Children’s Environmental Health Sciences
Pilot Grants Available

The Center for Children’s Health, the Environment, the Microbiome, and Metabolomics (C-CHEM²) (NIEHS: P50ES026071 / EPA:83615301) is pleased to announce the 2019 Pilot Project Program in Children’s Environmental Health Sciences. A major focus of C-CHEM² is to investigate the interrelationships of components of the prenatal and postnatal environment of the fetus and child and their impacts on birth outcomes, the infant microbiome, and neurodevelopment. Pilot projects must focus on the role of the environment in maternal and or child health, and may include basic (cellular and animal), biomedical, translational, clinical, epidemiological, or behavioral projects, e.g., studies on specific environmental toxicants, gene-environment interactions, or social determinants. The primary purpose of the Pilot Project Program is to position early investigators to apply for future NIEHS and EPA funding.

Applications that propose to utilize one or more of the HERCULES Facility Cores are encouraged. Applicants planning to use a HERCULES Core are required to consult with Core members regarding feasibility and costs before submitting a full application. Applicable Core consultation meeting times will be provided upon receipt of a letter of intent.

- **Environmental Health Data Sciences:** Expertise in mathematical modeling and systems biology.
- **Targeted Exposure Analysis:** A unique suite of multiple types of mass spectrometers allows for measurement of any chemical in multiple biological matrices.
- **Metabolomics:** A standardized high-resolution protocol is used to obtain a global view of metabolism and environmental exposures.
- **Clinical/Population Research Services:** Expertise in translation of basic science concepts into practical clinical and population research designs.

Projects with translational relevance (clinical or population-based), community-based participatory research projects, and collaborative and interdisciplinary projects are particularly encouraged. See below for guidelines regarding CBPR projects.
Award Information and Eligibility

- Doctoral students may apply for up to $10,000.
- Post-doctoral trainees and research assistant professors may apply for up to $20,000.
- C-CHEM^2 will fund two awards at up to $10,000 and one award at up to $20,000.
- Performance period for all projects must be six months.
- Pilot awards are open to all doctoral students, post-doctoral, and research assistant professors at Emory who are eligible to serve as Principal Investigators on NIH R-level grant applications. Doctoral students not eligible to serve as PI on NIH R-level grants must include their advisor as a Co-Investigator on the application.
- Only one application per PI may be submitted.
- Applications must be focused on the role of the environment in maternal and or child health and disease.

Priority will be given to:

- Those seeking to expand their research programs into the field of children’s environmental health. The aim of the program is to allow investigators to gather pilot and/or feasibility data to support applications for future independent research funding from NIEHS or EPA.
- Projects conducted in the Atlanta metro area.
- Aligned with the focus of C-CHEM^2, which is to investigate the interrelationships of components of the prenatal and postnatal environment of the fetus and child and their impacts on birth outcomes, the infant microbiome, and neurodevelopment.

Applicants are encouraged to:

- Provide opportunities for community engagement and science translation.
- Align proposals with the aims of the three research projects below; however, basic science proposals are acceptable.
  - Project 1: Characterize environmental exposures of pregnant African American women and infants living in the Atlanta metro area.
  - Project 2: Characterize associations between environmental exposures, the infant microbiome, and infant neurodevelopment.
  - Project 3: Characterize metabolic pathways through which environmental exposures and the microbiome contribute to preterm birth and infant neurodevelopment.

Guidelines for Community-Based Participatory Research Projects

- Applications for community-engaged research projects designed to address the potential health risks of environmental exposures of concern to a local community are encouraged.
- Community members/partners are expected to participate meaningfully in the development of the research questions and research design, as well as study implementation (e.g., data collection), with resources shared (e.g., compensating
• The research team and community partner should plan to disseminate study results directly to the community.
• The C-CHEM² Community Outreach and Translation Core (COTC) can facilitate community-academic partnerships for CBPR applications. To consult with the COTC, contact Nathan Mutic at Nathan.mutic@emory.edu.
• All pilot application documents must be submitted through the Emory PI and are subject to the standard requirements of the Pilot Project Program.

Timeline
• December 1st 2018 at 5:00 PM Letter of Intent Due
  The letter should include a descriptive title of the proposed research, overall aim/hypothesis of proposed research, names of key personnel, and any anticipated use of HERCULES Facility Cores (Targeted Analysis, Metabolomics, Data Sciences, or Clinical/Population Research Services). Letters should not exceed one page.
• December 14th Notification of Decision
  Applicants will be notified if they are selected to submit a full application.
• January 18th 2019 5:00 PM Complete Application Due
  See required application components below.
• Decisions made by February 1st, 2019.
• Funding begins February 15th, 2019.
• Funding ends August 15th, 2019.

Required Application Components:
1. Cover Page
   o Include a paragraph summarizing the proposed research and its environmental health relevance.
   o Describe immediate or future relevance to local communities, if applicable.
   o Include a sentence explaining how the research will advance children’s environmental health.
2. Science Portion
   o 3 page maximum length, 11 point Arial, 1-inch margins
   o Include plans for future grant submission and how pilot funding will improve likelihood of success. For pre-doctoral students, describe how proposed pilot project is aligned with and/or supports career trajectory.
   o Include a sentence describing your consultation with C-CHEM² or HERCULES Facility Core(s) or investigators (including meeting date and attendees), if applicable.
   o References and cover page are not included in the page count.
3. NIH Format Biosketch
4. Full NIH Format budget & justification on PHS 398 form (pages fp4 and fp5)
   o Funding of up to $10,000 direct costs (doctoral), 20,000 (post-doctoral or research assistant professor) may be requested. Indirect costs are not permitted.
Indirect costs should not be included in budget.
Salary support up to a maximum of 5% effort may be requested (combined effort of all participating investigators, NIH salary cap limit applies).
All federal and university rules and regulations regarding the administration of grants apply to these funds. Costs subject to CAS approval, such as computers, general purpose equipment, office supplies, etc., may not be budgeted. Any travel must follow Emory University travel policies and procedures.
Requests for equipment must be justified in the budget.

- Email a compiled electronic version (PDF) of the application to nathan.mutic@emory.edu. Include “CCHEMM PILOT APPLICATION” in the email subject line.

Awardee Requirements:

- Pilot awards are expected to lead to future funding. Awardees are required to keep the C-CHEM² Center Administrator informed of any funding related to the pilot project.
- Any resultant publications must cite funding from C-CHEM² and electronic copies of the publications should be provided to the C-CHEM² Center Administrator.
- By accepting a pilot award, the awardee agrees to participate in C-CHEM² activities (Retreats, Seminars, Data Clubs, Workshops, Advisory Board Meetings) and provide a brief written report at the end of the funding period. Awardees may be asked to present at the aforementioned activities.
- Awardees must supply the following IRB information, if relevant, to the C-CHEM² Center Administrator for approval before starting research: study team CITI certification, University IRB approval/exemption letter, Human Subjects Statement, and PHS Inclusion Form.
- A midpoint project report is due May 15th, 2019 and a final project update by August 23rd, 2019.

Contact Information

- For questions, contact Nathan Mutic nathan.mutic@emory.edu or Dr. P. Barry Ryan bryan@emory.edu.