# EXTRAMURAL FUNDING REPORT

**Funds awarded for April - June, 2014 $5,674,367**

**Total funding to date FY 2013 - 2014 $22,674,716**

## Research

<table>
<thead>
<tr>
<th>Research Description</th>
<th>Principal Investigator(s)</th>
<th>Start Date - End Date</th>
<th>Amount</th>
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<tbody>
<tr>
<td>Robert Baer, Lifespan Development and Educational Sciences</td>
<td>06/04/14 - 06/30/20</td>
<td>$380,000</td>
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<td>Rachel McMahan, Lifespan Development and Educational Sciences</td>
<td>06/04/14 - 06/30/20</td>
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<td>Subaward Ohio Department of Education /U.S. Department of Education</td>
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<td>Ohio Longitudinal Transition Study FY 14/15 - FY 19/20</td>
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<td>Roxanne Burns, East Liverpool</td>
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<td>Subaward University of Cincinnati /National Institute of Environmental Health Sciences</td>
<td>07/09/12 - 06/30/14</td>
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<tr>
<td>Multiple Risk Factors and Neurodevelopment Deficits in Rural Appalachian Children</td>
<td>07/09/12 - 06/30/14</td>
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<td>Heather Caldwell, Biological Sciences</td>
<td>06/01/14 - 05/31/17</td>
<td>$400,000</td>
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<td>National Science Foundation</td>
<td>06/01/14 - 05/31/17</td>
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<td>Oxytocin and the Ontogeny of Aggressive Behavior</td>
<td>06/01/14 - 05/31/17</td>
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<td>Gemma Casadesus Smith, Biological Sciences</td>
<td>01/02/14 - 10/31/15</td>
<td>$198,718</td>
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<td>Alzheimer's Association</td>
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<td>Modulation of Metabolic Processes to Prevent AD</td>
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<td>David Costello, Biological Sciences</td>
<td>05/20/14 - 05/20/15</td>
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<td>International Lead Zinc Research Organization</td>
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<td>Improved Predictions of Metal Bioavailability in Freshwater Sediments</td>
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<td>Andrew Curtis, Geography</td>
<td>09/30/13 - 09/29/14</td>
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<td>Subaward University of Southern California /Centers for Disease Control and Prevention</td>
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<td>Community Approaches to Reducing STDs (CARS)</td>
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<td>Feodor Dragan, Computer Science</td>
<td>Continuation 05/01/13 - 02/28/15</td>
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<td>Ruoming Jin, Computer Science</td>
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<td>Subaward University of Oregon /National Institute of General Medical Sciences</td>
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<td>Understanding the Mechanism of Social Network Influences in Health Outcomes through Multidimensional and Semantic Data Mining Approaches</td>
<td>05/01/13 - 02/28/15</td>
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<td>John Duncan, Applied Engineering, Sustainability, &amp; Technology</td>
<td>01/17/14 - 12/31/14</td>
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<td>Subaward Purdue University /Federal Aviation Administration</td>
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<td>Project #4: Weather Technology in the Cockpit: Project a Quantifying Causality-Project B</td>
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<td>Yanhai Du, Applied Engineering, Sustainability, &amp; Technology</td>
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<td>Farris Family Fund -Kent State University Foundation</td>
<td>09/01/14 - 08/31/17</td>
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<td>Enabling a High Power Density and Small Size Fuel Cell</td>
<td>09/01/14 - 08/31/17</td>
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Yanhai Du, Applied Engineering, Sustainability, & Technology 05/15/14 - 05/15/15 $50,000

Watt Fuel Cell Corp

WATT Fuel Cell Corporation Sponsored Research Agreement

James Gleeson, Physics Continuation 08/15/13 - 07/31/17 $235,000
Antal Jakli, Liquid Crystal Institute/Chemical Physics
Samuel Sprunt, Physics
Robert Twieg, Chemistry
National Science Foundation

Connecting Short Range Order to Macroscopic Properties in Complex Structural Fluids

Vladimir Gurau, Tuscarawas Campus 03/24/14 - 06/30/15 $26,616
Kamal Bichara, Tuscarawas Campus

Ohio Development Services Agency

End-Effector and Robot Workcell for Automated Assembly of Fuel Cell Stacks Using Robotic Technology

Eric Jefferis, Social and Behavioral Sciences 03/01/14 - 01/31/15 $8,800
John Staley, Health Policy Management

Subaward Northeast Ohio Medical University /Ohio Office of Criminal Justice Services

CIT Data Collection Initiative

Ruoming Jin, Computer Science Continuation 04/01/10 - 03/31/15 $97,820

National Science Foundation

CAREER: Novel Data Mining Technologies for Complex Network Analysis

David Kaplan, Geography 05/19/14 - 12/31/14 $9,230
Andria Blackwood, Geography

Oriana House, Inc.

