



Center for Environmental Health and Susceptibility (CEHS) Pilot Projects Program 2023-2024

GUIDELINES FOR PROPOSALS

LETTER OF INTENT: October 14, 2022 – Not required for application submission

PROPOSAL DEADLINE: November 7, 2022

The UNC Center on Environmental Health and Susceptibility (CEHS) announces the availability of funding for pilot projects to:

- Support novel translational and interdisciplinary research relevant to environmental health
- Support junior investigators and attract experienced investigators that are new to environmental health
- Integrate the UNC research community with CEHS cores and services

A separate RFA will be released in the coming weeks to support Environmental Justice and Community Based research proposals.

The CEHS Pilot Projects Program accepts applications for two types of projects: 1) single investigator, with awards of up to five grants of up to \$25,000 each, 2) interdisciplinary team science, with awards of up to two grants of up to \$50,000 each. Investigators that propose a Community Engagement component to a single investigator or team science award can receive a supplement of up to \$10,000.

ELIGIBILITY: Any member of the UNC Chapel Hill faculty is eligible to apply. Postdoctoral fellows are also eligible for Single Investigator awards if they have a collaborating CEHS center member as a Co-PI.

LETTER OF INTENT: Although not required, applicants may complete the online Letter of Intent form by October 14, 2022. (<http://bit.do/CEHS-Letter-of-Intent>). Completing a LOI allows us to pre-screen applications for fit to mission, connect applicants with core facilities as needed, and expedite the selection of relevant external scientific reviewers, to facilitate a rapid roll out of awards.

INTERDISCIPLINARY TEAM SCIENCE OR SINGLE INVESTIGATOR: Applicants must indicate whether they are applying as a single investigator, up to \$25,000 award, or as an interdisciplinary team, up to \$50,000. Interdisciplinary Team science applications must support exploration of innovative ideas from interdisciplinary research teams interested in the complex interactions between the environment and the pathogenesis of human disease. The interdisciplinary research team must include meaningful collaboration between basic, population, and clinical scientists.

CEHS RESEARCH FOCUS AREAS / NIEHS Priorities: Responsive applications will focus on one of the CEHS research focus areas: cardiopulmonary disease, developmental disease, or environmental cancer, however methods development may be acceptable for a single investigator award. Competitive applications will propose research relevant to the National Institutes of Environmental Health Sciences Strategic Plan (<https://www.niehs.nih.gov/about/strategicplan/index.cfm>), and describe goals for submission of an R-scale application to NIEHS.

This cycle, the CEHS is particularly interested in novel projects related to **spatial or geographic approaches to understanding environmental health questions and novel data science approaches to address environmental health.**

USE OF HUMAN SUBJECTS AND ANIMALS: Selected projects using human or animal subjects are required to submit a copy of the IRB or IACUC approval letter covering the pilot. Even if your project is covered under an existing/active IRB, we need a letter of approval stating such. Human subject studies are also required to complete the NIH Human Subjects and Clinical Trials form. Funds cannot be allocated until appropriate approvals are in place.

GENERATING ADDITIONAL GRANT PROPOSALS: CEHS pilot grants are seed money. It is expected that ALL pilot projects will generate preliminary data that will lead to new grant proposals, especially proposals to the National Institute of Environmental Health Sciences. All successful applications will clearly articulate specific plans for extramural funding applications. Funding for CEHS pilot grants is made possible by support from the National Institute of Environmental Health Sciences (NIEHS): P30ES010126.

USE AND SUPPORT FROM CEHS CORE FACILITIES: Following preliminary funding decisions, finalists will be **required** to meet with one or more of the CEHS Facility Core or sub-core directors for review of relevant research components. If investigators are proposing to use facility cores as a part of their pilot project, we strongly recommend that they engage core directors early in their application process in order to optimize research methodology and budget information respectively. Pilot projects are required to use at least one CEHS core as a part of their pilot.

CEHS Facility Cores or Sub-Cores can be found here: (<http://sph.unc.edu/cehs/facility-cores/>).

1. **Integrative Health Sciences Core (IHSFC)** - Director Hazel Nichols, hbn@email.unc.edu
2. **Molecular Analysis and Statistical Support Core (MASS)** - Co-Directors Kun Lu, kunlu@unc.edu (Molecular Analysis) and Haibo Zhou, zhou@bios.unc.edu (Biostatistics)
3. **Community Engagement Core** - Director Kathleen Gray, kmgray@email.unc.edu

FUNDING, ALLOWABLE ITEMS, AND BUDGET: The budget and budget justification must be detailed and should follow the format of the current NIH Budget and Budget Justification pages. Funding will be permitted for personnel, supplies, and some types of equipment. For personnel, the appropriate cost for fringe benefits should be included – [UNC current fringe rates](#). Health insurance for permanent staff and Graduate Research Assistants (GRA) should also be included (current health insurance rates apply; please check with the business office of the corresponding department to confirm the appropriate rates in effect at the time of this submission). If a GRA is hired, the PI should decide if the tuition award cost will be included in the budget (**and is consistent with the PI's departmental guidelines**). In general, the CEHS does not support faculty salaries as a component of the pilot project. The Center does not fund clinical trial research, so proposals involving clinical trials should not be submitted. For funded proposals, budget changes must be requested in writing. **Any deviations from these budget guidelines require approval prior to submission. The project and budget period will be from March 1, 2023 to February 28, 2024. All projects must be completed by February 28, 2024. PI requests for carryover funds are discouraged.**

APPLICATION FORMAT: We have substantially revised our format to limit investigator and reviewer burden. Review criteria will emphasize the significance of the problem and the potential for future NIEHS funding. We recommend providing enough information on scientific approach so that reviewers understand how the project will be implemented, but details are not required. Page limits below are recommended.

