

NIH Director's Update

National Advisory Child Health and Human Development
(NACHHD) Council
September 10, 2025

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Director, National Institutes of Health



MAHA vision for child health

Advancing children's health & well-being

- Prioritize lifelong health starting in childhood
- Address root causes of poor outcomes: nutrition, access, equity
- Build strong evidence to guide policies, interventions & care models
- Partner with communities, families & schools to ensure impact

Shaping healthy futures through nutrition

- Growing evidence links ultra-processed foods to obesity, diabetes & chronic disease
- NIH aims to **clarify biological pathways** and long-term health effects
- Support **innovative interventions** to reduce reliance on ultra-processed foods
- Equip families with **science-based tools** to foster healthier dietary patterns

ADSI initiative update

Autism Data Science Initiative (ADSI)

- Invest in high-risk, high-reward science that transforms child & population health
- Integrate data science, behavioral research & community-driven approaches
- Drive translation from discovery to real-world solutions
- Advance equity, resilience & long-term impact across generations

Vision for NIH



Improve population health
Ensure reliable results
Make big advances
Maintain safety and transparency
Encourage academic freedom



NIH Priorities

- Novel Alternative Methods (NAMs)
- Gold Standard Science Plan
- Support for early career investigators
- Unified Strategy to fund projects

Novel Alternative Methods (NAMs)

Novel Alternative Methods (NAMs)

Key Aspects

- **End Exclusive Animal Research Funding**
No longer seeking research proposals that exclusively involve animal testing
- **Incorporating NAMs**
All new NOFOs related to animal model system now also support human-focused approaches, including NAMs
- **Focus on Human Health**
New policy aims to ensure research models are aligned with human biology



Gold Standard Science Plan

NIH Priority: Raising the Bar for Research Excellence

GOLD STANDARD SCIENCE IS...

- * Reproducible
- * Transparent
- * Communicative of Error and Uncertainty
- * Collaborative and Interdisciplinary
- * Skeptical of Its Findings and Assumptions
- * Structured for Falsifiability of Hypotheses
- * Subject to Unbiased Peer Review
- * Accepting of Negative Results as Positive Outcomes
- * Without Conflicts of Interest

NIH's new **Gold Standard Science** implementation plan

- Comprehensive plan to embed Gold Standard Science—defined by scientific integrity— across the agency
- Building upon NIH's longstanding commitment to rigorous, credible research, aligning with broader **HHS and government frameworks** for scientific excellence

