NICHD Acting Director's Report

National Advisory Child Health and Human Development Council

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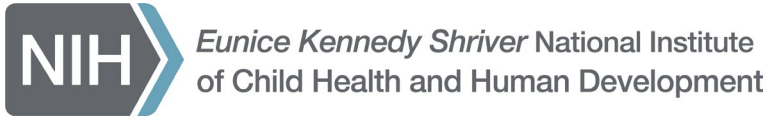
January 26, 2026



Talk Outline

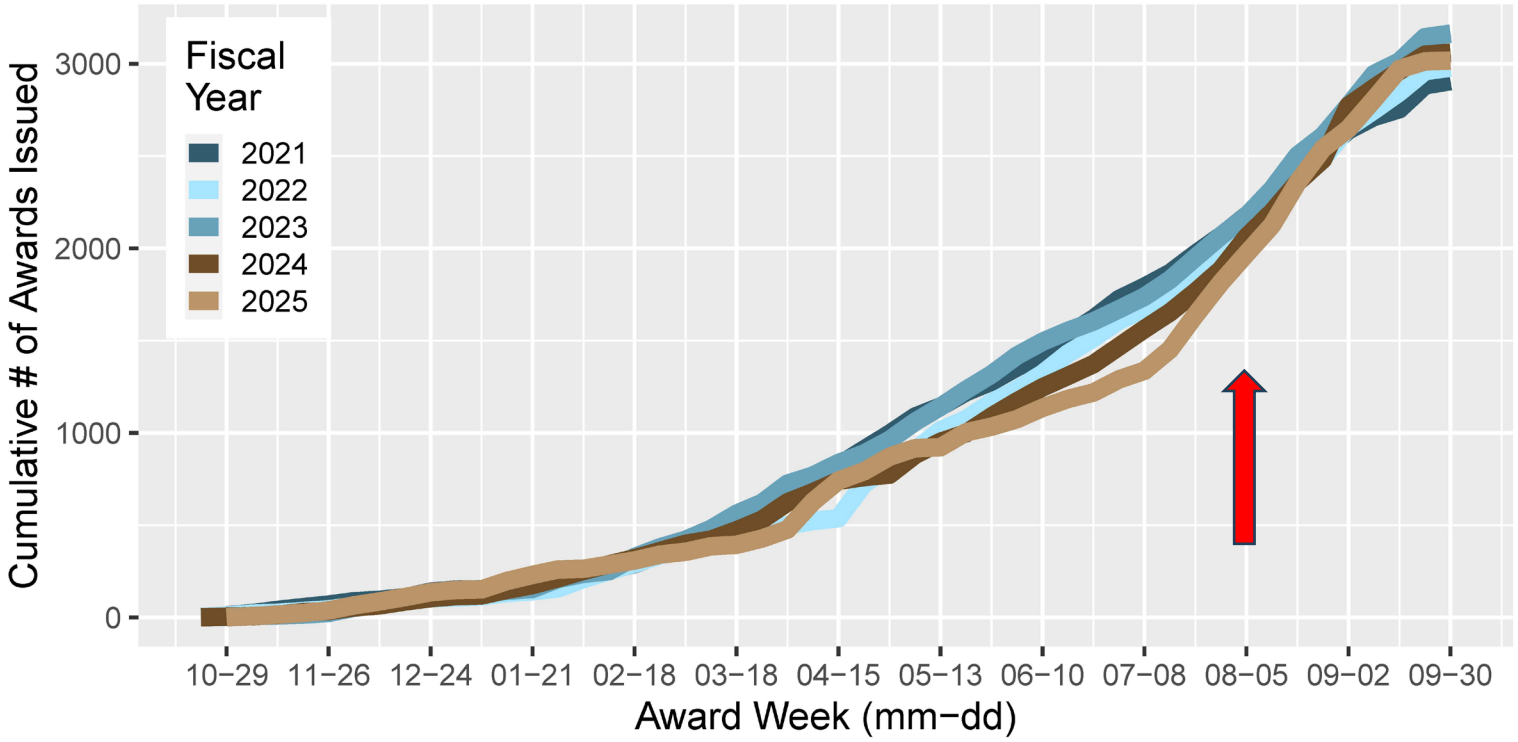
- NICHD Budget Update and FY25 Recap
- NIH Policy and Program Updates
- Pediatric Research at the NIH Clinical Center
- NICHD Research Highlights

