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Coalition for
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18th Annual Exhibition and Reception

STEM Research and Education:
 Underpinning American Innovation

Tuesday, May 15, 2012

Rayburn House Office Building

Washington, DC



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18th Annual Exhibition and Reception

Afterschool Alliance

National Partnerships for After School Science
Charlie Hutchison
Education Development Center

American Astronomical Society

Astronomy's Infrared Eyes
Dr. James W. Beletic
Teledyne Imaging Sensors

American Economic Association

Beyond Surveys: Advancing the Frontiers of National Statistics
Matthew Shapiro
University of Michigan

American Educational Research Association

Integrating Technology-Enhanced Feedback into a Middle School Science Curriculum
William Penuel
University of Colorado, Boulder

American Geosciences Institute/Geological Society of America/American Geophysical Union

Rapid Response to BP Deepwater Horizon Oil Spill
David Valentine
University of California, Santa Barbara

Aftermath of Tohoku Earthquake and Daiichi Nuclear Plant Disaster
Gregory Moore and Henrieta Dulaiova
University of Hawaii at Manoa

Lessons from Virginia Earthquake
Martin Chapman and John Hole
Virginia Polytechnic Institute and State University

American Mathematical Society

ICERM: Connecting Mathematics and Computing through Experimentation
Dr. Jill Pipher and Lauren Barrows
Institute for Computational and Experimental Research in Mathematics (ICERM)

American Psychological Association

Social Media and Tweens: Research on Developmental Outcomes
Dr. Roy Pea
Stanford University

American Statistical Association

Using Statistics to Identify Causes of Diabetes
Lily Wang
University of Georgia

Association for Women in Science

Is STEM Still Just a Man's World? Research Awards Go Mainly to Men, Despite Growth in Women's Participation
Alice Popejoy

Boise State University

STEM Central Station and Engineering with DNA
Dr. Will Hughes, Patricia Pyke and Barbara Morgan

Coalition for Academic Scientific Computation

CASC Members Advancing STEM
Curt Hillegas
Princeton University

Computing Research Association

Rendering Synthetic Objects into Legacy Photos
David Forsythe
University of Illinois at Urbana Champaign

Consortium for Ocean Leadership

Exploring the Oceans with the Ocean Observations Initiative and Integrated Ocean Drilling Program
Kerry Beck and Matthew Wright

CUAHSI: Universities Allied for Water Research

HIS: Internet-based System for Sharing, Discovering and Accessing Water Data for Better Science and Society
Jennifer Arrigo and Kayla Berry

DOSECC

Scientific Drilling: The Core of Earth Science Research
David Zur

Ecological Society of America

Mitigating Nutrient Pollution in the Agricultural Midwest
Sarah Roley
University of Notre Dame

Federation of American Societies for Experimental Biology

Developing Tools for Advancing "Big Data" Mining in Circuit Neuroscience: Accelerating Discovery and Innovation
Dr. Eduardo Rosa-Molinar
University of Puerto Rico, Rio Piedras

Federation of Associations in Behavioral & Brain Sciences

Learning to Think Spatially: Improving STEM Education in K-12 and Beyond
Dr. Nora S. Newcombe
Temple University

Genetics Society of America

Nanomaterials and Environmental Interactions
Dr. Nancy D. Denslow
University of Florida

IRIS Consortium

Facilitating New Discoveries in Seismology
Ray Willemann

Michigan State University

Robotic Sensors for Monitoring Water Quality in Lakes
Dr. Jongeun Choi, Mahdi Jadaliha and Alex Robinson

Museum of Science, Boston National Center for Technological Literacy

Nanoscale Informal Science Education Network (NISNet.org)
Larry Bell

National Ecological Observatory Network

NEON: Enabling Continental-Scale Ecological Forecasting
Brian Wee

The Ohio State University

Navigating the Critical Junctures: What Works in Broadening Participation of Minorities in STEM
Dr. Terrell L. Strayhorn and Derrick Tillman-Kelly



Princeton University

Reconstructing the Response of the Polar Ocean to Past Climate Changes
Dr. Daniel M. Sigman

Society for Industrial and Applied Mathematics

Mathematics and Climate Research
Dr. Hans G. Kaper
Georgetown University

Society for Research in Child Development

The Role of Families in Motivating Latino Youth to Pursue Science in High School
Dr. Sandra Simpkins
Arizona State University

Soil Science Society of America

Nitrous Oxide Emissions in Different Bioenergy Cropping Systems
Andrew McGowan

University Corporation for Atmospheric Research (UCAR) / National Center for Atmospheric Research (NCAR)

From Inspiration to Impact: Solving Weather, Transportation and Safety Challenges
Michael Henry and Cindy Schmidt

University of California

CREATE: Collaborative Research & Education in Agricultural Technologies and Engineering
Karen McDonald and Lucas Arzola
University of California, Davis

UC Irvine Innovation in STEM Education

Michael McCarthy, Diane O'Dowd and Marc Madou
University of California, Irvine

The Diversity Project

Paul Barber and Alexis Jackson
University of California, Los Angeles

University of Michigan

CADRE: A U-M Small Satellite for Exploring the Upper Atmosphere
Dr. Aaron Ridley

Vanderbilt University

The Promise of Haptics for Teaching Math to the Blind
Jenna Gorlewicz