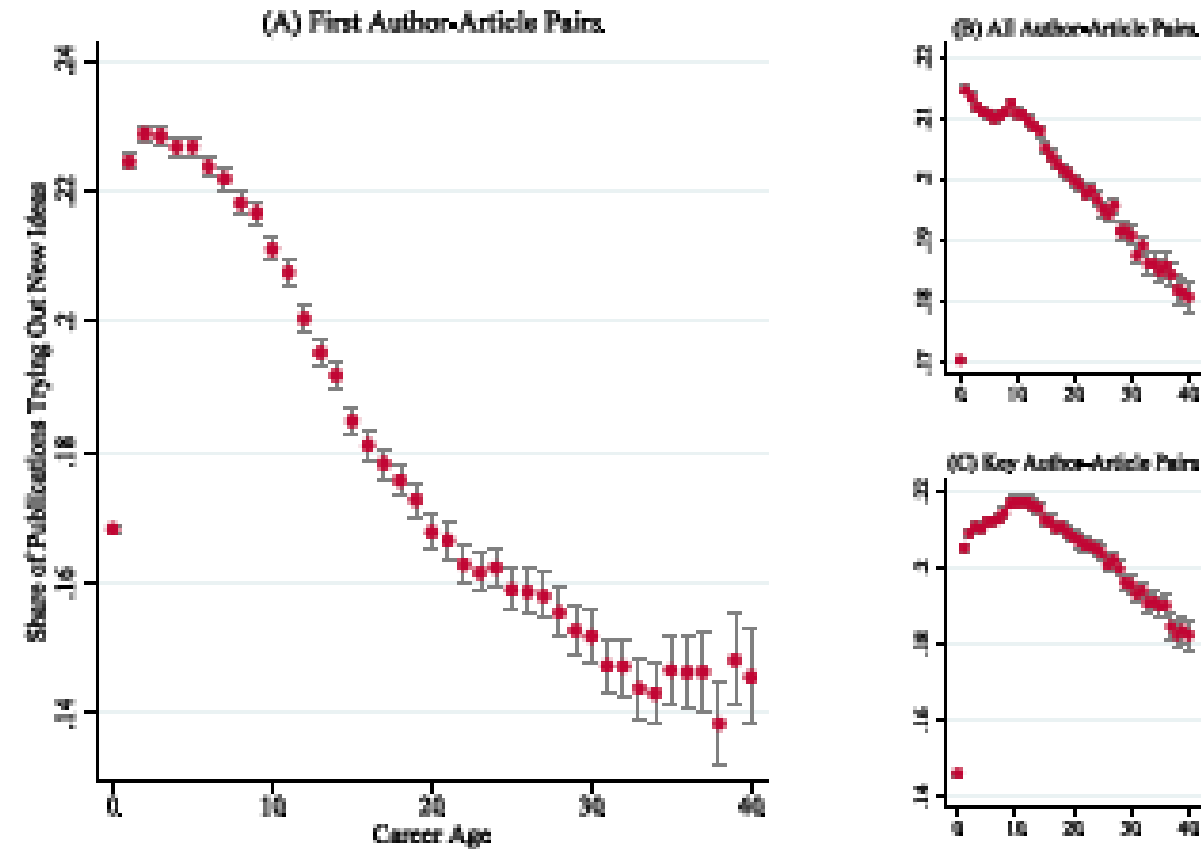
Strategic Actions & Next Steps

Gold Standard Science Implementation highlights

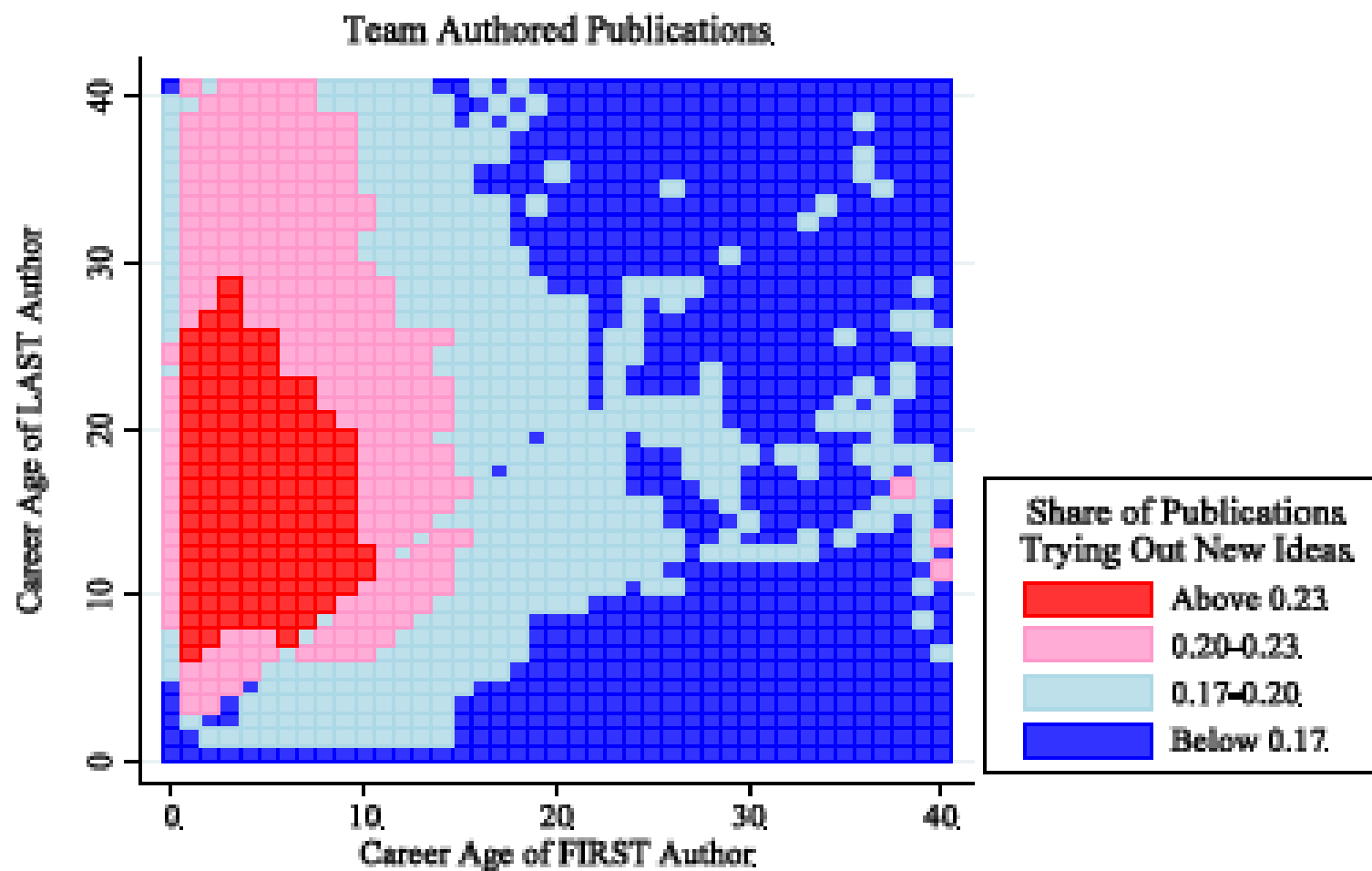
- Expanded training on rigor & reproducibility
- Launch replication initiative (NIH Common Fund)
- Provide regular public updates

