U.S. General Services Administration

# Public Engagement with Science

## Strategies for Federal Implementation

April 17, 2024

# Welcome and Introductions

**Jarah Meador**
(she/her)

*Director, Challenge.gov and CitizenScience.gov*

**General Services Administration**
**Technology Transformation Services (GSA TTS)**

# Event Logistics

- Breaks
- Lunch Options
- Social Media Policy
- Ask a GSA Open Innovation Team member
- Agendas and QR Code

# Morning Agenda

| Time | Topic | Speakers & Facilitators |
|---|---|---|
| 8:30 - 8:40 am | Opening Remarks | **Ann Lewis**, Director, *General Services Administration, Technology Transformation Services* |
| 8:40 - 9:40 am | **Fireside Chat**<br><br>The value and importance of public engagement with science | **Kei Koizumi**, Principal Deputy Director for Policy, *White House Office of Science and Technology Policy*<br>**Saul Perlmutter**, 2011 Nobel Laureate in Physics and PCAST member<br>**Geraldine (Geri) Richmond**, Under Secretary for Science and Innovation, *U.S. Department of Energy*<br>**Karen Marrongelle**, Chief Operating Officer, *National Science Foundation* |
| 9:40 - 9:45 am | *Transition* | |

# Morning Agenda, part 2

| Time | Topic | Speakers & Facilitators |
|---|---|---|
| 9:45 - 10:55 am | **Panel Discussion**<br><br>Perspectives and high-level agency overviews of programs and portfolios that support public engagement with science | **Shaibya Dalal**, Senior Advisor, *White House Office of Management and Budget*<br>**Christopher Frey,** Assistant Administrator, Office of Research and Development, *Environmental Protection Agency*<br>**Jonathan Pennock**, Director, National Sea Grant Office, *National Oceanic and Atmospheric Administration*<br>**Kevin Murphy**, Chief Science Data Officer, *National Aeronautics and Space Administration*<br>**Paul Allwood**, Branch Chief, Lead Poisoning Prevention and Environmental Health Tracking Branch,*Centers for Disease Control and Prevention* |
| 10:55 - 11:00 am | *Transition* | |

# Morning Agenda, part 3

| Time | Topic | Speakers & Facilitators |
|---|---|---|
| 11:00 am - 12:15 pm | **Facilitated Feedback Session**:<br><br>Opportunities and challenges for federal implementation | **Erica Kimmerling**, Assistant Director for Community Driven Health, *White House Office of Science and Technology Policy*<br>**Karen Andrade**, Senior Policy Advisor, Science & Society, *White House Office of Science and Technology Policy* |
| 12:15 - 1:45 pm | *Lunch Break and Networking* | |

# Afternoon Agenda

| Time | Topic | Speakers & Facilitators |
|---|---|---|
| 1:45 - 3:25 pm | **Project Panel Discussion**<br><br>Lessons and insights on a continuum of public engagement featuring exemplary projects | **Karen Andrade**, Senior Policy Advisor, Science & Society, *White House Office of Science and Technology Policy*<br>**Erica Kimmerling**, Assistant Director for Community Driven Health, *White House Office of Science and Technology Policy*<br>**Maryam Zaringhalam**, Assistant Director for Public Access and Research Policy, *White House Office of Science and Technology Policy*<br>**Panel of Exemplary Projects** |
| 3:25 - 3:30 pm | Closing Remarks | |

# Opening Remarks, part 1

**Ann Lewis**
(she/her)

*Director*

**General Services Administration**
**Technology Transformation Services**
(GSA TTS)

# Opening Remarks, part 2


## Kei Koizumi

*Principal Deputy Director for Policy*

**White House Office of Science and Technology Policy**
(OSTP)


# Fireside Chat, Part 1

## Saul Perlmutter

*2011 Nobel Laureate in Physics*

**Member, President's Council of Advisors on Science and Technology** (PCAST)

# Fireside Chat, Part 2

**Geraldine (Geri) Richmond**
*Under Secretary for Science and Innovation*
**Department of Energy**

**Karen Marrongelle**
*Chief Operating Officer*
**National Science Foundation**

# Fireside Chat

*The value and importance of public engagement with science*

- **Kei Koizumi** *(moderator)* | Principal Deputy Director for Policy, *White House Office of  Science and Technology Policy*
- **Saul Perlmutter** | 2011 Nobel Laureate in Physics, PCAST member
- **Geraldine (Geri) Richmond** | Under Secretary for Science and Innovation, *U.S. Department of Energy*
- **Karen Marrongelle** | Chief Operating Officer, *National Science Foundation*

