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Office of Research & Engagement

8-20-2008

Office of Research, Awards & Recognition, August 20, 2008

University of Tennessee Office of Research

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Awards for UT Knoxville, July 17 – 31, 2008

INVESTIGATOR	TITLE	SPONSOR	AWARD
College of Arts & Sciences			
Bingham, Carrol R.	Release Characteristics of Thorium	Oak Ridge Associated Universities	\$35,452
Dagotto, Elbio Ruben	Distinguished Scientist	UT-Battelle, LLC-Oak Ridge National Laboratory	\$60,250
Decorse, Elizabeth Kellar	Architectural Assessment for the Wellmont Vehicular Bridge, Kingsport, Sullivan County, TN	Mactec, Incorporated	\$4,356
Decorse, Elizabeth Kellar	Visual Assessment/Architectural Survey - PeeDee Generating Station, Florence Co, SC	Mactec, Incorporated	\$16,800
Hollenbach, Kandace Renee	Analysis of Plant and Shell Remains from 46KA111, Kanawha County, West Virginia	MACTEC Engineering and Consulting	\$14,995
Jouline, Igor Borisovich; Turner, Brandi Louise	Journal of Bacteriology Editor Expenses	American Society for Microbiology	\$14,502
Joy, David C.	Distinguished Scientist	UT-Battelle, LLC-Oak Ridge National Laboratory	\$34,985
Mays, Jimmy W.	Poly (Cyclohexadiene) - Based Polymer Electrolyte Membranes for Fuel Cell Applications	US Department of Energy Golden Field Office	\$125,000
Peterson, Cynthia B.	Analysis of Proteomic and Genomic Data	UT-Battelle, LLC-Oak Ridge National Laboratory	\$66,619
Peterson, Cynthia B.	BESC	UT-Battelle, LLC-Oak Ridge National Laboratory	\$31,420
Peterson, Cynthia B.	Research Associate - Kathleen Andrews	UT-Battelle, LLC-Oak Ridge National Laboratory	\$20,395
Schwarz, Ilsa E.; Ashmore, Donnell H.	Multidisciplinary Literacy Project for Children Who are Deaf or Hard of Hearing	US Department of Education	\$250,000
Smith, Jeremy C.	Governor's Chair	UT-Battelle, LLC-Oak Ridge National Laboratory	\$1,839
Welsh, Christopher John; Gross, Louis J.	Em Project Support Under Blanket Agreement #23900-Ba-Ca021f, Wr #57, Rev #00	Bechtel Jacobs Company, LLC - Accounts Payable	\$1,480
Welsh, Deborah P.	Practicum Experience in Clinical Psychology for Students	Cherokee Health Systems	\$10,000
College of Business Administration			
Fox, William F.	Child Care Market Rate Survey and Analysis	State of Tennessee	\$24,291
Murray, Matthew N.	Assessment of Education's Impact On Society and the State of Tennessee	State of Tennessee	\$60,000
College of Education, Health & Human Sciences			
Benner, Susan Mclean; Duckett, Kermit E.	Basic Aerospace Education Workshop	TN Department of Transportation -- Aeronautics Division	\$40,500
Fussell, Elizabeth M.	DRS/CIETAT	TN Dept of Human Services	\$800,700
Mincey, Bethany Aleece	V Power Training Seminars	Knox County	\$19,267
Mincey, Bethany Aleece	Learn to Earn	Knox County	\$64,144
Ponder, Beth Ann	Adult Education Professional Development and Technical Assistance	Tennessee Department of Labor and Workforce Development	\$654,779
College of Engineering			
Alexeff, Igor	Plasma Sterilization & Decontamination Technology	ASI	\$21,045
Bosilca, George Martian; Fagg, Graham E.; Dongarra, Jack	The Harness Workbench: Unified and Adaptive Access to Diverse HPC Platforms	US Dept of Energy -- Energy and Technology	\$171,335
Burton, Mark L.	Mid-America Regional Council's Regional Freight Outlook	TranSystems	\$50,000
Djouadi, Mohamed Seddik	Optimal Model Reduction for Aeodynamics Boundary Feedback Control	National Science Foundation	\$150,000
Islam, Syed K.; Rack, Phillip D.; Lee, Ida	Nanostructured Sensor Instruments for Astrobiology Exploration	NASA - Headquarters Washington, DC	\$270
Kuo, Way	Collaborative Research: Reliability Analysis of Spatial Systems with Local Interactions	National Science Foundation	\$88,864
Li, Fangxing	Self-Healing Protection and Control	Electric Power Research Institute	\$50,000