NICHD Budget Update and FY25 Recap

FY 2026 and FY 2027 Budgets

- **FY26**
  - Continuing resolution through January 30, 2026
  - Consolidated Appropriations Bill released January 20
    - $48.7B for NIH (increase of ~$200M)
    - $1.769B for NICHD (increase of $10M over FY25; increase directed to the IMPROVE initiative)
- **FY27 President's Budget**
  - Under development

Fiscal Year 2025 Recap



- NICHD awarded nearly all its appropriation
  - 861 competing awards (down 8.7% from 2024)*
  - NIH awarded 19.7% fewer competitive awards in 2024*

*Analysis based on preliminary FY25 data

Update on Grant Review

- Lapse in appropriations in October-November 2025 delayed grant review
- To date, 24,010 of 32,973 applications have been reviewed
- By the end of January, only 518 applications will remain, the last of which will be reviewed on February 10.
- As of last week, 6,546 summaries had been released
- Expect all summaries released by February 28 deadline
- **Many thanks** to scientific review officers and those serving as reviewers

NIH Policy and Program Updates

New NIH Policies

- **Grants.gov** - NIH will only post NOFOs on Grants.gov, not the NIH Guide
  - Use Grants.gov subscription services to receive notifications of new NIH funding opportunities
- **Highlighted topics** will note scientific areas of high interest to NIH and encourage applications from the community (using parent funding opportunities)
  - https://grants.nih.gov/funding/find-a-fit-for-your-research/highlighted-topics
- **Application submission limits** - NIH will only accept six new, renewal, resubmission, or revision applications from an individual Principal Investigator/Program Director or Multiple Principal Investigator in a calendar year
  - Applies to all activity codes except T and R13 conference grant applications
- **Applications with foreign subcomponents -** new mechanism (PA-26-002)
  - NIH Collaborative International Resarch Project (Parent PF5 Clinical Trial Optional)