Support for early-career investigators

Team and Solo Authored Publications



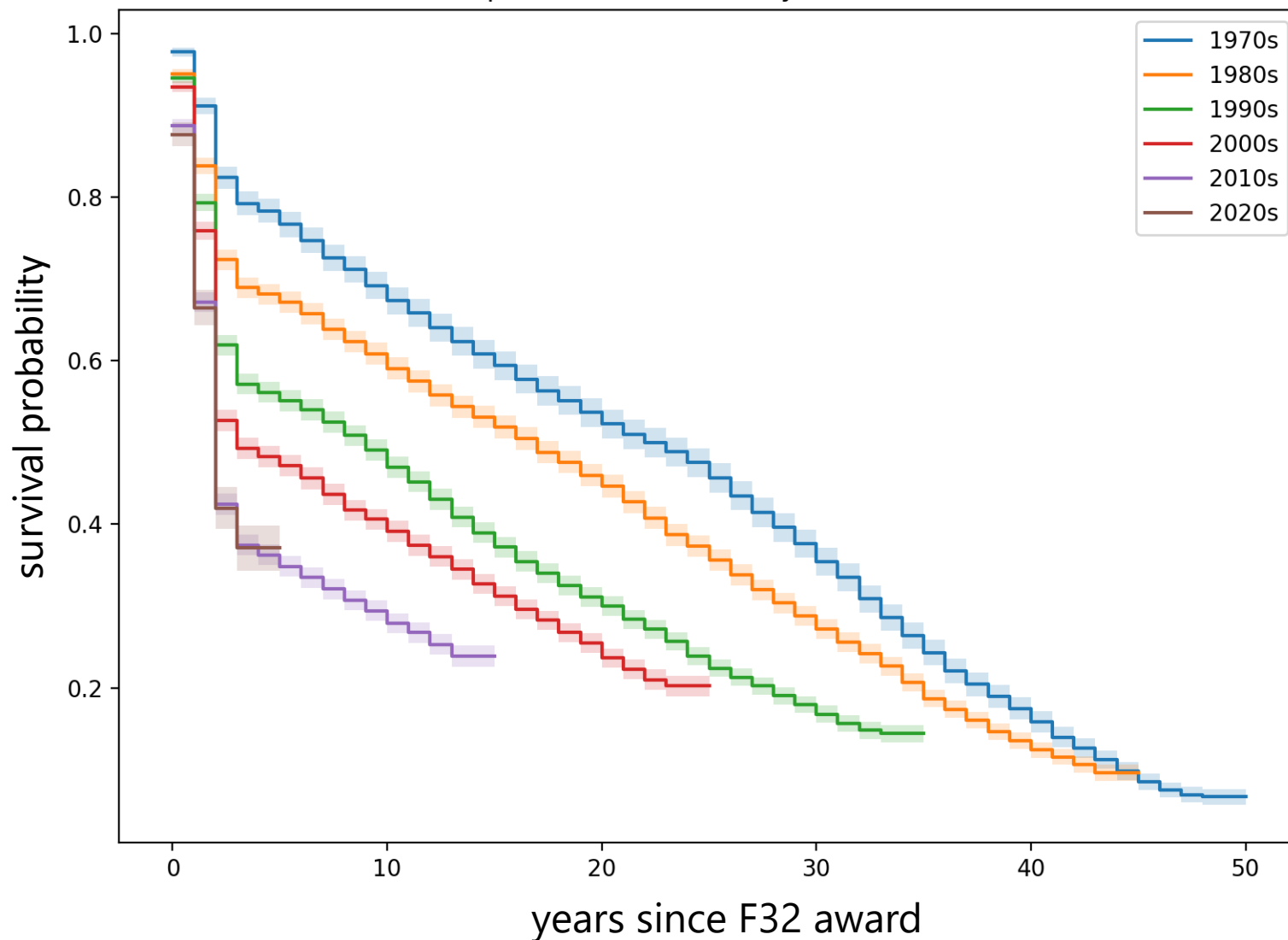
Packalen and Bhattacharya (2019) "Age and the Trying Out of New Ideas." *Journal of Human Capital*.



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NIH career-span of fellowship recipients is increasingly foreshortened

Kaplan-Meier curve shows normalized probability of continued application by chronological cohort

