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6-2013

## Office of Research, Awards and Recognition, June 15-30, 2013

University of Tennessee Office of Research

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**UTK Awards (6/15/2013 - 6/30/2013)**

INVESTIGATOR	TITLE	SPONSOR
<b>College of Arts and Sciences</b>		
Best, Michael; Campagna, Shawn	<i>REU Site: Advanced Materials for Energy and Sensing Applications at the University of Tennessee</i>	NSF - National Science Foundation
Bingham, Carrol	<i>Matching Funds - UT/ORNL Joint Institute</i>	DOE - UT-Battelle - Oak Ridge National Laboratory
Burghardt, Gordon	<i>Inquiry on Religious Experience &amp; Moral Identity</i>	Center of Theological Inquiry
Butler, Paul	<i>SI2-CHE: CCP-SAS -Collaborative Computing consortium for advanced analyses of structural data in chemical biology and soft condensed matter</i>	NSF - National Science Foundation
Campbell, Mary	<i>Charles Ellis Johnson's Stereographic Sinners and Latter-day Saints</i>	American Council of Learned Societies
Greene, Geoffrey	<i>Experimental Weak Interactions With Pulsed and Continuous Cold Neutrons</i>	DOE - US Dept. of Energy
Guidry, Michael	<i>Data-mining in nuclear reactor simulation results</i>	DOE - UT-Battelle - Oak Ridge National Laboratory
Hwang, Wonjae	<i>South Korea's Rise in the Era of Globalization: Power, Economic Development, and</i>	University of Wisconsin Milwaukee
Kilbey, Sidney; Mays, Jimmy	<i>Role of Chain Microstructure and Branching on Solution and Thin Film Phase Behav</i>	DOD - Department of the Army
Loeffler, Frank	<i>Secondary Impacts of In Situ Remediation on Groundwater Quality and Post-Treatme</i>	Tufts University
Maclean, Calvin; Alley, David	<i>The Whipping Man</i>	City of Knoxville
Mckay, Larry	<i>Technical Support for Environmental Projects</i>	DOE - UT-Battelle - Oak Ridge National Laboratory
Moreo, Adriana; Dagotto, Elbio	<i>Computational Studies of Model Hamiltonians for Prnctides and Multiferroic Manga</i>	NSF - National Science Foundation
Nazarewicz, Witold; Papenbrock, Thomas	<i>Nuclear Computational Low Energy Initiative (NUCLEI)</i>	DOE - Office of Science
Ohnesorg, Stefanie; Gallmeier, Maria; Schonagen, Mary	<i>A STEM-Based German Language Sustainability Curriculum Unit for Student Success</i>	American Association of Teachers of German
Reynolds, Todd; Davis, Sarah	<i>Role of phosphatidylethanolamine in regulating virulence in Candida albicans</i>	DHHS - NIH - National Institute of Dental and Craniofacial Research
Sorensen, Soren; Read, Kenneth	<i>Studies of Hot and Dense Nuclear Matter</i>	DOE - US Dept. of Energy
Weitering, Hanno	<i>Ultrathin Oxide Growth and Characterization</i>	DOE - UT-Battelle - Oak Ridge National Laboratory
Weitering, Hanno	<i>Exploration of quantum size effects in ultrathin magnesium films for hydrogen st</i>	DOE - UT-Battelle - Oak Ridge National Laboratory
Weitering, Hanno	<i>Exploration of quantum size effects in ultrathin ruthenium films for surface cat</i>	DOE - UT-Battelle - Oak Ridge National Laboratory
Yerka, Stephen	<i>Proposed In-Field Geophysical Consultation at Mawchu Llacta, District of Tuti, P</i>	Vanderbilt University
<b>College of Business Administration</b>		
Noon, Charles	<i>Statistical analysis for HRP</i>	DOE - UT-Battelle - Oak Ridge National Laboratory
<b>College of Communication and Information</b>		
Allard, Suzanne	<i>CCI Student Services to B&amp;W Y-12</i>	DOE - BWXT Y-12
Suttles, Barbara	<i>Support For Computational Science and Engineering Division-UTBattelle (Nelson)</i>	DOE - UT-Battelle - Oak Ridge National Laboratory
Suttles, Barbara	<i>Support for Biological and Environmental Research Information System (BERIS)- Co</i>	DOE - UT-Battelle - Oak Ridge National Laboratory
<b>College of Engineering</b>		