# Agency Perspectives on Supporting Public Engagement with Science


## Shaibya Dalal

*Senior Advisor*

**White House Office of Management and Budget**
(OMB)


# Public participation and community engagement (PPCE) is already advancing Administration priorities…


The UI Lexicon Project: defining commonly used UI terms in plain language

By: Kevin Parker - February 8, 2023

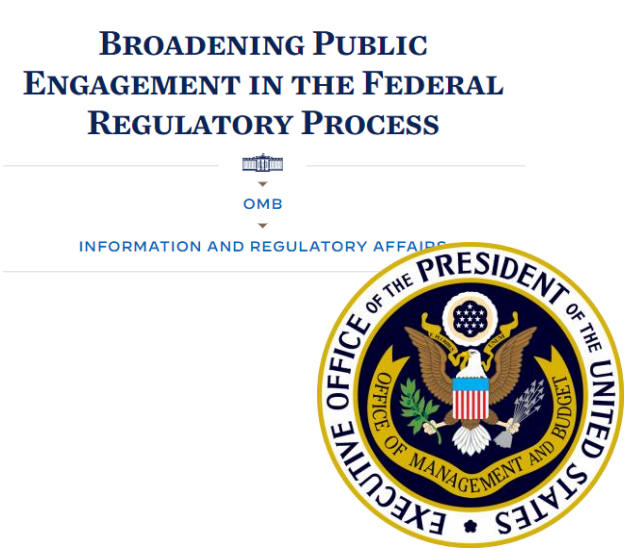
Since the onset of the COVID-19 pandemic, over 100 million initial claims for unemployment insurance (UI) have been filed in the U.S. At the height of the pandemic in April 2020, more than 6 million applications poured in during just a week. More than 46 million individuals -- roughly one in four American workers -- have received at least one week of UI benefits (source). A Federal Reserve Bank recently found have a great economic stimulus measure (source). This ha reaching government programs and put it accuracy, efficiency, and fairness.


CLIMATE CHANGE RESPONSE FRAMEWORK

MENU

Home » Who we are

The Climate Change Response Framework is a collaborative, cross-boundary approach among scientists, managers, and landowners to incorporate climate change considerations into natural resource management.


BROADENING PUBLIC ENGAGEMENT IN THE FEDERAL REGULATORY PROCESS

OMB

INFORMATION AND REGULATORY AFFAIRS

# …and is embedded across a wide range of Federal laws, Executive Actions, and policy directives.

**Federal Statutes**

- Administrative Procedure Act of 1946
- Paperwork Reduction Act of 1995
- Government Modernization Act of 2010
- Foundations for Evidence-based Policymaking Act of 2018

**Executive Orders**

- Federal Customer Experience and Service Delivery (14058)
- Racial Equity and Support for Underserved Communities (13985 & 14091)
- Consultation and Coordination With Indian Tribal Governments (13175)
- Environmental Justice for All (14096)

**Memoranda**

- Burden Reduction (M-22-10)
- Digital-First Public Experience (M-23-22)
- Uniform Grants Guidance 2024 Revision
- Restoring Trust in Government Through Scientific Integrity and Evidence-Based Policymaking
- Ensuring Free, Immediate, and Equitable Access to Federally Funded Research

**Other Policy Commitments**

- President's Management Agenda (PMA)
- 2011 Open Government Declaration

# Public engagement with science is aligned with these broader PPCE requirements, priorities, and approaches.

# OMB issued a call for public input on a PPCE Framework

**performance.gov/participation/**

**OMB is seeking public feedback – via RFI, online form, and listening sessions – through May 17 on:**

1. **Experiences** interacting with Federal Government PPCE activities.

2. **Content** (e.g., leading practices, tools, and metrics) for a Federal framework for PPCE.

3. **Process** for OMB to continue co-developing this framework with the public.

# OMB and GSA launched a PPCE Evidence Challenge


**Through a multi-phased Challenge, OMB and GSA are seeking an evaluation toolkit for agencies to evaluate and improve the effectiveness of their PPCE activities.**

- What PPCE approaches are effective in increasing reach, improving inclusivity, and promoting public involvement and trust in Federal decision-making?
- Phase 1 - Technical Concept Paper **(due May 21)**; Phase 2 - Evaluation Toolkit & Case Study **(due Aug 2)**.
- Up to **$195,000** in cash prizes!

# Panel Discussion

**Christopher Frey**
*Assistant Administrator, Office of Research and Development*
EPA

**Jonathan Pennock**
*Director, National Sea Grant Office*
NOAA

**Kevin Murphy**
*Chief Science Data Officer*
NASA

**Paul Allwood**
*Branch Chief, Lead Poisoning Prevention and Environmental Health Tracking Branch*
CDC

# Panel Discussion

*Perspectives and high-level agency overviews of programs and portfolios that support public engagement with science.*

- **Shaibya Dalal** *(moderator)* | Senior Advisor, *White House Office of Management and Budget*
- **Christopher Frey** | Assistant Administrator, *Office of Research and Development, Environmental Protection Agency*
- **Jonathan Pennock** | Director, National Sea Grant Office, *National Oceanic and Atmospheric Administration*
- **Kevin Murphy** | Chief Science Data Officer, *National Aeronautics and Space Administration*
- **Paul Allwood** | Branch Chief, Lead Poisoning Prevention and Environmental Health Tracking Branch, *Centers for Disease Control and Prevention*

