Catalyzing Communities of Research Rigor Champions

A Workshop Hosted by the NINDS Office of Research Quality

May 23-24, 2022
NIH Campus, Bethesda, MD

https://www.infinityconferences.org/ResearchRigorChampions

Co-Chairs:

Steven Goodman, Stanford University

Veronique Kiermer, PLOS

This workshop will bring together a diverse cross-sector group of individuals who promote rigor and transparency in biomedical research and are invested in catalyzing change. The champions of today and tomorrow include grassroot movements of early career researchers who want to see a better future for their generation, faculty seeking change within their labs and institutions, and institutional leaders who are redefining the future of their institutions' success. Over the course of two days of interactive discussions, the group will seek to identify critical strategies and tactics that help bring change in research institutions. The objective of this meeting is to empower participants to catalyze communities of rigor champions, within U.S. research institutions and through inter-institutional networks, to accelerate change towards prioritizing research rigor and transparency.

Agenda (All Times Eastern):

May 23, 2022 (Day 1)

8:45 am   **Check-In/Registration**

9:15 am   **Welcome**

Walter Koroshetz, NINDS

9:20 am   **Workshop Themes and Goals**

Steven Goodman, Stanford University

9:40 am   **Session 1: The Network Science of Behavior Change**

Damon Centola, University of Pennsylvania

10:00 am   **Session 2: Motivation – Developing Partnerships and Institutional Buy-In**

When considering the changes that are needed to establish a culture of research rigor within institutions, which framing is effective (or ineffective) in eliciting support from allies and buy-in from colleagues and institutional leadership? What are the links to positive aspirations and values that can inspire people to act?

   10:00 am   **Presentations**

   Moderator: David Allison, Indiana University-Bloomington

   Discussants: April Clyburne-Sherin, Reproducibility for Everyone
   Anna Hatch, DORA
   Malcolm Macleod, University of Edinburgh

   10:45 am   **BREAK**

   11:15 am   **Plenary Discussion**

12:15 pm   **LUNCH**

1:15 pm   **Session 3: A Clear Path -- Needed Behaviors, Knowledge, Skills, and Competencies**

What, operationally, do we want individuals and research groups to do? What are specific behaviors that researchers need to adopt to prioritize research rigor and transparency? What evidence supports the need for these behaviors, and what knowledge, skills, and competencies do these behaviors require? Which

educational efforts are effective for developing and measuring these behaviors, knowledge, skills, and competencies?

1:15 pm   **Presentations**

Moderator: Jason Williams, Cold Spring Harbor Laboratory

Discussants: Gundula Bosch, Johns Hopkins University
Kari Jordan, The Carpentries
Russell Poldrack, Stanford University
Tracey Weissgerber, Berlin Institute of Health at Charité Universitätsmedizin - Berlin

2:05 pm   **Plenary Discussion**

2:45 pm   **BREAK**

3:15 pm   **Forum for Catalyzing Change: Part 1**

Invited contributors (listed at the end of the agenda) and other attendees will divide into four rooms/topics that expand on the presentations:

A: Behaviors, Skills, and Competencies for Laboratory Researchers

Leader: Thomas Steckler, Janssen Pharmaceutica

B: Behaviors, Skills, and Competencies for Clinical Researchers

Leader: Susan Pusek, The University of North Carolina at Chapel Hill

C: Approaches to Education and Training

Leader: Roger Peng, Johns Hopkins University

D: Evaluation of Education and Training Efforts

Leader: Alexandra Nelson, University of California San Francisco

3:50 pm   **Forum for Catalyzing Change: Part 2**

Invited contributors and other attendees will rotate rooms/topics

4:20 pm   **Forum for Catalyzing Change: Part 3**

Invited contributors and other attendees will rotate rooms/topics

4:45 pm   **Day 1 Wrap-Up and Preparation for Day 2**

Veronique Kiermer, PLOS

May 24, 2022 (Day 2)

9:00 am   **Introduction to Day 2**

Steven Goodman, Stanford University

9:15 am   **Session 4: Facilitating Change -- Tools, Removing Barriers, Incentives, and Norming**

What can research groups and institutions do to make doing 'the right thing' for research rigor and transparency the easiest path and not burdensome? What are the types of tools that can make desired behaviors easier? How do you remove counterincentives and barriers and develop incentives through norms and rewards that reinforce good behaviors?