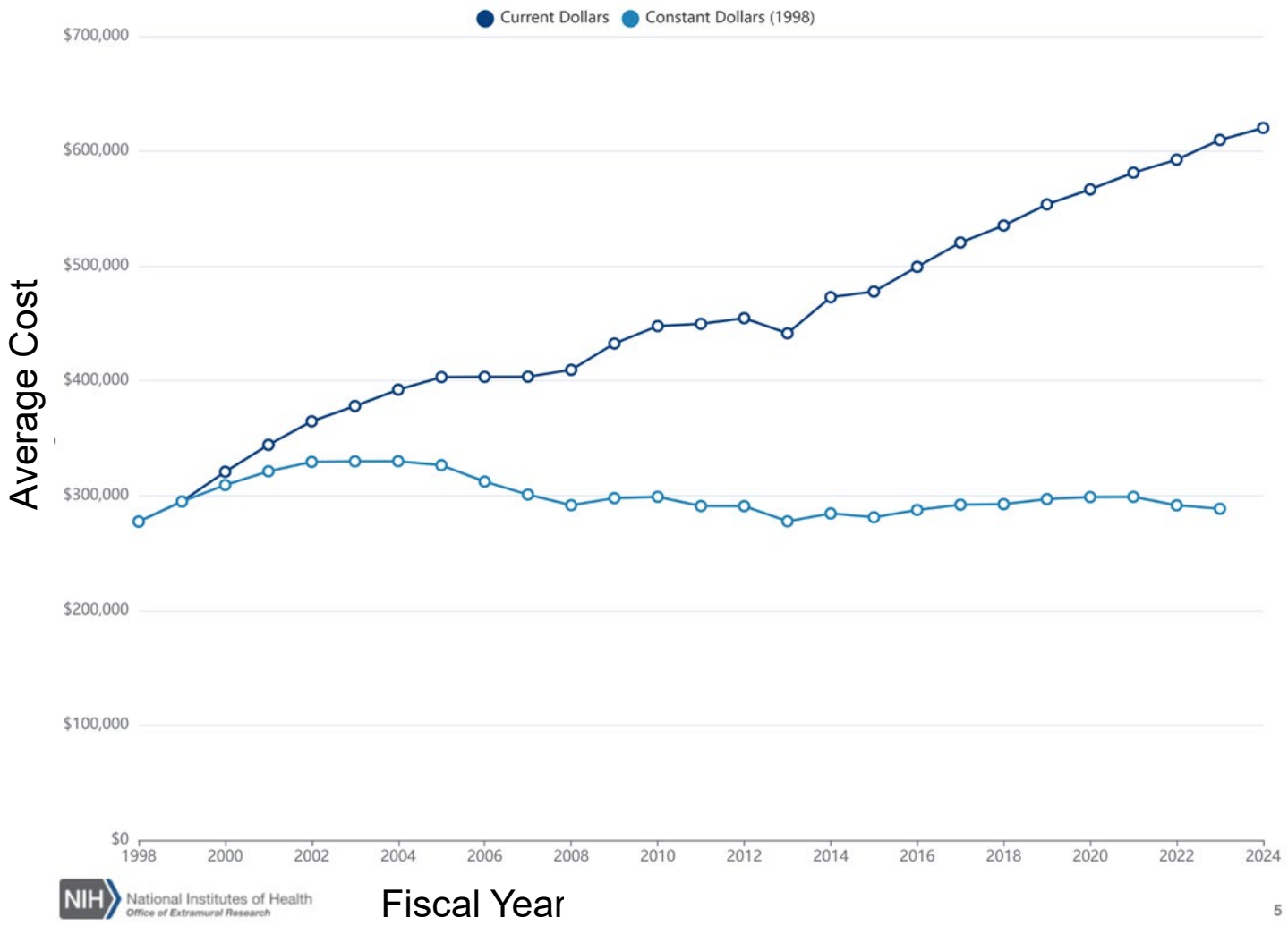
Unified NIH Funding Strategy

- As of January 2026, NIH will implement a new framework that harmonizes institute, center, and office (ICO) funding policies and pay plan development processes
- Core tenets include aligning with NIH mission and institute priorities, prioritizing scientific merit, including a breadth of topics and approaches, considering investigator career stage and broad distribution and geographic balance of funding
- NIH will no longer use paylines to develop pay plans
- ICO directors and extramural staff will consider peer review outcomes within the context of the ICO's and NIH's priorities and strategic plans to develop pay plans
- Advisory councils will continue to provide second level peer review
- IC directors will continue to have delegated authority to decide what is funded by their ICs

Extramural Nexus News Link

Average Size of Grant Awards Is Increasing

The average grant size has been increasing over the past 30 years, primarily due to inflation.



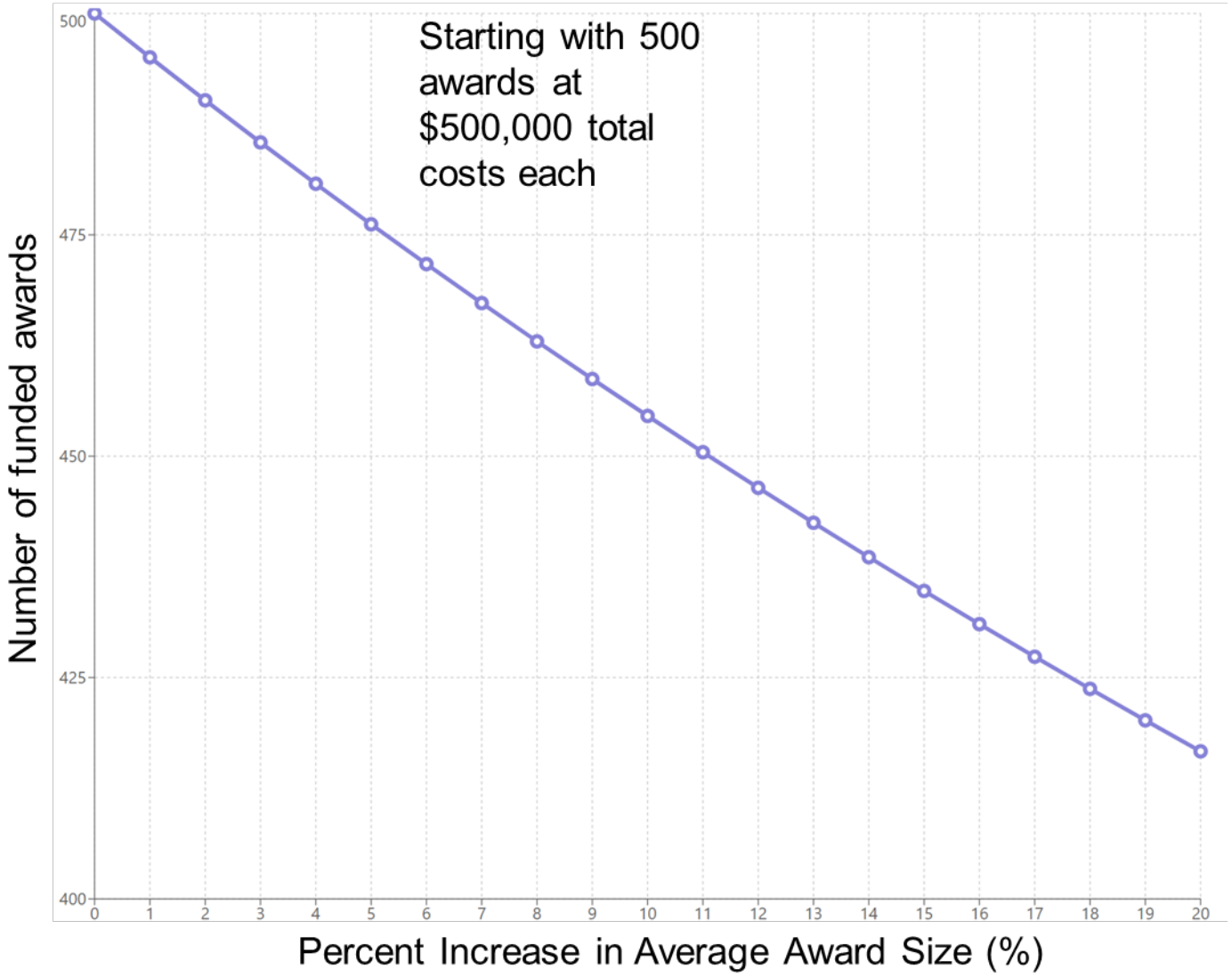
NIH National Institutes of Health Office of Extramural Research

