AGENDA

10:00–10:30 am Registration *(coffee served)* LOBBY OUTSIDE OF RM C202, C203, C204

10:30–10:50 Welcome and Opening Remarks  
- *Janice Earle*, Program Director, National Science Foundation
- *Ashok Agrawal*, Managing Director for Professional Development and Director of Outreach and Engagement, American Society for Engineering Education

10:50–11:45 The Role of Engineering in Successful K–12 STEM Education—Plenary Presentation  
- **Moderator**: *Darryl Williams*, Associate Dean of Recruitment, Retention, and Community Engagement, and Director of the Center for STEM Diversity, Tufts University
- **Panelists**: *Greg Pearson*, Senior Program Officer, National Academy of Engineering; *Cary Sneider*, Associate Research Professor, Portland State University; *Marion Usselman*, Principal Research Scientist and Associate Director, CEISMC, Georgia Institute of Technology

11:45 am–12:00 pm Break

12:00–1:00 Focusing on the “E” in STEM—Breakout Sessions  
- **Design Squad: Inspiring a New Generation of Engineers**: *David Peth*, WGBH  
  RM C207
- **Engineering High School Biology into the 21st Century**: *Christian Schunn*, University of Pittsburgh  
  RM C208
- **Engineer Your World: Engineering Design and Problem Solving for High Schools**: *Cheryl Farmer*, University of Texas at Austin  
  RM C210
- **Integrating Engineering and Literacy**: *David Hammer* and *Jessica Watkins*, Tufts University  
  RM C211
- **Making a Difference in the World: Engineering in Middle School Math and Science Classrooms**: *Amy Wendt*, University of Wisconsin-Madison; *Amy Schiebel*, Edgewood College  
  RM C212
- **What Does It Mean to “Engineer” in Engineering is Elementary?**: *Erin Fitzgerald*, Museum of Science, Boston  
  RM C213

1:00–1:15 Break
1:15–2:15 Networking *(lunch served)*  RMs C202, C203, C204
The Joy of STEM: Engineering Is at the Heart of It—*Plenary Presentation*
•  *Pramod Khargonekar*, Assistant Director, National Science Foundation

2:15–2:30 Break

2:30–3:30 Focusing on the “E” in STEM—*Breakout Sessions*
•  **CAPSULE: How to Use Engineering-Based Learning (EBL) in High School STEM Teaching:** *Jessica Chin*, Northeastern University  RM C207
•  **Elementary Engineering Teacher Professional Development: Initiation to Integration:** *Heidi Diefes-Dux*, Purdue University  RM C208
•  **Engaging Youth through Engineering (EYE) Modules: Integrating and Bringing Relevance to Core Middle Grades Mathematics and Science Content:** *Susan Pruet, Melissa Dean, and Judy Duke*, Mobile Area Education Foundation  RM C210
•  **Implementing K–12 Engineering Standards through STEM Integration:** *Tamora Moore, Aran Glancy, Forster Ntow, and Kristina Tank*, University of Minnesota, Twin Cities  RM C211
•  **Learning Science through Engineering Design: An Effective Approach to STEM Integration at the Elementary School Level:** *Brenda Capobianco and Chell Nyquist*, Purdue University  RM C212
•  **Mathematics Instruction Using Decision Science and Engineering Tools:** *Robert Young and Karen Keene*, North Carolina State University  RM C213

3:30–3:45 Break

3:45–4:30 K–12 and Higher Education: Why Collaboration Is Vital—*Plenary Presentation*
RMs C202, C203, C204
•  **Joseph Cocozza**, Co-Director of Education and Outreach Programs, Biomimetic MicroElectronic Systems, Engineering Research Center; Assistant Professor of Research, Ophthalmology, University of Southern California
•  **Adah Leshem**, Program Director of Pre-College Education, NSF Engineering Research Center for Biorenewable Chemicals

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