... July 17 – 31, 2008 Awards, continued

Liaw, Peter K.	Prediction of the Fatigue Lifetime Behavior of Engineering Alloys by the Measurement of Surface Roughness	VEXTEC Corporation	\$15,000
Maldonado, Guillermo Ivan	Development of SCALE-based Educational Modules to Innovate Reactor Physics and Criticality Safety Curricula	U.S. Nuclear Regulatory Commission	\$150,000
Maldonado, Guillermo Ivan; Dodds, Harold L.	US NRC Fellowship Program for Excellence in Nuclear Education at the University of Tennessee	U.S. Nuclear Regulatory Commission	\$600,000
Meek, Thomas T.	Microwave Sintering of Simulated Advanced Nuclear Fuel Pellets	Virginia Polytechnic Institute & State University	\$100,000
Paddison, Stephen J.	Membranes and MEA's for Dry, Hot Operating Conditions	3M Sourcing Operations	\$80,000
Upadhyaya, Belle R.	Instrumentation, Controls and Human-Machine Interface for Grid-Appropriate Reactors	UT-Battelle, LLC-Oak Ridge National Laboratory	\$6,299
Urbanik, Thomas	Trusted Truck 2 (Phase B)	National Transportation Research Center, Incorporated	\$24,644
Urbanik, Thomas; Alvic, Donald R.	Support to CTA Research Programs	UT-Battelle, LLC-Oak Ridge National Laboratory	\$49,005
College of Nursing			
Creasia, Joan L.	4th Annual Tennessee Leadership Institute of Nursing Excellence 2008	TN Center for Nursing	\$22,660
College of Social Work			
Campbell, Paul M.; Cunningham, Maryanne Lynch; Cheatham, Joanna	Child Care Assessment Supportive Services Program	TN Dept of Human Services	\$2,270,000
Jackson, Rebecca F.	Youth Villages	Youth Villages	\$3,000
Patterson, David A.	HMIS Matching Funds	Salvation Army	\$2,000
Patterson, David A.	HMIS Matching Funds	Knox Area Rescue Ministries	\$2,000
Campus Centers & Joint Institutes			
Wilt, Catherine A.; Webster, Sheila and Mckeown-Ice, Rosalyn Rae	Tennessee Solid Waste Education Project (TNSWEP)	TN Dept of Environment and Conservation	\$177,741

Awards for UT Knoxville, August 1 – 14, 2008

INVESTIGATOR	TITLE	SPONSOR	AWARD
College of Arts and Sciences			
Bingham, Carrol R.	Matching Funds - UT/ORNL Joint Institute	UT-Battelle, LLC-Oak Ridge National Laboratory	\$306,033
Bingham, Carrol R.; Grzywacz-Jones, Katherine Louise	RA Direct Reaction Studies Around 132Sn	Oak Ridge Associated Universities	\$32,545
Butefish, Kurt Lewis	Operating Funds for the Tennessee Geographic Alliance	Tennessee Geographic Alliance	\$97,154
Compton, Robert N.	IR Studies of Atmospheric Glow Discharges	Atmospheric Glow Technologies	\$26,725
Dadmun, Mark	Support of Postdoc/Grad student for Dr. Mark Dadmun	UT-Battelle, LLC-Oak Ridge National Laboratory	\$28,822
Dean, David Jarvis; Nazarewicz, Witold	RIKEN/RIA Theory Center	US Department of Energy National Energy Techology	\$57,000
Egami, Takeshi	Atomistic Study of Bulk Metallic Glasses	UT-Battelle, LLC-Oak Ridge National Laboratory	\$20,193
Ferrell, Thomas L.	Explosive Vaper Detection	UT-Battelle, LLC-Oak Ridge National Laboratory	\$64,680
Guo, Hong	Computational Study of Catalytic Mechanisms and Specificities of Serine-Carboxyl Peptidases	National Science Foundation	\$297,485
Hollenbach, Kandace Renee	Paleoethnobotanical and Zooarchaeological Analyses of 1Mb414, Mobile County, Alabama	Other private non-specified	\$11,917
Horn, Sally P.; Taylor, Zachary P.; Finkelstein, David Barry	Doct Diss Res: Interpreting Prehistoric Agriculture from Isotope and Pollen Indicators in Neotropical Lake Sediments	National Science Foundation	\$11,388
Konigsberg, Lyle W.	Doctoral Dissertation Improvement: If and How Many Races? The Application of Mixture Modeling	National Science Foundation	\$12,974
Mays, Jimmy W.	Distinguished Scientist	UT-Battelle, LLC-Oak Ridge National Laboratory	\$220,372
Mays, Jimmy W.	Synthesis, Assembly and Nanoscale Characterization of Confined, Conjugated, and Charged Polymer	UT-Battelle, LLC-Oak Ridge National Laboratory	\$20,000

