20th Annual CNSF Exhibition & Reception Wednesday, May 7, 2014

American Economic Association/Population Association of America

Continuity and Change in American Economic and Social Life Prof. Charles Brown University of Michigan

American Educational Research Association

Integrating Quality Talk Professional Development to Enhance Professional Vision and Leadership for STEM Teachers in High-Need Schools P. Karen Murphy The Pennsylvania State University

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

25,000 Feet under the Sea: Studying Japan's 2011 Tohoku Earthquake Dr. Patrick Fulton and Dr. James Sample University of California, Santa Cruz and Northern Arizona University

American Mathematical Society

Topological Sensor Networks Prof. Robert Ghrist University of Pennsylvania

American Psychological Association/Vanderbilt University

Russell the Robot: Engaging Children with Autism through Psychological and Engineering Research Zachary Warren, PhD and Nilanjan Sarkar, PhD Vanderbilt University

American Society of Plant Biologists

From Fire to Food: How Smoke Signals May Unlock New Innovations in Agriculture David C. Nelson, PhD University of Georgia

American Statistical Association Statistics for Mixed Big Data in Cancer Genomics Prof. Genevera Allen Rice University

Associated Universities, Inc. The National Radio Astronomy Observatory Mark Adams

Association of Science-Technology Centers

Center for Advancement of Informal Science Education Showcasing EHR Grants: Intersections and CAISE Margaret Glass, PhD

Brown University

How Mathematics Research Fuels Innovation Prof. Jill Pipher and Ruth Crane Institute for Computational and Experimental Research in Mathematics (ICERM)

Coalition for Academic Scientific Computation

HPC Centers & STEM Dr. Curt Hillegas Princeton University

Computing Research Association

Printable Robots and Soft Robots Ankur Mehta, Joseph DelPreto and Robert Katzschmann Massachusetts Institute of Technology

Consortium of Universities for the Advancement of Hydrologic Science Inc.

Water Data Center—Advancing Hydrologic Research and Education Emily Geosling

Council on Undergraduate Research

Institutionalizing Undergraduate Research for State Systems and Consortia Shontay Kincaid

Ecological Society of America

Wildflower Response to Climate Change Prof. David Inouye University of Maryland

Entomological Society of America

Optimizing Crop Yields: Pollinators, Pests and Pathogens Prof. Gary Felton and Prof. Christina Grozinger The Pennsylvania State University

Genetics Society of America Beyond the Gene: Epigenetic Control of Seed Development Mary Gehring, PhD Massachusetts Institute of Technology Whitehead Institute for Biomedical Research **Michigan State University** STEM Genetics: Steps Towards Success Prof. Michelle Williams and Amy Frahm

Museum of Science, Boston Building Computational Thinking in Museum Exhibits Clara Cahill

National Communication Association Improving Public Deliberation through the Citizens' Initiative Review Prof. John Gastil and Prof. Katie Knobloch The Pennsylvania State University and Colorado State University

NC State University Dielectrics and Piezoelectrics Dr. Elizabeth C. Dickey

Northwestern University *Rat Whiskers: Novel Engineering Applications and Insights for Neuroscience* **Prof. Mitra Hartmann**

The Ohio State University *Growing STEM Talent at a Large Scale* Prof. David Tomasko and Jasmine Peters

Oregon State University Sustainable Materials Chemistry and Physics Education Reform Prof. Douglas Keszler, Prof. Janet Tate and Jenn Amador

Princeton University High-Assurance Cloud Services Prof. Michael Freedman

Society for Industrial and Applied Mathematics *The Mathematics of Stem Cells, Drug Resistance and Cancer* Prof. Doron Levy University of Maryland

Society for Research in Child Development Parenting for STEM Success in African American Families Prof. Beth Kurtz-Costes and Prof. Stephanie Rowley University of North Carolina, Chapel Hill and University of Michigan

Tufts University Engineering Solutions for Clean Water Dr. Kurt Pennell and Dr. Daniele Lantagne **University of California** Shaping the Future of Innovation and Research Roxane Cohen Silver, David Feldman, Zach Reagh and Kristin Roher University of California, Irvine

Into the Loop Alliance: Exploring Computer Science Jane Margolis University of California, Los Angeles

Fire, Erosion and the Global Carbon Cycle Asmeret Asefaw Berhe University of California, Merced

Improving Success of First-Generation, Ethnically Diverse Students in STEM Majors Michael McKibben University of California, Riverside

The Role of the Loss of Anti-Oxidants in Developing Liver Tumors Brittany Anderton University of California, San Francisco

University of Colorado, Boulder CCAT Telescope: Research, Technology and Training Prof. Jason Glenn

University of Illinois at Chicago Faces of STEM Education & Research at UIC Prof. Mitra Dutta

University of New Mexico An HSI Doing World Class Research and Education in Micro-Engineered Materials Carlos Romero

West Virginia University *The Pulsar Content of Globular Clusters* Dr. Duncan Lorimer