



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

---

Awards and Recognitions

Office of Research & Engagement

---

4-11-2012

## Office of Research, Awards & Recognition, April 11, 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

Office of Research, University of Tennessee, "Office of Research, Awards & Recognition, April 11, 2012" (2012). *Awards and Recognitions*.  
[https://trace.tennessee.edu/utk\\_researchawards/78](https://trace.tennessee.edu/utk_researchawards/78)

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>

APRIL 11, 2012

### AWARDS FOR MARCH 13-APRIL 2, 2012

| INVESTIGATOR   | TITLE  | SPONSOR                                    | AWARD     |
|--|--|--|-----------|
| <b>COLLEGE OF ARCHITECTURE &amp; DESIGN</b>            |  |  |           |
| Wilkinson, Jeffrey                                     | UT Knoxville Application: Tennessee State Board of Architectural and Engineering Examiners     | State of Tennessee                         | \$37,527  |
| <b>COLLEGE OF ARTS &amp; SCIENCES</b>                  |  |  |           |
| Bingham, Carrol  | Matching Funds - UT/ORNL Joint Institute   | DOE - UT-Battelle - ORNL                   | \$490,000 |
| Cyr, Howard  | Geoarchaeological Investigation of the Oxford Recreation Facility, Oxford                      | Goodwyn, Mills and Cawood, Inc.            | \$5,237   |
| Dadmun, Mark   | Characterization of Lignin Feedstock for Use in Improved Carbon Fiber                          | DOE - UT-Battelle - ORNL                   | \$30,000  |
| Dai, Pengcheng   | Study Magnetic Excitations in Doped Transition Metal Oxides Using Inelastic Neutron Scattering | DOE - US Dept. of Energy                   | \$220,000 |
| Dai, Pengcheng   | Neutron Scattering Studies of Spin and Lattice Dynamics in Electron-Doped Iron                 | National Science Foundation                | \$120,000 |
| Dai, Sheng   | Support for the MRS Symposium  | DOD - Army Research Office                 | \$8,000   |
| Dolislager, F.; Galloway, L.; Gross, L.; Stewart, D.   | Risk Integration Support for FY 2012 Wr63, Rev 000   | DOE - URS CH2M Oak Ridge LLC (UCOR)        | \$1,558   |
| Dolislager, F.; Galloway, L.; Gross, L.; Stewart, D.   | Risk Integration Support for FY 2012 Wr63, Rev 000   | DOE - URS CH2M Oak Ridge LLC (UCOR)        | \$3,116   |
| Engel, Annette   | ARRA: The Speciation and Behavior of Sulfur Gases in Biogeochemical Processes                  | Louisiana State University                 | \$46,996  |
| Hollenbach, Kandace                                    | Archaeological Subsistence Analysis, Wr Oxford Project, Calhoun County, Alabama                | Spectrum Environmental Services, Inc.      | \$12,573  |
| Kabalka, George  | Organic Dyes - 900 nm Project  | U.S. Department of Energy                  | \$10,000  |
| Kaplan, Gregory  | Spanish Translation Services at ORNL   | U.S. Department of Energy                  | \$12,778  |
| Long, Brian  | STIR: Redox-Switchable Olefin Polymerization Catalysis: Electronically Tunable                 | DOD - Army Research Office                 | \$50,000  |
| Nebenfuehr, Andreas                                    | Myosin Functions in Root Hairs   | National Science Foundation                | \$6,120   |
| Steadman, Dawnie                                       | Bioarchaeological Analysis, Wr Oxford Project, Calhoun County, Alabama                         | Spectrum Environmental Services, Inc.      | \$10,716  |
