

***Re-Imagining Science Communication
in the COVID Era and Beyond:
The 5th National Academies Science Communication Colloquium***

*Standing Committee on Advancing Science Communication
Board on Science Education*

AGENDA

The need for effective communication and engagement about science has never been more important in the face of global challenges, like the ongoing COVID-19 pandemic, a changing climate, and the societal impacts of emerging new technologies. The pandemic has revealed the enormous challenges of communicating about science—communication inequities, political polarization, uncertainty, and misinformation—and the high costs of inadequately overcoming them, especially among communities of color and under-resourced communities. But the need for effective ways to communicate and engage with science is not limited to the current moment and the pandemic, and is only becoming more urgent. For example, the need to make critical decisions related to climate change, such as how to limit greenhouse gas emissions, understand and plan for potential risks, mitigate impacts to the health and well-being of humans and the natural world, and adapt to changes that cannot be prevented, makes it increasingly essential to find ways to improve productive and inclusive civic dialogue around science. Building this capacity for a more effective and equitable science communication ecosystem will require marshaling the collective strengths, creativity, and expertise of research, practice, and communities.

To advance this effort, the Standing Committee on Advancing Science Communication at the National Academies of Sciences, Engineering, and Medicine is hosting the 5th Science of Science Communication Colloquium: Re-imagining Science Communication in the COVID Era and Beyond. The multi-day hybrid event will bring together diverse researchers and practitioners of science communication and engagement to learn from one another and from community members and leaders. Plenary and interactive sessions will focus on building inclusive and equitable structures, evidence-based practices, and the science of science communication and engagement. Sessions will feature approaches from the global to the local levels.

Goals for the Colloquium:

1. Foster shared learning and collaboration among participants from the US and abroad—researchers from diverse fields, practitioners from diverse settings (including those who are new to communicating science), community leaders, funders, and organizations who support the communication of science;
2. Identify creative, collaborative, evidence-based solutions to persistent and foreseeable challenges in science communication;
3. Catalyze stakeholders to advance science communication and community engagement with science that prioritizes equity, values the expertise of communities, and centers their needs.

June 1, 2022

NATIONAL ACADEMY OF SCIENCES, WASHINGTON, DC

REFLECTING ON LESSONS FROM COVID-19:
KEY CHALLENGES FOR SCIENCE COMMUNICATION

- What has COVID-19 revealed about the biggest challenges facing science communication today?
- What are the complexities to consider regarding key challenges in addressing threats to civic dialogue about science and the need for diversity, equity, and inclusion in science communication?
- How can we set a vision for what is needed to reimagine a science communication and engagement system that addresses the biggest challenges?

12:00 p.m. Welcome and Opening Remarks

***Diетram Scheufele**, Taylor-Bascom Chair in Science Communication and Vilas Distinguished Achievement Professor at the University of Wisconsin-Madison and Co-Chair of the Standing Committee on Advancing Science Communication*

12:15 p.m. Keynote Dialogue

***Abigail Echo Hawk**, (Pawnee) Director, Urban Indian Health Institute
K. Vish Viswanath, Lee Kum Kee Professor of Health Communication, Harvard T. H. Chan School of Public Health and Member of the Standing Committee on Advancing Science Communication*

12:45 p.m. Perspectives on Key Challenges in Science Communication across the Ecosystem

Panelists will offer insights on how COVID-19 has shaped their perspectives on the most important goals for science communication and the priorities for the field. They will describe their visions for re-imagining how science communication and engagement can be more inclusive, equitable, evidence-based, and effective in meeting future challenges.

Moderator:

***William Hallman**, Professor and Chair of the Department of Human Ecology, Rutgers University and Member of the Standing Committee on Advancing Science Communication*

Panelists:

Céline Gounder, Senior Fellow & Editor-at-Large for Public Health, Kaiser Health News at the Kaiser Family Foundation

Ramona Ludolph, Technical Officer, Evidence-informed Policies, Health Emergencies Programme at World Health Organization, World Health Organization (virtual)

Sacoby Wilson, Director, Center for Community Engagement, Environmental Justice, and Health and Associate Professor, Maryland Institute for Applied Environmental Health

Sara Yeo, Associate Professor, Communication, University of Utah

1:50 p.m. Break

2:00 p.m. The Complexity of Threats to Civic Dialogue about Science

This session will feature the science behind some of the biggest threats to public engagement and decision-making around science: increasing factions, political polarization, mis- and disinformation, and the forces that shape the increasingly different realities that affect how people consume, understand, and perceive science.