Research Internship Agreement with Oriana House Inc.: Andria L. Blackwood

Edgar Kooijman, Biological Sciences 07/01/14 - 06/30/17 $216,000

National Science Foundation

The Secret Life of DGPP: Physicochemical Properties and Function of an Enigmatic Signaling Lipid

Isabel LaCruz, Modern and Classical Language Studies 09/01/14 - 08/31/17 $24,000

Farris Family Fund -Kent State University Foundation

Measuring and Predicting Effort in Human Post-Editing of Machine Translations

Oleg Lavrentovich, Liquid Crystal Institute 07/01/14 - 06/30/17 $147,770

National Science Foundation

Structure and Properties of the Twist-Bend Nematic Phase

Quan Li, Liquid Crystal Institute Additional 11/30/11 - 11/29/14 $83,333

Subaward Case Western Reserve University /U.S. Air Force Research Laboratory

Nanofabrication of Tunable 3D Nanotube Architectures

Quan Li, Liquid Crystal Institute 03/24/14 - 06/30/15 $35,004

Ohio Development Services Agency

Smart Energy-Saving Liquid Crystal Window
Bjorn Lussem, Physics
Technische Universität Dresden
VIDFLEX - Vertical Transistors for Driving Flexible Circuits
06/01/14 - 08/16/14 $26,563

Jonathan Maletic, Computer Science
National Science Foundation
Cl-ADDO-EN: Collaborative Research: Enhancing the srcML Infrastructure: A Mixed-Language Exploration, Analysis, and Manipulation Framework to Support Software Evolution
Supplement 07/01/13 - 06/30/16 $5,000

Mark Manley, Physics
U.S. Department of Energy
Baryon Spectroscopy Through Partial-Wave Analysis and Meson Photoproduction
Continuation 07/15/01 - 06/14/15 $86,000

Sushma Parab, Geology
Joseph Ortiz, Geology
Subaward Ohio State University /National Oceanic and Atmospheric Administration
Ohio Sea Grant College Program M/D-1 HPLC-measured Pigment and Growth Response of the Harmful Algal Species Microcystis (Cyanophyceae) to Variable Environmental Conditions
06/01/14 - 01/31/15 $9,999

Brian Peters, Architecture and Environmental Design
Farris Family Fund -Kent State University Foundation
Additive Architecture-3D Printed Architecture
09/01/14 - 08/31/17 $24,000

Gerassimos Petratos, Physics
A. Mina T. Katramatou, Physics
National Science Foundation
Structure of the Nucleon and Few-Body Nuclear Systems with Electron Scattering
07/01/14 - 06/30/17 $190,000

Amy Sato, Psychology
Douglas Delahanty, Psychology
Manfred van Dulmen, Psychology
National Institute of Child Health and Human Development
Biobehavioral Influences on Stress-Induced Eating In Low-Income Adolescents
06/01/14 - 05/31/16 $76,279

Robin Selinger, Liquid Crystal Institute/Chemical Physics
Jonathan Selinger, Liquid Crystal Institute/Chemical Physics
National Science Foundation
Programmable and Emergent Structures in Soft Matter: Chirality, Polarity, and Auto-Origami
09/01/14 - 08/31/17 $125,000

Abdul Shakoor, Geology
United States Department of Interior National Park Service
07/01/14 - 09/30/16 $25,000

Deborah Shama-Davis, Research and Evaluation Bureau
Edward Bolden, Research and Evaluation Bureau
Mark Smilaycoff, Research and Evaluation Bureau
Subaward Ohio Dept of Education and Akron Public Schools /U.S. Department of Education
Akron Public Schools Race to the Top Evaluations 2014-2015
03/01/14 - 01/31/15 $25,000
<table>
<thead>
<tr>
<th>Project Title</th>
<th>Principal Investigator(s)</th>
<th>Start Date</th>
<th>End Date</th>
<th>Amount</th>
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<tr>
<td>Akron Public Schools Race to the Top Evaluations 2014-2015</td>
<td>Deborah Shama-Davis, Edward Bolden</td>
<td>03/01/14 - 01/31/15</td>
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<td>Subaward Akron Public Schools U.S. Department of Education</td>
<td>Deborah Shama-Davis, Edward Bolden</td>
<td>03/01/14 - 02/28/15</td>
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<td>Evaluation of School Improvement Grant (S.I.G.) 2013-2014 Akron Public Schools</td>
<td>Deborah Shama-Davis, Edward Bolden, Pamela Freeman</td>
<td>Continuation 05/01/12 - 04/30/15</td>
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<td>Project Achieve: Access to Curriculum and High Quality Instruction for Educators Valuing English Language Learners</td>
<td>Scott Sheridan, Geography</td>
<td>Continuation 08/01/13 - 01/31/15</td>
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<td>Development of a Water Clarity Index for the Southeastern U.S. as a Climate Indicator</td>
<td>Bethany Simunich, Office of Continuing and Distance Education</td>
<td>04/26/14 - 12/31/15</td>
<td>$6,630</td>
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<td>Comparison of Motivation and Learning Outcome Achievement in Shortened, Online, Summer Courses Versus Their Full-Time Counterparts</td>
<td>Tara Smith, Epidemiology/Biostatistics</td>
<td>08/15/13 - 03/14/16</td>
<td>$901,040</td>
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<td>Producing a Comprehensive and Open Set of Tools for the JET Collaboration</td>
<td>Michael Strickland, Physics</td>
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<td>Hadron Physics and Non-Perturbative QCD Modeling</td>
<td>Peter Tandy, Physics</td>
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<td>Low-Absorption Liquid Crystals for Infrared Beam Steering</td>
<td>Robert Twieg, Chemistry</td>
<td>Continuation 01/23/13 - 12/22/14</td>
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<td>Low-Absorption Liquid Crystals for Infrared Beam Steering</td>
<td>Robert Twieg, Chemistry</td>
<td>Continuation 07/01/13 - 06/30/16</td>
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<td>REU Site at Kent State University: Liquid Crystals and Advanced Materials</td>
<td>Roberto Uribe, Technology</td>
<td>Continuation 07/01/13 - 08/30/15</td>
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Raymond Weber, Applied Engineering, Sustainability, & Technology 01/17/14 - 12/31/14 $36,910
Subaward Purdue University /Federal Aviation Administration
*Project #4: Weather Technology in the Cockpit: Project a Quantifying Causality - Project A*

