

The State of Planetary Health in the United States

China-U.S. Scientific Engagement on Sustainability
Workshop II

Sustainability and Planetary Health: Key Issues and Possible Solutions
Irvine, California 20 June, 2023



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Senior Vice President, Trust for Public Land



Agenda

- A disclaimer
- Definitions
- The growth of Planetary Health in the US
- Issues and possible solutions
 - Framing
 - Equity
 - Institutional challenges
 - Under-researched topics



A disclaimer



There isn't a "Planetary Health
in the United States."

It's truly a global enterprise!

Planetary Health: Standard definition

“the achievement of the highest attainable standard of health, wellbeing, and equity worldwide through judicious attention to the human systems—political, economic, and social—that shape the future of humanity and the Earth’s natural systems that define the safe environmental limits within which humanity can flourish. Put simply, planetary health is the health of human civilization and the state of the natural systems on which it depends”

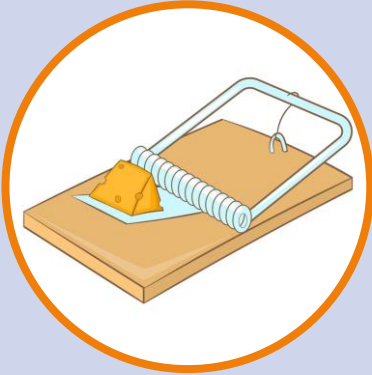
Planetary Health: Standard definition

*“the achievement of the highest attainable standard of health, wellbeing, and equity worldwide through judicious attention to the **human systems**—political, economic, and social—that shape the future of humanity and the Earth’s **natural systems** that define the safe environmental limits within which humanity can flourish. Put simply, planetary health is **the health of human civilization and the state of the natural systems on which it depends**”*

What is Planetary Health?

- ✓ **An aspirational state:** “the health of human civilisation and the state of the natural systems on which it depends.”
- ✓ **A scientific framework:** The fusion of biomedical sciences with physical, environmental, and social sciences, based on systems approaches, to investigate health threats of global environmental change and to discover and document solutions.
- ✓ **An emerging scientific field:** A transdisciplinary research enterprise based at universities, research institutes, and government agencies.
- ✓ **A “movement”:** A growing science-informed movement among members of the public and decision-makers, who recognize existential threats to humanity from the disruption of earth systems and demand practical, evidence-based solutions.

Planetary Health

Upstream-facing	Systems-based	Equity-committed	Future-oriented	Solutions-driven
				

The growth of Planetary Health

2014

From public to planetary health: a manifesto

This manifesto for transforming public health calls for a social movement to support collective public health action at all levels of society—personal, community, national, regional, global, and planetary. Our aim is to respond to the threats we face: threats to human health and wellbeing, threats to the sustainability of our civilisation, and threats to the natural and human-made systems that support us. Our vision is for a planet that nourishes and sustains the diversity of life with which we

previous civilisations. We have created an unjust global economic system that favours a small, wealthy elite over the many who have so little.

The idea of unconstrained progress is a dangerous human illusion: success brings new and potentially even more dangerous threats. Our tolerance of neoliberalism and transnational forces dedicated to ends far removed from the needs of the vast majority of people, and especially the most deprived and vulnerable, is only



by Stephen J. Grayson/Science Photo Library

2015



THE ROCKEFELLER FOUNDATION THE LANCET

The Rockefeller Foundation–Lancet Commission on planetary health

Safeguarding human health in the Anthropocene epoch: report of The Rockefeller Foundation–Lancet Commission on planetary health

Sarah Whitmee, Andy Haines, Chris Beyrer, Frederick Boltz, Anthony G Capon, Bráulio Ferreira de Souza Dias, Alex Eze, Howard Frumkin, Peng Gong, Peter Head, Richard Horton, Georgina M Mace, Robert Marten, Samuel S Myers, Sania Nishtar, Steven A Osofsky, Subhrendu K Pattanayak, Montira J Pongsiri, Cristina Romanelli, Agnes Soucat, Jeanette Vega, Derek Yach