| Yerka, Stephen   | Addendum to In-Field Archaeological Geophysical Consultation, Oxford Recreation                | Goodwyn, Mills and Cawood, Inc.            | \$7,221   |
| <b>COLLEGE OF BUSINESS ADMINISTRATION</b>              |  |  |           |
| Fox, William   | TennCare Patient Satisfaction Survey   | State of Tennessee                         | \$256,407 |
| Fox, W.; Murray, M.                                    | Re-Estimate the Cost Differential Factor for the BEP   | TN Department of Education                 | \$28,607  |
| Stewart, Joseph  | Air Force Acquisition Improvement Support - IDIQ   | DOD - Dept. of the Air Force               | \$220,000 |
| Wanamaker, Marianne                                    | The Economic Origins and Ramifications of the Great Migration                                  | National Science Foundation                | \$215,943 |
| <b>COLLEGE OF COMMUNICATION &amp; INFORMATION</b>      |  |  |           |
| Fitchpatrick, Steven                                   | Scientific Presentations Workshop  | DOE - UT-Battelle - ORNL                   | \$6,300   |
| Suttles, Barbara                                       | Genome Management Information System/Communications and Management Expert                      | DOE - UT-Battelle - ORNL                   | \$125,393 |
| <b>COLLEGE OF EDUCATION, HEALTH AND HUMAN SCIENCES</b> |  |  |           |
| Erwin, Paul  | Public Health Services and Systems Research Coordinating Center                                | University of Kentucky Research Foundation | \$37,784  |
| Morrow, Jennifer; Skolits, Gary                        | Follow-Up Evaluation of the Love Your Money Online Investor Education Program                  | UTIA - Extension                           | \$49,975  |
| Zemel, Michael   | Synergistic Effects of Metformin with Resveratrol-Hydroxymethylbutyrate Blend                  | Nutraceutical Discoveries, Inc             | \$50,361  |
| <b>COLLEGE OF ENGINEERING</b>                          |  |  |           |
| Berry, Michael   | Love Your Money  | UTIA - AgResearch                          | \$77,625  |
| Bray, Larry  | Technical Support of TVA Navigation Mission  | Tennessee Valley Authority                 | \$31,694  |
| Cao, Qing Charles                                      | CAREER: Operating System Based Energy Virtualization for Sensor Networks                       | National Science Foundation                | \$16,000  |
| Clarke, David  | Support to Transportation Policy Analysis Research Program                                     | DOE - UT-Battelle - ORNL                   | \$12,235  |
| Clarke, David  | Doe/EPA Fuel Economy Information   | DOE - UT-Battelle - ORNL                   | \$22,973  |
| Clarke, David  | Doe/EPA Fuel Economy Information Site  | DOE - UT-Battelle - ORNL                   | \$50,238  |
| Clarke, David  | Fuel Economy Guide   | DOE - UT-Battelle - ORNL                   | \$45,307  |
| Clarke, David  | Fuel Economy Program & Clean Cities Activities   | DOE - UT-Battelle - ORNL                   | \$25,361  |
| Clarke, David  | Fuel Economy Web Site  | DOE - UT-Battelle - ORNL                   | \$35,578  |
| Davis, Wayne   | Tennessee Department of Commerce & Insurance Board of Architectural and Engineering Examiners  | State of Tennessee                         | \$50,035  |