# Facilitated Discussion

**Erica Kimmerling**
*Assistant Director for Community Driven Health*
**White House Office of Science and Technology Policy**

**Karen Andrade**
*Senior Policy Advisor, Science & Society*
***White House Office of Science and Technology Policy***

# Public Engagement in Science: Strategies for Implementation

Karen Andrade Ph.D., STEM Next Fellow and Senior Policy Advisory

Erica Kimmerling Ph.D., Assistant Director for Community Driven Health

Community engagement in government is a specific form of public participation that involves agency actions to build trust-based, long-term, and two-way relationships with communities, including underserved communities that have been historically left out of government decision-making (OIRA 2023)

# The Public

Public engagement in Federal science and innovation is essential for the transformation of the scientific and technological ecosystem to be more open, inclusive, and responsive.

# Continuum of Engagement with Science

# Getting to Know Each Other

"Why do you care about public engagement in science?"

# Roadmap for the Day

# PCAST Recommendations

**Recommendation 1:**

Issue a clarion call to Federal agencies to make science and technology communication and public engagement a core component of their mission and strategy. An essential pillar of this effort is ensuring that experts in participatory public engagement are included in agency senior-level policy development and decision-making processes.

# PCAST Recommendations, continued

## Recommendation 2:

Establish a new office to support Federal agencies in their continuing efforts to develop and build participatory public engagement and effective science and technology communications. This office should consist of individuals with a range of expertise who can partner with or be deployed to agencies, including assistance in the use of social science-informed techniques for participatory engagement and cutting-edge digital technologies.

The U.S. Digital Service within the Office of Management and Budget and the 18F office within the General Services Administration may be useful models for this proposed office.

# Gallery Walk Prompts

- **Word Cloud**
  - Why is public engagement in science important for your work?
  - Characteristics of effective public engagement in science?

- **Mission Station**
  - To what extent does your leadership recognize public engagement as core to your agency's mission? Place your sticky not between 0 (not at all) to 5 (mission critical)
  - Write the rationale for your placement on the sticky note

- **Shared Challenges**
  - What is the biggest challenge to implementing, or expanding, public engagement?

- **Building Capacity**
  - What types of support would be most helpful to your engagement work?
  - Feedback on recommendation #2 – a central office with public engagement expertise

# Facilitated Discussion, part 2

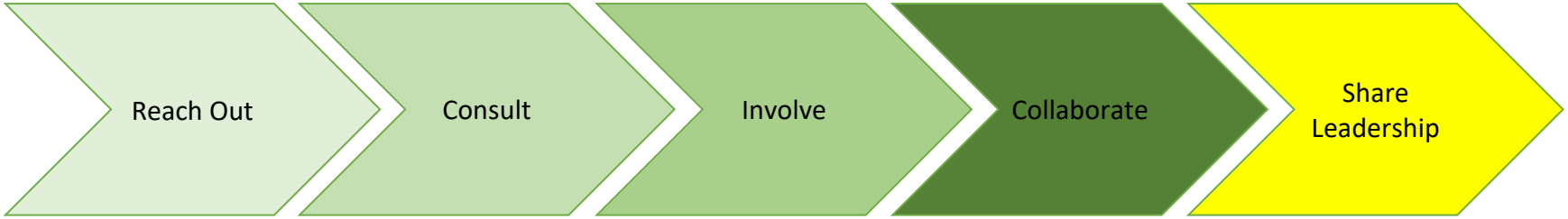
**Erica Kimmerling**
*Assistant Director for Community Driven Health*
**White House Office of Science and Technology Policy**

**Karen Andrade**
*Senior Policy Advisor, Science & Society*
***White House Office of Science and Technology Policy***

**Maryam Zaringhalam**
*Assistant Director for Public Access and Research Policy*
**White House Office of Science and Technology Policy**

# Grounding for the Afternoon

# Continuum of Engagement




**Example: Science Communication & Translation**

**Outcome:** Establishes communication channels

**Example: Public listening sessions, Crowdsourcing, Citizen Science**

**Outcomes**: Develops a connection, education, awareness

**Example: Community Review Panels, or Patient Engagement Councils, Citizen Science, Prize Competitions, Challenges, Community Patient-Centered Outcomes**

**Outcome**: Visible partnership that provides multiple avenues of engagement and increased agency and value to community voice

