NICHD Director's Report

National Advisory Child Health and Human Development Council

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October 14, 2026



Eunice Kennedy Shriver National Institute
of Child Health and Human Development

Outline

- Opening Remarks
- NIH Policy Updates
- NICHD Program Updates
- NIH Staff Updates



Eunice Kennedy Shriver



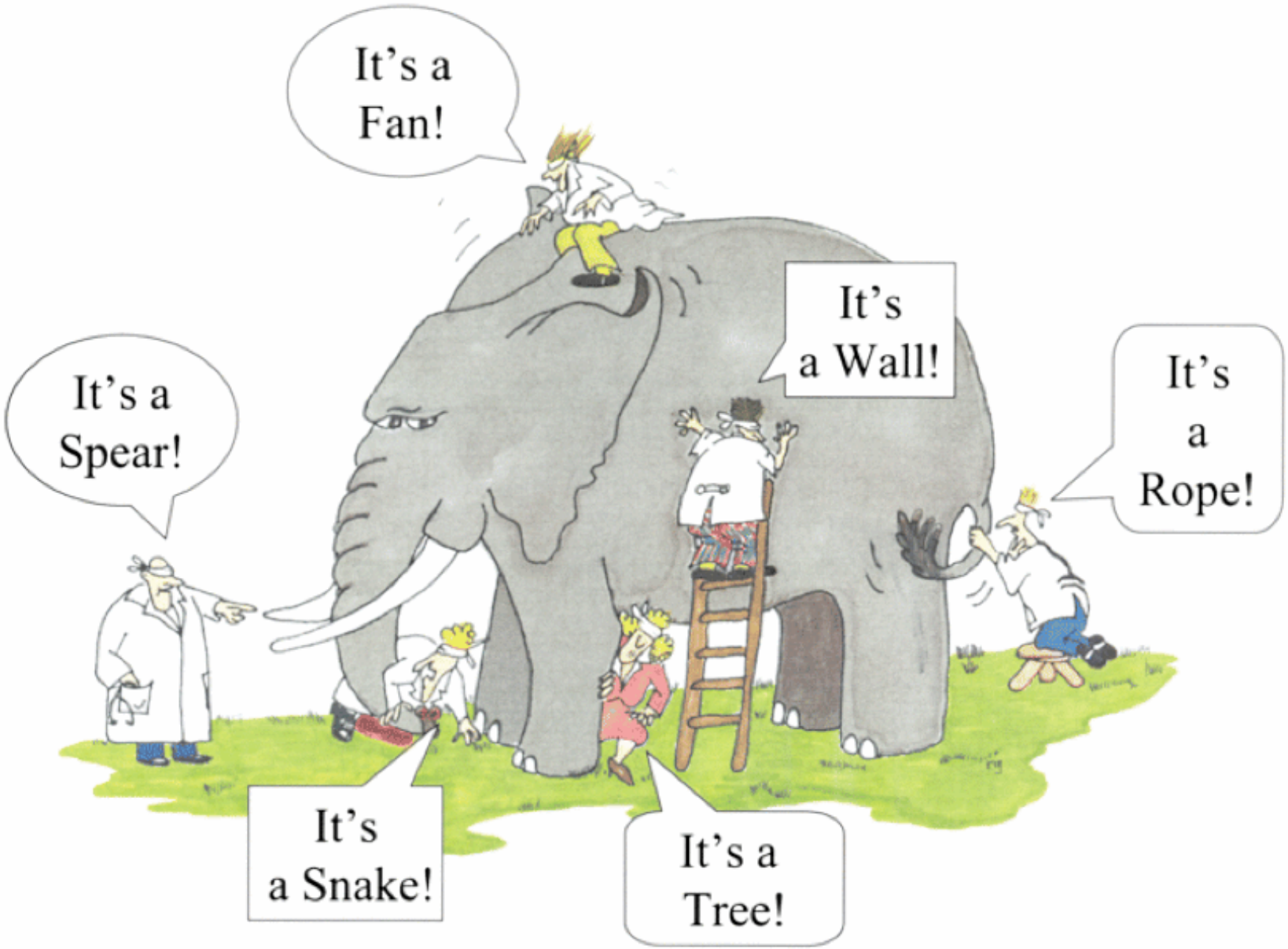
Four dimensions for setting priorities

- Frequency
- Burden
- Research trajectory
- Unmet need

Two principles for how we do the work

- **Whole-body, lifespan science**
- **Improving access** to meaningful care

She experiences one brain and one body



Himmelfarb J et al. Kidney International 2002; 62: 1524

An absence of scientific understanding is not evidence of an absence of illness. It is a reason to do better science





NIH Policy Updates

NIH Notices and Requests for Information (RFIs)

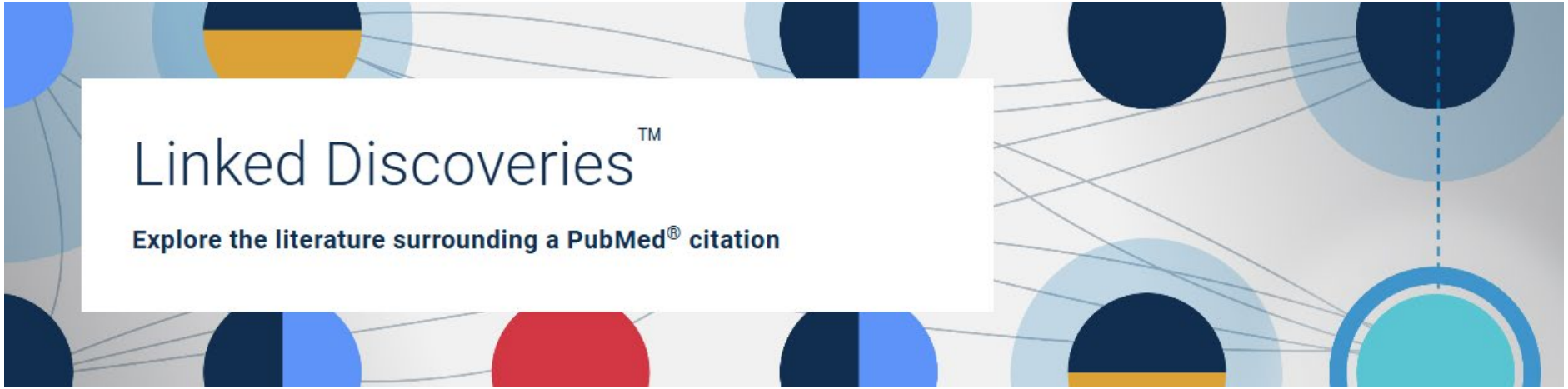
- **Modified peer review will continue through January Council** (NOT-OD-26-114)
  - 30-35% of applications discussed in review; middle third designated as “competitive but not discussed”
- **RFI: Proposed Changes to Reporting Outcomes from NIH Peer Review**
  - Initial review process remains the same
  - Applications placed in overall impact categories (most competitive (top 25%), competitive, and not discussed (<50%))
  - Overall category communicated back to NIH staff and PI
  - NOT-OD-26-088: https://grants.nih.gov/grants/guide/notice-files/NOT-OD-26-088.html
  - Comments were due October 13, 2026

NIH Updates to Career Development (K) Awards

- NOT-OD-26-098: **NIH Updates to Career Development (K) Award Programs**
  - Consolidating individual K notice of funding opportunities (NOFOs).
  - Eliminating the requirement for data management and sharing (DMS) plans on Ks.
  - NIH will no longer support "Independent Clinical Trial Required" K award.
- **RFI: Input on Potential NIH Funding Approaches to Support the Development of Future Clinical Trial Investigators**
  - NOT-OD-26-095: https://grants.nih.gov/grants/guide/notice-files/NOT-OD-26-095.html
  - New NIH policy: K award funds may not be used to support or offset the costs of conducting a clinical trial, clinical feasibility study, or a separate ancillary study to an existing clinical trial.
  - NIH seeks input on funding models that would allow mentored K award recipients to lead clinical trials while maintaining the K award's focus on career development
  - Official comment period closed September 30, 2026

