



ACD Working Group on Re-envisioning NIH-Supported Postdoctoral Training (Postdoc WG)

Shelley Berger, PhD & Tara Schwetz, PhD
NIH Advisory Committee to the Director Meeting
November 3, 2022

Decline in Postdocs – Not new, but growing challenge...

PNAS

April 2014



PERSPECTIVE

Rescuing US biomedical research from its systemic flaws

Bruce Alberts^a, Marc W. Kirschner^b, Shirley Tilghman^{c,1}, and Harold Varmus^d

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received for review March 7, 2014)

Science

CAREERS

The case of the disappearing postdocs

December 2015

9 DEC 2015 • BY BERYL LIEFF BENDERLY

CAREERS AND RECRUITMENT

**nature
biotechnology**

January 2017

The impact of postdoctoral training on early careers in biomedicine

Shulamit Kahn & Donna K Ginther

SCIENCE ADVANCES |

ScienceAdvances

June 2022

The dire need for federal support of molecular research, then and now

Ali Shifatifard

Science

CAREERS

As professors struggle to recruit postdocs, calls for structural change in academia intensify

June 2022

13 JUN 2022 • BY KATIE LANGIN

CAREER NEWS | 30 August 2022

nature
International weekly journal of science

Lab leaders wrestle with paucity of postdocs

Even high-profile scientists are struggling to recruit qualified postdoctoral researchers.

August 2022

Chris Woolston



ELSEVIER

Contents lists available at ScienceDirect

Journal of Economic Behavior and Organization

journal homepage: www.elsevier.com/locate/jebo

Chasing the academic dream: Biased beliefs and scientific labor markets[☆]

Ina Ganguli^a, Patrick Gaulé^{b,*}, Danijela Vuletić Čugalj^c

October 2022

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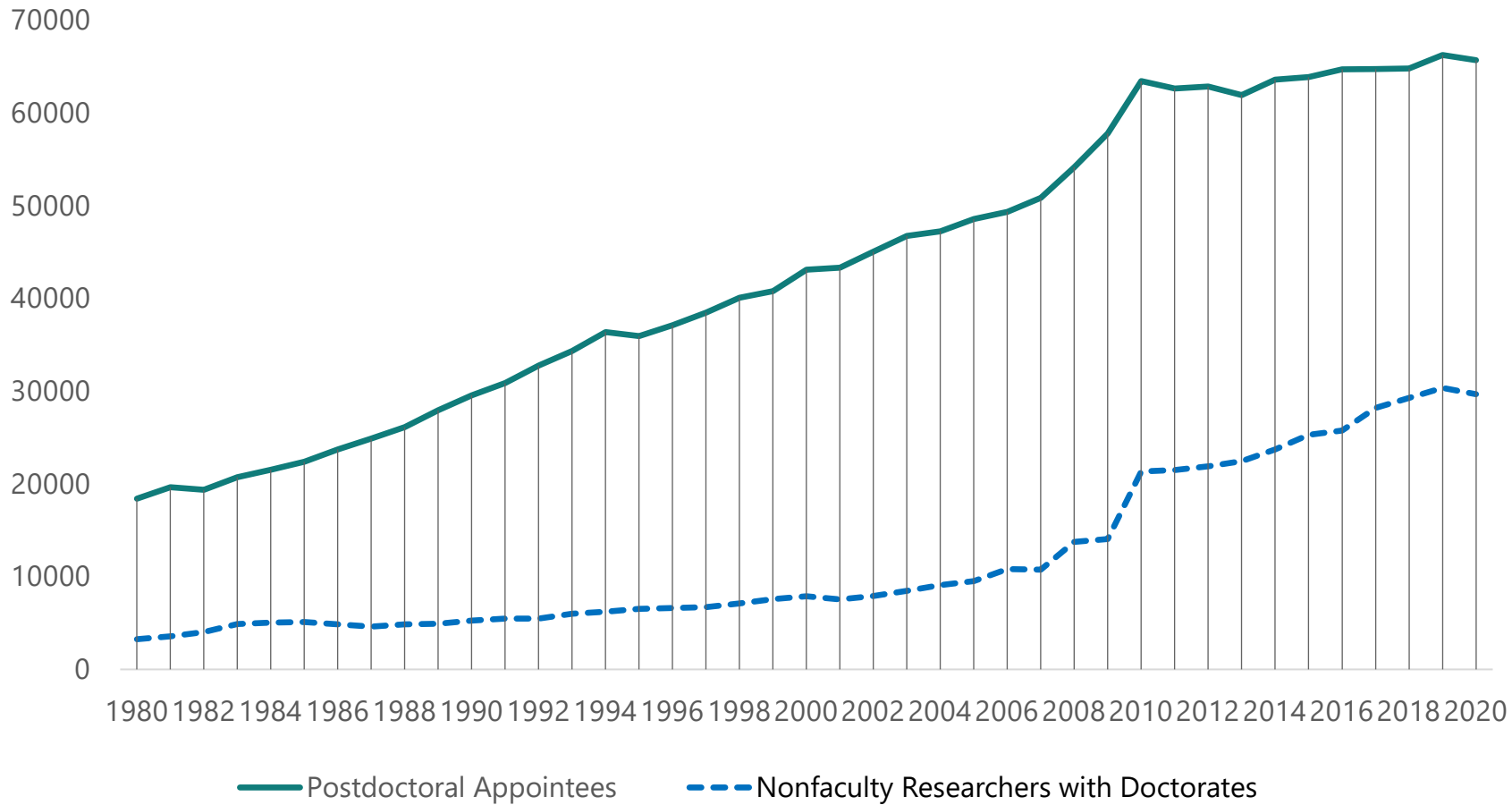
^bSchool of Economics, University of Bristol, United Kingdom

