REACH Center Call for Proposals

The Research and Engagement for Action on Climate and Health (REACH) Center is pleased to announce its inaugural annual seed research grant competition. This year we will make available \$80,000 for seed grants, and will fund multiple grants of \$20,000-40,000 in total costs.

The REACH Center is a multi-institutional partnership between George Washington University, George Mason University, Howard University, and Environmental Defense Fund. The mission of the REACH Center is to bridge big data to climate solutions that advance health and environmental justice. Specifically, the Center leverages the power of novel geospatial datasets and research co-generation with governmental and nongovernmental partners to research health and equity impacts of climate change mitigation and adaptation actions from local to global scales. The Center offers unique contributions to climate change and health research, which are aligned with the NIH Climate Change and Human Health Strategic Framework:

- Health effects research, including discovery and applied research in multiple climate-health exposure pathways, producing new knowledge of how climate change influences infectious and non-communicable disease and how these associations are affected by mitigation and adaptation strategies.
- Evaluation of health equity outcomes associated with climate change.
- <u>Intervention research</u>, with a primary focus on broad-scale climate solutions through
 policies and other institutional actions that can reduce exposure and protect public
 health from climate-sensitive hazards.

The goal of the seed grant program is to build capacity so that a new cohort of researchers and community partners will have the skills, connections, and research agendas to apply for National Institutes of Health R-level research grants in these topical areas while also targeting effective interventions to advance health equity and environmental justice.

Who Should Apply?

REACH pilot awards are open to multidisciplinary teams led by PI-eligible investigators at George Washington, Howard, and George Mason universities. Teams should be composed of at least two researchers who contribute distinct methods, frameworks, or expertise, in addition to at least one community partner. Cross-institutional collaboration is encouraged. While the overall project should focus on climate change and health, individual team members can bring specific skill sets to the project from such diverse fields as Earth and atmospheric sciences, public health, environmental health, medicine, public policy, engineering, and social sciences. We particularly encourage applications from early-stage investigators and investigators from gender, racial, and ethnic groups which are underrepresented in the climate and health research field.

This pilot grant opportunity is intended to lead to community-engaged research proposals. Community partners may be local, state, or national governments; community-based

organizations; and/or other non-academic end-users of scientific research. Proposals may be submitted under one of two community engagement tracks as described below.

What Kinds of Projects Will Be Funded?

Track 1: Research Projects (up to \$40,000)

Proposals in this track should come from teams of researchers and one or more community partners that have a history of working together. The research project should be responsive to questions and concerns defined by community partners and employ environmental and/or health data (e.g. geospatial data from Earth system models, statistical models, satellite observations, sensor networks, wearable sensors, etc.) to explore the human and environmental health impacts of climate change and climate solutions. Projects must have a connection to potential, proposed, or implemented climate solutions. Examples of the kind of research we are looking for include, but are not limited to: (1) climate, health, and equity benefits of greenhouse gas mitigation and adaptation actions, such as active transportation schemes, energy efficiency retrofits, improved electrical grid reliability, vehicle or building electrification, climate-friendly agriculture practices, and expanding urban greenspace; (2) climate change adaptation responses for health systems to reduce mortality and morbidity outcomes; and (3) community-led projects that identify health concerns related to climate change. Geographical scope could range from community scale to national and international. Projects should be responsive to NIH research priorities (research priorities of NIEHS) and should plan to generate data for competitive R-level applications. Clinical trial activities, as defined by NIH, are not allowed.

Research approaches could include:

- <u>Discovery research</u>: Discovery research, including Epidemiology, to establish the
 evidence for cause and effect that can then be extended to investigate how mitigation
 and adaptation actions can reduce health damages and improve community resilience.
- Applied quantitative research: Applications of geospatial datasets to generate new knowledge about how health outcomes and inequity could be affected by mitigation and adaptation actions, using methods such as Data Integration and Exposure and Risk Assessment.
- <u>Mixed quantitative-qualitative methods</u>: Exploring how geospatial datasets can be used to understand: (1) the degree to which quantitative estimates of health damages and benefits from actions play a role in driving decision-making to mitigate climate change and adapt to it; and (2) approaches for effectively communicating about the health consequences of climate change to enable people to take informed action.

For Track 1 proposals, community partners are expected to co-create the research questions to ensure that they reflect community concerns, and participate in study implementation (this could include data collection, development of deliverables, dissemination of results, research translation, etc.).

Track 2: Partnership-Building Projects (up to \$20,000)

Proposals in this category should come from researcher/community partner teams that have not yet established strong relationships, and/or do not have a history of working together. Partnership-building projects should focus on strengthening relationships between researchers and community partners and co-creating a research agenda responsive to community priorities or concerns that can form the basis for future research proposals that will explore potential, proposed, or implemented climate solutions; include application of environmental and/or health data; and be focused on issues related to NIH research priorities (research priorities of NIEHS). Projects may include activities such as building research infrastructure, providing learning opportunities for team members, conducting outreach, or capacity-building. The aim is to lay the groundwork for productive and equitable partnerships spanning multiple sectors wherein researchers and community partners understand their mutual research needs.

Application Process and Deadlines

Deadline	Submission
December 1, 2024 5 PM EST	1-page Letter of Intent
January 15, 2025 5 PM EST	Full Proposal
February 15, 2025	Decisions announced
March 1, 2025	Project start date

One-Page Letter of Intent (11pt Arial, 1 inch margins)

Each team of applicants should submit a one-page letter of intent. This letter should include:

- Project title
- Identification of whether submission will be under Track 1 or Track 2
- Names, affiliations, and contact information of the lead PI and co-PIs, community partner, and other participants
- Concise summary of the research project, including the problem to be addressed and the type of data and analysis used to further the search for solutions. What existing community need will the project address and how will it do that?
- Any missing components that the research team would like help filling. For example, if the research team has not yet identified community partners, we can help identify potential partners.