<b>Arel, Itamar; Gu, Gong; Holleman, Jeremiah</b>	<i>Scalable Power-Efficient Signal Analysis Systems using Hybrid Analog Computation</i>	DOD - Defense Advanced Research Project Agency (DARPA)
<b>Bialock, Benjamin</b>	<i>Development of Silicon-on-insulator (SOI) Components for Isolation and Gate Drive</i>	DOE - UT-Battelle - Oak Ridge National Laboratory
<b>Choo, Hahn</b>	<i>In situ neutron diffraction and fluid dynamics modeling of dynamic recrystallization in Mg alloys</i>	NSF - National Science Foundation
<b>Clarke, David</b>	<i>Database Applications</i>	DOE - UT-Battelle - Oak Ridge National Laboratory
<b>Clarke, David</b>	<i>Fuel Economy Guide</i>	DOE - UT-Battelle - Oak Ridge National Laboratory
<b>Clarke, David</b>	<i>DOE/EPA Fuel Economy Information &amp; Market Research</i>	DOE - UT-Battelle - Oak Ridge National Laboratory
<b>Clarke, David</b>	<i>Support to Transportation Research Analysis Research</i>	DOE - UT-Battelle - Oak Ridge National Laboratory
<b>Clarke, David</b>	<i>DOE/EPA Fuel Economy Information</i>	DOE - UT-Battelle - Oak Ridge National Laboratory
<b>Clarke, David</b>	<i>Fuel Economy Web Site</i>	DOE - UT-Battelle - Oak Ridge National Laboratory
<b>Clarke, David</b>	<i>Fuel Economy Program, Clean Cities, &amp; Your MPG</i>	DOE - UT-Battelle - Oak Ridge National Laboratory
<b>Cox, Chris</b>	<i>Laboratory Energy Research and Development Working Group (LERDWG)</i>	DOE - Los Alamos National Laboratory
<b>Dongarra, Jack; Bosilca, George</b>	<i>Unified Common Communication Substrate (UCCS)</i>	DOE - UT-Battelle - Oak Ridge National Laboratory
<b>Frankel, Jay; Keyhani, Majid</b>	<i>A Novel Calibration Method for Estimating Transient Surface Heat Flux under Hype</i>	Air Force Research Laboratory
<b>Fu, Joshua</b>	<i>Stochastic Parameterization approach to explore landscape heterogeneity and dyna</i>	DOE - UT-Battelle - Oak Ridge National Laboratory
<b>Hall, Howard</b>	<i>Simulation Study using MCNPX and NRFGEANT4 for Applicability of Nuclear Resonanc</i>	DOE - UT-Battelle - Oak Ridge National Laboratory
<b>Hayward, Jason</b>	<i>Alternative Detector System to Replace He-3 Detectors for Neutron Sciences</i>	DOE - UT-Battelle - Oak Ridge National Laboratory
<b>Hayward, Jason</b>	<i>Technical Support for International Safeguards Research</i>	DOE - UT-Battelle - Oak Ridge National Laboratory
<b>Hayward, Jason</b>	<i>Neutron Scattering Instrumentation Research and Development for High Spatial and</i>	DOE - Office of Science
<b>Heilbronn, Lawrence</b>	<i>Secondary Light-Ion Cross Sections and Transport from Intermediate-Energy Heavy-</i>	NASA - Langley Research Center
<b>Irick, David</b>	<i>ITER CS Module Material Development</i>	DOE - UT-Battelle - Oak Ridge National Laboratory
<b>Li, Fangxing</b>	<i>GPU-based matrix condensation with sparse matrix technique for power system simu</i>	NSF - National Science Foundation
<b>Li, Husheng</b>	<i>Communication System Design in Microgrid</i>	DOE - UT-Battelle - Oak Ridge National Laboratory
<b>Lukosi, Eric</b>	<i>Diamond-based Energy Conversion System</i>	Oak Ridge Associated Universities
<b>Maldonado, Guillermo</b>	<i>Development of Nuclear Reactor Models</i>	DOE - UT-Battelle - Oak Ridge National Laboratory
<b>Mandrus, David</b>	<i>Correlated and Complex Materials</i>	DOE - UT-Battelle - Oak Ridge National Laboratory
<b>Morris, James</b>	<i>Structure of Nano-Porous Carbon</i>	DOE - UT-Battelle - Oak Ridge National Laboratory
<b>Ostrowski, James</b>	<i>Optimization in Power Systems</i>	DOE - Argonne National Lab
<b>Parker, Lynne</b>	<i>Analysis Tools for Sensor-Based Energy Modeling</i>	DOE - UT-Battelle - Oak Ridge National Laboratory
<b>Pennycook, Stephen</b>	<i>Atomic-scale investigations of energy materials</i>	DOE - UT-Battelle - Oak Ridge National Laboratory
<b>Penumadu, Dayakar</b>	<i>Microstructural Characterization of Aluminum Damage Due to Fires</i>	DOD - Department of the Navy
<b>Rack, Philip</b>	<i>Molecular Scale Engineering and Nanoscale Technologies</i>	DOE - UT-Battelle - Oak Ridge National Laboratory

