

Bolstering national science & technology competitiveness through effective science communication

February 25-26, 2025

TUESDAY, FEBRUARY 25, 2025

Purpose

Pathways of effective communication across different sectors within the U.S. research enterprise can present challenges due to differences in institutional cultures and perspectives yet are critical to translating impact from science into society and bolstering national science and technology competitiveness. This workshop will explore "communication" from different angles including: how inclusive public engagement strategies can mitigate mistrust in science and technology; how effective communication to policymakers can drive S&T economic and workforce development; how earlier and more open pathways for dissemination of scientific results spur more rapid R&D innovation; and how the balance of national and international S&T priorities is best conveyed to the different sectors to maximize competitiveness.

4:00-4:15pm Opening Remarks (Room 125)

- Danielle Merfeld, GUIPRR Council Co-Chair, Executive Vice President and Global Chief Technology Officer, Qcells
- Darryll Pines, GUIPRR Council Co-Chair, President, University of Maryland
- Michael Nestor, Board Director, GUIPRR

4:15-5:30 Harmonizing National Science Strategy and Globalizing U.S. Innovation Through Alignment with Inter-Governmental Organizations

Inter-governmental organizations (IGOs) such as the UN and NATO, set their own S&T objectives that may or may not align with the priorities of their member nations, including the U.S. To build a robust and thriving innovation strategy that is both national and global in scope, the U.S. has a strong network of relationships with IGOs. This session will explore the best approaches to partner with IGOs to build global innovation ecosystems and how the U.S. national science strategy can inform the development of these collaborative relationships more effectively.

Moderator: Sheril Kirshenbaum, Council on Foreign Relations

- Jeff Singleton, US Deputy Assistant Secretary of Defense, U.S. Department of Defense
- Richard "Alex" Roehrl, Senior Economic Affairs Officer, United Nations Department of Economic and Social Affairs
- Salvatore Aricò, CEO, International Science Council
- Mohamed Abdel-Kader, Founder & Principal, Radial Global Advisory

5:30-6:30 Networking Reception (West Court)

6:30-8:00 Dinner: The Bell Labs X "Project": A Vision for Reinventing Corporate Research Labs

This fireside chat will outline a vision for a 21st century re-invention of a corporate research lab model, where research is inspired by real-world problem-rich use environments that advance (and disrupt) knowledge on behalf of broader society. A network of "Bell Labs Xs", public-private-partnerships that would harness industry to create public, not just private, goods would flip, or at least rebalance, the relationship between industry and the nation's science and technology enterprise. Instead of asking what the latter can do for the former, we would also be asking what the former can do for the latter.

Moderator: Darryll Pines, President, University of Maryland

 Jeffrey Tsao, Senior Scientist, Material, Physical and Chemical Sciences Center, Sandia National Laboratories

END OF DAY 1

WEDNESDAY, FEBRUARY 26, 2025

8:30-9:00am Breakfast & Check-in (East Court & Lecture Room)

9:00–10:15 Fostering Public Trust and Economic Development Through Strategic S&T Communication

Public trust in science and technology is essential for fueling innovation and driving economic growth. Inclusive and transparent public engagement strategies can bridge the gap between scientific advancements and societal understanding, positioning science as a tool to address shared challenges and unlock economic opportunities. This session will explore how building trust through public engagement strengthens economic resilience, accelerates innovation, and enhances national competitiveness.

Moderator: Calvin Mackie, Founder and CEO, STEM NOLA

- Brian Southwell, Distinguished Fellow and Lead Scientist for Public Understanding of Science, RTI International
- Melissa Edwards, Associate Vice Chancellor for Research and Innovation, University of Illinois Urbana-Champaign
- Ruth Freeman, Director of Research for Society, Research Ireland
- Hollie Mackey, Chief Executive Officer, NSF Engine: North Dakota Advanced Agriculture Technology Engine

10:15-10:45 Break (East Court)

10:45–12:00 From Open Science to Impact: Accelerating Technology Competitiveness Through Transparency

Open science has the potential to revolutionize how research drives innovation and economic competitiveness by prioritizing transparency through the sharing of preprints, open data, and collaborative methodologies. The discussions will include successful best practices for cross-sector collaboration through open science; case studies on how open science can enhance technology development for societal benefit; and how

the sharing of data has become a commodity in an increasingly competitive global landscape.

Moderator: Brandon Ogbunu, Assistant Professor, Yale University and Resident Professor, the Santa Fe Institute

- Tom Mitchell, Founders University Professor, Machine Learning Department, Carnegie Mellon University
- Amy L. McGuire, Leon Jaworski Professor of Biomedical Ethics and Director
 of the Center for Medical Ethics and Health Policy, Baylor College of Medicine

12:00-1:15pm Networking Lunch (West Court)

1:15-2:20 Connecting Scientific Innovation and Economic Development: Strategic Communication for Policy Advancement

This fireside chat will consider how to "connect the dots" between scientific innovation and economic metrics using strategic communication and how to bring together those seemingly disparate concepts to enact meaningful policy progress for scientific innovation. This chat will specifically focus on how science policymakers can develop more meaningful and actionable engagements with legislatures to help support national scientific strategic objectives.

Moderator: Andrea C. Love, Founder, ImmunoLogic

- Rémi Quirion, Chief Scientist of Québec, President of INGSA
- Maryann Feldman, Watts Professor of Public Policy and Management, Arizona State University
- Todd Ringler, Executive Managing Director, Head of Earned Media, Edelman

2:20-2:30 End of Panel Programming & Closing Remarks

- Danielle Merfeld, GUIPRR Council Co-Chair, Executive Vice President and Global Chief Technology Officer, Qcells
- Darryll Pines, GUIPRR Council Co-Chair, President, University of Maryland

MEETING ADJOURNS