Please submit the one-page letter of intent by December 1, 2024 5pm EST to Rachel Clark at rachelclark@gwu.edu.

Full Proposal (11 pt Arial font, 1 inch margins)

- 1. Cover page (1 page maximum)
 - a. Project Title
 - b. Track Number
 - Participants: List all project participants and their role(s) on the project (at least two researchers from different disciplines and, for Track 1 proposals, at least one community partner)
 - d. Abstract of the research project written in lay language that can be understood by the general public

2. Science Proposal

- a. Track 1 (5 page maximum)
 - i. Identify the community partner and describe the history of collaboration between the community partner and the research team.
 - ii. Describe what community concern the research question is responsive to, how that concern was identified, how community partners contributed to the development of the research questions, how community partners will participate in study implementation (this could include data collection, development of deliverables, dissemination of results, research translation, etc.), and the plan for communicating project results to community members.
 - iii. Proposals must describe how the research will add to the climate and health literature and how the proposed approach deploys innovative methods to fill identified knowledge gaps.
 - iv. Applications should describe the kinds of climate-focused and health data that they will work with in their application, showing the linkages between climate change solutions and health outcomes.
 - v. Proposals must identify a climate solution that they will study.
- b. Track 2: (3 pages maximum)
 - i. Identify the community partner and describe prior collaboration between the community partner and the research team (if applicable).
 - ii. Describe how the project team will strengthen the relationship between the researchers and community partner during the grant period, including a description of how the research team will collaborate with the partner to identify and understand their mutual research needs, shape a clear research question, and develop community engagement strategies.
 - iii. Describe how the partnership will benefit both the research and the anticipated groups interested in or potentially affected by the research
 - iv. Where possible, explain how the project will add to the climate and health literature, work with data, and analyze a climate solution.
- 3. References (no page limit)
 - a. Include references cited in the Science Proposal using standard citation format.
- 4. Future plans for NIH grant submission (400 words maximum)
 - a. Explain how the project will prepare the research team to apply for a future NIH grant submission, and provide a timeline for when the submission will take place.
- 5. NIH biosketch of PI and all academic co-investigators

- 6. Proposed budget and budget justification
 - a. Track 1 proposals may request up to \$40,000; Track 2 proposals may request up to \$20,000.
 - b. Indirect costs are not allowed.
 - c. It is expected that the project budget will be developed collaboratively by the researchers and community partner(s) and will support the effort and expenses of the community partner(s).
- 7. A Letter of Commitment from the community partner, describing the value of the project to the community and the role the partner will play in the proposed project.

Application Submission and Deadline

Please submit the full proposal in one PDF file by January 15, 2025 5pm EST to Rachel Clark at rachelclark@qwu.edu. Decisions will be announced by February 15, 2025.

Scoring Criteria

Applications will be scored by the REACH Developmental Score Committee based on following criteria: (1) innovation (20%); (2) research approach (40%); (3) project team (10%); (4) significance (10%); and (5) potential for leading to a subsequent successful grant application (20%).

Awardee Requirements

- Pilot awards are expected to lead to R-level NIH funding, including with NIEHS and any
 other NIH Institutes and Centers participating in NOT-ES-22-006 Notice of Special
 Interest (NOSI): Climate Change and Health. Awardees are required to keep the REACH
 Center informed of any funding related to the pilot project.
- Any resultant publications must cite funding from REACH (NIH grant #P20ES036775-01). Awardees must follow NIH guidelines for depositing the manuscript in PubMed Central. An electronic copy of all publications should be provided to the REACH Center.
- Awardees automatically become members of the REACH Center and are expected to
 participate in REACH activities (seminars, workshops and trainings, journal club,
 networking events, and scientific working groups, if applicable). Awardees will be asked
 to present their research-in-progress at a REACH event at least once during the project
 period. As REACH Members, awardees are also invited to take advantage of REACH
 resources, including assistance in grant preparation and career development activities.
- Awardees must supply the following IRB information, if relevant, to the REACH Center Administrator for approval by NIEHS prior to release of funds: study team CITI certification, University IRB approval/exemption letter, Human Subjects Statement, and PHS Inclusion Form and any other NIH requirements, including access to data.
- With guidance from the Developmental Core, each awardee is required to draft a plain language summary of the proposed research for the REACH website.
- Awardees must draft a Data Sharing Plan, where applicable.

 A midpoint project report is due 30 days following the midpoint of the grant funding period and a final project update within 30 days following the completion of the grant funding period. Additional follow-up reports and a presentation of pilot results will also be required.

Resources

- NIH Climate Change and Health Initiative
- NIH Climate Change and Health Initiative Funding Opportunities
- NIH Climate Change and Health Strategic Framework
- REACH Center <u>overview</u>, <u>Developmental Core</u>, <u>Exposure Assessment Core</u>, <u>Community Engagement Core</u>, <u>Research Project 1</u>, and <u>Research Project 2</u>
- CAFÉ Research Coordinating Center at Boston University and Harvard University

Questions?

If you have one or more components of a proposal, but are missing other bits and pieces, we are here to help! REACH Center staff will be happy to assist you in preparing a full proposal. Please contact Robert Orttung (rorttung@gwu.edu) or Rachel Clark (rachelclark@gwu.edu) with any questions.