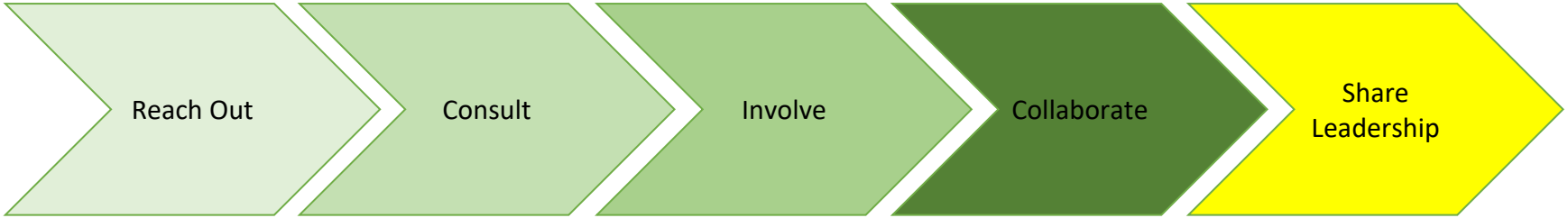
**Example: Cooperative Agreement Funding Models**

**Outcome**: Evolving partnership that builds and centers trust and provides increasing agency to community partner

**Example: Funding Community Engagement Cores that fund community-university research**

**Outcome**: More equitable access to Federal resources and leveraging knowledge and for policies that improve local outcomes

# Continuum of Engagement, continued




**Project Community (FDA)**

**Smoke Sense (EPA)**

**PNNL WHONDRS Project (DOE)**

**Aurorasaurus (NASA)**

**Crocus (Argonne National Labs) (DOE)**

**Climate Adaptation Partnerships (NOAA)**

# Definition of Open Science

Open Science is the principle and practice of making research products and processes **available to all, while respecting diverse cultures**, maintaining security and privacy, and **fostering collaborations, reproducibility, and equity**.

# Lightning Talks

- **Aurorasaurus** (NASA) | **Elizabeth MacDonald**, Space Physicist, Goddard Space Flight Center, *National Aeronautics and Science Administration*
- **Climate Adaptation Partnerships** (NOAA) | **Sean Bath**, Climate Adaptation Partnerships Program Manager
- **CROCUS** (Argonne National Labs, DOE) | **Rao Kotamarthi**, Science Director, Center for Climate Resilience and Decision Science, *Argonne National Labs*
- **Project Community** (FDA) | **Rea Blakey**, Associate Director, External Outreach and Engagement, Oncology Center of Excellence, *US Food and Drug Administration*
- **Smoke Sense** (EPA) | **Steven Prince**, Behavioral Scientist, Epidemiology Branch, *Environmental Protection Agency*
- **WHONDRS Project** (Pacific Northwest National Labs, DOE) | **Tim Scheibe**, Laboratory Fellow and Director of Program Development, Earth and Biological Sciences Directorate, *Pacific Northwest National Laboratory*

# Aurorasaurus

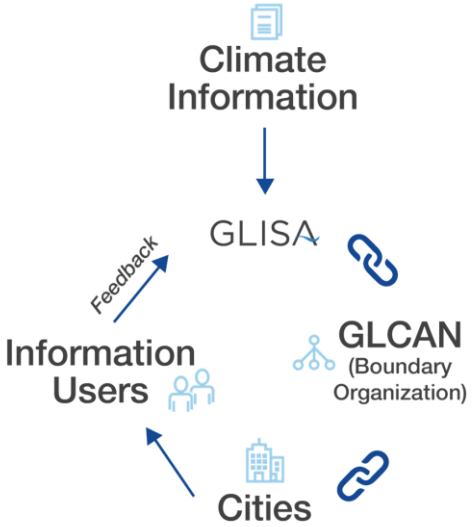
**Sponsor:** NASA; NSF INSPIRE
**Audience:** Enthusiasts; Photographers; the Public
**Purpose:** Participatory science initiative that tracks auroras via reports on our website and social media
**Goals:** • Create a robust system for rapid collection, management, visualization, analysis, interpretation, and redistribution of data contributed by observers that significantly improves our understanding of auroral physics and nowcasting of space weather.
• Create an informal science learning environment that engages and facilitates a diverse public audience to participate in reporting auroral observational data and conducting participatory research activities.
• Design and implement a human-centered computer interface incorporating social media and communications technologies that enables a virtual community to fully participate in advancing understanding of space weather and auroras.

**Website:** Aurorasaurus.org; e.a.macdonald@nasa.gov


# Climate Adaptation Partnerships

**Climate Adaptation Partnerships**
*Formerly RISA*

**Sponsor:** Department of Commerce / National Oceanic and Atmospheric Administration
**Purpose:** Advance equitable adaptation through sustained regional research and community engagement
**Audience:** Teams of researchers and engagement specialists partner with state, local, Tribal governments, community-based organizations, and other intermediaries to help any part of society with the climate part of their decision making.
**Goal:** Build adaptive capacity of society, especially regionally. Real outcomes that are proxies of this include changed behaviors/practices, changing policies, improved understanding, better plans.
**Website:** https://cpo.noaa.gov/cap-risa



