Healthy pregnancies. Healthy children. Healthy and optimal lives.

NICHD's mission is to lead research and training to understand human development, improve reproductive health, enhance the lives of children and adolescents, and optimize abilities for all. http://nichd.nih.gov

Key populations: Children, Pregnant and Lactating Women, People with Disabilities



Director: Diana W. Bianchi, M.D.

HISTORY National Center for Medical Rehabilitation Research NICHD founded

(NCMRR)

Best Pharmaceuticals for Children Act (BPCA)

Renamed: Eunice Kennedy Shriver **NICHD**

New Mission and Vision



1962

1990

2002

2007

2020

2022

IMPROVE MATERNAL HEALTH

Maternal Health Centers of Excellence: National network to develop community-

tailored interventions, with focus on populations that experience health disparities

Centers will develop and evaluate innovative approaches to reduce pregnancy-related complications and deaths and promote maternal health equity

Includes 10 research centers, a data innovation and coordinating hub and an implementation science hub

Centers also support training and professional development of maternal health researchers

- Awarded \$24 million in first-year funding
- 2 HBCUs among 10 awarded centers









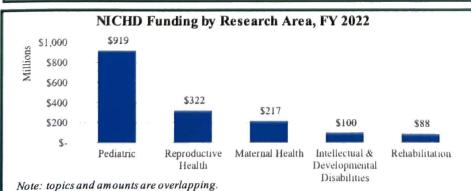


WOMEN'S HEALTH RESEARCH



- Investigational drug reduces the size of fibroid tumors in mice
- Green tea compound may inhibit processes promoting uterine fibroid growth
- Prototype genetic test demonstrates potential to predict the development and eventual severity of uterine fibroids
- Higher ambient temperature associated with pregnancy complications
- Compound in olive oil and olive leaves may provide endometriosis treatment with fewer side effects
- Differences in endometriosis-related gene expression may identify links to other chronic pain conditions
- Cancer treatment technique—using heat to remove disease-causing tissue-adapted to treat endometriosis in animal studies















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RECENT ACCOMPLISHMENTS

Prenatal testing and newborn screening can identify issues and allow treatment to begin early, preventing or alleviating developmental problems. Now, a same-day, less expensive test can identify abnormal fetal chromosomes.

Human Development



CURRENT ACTIVITIES

NICHD leads the birth defects portion of the Gabriella Miller Kids First Pediatric Research Program at NIH, to help researchers uncover new insights into the biology of structural birth defects and share these data.

In a mouse study, researchers have identified compounds that temporarily inhibit sperm mobility, which could lead to an on-demand, non-hormonal, short-term contraceptive for men.

Reproductive Health



The Centers to Advance Research in Endometriosis support basic, translational, and clinical studies of endometriosis, a chronic painful condition affecting 1 in 10 women of reproductive age.

New, non-invasive imaging tool maps uterine contractions during labor. Tool has the potential to assist with preterm birth, labor management and clinical decision-making.

Maternal Health

The Global Network for Women's and Children's Health Research is dedicated to improving maternal and child health outcomes worldwide and building health research capacity in resource-poor settings.

With data from studies conducted under the Best Pharmaceuticals for Children Act, FDA labels for diazepam and clindamycin now include better information on recommended usage and dosage in pediatric populations.





The Maternal and Pediatric Precision in Therapeutics (MPRINT) Program supports therapeutics-focused research in obstetrics, lactation, and pediatrics while enhancing inclusion of people with disabilities.

Early diagnosis and intervention can help children with autism spectrum disorder (ASD). A new app-based method could improve the accuracy of autism screening in primary care settings.

Optimizing Abilities for All



Supported by NICHD's National Center for Medical Rehabilitation Research (NCMRR), the Medical Rehabilitation Research Resource (MR3) Network builds infrastructure, focusing on tissue engineering, pediatric rehabilitation, technology development, and neuromodulation.

RESEARCH HIGHLIGHTS



















- "Eat, Sleep, Console" reduces hospital stay and need for medication among opioid-exposed infants.
- A second brain receptor abnormality was identified in tissue from sudden infant death syndrome (SIDS) cases.
- Commonly-used drug in infants undergoing cardiac surgery does not improve outcomes, and has side effects
- "Prosthetic Limb Users Survey of Mobility" taps prosthesis users' perspectives to understand mobility challenges and guide care.
- Noninvasive treatment safely enables upright posture in children with spinal cord injury.
- Placental examinations can improve researchers' and providers' efforts to identify cause of death in stillbirth.
- An MRI technique administered as early as the 14th week of pregnancy may predict impaired fetal growth.
- Fortified human milk may promote preterm infant growth.

NEW AND FUTURE INITIATIVES





- Reconvening the Task Force on Research Specific to Pregnant Women and Lactating Women (PRGLAC) to monitor and report on the implementation of its recommendations to promote inclusion of pregnant and lactating people in clinical trials
- Continuing the Stillbirth Working Group of Council to examine data collection/epidemiology, prevention, and psychological impact of stillbirth
- Establishing new specialized centers for research on health disparities in uterine fibroids
- Understanding and mitigating health disparities experienced by people with disabilities caused by
- Advancing our knowledge of human milk and lactation
- · Addressing the impact of climate change on health and well-being over the life course

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