Awards and Honors

Natalie Bursztyn**, Department of Geology, received the 2011 Biggs Award for Excellence in Earth Science Teaching. The Biggs Award recognizes innovative and effective teaching of earth science among early career faculty.

Contracts and Grants

Chemistry & Biochemistry

Brooke Siler* with Joanie Hevel
Undergraduate Research and Creative Opportunities Grant (URCO)
“Investigating the Importance of the N-terminal Negative Residues in Human PRMT1”
January 2012 - May 2012
$1000

Drake Smith* and Joanie Hevel
URCO Grant
“Defining a Minimal PRMT5-like Activity in Yeast HSL7”
January 2012 - May 2012
$1000

Taylor Rasmussen* and Joanie Hevel
URCO Grant
“Locking Down the N-terminus of PRMT1 to Assess the Role of Motion in Activity”
January 2012 - May 2012
$1000

Physics

Landon Hillyard* with JR Dennison
Undergraduate Research and Creative Opportunities (URCO)
“The Effect of the Space Environment on Bluetooth Protocol Communication Hardware”
November 2011 - August 2012
$500

E. Parker Davenport* and Shane L. Larson
URCO Grant
“Dark Adaptation and its Dependency on Light Intensity and Color”
$770

Keith A. Mott and David Peak
National Science Foundation
“Integrated Stomatal Response to Environmental Input”
September 1, 2011 - August 31, 2014
Shane L. Larson  
NASA EPSCoR Minigrant  
“Wide-field Variability Search Strategies for Multi-messenger Astronomy”  
July 1, 2011 – June 30, 2012  
$23,633

Lee Pearson, JR Dennison, and Tim Doyle  
Small Business Technology Transfer Research, Air Force Research Laboratory  
“Volume Charge Distribution Measurement in Thin Dielectrics”  
March 2012 - November 2013  
$100,000.

JR Dennison  
National Academies Research Fellowship, Air Force Research Laboratory.  
“Advanced Modeling and Measurements of Spacecraft Materials Properties for Spacecraft Charging”  
January 2012 - December 2012  
$122,000

JR Dennison  
Goddard Space Flight Center  
August 2011 - December 2011  
$53,250

JR Dennison  
Orbital Sciences Corporation  
“Radiation Effects on Flight Materials”  
October 2011 - December 2011  
$6,924

Presentations

undergraduate*  graduate**

Chemistry & Biochemistry

Lisa M. Berreau presented an invited talk titled “Photochemically-induced Dioxygenase-type CO-release Reactivity of Metal Flavonolate Complexes,” at the 2011 Southwest Regional ACS Meeting, Austin, Texas, 9 November 2011.

Lisa M. Berreau presented an invited talk titled “CO Release Reactivity of Divalent Metal Enolate and Flavonolate Complexes,” at the Zing Conference - Coordination Chemistry, Xcaret, Mexico, 11 December 2011.

Lisa M. Berreau chaired the NIH F04A Special Emphasis Fellowship Panel, 11-12 November 2011.

Alvan Hengge presented an invited seminar titled, “Protein Motions and Catalytic Promiscuity in Phosphatases,” at the following institutions in China:

- Nankai University, State Key Laboratory of Elemento-Organic Chemistry, Tianjin, 21 September 2011.
- Institute of Chemistry, Chinese Academy of Sciences, Beijing, 23 September 2011.
- Lanzhou University, State Key Laboratory of Applied Organic Chemistry, Lanzhou, 27 September 2011.

Joanie Hevel presented an invited talk titled “Investigation of the Molecular Origins of Protein Arginine Methyltransferase I (PRMT1) Product Specificity: A Tale of Two Methionines” at the Enzymes, Coenzymes and Metabolic Pathways Conference in Xcaret, Mexico, 17-21 December 2011.

Geology

The following presentations were made at the American Geophysical Society Meeting, San Francisco, California, 5-9 December 2011:

- Moises M. Ponce-Zepeda*. “M.E.S.A., Not Just a Seat at the Table: A Chicano Geology Student’s Experience with Investigative Field Research.”


- Dawn S. Hayes** (presenter) and Carol M. Dehler. “Description and Stable Isotope Record of Newly Discovered Neoproterozoic (Cryogenian?) Tube Structures, Northern Utah.”


- Carol M. Dehler (presenter), Dawn S. Hayes**, and Robin M. Nagy**. “Possible Pre-Cryogenian Eutrophication Event Recorded in ~770-742 Ma Strata of the Uinta Mountain Group, Utah, USA.”