Fewer Awards Can Be Made As Grant Size Increases

- NIH no longer requires applicants requesting >$500k in direct costs to contact the IC prior to submission (NOT-OD-26-019).
- In this example, a 20% increase in award size (to $600K) means you can only fund 417 applications instead of 500.
- Award size can increase due to
  - Higher requested costs

    and/or

  - Awards are fully funded
- More expensive awards → fewer awards



Pediatric Research at the NIH Clinical Center

Pediatrics at the NIH Clinical Center

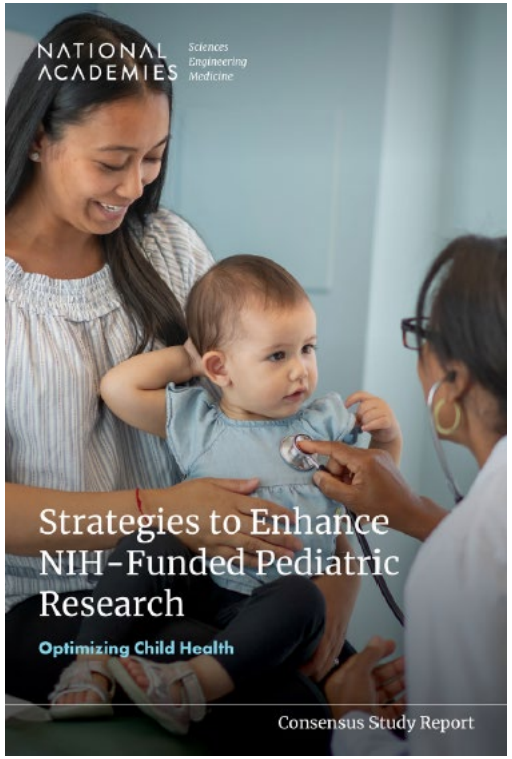
- Addressing historic gaps in pediatric research and care
- More than 21,500 pediatric outpatient visits in FY24
- ~10% of all CC patients are children
- Currently 21 pediatric subspecialties on staff
- Recent infrastructure supports added:
  - Pediatric hospital medicine service (24/7/365)
  - New child life services
  - Lowered general admission age to 2 years

Planning for the Future: Clinical Center Pediatric Intensive Care Unit

- PICU ensures
  - Safety and continuity of care
  - Avoiding risky transfers
  - Enabling research in infants and critically ill children
- PICU enables
  - First-in-child and higher risk trials
  - Rare disease research previously not possible at NIH
  - Stronger national pediatric partnerships

NASEM Report Release: Strategies to Enhance NIH-Funded Pediatric Research

- Committee tasked by NIH with:
  - Reviewing current NIH pediatric research portfolio and structure
  - Consider ways in which the NIH Clinical Center could be used to advance innovative pediatric research
- Report release webinar 3pm on January 28, 2026
  - Registration: https://events.nationalacademies.org/46276