# Community Research on Climate and Urban Science

**Sponsor:** Department of Energy Office of Science BER
**Purpose:** Develop, Test and Validate  our understanding of the drivers of heterogeneous impacts of climate in urban neighborhoods, identified with community participation, and investigate potential mitigation using scientific methods.
**Audience**: The project has 18 partners, including community colleges, MSI's a HBCU (NCAT) and three community organizations. Community stakeholders and Scientific peers are the audience
**Goal:** The project is directed at providing scientific rationale for the differences in impacts across neighborhoods and developing a rigorous scientific methodology for performing community participatory research addressing climate in urban settings.
**Website:** https://crocus-urban.org

CROCUS
Community Research on Climate & Urban Science

**Kickoff meeting of CROCUS attended by Dr. Berhe, Deputy Secretary DOE Office of Science, Dr. Gary Geernart, Director, Earth and Environmental Science Division, DOE at the Blacks in Green Community Center in the Westlawn Neighborhood of Chicago**

# Project Community

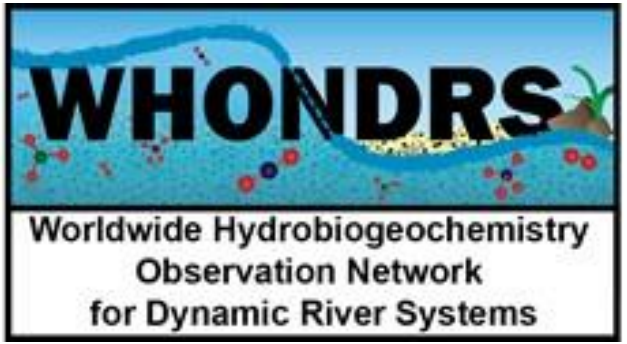
**Sponsor:** FDA Oncology Center of Excellence (OCE)
**Purpose:** Public health outreach promoting inclusion for minority groups, rural communities and underserved
**Audience:** People with cancer, advocates, oncology organizations, the US/global public (via European Medicines Agency)
**Goal:** Increase clinical trial awareness & understanding, foster public efforts to reduce cancer risk and increase survival quality.
**Website:** https://www.fda.gov/about-fda/project-community/national-black-family-cancer-awareness

# SmokeSense

**Sponsor:** Environmental Protection Agency
**Purpose:** Increase public awareness of wildfire smoke health risks; help close the gap between intention and protective action.
**Audience:** Citizen Scientists (U.S. adults) who contribute information and learn more about air quality impacts and responses
**Goal:** Encourage timely action and protective measures to improve health outcomes. Inform health risk communication efforts, recognizing factors that facilitate (or hinder) behavioral responses. Notable outcomes include 65k downloads, published manuscripts and academic partners that expanded research, media coverage + state/local agency sharing that broadened outreach, EPA Silver medal award, and receiving thank-you letters from app users.
**Website:** https://www.epa.gov/air-research/smoke-sense


# **WHONDRS**: Worldwide Hydrobiogeochemistry Observational Network for Dynamic River Systems


**Sponsor:** US Department of Energy, Office of Science
**Purpose:** Develop transferable scientific understanding of the function of river systems as an integral component of national and global water, energy, and nutrient cycles. Develop resources that provide mutual benefit to participants.
**Audience:** Volunteer researchers and other interested parties around the US and the globe.
**Goal:** Characterize variability of organic matter composition, microbial processes, and riverbed sediment respiration across scales and systems. We have engaged over 300 collaborators at over 400 sites worldwide and published 22 public datasets. Contributors have participated in workshops, educational webinars, and co-authored several publications.
**Website:** https://whondrs.pnnl.gov/



# Project Panel Discussion

- **Aurorasaurus** (NASA) | **Elizabeth MacDonald**, Space Physicist, Goddard Space Flight Center, *National Aeronautics and Science Administration*
- **Climate Adaptation Partnerships** (NOAA) | **Sean Bath**, Climate Adaptation Partnerships Program Manager
- **CROCUS** (Argonne National Labs, DOE) | **Rao Kotamarthi**, Science Director, Center for Climate Resilience and Decision Science, *Argonne National Labs*
- **Project Community** (FDA) | **Rea Blakey**, Associate Director, External Outreach and Engagement, Oncology Center of Excellence, *US Food and Drug Administration*
- **Smoke Sense** (EPA) | **Steven Prince**, Behavioral Scientist, Epidemiology Branch, *Environmental Protection Agency*
- **WHONDRS Project** (Pacific Northwest National Labs, DOE) | **Tim Scheibe**, Laboratory Fellow and Director of Program Development, Earth and Biological Sciences Directorate, *Pacific Northwest National Laboratory*

# Panel Discussion Questions

- What strategies have worked to get buy-in for your work?

- Do you have good tactics for overcoming barriers?