Moderator:

Laura Helmuth, Editor-in-Chief, Scientific American and Member of the Standing Committee on Advancing Science Communication

Presentations:

James Druckman, Payson S. Wild Professor of Political Science and Member of the Standing Committee on Advancing Science Communication

Dietram Scheufele, Taylor-Bascom Chair in Science Communication and Vilas Distinguished Achievement Professor at the University of Wisconsin-Madison and Co-Chair of the Standing Committee on Advancing Science Communication

Discussants:

Mahmud Farooque, Associate Director, Consortium for Science, Policy & Outcomes

M. Anthony Mills, Senior Fellow, American Enterprise Institute

Kimberly Rios, Associate Professor of Psychology, Ohio University

3:30 p.m. Break

3:45 p.m. Diversity, Equity, and Inclusion in Science Communication: Unpacking Frameworks for Research and Practice

This session will feature a wide range of perspectives to shed light on the frameworks, evidence, and most critical needs around increasing diversity, equity, and inclusion (DEI) in science communication. Panelists will discuss how they define DEI in the context of their work, the approaches they use, and the challenges and tensions they have observed.

Moderator:

K. Vish Viswanath, *Lee Kum Kee Professor of Health Communication, Harvard T. H. Chan School of Public Health and Member of the Standing Committee on Advancing Science Communication*

Panelists:

Amanda Boyd, *Associate Professor of Health, Risk and Science Communication, Washington State University*

Chhaya Kolavalli, *Senior Program Officer, Entrepreneurship, Kauffman Foundation*

Tia C. Madkins, *Assistant Professor of Curriculum and Instruction, University of Texas at Austin*

Emiliano Rodríguez Mega, *Science Journalist*

Darryl Williams, *Senior Vice President of Science and Education, The Franklin Institute*

5:10 p.m. Closing Remarks

Dietram Scheufele, *Taylor-Bascom Chair in Science Communication and Vilas Distinguished Achievement Professor at the University of Wisconsin-Madison and Co-Chair of the Standing Committee on Advancing Science Communication*

5:15 p.m. Networking Reception at the National Academy of Sciences

JUNE 2, 2022

(ALL VIRTUAL)

PROMISING PRACTICES AND EVIDENCE-BASED APPROACHES FOR ADDRESSING
KEY CHALLENGES IN SCIENCE COMMUNICATION

On Day 2, participants will learn about promising practices for addressing the challenges discussed on Day 1, and have opportunities to contribute to discussions and participate in interactive sessions to meet others working across sectors and roles to address common issues.

- What are promising approaches for strengthening connections and collaboration with communities around science and health?
- What are approaches for improving the quality of civic dialogue about science, and what are the roles for research, practice, communities, policy, media, and the private sector?

11:00 a.m. Welcome and Day 2 Overview

***Itzhak Yanovitzky**, Professor of Communication and Public Health at Rutgers University, and Member of the Standing Committee on Advancing Science Communication*

11:10 a.m. Keynote Presentation

***Catherine Coleman Flowers**, Founding Director of the Center for Rural Enterprise and Environmental Justice and 2020 MacArthur Fellow for Environmental Health Advocacy*

11:30 a.m. Promising Approaches for Engaging Diverse Communities around Health and Science

A panel of community leaders will offer insights into collaborations between communities and science. Panelists will discuss their approaches to building relationships and earning trust, honoring community expertise and power, and overcoming challenges they face.

Moderator:

***Liz Neeley**, Founder and Principal, Liminal Creations*

Panelists:

***Stephen B. Thomas**, Professor and Director, Center for Health Equity, University of Maryland*

***Mónica Feliú-Mójer**, Director of Communications and Science Outreach, Ciencia Puerto Rico*

***Akram Boutros**, President and CEO, MetroHealth*

12:45 p.m. Making Connections (Interactive Session)

Using the capabilities of the online platform, participants will have opportunities to connect with others who are working to address common issues around community engagement with science.

1:15 p.m. Next Steps

1:20 p.m. Informal Networking and Lunch Break

2:00 p.m. Concurrent Sessions: Evidence-Based Practices for Improving Civic Dialogue about Science

Participants will choose which session to attend from among 4 sessions focused on evidence-based approaches for improving civic dialogue about science. Sessions will focus on promising approaches and available evidence for improving dialogue about science in the online environment, addressing misinformation, considering how journalism can enhance public dialogue, and national and local models for dialogue about ecological hazards and climate resilience. All sessions will include time for audience Q&A.