^cCERGE-EI, a joint workplace of Charles University and the Economics Institute of the Czech Academy of Science, Czech Republic

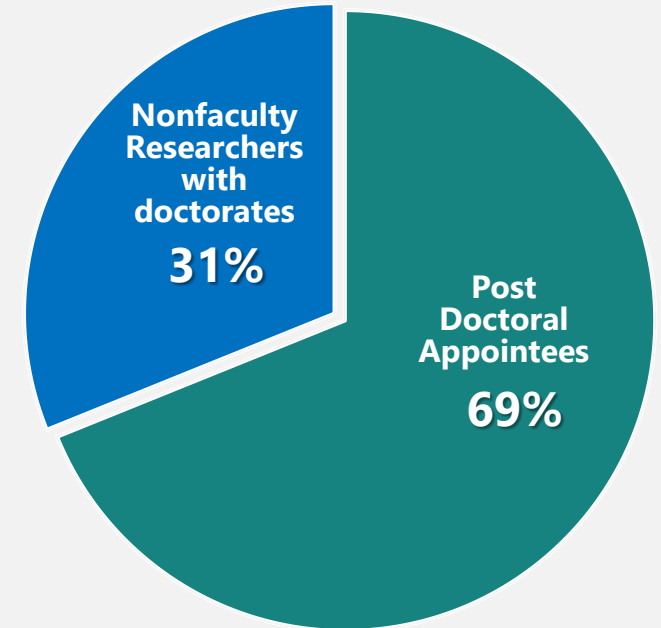


Postdocs #s have steadily increased since 1980, but stayed relatively flat for the last decade

