

NSF 24-013

Dear Colleague Letter: Capacity Building to Catalyze Collaborations to Address Climate Change Impacts on Human Health (C2H2)

October 16, 2023

Dear Colleagues:

This Dear Colleague Letter (DCL) encourages submission of proposals and supplemental funding requests focused on addressing the serious issue of the human health impacts resulting from climate change and downstream impacts from climate mitigation strategies. Tackling climate change-related human health issues has been identified as a priority by the scientific community¹. Participating entities in this DCL are the National Science Foundation's (NSF) Directorate for Geosciences (GEO); the Directorate for Social, Behavioral, and Economic Sciences (SBE); and, in the Directorate for STEM Education (EDU), the Centers of Research Excellence in Science and Technology (CREST) and the Tribal Colleges and Universities (TCUP) Programs.

Due to the increased incidence of human health issues driven by climate change GEO, SBE, and the EDU CREST and TCUP Programs, using the funding vehicles below, seek to foster interdisciplinary teams and approaches that strengthen communication and collaboration across and between their scientific communities and with those in the health sector as well as with local communities and other key stakeholders. Interested researchers are encouraged to include participants reflecting the full spectrum of diverse talent in STEM and engage those underserved by current geoscience research and/or medical science, as well as communities most vulnerable to climate change impacts.

GEO, SBE and the EDU TCUP Program invite submission of the following types of opportunities that respond to the climate change and human health focus of this DCL. In addition the EDU CREST and TCUP Programs encourage submission of proposals in response to this DCL topic. Proposals and supplemental funding requests must be prepared and submitted in accordance with the guidelines contained in the *NSF Proposal & Award Policies & Procedures Guide* (PAPPG) and the relevant program solicitation, if applicable. To

submit a responsive request for the following opportunities indicated below, please see the C2H2 Opportunity Submission Instructions section at the end of this DCL.

- Research Coordination Networks (RCNs) proposals to develop networks that involve geoscientists, health/medical professionals, social/behavioral/economic scientists, educators, and can include impacted communities, and other stakeholders. These networks advance research or education through discussion and coordination of research, training, and educational activities across disciplinary and organizational boundaries. They facilitate understanding across disciplines and the development of novel ideas for collaboration, networking, and information exchange on challenges, solutions, and data. Find more information on the RCN program and solicitation on the RCN program page.
- Early-concept Grants for Exploratory Research (EAGER) proposals responding to this DCL support novel and transformative ideas from a team involving geoscientists and/or social/behavioral/economic scientists and human health/medical professionals for transformative exploratory projects addressing climate-triggered human health issues. Guidance on preparation of EAGER proposals is contained in PAPPG Chapter II.F.3.
- **GOALI Supplemental Funding Requests** responsive to this DCL are for GEO or SBE recipients to work with a biomedical or any other medical/health-related private sector entity on research of mutual interest. Guidance on preparation of GOALI supplemental funding requests is contained in PAPPG Chapter II.F.5.
- GeoHealth INTERN supplements provide opportunities for graduate students on GEO or SBE funded awards to work with a non-academic health or medical entity as described in the 2023 GeoHealth INTERN DCL.
- Centers of Research Excellence in Science and Technology (CREST) responsive to this DCL must enhance research capabilities in climate change and health at minority-serving institutions (MSIs) through the establishment of centers that effectively integrate education and research. Learn more about CREST Centers.
- Tribal Colleges and Universities Program (TCUP) increases instructional and discovery capacity in STEM fields that align with and support the emphases of this DCL coming from institutions of higher education that are eligible for TCUP support. Get more information on the TCUP Program.
- Conference Proposals led by geoscientists for meetings between geoscientists, health/medical professionals, social scientists, and/or affected communities. Preparation of conference proposals for identifying opportunities for advancing climate change impacts on human health should be guided by results from recent federal agency workshop reports, National Academies studies, reports from professional societies of geoscientists, and similar sources. Proposals should present new ideas and a vision for advancing convergent research on specific climate-related health topic(s) and on activities to catalyze collaborations between parties that advance use-inspired research

- with high potential for significant human health impacts. Guidance on preparation of Conference proposals is contained in PAPPG Chapter II.F.9.
- Planning Proposals from geoscientists or social/behavioral/economic scientists to support initial conceptualization, planning, and collaboration activities related to climate change impacts on human health with the goal of formulating new, robust plans for large-scale projects in current and emerging research areas responsive to this DCL for future submission to NSF. Guidance on preparation of planning proposals is contained in PAPPG Chapter II.F.1.
- Supplemental Funding Requests to existing NSF GEO or SBE awards for PIs wanting to further develop a component of human health related to their parent award that requires collaboration with medical or public health professionals.

