

U.S. NATIONAL SCIENCE FOUNDATION 2415 EISENHOWER AVENUE ALEXANDRIA, VIRGINIA 22314

NSF 24-074

Dear Colleague Letter: Catalyzing human-centered solutions through research and innovation in science, the environment and society

March 28, 2024

Dear Colleagues:

The U.S. National Science Foundation (NSF) seeks to build research capacity and infrastructure to address complex and compounding national and global crises whose solutions require a human-centered approach. To help generate effective and long-lasting solutions, NSF is providing this funding opportunity to inform possible future Centers for Research and Innovation in Science, the Environment and Society (CRISES).

The envisioned centers will catalyze new research and research-based innovations to address seemingly intractable problems that confront society. Research is needed to anticipate how to effectively respond to social, political, economic, and environmental change resulting from systemic disruptions to mitigate and minimize negative impacts on humanity.

This funding opportunity for planning proposals is led by NSF's Social, Behavioral and Economic Sciences Directorate (SBE) with support from NSF's directorates for Geosciences (GEO), Biological Sciences (BIO), Engineering (ENG), Technology, Innovation and Partnerships (TIP), and STEM Education (EDU), as well as the Office of International Science and Engineering (OISE) and the Office of Integrative Activities (OIA). By supporting research to understand the social and behavioral aspects of the rapidly changing world and how these challenges are affected by social, political, economic, and natural environments this DCL aims to advance understandings of fundamental and use-inspired research of people, organizations, and society, while revealing emerging opportunities to address challenges affecting individuals and communities to live healthy and productive lives.

This announcement encourages multi-disciplinary teams led by social or behavioral scientists to develop research programs to advance scientific understanding of critical challenges facing social and environmental systems at local, regional, and global scales.

BACKGROUND

A deeper, more contextualized understanding is needed to address the many crises facing the world today. Threats to well-being, such as workforce disruptions, governance failures, extreme social and systemic inequities, institutional mistrust, genocides, extremism, wars, decreasing availability and/or quality of natural resources, and the impacts of environmental change, require immediate and innovative solutions and interventions. There are many profound challenges that undermine the success and sustainability of society. In all these cases, human beings and their behavior shaped by society and culture play direct roles in causing crises and responding to severe threats to well-being and even existence.

This DCL seeks to catalyze multi-disciplinary and transdisciplinary research led by social science investigations to improve human livelihoods and support healthy ecosystems by driving discoveries and findings from these areas of research addressing any problems associated with community vulnerability, resource depletion, environmental degradation, group and regional conflict, prejudice, poverty, crime, and violence. Teams of researchers representing diverse disciplinary approaches can develop critical advances and scientific innovations and interventions. Multi-disciplinary teams draw from different theoretical perspectives, varied methodological tools, as well as insight from the communities being served/impacted to drive the context and solution development. This will help to improve the understanding of actions by humans and their institutions and their consequences in more comprehensive ways.

This opportunity supports multi-disciplinary teams, led by researchers in the social, behavioral, and economic sciences, who use empirical methods to grapple with crises that impact individuals, families, communities, organizations, regions, nations, and the planet. The CRISES initiative invites planning proposals as a first step toward facilitating the creation of large-scale interdisciplinary research centers that will address today's crises and ultimately enhance people's quality of life. Suitable topics for CRISES may focus entirely on social and behavioral dynamics or address intersections among different components such as economic, political, environmental systems, and the built environment.

PROPOSAL AND AWARD SCOPE

Through this funding opportunity, NSF seeks to invest in ideas that can potentially serve as the basis for a larger, center-scale activity.

NSF supports a variety of centers that contribute to its mission and goals. Centers leverage research opportunities when the complexity of the research program or the resources needed to solve the problem are of great scope, scale, and duration. Centers require unusually large amounts of equipment, research infrastructure, facilities, and/or people. Centers are a principal means by which NSF fosters interdisciplinary research.