Linked Discoveries

- New PubMed tool to strengthen research replication and reproducibility
- Shows how an individual research finding relates to the larger body of biomedical evidence.
- From a citation in PubMed, the Linked Discoveries tool explores a “neighborhood” of publications closely related to that article, including replication studies.
- https://linkeddiscoveries.ncbi.nlm.nih.gov/



NICHD Program Updates

Implementing a Maternal health and PRegnancy Outcomes Vision for Everyone (IMPROVE) Initiative

- Supports research to reduce preventable causes of maternal deaths and improve health for women before, during, and after pregnancy
- Created 12 Maternal Health Research Centers of Excellence (COEs) in 2023-24
- $10M increase in FY26 appropriation enabled COE project expansion to additional states with maternity care deserts
  - COE programs will reach 10 new states: AK, AL, AR, CO, CT, ID, IN, KS, MO, WY
- Launched the Connecting the Community for Maternal Health Challenge 2.0 in August 2026 to build research capacity in maternity care deserts
  - https://www.nih.gov/challenges/ccmh-2-challenge-research-capacity-building-maternity-care-deserts

Support for Early Career Investigators

- NICHD support for K99 to R00 transitions in FY26 include projects across mission areas:
  - Maternal childhood maltreatment influence on prenatal neural programming and infant emotional regulation
  - Pediatric primary care assessment and intervention in childhood violence exposure
  - Understanding fertility trends in Amish populations that maintain high fertility in a low-fertility environment
  - Exploring how temperature affects genome integrity in spermatocytes to understand associated male infertility
  - Understanding how double negative T cells preserve ovarian immune balance
  - Identifying altered microbial determinants of altered immunity in HIV-exposed infants

Research Highlight: Improving Safety and Efficiency of Hysterectomy Procedures

- Hysterectomies are the second most common surgery in women
- About 30% of these procedures require special techniques and tools and involve additional safety risks
- NICHD SBIR grant developed novel integrated tissue containment and removal system to improve safety and speed of the procedure through electronic communication between its tri-layer container and handpiece to prevent unintended safety barrier breaches
- Device was approved under the FDA's Safer Technologies Program (STeP), which expedites review of devices expected to significantly improve the safety of currently available treatments

https://www.globenewswire.com/news-release/2026/07/13/3326151/0/en/fda-grants-de-novo-classification-to-claria-medical-for-device-designed-to-improve-safety-and-efficiency-of-hysterectomy-procedures.html

Early albumin use linked to lower mortality in children with septic shock

- Life-threatening sepsis occurs when the body's response to infection damages its own organs
  - Sepsis can develop into septic shock, where blood pressure drops and organs can fail
- Treatment of septic shock includes IV fluids; albumin (a protein) can be added, but benefit in children was uncertain
- Researchers analyzed electronic health records from more than 17,000 children with sepsis, about 56% of whom had septic shock.
- Among children with septic shock, those who received IV fluids with albumin were about 30% less likely to die in hospital.
  - No evidence of improved survival among children with sepsis who did not have shock.
- Early albumin therapy may benefit children with septic shock, but not those with less severe sepsis

Lee CM, et al. Association of Albumin Infusion With Differential Response in Pediatric Sepsis and Septic Shock: Retrospective Analysis Using a U.S. Multicenter 2012-2018 Dataset. Pediatr Crit Care Med. 2026 May 1;27(5):625-633. doi: 10.1097/PCC.0000000000003933. PMID: 41789989.