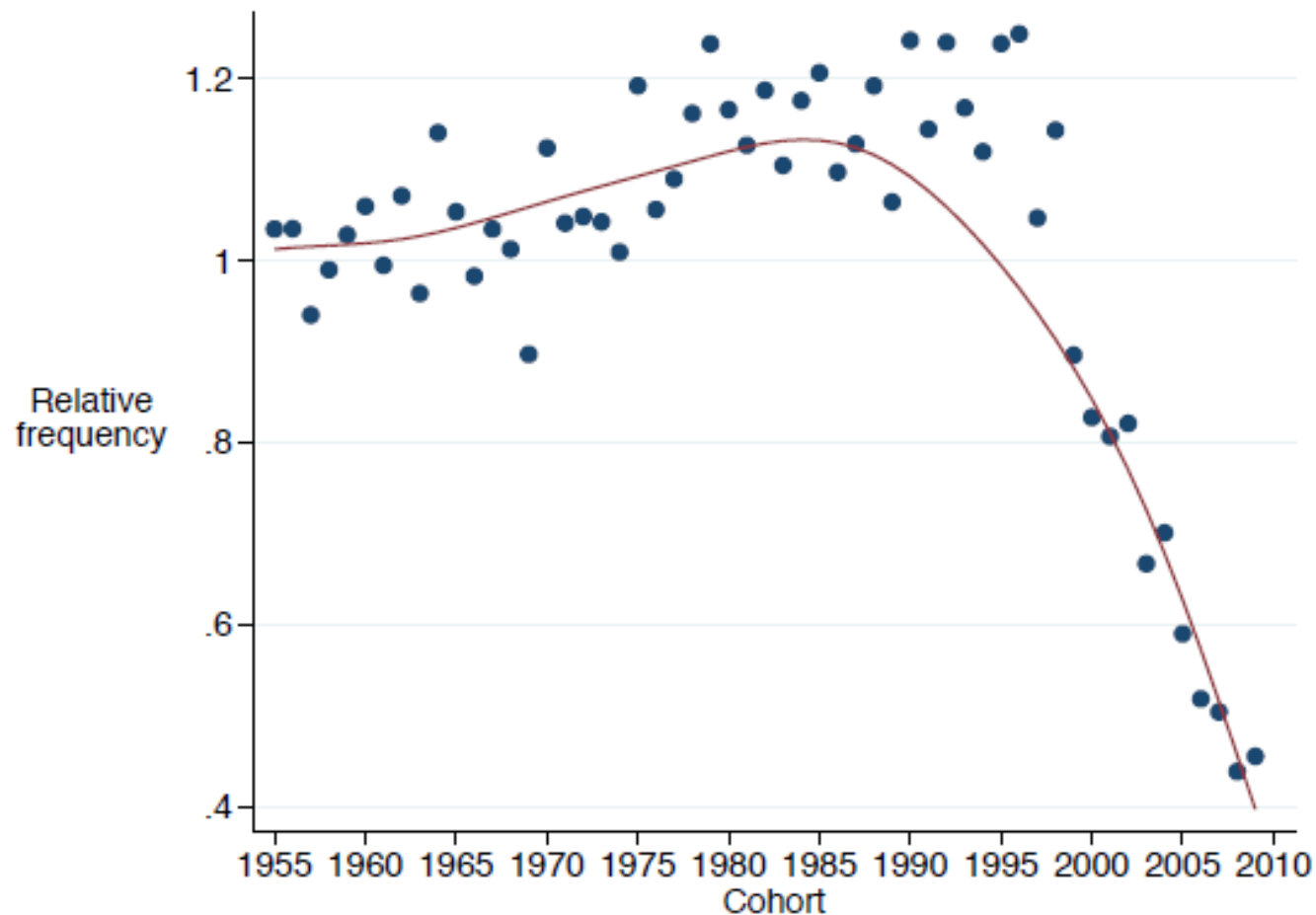


Total cost of training
F32 awardees
who never apply again:

\$0.9 billion =
28% of total costs
BRDPI-adjusted

Unified strategy to fund projects

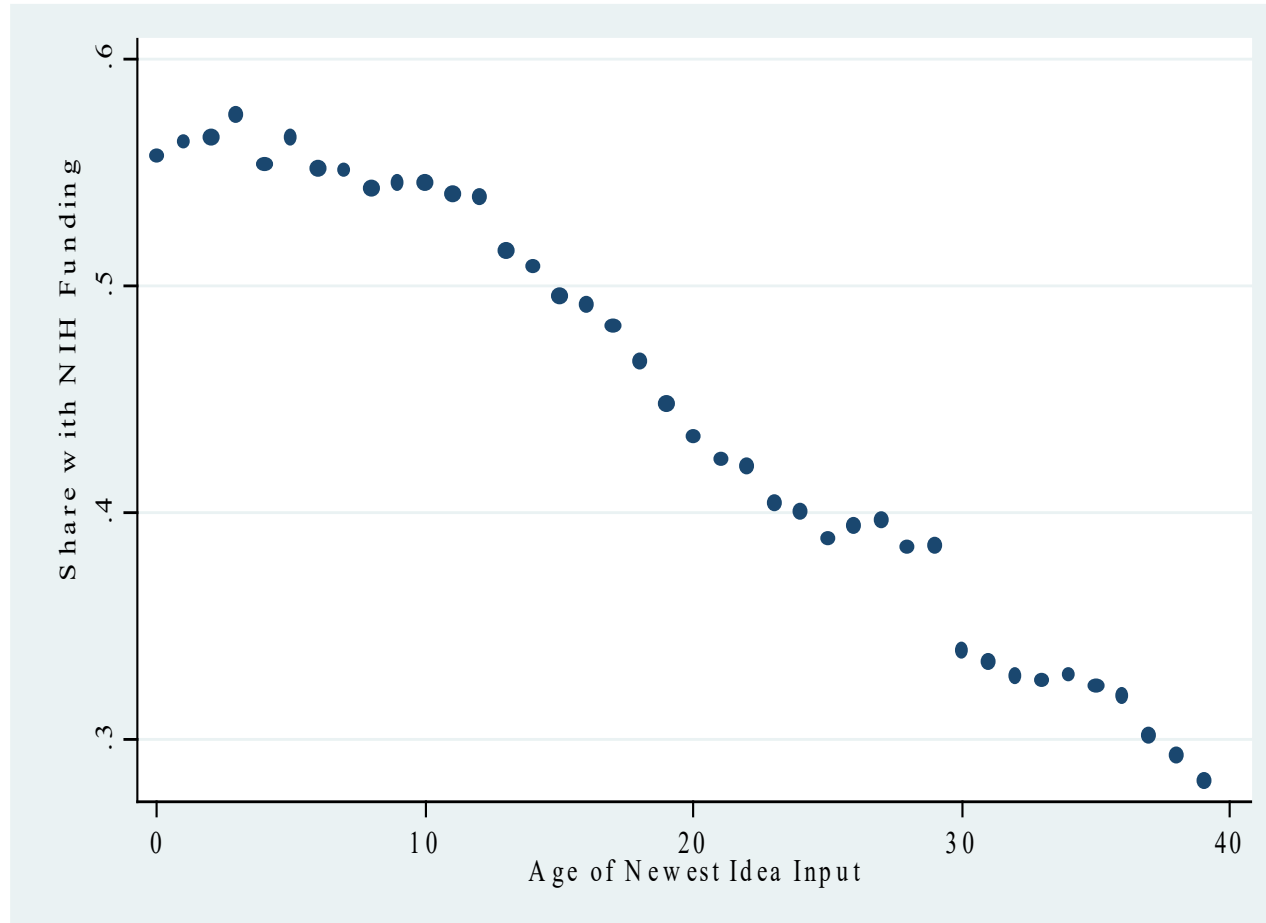
Frequency of NIH-funded vs. Non-NIH funded Papers



Sample: Papers
published
between 2000
and 2009
(inclusive)

