Concept Clearance: Reissue of RFAs OD-23-019 and OD-23-020, Maximizing the Scientific Value of Data Generated by the Environmental influences on Child Health Outcomes (ECHO) Program (R36/F32)

## **Background**

In its initial 7-year funding cycle, the Environmental influences on Child Health Outcomes (ECHO) Program harmonized longitudinal data from more than 107,000 maternal and child participants from 69 U.S. cohorts examining early exposures and child health outcomes. Combining data across studies into a single cohort has enabled power for addressing important child health research questions and increased generalizability of findings. Prenatal and child exposure data include natural and built environments, and physical, chemical, social, behavioral, and biological factors. ECHO's five pediatric outcome areas are pre-, peri-, and postnatal outcomes, upper and lower airway, obesity, neurodevelopment, and positive health. The ECHO Cohort is now in its 2<sup>nd</sup> 7-year cycle, which is following 30,000 continuing children, recruiting 30,000 new pregnancies, and adding a preconception phase.

Harmonized, de-identified data from over 63,000 participants are now available through the NICHD Data and Specimen Hub (DASH). ECHO's Data Analysis Center deposits new data at regular intervals. DASH is a centralized resource that allows researchers to access data from ECHO and other studies via a controlled-access mechanism. A key goal of the ECHO Program is to catalyze research using this accessible resource by the broader scientific community, especially among emerging researchers not supported by the ECHO Program. These data provide an exceptional opportunity for training early investigators pursuing research on child health outcomes by enabling use of a large longitudinal data set. The ECHO Program released two RFAs in 2023 (RFAs OD-23-019 and OD-23-020) to fund dissertation students and postdoctoral fellows to access and analyze ECHO DASH data in conducting maternal and child health research. The response to these opportunities was very good, and ECHO made six awards to highly talented students and fellows.

## Objective

This concept proposes to reissue RFAs OD-23-019 and OD-23-020 to advance research and training in high-priority areas of child health outcomes by stimulating the use of ECHO data broadly by investigator trainees of relevant scientific areas.

Proposed funding opportunities for FYs 2026 - 2028 are:

- 1) Maximizing the Scientific Value of Data Generated by the Environmental influences on Child Health Outcomes (ECHO) Program: Dissertation Grant (R36)
- Maximizing the Scientific Value of Data Generated by the Environmental Influences on Child Health Outcomes (ECHO) Program: Ruth L. Kirschstein National Research Service Award (NRSA) Individual Postdoctoral Fellowship (F32)

**Funds Available:** The ECHO program plans to commit ~\$1,260,000 total costs over FYs 2026–2028 for up to 8 two- to three-year awards and will invite other NIH ICOs to contribute additional funds.

Award Mechanisms: R36 Dissertation Grant, and F32 Individual Postdoctoral Fellowship Award

Award Project Period: 2 years (R36) / 3 years (F32)

**Anticipated Timeline:** ECHO anticipates publishing two NOFOs in January 2025 for funding that will start in October 2025.