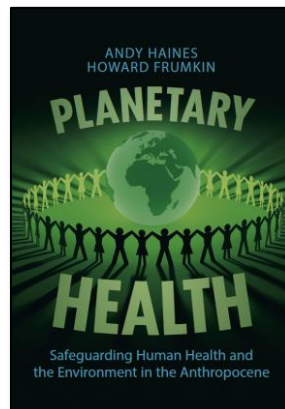
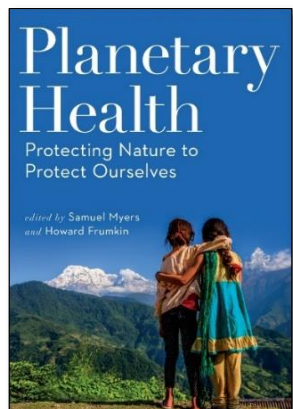
2016



PLANETARY HEALTH ALLIANCE

www.planetaryhealthalliance.org/

2020-21



2021



2024



SUNWAY CENTRE FOR PLANETARY HEALTH

Global Roadmap for Planetary Health Policy (planned)

Institutional growth of Planetary Health in the US

UNIVERSITY
OF
CALIFORNIA Global Health Institute



Indiana University Bloomington

Learn more about Planetary Health and Global Climate Change in Costa Rica



Perelman
School of Medicine
UNIVERSITY of PENNSYLVANIA



**UNIVERSITY OF
CHARLESTON**
CHARLESTON, WEST VIRGINIA

**UC School of Pharmacy Participates in
Planetary Health Pilot**

USC Dornsife

Dana and David Dornsife
College of Letters, Arts and Sciences

Center on Science, Technology, and Public Life

About

People

Collaborations

News

Events

Planetary Health



DOWNSTATE
HEALTH SCIENCES UNIVERSITY

Advanced Certificate
Program in Climate
Change and Planetary
Health



PhD in Environmental and Planetary
Health Sciences



Yale SCHOOL OF NURSING

Planetary Health Initiatives



Cornell University
Graduate School

[Graduate School](#) > Fields of Study

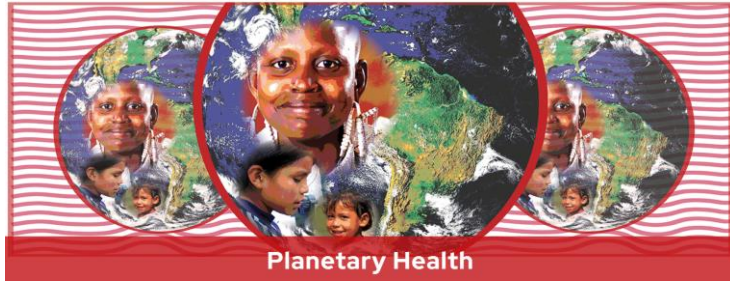
Public Health and Planetary Health



**Arizona State
University**

Julie Ann Wrigley Global Futures Laboratory

Rob and Melani Walton Center for Planetary Health



MENU

OSHER CENTER FOR INTEGRATIVE HEALTH

Osher Center for Integrative Health: Planetary Health



STANFORD
CENTER FOR INNOVATION IN
GLOBAL HEALTH

Human and
Planetary Health



New Funding Strengthens Planetary
Health Education at Rush University

Thursday, April 21, 2022



School of Nursing

Planetary Health



Boston University Institute for Global Sustainability

PLANETARY & ENVIRONMENTAL HEALTH

U.S.-based organizational members of Planetary Health Alliance (of 125)

Organizations:

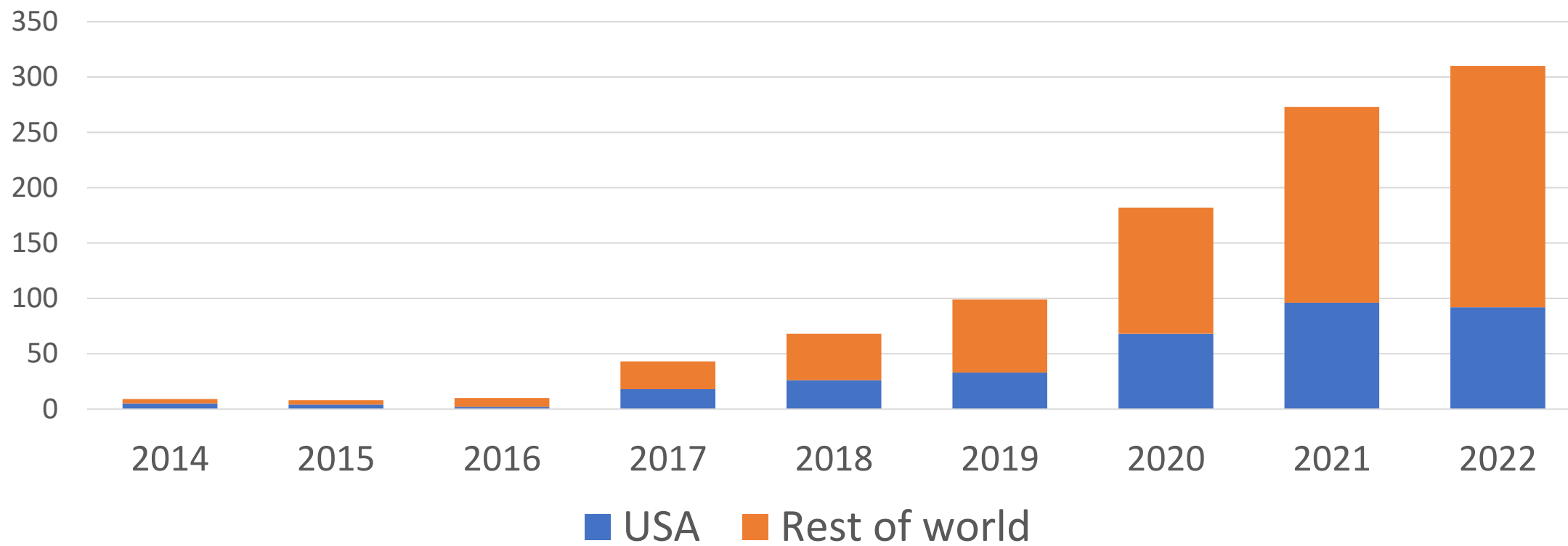
- American Geophysical Union
- American Public Health Association
- California Academy of Sciences
- Conservation International
- EcoAmerica
- EcoHealth Alliance
- Health Care Without Harm
- Malaria No More
- Population Reference Bureau
- Project Drawdown
- United Nations Foundation
- US Fish and Wildlife Service
- World Wildlife Fund

Universities (or units of):