Richard W. Bradshaw (presenter), Eric H. Christiansen, Michael J. Dorais, Katherine E. Potter**, and John W. Shervais. “Project Hotspot: Mineral Chemistry of High-MgO Basalts from the Kimama Core, Snake River Scientific Drilling Project, Idaho.”


Benjamin J. Burger presented a talk titled “Diversity, Extinction, and Gaps: An Overview of the Mammalian Record During the Late Paleocene and Eocene in the Rocky Mountain Region of North America” at the Society of Vertebrate Paleontology Conference held in Las Vegas, Nevada, 30 September 2011.

Derek L. Schutt, Anthony R. Lowry, and Janine S. Buehler presented a talk titled “Moho Temperatures Within the Western U.S.” Invited contribution to the EarthScope Institute: The Lithosphere-Asthenosphere Boundary, Portland, Oregon, 21 September 2011.


Anthony R. Lowry presented an invited talk titled “Why Mountains Are Where They Are: Quartz Marks the Spot” for Southern Methodist University’s Roy M. Huffington Department of Earth Sciences’ Seminar Series, Dallas, Texas, 9 September 2011.

The following presentations were made at the American Geophysical Society Meeting, San Francisco, California, 5-9 December 2011:

James P. Evans (presenter) and David Forand (alumnae). “Discrete Brittle to Distributed Shearing. Results from Analysis of the Deep Portions of the Cajon Pass Drill Hole.”

Joel Pederson (invited presenter). “Holocene Climate-Dynamics of the Colorado River in Grand Canyon - A Record Built by Centennial Paleoflood Variations Superimposed upon Millenial Cycles of Grade Change.”


Physics

Linsey Johnson*, Doug Ball*, David Peak, Shane L. Larson, Michelle B. Larson, and Jan Sojka presented a poster titled “Engaging Undergraduates in Innovative Science Outreach” at the 2011 American Geophysical Union Meeting held in San Francisco, California, 6-10 December 2011
The following posters were presented at the 2011 NASA Goddard Space Flight Center, Greenbelt, Maryland, 23 November 2011.


Eric Held and Ross Spencer (BYU) served as local organizers of the 53rd Annual Meeting of the American Physical Society Division of Plasma Physics (APS-DPP), Salt Lake City, Utah, 14-18 November 2011.

JR Dennison gave an invited talk titled “Exploring the Universe…One Electron at a Time” at the Physics Colloquium, Utah State University, Logan, Utah, 15 November 2011.

James Coburn attended a Teaching Excellence Workshop titled “Effective Implementation of Interactive Instructional Strategies to Improve Learning in Earth and Space Science Introductory Classrooms” presented by the Center for Astronomy Education, University of Hawai‘i, Hilo, 16-17 July 2011.

The Physics Department opened its new teaching observatory to the public for a night of star gazing. Approximately 200 people took advantage of this opportunity. September 20, October 7, and November 11, 2011.

On November 18, 2011 James Coburn presented his annual night of physics demonstrations. This year’s title was “Magnificent Mechanics.” Approximately 400 people attended this outreach event.

The Center for Atmospheric & Space Sciences

The following posters were presented at the Fall American Geophysical Union (AGU) held in San Francisco, California, 5-9 December 2011:


Robert W. Schunk and Scott Budzien presented a Joint Center for Satellite Data Assimilation seminar titled “Ionospheric Data Assimilation” at the World Weather Building, Camp Spring, Maryland, 16 November 2011.
Jan J. Sojka presented a talk titled “The Living With a Star Heliophysics Summer School” at the NASA Community Coordinated Modeling Center Workshop held in Key Largo, Florida, 16-20 January 2012.

The following talks were presented at the 92nd Annual AMS Meeting, 9th Conference on Space Weather held in New Orleans, Louisiana, 22-26 January 2012:


The following talks were presented at the Fall American Geophysical Union held in San Francisco, California, 5-9 December 2011:


The following posters were presented at the Fall American Geophysical Union held in San Francisco, California, 5-9 December 2011:


Abdallah R. Barakat and Robert W. Schunk. “Effects of Season and Solar Cycle on
Storm-Time Behavior of the Generalized Polar Wind.”


Ludger Scherliess, Levan Lomidze**, and Robert W. Schunk. “Ionosphere/Thermosphere Climatology at Low and Mid-latitude During Solar Minimum Obtained from the GAIM-Physics-based Data Assimilation Model (GAIM-FP).”


Publications

undergraduate*  graduate**

Biology


Chemistry & Biochemistry


Geology


**Physics**


**The Center for Atmospheric & Space Sciences**