# Speaker Bios

**Ann Lewis**

Director, Technology Transformation Services, General Services Administration

Ann Lewis is the Director of Technology Transformation Services (TTS) at the U.S. General Services Administration (GSA), and runs a team of ~600 technologists working on a variety of platforms, products and programs that bring tech industry best practices and tools into government. Ann is a tech industry veteran, and has held a variety of tech leadership roles, including 2 CTO roles, and Senior Advisor for Technology and Delivery at the U.S. Small Business Administration. Ann is passionate about shipping great products, building great teams, and using tech as a force for good. Ann is based in DC, and holds a B.S. in Computer Science from Carnegie Mellon University.

**Kei Koizumi**

Principal Deputy Director for Policy, White House Office of Science and Technology Policy

Kei Koizumi (he/his) is a longtime science-policy leader, science policy researcher, and social scientist in Washington, DC. Since January 2021, he has served at the White House Office of Science and Technology Policy (OSTP), currently as Principal Deputy Director for Science, Society, and Policy and previously as Chief of Staff and Acting Director. He is also Acting Executive Director of the National Science and Technology Council. Immediately before the Biden-Harris Administration, he served on the Biden-Harris Transition Team as the lead for the National Science Foundation (NSF) and a member of the OSTP transition. Previously, he served as Senior Advisor for Science Policy at the American Association for the Advancement of Science (AAAS) between 2017 and 2019. He was Assistant Director for Federal R&D, and Senior Advisor for the National Science and Technology Council, at OSTP from 2009 to 2016 in the Obama Administration. He is a Fellow of the AAAS.

## Saul Perlmutter, PhD

2011 Nobel Prize Laureate in Physics

Saul Perlmutter, PhD, is an astrophysicist and cosmologist who received the Nobel Prize in Physics for discovering that the expansion of our universe is accelerating, and is a member of the President's Council of Advisors on Science and Technology (PCAST). He is also a Franklin W. and Karen Weber Dabby Professor of Physics, and Director of the Berkeley Institute for Data Science at University of California, Berkeley, and Senior Scientist at Lawrence Berkeley National Laboratory.

## Geraldine “Geri” Richmond

Under Secretary for Science and Innovation, U.S. Department of Energy

Geraldine (Geri) Richmond is the Under Secretary for Science and Innovation at the Department of Energy (DOE). In this role she oversees DOE's Office of Science, the nation’s largest federal sponsor of basic research in the physical sciences, DOE’s applied R&D areas of nuclear, fossil, and renewable energy, and energy system integrity, and the DOE national laboratories and their facilities.

**Karen Marrongelle**
Chief Operating Officer, National Science Foundation

Dr. Karen Marrongelle is the Chief Operating Officer of the National Science Foundation, where she oversees operations of the $10B federal agency whose mission includes support for all fields of fundamental science and engineering. Previously, she served as Assistant Director of the National Science Foundation Directorate for Education and Human Resources (EHR). She led the EHR Directorate in supporting research that enhances learning and teaching to achieve excellence in U.S. science, technology, engineering and mathematics (STEM) education.

**Shaibya Dalal**

Senior Advisor, White House Office of Management and Budget

Shaibya Dalal is the Federal Equity and Engagement Lead at the White House Office of Management and Budget (OMB), where she leads a team focused on implementing cross-agency efforts to advance equity, improve service delivery, and strengthen how the Federal Government involves the public in decision-making. Most recently, Shaibya coordinated OMB's work implementing President Biden's Executive Order 14091 on Further Advancing Racial Equity and Support for Underserved Communities Through the Federal Government and launched an OMB initiative to develop the first-ever Federal framework for public participation and community engagement. Before joining OMB in 2021, Shaibya served as Director of Strategic Growth at PolicyLink, leading strategic initiatives to drive equity in Federal policy and within corporate America.

**Christopher Frey**

Assistant Administrator, Office of Research and Development, Environmental Protection Agency

Chris Frey is the Assistant Administrator for Research and Development effective May 2022. He also serves as the Agency Science Advisor. Before his confirmation, he served ORD as the Deputy Assistant Administrator for Science Policy. Prior to joining EPA, Dr. Frey was the Glenn E. and Phyllis J. Futrell Distinguished University Professor at North Carolina State University, where he served on the faculty since 1994. His research includes measurement and modeling of human exposure to air pollution, measurement and modeling of vehicle emissions, and applications of probabilistic and sensitivity analysis methods to emissions estimation, risk assessment, and technology assessment.

**Jonathan Pennock**

Director, National Sea Grant Office, National Oceanic and Atmospheric Administration

Dr. Pennock serves as the director of the National Sea Grant College Program, having joined NOAA in 2016 from the University of New Hampshire where he served as the deputy-director of the School of Marine Sciences & Ocean Engineering, the director of the New Hampshire Sea Grant College Program and an Associate Professor of Natural Resources and the Environment. Dr. Pennock is a nationally-known coastal scientist with expertise in oceanography and estuarine sciences. His research has focused on understanding human impacts on coastal marine food webs.