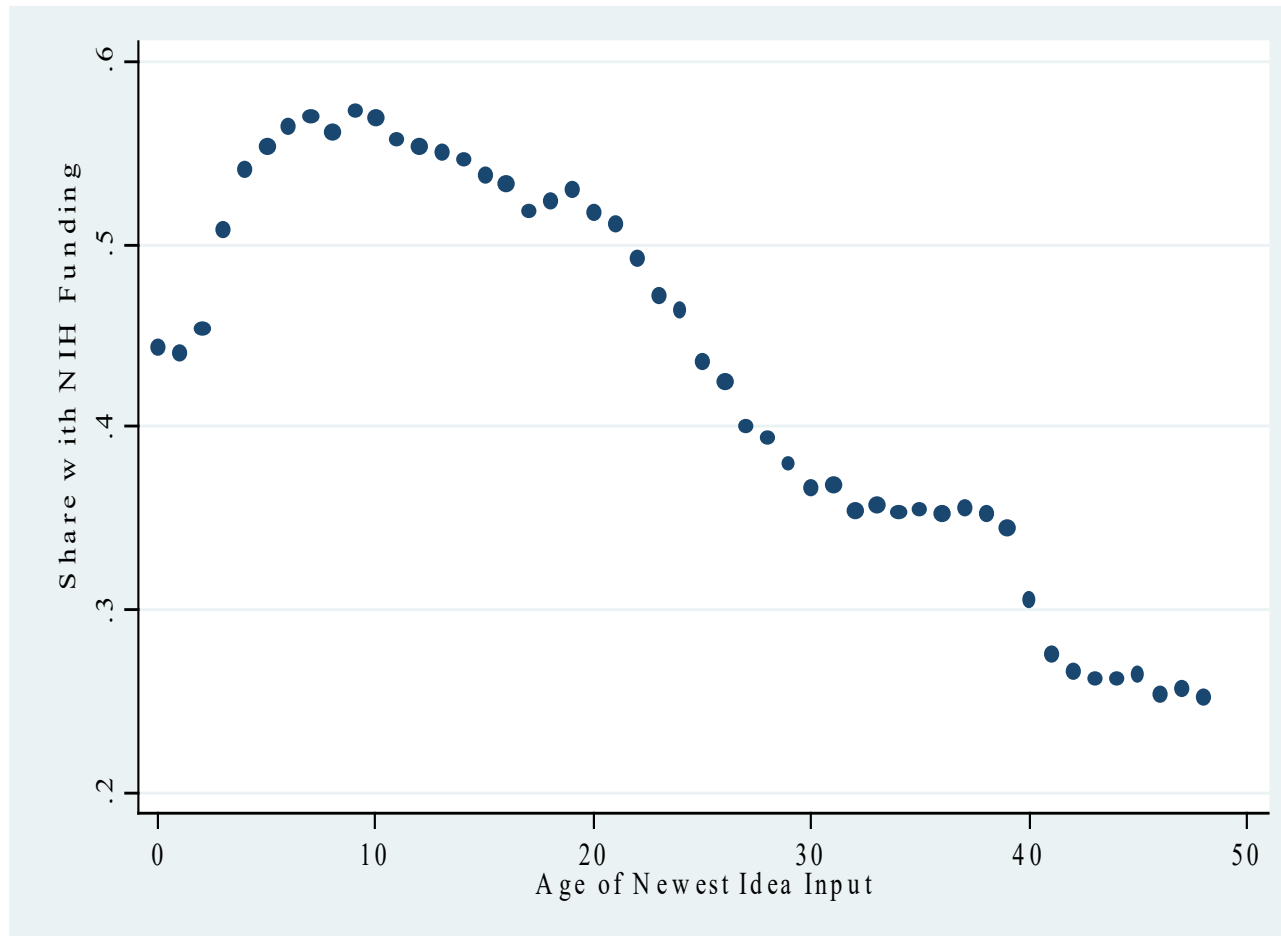
Packalen and
Bhattacharya
(2020) NIH
Funding and the
Pursuit of Edge
Science. PNAS

Change Over Time: 1990-1999 Paper Cohort



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New Unified Grant Funding Policy

- Previously, about half of NIH's Institutes and Centers (ICs) used fixed percentile "paylines,"
- Under NIH's updated, unified strategy, paylines are no longer the primary driver of funding decisions.

New Funding Criteria

- ICs still consider scientific scores alongside other critical factors, including:
 - Whether the proposal aligns with the NIH Institute or Center's mission and strategic priorities
 - How the proposal contributes to balance within the ICO's overall research portfolio
 - The investigator's career stage and sustainability of the biomedical research workforce