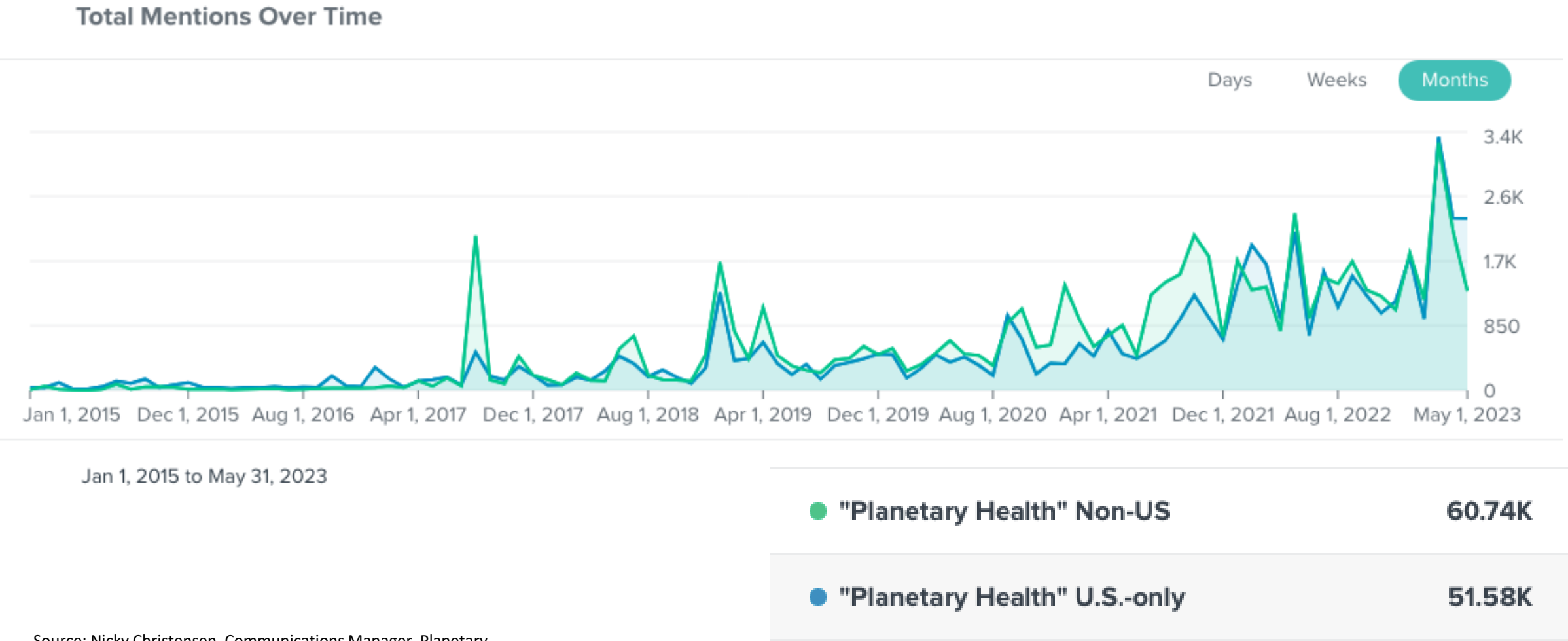
- Columbia
- Cornell
- Dartmouth
- Duke
- Emory
- George Mason
- Harvard
- Haverford
- Oregon State U
- Stanford
- Stony Brook U
- Tufts
- U of Minnesota
- U of Vermont
- Yale

