NIH Strategic Vision and Plan for Strengthening Replication and Reproducibility:

Advancing the Rigor of Gold Standard Science

NIH Director's Update to Council of Councils
January 29, 2026

Jay Bhattacharya, M.D., Ph.D.
Director, National Institutes of Health

STATEMENT Friday, August 15, 2025

Advancing NIH's Mission Through a Unified Strategy

Replicable, reproducible, and generalizable research must serve as the basis for truth in biomedical science.

www.nih.gov/about-nih/nih-director/statements/advancing-nihs-mission-through-unified-strategy

NIH Replication and Reproducibility

What is the replication and reproducibility issue?

The “publish or perish” culture in research favors the **promotion of only favorable results**, and replication work is little valued or rewarded.

What are we trying to do?

NIH aims to **restore confidence in scientific knowledge** through a culture change and **elevate replication and reproducibility** (R&R) as an essential component of gold standard science.

The Foundation of NIH's Efforts: **Three Key Pillars**



Advance Effective Efforts

Drive flagship R&R policies, resources, and programs



Incentivize Across the Research Enterprise

Identify innovative approaches to reinforce and fortify the R&R commitment



Embed as a Discipline

Promote cultural change through coordination, education, and outreach within the community

Pillar 1: **Advance Effective Efforts**

NIH pledges to drive R&R policies, resources, and programs



Ensuring compliance with data sharing and reproducibility policies



Supporting replication research

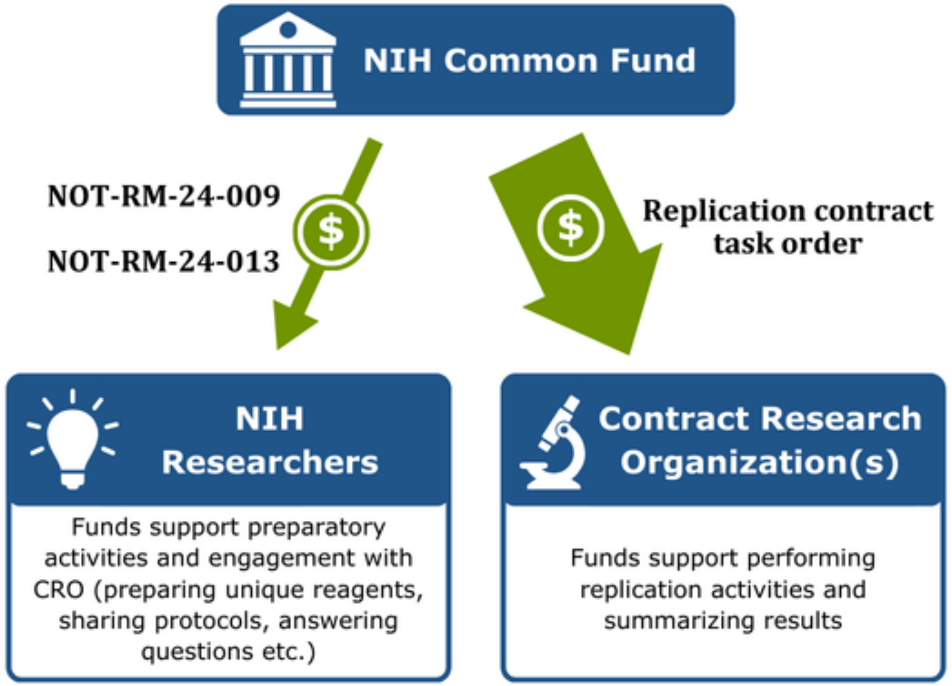


Policy & grant guidance

Replication to Enhance Research Impact Initiative

Goal:

Provide support to **independently replicate** significant lines of research and **validate** novel technologies, generating **best practices** and lessons learned



Autism Data Science Initiative (ADSI)

Goal:

Provide independent assessment of research models and methods from ADSI-funded investigators to strengthen confidence in autism research findings

- **Model Validation**
- **Method Replication**

ADSI Validation Centers

AR² - Autism Replication, Validation, and Reproducibility Center

Contact PI: Hua Judy Zhong

Validate ASD: Independent Multimodal Replication and Validation of Autism Data-Science Models

Contact PI: Zhandong Liu

Pillar 2: **Incentivize Across the Research Enterprise**

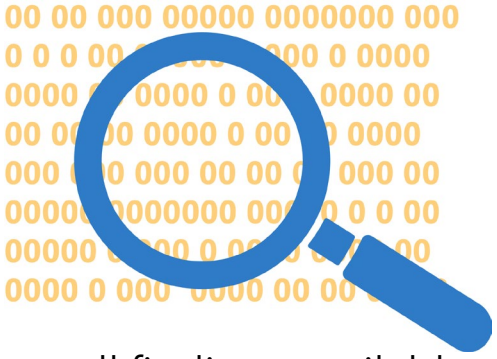
Innovative approaches are needed to reinforce and fortify the R&R commitment



Launch new, multifaceted, cross-NIH programs



Explore mechanisms to encourage prosocial behaviors and design success metrics



Make null findings available, reportable, and searchable



Leverage prize competitions to spur new approaches

Challenges and Prize Competitions

LitCoin NLP Challenge

Designing an NLP system to create accessible knowledge from research

LitCoin Pilot Design Challenge

Spur new strategies to build an innovative system for publishing machine-readable research

Platform development underway

NINDS Early-Career Rigor Champions Prize

Recognizing early-career scientists who are enhancing attention to rigor

NINDS Rigor Champions Prize

Recognizing scientists who are enhancing rigor and transparency

Replication Prize*

Shape the future of rigorous and replicable science through two tracks: Ideas & Exemplars

Winners to be Announced: March 13, 2026

**Part of the Replication to Enhance Research Impact Initiative*

NIH Data Sharing Index (S-index) Challenge

Promoting data sharing and developing a robust metric to reward exemplary data sharers

Phase 2 Open Until: February 13, 2026

Pillar 3: **Embed as a Discipline**

Promote cultural change throughout research community



Build the workforce through education and training



Establish cross-cutting office to increase coordination across NIH



Develop tools and methods to further cultural change



Encourage sustainable community uptake

Together, driving forward R&R



Advance



Incentivize



Embed

Questions?



National Institutes of Health

Turning Discovery Into Health