



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

---

Awards and Recognitions

Office of Research & Engagement

---

9-5-2012

## Office of Research, Awards & Recognition, September 5, 2012

University of Tennessee Office of Research

Follow this and additional works at: [https://trace.tennessee.edu/utk\\_researchawards](https://trace.tennessee.edu/utk_researchawards)

---

### Recommended Citation

University of Tennessee Office of Research, "Office of Research, Awards & Recognition, September 5, 2012" (2012). *Awards and Recognitions*.  
[https://trace.tennessee.edu/utk\\_researchawards/94](https://trace.tennessee.edu/utk_researchawards/94)

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](mailto:trace@utk.edu).

## AWARDS AND RECOGNITIONS

<http://research.utk.edu>

SEPTEMBER 5, 2012

### AWARDS FOR AUGUST 9–23, 2012

| INVESTIGATOR   | TITLE   | SPONSOR  | AWARD       |
|--|---|--|-------------|
| <b>COLLEGE OF ARTS &amp; SCIENCES</b>                    |   |  |             |
| Alley, David; Cervone, Thomas                            | A Raisin in the Sun   | City of Knoxville  | \$10,000    |
| Breinig, Marianne  | UT Research Assistant - Accelerator Physics   | DOE - UT-Battelle - ORNL                                       | \$55,459    |
| Breinig, Marianne  | Science of the Plasma-Materials Interface at Extreme Conditions                                 | DOE - UT-Battelle - ORNL                                       | \$3,348     |
| Burr, Devon  | An Integrated Study of the Evolution of Cerberus Fossae, Mars                                   | University of Idaho  | \$36,098    |
| Chen, Xia  | Random Walk in Random Media   | Simons Foundation  | \$35,000    |
| Freeman, Mark  | Working with Parks: New Content for the Park Museum Management Program (PMMP)                   | US Dept. of Interior - National Park Service Southeast Region  | \$4,000     |
| Greene, Geoffrey   | Experimental Weak Interactions with Pulsed and Continuous Cold Neutrons                         | US Department of Energy  | \$300,000   |
| Gross, Louis; Ahern, Sean; Gilchrist, Michael            | National Institute for Mathematical and Biological Synthesis (NIMBioS)                          | National Science Foundation                                    | \$199,986   |
| Grzywacz-Jones, Katherine                                | Spectroscopic Studies Close to 100Sn and 132Sn Using Direct Reactions and Gamma-Ray Measurement | US Department of Energy  | \$105,000   |
| Guiochon, Georges; Campagna, Shawn                       | Separation of Highly Complex Mixtures by Two-Dimension Liquid Chromatography                    | US Department of Energy - Office of Science                    | \$120,000   |
| Jessup, Micah  | Collaborative Research: Shear Zone and Detachment Formation                                     | National Science Foundation                                    | \$190,187   |
| Levy, Jacob  | Practicum Experience for Counseling Psychology  | Knoxville Family Justice Center                                | \$8,500     |
| Mazur, Peter   | Aquaporins, Ice Formation in Cells, and Cryopreservation  | NIH - National Center for Research Resources                   | \$255,567   |
| Miles, Joseph  | Institutional Settings and the Transmission of Social   | National Science Foundation                                    | \$37,001    |
| Moore, Todd  | Practicum Experience for Clinical Graduate Student  | Helen Ross McNabb Center                                       | \$10,000    |
| Moore, Todd  | Practicum Experience in Clinical Psychology   | BWXT Y-12, LLC   | \$20,000    |
| Musfeldt, Janice   | Spectroscopic Investigations of Complex Magnetic and Electronic Materials                       | DOE - US Dept. of Energy                                       | \$145,760   |