National Institutes of Health

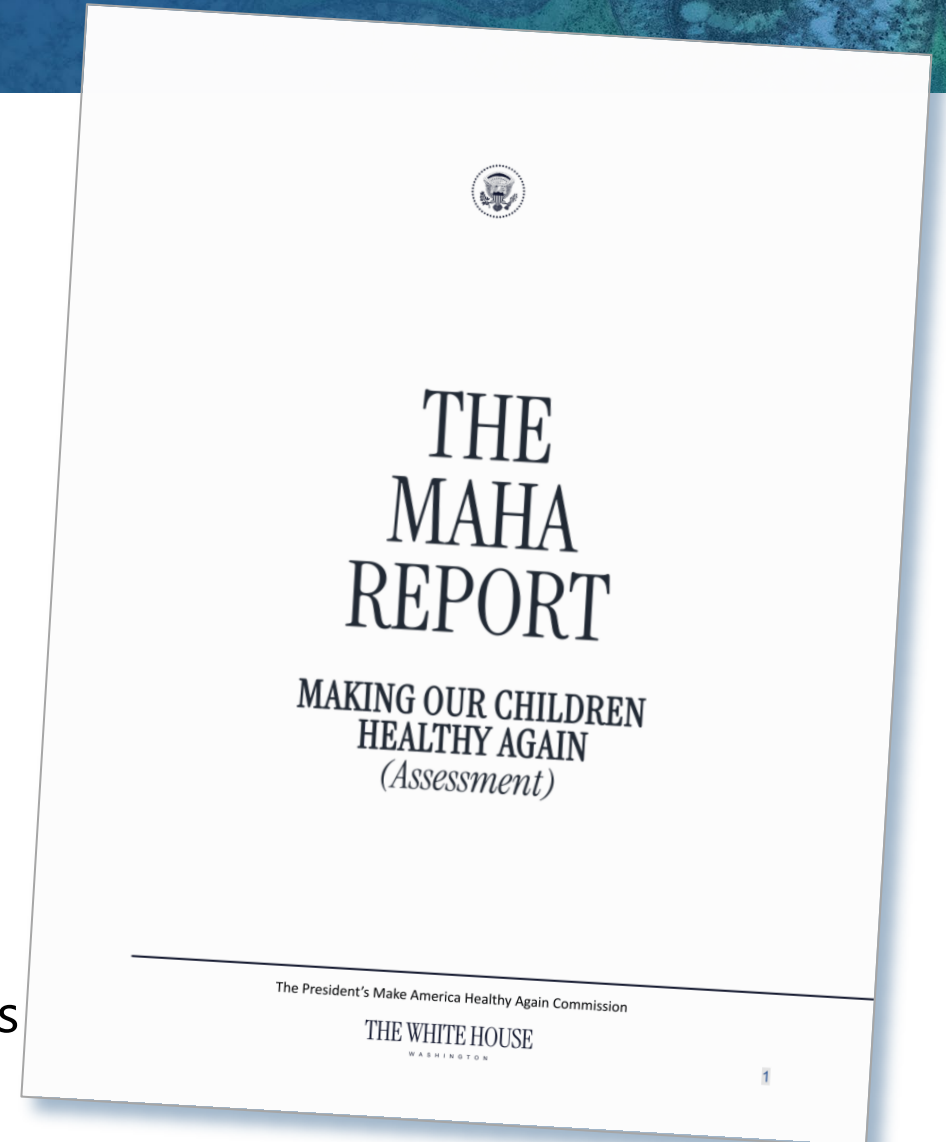
Turning Discovery Into Health

Supporting gold-standard scientific research

Close critical **research gaps** &
Guide efforts to better **combat childhood
chronic disease** in America

Next steps:

1. Addressing the Replication Crisis
2. Post-Marketing Surveillance
3. Real-World Data Platform
4. AI-Powered Surveillance
5. GRAS Oversight Reform
6. Nutrition trials
7. Large-scale Lifestyle Interventions
8. Drug Safety Research
9. Alternative Testing Models
10. Precision Toxicology



NIH autism research initiatives

Autism Data Science Initiative:

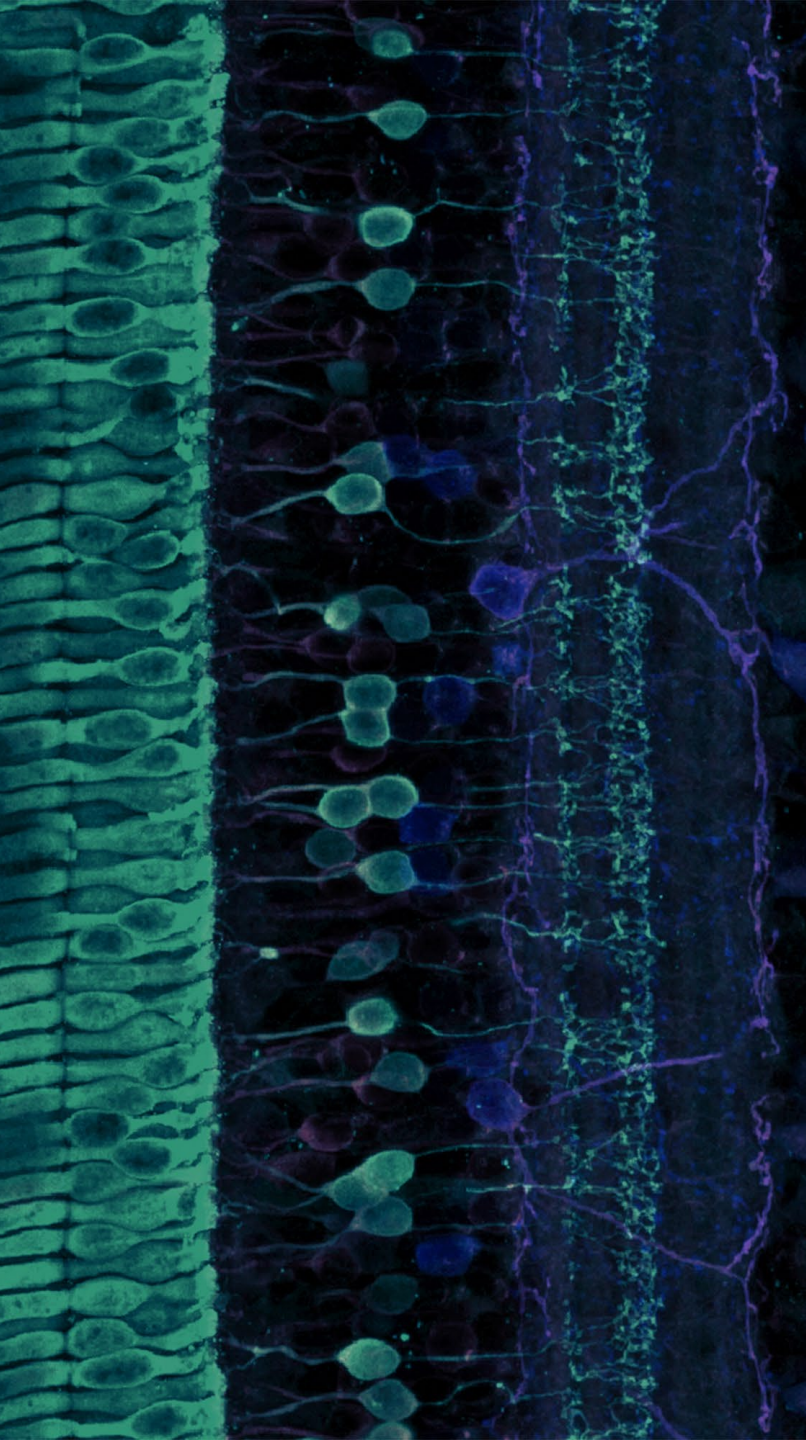
- Research initiative
- Will support investigators in the identification and integration of existing data resources to conduct state-of-the-art analyses
- Will not support a new, centralized data platform
- Focused on autism causes, prevalence, treatments and interventions