Planetary Health citations, Web of Science, 2014-22

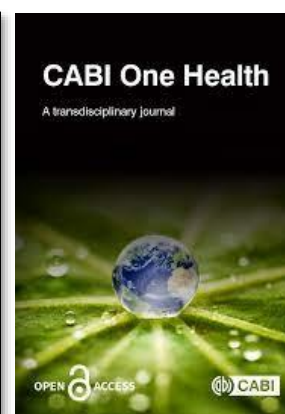
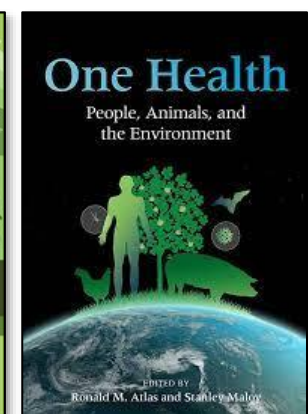
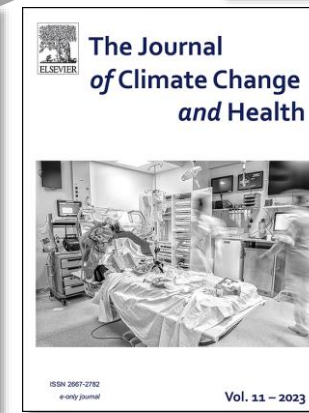
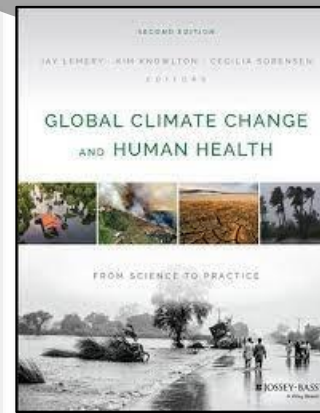
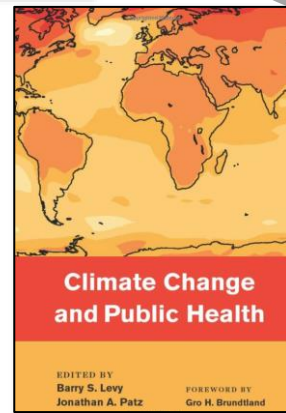
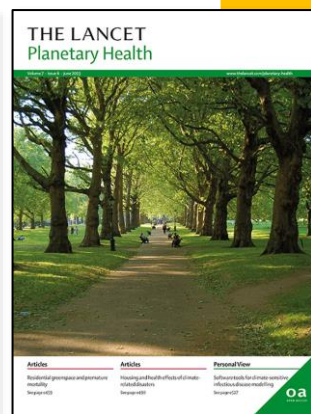
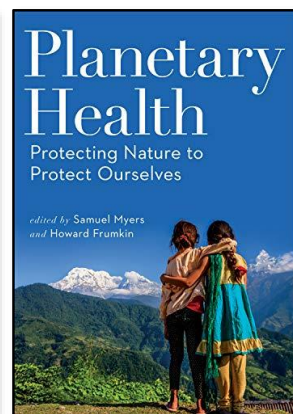
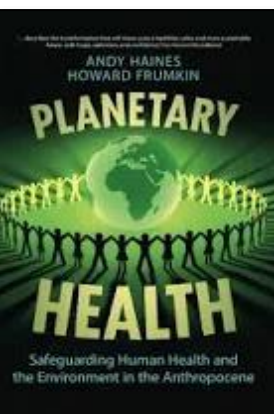
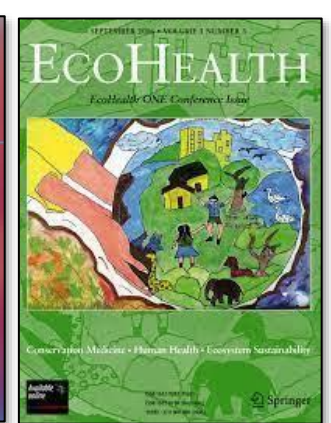
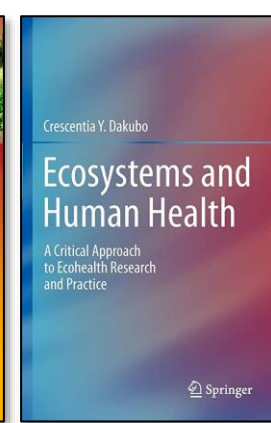
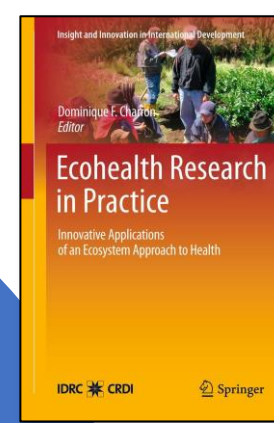
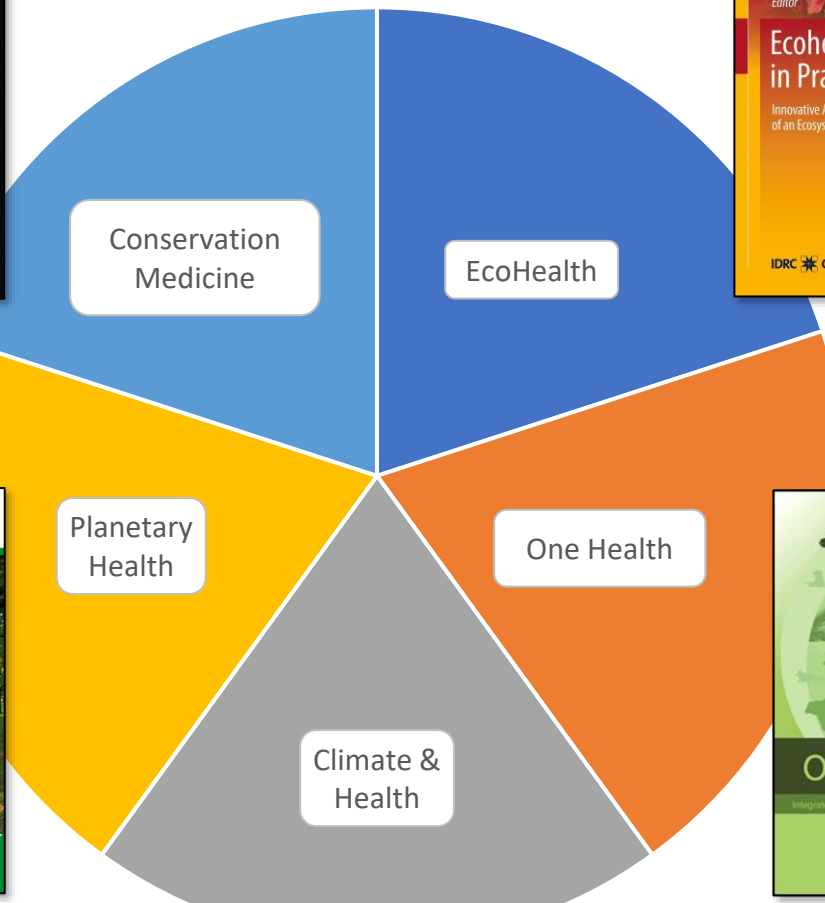
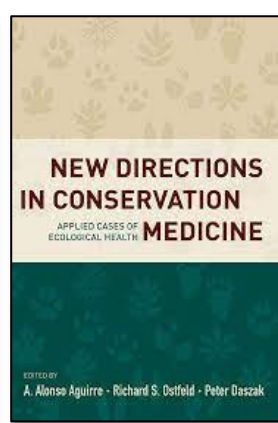
Number of publications by year



