



University of Tennessee, Knoxville
**TRACE: Tennessee Research and Creative
Exchange**

Awards and Recognitions

Office of Research & Engagement

7-29-2009

Office of Research, Awards & Recognition, July 29, 2009

University of Tennessee Office of Research

Follow this and additional works at: https://trace.tennessee.edu/utk_researchawards

Recommended Citation

Office of Research, University of Tennessee, "Office of Research, Awards & Recognition, July 29, 2009" (2009). *Awards and Recognitions*.

https://trace.tennessee.edu/utk_researchawards/27

This Newsletter is brought to you for free and open access by the Office of Research & Engagement at TRACE: Tennessee Research and Creative Exchange. It has been accepted for inclusion in Awards and Recognitions by an authorized administrator of TRACE: Tennessee Research and Creative Exchange. For more information, please contact trace@utk.edu.

AWARDS AND RECOGNITIONS

<http://research.utk.edu>

JULY 29, 2009

AWARDS FOR JUNE 25–JULY 23, 2009 — PART I

Note: Due to the large number of awards for this period, data for the **College of Engineering, College of Law, College of Social Work** and **Campus Centers & Institutes** are published in a separate edition designated as **Part II**.

| INVESTIGATOR | TITLE | SPONSOR | AWARD |
|--|--|---|-----------|
| COLLEGE OF ARTS & SCIENCES | | | |
| Alexandre-Jouline, Gladys Marie | ARRA: Chemotaxis and the Regulation of Multiple Cellular Functions in a Bacterium | National Science Foundation | \$587,546 |
| Angst, Michael | Phase I Archaeological Survey for KUB Sewer Project at Goose Creek, Knox County, TN | CH2M HILL | \$47,535 |
| Bingham, Carrol | Matching Funds - UT/ORNL Joint Institute | UT-Battelle - ORNL | \$624,500 |
| Bingham, Carrol; Stone, Nicholas; Riedinger, Leo; Jones, Kate; Grzywacz, Robert; Grzywacz-Jones, Katherine | Nuclear Spectroscopy Studies with Radioactive and Stable Ion Beams | US Department of Energy - Golden Field Office | \$357,000 |
| Burr, Devon | Mapping, Characterization, and Analysis of Channel/ Valley Features on Titan | NASA - Headquarters | \$108,526 |
| Burr, Devon | Raised Curvilinear Features in the Western MFF | NASA - Headquarters | \$68,222 |
| Chesler, Elissa; Langston, Michael | Genome Dynamics: Evolution, Organization & Function | Jackson Laboratory | \$54,000 |
| Cook, Kelsey | Support of Andrew Dykstra | UT-Battelle - ORNL | \$13,153 |
| Dagotto, Elbio | Distinguished Scientist | UT-Battelle - ORNL | \$60,250 |
| Dockendorff, Tom | FMRP Agent Domains | FRAXA Fragile X Research Fdn. | \$60,000 |
| Driskell, Boyce | Phase I Archaeological Survey for River Plain Park and Lincoln Street Landing, Knoxville, TN | Hargreaves Associates | \$23,574 |
| Egami, Takeshi | Atomistic Study of Bulk Metallic Glasses | UT-Battelle - ORNL | \$40,390 |
| Eguiluz, Adolfo | Joint Faculty | UT-Battelle - ORNL | \$16,700 |