Real World Data Platform:

- Data infrastructure initiative
- Will integrate and link data from various real-world sources and provide advanced computational analysis resources
- Will provide data via a secure NIH platform to accelerate research and translation
- Will be an optional data resource & tool for autism and other research



Community partners and researchers are collaboratively engaged.



Program and policy updates

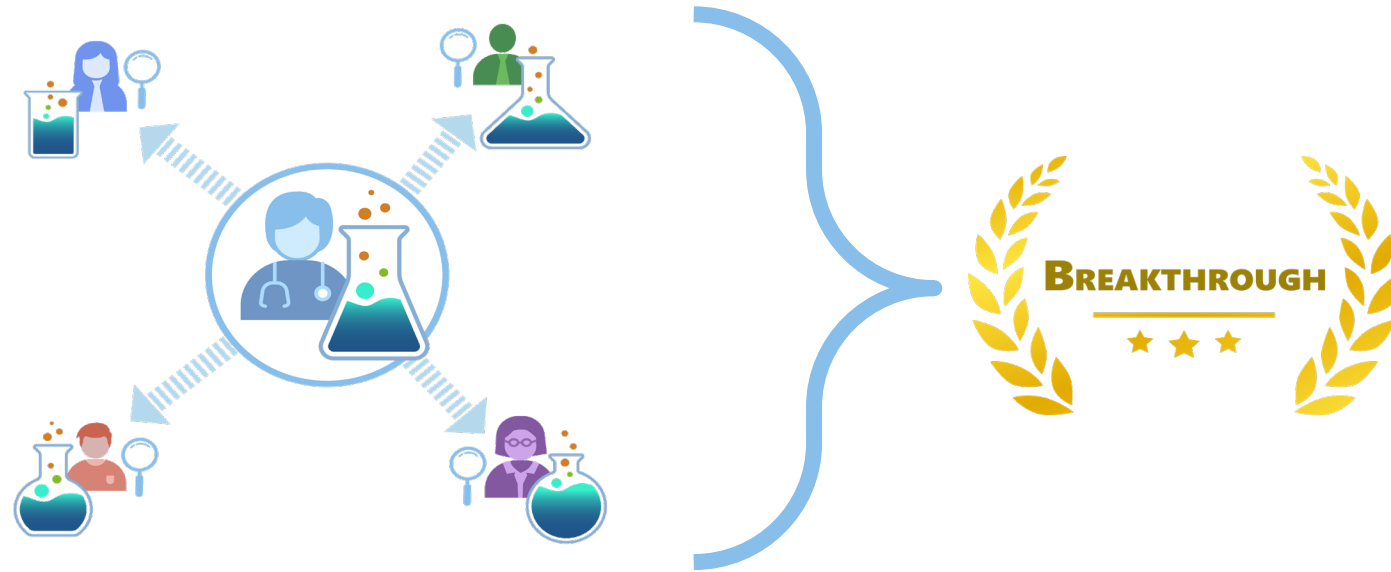
Academic freedom at NIH



- Establish **academic freedom as the rule**, not the exception
- Foster a culture incentivizing scientists to engage in **open, academic discourse**
- Restore **public trust** in NIH's ability to carry out its mission

Update: NIH scientists no longer need supervisor approval to publish.

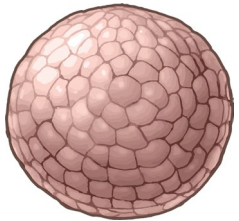
Replication should be rewarded



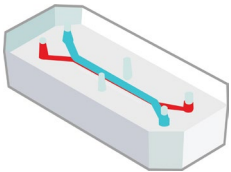
- Create academic tracks for researchers interested in replication research
- Consider replication work in promotion and advancement decisions
- Develop incentives for replication work, including metrics

Reducing the use of animals in research

New Approach Methods:



Organoids



Tissue chips



Computational models

Office of Research Innovation, Validation and Application (ORIVA)

- Coordinate NIH-wide efforts to develop, validate, and scale the use of non-animal approaches
- Serve as a hub for interagency coordination and regulatory translation for public health protection

NOFOs Update:

- NIH will no longer issue NOFOs that solicit solely research in animal models.
- NOFOs will include option to use human-focused approaches such as NAMs.
- Does not apply to current awards.