Media mentions of “planetary health,” non-US and US, 2015-22



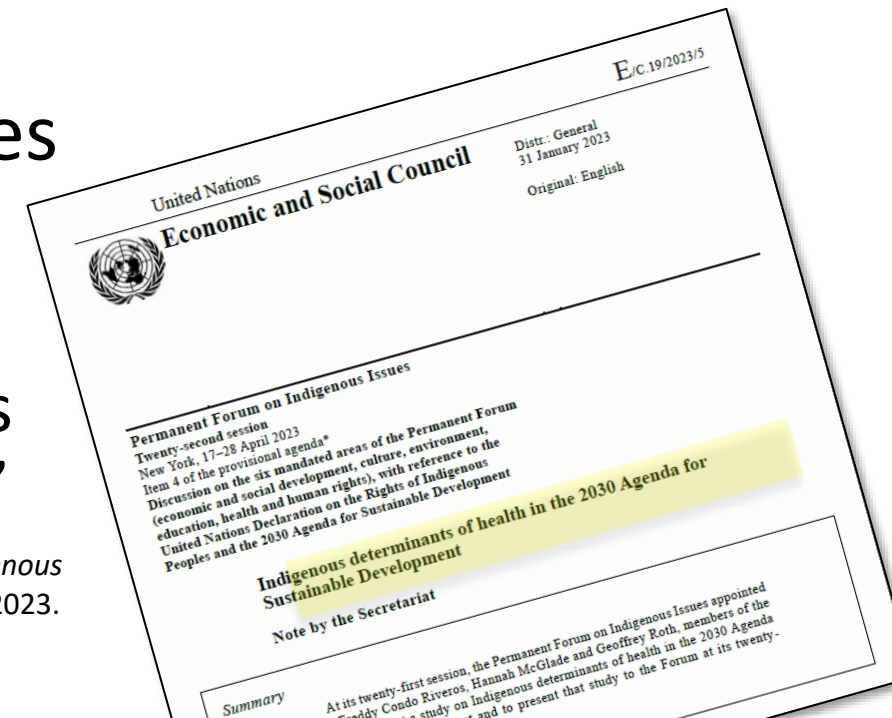
Source: Nicky Christensen, Communications Manager, Planetary Health Alliance. Personal communication, June 2023.