| Eguiluz, Adolfo | Predictive Capability for Strongly Correlated Systems | US Department of Energy | \$40,400 |
| Feller, Daniel | The Papers of Andrew Jackson | National Endowment for the Humanities | \$254,000 |
| Galloway, Leslie; Gross, Louis | Mammalian Research | UT-Battelle - ORNL | \$13,600 |
| Gordon, Kristina; Willett, Jennifer | Intergenerational Transmission of Relational Patterns | American Psychological Assn. | \$6,000 |
| Howell, Elizabeth | R67, the Other Dihydrofolate Reductase | National Science Foundation | \$170,445 |
| Hulsey, Christopher | ARRA: Evolutionary Plasticity: Is Remodeling Key to Cichlid Pharyngeal Jaw Diversification? | National Science Foundation | \$166,555 |
| Jouline, Igor; Turner, Brandi | Journal of Bacteriology Editor Expenses | Amer. Society for Microbiology | \$10,836 |
| Joy, David | Distinguished Scientist | UT-Battelle - ORNL | \$108,102 |
| Kamyckov, Iouri; Ward, Bennie; Spanier, Stefan; Siopsis, George; Handler, Thomas; Efremenko, Yuri; Bugg, William | Elementary Particle Interactions | US Department of Energy - Golden Field Office | \$470,000 |
| Macek, Joseph | Distinguished Scientist | UT-Battelle - ORNL | \$17,422 |
| Mannella, Norman | Expanding the Capabilities of Photoelectron Spectroscopy as to Reveal the Coupling of Different Degrees of Freedom in Complex Electron | National Science Foundation | \$75,000 |
| Mays, Jimmy | Distinguished Scientist | UT-Battelle - ORNL | \$220,372 |
| Mckay, Larry; Biggerstaff, John | Mobility of Particulate and Dissolved Munitions in the Vadose Zone at Operational Ranges | UT-Battelle - ORNL | \$157,054 |
| Moersch, Jeffrey | Modeling and Characterization Studies of a Rover-Based Neutron Detector with Applications to Mars | NASA - Jet Propulsion Lab - California Institute of Tech. | \$29,960 |
| Moreo, Adriana | Joint Faculty | UT-Battelle - ORNL | \$31,366 |
| Peterson, Cynthia | Analysis Software and Algorithm Development | UT-Battelle - ORNL | \$52,852 |
| Peterson, Cynthia | Graduate Research Assistant - Vivek Philip | UT-Battelle - ORNL | \$22,000 |
| Peterson, Cynthia; Greene, Geoffrey | Graduate Research Assistant - Khalsa-Moyers | UT-Battelle - ORNL | \$37,680 |
| Plyler, Patrick Norton | Bernafon Hearing Aid Testing | Bernafon AG | \$30,500 |
| Roberts, Daniel | Nodulin-26 Intrinsic Proteins: Multifunctional Transporters of Water and Metabolites in Plant Symbioses and Stress Responses | National Science Foundation | \$167,611 |
| Sanders, Nathan | Dissertation Research: Historical & Ecological Causes of Ant Diversity Along Environment | National Science Foundation | \$8,180 |
| Schmidt, Gilya | Schusterman Visiting Israeli Professor | The American-Israeli Cooperative Enterprise | \$60,000 |
| Schwarz, Ilsa; Webb, Patricia | TDE Pediatric Language Clinic FY10 | State of Tennessee | \$221,000 |
| Serpescu, Engin | ARRA: Dissection of promiscuous Enzyme-Ligand Interactions | National Science Foundation | \$782,240 |

