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Awards and Recognitions

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4-27-2011

## Office of Research, Awards & Recognition, April 27, 2011

University of Tennessee Office of Research

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## AWARDS AND RECOGNITIONS

<http://research.utk.edu>

APRIL 27, 2011

### AWARDS FOR MARCH 26–APRIL 18, 2011

INVESTIGATOR	TITLE	SPONSOR	AWARD
<b>COLLEGE OF ARCHITECTURE &amp; DESIGN</b>			
Stach, Edgar; Klinkhammer, Barbara; Rose, James; Shmerler, Deborah; Tolbert, Leon	Solar Decathlon 2011	National Renewable Energy Laboratory	\$100,000
<b>COLLEGE OF ARTS &amp; SCIENCES</b>			
Bruce, Barry	Understanding Photosystem I as Biomolecular Reactor for Energy Conversion	DOD - Department of the Army	\$175,000
Classen, Aimee	Collaborative Research: Fungal Responses to Warming Will Shape Decomposition in Eastern	DOE - UT-Battelle - ORNL	\$28,000
Cyr, Howard	Physical and Chemical Analysis of Cultural Planting Features at Thomas Jefferson	The Corporation for Jefferson's Poplar Forest	\$6,299
Dai, Pengcheng	Growth and Characterization of Magnetic Nanostructures	DOE - UT-Battelle - ORNL	\$3,130
DeCorse, Elizabeth; Yerka, Stephen	Remote Sensing Survey of the Sander's Site (15LV24) On Kentucky Dam Reservation	Tennessee Valley Authority	\$22,454
Egami, Takeshi	Atomistic Study of Bulk Metallic Glasses	DOE - UT-Battelle - ORNL	\$48,450
Feigerle, Charles; Rack, Philip	Development of a Thin-Film Boron Phosphide Solid-State Neutron Detector	National Nuclear Security Administration	\$250,000
Kah, Linda	MAHLI - MArS HandLens Imager for the Mars Science Laboratory	Malin Space Science Systems	\$32,378
Loeffler, Frank	Development and Validation of a Quantitative Framework and Management Expectation	DOD - Department of Defense	\$120,334
Mays, Jimmy	Polymer-Based Multicomponent Materials	DOE - UT-Battelle - ORNL	\$22,895
McSween, Harry	Participation in DAWN Science Team	Regents of the University of California, Los Angeles	\$20,500
O'Neill, Hugh	Investigation of Photosynthetic Membranes Using Small-Angle Neutron Scattering	DOE - UT-Battelle - ORNL	\$27,831
Peterson, Cynthia	UTK SCALE-IT Brian Erickson	DOE - UT-Battelle - ORNL	\$21,696
Sanders, Nathan	DISSERTATION RESEARCH: Direct and indirect effects of invasive species on plant	National Science Foundation	\$12,850
Shpak, Elena	Dissection of the ERECTA Receptor-Like Kinase Signaling Pathway in Arabidopsis	National Science Foundation	\$120,000
Vonarnim, Albrecht	Arabidopsis 2010: Global Analysis of Translational Regulons	University of California at Riverside	\$160,311
Weitering, Hanno	Exploration of quantum size effects in ultrathin magnesium films for hydrogen	DOE - UT-Battelle - ORNL	\$9,947
Weitering, Hanno	Exploration of quantum size effects in ultrathin ruthenium films for surface	DOE - UT-Battelle - ORNL	\$9,947
Williams, Richard	AS107 Operation and maintenance	Southern Methodist University	\$13,500
Zhu, Wenguang	Theory and simulations of nanoscale materials	DOE - UT-Battelle - ORNL	\$23,536
Zhu, Wenguang	Theoretical Studies of Optical Properties of Novel Nano-materials	DOE - UT-Battelle - ORNL	\$13,333
<b>COLLEGE OF BUSINESS ADMINISTRATION</b>			
Fox, William; Murray, Matthew	Race to the Top	Tennessee Department of Education	\$8,030,958
Stewart, Joseph	Air Force Acquisition Improvement Support (FA7014-10-R-0008) - IDIQ	Department of the Air Force	\$961,275
<b>COLLEGE OF EDUCATION, HEALTH &amp; HUMAN SCIENCES</b>			
Mincey, Bethany	WIA Youth	Knoxville/Knox County-Community Action Committee	\$111,600
Mulligan, Geraldine	Ovae Associates Initiative	MPR Associates, Inc.	\$44,737
White, Connie	Tennessee Even Start Database Support, Training, and Technical Assistance	Tennessee Department of Education	\$97,000
<b>COLLEGE OF ENGINEERING</b>			
Attard, Thomas	Development and Application of a CarbonFlex Composite for Structural Damage	DOE - UT-Battelle - ORNL	\$125,000
Blalock, Benjamin; Tolbert, Leon; Wang, Fei	High Temperature Silicon Carbide (SiC) Gate Driver - Phase 1 SBIR	Global Power Electronics	\$20,000
Clarke, David	Support to Transportation Policy Analysis Research Program	DOE - UT-Battelle - ORNL	\$23,103
Clarke, David	DOE/EPA Fuel Economy Information	DOE - UT-Battelle - ORNL	\$45,837
Clarke, David	DOE/EPA Fuel Economy Information Site	DOE - UT-Battelle - ORNL	\$76,005
Clarke, David	Fuel Economy Guide	DOE - UT-Battelle - ORNL	\$86,450
Clarke, David	Fuel Economy Program & Clean Cities Activities	DOE - UT-Battelle - ORNL	\$51,833
Clarke, David	Fuel Economy Web Site	DOE - UT-Battelle - ORNL	\$68,474
Dmowski, Wojciech	Collaborative Research: Probing Atomic Structure Changes in Deformation of Metallic Glasses: An Experimental and Computational	National Science Foundation	\$85,001