**Kevin Murphy**

Chief Science Data Officer, National Aeronautics and Space Administration

Kevin Murphy is the Chief Science Data Officer for NASA's Science Mission Directorate. In this capacity, he works across five divisions to advance the state of the art in cloud computing, machine learning, data management and analysis platforms for NASA's scientific data, and advocates for open science for all of NASA. Before assuming his current role, Mr. Murphy served as the Program Executive for Earth Science Data Systems programs and the System Architect for EOSDIS, one of the largest repositories of Earth observing data on the planet. He managed the production and distribution of data from NASA's fleet of over 20 Earth-Observing satellites and instruments including near real-time science data production systems, search engines, scientific data visualization system, evaluation of commercial data, and earthdata.nasa.gov. Mr. Murphy has received numerous awards, including the NASA Exceptional Achievement Medal, Robert H. Goddard Exceptional Achievement for Engineering, Charles S. Falkenberg Award, Fed 100, among others.

## Paul Allwood

Branch Chief, Lead Poisoning Prevention and Environmental Health Tracking Branch, Centers for Disease Control and Prevention

Paul Allwood, PhD, MPH, RS serves as Branch Chief of the Lead Poisoning Prevention and Surveillance Branch, in CDC's National Center for Environmental Health (NCEH), Division of Environmental Health Science and Practice (DEHSP), Atlanta, GA. He directs scientific and programmatic activities Lead Poisoning Prevention throughout the United States. Prior to joining the CDC, Paul worked in various leadership roles in state and local public health agencies, as a professional and academic staff at the University of Minnesota in Minneapolis.  Paul strongly believes that all humans deserve the chance to achieve the highest levels of health and well-being they are capable of.  He lives near St. Paul Minnesota with his wife.

## Erica Kimmerling

Assistant Director for Community Driven Health, White House Office of Science and Technology Policy

Erica Kimmerling, PhD, is the Assistant Director for Community Driven Health at the White House Office of Science and Technology Policy (OSTP). In her previous role as Senior Policy Advisor for Public Engagement in Science, she increased public participation in, and developed policy across, OSTP's portfolio including Cancer Moonshot, pandemic prevention, STEM equity, and climate and the environment. She also advised on issues related to science communication and engagement, the societal and ethical implications of science, public perception of science, misinformation/disinformation, and building community/civic capacity in science. Prior to OSTP she most recently served as the Senior Advisor for Science Engagement Policy and Partnerships and Civic Science Fellow at the Association of Science and Technology Centers (ASTC).

**Karen Andrade**

Senior Policy Advisor, Science & Society, White House Office of Science and Technology Policy

Karen Andrade, PhD, is soon ending her term as a Senior Policy Advisor in the Science, Society and Policy Team at the White House Office of Science and Technology Policy. She is an interdisciplinary environmental health scientist with expertise in community-based participatory research (CBPR). Part microbiologist, part ecologist, whole CBPR practitioner and environmental justice advocate, she earned a PhD in Environmental Science, Policy & Management from the University of California, Berkeley. She completed postdoctoral fellowships at Stanford and the University of California, Davis where she led biomedical and environmental health research to benefit communities facing environmental injustice. She also worked as a Civic Science Fellow at the Science Philanthropy Alliance where she assisted private science funders, scientists and non-profits in their work at the interface of science, society and equity.

## Maryam Zaringhalam

Assistant Director for Public Access and Research Policy, White House Office of Science and Technology Policy

Maryam Zaringhalam is the Assistant Director for Public Access and Research Policy at OSTP. There, she works to coordinate programs and policies advancing the Biden-Harris Administration's commitment to providing public access to data, publications, and the other important products of the nation's taxpayer-supported research and innovation enterprise. She comes to OSTP on detail from the National Library of Medicine at the National Institutes of Health, where she is the NLM Data Science and Open Science Officer.

## Elizabeth MacDonald

Space Physicist, Goddard Space Flight Center, National Aeronautics and Science Administration

Dr. Liz MacDonald is a heliophysicist working for NASA's Goddard Space Flight Center in Maryland. She lives and works on the traditional homelands of the Cayuse, Umatilla, and Walla Walla peoples in what today is known as Walla Walla, WA. Dr. MacDonald has been studying the glitter of the Northern Lights for over 25 years, and it never ceases to amaze her. She leads a participatory science project called Aurorasaurus, which enlists people to help with community reports, using smartphones and social media to improve predictions of the Northern and Southern Lights. In 2018, along with a large team including many amazing Canadians, they announced a new understanding of an unusual aurora called STEVE (Strong Thermal Emission Velocity Enhancement). She has also led teams that build instruments to measure charged particles in the space environment for NASA and DOE satellite and rocket missions. She also serves the NASA HQ participatory science community as the lead of the Heliophysics Strategic working group. Dr. MacDonald has been studying the glitter of the Northern Lights for 25 years, and it never ceases to amaze her. This has only increased over the last 12 years working with fantastic photographers and passionate volunteers. Outside of work she likes to ski and hike and use iNat and Merlin.