NSF Statistics: U.S. Researchers by Position Over Time



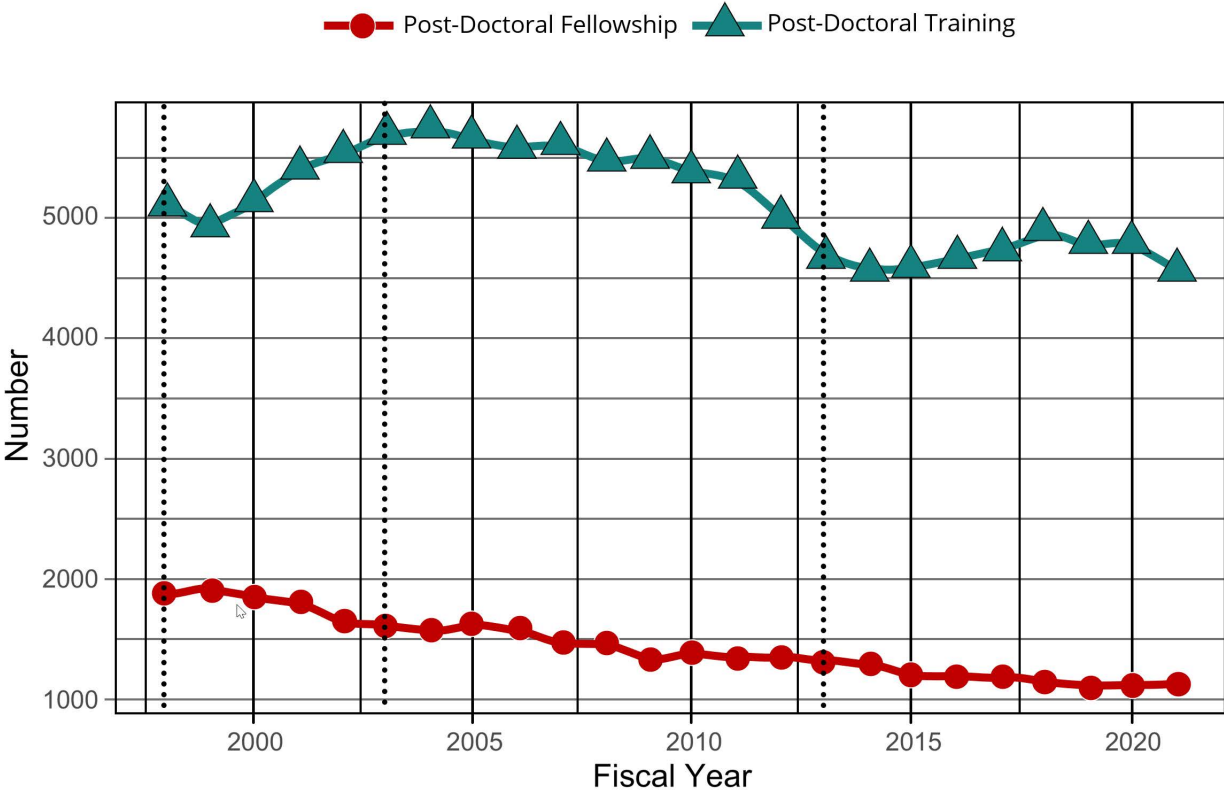
Researchers by Position in 2020



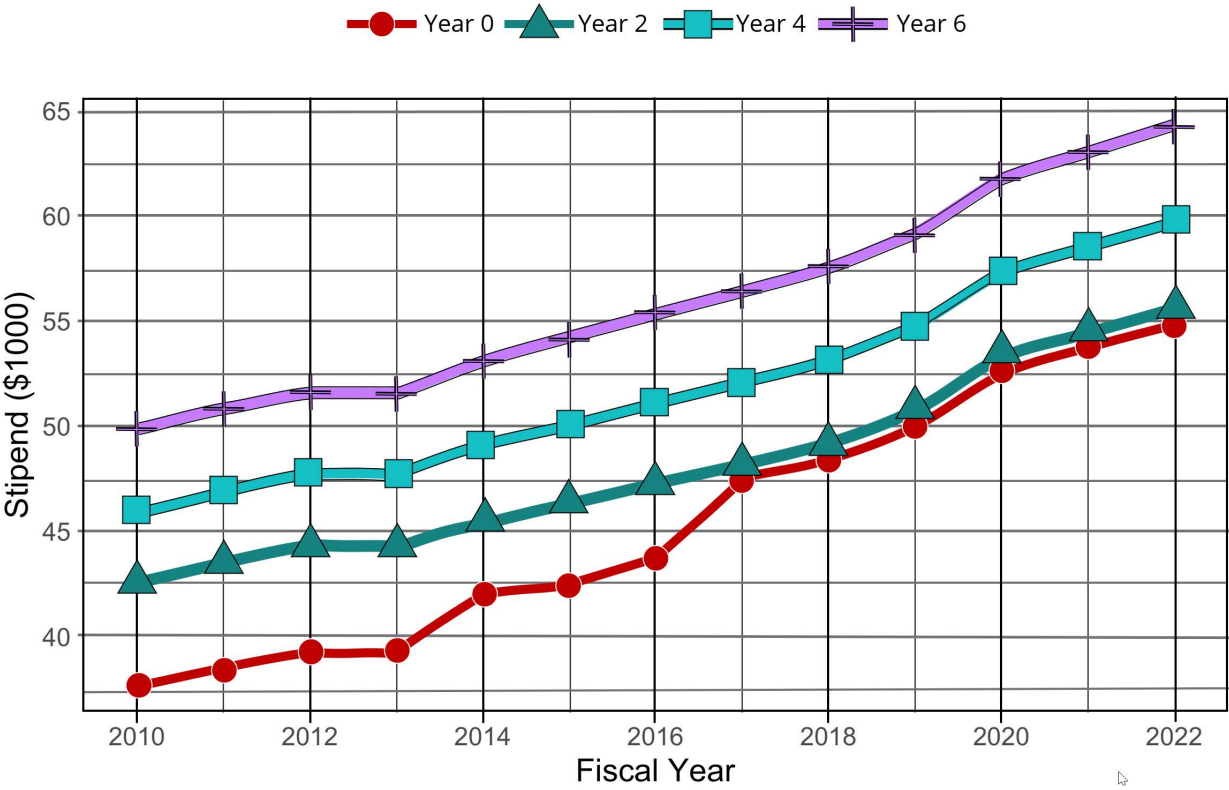
NIH NRSA Postdoctoral Fellows and Trainees, and Stipend Level

Decreasing awards and increasing stipends (but low compared to industry)

