Innovative Models for STEM Workforce Development in Critical Technologies: Cross-disciplinary, Cross-sectoral Solutions

Symposium Agenda, January 29, 2026

THURSDAY, JANUARY 29, 2026

Location: Lecture Room, National Academy of Sciences Building (2101 Constitution Ave. NW, Washington, DC 20418)

8:30 – 9:00 a.m. **Breakfast and Registration**

8:45 – 9:00 a.m. **Opening Remarks**

Symposium Co-Chairs:

- **Kiana Aran,** Associate Professor and Co-Director of Center for Technologies for Healthy Aging, University of California, San Diego
- **Amanda Vernon**, Aver Strategy

9:00 – 9:45 a.m. **Keynote Remarks**
Shari Liss, Vice President of Global Workforce Development & Initiatives, SEMI

9:45 – 11:00 a.m. **Panel I: Preparing the Future Workforce: Proven Models for STEM Education and Training**

This session will highlight innovative and proven models for cultivating the next generation of STEM talent. Speakers will share case studies that demonstrate how cross-sector and cross-disciplinary approaches can strengthen the education and training pipeline to meet national priorities in critical technologies.

Moderator: **Emily Pentzer,** Professor; Senior Associate Dean for Research, Texas A&M University

Panelists:

- **Kiana Aran**, Associate Professor and Co-Director of Center for Technologies for Healthy Aging, University of California, San Diego
- **Sonya Christian,** Chancellor, California Community Colleges
- **Kumar Garg**, President, Renaissance Philanthropy
- **Lawrence C. Schuette**, Director of Research and Technology Programs, Lockheed Martin Corporation

Session Co-chairs: Mitul Luhar, Holly Mayton, and Emily Pentzer

11:00 – 11:15 a.m. **Coffee Break**

11:15 – 12:30 p.m. **Panel II: Preparing Today's Workforce for Tomorrow's Technologies**

This session will explore strategies to help the existing STEM workforce rapidly adapt to technological change. Discussions will focus on agile training approaches that enable workers to build new skills and stay competitive in areas such as advanced manufacturing, AI, semiconductors, and clinical care.

Moderator: **Jessica Menold,** Associate Professor of Mechanical Engineering and Industrial Engineering, The Pennsylvania State University

Panelists:

- **Lisa Rotenstein,** Assistant Professor and Medical Director of Ambulatory Quality and Safety, University of California San Francisco
- **Sajan Saini**, Education Director, Initiative for Knowledge & Innovation in Manufacturing, MIT
- **Mark Threeton**, Executive Director, Professional Development Center for Career & Technical Education, Professor, Workforce Education and Development, The Pennsylvania State University
- **Emma Yourd,** Senior EWD Partnership Manager, Advanced Robotics for Manufacturing (ARM) Institute

Session Co-chairs: Jessica Menold and Lisa Rotenstein

12:30 PM – 1:30 p.m. **Lunch**

1:30 – 2:45 p.m. **Panel III: STEM Workforce as a Strategic Asset: National Security and Technological Competitiveness**

This panel explores the vital intersection of STEM and national security, emphasizing how a strong and diverse STEM workforce is essential to sustaining America's technological edge, economic prosperity, and defense readiness. Panelists will discuss how incentivizing students to pursue science and engineering degrees and attracting global STEM talent can strengthen the nation's innovation and manufacturing base in critical technology areas such as AI, autonomy, and advanced manufacturing. By fostering cross-collaboration, the United States can ensure a resilient innovation ecosystem that secures long-term national competitiveness and reinforces economic strength as a strategic pillar of national security.

Moderator: **Ayodeji Coker,** Owner, Intelligent Equations, LLC

Panelists:

- **Divyansh Kaushik**, Vice President, Beacon Global Strategies
- **Cara LaPointe**, Director of Analysis at the Center for Security and Emerging Technology, Georgetown University
- **Bindu Nair**, Associate Director of Basic Energy Science, U.S. Department of Energy
- **Alexander Walan,** Managing Director of Anduril Labs, Anduril Industries

Session Co-chairs: Ayodeji Coker and Monica Dus

2:45 – 3:00 p.m. **Coffee Break**

3:00 – 4:15 p.m. **Break-out Discussions**

Symposium attendees are invited to participate in open, facilitated discussions for each of the panel topics. The goal of these conversations will be to respond to the panel presentations and collectively envision next steps for each subject area. Attendees will choose one breakout room to join and a report out from all three rooms will be shared at the closing of the meeting.

Choose one room:

- **Room 1 (NAS 125): Preparing the Future Workforce: Proven Models for STEM Education and Training**
  Facilitator: ***Mitul Luhar****, Associate Professor and Henry Salvatori Early Career Chair, University of Southern California*

- **Room 2 (Lecture Room): Preparing Today's Workforce for Tomorrow's Technologies**
  Facilitator: ***Holly Mayton,*** *Science, Technology, and Policy Partnerships Lead, John Deere*

- **Room 3 (NAS 120): STEM Workforce as a Strategic Asset: National Security and Technological Competitiveness**
  Facilitator: ***Monica Dus,*** *Director, Office National Labs & Associate Professor, University of Michigan*

4:30 – 6:00 p.m. **Closing and Reception**

Remarks by symposium co-chairs:

- **Kiana Aran,** Associate Professor and Co-Director of Center for Technologies for Healthy Aging, University of California, San Diego
- **Amanda Vernon**, Aver Strategy