

# Aligning Geosciences Research Incentives and Open Scholarship

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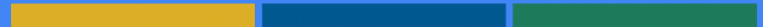
Greg Tananbaum, Head of Open Research Funders Group/Roundtable  
Secretariat

Loretta Parham, CEO & Director AUC Woodruff Library

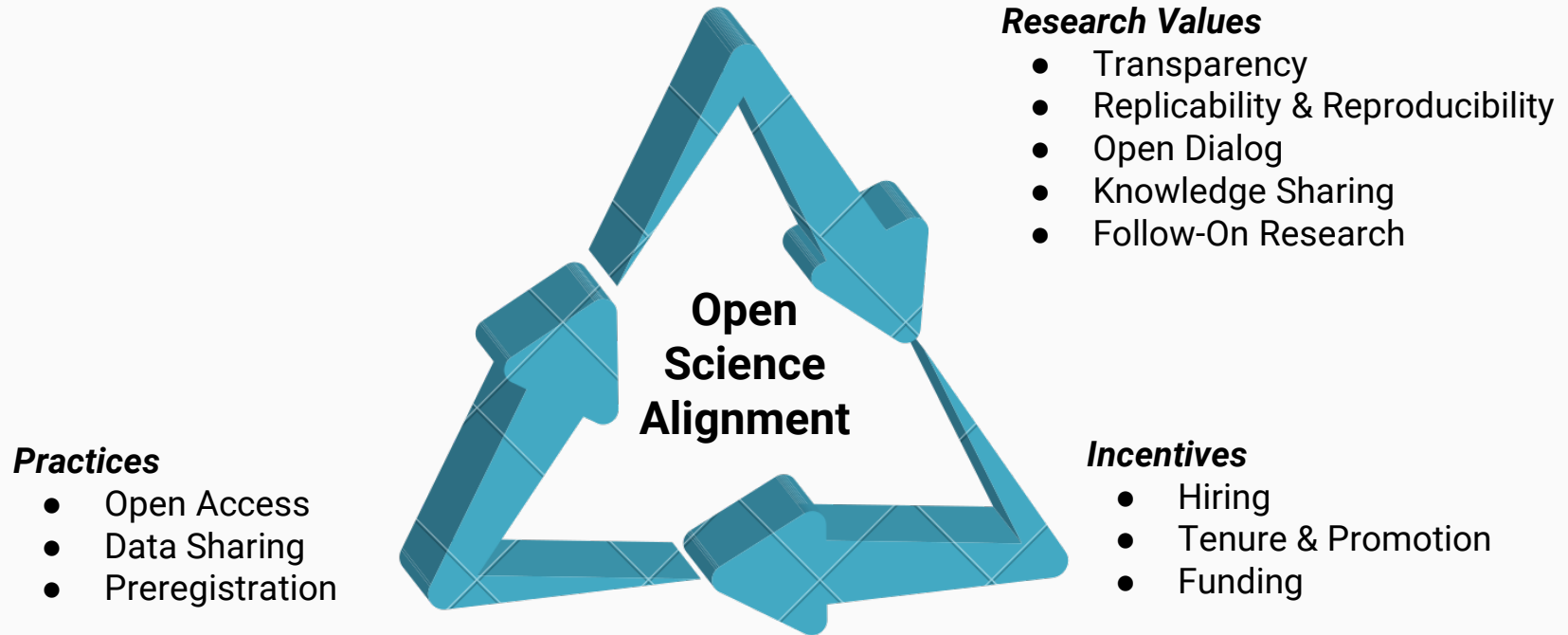


# Overview of NASEM's Roundtable on Aligning Incentives for Open Science

*The National  
Academies of* | SCIENCES  
ENGINEERING  
MEDICINE



# NASEM Roundtable: Goals



# NASEM Roundtable: Participants

## Universities

- Arizona State University
- Atlanta University Center
- Benedict College
- Harvard University
- Howard University
- Johns Hopkins University
- Massachusetts Institute of Technology
- Princeton University
- Stanford University
- Trinity University
- University of Arizona
- University of California
- University of California at Los Angeles
- University of Houston
- University of Southern California

## Funders

- Alfred P. Sloan Foundation
- American Heart Association
- Andrew W. Mellon Foundation
- Arcadia
- Arnold Ventures
- Bill & Melinda Gates Foundation
- Coalition for Epidemic Preparedness Innovations
- Gordon and Betty Moore Foundation
- Health Research Alliance
- Howard Hughes Medical Institute
- James S. McDonnell Foundation
- John Templeton Foundation
- Leona M. and Harry B. Helmsley Charitable Trust
- Lumina Foundation
- Robert Wood Johnson Foundation
- Schmidt Futures
- Wellcome Trust

## Agencies & Others

- Association of American Medical Colleges
- Association of American Universities
- Association of Public and Land-grant Universities
- European Commission
- National Institute of Standards and Technology
- National Institutes of Health
- Open Research Funders Group
- National Science Foundation
- Scholarly Publishing and Academic Resources Coalition
- U.S. Department of Education
- United Kingdom Research and Innovation

# Roundtable Member Perspective

## Why “Open” Matters...to you

- Game Changer for Research & Publishing
- MORE:
  - ✓ Readers
  - ✓ Collaborators
  - ✓ Citations
  - ✓ Recognition – Individual & Institution