Number of Postdocs Supported, 1998 - 2021



Stipend Level, 2010 - 2022

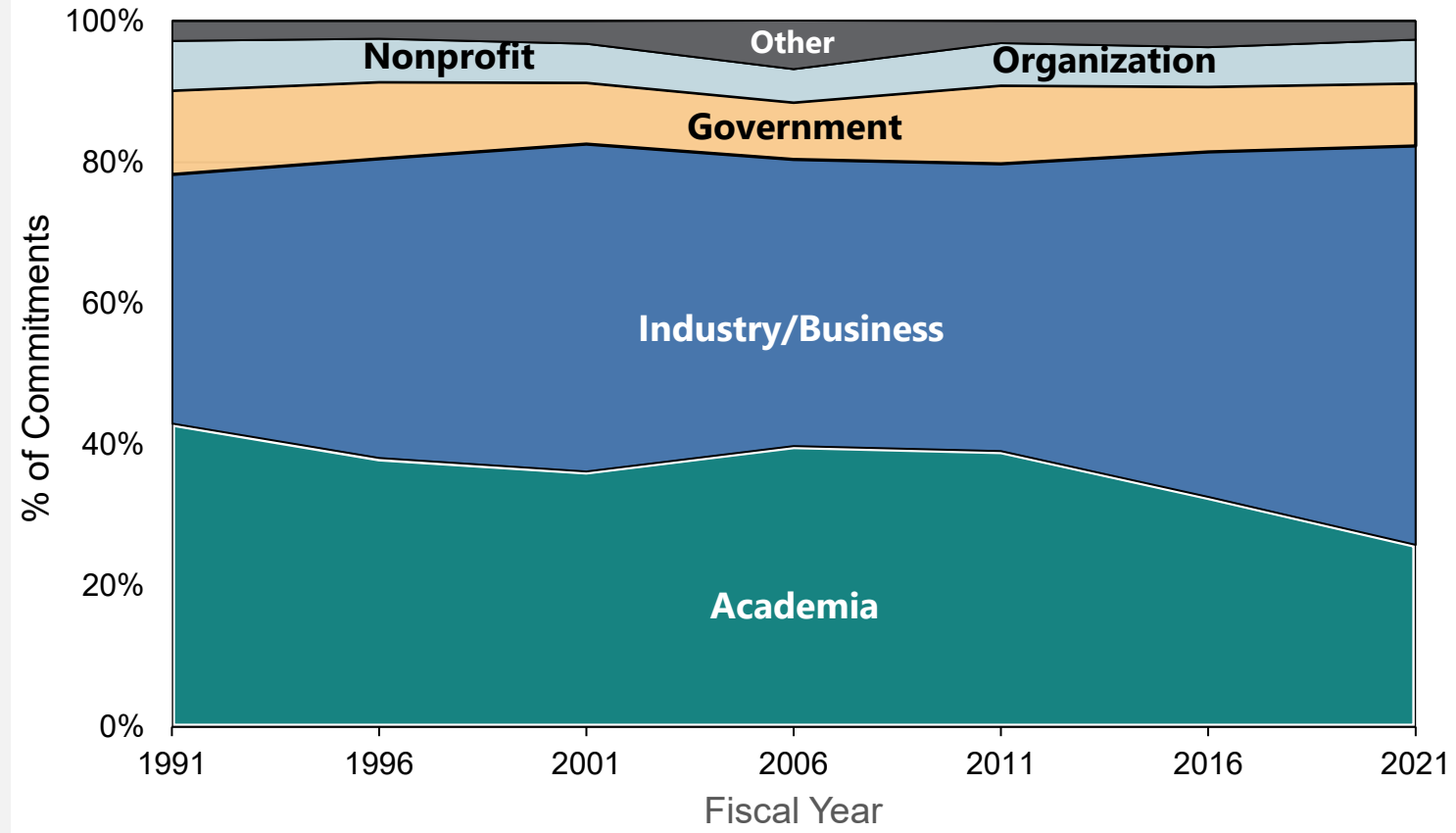


Source: NIH/OER

Doctorate Recipient Employment Commitments

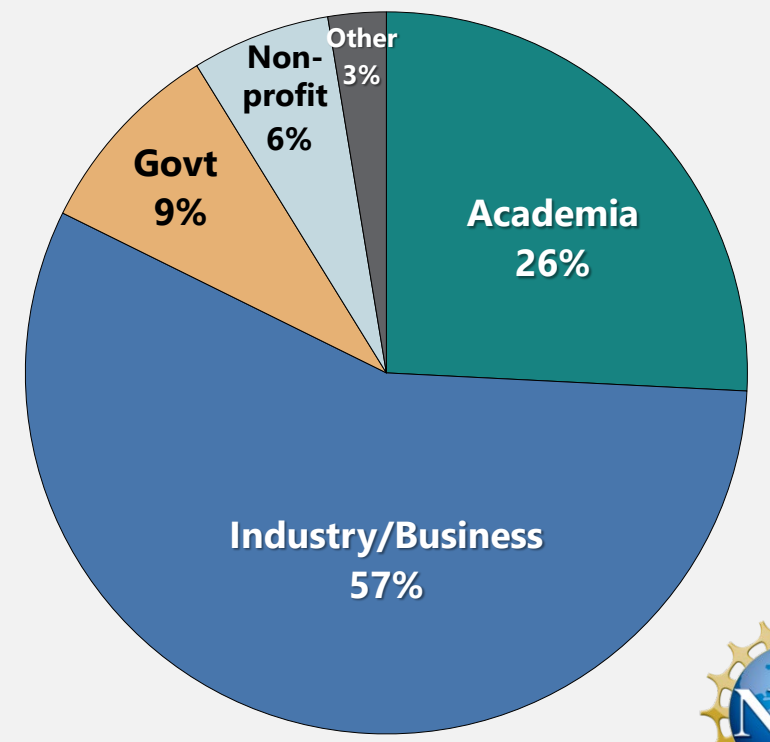
Increasing percentage of earned doctorates commit immediately to industry/business

Employment Sector of Science & Engineering Doctorate Recipients with Definite Postgraduation Commitments for US Employment



■ Academia ■ Industry or Business ■ Government ■ Nonprofit Organization ■ Other / Unknown

Employment Sector of Science & Engineering Doctorate Recipients in 2021



Source: <https://nces.nsf.gov/pubs/nsf22319>

Multi-Factorial Challenge

Is there an ongoing change in trajectory of graduate student decisions?



