



NATIONAL SCIENCE FOUNDATION
2415 EISENHOWER AVENUE
ALEXANDRIA, VIRGINIA 22314

NSF 19-059

Dear Colleague Letter: Research Opportunities Related to Coastlines and People (CoPe)

April 24, 2019

Dear Colleagues:

With this Dear Colleague Letter (DCL), the National Science Foundation (NSF) Directorates for Geosciences (GEO), Social, Behavioral and Economic Sciences (SBE), Biological Sciences (BIO), Engineering (ENG), Education and Human Resources (EHR) and the Office of Integrative Activities (OIA) announce their intent to support Research Coordination Networks (RCNs), a select type of Early-Concept Grants for Exploratory Research (EAGER), conferences, and Non-academic Research Internships for Graduate Students (INTERN) supplements that relate to Coastlines and People (CoPe). NSF first publicly explored this topic with 4 workshops held in September 2018. In those workshops, participants were challenged to think about the interdisciplinary science necessary to advance our understanding of coastlines and people, the ways that broadening participation can be integral to research in this area, and what type of research infrastructure, referred to as "hubs", is needed to enable both interdisciplinary science and broadening participation efforts. See coastlinesandpeople.org for the products of these workshops.

Through CoPe, NSF is interested in supporting projects to build capacity and explore research focused on understanding the impacts of coastal environmental variability and natural hazards on populated coastal regions. CoPe projects should explore the complex interface between coastal natural processes, geohazards, people and their natural and built environments. CoPe will include coastal variability and hazards on a range of spatial and temporal scales, from local to global and seconds to millenia to put current changes in context of pre-anthropogenic changes. The landscape of individuals interested in coastal research is diverse, including but not limited to researchers, decision-makers, practitioners (individuals dealing with the day to day operations in coastal areas), and stakeholders (communities impacted by coastal change). The following funding mechanisms are available to provide support for a spectrum of coastal interests from scientists to stakeholders, to develop partnerships and build the networks needed to delve more deeply into these ideas

and/or explore novel ones, and to conduct small pilot projects related to CoPe.

RCN

Successful Research Coordination Networks will establish new collaborations among coastal research communities. The networks supported should: (1) identify and prioritize research topics for innovative CoPe science with well-defined research questions that span spatial and temporal scales across disciplines and sub-disciplines; (2) establish mechanisms for new coordination with ongoing or planned coastal research activities, especially with local communities and stakeholders; and (3) connect with the NSF INCLUDES National Network, the Geosciences Opportunities for Leadership in Diversity (GOLD) program, or other broadening participation efforts to build relationships necessary to broaden participation in coastal research. While the duration of RCNs funded in response to this DCL will be 2-3 years, coordination efforts described above should develop a collaborative enterprise able to tackle major CoPe scientific problems that neither short-term nor single discipline efforts can address using this opportunity as a mechanism to start the collaborative building of capacity for CoPe research. Proposals for RCNs submitted in response to this DCL should follow the instructions provided in NSF's RCN solicitation ([NSF 17-594](#)) – with the exception that CoPe RCNs should only be 2-3 years in duration and proposals should be submitted following the guidance below.

EAGER

NSF's Early-concept Grants for Exploratory Research (EAGER) funding mechanism may be used to support proposals on exploratory research in its early stages on untested, but potentially transformative, research ideas or approaches related to CoPe. This work must be considered especially "high risk-high payoff" by involving radically different approaches, applying new expertise, or engaging in novel disciplinary or interdisciplinary perspectives. Within the context of CoPe, EAGERS may pilot high-risk efforts such as incubators, mobile hubs, untested instrumentation technology, and community responsive science teams. This list is not inclusive of the types of EAGERS that will be considered, but is merely examples from the scientific community building on the CoPe workshops. More information is available in the white papers on coastlinesandpeople.org. EAGERS submitted in response to this DCL must follow the instructions for the EAGER proposal type provided in the NSF Proposal and Award Policies and Procedures Guide (PAPPG) [Chapter II.E.2](#) and must be potentially scalable and represent an idea that is in clear alignment with CoPe.

CONFERENCES

This DCL encourages convening, within the US, conferences (which may take the form of symposia or workshops) related to CoPe research priorities and broadening participation efforts. Conferences will be supported only if equivalent results cannot be obtained at regular

meetings of professional societies. While the mission of NSF centers on basic research, exploring which basic research topics will be most useful for practitioners and other researchers is encouraged in this DCL. Conferences proposed in response to this DCL should: (1) bring together a diverse group of scientists and practitioners to work together to explore new synergistic research topics related to coastlines and people; (2) discuss novel, new strategies to integrate broadening participation into CoPe activities; and/or (3) explore how academic and industry partnerships can advance CoPe related research. Conference proposals submitted in response to this DCL should follow the instructions for the conference proposal type provided in the [PAPPG Chapter II.E.7](#) and not exceed \$100K in their budget.

INTERN

NSF DCL [NSF 18-102](#) outlines an opportunity for PIs to request up to six months of additional support for graduate students on active NSF awards so that students may gain knowledge, skills and experiences that will augment their preparation for a successful long-term career through an internship in a non-academic setting. CoPe will support INTERN supplements to active awards that allow a graduate student to intern with a non-academic partner on a topic relevant to CoPe. Internships in a non-academic setting may include: for-profit industry laboratories or industry research and development groups; start-up businesses, such as (but not limited to) those funded through the NSF's Small Business Innovation Research (SBIR) program and Small Business Technology Transfer (STTR) program; government agencies (all levels) and national laboratories; policy think-tanks; and non-profit organizations. Successful INTERN supplement requests will articulate how the internship will contribute to the graduate student's professional development and how the work with the non-academic partner will advance CoPe interests.

While coastal communities vary extensively, most of the world's largest cities are coastal and the amount of urban infrastructure built along coastlines continues to grow. For reference, NSF's efforts in urban systems, namely Coastlines and People, Sustainable Urban Systems, Smart and Connected Communities, and Long-Term Ecological Research –Urban Ecology, are compared and contrasted on the [NSF Environmental Research and Education web site](#).

TARGET DATES AND SUBMISSION

Proposals must be prepared and submitted in accordance with the guidelines contained in the [NSF PAPPG](#) and the title must start with "CoPe:".

- For INTERN supplements related to CoPe, PIs should follow the instructions of [DCL NSF 18-102](#), as well as articulating CoPe relevance in the two-page summary that describes the internship. PIs should email NSFcope@nsf.gov before submitting a supplement request. Upon submission of an INTERN supplement, PI should send an email to NSFcope@nsf.gov that includes the original award number, the supplement

proposal number, and the name of the managing program director.

- PIs interested in submitting RCN, EAGER, and Conference proposals in response to this DCL for FY19 should contact NSF at NSFcope@nsf.gov by May 31st, 2019 with a one-page summary of their plan to submit. This one-page summary should identify the type of opportunity (e.g. EAGER, RCN, Conference), the institutions involved and a brief summary of the CoPe effort to be proposed. NSF will respond to the inquiry with encouragement or discouragement of submission, as well as more details on how to submit a full proposal by the target date of June 28th, 2019. Inquiries about this DCL and questions about submission of RCN, EAGER, Conference proposals or INTERN supplements, in response to this DCL should be directed to NSFcope@nsf.gov.

Sincerely,

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