

STEM Smart: Pathways to Middle-Skill Occupations and Beyond

May 12, 2014

Olin College of Engineering | Needham, MA



AGENDA

- 8:30–9:00 am** **Registration (*light refreshments served*) MILAS HALL**
- 9:00–9:30** **Welcome and Opening Remarks AUDITORIUM, MILAS HALL**
- **Honorable Congressman Joseph Kennedy III**
 - **Joan Ferrini-Mundy**, Assistant Director, Directorate for Education and Human Resources, National Science Foundation
 - **Richard Miller**, President, Franklin W. Olin College of Engineering
- 9:30–10:30** **Pathways to Middle-Skill STEM Occupations and Beyond: Issues, Challenges and Opportunities—Plenary Presentation AUDITORIUM, MILAS HALL**
- **Moderator: Janice Earle**, National Science Foundation
 - **Panelists: Dale Allen**, Quinsigamond Community College; **Deborah Boisvert**, Broadening Advanced Technological Education Connections, University of Massachusetts, Boston; **Kimberly Green**, National Association of State Directors of Career Technical Education Consortium; **Mary Wright**, Jobs for the Future
- 10:30–10:45** **Break**
- 10:45–12:00** **Focusing on Pathways to Middle-Skill Occupations and Beyond—Breakout Sessions ACADEMIC CENTER**
- **Digitally Supported Pathways Transitioning Students into Technical Education Fields:** Ginny Hall and Caroline Christ, Clemson University Center for Workforce Development **RM. 313**
 - **Making Is Learning: Developing Curricula Around Materials Exploration and Tool Literacy:** David Wells and Janella Watson, New York Hall of Science **RM. 318**
 - **Problem-Based Learning (PBL) Implementation Strategies for STEM Courses:** Fenna Hanes, New England Board of Higher Education; James DeLaura, Central Connecticut State University; Nicholas Massa, Springfield Technical Community College **RM. 326**
 - **Real-World Externships for Teachers of Science, Mathematics, and Technology: A Bridge for Uniting Education and Industry:** Jeffrey Weld, Iowa Governor's STEM Advisory Council and University of Northern Iowa **RM. 328**
 - **The STEM Academies at Wheaton High School:** Heather Carias and Andrea Robertson-Nottingham, Wheaton High School, Maryland **RM. 417**

- **Using Universal Design Principles and Assistive Technology to Improve Student Learning and Success:** Donna Lange, National Technical Institute for the Deaf, Rochester Institute of Technology; Samantha Langley-Turnbaugh, University of Southern Maine **RM. 428**

12:00–12:45 pm

Networking (lunch served) TENTED AREA, OUTSIDE COMMONS

12:45–1:30

The Hidden STEM Economy: The Range of STEM Knowledge Across Occupations—Plenary Presentation AUDITORIUM, MILAS BUILDING

- **Introduction:** Susan Singer, Division of Undergraduate Education, National Science Foundation
- **Speaker:** Jonathan Rothwell, Brookings Institution

1:30–2:00

Break

Olin College of Engineering Student Expo **ACADEMIC CENTER**

2:00–3:15

Focusing on Pathways to Middle-Skill Occupations and Beyond—Breakout Sessions ACADEMIC CENTER

- **FabNet: Extending the FabLab Classroom:** Nigel Standish, University of Virginia; Stephen Portz, Triangle Coalition for STEM Education **RM. 313**
- **GLOBE CAP: Using Real-World Science to Further College and Career Readiness:** Svetlana Darche, WestEd; Erin Fender, College and Career Academy Support Network, University of California, Berkeley **RM. 318**
- **Health IT Entry Certification: A Rapid-Growth Industry Beckons New Talent:** Patricia Dombrowski, Bellevue College **RM. 326**
- **Strategies to Interest Women and Girls in STEM Programs:** Donna Milgram, Institute for Women in Trades, Technology & Science; Mel Cossette, National Resource Center for Materials Technology Education, Edmonds Community College; Karen Wosczyzna-Birch, Regional Center for Next Generation Manufacturing and Connecticut College of Technology **RM. 328**
- **The New Tech Network: Transforming Schools into Innovative Teaching and Learning Environments:** Dan Liebert and students, Tech Valley High School, New York; Paul Buck, New Tech Network **RM. 417**
- **Unlocking the Mathematical Gate: Pathways to and Through College Mathematics:** Andre Freeman, Capital Community College **RM. 428**

3:15–3:30

Break

3:30–4:15

Connected Learning in the Workplace—Plenary Presentation AUDITORIUM, MILAS BUILDING

- **Moderator:** Deborah Boisvert, Broadening Advanced Technological Education Connections, University of Massachusetts, Boston
- **Panelists:** Jim Whalen, Boston Properties, Inc.; Jeff Stolz, Integrated Defense Systems, Raytheon Company; Kostian Iftica, Brilliant Geeks; Henk Portier, Engineering Operations (Intern), Raytheon Company

4:30–5:30

Tours of Olin College of Engineering (optional)



Join the conversation at #nsfstem