# 2009 Maine EPSCoR State Conference

**September 21, 2009**
**Wells Conference Center, University of Maine, Orono**

The Experimental Program to Stimulate Competitive Research (EPSCoR) is directed at states that have historically received lesser amounts of federal R&D funding. Through this program, states receive support to develop partnerships between their higher education institutions, industry, government, and others to effect lasting improvements in their R&D infrastructure, capacity, and national competitiveness**.**

**Conference goals:**

1) to provide information & networking opportunities for NSF EPSCoR & other federal EPSCoR programs
2) to provide information & connections to help increase R&D funding opportunities & competitiveness
3) to foster networking for research and educational outreach collaborations in the region
4) to provide an opportunity to showcase the research being done in the region

## AGENDA for Monday, September 21, 2009 (as of 9/15/09)
## Wells Conference Center

**7:30-8:00 a.m.** **Registration & continental breakfast** *(lobby and Conference Room 2)*

**8:00-8:30 a.m.** **Welcome and Introduction:** *(Conference Room 1)*

- Michael Eckardt, UMaine V.P. for Research & Maine NSF EPSCoR Proj. Dir.
- Miles Theeman, Chair, Maine Innovation Economy Advisory Board
- Vicki Nemeth, UMaine Director of Research Administration & Maine EPSCoR

**8:30-9:00 a.m.** **NSF EPSCoR National Program Update**

- Denise Barnes & John Hall, NSF EPSCoR Program Directors, VA

**9:00-9:45 a.m.** **Maine EPSCoR's Sustainability Solutions Initiative (SSI):** *(Conference Room 1)*

Under a new five-year $20M NSF EPSCoR grant award, SSI will build dynamic relationships across the state to help solve various challenging problems related to natural and human landscapes. Attendees are encouraged to learn more about the project's scope in order to foster new interdisciplinary collaborations in this area.

- SSI Research Project Overview:
  - David Hart, SSI Research Project Director, UMaine
- SSI Coupled Systems Modeling:
  - Kathleen Bell, Assoc. Professor of Resource Economics and Policy, UMaine
  - Shaleen Jain, Asst. Professor Civil and Environmental Engineering, UMaine

**9:45-10:00 a.m.** **Break** *(refreshments available in Conference Room 2)*

**10:00-11:00 a.m.** **Maine EPSCoR's Sustainability Solutions Initiative continued:** *(Conference Room 1)*

- Knowledge to Action Partnerships:
  - University Perspective: Laura Lindenfeld, Asst. Prof. Mass Communications/ Media Studies & Public Policy, UMaine
  - Stakeholder Perspective: Evan Richert, Orono Town Planner
- The Nature of Interdisciplinary Research and Education:
  - Susan Gardner, Assistant Professor of Higher Education, UMaine

**11:00-noon** **STEM Education & Workforce Development:** *(Conference Room 1)*

The National Science Board recommends advancing STEM (science, technology, engineering, and mathematics) education for all American students, to nurture innovation, and to ensure the long-term economic prosperity of the Nation. There is a pressing need to develop the ideas that could transform and strengthen the economy, ensure a skilled workforce for American industry, and guarantee that all American students are provided the educational resources and tools needed to participate fully in the science and technology based economy of the 21st century. To that end, integrated educational outreach is a now required element of many federal funding opportunities. This session will provide researchers with information about Maine's STEM education efforts; the new Maine STEM Collaborative; and new approaches to training our future STEM workforce.

- Overview of STEM Education in Maine:
  - Anita Bernhardt, Science & Technology Specialist & Regional Representative, Maine Department of Education
  - Jan Mokros, Director, Maine Mathematics & Science Alliance, & Chair, Maine Stem Collaborative
- Workforce Development & STEM Education:
  - John Dorrer, Maine Department of Labor
  - Dwight Littlefield, Manager of Training, Cianbro Institute

**noon-1:00 p.m.** **Lunch, networking, and viewing exhibits** *(Conference Rooms 1 & 2)*

**BREAKOUT SESSIONS:** Participants can select to attend any of the following break-out sessions.

**1:00-1:50 p.m.** **A) Broadening Participation: Community Colleges:** *(Conference Room 1)*

- Geospatial Technology Education: a collaboration between UMaine Machias, University of Southern Maine, UMaine Augusta, and Washington County, Kennebec Valley, and Southern Maine Community Colleges
  - Tora Johnson, Director of Geographic Information Systems, UMM
- Central Maine Technical College: Virtual Ideation Platform (VIP) (NSF EPSCoR co-funded project)
  - Diane Dostie, Dean of Corporate & Community Services, CMCC
- (additional pending)

**B) Broadening Participation: Persons with Disabilities:** *(Conference Room 2)*

- EAST Alliance for Students with Disabilities in STEM, USM (NSF EPSCoR co-funded project)
  - Lynn Lovewell, Project Director of EAST, University of Southern Maine
- Universal Design & Higher Education
  - Lu Zeph, Director, Ctr. Community Inclusion & Disability Studies, UMaine
- Maine Transition Network – Region 3 (funded by Maine Dept. of Education)
  - Cindy Tuck, Transition Coordinator, Maine Transition Network

**C) Technology Transfer 101:** *(Conference Room 3)*

This session will look at engaging commercial research collaborators; turning research into useful products and processes; and the resources available to encourage innovation and entrepreneurship among students, businesses and faculty.