Please submit:

- Application Cover Page. If an MPI application, designate the contact PI.
- Abstract (180 words)
- Proposal – ~3 pages
 - Aims (0.5 page)
 - Significance & Innovation (0.5 page)
 - Scientific Approach (1-1.5 pages)
 - Next steps in future NIEHS funding (2-3 sentences)
- References
- Budget
- Budget justification
- Support letter from CEHS Facility Core
- PI and Co-investigator biosketches

*Proposal text should not exceed 3 pages, single spaced, using Arial 11-point font, and half-inch margins.

APPLICATION SUBMISSION: Applicants should submit a single PDF file. The file should be sent as an email attachment to the CEHS Associate Director, Michael Sanderson, sanderson@unc.edu. Applications are due by November 7, 2022.

The CEHS Internal Advisory Committee will make final decisions and select proposals for funding in January 2023. Selected projects will be funded effective March 1, 2023.

APPLICATION REVIEW CRITERIA:

Each application will be part of a two-tier review system. The two-step review process will include:

1) Evaluation by external reviewers

Significance/Innovation:

- Is the environmental problem identified important and address a critical barrier to progress in environmental health sciences?
- Will the proposed scientific project advance scientific knowledge, or technical capabilities?
- Are methods and approaches novel or unique?

Likelihood of future NIEHS funding:

- Is the proposal likely to generate data that will support a competitive R-scale application to NIEHS
- Is the topic relevant to the NIEHS Strategic Plan

Scientific approach:

- Is the study design appropriate and are the methods scientifically rigorous?
- Can the project be accomplished within a 1 year time frame?

Overall score:

- Considering all these factors rate the project overall on an NIH scale of 1-9 (1 being best).

2) Evaluation by the CEHS Internal Advisory Committee for relevance to the Center's mission and priorities. Step 2 criteria includes –

Principal Investigator:

- The degree to which the PI (UNC faculty) is a junior researcher or inexperienced in environmental exposure research.
- The degree to which the PI has received previous CEHS funding and the results of the funding.

Future Funding:

- The degree to which the proposal will likely be developed into a full NIEHS application within the next 2-3 years.

CEHS Mission:

- The degree to which the proposal utilizes one or more CEHS facility cores
- The degree to which the proposal demonstrates an ability to improve public health **in North Carolina**

CEHS PARTNERS – OTHER RESOURCES AND OPPORTUNITIES: The Center for Environmental Health and Susceptibility has several partnerships across the UNC campus interested in sharing resources and possibly matching CEHS research funds. While not required, applicants may benefit from these resources:

The following centers/units have historically participated in **grant matching** with the CEHS. Please indicate in your application if you have an affiliation with these or other university centers –

- [UNC TraCS](#) - Proposals related to translation of research to clinical practice
- [NC Policy Collaboratory](#) – Proposals addressing North Carolina Environmental issues
- [UNC Lineberger Cancer Center – Proposals addressing cancer research](#)
- [UNC Intellectual and Developmental Disabilities Research Center \(IDDRC\)](#)
- [UNC Bioinformatics and Analytics Research Collaborative \(BARC\)](#)

Please review the eligibility requirements for those listed below to see if your application is eligible.

CEHS CONTACTS:

For more information on programmatic fit and funding priorities for the CEHS, please contact Michael Sanderson, CEHS Associate Director for Administration at sanderson@unc.edu



Center for Environmental Health and Susceptibility (CEHS)

Pilot Projects Program 2023-2024

APPLICATION COVER PAGE - Applications due November 7, 2022

Project type <i>(circle one)</i>	Single Investigator or Team Science
Primary Focus Area <i>(circle one)</i>	Cardiopulmonary Disease, Developmental Disease, or Environmental Cancer

Project Title	
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Principal Investigator Name	
Title/Academic Rank	
Department/School	
E-mail address	
Telephone number	

Co-Investigator's Name	
Title/Academic Rank	
Department/School	
E-mail address	

Are Human Subjects Involved?	Yes or No <i>(circle one)</i>
Are Vertebrate Animals Used?	Yes or No <i>(circle one)</i>

Names and Departments of Co-Investigators - (Last name, First name, Academic Rank, Department)

Please describe interdisciplinary collaborations included in this application (required for team science applications)

Is PI or other project investigator affiliated with any of the below Centers/Units? Please check all that apply.
<input type="checkbox"/> Lineberger Comprehensive Cancer Center -LCCC
<input type="checkbox"/> Intellectual and Developmental Disability Research Center- IDDRC
<input type="checkbox"/> NC Policy Collaboratory
<input type="checkbox"/> UNC TraCS
<input type="checkbox"/> Other, specify _____

Please identify three potential reviewers: (Last name, first name, agency, email address, phone number)