Equity

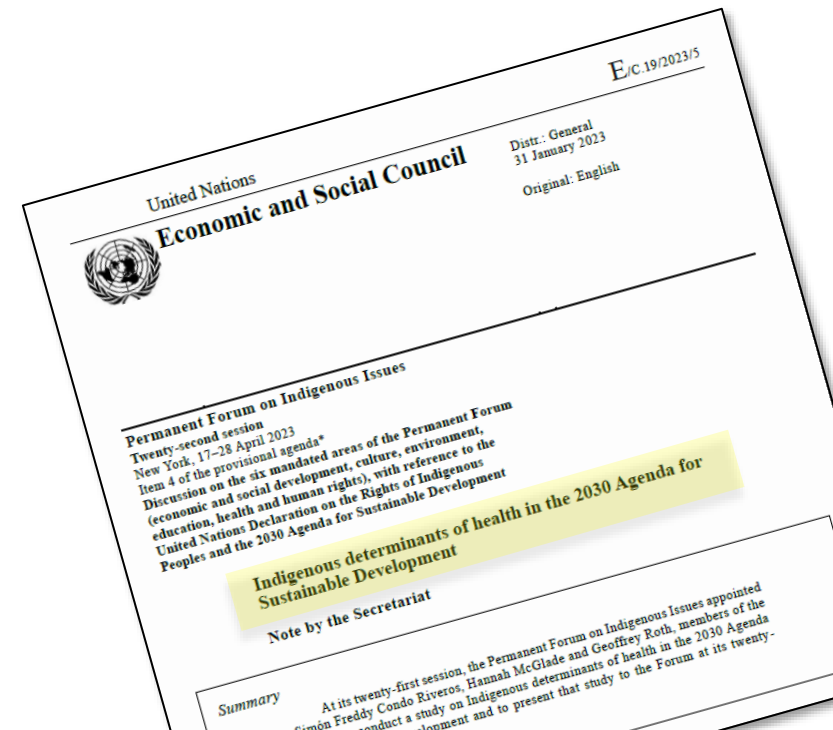
- Across socioeconomic, racial, and ethnic groups
 - Across gender
 - Across generations
 - Across species
-
- The importance of Indigenous perspectives
 - Traditional Ecological Knowledge
 - “The health of the land and Peoples are synonymous, nurtured through relationships with the physical and social environments...”

UN Economic and Social Council, Permanent Forum on Indigenous Issues. *Indigenous determinants of health in the 2030 Agenda for Sustainable Development*. April, 2023.
<https://www.nihb.org/resources/IDH%20UNPFII%20Report%20-%202023.pdf>.



Equity

- The importance of Indigenous voices and perspectives
 - Traditional Ecological Knowledge
 - “The health of the land and Peoples are synonymous, nurtured through relationships with the physical and social environments...”