## Sean Bath

Climate Adaptation Partnerships Program Manager, National Oceanic and Atmospheric Administration

Sean Bath is a white, queer, interdisciplinary professional with expertise in policy, planning, and analysis related to environmental science, risk management, and climate change. He has several years of gradually escalating program management experience in the NOAA Climate Adaptation Partnerships Program. In his experience with the program, he has become increasingly convinced of the need to "work at the speed of trust" in building the social infrastructure to withstand the climate crisis. Over the years, he's focused his contributions to the program in reporting & articulating accomplishments, integrating social justice and equity, and promoting meaningful cultural change in our top-down institutions. He is originally from Charleston, South Carolina. In the past year, he has taken on the role of competition manager for the 2024 CAP Funding Opportunity and currently serves on partial detail to NOAA Deputy Administrator Jainey Bavishi to help improve NOAA's focus on society's adaptation.

**Rao Kotamarthi**

Science Director, Center for Climate Resilience and Decision Science, Argonne National Labs

Dr. Rao Kotamarthi is Senior Scientist in the Environmental Science Division at Argonne National Laboratory, where he also serves as a Chief Scientist. At the University of Chicago, he is a senior fellow at the CASE and holds complimentary positions as an expert at the Energy Policy Research Institute (EPIC). He has PhD in Chemical and Biochemical Engineering from the University of Iowa and holds a certificate in strategic laboratory leadership program from the Booth School of Business, University of Chicago. Dr. Kotamarthi has nearly 30 years of experience in regional- and global-scale modeling of Air Quality and Atmospheric Composition, atmospheric aerosols and regional scale climate change. His work leverages HPC and applied mathematics to develop models for environmental problems. He has authored over 150 journal articles and technical reports. He serves as a principal investigator for projects funded by DOE on climate and wind energy and private sector entities. He has contributed to the IPCC assessment report 2 and serves on peer review panels for DOE, NSF and NASA. He is the author of a book titled ‘Downscaling Techniques for High-Resolution Climate Projections: From Global Change to Local Impacts”.

## Rea Blakey

Associate Director, External Outreach and Engagement, Oncology Center of Excellence, US Food and Drug Administration

Rea Blakey is Associate Director for External Outreach and Engagement in the Oncology Center of Excellence (OCE) at the U.S. Food and Drug Administration Rea Blakey leads Project Community at the FDA Oncology Center of Excellence (OCE), and the annual National Black Family Cancer Awareness initiative, as well as the international public panel discussion series “Conversations On Cancer.” At OCE, Ms. Blakey serves as a liaison leader for patients, advocacy groups, health care providers and medical associations interested in influencing oncology-related medical product regulatory decision-making. Ms. Blakey has directed OCE’s Project Community since joining the immediate office in July 2018.

**Steven Prince**

Behavioral Scientist, Epidemiology Branch, Environmental Protection Agency

Dr. Prince, a behavioral scientist, studies how people interact with and use information about wildfire smoke and air quality in relation to their health. This includes approaches to understand the context in which information is delivered and the specific behavioral changes that are under consideration. What are the factors that contribute to intention and action gaps and how can we help to bridge those gaps? Dr. Prince brings expertise in the cognitive and motivational facets of behavior, and the biases, heuristics, and decision-making context for protective health actions.

## Timothy Scheibe

Laboratory Fellow and Director of Program Development, Earth and Biological Sciences Directorate, Pacific Northwest National Laboratory

Dr. Timothy D. (Tim) Scheibe has been an Earth Scientist and researcher at the Pacific Northwest National Laboratory (PNNL) since 1992. His research dives deep into the fascinating world of fluid flow and biogeochemical reactive transport in subsurface environments. He's currently at the helm of PNNL's River Corridor Scientific Focus Area project, funded by the U.S. Department of Energy's Office of Science. This project is a unique blend of field research, lab experiments, and numerical models, all aimed at understanding the ecological impacts of groundwater and surface water exchange. Dr. Scheibe's expertise is widely recognized, with around 90 publications and book chapters to his name, and he is a respected voice in the field of subsurface biogeochemical modeling and reactive transport modeling. He's also an active member of the scientific community, serving on the editorial boards of Water, PeerJ, and Frontiers in Water, and previously serving with Groundwater and Hydrogeology Journal. His leadership extends to the American Geophysical Union, where he's held several volunteer roles. In 2010, the National Ground Water Association honored Dr. Scheibe as the Henry Darcy Distinguished Lecturer. This role took him across North America and Europe, delivering 65 invited lectures. Dr. Scheibe's work goes beyond traditional discipline-focused academic research, and he also has broad interests in interdisciplinary team research and fostering participatory science and engagement in his field.