## AWARDS FOR MARCH 26–APRIL 18, 2011 (CONT.)

INVESTIGATOR	TITLE	SPONSOR	AWARD
Hayward, Jason	Alternative Detector System to Replace He-3 Detectors for Neutron Sciences	DOE - UT-Battelle - ORNL	\$20,000
He, Wei	CAREER: Immunologically Responsive Therapeutic Biomaterials to Modulate Wound He	National Science Foundation	\$400,075
Irick, David	ITER Magnet Systems Development	DOE - UT-Battelle - ORNL	\$82,334
Kihm, Kenneth	Multi-Scale Energy Transport in High Temperature heat pipes for Leading Edges	Lockheed Martin	\$75,000
Mandrus, David	Correlated and Complex Materials	DOE - UT-Battelle - ORNL	\$18,144
McHargue, Carl	Neutron Optics and Crystals	DOE - UT-Battelle - ORNL	\$34,234
McHargue, Carl	Mechanical Properties of Nuclear Materials	DOE - UT-Battelle - ORNL	\$40,000
McHargue, Carl; Meisner, Roberta	Materials Characterization	DOE - UT-Battelle - ORNL	\$47,265
Melcher, Charles; Hayward, Jason	Enhancing Energy Migration and Proportionality in Scintillation Materials	DOE - US Dept. of Energy	\$250,000
Mench, Matthew	Studies of Regenerative Fuel Cell Architecture	DOE - UT-Battelle - ORNL	\$7,500
Mench, Matthew	Studies of Regenerative Fuel Cell Architecture	DOE - UT-Battelle - ORNL	\$7,500
Nguyen, Ke	Engine Friction	DOE - UT-Battelle - ORNL	\$8,905
Pharr, George; Herbert, Erik	Collaborative Research: Aging and Disease Effects on Viscous Energy Dissipation	National Science Foundation	\$226,074
Qi, Hairong	Real-Time Smart Tools for Processing Spectroscopy Data	Signal Processing, Inc.	\$30,000
Rack, Philip	Electromechanical Imaging of Live Vascular Smooth Muscle Cells	Clemson University	\$66,150
Wang, Xiaorui	Enforcing Timing and Power/Thermal Constraints for Mission-Critical Real-Time	DOD - Department of the Navy	\$20,000
Wu, Jie	Advanced Chlorophyll Fluorometers for Aquasentinel Technology	DOE - UT-Battelle - ORNL	\$20,000
<b>CAMPUS CENTERS &amp; INSTITUTES</b>			
Gangaware, Timothy	FY2011 WRRIP Application for TN Water Resources Center	US Dept. of Interior - US Geological Survey	\$48,018
Jouline, Igor; Baudry, Jerome	Computational Genomics of Signal Transduction	NIH - National Institute of General Medical Sciences	\$254,566
Nichols, Jeffrey	F Wavelength-Division Multiplexed Quantum Communication Network	DOE - UT-Battelle - ORNL	\$32,035
Nichols, Jeffrey	Computational Science Workflow System	DOE - UT-Battelle - ORNL	\$30,684
Sayler, Gary; Cox, Chris; Jouline, Igor; Smith, Jeremy	Cellulosic Biomass Deconstruction, Characterization and Modeling	DOE - UT-Battelle - ORNL	\$183,000
Sayler, Gary; Cox, Chris; Jouline, Igor; Smith, Jeremy	Cellulosic Biomass Deconstruction, Characterization and Modeling	DOE - UT-Battelle - ORNL	\$150,000
Shelton, Robert	US-European Summit on Science, Technology, Innovation, and Sustainable Economic	DOE - UT-Battelle - ORNL	\$94,355
Zacharia, Thomas	Joint Institute for Computational Sciences Proposal to NSF05-625: High Performance Computing System Acquisition: Towards a Petascale Computing Environment	National Science Foundation	\$7,222,520