Concurrent Session 1: Communicating Science Online: Approaches for Fostering Trust and Inclusive Public Deliberation and Decision-Making

Presentations will address two distinct facets and approaches for communicating science online to improve civic dialogue. One presentation will offer research about the online media environment and how communication and interactions around science can affect trust, address misinformation, and build community. A second presentation will offer approaches for harnessing online tools and strategies, and in-person community engagement for effective and inclusive public policymaking around issues like climate resilience.

Presenters:

Kaiping Chen, Assistant Professor in Computational Communication,
University of Wisconsin-Madison

Ashley A. Anderson, Associate Professor, Journalism & Media
Communication, Colorado State University

Moderator:

David Lazer, Distinguished Professor of Political Science and
Computer and Information Science, Northeastern University and
Member of the Standing Committee on Advancing Science
Communication

Concurrent Session 2: Approaches for Defining, Measuring, and Addressing Misinformation about Science

Two experts on mis- and disinformation will share the latest evidence about how

to define and measure misinformation and why this matters, how misinformation can negatively impact health, and how to combat it.

Presenters:

Brian Southwell, Senior Director, Science in the Public Sphere, RTI International

Wen-Ying Sylvia Chou, Program Director, Health Communication and Informatics Research Branch, Behavioral Research Program, National Cancer Institute, National Institutes of Health

Moderator:

James Druckman, Payson S. Wild Professor of Political Science and Member of the Standing Committee on Advancing Science Communication

Concurrent Session 3: Informal Science Spaces for Civic Dialogue about Science

Presentations will describe two different evidence-based approaches for engaging communities in informal science spaces in inclusive and systematic dialogue and deliberation around adapting to climate change and environmental issues. One approach features a science-to-civics model with discussions around different climate-related hazards in conjunction with community resilience planners. A second presentation will focus on lessons from local partnerships, citizen science, and community-embedded ecological research.

Presenters:

David Sittenfeld, Manager, Current Science Communication, Museum of Science, Boston

Sarah Garlick, Director of Science Policy and Outreach, Hubbard Brook Research Foundation

Moderator:

Cynthia Coburn, Professor, School of Education and Social Policy, Northwestern University and Member of the Standing Committee on Advancing Science Communication

Concurrent Session 4: Improving Civic Dialogue about Science through Journalism

This session will feature insights from two seasoned journalists who are also leaders in providing training for science journalists about the role of journalism in civic dialogue about science. Remarks and discussion will address topics such as including diverse sources and perspectives while avoiding tokenism and making choices about how to communicate about challenging issues without contributing to increased polarization and echo chambers.

Presenters:

Rick Weiss, Director, SciLine, American Association for the
Advancement of Science

Siri Carpenter, Co-founder and Editor-in-chief, The Open Notebook

Moderator:

William Hallman, Professor and Chair of the Department of Human
Ecology, Rutgers University and Member of the Standing Committee
on Advancing Science Communication

3:00 p.m. Break

3:15 p.m. Reflections from the Concurrent Sessions

Members of the Standing Committee on Advancing Science Communication will offer their reflections on key takeaways from the concurrent sessions and participants will share their key takeaways on the digital platform.

**3:35 p.m. Closing Keynote: Building a Culture of Evidence –
The Year of Evidence**

This keynote presentation will provide an overview of the Biden Administration's Year of Evidence for Action, including goals and priorities, and approaches to building a culture of evidence use. The presentation and discussion will focus on plans for increasing connection and collaboration among researchers, knowledge producers, and decision makers inside and outside of the Federal Government, and the need to prioritize diversity, inclusion, and strong relationships built on trust between scientists, practitioners, and the public.

Diana Epstein, Evidence Team Lead, Office of Management and Budget

Moderator:

Itzhak Yanovitzky, Professor of Communication and Public Health at
Rutgers University and Member of the Standing Committee on Advancing
Science Communication

4:05 p.m. Closing Remarks

Angela Bednarek, Project Director, The Evidence Project, Pew Charitable
Trusts, and Member of the Standing Committee on Advancing Science
Communication

4:15 p.m. Adjourn

JUNE 6, 2022

NATIONAL ACADEMIES OF SCIENCES, BECKMAN CENTER, IRVINE, CA

**BUILDING CAPACITY AND INNOVATION FOR THE FUTURE OF SCIENCE
COMMUNICATION**

On Day 3, participants will focus on the future—approaches for increasing capacity and scale, opportunities for responsible innovation in data, technology, and media, and the role of collaboration in realizing the promise of these opportunities. The colloquium will close with a look toward the future.