| Musfeldt, Janice   | DMREF/Collaborative Research: Enhanced Functionalities in 5d Transition Metal                   | National Science Foundation                                    | \$320,000   |
| Nazarewicz, Witold; Papenbrock, Thomas                   | Nuclear Computational Low Energy Initiative (NUCLEI)  | US Department of Energy - Office of Science                    | \$210,000   |
| <b>COLLEGE OF BUSINESS ADMINISTRATION</b>                |   |  |             |
| Cathey, Amy  | MBA Student Support for Y-12 National Security Complex  | BWXT Y-12, LLC   | \$30,000    |
| Degennaro, Ramon   | Student Research Fellowship   | Charles Koch Foundation Undergraduate Programs                 | \$7,000     |
| Fox, William; Murray, Matthew                            | Re-Estimate the Cost Differential Factor for the BEP  | TN Department of Education                                     | \$10,000    |
| Murray, Matthew  | Economic Forecast for TN Valley Region  | Tennessee Valley Authority                                     | \$117,033   |
| <b>COLLEGE OF EDUCATION, HEALTH &amp; HUMAN SCIENCES</b> |   |  |             |
| Brewer, Ernest   | Upward Bound [Pre-College] - Revision 1   | US Department of Education                                     | \$386,632   |
| Terry, Paul  | Study of Ovarian Cancer in African Americans  | Duke University  | \$224,295   |
| <b>COLLEGE OF ENGINEERING</b>                            |   |  |             |
| Arimilli, Rao; Ekici, Kivanc                             | Calc. Rev. & Development of Improved COMSOL-Based 2-D Thermal-Hydraulic Model for HFIR Core     | DOE - UT-Battelle - ORNL                                       | \$16,102    |
| Bennett, Richard; Schleiter, William; White, Betsy       | "Engage Spatial Skills Mini-Grant"  | Stevens Institute of Technology                                | \$2,500     |
| Blalock, Benjamin  | A Circuit-Level Radiation Hardened-By-Design Approach for Standard CMOS                         | NASA - Headquarters  | \$65,405    |
| Blalock, B.; Tolbert, L.                                 | Integrated Circuit Intelligent IGBT Gate Driver   | IMRA   | \$150,000   |
| Fathy, Aly   | Tampering Detection Devices by Using Conductive Fabrics   | DOE - UT-Battelle - ORNL                                       | \$7,524     |
| Frankel, Jay; Keyhani, Majid                             | Transformative Calibration Method for Prediction of Surface Heat Flux                           | National Science Foundation                                    | \$249,916   |
| Fu, Joshua   | Rural Economic Impacts of Green Energy Production from the Agricultural                         | UT Institute of Agriculture - AgResearch                       | \$119,546   |
| George, Easo   | Investigate Silicon Effects in DOP-26 Iridium Alloys  | DOE - UT-Battelle - ORNL                                       | \$32,584    |
| Gregor, Jens   | ALERT Project Task 6: Iterative Reconstruction Algorithms                                       | Northeastern University  | \$90,000    |
| Hall, Howard   | Strategic Analysis of Alternatives for Existing Deterrents and Vulnerabilities                  | DOE - UT-Battelle - ORNL                                       | \$77,000    |
| Hazen, Terry   | Deep Sea Basin Microbiology   | BP America   | \$1,320,000 |
| Hines, J.  | National Academy Nuclear Training - Radiological Engineering                                    | National Academy for Nuclear Training - Educational Assistance | \$25,000    |
| Li, Fangxing   | Economical Stability and Physical Stability Study for Controllable Load including PHEV          | National Science Foundation                                    | \$12,000    |
| Li, Husheng  | Wireless Communication Network Design for DEG Controls  | DOE - UT-Battelle - ORNL                                       | \$52,046    |