<b>Rawn, Claudia</b>	<i>Computational Modeling for Radiation Effects</i>	DOE - UT-Battelle - Oak Ridge National Laboratory
<b>Rawn, Claudia</b>	<i>Characterization, Testing, and Development of Thermoplastic Composites</i>	DOE - UT-Battelle - Oak Ridge National Laboratory
<b>Tan, Jindong</b>	<i>A Semi-spherical Magnetic Driven Wireless Camera for Single Incision Laparoscopic Surgery</i>	NSF - National Science Foundation
<b>Tomsovic, Kevin</b>	<i>Program Income for NSF Engineering Research Center for Ultra-wide-area Resilient Electric Energy Transmission Network</i>	ISO New England
<b>Tomsovic, Kevin; Liu, Yilu</b>	<i>Magnetic Amplifier for Power Flow Control</i>	SPX Transformer Solutions, Inc.
<b>Wirth, Brian</b>	<i>Modeling materials performance in extreme environments</i>	DOE - UT-Battelle - Oak Ridge National Laboratory
<b>Wirth, Brian</b>	<i>Modeling Oxidation Kinetics in Ferritic Alloys for Advanced Clad Applications</i>	DOE - UT-Battelle - Oak Ridge National Laboratory
<b>Zhang, Mingjun</b>	<i>Energy Efficient Swimming Mechanism: An Inspiration from Micro-scale Biological</i>	Office Of Naval Research
<b>College of Nursing</b>		
<b>Hutson, Sadie; Lindley, Lisa; Hall, Joanne; Phillips, Kenneth</b>	<i>End of Life Needs of PLWA in Appalachian Tennessee and Alabama</i>	DHHS - NIH - National Institutes of Health
<b>Niederhauser, Victoria; Ramsey, Gary; Mccay, Katherine</b>	<i>Enhancing Diversity in a Second-Degree Nursing Program</i>	Robert Wood Johnson Foundation
<b>Wyatt, Tami</b>	<i>Incorporating DocuCare Across Nursing Curricula</i>	Lippincott, Williams & Wilkins
<b>College of Social Work</b>		
<b>Patterson, David</b>	<i>KARM 2013 Matching Funds for Knox HUD/HMIS</i>	Knox Area Rescue Ministries
<b>Campus Centers and Institutes</b>		
<b>Halloy, Christian</b>	<i>Develop 3-D Diffusion/Evolution Equations</i>	DOE - UT-Battelle - Oak Ridge National Laboratory
<b>Other</b>		
<b>Reed, Sandra</b>	<i>NSF Graduate Research Fellowship Program</i>	NSF - National Science Foundation
<b>Stewart, Joseph</b>	<i>Air Force Acquisition Improvement Support (FA7014-10-R-0008) - IDIQ</i>	DOD - Department of the Air Force
<b>MultiCollege/Center</b>		
<b>Bhat, Gajanan(Engr); Durairaj, Baskaran(A&amp;S)</b>	<i>Nanofiller Reinforced Nonwoven Sandwiched Composites for Asymmetric Explosive Threats Protection</i>	DOD - Department of the Navy
<b>Egami, Takeshi(Engr); Sokolov, Alexei (A&amp;S); Smith, Jeremy (A&amp;S); Mays, Jimmy(A&amp;S); Hopkins, John(UTK-Executive Vice President)</b>	<i>Neutron Scattering Research Network for Epscor States</i>	DOE - US Dept. of Energy
<b>Gaylord, Nan(Nur); Skolits, Gary(EHHS)</b>	<i>Interprofessional Care at the Vine School Health Center (I.C.V.)</i>	DHHS - Health Resources and Services Administration

AWARD

\$300,000

\$551,000

\$40,000

\$611,582

\$35,000

\$280,000

\$7,500

\$15,831

\$141,000

\$152,780

\$5,000

\$15,431

\$140,000

\$210,000

\$2,500

\$35,732

\$288,000

\$8,374

\$10,281

\$10,281

\$4,594

\$15,173

\$11,500

\$171,878

\$80,000

\$248,944
\$59,495
\$147,271
\$3,422
\$44,080
\$52,220
\$15,894
\$17,908
\$36,733
\$26,360
\$2,500
\$30,000
\$63,000
\$28,577
\$3,914
\$20,000
\$10,710
\$150,000
\$50,000
\$170,282
\$12,000
\$52,079
\$5,000
\$48,376
\$19,300
\$20,000
\$15,000
\$8,866
\$20,000
\$40,000
\$25,000

\$30,530
\$115,179
\$400,000
\$10,000
\$25,156
\$20,000
\$64,601
\$84,882
\$235,329
\$80,000
\$39,783
\$4,000
\$58,664
\$183,500
\$893,343
\$105,719
\$40,000
\$438,046