> **9:15 am**   **Presentations**
>
> Moderator: Juan Pablo Alperin, Simon Fraser University
>
> Discussants: Ulrich Dirnagl, Charité Universitätsmedizin Berlin
> Timothy Errington, Center for Open Science
> Rebecca Lundwall, Brigham Young University
> Melissa Rethlefsen, University of New Mexico
>
> **10:05 am**   **Plenary Discussion**
>
> **10:40 am**   **BREAK**
>
> **11:05 am**   **Forum for Catalyzing Change: Part 1**
>
> *Invited contributors (listed at the end of the agenda) and other attendees will divide into four rooms/topics that expand on the presentations:*
>
> **A: Facilitation of Best Practices for Laboratory Research: Removing Barriers and Introducing Tools**
>
> > Leader: Daniella Lowenberg, University of California Office of the President

B: Facilitation of Best Practices for Clinical Research: Removing Barriers and Introducing Tools

Leader: Mathew Abrams, International Neuroinformatics Coordinating Facility

C: Norms and Incentives at the Community and Laboratory Level

Leader: Jessica Polka, ASAPbio

D: Incentives and Formal Evaluation at the Departmental and Institutional Level

Leader: Carole Lee, University of Washington

11:40 am   Forum for Catalyzing Change: Part 2

Invited contributors and other attendees will rotate rooms/topics

12:05 pm   Forum for Catalyzing Change: Part 3

Invited contributors and other attendees will rotate rooms/topics

12:30 pm   LUNCH

1:30 pm   Session 5: Working Together

What can we do as a group that we cannot do individually? How can we know and use what other stakeholders are doing (e.g., journals, funders, scholarly societies, professional organizations) to help induce change? What are the characteristics of ongoing movements and networks who seek to catalyze change as well as lessons learned in trying to organize groups? How do we emulate these efforts, take advantage of developments in other sectors of our community, and build stronger alliances and networks?

1:30 pm   Presentations

Moderator: Karen Salt, UK Research and Innovation

Discussants: Sophia Crüwell, University of Cambridge and Charité — Universitätsmedizin Berlin
Maryrose Franko, Health Research Alliance
Marcus Munafò, University of Bristol
Naomi Schrag, Columbia University

2:30 pm   BREAK

2:45 pm   Plenary Discussion

3:45 pm   Day 2 Wrap-Up and Next Steps

Veronique Kiermer, PLOS

4:15 pm   ADJOURN

Other Invited Contributors

Eryn Adams, Baby's First Years
Audrey Brumback, The University of Texas at Austin
Lique Coolen, Kent State University
Jennifer Croker, University of Alabama at Birmingham
Christin Daniels, Duke University
Michaela DeBolt, University of California, Davis
Michael Dougherty, University of Maryland
Kara Kerr, Oklahoma State University
Halil Kilicoglu, University of Illinois at Urbana-Champaign
Dana Lapato, Virginia Commonwealth University
Carmen Maldonado-Vlaar, University of Puerto Rico – Río Piedras
Nicole Nelson, University of Wisconsin – Madison
William X.Q. Ngiam, University of Chicago
Sarah Nusser, Iowa State University
Ishwar Puri, University of Southern California
Pradeep Reddy Raamana, University of Pittsburgh
Pamela Reinagel, University of California San Diego
Jason Ritt, Brown University
Joseph Ross, Yale School of Medicine
Alonzo Whyte, Georgia Institute of Technology
Hao Ye, University of Florida