# Roundtable Member Perspective

## Why “Open” Matters...to information professionals

- Fit with professional values
  - Support and Preservation of content, data, media, etc. and the resulting research and knowledge
  - Access to information

# Roundtable Member Perspective

## OPEN SCIENCE >>> OPEN ACCESS

### **OA uses...**

*...the internet in the way it was originally intended, to accelerate research.*

### **OA is...**

*...the free, immediate, online availability of research articles, coupled with the rights to use these articles fully in the digital environment.*

# Provost & Chairs Working Group



# P&C Group's Origin Story



Conversations to  
Date

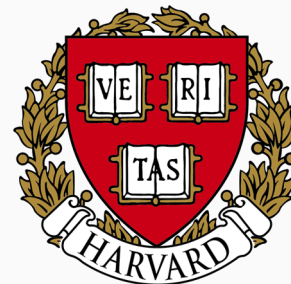
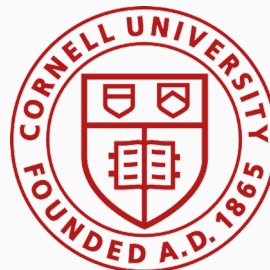
**36** Departments

**22** Institutions

**14** Disciplines



UNIVERSITY  
OF OREGON



# Collaborating with AGI & AGU



“How do we make sure that the open science policies we implement here will align with what our peers are doing in their own departments? ”

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- Really Smart Department Chair from Big-Time University

“It would totally suck if we made our people do open stuff that made it harder for them to get work elsewhere. ”



- Really Smart (If Perhaps Slightly More Blunt) Department Chair from Different Big-Time University

# The Psychology Example

**Department:** Arts & Sciences, College of

**Department:** Department of Psychology, Developmental Area

**Rank:** Assistant Professor

**Annual Basis:** 9 Month

**Application Deadline**

Review of applications will begin October 15, 2019; position open until filled

**Required Application Materials**

Candidates are asked to apply online at <https://academicjobsonline.org/ajo/jobs/14601> by submitting a cover letter, curriculum vitae, three letters of recommendation, three representative publications, and three statements: (1) research accomplishments and future plans, (2) teaching experience and approach, and (3) personal contributions and/or plans to foster an environment of equity and inclusion for faculty, staff, and students from diverse backgrounds.

Our department embraces the values of open and reproducible science, and candidates are strongly encouraged to address in their statements how they have pursued and/or plan to pursue these goals in their work.



# Sample Signalling Language: Faculty Annual Reporting

- For each of the categories below, please provide representative examples demonstrating how (where appropriate) you have made outputs resulting from your research openly accessible. If possible, please provide the DOI and license terms under which the materials are available.
  - Open access articles
  - Open access books, book chapters, and/or monographs
  - Copies of your papers, chapters, monographs, or other published materials in institutional or disciplinary repositories
  - Etc.
- If known, describe how others have made use of these open research outputs, and include relevant DOIs if possible. This can include use in other disciplines and outside of academia.
- Please describe the impact that your openly available research outputs from this evaluation period have had from the research, public policy, pedagogic, and/or societal perspectives.

# So What Do We Want?

Coordinated action to develop open science plans that are appropriate for your department, your institution, *and your discipline.*

1. Build a “Geosciences Coalition of the Willing”
1. Collaborate to Develop Geo-Appropriate Language and Insertion Points
1. Collaborate to Develop Geo-Appropriate Propagation Plans
1. Commitments to Engage with Department Colleagues and Academic Leadership to Get Buy-In
1. Commitments to Share Lessons Learned from these Engagements



# ...and What Are We Prepared to Do?

Lead the effort to understand what open science language, practices, and policies can be realistically implemented at scale in the geosciences.

1. Provide Toolkit of Resources to Adapt and Adopt
2. Leverage NASEM Imprimatur to Ensure Academic Leadership are Engaged
3. Coordinate Geoscience Cohort Discussions
4. Analyze Collective Wisdom and Share with Broader Geoscience Community

# What Have We Heard So Far?

- Disciplinary coordination across institutions is key
  - Example: Early career research priorities
  - Example: External letters
- Departments control some, but not all, points of leverage
  - Hiring, annual reporting
- Changes to language must be complemented by formalized training
  - ECRs can learn open science practices as part of research methods/stats training
  - Evaluators of annual reports/job applications need to understand what represents good open practices

# What Have We Heard So Far?

Objections exist, but...

- Objections are practical but surmountable with support & guidance from admin, funders, agencies, etc.
- General consensus is that open is the right thing to do
- Eagerness to also make open the **easy** thing to do

# Coordinated Action Opportunities within Geosciences

1. Hiring Practices
1. Tenure & Promotion Reviews
1. Faculty Annual Reports

# Drafting a Geosciences Blueprint

- How do open activities currently factor into each of these opportunities?
- What does the ideal state look like?
- What objections/barriers exist?
- How can we overcome them?

# Building a Geosciences Plan

- How can we best socialize this blueprint?
- Who needs to be read into the project?
- Whose support do we need in the immediate term?
- What can the Roundtable do to facilitate?
- What do aspire the 2021 "Aligning Geosciences Research Incentives and Open Scholarship" report-out to be?

# Let's Talk!

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## GEOLOGIST AT LUNCH



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