... August 1 – 14, 2008 Awards, continued

Moersch, Jeffrey E.	Modeling and Characterization Studies of a Rover-Based Neutron Detector with Applications to Mars	NASA - Jet Propulsion Laboratory-California Institute of Technology	\$30,000
Moreo, Adriana	Joint Faculty	UT-Battelle, LLC-Oak Ridge National Laboratory	\$15,685
Nebenfuehr, Andreas	Myosin Functions in Root Hairs	National Science Foundation	\$190,000
Papenbrock, Thomas	Joint Faculty	UT-Battelle, LLC-Oak Ridge National Laboratory	\$9,595
Peterson, Cynthia B.	Graduate Research Assistant - Vivek Philip	UT-Battelle, LLC-Oak Ridge National Laboratory	\$20,595
Peterson, Cynthia B.; Langston, Michael A.; Dongarra, Jack	IGERT for Scalable Computing and Leading Edge Innovative Technologies (SCALE-IT) for Biology	National Science Foundation	\$582,828
Taylor, Lawrence A.	Moon Mineralogy Mapper - Science Advisory Team	Brown University — Office of Sponsored Projects	\$20,391
Welsh, Deborah P.	Practicum Experience in Clinical Psychology for Students	Peninsula Village	\$40,000
Wilhelm, Steven W.	Collaborative Research: Fecycle II - Natural Variability in Plankton Iron Quotas During an Unamended Lagrangian Experiment	National Science Foundation	\$174,257
Xue, Ziling	Novel Methods for Chromium and Vanadium Analyses in Biological Fluids	NIH - Center for Scientific Review	\$213,936
College of Business Administration			
Bruce, Donald J.	Families First Research, Evaluation, and Forecasting	State of Tennessee	\$411,483
College of Education, Health and Human Sciences			
Freeman, Rosalina M.	Southeastern High School Equivalency Program	US Department of Education	\$425,604
French, Russell L.; Skolits, Gary J.	Evaluation of Drexel University DPAC T2T Project	Other non-Tennessee educational institutions non-specified	\$51,812
Gardner, Diane P.; Stephens, Jean; Ponder, Beth Ann	Support for State Implementation of Standards-Based Education	Other private non-specified	\$50,196
Kolvitz, Marcia E.; Woolsey, Mary Lynn; Benner, Susan Mclean	Postsecondary Education Programs Network - PEPNet South	US Department of Education	\$1,000,000
College of Engineering			
Banks, David Cotton	Joint Faculty	UT-Battelle, LLC-Oak Ridge National Laboratory	\$116,756
Clarke, David Bruce; Cate, Matthew A.	Administration of a Traffic Sign Grant Program for Small Cities and Counties in Tennessee	TN Dept of Transportation-Division of Planning	\$782,024
Dahotre, Narendra B.	Laser Assisted Rapid Surface Microstructuring of Alumina Ceramic	National Science Foundation	\$320,000
Dodds, Harold L.	Nuclear Safety Research and Development	UT-Battelle, LLC-Oak Ridge National Laboratory	\$21,736
Dongarra, Jack; Kurzak, Jakub	CPA-Parallel Algebra Software for Multiprocessor Architectures (PLASMA)	National Science Foundation	\$635,200
Egami, Takeshi	Atomistic Study of Bulk Metallic Glasses	UT-Battelle, LLC-Oak Ridge National Laboratory	\$60,611
Egami, Takeshi	Atomic Structure of Gold Nano-Particles	UT-Battelle, LLC-Oak Ridge National Laboratory	\$33,760
Everett, Jerry D.	Transportation Planning, Environment and Real Estate	Federal Highway Administration	\$4,680
Islam, Syed K.; Roberts, Michael J.; Blalock, Benjamin J.	Mixed-Signal VLSI and Monolithic Sensors	UT-Battelle, LLC-Oak Ridge National Laboratory	\$25,000
Keffer, David J.; Rawn, Claudia J.; Khomami, Bamin; Frymier, Paul D.; Bruce, Barry D.	Igert: Stair - Sustainability Through Advanced Interdisciplinary Research	National Science Foundation	\$568,366
Keppens, Veerle	Resonant Ultrasound Studies of Complex Chromium and Vanadium Oxide Spinels	National Science Foundation	\$110,000
Komistek, Richard David	In vivo Mechanics Analysis for Subjects having a Medial Pivot TKA or a Normal Knee	Wright Medical Tech, Inc.	\$188,671
Langston, Michael A.	Ontological Discovery for Ethanol Research	UT-Battelle, LLC-Oak Ridge National Laboratory	\$11,394
Mchargue, Carl J.	Electron Microscopy Research & Development Support	UT-Battelle, LLC-Oak Ridge National Laboratory	\$44,052
Meek, Thomas T.	Development and Characterization of Advanced Materials	UT-Battelle, LLC-Oak Ridge National Laboratory	\$48,465