AWARDS FOR JUNE 25–JULY 23, 2009 — PART I (CONT.)

| INVESTIGATOR | TITLE | SPONSOR | AWARD |
|--|--|---|-----------|
| Sherwood, Sarah | Geoarchaeological and Geomorphologic Examination of the Governor's Landing Subdivision | Individual | \$2,824 |
| Sorensen, Soren; Read, Kenneth | Studies of Hot and Dense Nuclear Matter | US Department of Energy | \$261,000 |
| Taylor, Lawrence | Miniaturization of an Environmental Scanning Electron Microscope for Remote Planetary Studies: Science Advisory Team | NASA-Marshall Space Flight Center-Financial Management Office | \$38,500 |
| Tran, Liem | Technical Support for Regional Vulnerability Assessment | TN & Associates | \$41,112 |
| Venkatachalam, Sundaresan | Chromatin Remodeling and Lymphoma Formation | Leukemia Research Foundation | \$94,460 |
| Vonarnim, Albrecht | Mechanisms of Regulated Protein Transport Between Nucleus and Cytoplasm | US Department of Energy - Golden Field Office | \$170,000 |
| Weitering, Hanno; Yoon, Mina; Feigerle, Charles | Theory and simulations of nanoscale materials | UT-Battelle - ORNL | \$32,250 |
| Williams, Richard | AS107 Operation and maintenance | Southern Methodist University | \$35,500 |
| Wise, Steven | Collaborative Research: Multiscale Modeling of Solid Tumor Growth | National Science Foundation | \$12,285 |
| Xue, Ziling | Novel Methods for Chromium and Vanadium Analyses in Biological Fluids | NIH - Center for Scientific Review | \$187,425 |
| Zhang, Zhenyu | Optical Plasmonic Properties of Thin Films, Multilayers, and Nanostructures | UT-Battelle - ORNL | \$13,500 |
| COLLEGE OF BUSINESS ADMINISTRATION | | | |
| Fox, William | Child Care Market Rate Survey and Analysis | State of Tennessee | \$25,913 |
| Schrivier, William | Proposal to Provide Support Services for the Wage & Hour Division of the ESA | US Department of Labor | \$874,039 |
| Schrivier, William | Services supportive of OSHA | US Department of Labor | \$96,312 |
| COLLEGE OF COMMUNICATION & INFORMATION | | | |
| Allard, Suzanne; Tenopir, Carol; McMillan, Sally | ScienceLinks2 PhD: Linking Education and Science | Institute of Museum & Library-Office of Museum Services | \$711,727 |
| Singh, Vandana | Tech Support for Library Systems-Comparison of Open Source & Proprietary Software | Institute of Museum & Library-Office of Museum Services | \$321,178 |
| COLLEGE OF EDUCATION, HEALTH & HUMAN SCIENCES | | | |
| Brewer, Ernest | Academic Enrichment Upward Bound | US Department of Education | \$695,368 |
| Brewer, Ernest | Veteran's Upward Bound | US Department of Education | \$315,916 |
| Brewer, Ernest | Upward Bound Math and Science Competition | US Department of Education | \$297,034 |
| Fussell, Elizabeth | Transition Service Integration Model | TN Dept. of Education | \$242,466 |
| Gardner, Diane | Oregon Adult Basic Skills Content Standards Plan 2009-10 | State Of Oregon | \$98,815 |
| Haughton, Betsy; Spence, Marsha | Public Health Nutrition Leadership Education and Training for a Healthy MCH Population | Health Resources and Services Administration | \$208,090 |
| Mincey, Bethany | Pellissippi State AE | Pellissippi State Comm. College | \$2,960 |
| Morrow, Jennifer | Evaluation of CHASCo's Higher Education Environmental Management Grant | TN Independent Colleges & Universities Association | \$10,000 |
| Mulligan, Geraldine; Stephens, Jean | LINCS Regional Resource Center, Region II | US Department of Education - National Institute for Literacy | \$183,425 |
| Skolits, Gary | Evaluation of the TBR Teacher Preparation Collaborative | Pellissippi State Comm. College | \$21,600 |
| White, Connie | West Virginia Parent Connections, a Parental Information and Resource Center | Edvantia | \$25,000 |
| White, Connie | Knox County School Improvement Grant | Knox County Schools | \$19,764 |

RECOGNITIONS

Gordon Burghardt, professor of psychology, has been elected president-elect of the Behavioral Neuroscience and Comparative Psychology Division of the American Psychology Association.

Chris Holmlund, professor in the Department of Modern Foreign Languages and Literatures and the Cinema Studies Program, was recently elected president of the Society for Cinema and Media Studies.

Kate Jones, assistant professor of physics, has received an Outstanding Junior Investigator Award from the U.S. Department of Energy. The honor includes \$300,000 over the next three years to support her research.

Todd Moore, assistant professor of clinical psychology, has accepted an invitation from the American Psychological Association to attend their annual Science Leadership Conference in Washington, D.C.

AWARDS AND RECOGNITIONS

<http://research.utk.edu>

JULY 29, 2009

AWARDS FOR JUNE 25–JULY 23, 2009 — PART II

Note: Due to the large number of awards for this period, data for the **Colleges of Arts & Sciences, Business Administration, Communication & Information and Education, Health & Human Sciences** are published in a separate edition designated as **Part I**.