## AWARDS FOR MARCH 13–APRIL 2, 2012 (CONT.)

| INVESTIGATOR  | TITLE  | SPONSOR                                     | AWARD     |
|---|--|---|-----------|
| Djouadi, Seddik   | Design and Model Development of Electric Grid Components for Cyber-Physical  | DOE - UT-Battelle - ORNL                    | \$10,531  |
| Dongarra, Jack  | Workshop on Clusters, Clouds and Grids for Scientific Computing  | National Science Foundation                 | \$37,640  |
| Dongarra, J.; Andrews, P.   | Keeneland: National Institute for Experimental Computing   | Georgia Institute of Technology             | \$127,033 |
| Gao, Yanfei; Troparevsky, Maria   | Theoretical Studies of Novel Properties of Metal/Alloy Nanoparticles   | DOE - UT-Battelle - ORNL                    | \$12,500  |
| Hu, Bin   | Magneto-Optical Studies of Charge Dissociation, Transport, and Collection  | National Science Foundation                 | \$18,000  |
| Hu, Bin   | Exploring Novel Spintronic Responses from Advanced Functional Organic Materials  | DOD-AFOSR-AOARD                             | \$25,000  |
| Jin, Mingzhou   | Decision Support Tools for Transportation Resilience & Security  | Mississippi State University                | \$108,800 |
| Langston, Michael   | Environmental Context of Health Disparities  | Meharry Medical Center                      | \$74,962  |
| Lee, Dongjun  | CAREER: Passivity-Based Distributed Frameworks for Multiuser Shared Haptic Collaboration                               | National Science Foundation                 | \$92,621  |
| Lee, Ida  | SSPM Investigation for Post-Detonation Behavior of Radiological Debris   | DOE - UT-Battelle - ORNL                    | \$25,190  |
| Liaw, Peter   | Computational Design of Creep-Resistant Alloys and Experimental Validation   | U.S. Department of Energy                   | \$419,409 |
| Liaw, Peter; Clarke, David  | Fracture Toughness and Fatigue Properties of Pipeline Base Steels and Welds in High-Pressure Hydrogen and Technologies | DOT - Federal Highway Administration        | \$397,930 |
| Maldonado, Guillermo  | Enhancements to the 3-D Core Simulator Nestle-Candu  | Canadian Nuclear Safety                     | \$25,000  |
| McHargue, C.; Gussev, M.  | Mechanical Properties of Nuclear Materials   | DOE - UT-Battelle - ORNL                    | \$48,366  |
| Poore, J.; Swain, W.  | SNS Analysis Software Architecture and Prodess Definition  | DOE - UT-Battelle - ORNL                    | \$76,306  |
| Rack, Philip  | Molecular Scale Engineering and Nanoscale Technologies   | DOE - UT-Battelle - ORNL                    | \$15,000  |
| Rack, Philip  | Synthesis of Complex Oxide Nanostructures  | DOE - UT-Battelle - ORNL                    | \$36,540  |
| Tolbert, L.; Blalock, B.  | Isolation and Gate Buffer for Smart Integrated Power Module  | DOE - UT-Battelle - ORNL                    | \$40,000  |
| <b>COLLEGE OF SOCIAL WORK</b>   |  |   |           |
| Campbell, P.; Bassett, D.; Cunningham, M.; Everett, J.; Fitzhugh, E.; McNeely, C.; Murray, M. | HUD Sustainable Communities Regional Planning Grant  | City of Knoxville                           | \$495,894 |
| <b>CAMPUS CENTERS &amp; INSTITUTES</b>  |  |   |           |
| Davenport, Joel   | IDF Rangefinder Environmental Testing  | Opti-Logic Corporation                      | \$1,500   |
| Gangaware, T.; Robinson, K.; Schwartz, J.   | FY2011 WRRIP Application for TN Water Resources Center   | US Dept. of Interior - US Geological Survey | \$92,335  |
| Harrison, Robert  | Functionality of the Vampir Tools Set Domke  | DOE - UT-Battelle - ORNL                    | \$16,654  |
| Harrison, Robert  | Implementation of Key Metrics  | DOE - UT-Battelle - ORNL                    | \$10,026  |
| Hofmeister, William   | Laser Die Coating with Chromium  | International Copper Assn.                  | \$5,000   |
| Layton, A.; DiClaudio, M.; Eldridge, M.; Menn, F.   | Study the Prevalence and Concentration of Pharmaceutical Compounds   | TN Dept. of Environment and Conservation    | \$128,700 |
| Loeffler, Frank   | Identification of Microbes and Pathways for Enhanced Carbon Tetrachloride  | Dupont/Pioneer                              | \$150,000 |
| Moeller, Trevor Michael   | Characterization of Heat Transfer Coefficient Uncertainty in Support of High Temperature Probe Measurement Technology  | AEDC/FMF                                    | \$42,500  |
| Sayler, G.; Cox, C.; Jouline, I.; Smith, J.; Stewart, C.                                      | Cellulosic Biomass Deconstruction, Characterization and Modeling   | DOE - UT-Battelle - ORNL                    | \$480,000 |
| Wilt, Catherine   | Technical Support to ORNL Energy Program Evaluation Projects   | DOE - UT-Battelle - ORNL                    | \$41,511  |

## RECOGNITIONS

**Pengcheng Dai** and his research group — including graduate students **Mengshu Liu**, **Leland Harringer**, and staff assistant **Meng Wang** — have had a paper published in *Nature Physics* on magnetism in an alloy made up of barium, iron, nickel, and arsenic. The paper, “Nature of Magnetic Excitations in Superconducting BaFe<sub>1.9</sub>Ni<sub>0.1</sub>As<sub>2</sub>,” appeared in the journal March 25.

*The Limits of Literary Historicism* by **Allen Dunn** and **Thomas F. Haddox** has been released as a joint publication of the University of Tennessee Press and UT Knoxville’s English department. The book is the 45th volume in the Tennessee Studies in Literature series. Dunn is professor and Haddox is associate professor in English.

**Sarah Lowe**, associate professor of art, has been awarded a Fulbright Fellowship to work in an interdisciplinary research center at the University of Oslo in Norway. Lowe will work with the Communicating Organizations in Networks of Art and Cultural Heritage Technologies (CONTACT), a project team of InterMedia, an interdisciplinary research center that investigated the intersections of design, communication, and learning in digital environments. Lowe has been recognized for her work communicating cultural heritage (Knoxville’s black heritage, Cherokee history) through mobile and tablet media technologies.