Revolutions in Science: Discovery, Imagination, and the Future

June 25, 2026, 8:30–5:00 pm ET
NAS Building
Constitution Avenue

This year the nation commemorates America's 250th anniversary—a key milestone for the country to reflect on the past 250 years, meet the present moment, and chart an inspired course for our shared future. At a pivotal moment for the American scientific community, the 250th presents a once-in-a-generation opportunity to bring experts together on the national stage to highlight the importance of *Revolutions in Science: Discovery, Imagination, and the Future.* This day-long symposium brings together the research community to share groundbreaking research, foster cross-generational dialogue, and explore the next frontiers of science.

Throughout the day, we hope you are inspired by the ways:

- Discovery drives leadership
- Public investment makes discovery possible
- People and collaboration power progress
- The next era demands urgency, not complacency

7:30 **Registration, Networking, Breakfast available**

Event Emcee:

- ***Heather Berlin***, Icahn School of Medicine at Mount Sinai

8:30 **Welcome & Framing**

This opening session situates the symposium within the nation's 250th anniversary, reflecting on the historic role of scientific discovery in shaping American prosperity and outlining why sustained excellence and public trust are essential for the next 250 years.

- ***Marcia McNutt***, President, National Academy of Sciences
- ***Ellen Stofan***, Under Secretary for Science and Research, Smithsonian Institution

8:45 **Signature Keynote:** ***The Past and Future of Innovation: Can Progress be Sustained?***

This keynote explores how discovery-driven research and practical knowledge have historically powered American leadership and examines whether the nation can sustain that momentum in a globally contested knowledge economy.

- ***Harvey Fineberg***, Former President, Gordon and Betty Moore Foundation

9:15 **Fireside Conversation:** ***The Next Era of Discovery***

This conversation will reflect on how foundational research becomes transformative impact, exploring how the discovery ecosystem is evolving and what frontiers may define the next generation of breakthroughs.

Moderator: ***Heather Berlin***, Icahn School of Medicine at Mount Sinai

- ***Frances Arnold***, California Institute of Technology
- ***Robert Langer***, Massachusetts Institute of Technology

10:00 **Coffee Break/Networking**
Visit the poster installations across the building, tour the exhibit, or find a space to network

10:30 **Plenary Panel: *Frontiers of Intelligence: From Brains to Machines***
This session examines the scientific and societal implications of intelligence across biological and artificial systems, exploring how advances in neuroscience and AI are reshaping our understanding of cognition, work, education, and human-machine interaction.

Moderator: ***Carla Shatz***, Stanford University
- ***Edward Chang***, University of California, San Francisco
- ***Ellie Pavlick***, Brown University
- ***Eero Simoncelli***, New York University
- ***Joshua Tenenbaum***, Massachusetts Institute of Technology

11:30 **Vision Talks: *AI as a Catalyst for Scientific Discovery***
Short, high-impact presentations highlight how artificial intelligence is accelerating discovery across disciplines—from biology to astrophysics—transforming how scientific questions are asked, investigated, and answered.

Moderator: ***Lyman Page***, Princeton University
- ***Sara Beery***, Massachusetts Institute of Technology
- ***Tanya Berger-Wolf***, Ohio State University
- ***Cecilia Garraffo***, AstroAI Institute, Harvard & Smithsonian

12:15 **Networking Lunch**
Enjoy your lunch! This is also a great time to network, tour the building, and visit the Installations

1:15 **Concurrent Sessions**

Track 1: *Sustaining the Future: Planet, Resources, and Security* (Room TBD)
This session explores how scientific innovation underpins planetary resilience, energy systems, advanced manufacturing, and national capability, highlighting the research foundations necessary for long-term security and sustainability.

Facilitator: ***Ryan Truby***, Northwestern University
- ***Ved Chirayath***, University of Miami
- ***Joseph DeSimone***, Standford University
- ***Milena Graziano***, Johns Hopkins Applied Physics Lab

Track 2: *Life Everywhere: Origins, Evolution, and Resilience* (Room TBD)
Participants examine life across scales—from cellular organization to exoplanets—exploring how new discoveries in biology, evolution, and planetary science are reshaping our understanding of life's origins and persistence.

Facilitator: ***Teri Odom***, Northwestern University
- ***Bethany Ehlmann***, University of Colorado Boulder
- ***Ishi Keenum***, Michigan Technological University
- ***Arpita Roy***, Schmidt Sciences

Track 3: *Human Vitality Across the Lifespan: From Molecules to Systems* (Room TBD)
This discussion highlights how foundational discoveries in biology, engineering, and medicine are transforming prevention, diagnosis, and treatment across the human lifespan, emphasizing the continuum from molecular insight to clinical impact.

Facilitator: ***Kalli Kappel***, University of California, Los Angeles
- ***John Rogers***, Northwestern University
- ***Conor Walsh***, Harvard University
- ***Alicia Martin***, Broad Institute

Track 4: *Frontiers That Define the Next Century* (Room TBD)
This session focuses on the most profound unanswered scientific questions—those that could redefine our understanding of life, intelligence, matter, and complexity—underscoring the enduring importance of curiosity-driven research.

Facilitator: ***Nipam Patel***, Marine Biological Laboratory
- ***Amy Gladfelter***, Duke University
- ***Katherine Pollard***, University of California, San Francisco
- ***Priyamvada Natarajan***, Yale University

2:15 **Coffee Break/Networking**

2:40 **Afternoon Plenary: *The Problems of Today, the Solutions for Tomorrow***
Drawing from the day's discussions, this moderated conversation synthesizes recurring challenges and cross-cutting capabilities, examining where scientific opportunity and societal need intersect—and where urgency must replace complacency.

Moderator: ***Laurie Leshin***, Arizona State University
- ***Jennifer Lewis***, Harvard University
- ***Sara Walker***, Arizona State University
- ***Huda Zoghbi***, Baylor College of Medicine
- ***Maria Zuber***, Massachusetts Institute of Technology

3:30 **Closing Keynote: *Imagination for the Next 250 Years***
This closing address reflects on the day's themes while looking beyond them, articulating a forward-looking vision of how discovery, imagination, and sustained investment can shape the next era of American science and innovation.

- ***Joel Mokyr***, Northwestern University

3:50 **Final Thoughts/Reflections**

4:00 **Reception Begins**
Poster Installation

5:00 **Reception Concludes**