Public Access Policy

New policy effective July 1, 2025
(moved up from Dec. 31, 2025)



New cap on allowable publication costs

- NIH will implement a cap on allowable publication costs starting in FY 2026
- Ensure equitable access to publicly funded research remains and that taxpayers are not charged again for the dissemination of research they already supported



Unifying AI at NIH

Opportunities:

- Exponential growth of AI methods and discoveries in past few years
- Costs decreasing
- Size of models increasing
- Performance of LLMs improving

RFI on NIH's AI strategy

(closed July 15, 2025):

Goal: Create a unified, central AI structure to build synergy across program silos, improve transparency, and accelerate R&D and translation of AI discoveries to patient benefit.



Executive Order: Improving the safety and security of biological research

P3CO Framework Key Concerns:

- PPP and ePPP scope is too narrow; culture needs to shift beyond definitions to risk
- To date, only 4 projects involving ePPP research were sent for review
- Identifying risk is placed solely on govt/investigators and institution are key to culture of responsibility
- Inadequate transparency in the review/oversight process
- Oversight is conducted at Dept-level (self-governance issue)

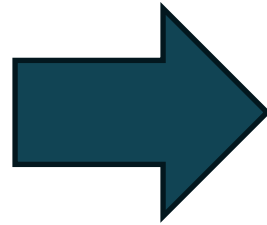
Guiding principles for a new policy:

- Prompt a shared understanding of risk; and a willingness to raise the question
- Ensure oversight has clear accountability measures in place
- Integrate the question of whether the potential for risk simply isn't worth the gain
- Independent oversight to consider multiple aspects of potential societal consequences (e.g., security, economic, resilience)

Improving oversight: Foreign subawards

Current policy:

Pass-through entities (prime awards) can provide subawards to foreign institutions to carry out part of a federal award.



New structure:

(to be implemented before FY26)

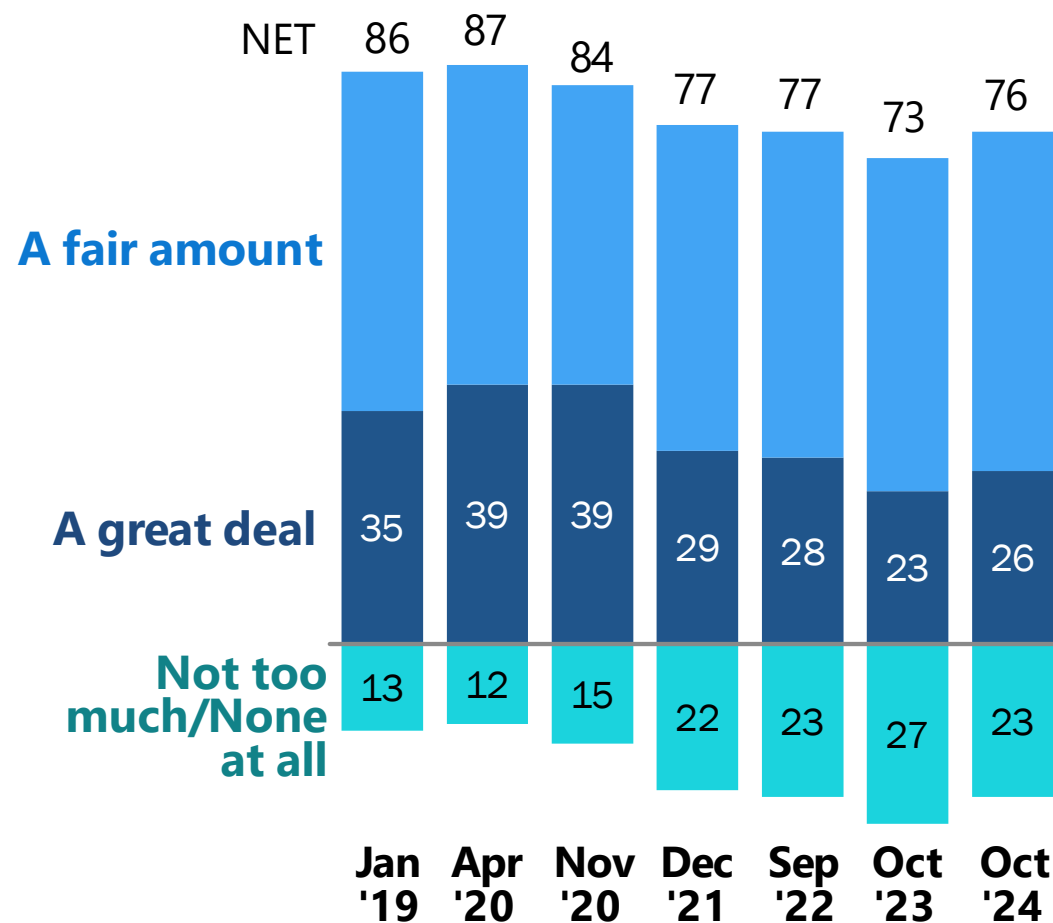
Prime awards may include foreign components that are structured as independent subprojects linked to the prime award.

Key goals:

- Enhance the tracking of foreign subawards
- Ensure consistency across reporting systems
- Protect national security

Decline in Public Trust in Science

How much confidence U.S. adults have in scientists to do what's best for the public



Source: Pew Research Center, November 2024, "Public Trust in Scientists and Views on Their Role in Policymaking"



National Institutes of Health

Turning Discovery Into Health