C2H2 DCL OPPORTUNITY SUBMISSION INSTRUCTIONS

For those wishing to participate in the capacity building activities indicated above and in response to this DCL, the first step is to send an email to the NSF email address geohealth@nsf.gov containing a brief Concept Outline of the activity that includes the information below.

Concept Outline Content and Format

- 1. Opportunity of interest (see titles of opportunities in bold above).
- 2. Title
- 3. Most relevant Directorate one of the following GEO, SBE, EDU.
- 4. PI(s) name(s) and institutional affiliation, with lead PI listed first.
- 5. No more than one page description of the activity and its proposed implementation and goals, including brief mention of targeted groups, entities, and/or partners. For the below opportunities, please also include the following in the text of the email:
 - a. **RCN** Most appropriate GEO or SBE program to which the proposal is to be submitted, identification of targeted science and medical/health sectors/groups, and targeted medical/public health issue.
 - b. **EAGER** Most appropriate GEO or SBE program to which the proposal is to be submitted, identification of participants in the activity including those from the medical/health sector, and targeted medical/public health issue.
 - c. **GOALI** Parent award number, award end date, NSF award managing program director, targeted human health issue, and identity of public health/medical related private sector company.
 - d. **GeoHealth INTERN** Parent award number, award end date, NSF award managing program director, targeted human health issue, and identity of non-academic public health/medical host.
 - e. **CREST** Identification of institutions and participants in the activity including those from the medical/health sector and the targeted medical/public health issue.

- f. **TCUP** Identification of participants in the activity including those from the medical/health sector and the targeted medical/public health issue.
- g. **Conference** Most appropriate GEO or SBE program to which the proposal is to be submitted. Conference focus and goal/probable outcome, identification of participants in the activity including those from the medical/health sector, and the targeted medical/public health issue.
- h. **Planning Proposal** Most appropriate GEO or SBE program to which the proposal is to be submitted. Planning process goal in terms of future actions, identification of participants in the activity including those from the medical/health sector, and the targeted medical/public health issue.
- i. **Supplement to an active GEO or SBE award** Parent award number, award end date, award managing program officer, and identification of medical/public health collaborator(s).

Upon receipt, Concept Outlines submitted to the **geohealth@nsf.gov** email address will be distributed to the appropriate and/or targeted Programs/program officers. Prospective Pls will receive an email from the cognizant NSF program officer that specifies whether a full proposal or supplemental funding request may be submitted. Note: For EAGER and Planning proposals, the email confirming approval to submit must be uploaded in the "Program Officer Concurrence Email" section of Research.gov. For all other types of proposals and supplemental funding requests, the email must be with the file name "Program Officer Concurrence Email" in the "Other Supplementary Documents" section in Research.gov.

Questions about this DCL and/or its relation to the opportunities described above should be directed to geohealth@nsf.gov.

This DCL does not constitute a new competition or program.

Sincerely,

Alexandra R. Isern
Assistant Director, Directorate for Geosciences

James Luther Moore
Assistant Director, Directorate for STEM Education

Sylvia M. Butterfield Assistant Director (Acting), Directorate for Social, Behavioral, and Economic Sciences

REFERENCES

• 1 https://www.niehs.nih.gov/research/programs/climatechange/index.cfm

- https://rock.geosociety.org/net/documents/gsa/policy/gsa-geohealth-solutions-report-20220421.pdf
- https://www.authorea.com/doi/full/10.1002/essoar.10511162.1
- https://www.ametsoc.org/index.cfm/AMS/policy/studies-analysis/ams-community-synthesis-on-geohealth/