## RECOGNITIONS

**Sheng Dai**, UT professor of chemistry and a researcher in the Chemical Sciences Division at Oak Ridge National Laboratory, has been given the UT-Battelle Director's Award for Outstanding Individual Accomplishment in Science and Technology for his work in novel functional porous materials.

**Robert Hatcher**, professor of earth and planetary sciences, and two former graduate students have been recognized for having the most cited paper in the Journal of Structural Geology between 2005 and 2010. **Arthur Merschat** (MS, 2003) and **Timothy Davis** (PhD, 1993) were coauthors with Hatcher on "The northern Inner Piedmont, southern Appalachians, USA: kinematics of transpression and SW-directed mid-crustal flow."

**Suzanne Lenhart**, whose research applications range from improving cardiopulmonary resuscitation to modeling rabies in raccoons, has been named a Society for Industrial and Applied Mathematics (SIAM) fellow. Lenhart, a professor of mathematics and faculty adviser for the SIAM student chapter at UT Knoxville, is being recognized for her research in optimal control with biological and physical applications and her significant contributions to advance undergraduate research.

**Jimmy Mays**, professor of polymer chemistry, is one of three recipients of the 2011 Herman F. Mark Scholar Award from the Polymer Chemistry Division of the American Chemical Society. The award recognizes excellence in basic or applied research in polymer science. Mays also recently received the Innovation Valley Technology Council's Navigator Awards for research entrepreneur of the year.

The New Norris House has been recognized by the National Council of Architectural Registration Boards with its 2011 NCARB Prize for Creative Integration of Practice and Education in the Academy. **Tricia Stuth**, associate professor of architecture and project manager, led an interdisciplinary team of UT

Knoxville students in designing the sustainable home and landscape setting, which also involved industry, professional, and community partners.

**Brad Nichols**, a PhD student in history, has received a fellowship from the Berlin Program for Advanced German and European Studies to work on his dissertation: "The Hunt for Lost Blood in the East: A Study of Nazi Re-Germanization Policy" in World War II Poland. UT graduate **Tracey Norrell**, who completed her PhD in history in 2010, has been awarded a postdoctoral fellowship for 2011-12 from the German Academic Exchange Service (DAAD). **Vejas Liulevicius**, professor of history, is director of their dissertations.