| INVESTIGATOR | TITLE | SPONSOR | AWARD |
|--|--|--|-----------|
| COLLEGE OF ENGINEERING | | | |
| Abidi, M. | Vision Based Chip Monitor for AIMS | BWXT Y-12, LLC - ORNL | \$24,990 |
| Arel, Itamar | New Methods for Identifying Attach Signatures Using Machine Learning Techniques | UT-Battelle - ORNL | \$7,650 |
| Benson, Roberto | Effect of Processing Parameters on the Barrier Properties of Polyolefin | B&W Y-12, LLC | \$40,000 |
| Bhat, Gajanan | Meltblown Nonwovens Research & Development | Lubrizol Advanced Materials | \$15,000 |
| Bosilca, George; Luszczek, Piotr; Dongarra, Jack | Collaborative Research: CSR - AES: Automatic Turning MPI Software CAToMS | National Science Foundation | \$70,000 |
| Dodds, Harold; Heilbronn, Lawrence | The Faculty Development Program at the University of Tennessee | Nuclear Regulatory Commission | \$449,766 |
| Dongarra, Jack | International Exascale Software Project (IESP) | DOE - Argonne National Lab | \$400,160 |
| Dongarra, Jack | The IESP: Planning to Create Next Generation Software Infrastructure for Exascale Science | National Science Foundation | \$350,000 |
| Egami, Takeshi | Distinguished Scientist | UT-Battelle - ORNL | \$60,307 |
| Egami, Takeshi | Atomistic Study of Bulk Metallic Glasses | UT-Battelle - ORNL | \$77,144 |
| Ekici, Kivanc | State-of-the-Art Computational Methods for the Analysis of Aerodynamic Asymmetries in Turbomachinery | Duke University-Office of Sponsored Programs | \$29,988 |
| Gao, Yanfei | A Peierls Perspective on Atomic Friction | National Science Foundation | \$198,000 |
| Gribok, Andrei | Development of Mathematical Models and Data Processing Routines from Real-Time Ambulatory Sensor Data Collected on Free-Living Individuals | USDA - Agricultural Research Service | \$25,467 |
| Han, Lee | 2009 Dwight D. Eisenhower Graduate Transportation Fellowship | US Dept. Trans. - Federal Highway Administration | \$35,500 |
| Hu, Bin | Organic Solar Cells | UT-Battelle - ORNL | \$11,548 |
| Hu, Bin | Planning Visits and Workshops in Brazil towards US-Brazil International Collaboration in Emerging Science: Magnetic Field Effects in Non-Magnetic Orga | National Science Foundation | \$19,360 |
| Huang, Jian | Agile Development of Data Analysis Tools for Neutron Scattering Sciences | UT-Battelle - ORNL | \$10,000 |
| Irick, David; Madhukar, Madhu | Pull Tests for ITER | UT-Battelle - ORNL | \$86,403 |
| Keffer, David; Paddison, Stephen; Edwards, Brian; Cui, Shengting | A Unified Computational, Theoretical, and Experimental Investigation of Proton Transport through the Electrode/Electrolyte Interface of Fuel Cell Memb | US Department of Energy-National Energy Technology | \$275,000 |
| Komistek, Richard; Mahfouz, Mohamed | Innovative Tools for In Vitro Computational Prediction of Lumbar Stresses | NIH - Nat Inst Arthritis & Musculoskeletal and Skin Diseases | \$457,229 |
| Langston, Michael | Ontological Discovery for Ethanol Research | UT-Battelle - ORNL | \$22,872 |
| Langston, Michael | DOE-BER Proteomics Project | UT-Battelle - ORNL | \$28,808 |
| Li, Husheng | Collaborative Research: Wide Band Cognitive Radio: Modeling, Algorithm and Test-bed | National Science Foundation | \$179,765 |
| Li, Xueping | ALPR: Automatic License Plate Reading | INEX | \$4,320 |
| Maldonado, Guillermo Ivan | Development of a Joint US-Russia Educational Program on Advanced Energy Technologies | University of Maryland | \$32,810 |
| Maldonado, Guillermo Ivan | Development of Nuclear Reactor Models | UT-Battelle - ORNL | \$87,700 |
| Maldonado, Guillermo Ivan | High Fidelity Neutronic and Depletion Simulations for the High Flux Isotope Reactor | UT-Battelle - ORNL | \$26,500 |
| Mchargue, Carl | Electron Microscopy Research & Development Support | UT-Battelle - ORNL | \$3,634 |
| Mchargue, Carl; Kulkarni, Nagraj | High Throughput Isotopic Diffusion Databases for Integrated Computational Materials Engineering | UT-Battelle - ORNL | \$54,298 |
| Moore, Shirley | SDCI HPC Improvement: High-Productivity Performance Analysis and Tools Environment | University of Oregon | \$182,999 |
| Nieh, Tai-Gang | Roles of Nanoclusters in Shear Banding and Plastic Deformation of Bulk Metallic Glasses | US Dept. of Energy - Energy and Technology | \$137,975 |
| Parang, Masood | UTK Summer Bridge Program | Tennessee State University | \$16,079 |
| Qi, Hairong | STTR: A Novel and High Performance Change Detection Algorithm for Hyperspectral Images | Signal Processing, Inc. | \$33,000 |
| Sawhney, Rapinder | Nuclear Nonproliferation Program Functional Analysis | UT-Battelle - ORNL | \$25,001 |
| Sawhney, Rapinder | Creation of Industrial Research Partnership | US Department of Commerce | \$100,000 |

AWARDS FOR JUNE 25–JULY 23, 2009 — PART II (CONT.)