- Jake Ward, Assistant Vice President of Research, Economic Development and Governmental Relations, UMaine
- Kris Burton, Technology Commercialization Manager, Department of Industrial Cooperation, UMaine

**1:50-2:00 p.m.** **Break** *(refreshments available in Conference Room 2)*

**2:00-2:50 p.m.** **D) Broadening Participation: Women & Girls** *(Conference Room 2)*

- Engaging Women and Girls in STEM:
  - Sharon Barker, Director, Women's Resource Center, UMaine
  - Mary Madden, Associate Research Professor of Education, UMaine
- NSF ADVANCE Program: Challenges for Women at the Faculty Level
  - Karen Horton, Assoc. Prof. Mechanical Engineering Technology, UMaine
  - Amy Fried, Assoc. Dean Research, College Liberal Arts & Sciences, UMaine
  - Jody Jellison, Assoc. Director for the School of Biology and Ecology, UMaine

**E) Broadening Participation: Native Americans** *(Conference Room 3*)

- Research Protocols with Tribal Nations:
  - Darren Ranco, Coordinator of Native American Research, and Associate Professor of Anthropology, UMaine
- Native Scholar Educational Outreach Project (NSEOP):
  - Gail Dana-Sacco, Director, Wabanaki Center, UMaine
  - John Bear Mitchell, Associate Director, Wabanaki Center, UMaine
- UMPI's Project Compass for Native American Students
  - Raymond Rice, Prof. & Chair, Arts & Sciences, UM Presque Isle

**F) Enhancing Communications for Collaboration with Cyberinfrastructure:** *(Conference Room 1)*

This session will bring you up to speed on innovative ways that researchers and educators can communicate with each other; how to effectively interact with today's tech-savvy youth in integrated research and STEM education activities; and how to communicate research results directly to the public. Attendees will have the opportunity to submit an application for free web-cams to use in their research and education projects (limited number available on a merit basis), and to try out actual equipment.

- Updates on Maine's Networking Capabilities for Research & Education:
  - Jeff Letourneau, Acting Exec. Director of NetworkMaine, UM System
  - Bruce Segee, Professor of Electrical & Computer Engineering, UMaine
- Getting Face-to-face with Web cams, Skype, & Video-Conferencing:
  - Eric Damboise, Senior Communications Specialist, UMaine System
- Tapping Into Social Networking Sites (Facebook, Twitter, Linked In, etc.):
  - Monique Bouchard, Consultant
- Bringing Research into K-12 Classrooms & New Advances with Google Connections:
  - Bette Manchester, Exec. Dir., Maine International Center for Digital Learning
  - John Newlin, Maine International Center for Digital Learning

**2:50-3:40 p.m.** **G) Maine EPSCoR Sustainability Solutions Partners meeting:** *(Conference Room 2)*

Representatives from colleges, universities, and community colleges will learn more about collaborating with the Sustainability Solutions Initiative through its SSP program.

- David Hart, Director, Senator G. J. Mitchell Center & SSI, UMaine

**H) Enhancing Communications for Collaboration with Cyberinfrastructure – continued** *(Conference Room 1)*

Presentations and hands-on activities continue from the previous session.

**I) Other Federal Agency EPSCoR/IDeA Projects in Maine** *(Conference Room 3)*

Learn about successfully funded research programs in the state that have received other federal agency EPSCoR/IDeA support.

- NIH: Maine INBRE
  - Patricia Hand, Admin. Director, Mount Desert Island Biological Laboratory
- NASA EPSCoR: Real-time Wireless Shape Monitoring of Space Structures
  - Ali Abedi, Asst. Professor of Electrical & Computer Engineering, UMaine
- DEPSCoR: High Temperature Microwave Acoustic Sensors for Aerospace Vehicle Health Management
  - Robert Lad, Dir. & Prof. Lab. for Surface Science & Technology, UMaine
- DEPSCoR: Fatigue Life Prediction of Sandwich Composite Joints for Navy Seaframes
  - Roberto Lopez-Anido, Associate Professor of Civil Engineering, UMaine

**3:40-5:30 p.m.** **Reception, Poster Session, and Networking Opportunities** *(lobby)*

Researchers and students participating in the conference are invited to bring a poster that showcases their current research and any related education activities. This event is designed to allow for networking opportunities that can lead to future potential collaborations. A cash bar will be available and hearty appetizers will be served.

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