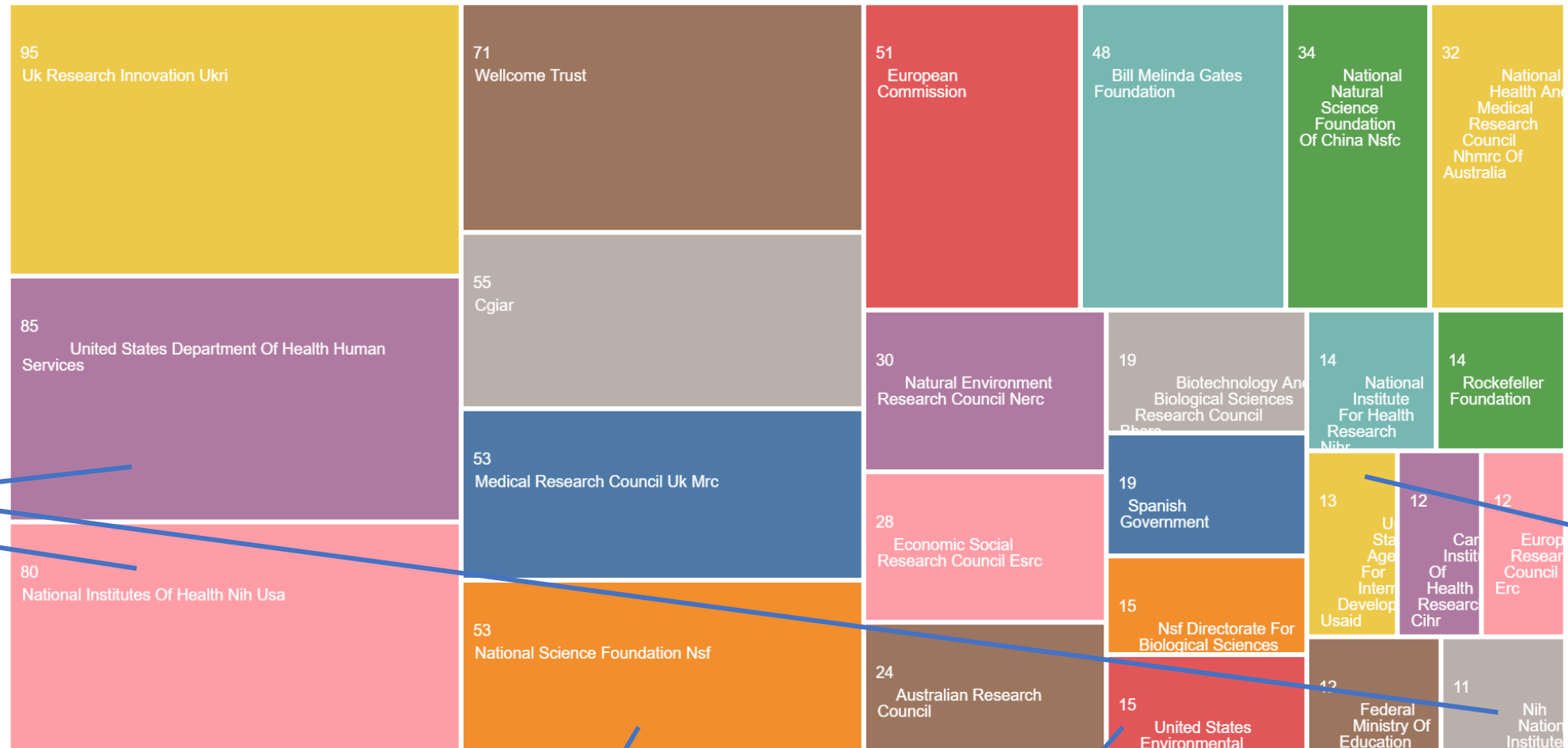
Institutional challenges

- Siloing in
 - Academia
 - Government
 - Funding institutions
- Incentives in academia



Planetary Health citations, Web of Science, 2014-22: Funding agency

N=1,983



8.9%
from NIH
and CDC

0.6%
from
USEPA

2.7% from NSF

0.7% from USEPA

Under-researched Planetary Health topics



- Mental health



- Migration



- Food systems



- Healthy built environment design



- Policy

Acknowledgments



Sam Myers, M.D., M.P.H.



Marie Studer

...and the staff of the Planetary Health Alliance



Thank you!