The Eunice Kennedy Shriver National Institute of Child Health and Human Development (NICHD) is committed to supporting research in neuroscience, particularly as it affects developing systems and rehabilitation. The institute funds multidisciplinary basic, clinical, and behavioral research in this arena.

Learn more about NICHD’s support of neuroscience research through the NICHD Neuroscience Research Support website: https://www.nichd.nih.gov/neuroscience.
Child Development and Behavior Branch

• Developmental pathways that lead to normal and at-risk brain development and behaviors and the underlying mechanisms of these pathways at the molecular, cellular, and network levels.
• Innovations in neuromodulation for studying structure, function, and connectivity in vivo and development.
• Neural basis of cognition, language, executive function, math, learning, memory, pain, sleep, sensory, motor, and perceptual development, and the integration of these systems in the development of behavior.
• Screening, diagnosis, and treatment of disabilities that affect learning, school performance, and general well-being.

Contact: Dr. Armanda Price • (301) 827-4307 • Armanda.Price@nih.gov

Developmental and Behavioral Biology Branch

• Normal and abnormal development of the central and peripheral nervous systems, including neural tube formation/defects.
• Neurogenesis, cell migration, differentiation, axon guidance, synapse formation, neural crest, and the role of growth and other trophic factors in neural development.
• Blood–brain barrier formation/defects.
• Neurodevelopmental teratogens.
• Cellular, molecular, and biophysical mechanisms underlying neural development.
• Multidisciplinary approaches including, but not limited to, human and animal models, genetics, genomics, and molecular and cellular biology.

Fertility and Infertility Branch

• Neuroendocrine control of reproduction, including the cellular and molecular mechanisms and network pathways within the brain that regulate the hypothalamic–pituitary–ovarian, hypothalamic–pituitary–testicular, and hypothalamic–pituitary–adrenal axes.
• Genetic and epigenetic bases of diseases and disorders of central origin that impact reproduction.
• Neural regulation of reproductive behavior, sexual function, and differentiation.

Contact: Dr. Deborah H. Herlin • (301) 496-5541 • Deborah.Herlin@nih.gov

Gynecologic Health and Disease Branch

• Role of central neural mechanisms and parallel innervation in the development and treatment of gynecologic pain syndromes, including chronic pelvic pain.
• Fetal, genetic, and other factors that affect the development of preterm birth, preeclampsia, and intrauterine growth restriction.
• Fetal and uterine blood flow.

Contact: Dr. Heleen Ahr • (301) 827-1207 • Heleen.Ahr@nih.gov

Obstetric and Pediatric Pharmacology and Therapeutics Branch

• Clinical trials, including pharmacokinetic/pharmacodynamic studies, of drugs for fertility and for the developmental and psychopharmacological treatment of pediatric and obstetric patients.
• Faculty of drug neurotoxicity.
• Drug disposition, neurotoxicity, and other adverse drug effects.
• Molecular and cellular mechanisms of drug effects on neurotransmitters, drug transporters, and the immune system.
• Neuroprotective agents and biomarkers.
• Pharmacogenomic, proteomic, and imaging approaches and in vivo, vitro, and animal models.
• Neurodevelopmental outcome measures, particularly in neonates and at-risk children.

Contact: Dr. Zhasmina Ren • (301) 402-9340 • Zhasmina.Ren@nih.gov

Neuroscience Research Support at NICHD

• Epidemiology, clinical diagnosis, clinical manifestations, transmission, treatment, and prevention of HIV, including neurologic complications in infants and children, and the role of antiretroviral therapy in domestic and international settings.
• Neurological and psychiatric effects of HIV and associated co-infections, as well as other infectious diseases, such as Zika virus, syphilis, tuberculosis, hepatitis, malaria, and COVID-19.
• Interactions between infectious agents, genetic, brain, and behavior including multidisciplinary, basic science, imaging, and assessment studies.
• Neuro-related outcomes of drugs for treating HIV and its co-infections, including the pharmacokinetic–pharmacodynamic interface between the central nervous system and the immune system.
• Neurologic and psychiatric outcomes and neurotoxicity of treatment drugs.
• Evaluation, assessment, and monitoring of emerging and re-emerging infectious diseases in utero that affect the neonate/infant/child impact on the pediatric nervous system.
• Characterization of HIV reservoirs and persistence, and pursuit of potential strategies for HIV care/education in infants and children.

Contact: Dr. Sonta Lee • (301) 594-4763 • Sonta.Lee@nih.gov

Pediatric Trauma and Critical Illness Branch

• Pediatric neurocritical care, resuscitation, and rehabilitation.
• Development and refinement of strategies to prevent and treat acute brain injuries, including development of novel treatment modalities, assessment of treatments and outcomes, and validation of outcomes.
• Development and refinement of devices and technologies to improve function, including rehabilitation devices, assistive technologies, and neuromodulation devices.
• Neuroprotective agents and biomarkers.
• Rehabilitation and neuroprotection for cancer and viral infections.

Contact: Dr. Bettina Bulbring • (301) 827-8262 • Bettina.Bulbring@nih.gov

Pediatric Growth and Nutrition Branch

• Clinical trials, including pharmacokinetic/pharmacodynamic studies, of drugs for fertility and for the developmental and psychopharmacological treatment of pediatric and obstetric patients.
• Faculty of drug neurotoxicity.
• Drug disposition, neurotoxicity, and other adverse drug effects.
• Molecular and cellular mechanisms of drug effects on neurotransmitters, drug transporters, and the immune system.
• Neuroprotective agents and biomarkers.
• Pharmacogenomic, proteomic, and imaging approaches and in vivo, vitro, and animal models.
• Neurodevelopmental outcome measures, particularly in neonates and at-risk children.

Contact: Dr. Kazem Nouri • (301) 402-9340 • Kazem.Nouri@nih.gov

Research Training

• Training and career development opportunities in the neuroscience field that correspond with NICHD research priorities.

Contact: Dr. Dennis Trauer • (301) 451-3371 • Dtrauer@mail.nih.gov


gastrointestinal function, connectivity, and overall brain developmental trajectories.
• Neuroprotection.
• Effect of early-life experiences on brain development.

Contact: Dr. Karen Wu • (301) 496-8877 • Karen.Wu@nih.gov

Neuroendocrinology

• Sexual dimorphism of the nervous system.

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