... August 1 – 14, 2008 Awards, continued

Parker, Lynne E.	RI-Small: Reconfigurable and Adaptable Multi-Robot Coalitions	National Science Foundation	\$354,123
Parker, Lynne E.; MacLennan, Bruce J.	Development of C++ API and Curriculum for IPRE "Scribbler" Robot	Georgia Institute of Technology - CEE	\$10,000
Pharr, George M.	Joint Faculty	UT-Battelle, LLC-Oak Ridge National Laboratory	\$67,164
College of Social Work			
Campbell, Paul M.; Black, Brenda J.	CAPTA and CJA 2008	Tennessee Department of Children's Services	\$156,922
Campbell, Paul M.; Cunningham, Maryanne Lynch	Child Care Research and Evaluation Studies	TN Dept of Human Services	\$708,400
Campus Centers and Joint Institutes			
Gangaware, Timothy R.	Tennessee Erosion Prevention and Sediment Control Handbook Revision and Update	Other city non-specified	\$36,885
Pfiffner, Susan M.; White, David C.; Davis, Kimberly L.	Detection of Biosustainable Energy and Nutrient Cycling in the Deep-Subsurface of Earth & Mars	Indiana University	\$45,952
Zacharia, Thomas	Computational Investigation of the Formation of Self-Assembled Molecular Surfaces	UT-Battelle, LLC-Oak Ridge National Laboratory	\$115,228
Zacharia, Thomas	Large-Scale Scientific Data Analysis Platforms	UT-Battelle, LLC-Oak Ridge National Laboratory	\$55,919

Recognition...

Xia Chen, professor of mathematics, has been named Fellow of the Institute of Mathematical Statistics (IMS). An induction ceremony for all 2008 Fellows took place July 14, 2008 at the IMS Annual Meeting/World Congress in Singapore. Chen received the award for contributions to the theory of ergodic Markov chains with general state space, to limit laws, and to large and moderate deviations for intersection local times.

Each Fellow nominee is assessed by a committee of his/her peers for the award. In 2008, after reviewing 47 nominations, 17 were selected for Fellowship. Created in 1933, the Institute of Mathematical Statistics is a member organization which fosters the development and dissemination of the theory and applications of statistics and probability. The IMS has 4500 active members throughout the world. Approximately 5% of the current IMS membership has earned the status of fellowship.

Seddik M. Djouadi, assistant professor in the department of Electrical Engineering and Computer Science, has two proposals funded by NSF and the Air Force Office of Scientific Research. The NSF proposal is "Optimal Model Reduction for Aerodynamics Boundary Feedback Control" and is funded at \$150,000 and the Air Force proposal is "Optimal Model and Robust Feedback Control for Aerodynamics" and is funded at \$99,000.

Additionally, Djouadi's paper "Stochastic Wireless Channel Modeling, Estimation and Identification from Measurements," co-authored with graduate students M. M. Olama, Y. Li and Prof. C.D. Charalambous, won the best paper award in the 1st Mediterranean Conference on Intelligent Systems and Automation.