Proposed WG Charge



- **Evaluate** evidence on the perceived shortage in PhDs seeking U.S. postdocs
- **Assess and consider** factors influencing the scope and persistence of the issue
- **Review and compare** other approaches to postdoctoral training
- **Consider** ways to support postdocs' quality-of-life and work-life balance
- **Engage** key internal and external stakeholders

Proposed ACD Working Group



Co-Chairs:



Shelley Berger, PhD



Tara Schwetz, PhD

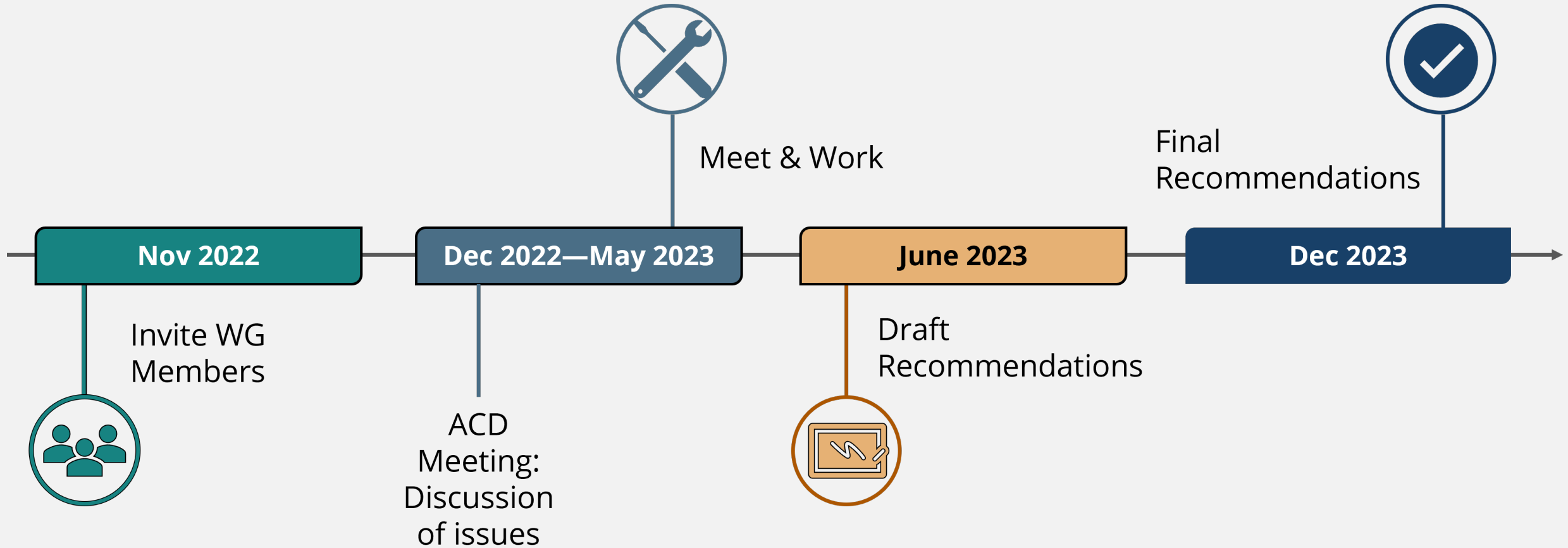
Proposed WG Membership and Expertise:

- ACD members
- NIH members
- Postdocs
- Grad students
- Early career investigators
- Academic organizations
- Postdoc associations
- Economists

Executive Secretaries:

- Joel Islam
- Laura Long

Next Steps





**Welcome ideas, thoughts, questions, and volunteers
for the proposed ACD WG**