## AWARDS FOR AUGUST 9–23, 2012 (CONT.)

| INVESTIGATOR   | TITLE   | SPONSOR   | AWARD       |
|--|---|---|-------------|
| Maldonado, Guillermo   | Curriculum Development for Consortium for Advanced Simulation of Light Water                            | DOE - UT-Battelle - ORNL                          | \$20,000    |
| McHargue, Carl   | Computational Modeling for Radiation Effects  | DOE - UT-Battelle - ORNL                          | \$35,260    |
| Parker, L.; Arel, I.; Corbetta, D.; Lee, D.; MacLennan, B.; Reynolds, G. | MRI: Acquisition of Infant/Robot Grasp Learning Instrumentation   | National Science Foundation                       | \$312,844   |
| Plank, James   | CSR: Small: Developing and Implementing High Performance Erasure Codes                                  | National Science Foundation                       | \$16,000    |
| Rack, Philip   | Center for Nanophase Materials Science (CNMS)   | DOE - UT-Battelle - ORNL                          | \$30,000    |
| Tomsovic, K.; Li, F.; Liu, Y.; Tolbert, L.; Wang, F.                     | ERC for Ultra-Wide Area Resilient Electric Energy Transmission Network                                  | National Science Foundation                       | \$3,500,000 |
| Tomsovic, K.; Li, F.; Liu, Y.; Tolbert, L.; Wang, F.                     | ERC for Ultra-Wide Area Resilient Electric Energy Transmission Network                                  | National Science Foundation                       | \$1,575,000 |
| Townsend, Lawrence   | Additional Improvements to the HZETRN Code and the NUCFRG2 Database                                     | NASA - Langley Research Center                    | \$160,000   |
| Wirth, Brian   | Liquid Salt Test Loop Graduate Student Research   | DOE - UT-Battelle - ORNL                          | \$45,343    |
| Zhang, Yanwen  | Heavy-Ion Energy Deposition in Dielectrics and Semiconductors   | Department of Defense                             | \$150,000   |
| Zhang, Yanwen  | Silver Behavior on SiC Surface  | DOE - UT-Battelle - ORNL                          | \$150,000   |
| Zhao, Xiaopeng   | Hybrid Bifurcation with Applications in Cardiac Dynamics  | National Science Foundation                       | \$221,069   |
| <b>COLLEGE OF SOCIAL WORK</b>  |   |   |             |
| Choi, Sunha  | Access to Healthcare Among Asian Subgroups in the U.S.  | FAHS-BECK Fund New York Community Trust           | \$13,000    |
| Cummings, Sherry   | Leadership Education Excellence in Caring for Children with Neurodevelopmental and Related Disabilities | Vanderbilt University Medical Center              | \$9,560     |
| Wodarski, John   | HIV/AIDS Primary Prevention Program with Caribbean Youth  | DHHS - Substance Abuse and Mental Health Services | \$448,146   |
| <b>CAMPUS CENTERS &amp; INSTITUTES</b>                                   |   |   |             |
| Harrison, Robert   | Jewell Health Care Informatics  | DOE - UT-Battelle - ORNL                          | \$11,305    |
| Harrison, Robert   | McCasky Test Software   | DOE - UT-Battelle - ORNL                          | \$4,000     |
| Harrison, Robert   | Stahl Advanced Analytic Methods   | DOE - UT-Battelle - ORNL                          | \$7,728     |
| Sheffield, John  | The Role of Developing Countries in Fusion Energy   | DOE - UT-Battelle - ORNL                          | \$10,002    |
| <b>OTHER</b>   |   |   |             |
| Hall, Howard   | Technical Support for Reliability Studies   | DOE - UT-Battelle - ORNL                          | \$30,910    |
| Smith, Steven  | UT/ORNL Library Project   | DOE - UT-Battelle - ORNL                          | \$450,000   |
| Wood, Pia  | Peace Corps Campus Recruiter  | Peace Corps                                       | \$14,200    |

# WANTED!

## Faculty Nominations for Scholar of the Week

The Scholar of the Week is a service of the UTK Office of Research. Through this award we recognize the recent important research, scholarship, and creative accomplishment of our faculty members and students.

Faculty can be recognized for publication of original research in rigorously refereed major journals, a major exhibit or performance in a national or international venue, a record of national grant or fellowship support awarded through peer review, national or international prizes or awards, invitations to hold endowed lectureships, and invited lectureships, particularly at major scholarly meetings.

Students who are recognized by peers as independent and original researchers can be nominated for publication of original research in refereed journals, a major exhibit or performance at a national or international venue, a record of national fellowship support, national or international prizes or awards, or other significant scholarly achievements recommended by a faculty mentor.

Instructions for submitting nominations can be found online at <http://quest.utk.edu/scholar-of-the-week>



wrote an article in the *American Scientist*: "The Complex Call of the Carolina Chickadee: What can the 'chick-a-dee' call teach us about communication and language?"

**Bruce Ralston**, professor emeritus of geography, has received the faculty excellence award from the UT Institute for Public Service. Ralston was recognized for collaborating with IPS for more than a decade in ways to use Geographic Information Systems to improve government decision-making and for his work on the Tennessee Data Portal.

Fordham University Press has just published a book on the Holocaust by **Gilya Schmidt**, professor of religious studies. In *Süsses Is Now Free of Jews: World War II, the Holocaust, and Rural Judaism*, Schmidt uses archival material, memoirs, interviews, and personal recollections to illuminate the lives of rural Jewish families in Germany.

**Maurice Stucke**, professor of law, presented his article "Looking at the Monopsony in the Mirror" to a conference at the University of Oxford in May and has been invited to present the paper to a conference hosted by the Norway Mission to the European Union.

## RECOGNITIONS

A book by **Sherry Cable** on the social aspects of environmental policy was recently published by Temple University Press. *Sustainable Failures: Environmental Policy and Democracy in a Petro-dependent World* explores how environmental policy contributes to environmental problems, rather than providing a partial solution. Cable is professor of sociology.

**Todd Freeberg**, associate professor of psychology, has been named a fellow of the Association for Psychological Science for his contributions to the science of psychology. He recently co-