| INVESTIGATOR | TITLE | SPONSOR | AWARD |
|--|---|--|-------------|
| Sawhney, Rapinder | Supporting the Optimization Model for Airport Terminal Flow | UT-Battelle - ORNL | \$24,985 |
| Schwartz, John | Third Creek Restoration Project Monitoring, Knox County, Tennessee | Tennessee Stream Mitigation Program | \$8,250 |
| Urbanik, Thomas | DOE/EPA Fuel Economy Information | UT-Battelle - ORNL | \$42,815 |
| Urbanik, Thomas | DOE/EPA Fuel Economy Information Site | UT-Battelle - ORNL | \$129,373 |
| Urbanik, Thomas | Fuel Economy Guide | UT-Battelle - ORNL | \$86,484 |
| Wang, Xiaorui | A Holistic Framework for Energy and Performance Control in Data Centers | National Science Foundation | \$69,464 |
| COLLEGE OF LAW | | | |
| Williams, Paulette | Professional Services for Paulette Williams/GWU 09/10 | George Washington University | \$129,468 |
| COLLEGE OF SOCIAL WORK | | | |
| Campbell, Paul | Tennessee's Child Support Employment and Parenting Program - Judicial District 4 | State of Tennessee | \$149,378 |
| Campbell, Paul; Cunningham, Maryanne | Child Care Research and Evaluation Studies | TN Dept. of Human Services | \$708,400 |
| Glisson, Charles | Center for the Study of Schools as a Context for Urban Children's Health | University of Illinois at Chicago | \$53,493 |
| Glisson, Charles | Organizational Context and Children's Mental Health in Urban After School Programs | University of Illinois at Chicago | \$32,313 |
| Wodarski, John | HIV/AIDS and Substance Abuse Primary Prevention in Minority Adolescents | Substance Abuse & Mental Health Services Adm (SAMSA) | \$335,333 |
| Yorke, Janet | Traumatized Children and Horses: The neurobiological Impact of Therapeutic Riding on Both | Waltham Foundation | \$10,188 |
| CAMPUS CENTERS & JOINT INSTITUTES | | | |
| Andrews, Philip | DV.GFS, Global Wide Area File Systems | University of Chicago | \$469,579 |
| Bell, Larry | Bioconversion of Fuels and Chemicals | UT-Battelle - ORNL | \$6,000 |
| Bell, Larry | NASA/LBA | Science Systems and Applications, Incorporated | \$22,650 |
| Cole, Gregory | Global Ring Network for Advanced Applications Development (GLORIAD) | National Science Foundation | \$871,094 |
| Geibig, Jack; Wilt, Catherine | Electronic Standards Development in Continuance of EPEAT | US Environmental Protection Agency | \$70,000 |
| Harrison, Robert; Peterson, Gregory; Eguiluz, Adolfo | ARRA: Computational Chemistry and Physics Beyond the Petascale | National Science Foundation | \$1,330,000 |
| Kovatch, Patricia; Zacharia, Thomas | Enhancing Computational Science Opportunities on NSF's Kraken | National Science Foundation | \$1,680,000 |
| Peretz, Sally | USDOE Solar Decathlon Project - Written Procedures National Evaluation | UT-Battelle - ORNL | \$6,844 |
| Thonnard, Norbert | Laser Spectroscopy of Nanomaterials Synthesis and Carbon Nanohorn Decoration for Hydrogen Storage | UT-Battelle - ORNL | \$47,949 |
| Webster, Sheila | DOE Nuclear Weapons Complex HAZMAT Training | Kirkwood Community College | \$45,000 |
| Zacharia, Thomas | Nanomaterials Development | UT-Battelle - ORNL | \$20,370 |
| Zacharia, Thomas; Nichols, Jeffrey | Computational Investigation of the Formation of Self-Assembled Molecular Surfaces | UT-Battelle - ORNL | \$133,341 |
| Zacharia, Thomas; Nichols, Jeffrey | Catalysis and Electron Transport in Nanoscale Systems | UT-Battelle - ORNL | \$109,206 |

RECOGNITIONS

Hamparsum Bozdogan, Toby & Brenda McKenzie Professor in the Department of Statistics, Operations and Management Science, recently hosted and chaired two sessions at the Conference of the Classification Society of North America.

Christopher Cherry, assistant professor of civil and environmental engineering, was recently quoted in an Associated Press article titled "E-China: The bicycle kingdom is going electric."

Yilu Liu has been named the fourth UT-ORNL Governor's Chair. She will hold appointments at ORNL's Energy and Transportation Science Division and UT's Department of Electrical Engineering and Computer Science.

Dayakar Penumadu has been named as permanent head and Fred M. Peebles Professor of the Department of Civil and Environmental Engineering. He has served in the role on an interim basis since 2007.