First-trimester exposure to sleep disturbance medications is *not* associated with fetal anomalies

- Limited data on fetal effects of commonly used drugs to treat sleep disturbances during pregnancy (e.g., Z-drugs zolpidem, eszopiclone, or zaleplon)
- Medicaid and commercial claims data from nearly 4.3 million pregnancies documented first-trimester Z-drug exposure in ~0.5% of pregnancies.
- After adjusting for potential confounding factors, there was no difference in risk for congenital malformations overall among infants exposed to Z-drugs in the first trimester compared with unexposed infants.
- Overall, the findings provide “reassurance” on the use of Z-drugs for sleep problems during pregnancy.

K Fung et al. Z-Drug Use in the First Trimester of Pregnancy and Risk of Congenital Malformations. JAMA Psychiatry 2025 Dec 23:e253874. doi: 10.1001/jamapsychiatry.2025.3874. PMID 41432941.

Scientists discover an RNA “aging clock” in human sperm

- Older fathers are linked to higher health risks for their children (e.g., obesity and stillbirth), but the factor in sperm that drives this risk was unknown.
- Researchers developed an advanced RNA-sequencing method called PANDORA-seq to detect sperm RNA changes that other techniques missed.
- They found sperm RNA shifts dramatically around mid-life and grows progressively longer with age in both mice and humans.
- Exposing mouse stem cells to this "old RNA" altered genes tied to metabolism and neurodegeneration, hinting at a mechanism linking paternal age to offspring effects.
- These RNA changes could eventually be a diagnostic tool to guide reproductive decisions and, if the responsible enzymes are identified, a target for treatments to improve sperm quality in older men.

Shi, J et al. Conserved shifts in sperm small non-coding RNA profiles during mouse and human aging. EMBO J. 2026 Feb;45(4):1362-1380. doi: 10.1038/s44318-025-00687-8. Epub 2026 Jan 20.

Immune and Blood-Brain Barrier Changes Found in Down Syndrome Regression Disorder (DSRD)

- DSRD is a condition in which some individuals with Down syndrome (DS) suddenly lose previously developed skills (e.g., language, social abilities, daily living skills)
- Cause may be linked to neuroinflammation
- Researchers analyzed cerebrospinal fluid (CSF) from individuals with DSRD, individuals without DS who had a neuroinflammatory disorder (e.g., multiple sclerosis), and individuals without DS or neuroinflammation
- Results showed that CSF from individuals with DSRD more closely resembled people with neuroinflammatory disorders than that of neurotypical individuals.
- Specific findings suggest DSRD may involve immune-related changes in the brain and a weakened blood brain barrier

Santoro JD, et al. Evidence of blood-brain barrier dysfunction and CSF immunoglobulin synthesis in Down Syndrome Regression Disorder. Ann Clin Transl Neurol. 2025 Apr;12(4):805-820. doi: 10.1002/acn3.52299. PMID: 39996411.

New Highlighted Topics

- HTs released since July 2026 (NICHD secondary sign on)
  - Leveraging All of Us Biospecimens to Advance Precision Medicine Research
  - Interventions to Prevent Unintentional Injury
  - Research on Chatbots and their Usage
  - Catalyzing Interdisciplinary Research on HIV-Associated Co-occurring Conditions
  - Environmental Contributors to Infertility
  - Understanding Nutritional Influences on Neurodevelopmental Disorders in Children

NIH Staff Updates

New NIH Institute and Center Directors

- Wendy Weber, N.D., Ph.D., M.P.H.
  - National Center for Complementary and Integrative Health
- Judy Cho, M.D.
  - National Human Genome Research Institute
- Johnathan Burke, D.M.D.
  - National Institute of Dental and Craniofacial Research
- Courtney Aklin, Ph.D.
  - National Institute of Nursing Research
- Peter Embi, M.D., M.S.
  - National Library of Medicine





Thank You!
Questions?