Professional Studies
PI: Dr. Jill Priest  
*Title: High School Dance Festival*  
Funding Agency: Oklahoma Arts Council  
College of Fine Arts and Design

PI: Dr. Linda Sealey-Holtz  
*Title: Regional Preschool Program – Hearing Impaired*  
Funding Agency: U.S. Department of Education (Pass-through entity Oklahoma Department of Rehabilitation Services)  
College of Education and Professional Studies

PI: Ms. Jasmyn Scott  
*Title: Bronchos with Kids*  
Funding Agency: Women’s Foundation of Oklahoma  
Student Affairs

PI: Dr. Susan Scott  
Co-PI: Dr. Regina James, Dr. Mark Maddy, Dr. Kim Pennington  
*Title: Teachers and Leaders Academy III*  
Funding Agency: Oklahoma State Regents for Higher Education  
College of Education and Professional Studies

PI: Mr. Shikoh Shiraiwa  
*Title: UCO Melton Legacy Collection: Assessment of the Conservation Treatment Needs*  
Funding Agency: National Endowment for the Humanities  
Max Chambers Library

PI: Dr. Billy Singleton  
*Title: UCO Behavior Analysis*  
Funding Agency: Oklahoma State Regents for Higher Education  
College of Education and Professional Studies

PI: Dr. Heidi Vaughn  
*Title: Improving Access to the Central Men & Women in Service Collection*  
Funding Agency: OK Department of Libraries  
College of Liberal Arts

PI: Dr. Melville Vaughan  
*Title: Carry-forward Funds for Equipment for Research in Lung Cancer Treatments*  
Funding Agency: OK-INBRE (Pass-through OUHSC)  
College of Mathematics and Science

PI: Dr. Melville Vaughan  
*Title: INBRE Equipment 2018*  
Funding Agency: OK-INBRE (Pass-through OUHSC)  
College of Mathematics and Science
PI: Dr. Melville Vaughan  
*Title: Phenotypic effect of extra chromosome 5 in Ker-CT-Ras keratinocytes*  
Funding Agency: OK-INBRE  
College of Mathematics and Science

PI: Dr. Melville Vaughan  
*Title: Summer Mentor 2018*  
Funding Agency: Oklahoma State Regents for Higher Education  
College of Mathematics and Science

PI: Ms. Amanda Waters  
*Title: Preparing a Unique Sponge Collection for Biomedical Assay Screening*  
Funding Agency: OK-INBRE  
College of Mathematics and Science

PI: Dr. Greg White  
*Title: Broadway Tonight FY18*  
Funding Agency: Oklahoma Arts Council  
College of Fine Arts and Design

PI: Dr. Greg Wilson  
*Title: Smart Start OK 2018-2019*  
Funding Agency: Oklahoma Partnership for School Readiness Foundation  
Academic Affairs

PI: Dr. Gang Xu  
*Title: INBRE Travel Grant*  
Funding Agency: Oklahoma State Regents for Higher Education  
College of Mathematics and Science