

NATIONAL
ACADEMIES

Sciences
Engineering
Medicine

Integrating Public and Ecosystem Health Systems to Foster Resilience:

Identifying Research to Bridge the Knowledge-To-Action
Gap

Workshop Proceedings Public Release Webinar

May 9, 2023

SUPPORTED BY THE GORDON AND BETTY MOORE
FOUNDATION

Land Acknowledgement

We acknowledge that the National Academies reside on the traditional territories of the Nacotchtank and Piscataway Peoples.

We invite you to learn more about the land you reside upon using the link below or through other resources.

<https://native-land.ca/>

Workshop Proceedings

The **workshop proceedings** that summarizes the presentations and discussions from the meeting was published on April 20, 2023. It is available to read online or download as PDF at no cost.

<https://nap.nationalacademies.org/26896>



Integrating Public and Ecosystem Health Systems to Foster Resilience

*A Workshop to Identify Research to
Bridge the Knowledge-To-Action Gap*



Proceedings of a Workshop

Today's Discussion

- **Workshop Overview**
- **Proceedings Highlights**
- **Committee Members' Reflections**
- **Q&A**

Why this workshop?

There is an integral connection
between nature and public health...
but gaps in our understanding remain

Workshop Planning Committee

- **Kathleen Rest** (*chair*), Boston University
- **Katie Arkema**, Pacific Northwest National Laboratory
- **Aaron Bernstein**, Harvard University
- **Shanondora Billiot**, Arizona State University
- **Rodolfo Dirzo**, Stanford University
- **Benis Egoh**, University of California Irvine
- **Albert Ko**, Yale University
- **Jessica LeClair**, University of Wisconsin-Madison
- **Jonathan Sleeman**, U.S. Geological Survey National Wildlife Health Center

This activity was supported by the Gordon and Betty Moore Foundation

Workshop Design

September 19, 2022 (virtual)

September 29-30 (hybrid)
in-person at Washington, D.C.



- Interdisciplinary speakers and participants
- Knowledge exchange
- Discussion of barriers and critical gaps in understanding and practice
- Ideas and practices for research

Workshop Agenda and Format

Session 1: What has been learned about how to integrate public health and Nature into research, policy, and practice to foster resilience?

- Exploring how public health, nature, and their interconnections are valued
- Exploring challenges and gaps in current approaches and opportunities for moving from knowledge to action

Session 2: Advancing transdisciplinary, community-engaged scholarship to integrate public health and Nature and inform policy and practice

- Addressing knowledge gaps through new, emerging research
- Approaches for developing solutions
- Considerations for developing key elements of a research agenda

Breakout Discussions

Session 3: Bridging the knowledge-to-action gap: strategies to translate knowledge into policy and practice

- Crafting a research agenda that facilitates knowledge generation that informs action
- Overcoming existing barriers to knowledge development and moving to action

Looking to the future

Today's Discussion

- Workshop Overview
- **Proceedings Highlights**
- Committee Members' Reflections
- Q&A

Highlights from the Proceedings

Connections between nature and public health – existing knowledge

- We rely on ecosystems for our health, livelihoods, and well-being
- Our activities influence ecosystems and circle back to affect us and our well-being. *Investments in nature can double as investments in public health.*
- *Conserving nature and natural spaces has broad public appeal.*
- Environmental burden of disease is unequally distributed.

Highlights from the Proceedings

How we value interconnections between public health and nature

- Environmental health is a global problem, but rarely looked at, presented, or costed out in this way.
- Linking environmental change to public health can bring value to different stakeholders.
- Traditional Knowledge frameworks consider the health of animals, plants, air, water, land, and fire as sacred and should be valued equally to human health.

Highlights from the Proceedings

Research agenda - addressing knowledge gaps to inform action

- About both the “what” of the research questions and the “how” of embracing knowledge production practices
- *There is danger in prioritizing economic growth at all costs.*
- *The reductionist scientific approach hampers our ability to integrate concerns about nature and humans.*
- There is a need to address historical inequality in research and research support across countries.

Highlights from the Proceedings

Challenges moving from knowledge-to-action

- Recognition and understanding of the connections between human and ecosystem health has done little to overcome entrenched institutional and structural barriers that reinforce inertia.
- Prioritizing environment-related issues is challenging in the daily practice of public health and health care professionals.

Highlights from the Proceedings

Opportunities moving from knowledge to action

- Create and promote an inspirational vision.
- Align health and environmental policies; consider environmental determinants of health.
- A portfolio of indicators that link data streams on public health and environmental change is needed.
- Some solutions are already in hand.

Highlights from the Proceedings

Approaches to overcome barriers to generate knowledge, integrate public health and nature, inform policy and practice

- Overcoming these barriers requires
 - Integrating social and cultural contexts into research
 - Investing time to build relationships and credibility with government officials
 - Building key partnerships with local communities.
- *Providing incentives to academia to train, encourage, support, and reward “boundary-crossing” students and faculty.*

Today's Discussion

- Workshop Overview
- Proceedings Highlights
- **Committee Members' Reflections**
- Q&A

Committee members' reflections

These are personal reflections: they do not represent the position of the full planning committee and may not have been discussed at the workshop

NATIONAL
ACADEMIES

Sciences
Engineering
Medicine

Integrating Public and Ecosystem Health Systems to Foster Resilience

A Workshop to Identify Research to
Bridge the Knowledge-To-Action Gap



Proceedings of a Workshop

Today's Discussion

- Workshop Overview
- Proceedings Highlights
- Committee Members' Reflections
- Q&A

Thanks for joining!

For further questions or information about this project, contact Julie Liao (JLiao@nas.edu) and April Melvin (AMelvin@nas.edu).

Download proceedings at:

<https://nap.nationalacademies.org/26896>



Integrating Public and Ecosystem Health Systems to Foster Resilience

A Workshop to Identify Research to
Bridge the Knowledge-To-Action Gap



Proceedings of a Workshop