NICHD Research Highlights

Sensor Devices Can Monitor Placental Oxygen Saturation Noninvasively

- Poor placental development and placental defects can lead to adverse pregnancy outcomes
- Researchers assessed wearable, non-invasive transabdominal sensors to measure placental oxygen saturation
- Patients with known complications had lower placental oxygenation levels than those with uncomplicated pregnancies
- Sensors show promise for helping detect at-risk pregnancies and guide timely clinical interventions (PMID 39451694)

NICHD intramural research

Nguyen T, et al. Biosensors (Basel). 2024 Oct 7;14(10):481

Same-Day Genetic Testing Comes to the NICU

- Rapid genetic diagnoses guide medical care for critically ill newborns
- Most genetic tests take several days, but medical decisions in the NICU must be made within hours
- Researchers tested a genome sequencing approach using new technology called sequencing by expansion
  - Creates longer, easier-to-read DNA copy, allowing machines to read the genetic code and identify genetic differences more quickly
- Enabled identification of genetic variants in about four hours to guide same-day medical decisions

Wojcik, MH, et al., N Engl J Med. 2025 Nov 20;393(20):2063-2065

Early Brain Development Linked to Later Reading Skills in Childhood

- Scientists studied brain scans and test results collected from infancy through late childhood
- Children tested on phonological processing (ability to detect, understand, and manipulate sounds in words)
- Researchers found that children with stronger phonological processing skills had:
  - More developed brain structures in areas involved in reading
  - Stronger reading skills in elementary school
- Results link early brain development and later reading ability

Turesky, TK. PMID 39005343

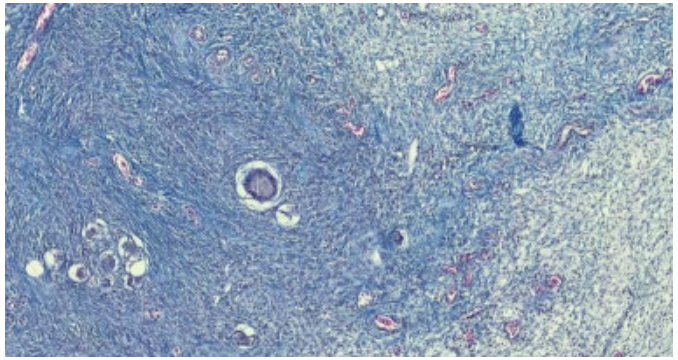
Progress Towards Non-Hormonal Treatment for Endometriosis

- Scientists reviewed genome-wide association data to find genetic targets, then analyzed data from endometriosis patients to identify potential risk genes within individual cells
- Genetic changes in M2 macrophage immune cells were associated with development of endometriosis
- Researchers then used an organoid model to explore possible treatment approaches
- Results identified a signaling pathway in these immune cells as a promising approach for non-hormonal treatments

Ochoa, S, et al. Adv Sci (Weinh). 2025 Nov;12(41):e15285

Researchers Identify Genetic Variants Associated with Uterine Fibroid Development

- Researchers analyzed genetic data from ~20,000 women with uterine fibroids and 224,000 women without fibroids
- 24 “risk locations” identified where genetic variations increased the risk of developing uterine fibroids.
  - Nearly 400 genes associated with these locations identified
  - 168 of those genes expressed differently in fibroid tissues
- Findings will focus efforts for understanding how genetic variations contribute to fibroid development



Buyukcelebi K, et al., Nat Commun. 2024 Feb 7;15(1):1169.

OpenExo: An Open-source Modular Exoskeleton to Augment Human Function

- Wearable exoskeletons have great potential to enhance mobility
- Advances have been limited by lack of standardization—each exoskeleton is built to purpose and unique
- Researchers supported by NICHD created an open-source exoskeleton platform with free, detailed instructions and software.
- Exoskeletons can be built for under $2000 in materials
- OpenExo makes it easier for people to participate in exoskeleton research and may help speed up the development of new designs and control systems

Williams, JR., et al. Sci Robot. 2025 Jun 25;10(103)

U.S. FOOD & DRUG ADMINISTRATION

FDA Approves First Treatment for Children with Menkes Disease

- Pediatric neurodegenerative disorder caused by a genetic defect impairing copper absorption
  - Causes seizures, developmental delays, intellectual disability
- Ultrarare, with life expectancy less than three years
- Zycubo is a newly approved copper replacement therapy
  - Clinical development occurred within NICHD intramural lab and clinical trials conducted at the Clinical Center
- Children treated within four weeks of birth had 78% reduction in risk of death
  - Nearly half survived beyond six years, and some beyond 12 years

Thank You!
Questions?