Christopher Woolverton, Environmental Health Sciences 05/27/14 - 08/15/14 $9,987
City of Kent Department of Public Health
*Researching Testing for West Nile Virus*

**Instruction**

Mary Lou Holly, Teaching, Learning and Curriculum Studies Additional 07/01/13 - 06/30/14 $2,350
Ohio Board of Regents
*Choose Ohio First Scholarship Program: Improving Retention and Learning of STEM Student Through Learning Communities*

Candace Perkins-Bowen, Journalism and Mass Communication 05/01/14 - 12/31/14 $132,800
American Society of Newspaper Editors
*Reynolds High School Journalism Institute 2014*

Brent Robinson, Academic Success Center Continuation 09/01/14 - 08/31/15 $443,212
U.S. Department of Education
*Kent State University SSS Grant Proposal 2010-2015*

**Public Service**

Joanne Arhar, VACCA Office of Student Services 04/23/14 - 05/17/15 $18,617
Martha Holden Jennings Foundation
*KEEP Summer Academy*

Madhav Bhatta, Biostatistics/Epidemiology/Environmental Health 07/01/13 - 06/30/14 $25,000
Subaward Tuscarawas County General Health District / Ohio Dept of Public Health /Centers for Disease Control and Prevention
*Epidemiology Services: Public Health Infrastructure Grant*

James Campbell, Fashion Design and Merchandising 04/01/13 - 03/31/16 $210,000
John P. Murphy Foundation
*TechStyleLAB: Phase Three and Beyond*

Scott Courtney, Teaching, Learning and Curriculum Studies Additional 07/01/13 - 08/15/14 $9,413
Joanne Caniglia, Teaching, Learning and Curriculum Studies
Subaward Ohio Dept of Education /U.S. Department of Education
*Warren City Schools-Kent State Mathematics Partnership Study Group Project*

Thomas Jefferson, VP Diversity, Equity and Inclusion Continuation 06/01/14 - 05/31/15 $495,139
U.S. Department of Education
*Classic Upward Bound Academy*

Annette Kratcoski, Research Center for Educational Technology/Teaching, Leadership and Curriculum Studies 09/01/13 - 06/30/14 $2,000
Subaward Northeast Ohio Medical University /U.S. Department of Education
*STEMM Foundations Curriculum*
Victor Pavona, Stark Campus  
Subaward Ohio Development Services Agency /U.S. Small Business Administration  
*Stark SBDC FY14*

Marty Ropog, Ohio Literacy Resource Center/Teaching, Learning and Curriculum Studies  
Subaward Ohio Board of Regents and The Ohio State University /U.S. Department of Education  
*2014 ABLE (Adult Basic and Literacy Education) Professional Development Network*

Stephen Schillig, Tuscarawas Campus  
Subaward Ohio Development Services Agency /U.S. Small Business Administration  
*Tuscarawas SBDC FY14*

William T. Southards, Applied Engineering, Sustainability, & Technology  
NorTech  
*SBIR Academy 2014*

Therese Tillett, Curriculum Services  
Subaward Ohio Board of Regents /U.S. Department of Education  
*Secondary Career-Technical Alignment Initiative (SCTAI) Coordinator*

### COMPARATIVE DATA

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<th>Fiscal Year to Date</th>
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<td>Total Funding</td>
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<td>Research</td>
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<td>Instruction</td>
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<td>Public Service</td>
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