

20th Anniversary of the Board on Science Education

Charting a Course for the Future

Lecture Room, National Academy of Sciences September 19, 2024



THURSDAY, SEPTEMBER 19, 2024 · ALL TIMES ARE ET

8:30 Registration and Breakfast

Breakfast available in the East Court for in person attendees

9:15–9:25 Welcome and Overview of Agenda

Stephen Pruitt, Southern Regional Education Board (BOSE Board Member, Emcee)

Carlotta Arthur, Division of Behavioral and Social Sciences and Education

Susan Singer, St. Olaf College (BOSE Board Chair)

Heidi Schweingruber, Board on Science Education (BOSE Director)

9:25–9:45 BOSE Origin Story

Key figures and leaders will share the story of the Board on Science Education's inception and evolution.

Moderator: Susan Singer, St. Olaf College (BOSE Board Chair)

Panelists:

C. Jean Moon, Tidemark Institute (Former BOSE Director)

Bruce Alberts, *University of California*, *San Francisco* (Former President, National Academy of Sciences)

9:45–10:45 Twenty Years of Shaping the Future: Reflections on the Impact of BOSE

This panel will reflect on BOSE's influence on science and STEM education over the past two decades. Panelists will discuss significant achievements and explore potential future directions for BOSE's work.

Moderator: Susan Singer, St. Olaf College (BOSE Board Chair)

Panelists:

Helen Quinn, Stanford University (Former BOSE Board Chair)

Maya Garcia, Beyond100K (BOSE Board Member)

Martin Storksdieck, Oregon State University (Former BOSE Director)

Darryl Williams, *Franklin Institute* (BOSE Board Member)

Melanie Cooper, Michigan State University (Former BOSE Board Member)

Adam Gamoran, William T. Grant Foundation (Former BOSE Board Chair)

10:30-10:45 Audience Discussion

10:45-11:00 **Break**

Light refreshments available in the East Court for in person attendees

11:00-12:00 Possible Futures: Where Do We Envision Science Education in 2044 and Beyond?

This forward-looking session will feature lighting talks by national leaders in science and STEM education, sharing their visions for the field over the next twenty years.

Moderator: Kirsten Ellenbogen, Great Lakes Science Center (BOSE Board Member)

Panelists:

Megan Bang, Northwestern University (BOSE Board Member)

Autumn Rivera, Glenwood Springs Middle School, Roaring Fork School District (Colorado)

Archie Holmes, University of Texas System

Noah Weeth Feinstein, University of Wisconsin-Madison

11:45-12:00 Audience Discussion

12:00-1:00 Lunch

Lunch available in the East Court for in person attendees.

1:00-1:15 Greetings from Marcia McNutt, President of the National Academy of Sciences

1:15-2:15 Future-Casting: Climate, the Environment, Sustainability, and Resilience

This session will address how science education and engagement are critical as society tackles challenges related to climate change and environmental sustainability.

Moderator: Vicki Chandler, Minerva University (BOSE Board Member)

Speaker:

Raj Pandya, Arizona State University

Respondents:

Christina Kwauk, Unbounded Associates

Asli Sezen-Barrie, University of California, Irvine

2:00-2:15 **Audience Discussion**

2:15-2:30 **Break**

Light refreshments available in the East Court for in person attendees

2:30-3:30 Future-Casting: Computing, Technology, and Transformation of Science Education

This panel will explore how advances in computing and technology might transform science and STEM education for the next generation of learners.

Moderator: Jan Plass, New York University

Panelists:

Fengfeng Ke, Florida State University; National Science Foundation

Camillia Matuk, New York University Sepehr Vakil, Northwestern University

3:15-3:30 **Audience Discussion**

3:30-4:15 Voices of the Future: What Do We Need from Science and Science Education?

Young leaders will share their perspectives on the future of science and science education and highlight what the next generation needs from education to address future challenges and opportunities.

Moderator: Anita Krishnamurthi, Collective for Youth Empowerment in STEM & Society, Afterschool Alliance

Panelists:

Asenette Ruiz, trubel&co

Nichola Wells, University of North Carolina at Chapel Hill

Ananya Tadigadapa, Northeastern University

Jamie Minden, American University

Quentin Taylor, Howard University

4:00-4:15 **Audience Discussion**

4:15-4:50 Setting the Agenda for BOSE: A Community Conversation

This final session will invite attendees to engage with each other to share innovative ideas and priorities for the next era of BOSE work.

4:50-5:00 Closing Remarks & Coming Attractions to BOSE

Stephen Pruitt, Southern Regional Education Board (BOSE Board Member, Emcee)

Susan Singer, St. Olaf College (BOSE Board Chair)

Heidi Schweingruber, Director, Board on Science Education

Amy Stephens, Associate Director, Board on Science Education

5:00 pm Adjourn to Reception

6:30 pm **Reception Ends**