In this call, NSF invites planning proposals for up to \$100,000 that will bring together experts across disciplines to seed ideas and help inform the possible full-scale implementation of a CRISES center. As described below, teams are to be led by social scientists and the involvement of researchers from diverse disciplinary perspectives outside the social sciences is encouraged.

A planning proposal is used to support initial conceptualization, planning and collaboration activities that aim to formulate new plans for large-scale projects in emerging research areas for future submission to an NSF program. Planning activities can provide teams with the opportunity to envision structures that would ultimately compose a center. This effort can include forming partnerships with stakeholders and engagement with communities directly impacted by the focus area and outcomes of the research, working as a team to refine the scope and vision for a center, and creating a vision for the potential broader impacts of a center, including diversity, workforce development, and education. Building the framework for a center requires time and investment to strengthen relationships and refine a common vision. Planning proposals are intended to support teams in that process.

Proposals must include the following:

- A lead principal investigator who is a social, behavioral, or economic scientist (with a degree in the SBE sciences or significant publications in SBE journals).
- A focus on at least one program area currently supported by the SBE directorate.
- Identification of the problem(s) the center will address along with a statement of the scope and approach.
- Planned activities that will bring together experts from a range of disciplines to explore the creation of a center to study and develop solutions to one or more pressing societal issues.

Additional principal investigators included in the proposals can be experts in other disciplines. Proposals must demonstrate an interdisciplinary approach beyond that of any single disciplinary program. This DCL encourages the participation of researchers from Minority-Serving Institutions (MSIs), Primarily Undergraduate Institutions (PUIs), eligible institutions in EPSCoR jurisdictions, as well as non-profits and local and state government organizations.

NSF anticipates funding approximately 10-12 awards through this opportunity, subject to the availability of funds and the quality of proposals received.

PROPOSAL INSTRUCTIONS

Planning proposals must be prepared and submitted in accordance with the guidance contained in Chapter II.F.1 of the NSF Proposal & Award Policies & Procedures Guide (PAPPG). Proposals may be submitted via either Research.gov or Grants.gov.

Prior to submission, potential research teams interested in submitting a planning proposal are required to first send a research concept outline, including project title, team members, institutions involved and a summary of the project concept (up to two pages) by email to NSF_CRISES_Program@nsf.gov.

Concept outlines and planning proposals should address the following: (1) Problem Statement, (2) Scientific Approach (e.g., data products and analytical approaches), (3) Planning Activities (e.g. timeline and structure of meetings, workshops, synchronous/asynchronous coordination), and (4) Outcomes and Deliverables (i.e., what would be realized at the completion of the planning endeavor). To ensure proper processing of the Concept Outlines, the subject line of the initial email inquiry should begin with: "Concept Outline: CRISES:" Concept outlines should be submitted by email to NSF_CRISES_Program@nsf.gov by May 1, 2024. NSF program directors will review the concept outlines and will authorize those that fall within the scope of this DCL for submission of a full planning proposal. All PIs will receive notification by May 15, 2024.

- Planning proposals may only be submitted with NSF approval of a submitted Concept
 Outline. The email confirming approval to submit must be uploaded in the "Program
 Officer Concurrence Email" section of Research.gov or as a supplementary document in
 Grants.gov.
- Proposal titles should start with "CRISES:" and be submitted under the CRISES program description, PD 23-265Y. Please note that if submitting via Research.gov, the system will automatically prepend the title with "Planning" when the proposal is created.

The target date for full planning proposal submissions is by 5 p.m. submitting organization's local time on **July 1**, **2024**. and planning proposals will only be accepted if accompanied by the email authorization to submit obtained in response to the research concept outline. Planning proposals submitted without written authorization from an NSF program director will be returned without review.

NSF anticipates that awards will be made in the summer of 2024.

POINT OF CONTACT

Questions about this funding opportunity should be directed to NSF_CRISES_Program@nsf.gov.

Sincerely,

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