- What are approaches for building capacity for a better system for engaging communities, and improving the quality of science communication?
- What collaborations among research, practice, communities, policy, media, and the private sector are needed to generate creative solutions and build a more effective and equitable science communication ecosystem prepared for future challenges?
- How can we responsibly leverage technology and social media to strengthen science communication and enhance resiliency?
- What challenges should we see coming and what are the tools we need to address them?

12:30 p.m. PT Welcome and Day 3 Overview

Georges Benjamin (NAM), *Executive Director of the American Public Health Association and Member of the Standing Committee on Advancing Science*

12:45 p.m. PT Building Capacity for Connecting Science with Social Institutions, Policy, and Diverse Communities

This session will focus on building capacity by way of mobilizing the collective strengths, creativity, and expertise from research, practice, policy, and communities to realize an effective science communication system that supports productive and inclusive public engagement with science, civic dialogue, and evidence-based decision making around science. This session will also explore what capacity needs remain as we look to the future.

Moderator:

Angela Bednarek, *Project Director, The Evidence Project, Pew Charitable Trusts, and Member of the Standing Committee on Advancing Science Communication*

Panelists:

John Lavis, *Director of the Collaborating Centre for Evidence-Informed Policy, World Health Organization*

Annette Boaz and Kathryn Oliver, Co-Leads, *Transforming Evidence Collaboration* (virtual)
Aradhna Tripathi, Faculty Director and Founder, *UCLA Center for Diverse Leadership in Science*

1:45 p.m. PT

Building a Culture of Civic Science: The Civic Science Fellows Program

Members of the Civic Science Fellows network will describe the growing network and its goals, accomplishments, and vision for the future. The session will specifically highlight the history and intentional design principles supporting the network's infrastructure, cross-cutting objectives that support collective action in civic science, and perspectives for members about the value-add of the network toward meeting a variety of goals across multiple sectors and stakeholder groups.

Moderator: **Elizabeth Christopherson**, *President and CEO, Rita Allen Foundation* (virtual)

Panelists:

Caroline Montojo, *President and CEO, Dana Foundation and Civic Science Fellows Funding Partner*
Adam Levine, *Stavros Niarchos Foundation Agora Institute Associate Professor of Health Policy and Management, Johns Hopkins Agora Institute and Civic Science Fellows Host Partner*
Jylana Sheats, *Civic Science Fellow, Aspen Institute*
Nicole Krause, *Civic Science Fellow, University of Wisconsin-Madison and John Templeton Foundation*
Mariette DiChristina, *Boston University and Civic Science Fellows Advisory Committee Member* (virtual)

2:30 p.m. PT

Break

2:45 p.m. PT

Responsible Innovation in Technology and Social Media for Enhancing Engagement and Health

This session will explore the opportunities for responsible innovations in technology, data, and media to help create a science communication ecosystem that is more diverse, inclusive, equitable, and effective.

Moderator:

Wendy Wolfson, *Science Journalist*

Panelists:

Brooke Foucault Welles, *Associate Professor, Communication Studies, Northeastern University* (virtual)
Marti Louw, *Director, Learning Media Design Center, Carnegie Mellon University*
Garth Graham, *Director, and Global Head of Healthcare and Public Health Partnerships YouTube/Google* (virtual)

4:00 p.m. PT

Break

4:15 p.m. PT

The Future of Science Communication: Paths Forward

Panelists will share their views on anticipated future challenges and opportunities in science communication.

Moderator:

Kirsten Ellenbogen, *President and Chief Executive Officer of the Great Lakes Science Center and Co-Chair of the Standing Committee on Advancing Science Communication*

Panelists:

Brooke Smith, *Director of Public Engagement with Science, Kavli Foundation*

Sam Dyson, *Physics Ph.D. Student, University of Chicago and Civic Science Fellows Alumnus*

Michael Mendez, *Assistant Professor of Environmental Planning and Policy, University of California at Irvine*

Sara Yeo, *Associate Professor, Communication, University of Utah*

Jeff MacGregor, *Vice President of Communications, Science, Chan Zuckerberg Initiative*

5:00 p.m. PT

Closing Remarks

Kirsten Ellenbogen, *President and Chief Executive Officer of the Great Lakes Science Center and Co-Chair of the Standing Committee on Advancing Science Communication*

5:20 p.m. PT

Networking Reception