NATIONAL SCIENCE FOUNDATION
2415 EISENHOWER AVENUE
ALEXANDRIA, VIRGINIA 22314

NSF 21-099

Dear Colleague Letter: Opportunities for Collaboration between CISE and SBE Researchers

June 23, 2021

Dear Colleagues:

The National Science Foundation (NSF) supports fundamental research that is collaborative between the computer and information science and engineering (CISE) and the social, behavioral, and economic sciences (SBE) fields. This research empowers our Nation to address great challenges and seize transformative opportunities. Through scientific advances and subsequent applications of these advances, research jointly supported by NSF's CISE and SBE Directorates spurs innovation, creates jobs, strengthens security and preparedness, and improves quality of life for people across the country and around the world.

The CISE and SBE Advisory Committees recently held joint meetings to discuss research areas of mutual interest, resulting in a joint working group that engaged members of the research communities in exploring critical societal problems at the intersection of the sciences funded by the two directorates. The discussion added to the CISE and SBE directorates' ongoing recognition of possibilities for transformative research from collaboration between CISE and SBE researchers. The purpose of this Dear Colleague Letter (DCL) is to acquaint the CISE and SBE communities, whose members may be unaware of these funding opportunities, with recent programs either dedicated to such collaborations or welcoming of them. These programs are in addition to the many Foundation-wide programs at NSF that are encouraging of cross-disciplinary and cross-directorate projects more generally and that also would support CISE-SBE collaborations. The cross-directorate programs are included in the DCL for completeness. This DCL is a reminder of the opportunities available to researchers and of our directorates' interest in furthering these collaborations.

To inform and assist interested researchers, this DCL lists recent NSF programs that are especially suitable for CISE-SBE researcher collaboration. Each program is hyperlinked to the corresponding NSF webpage. To show the scope of recent offerings, the list includes both current programs with future deadlines, as well as some programs with only past deadlines. Programs may or may not be updated and reissued. Please keep in mind that

deadlines and target dates vary in when they fall and in the frequency with which they recur.

All programs list a contact email and usually directorate-specific cognizant program directors. We urge researchers to contact those program directors with any questions they may have. Many program directors welcome brief inquiry letters well in advance of deadlines. Concerning the categories below, please note that the research infrastructure programs (including Major Research Instrumentation and Mid-scale Research Infrastructure) only support efforts that develop resources for the research community; they do not fund research utilizing those resources.

JOINT CISE-SBE PROGRAMS

- CompCog (Dear Colleague Letter: Stimulating Integrative Research in Computational Cognition). Deadline: Deadline of the program to which a proposal is submitted.
- DASS (Designing Accountable Software Systems).
- FAI (NSF Program on Fairness in Artificial Intelligence in Collaboration with Amazon). Deadline: 8/3/21

MULTI-DIRECTORATE PROGRAMS (INCLUDING CISE, SBE AND OTHER DIRECTORATES)

- Convergence Accelerator. Current tracks:
  - Networked Blue Economy (Track E)
  - Trust & Authenticity in Communications Systems (Track F)
    - Full proposal 6/14/21 (for projects that submitted a letter of intent [LOI])
  - Convergence Accelerator Topic Selection Process
- CIVIC (Civic Innovation Challenge).
- CRCNS (Collaborative Research in Computational Neuroscience). Deadline: 11/23/21
- D-ISN (Disrupting Operations of Illicit Supply Networks).
- DLI-DEL (NSF Dynamic Language Infrastructure - NEH Documenting Endangered Languages). Deadline: 9/15/21
- ER2 (Ethical and Responsible Research). Deadline: 2/22/22
- FW-HTF (Future of Work at the Human-Technology Frontier).
- GCR (Growing Convergence Research). Deadline: 2/7/22
- HDR (Harnessing the Data Revolution: Institutes for Data-Intensive Research in Science and Engineering).
- MRI (Major Research Instrumentation). Submission window: 1/1-19/22
- Midscale RI-1 (Mid-scale Research Infrastructure-1).
- Midscale RI-2 (Mid-scale Research Infrastructure-2). Full proposal (invited only) deadline: 9/20/21
- NAIR (National Artificial Intelligence Research Institutes).
- NCS (Integrative Strategies for Understanding Neural and Cognitive Systems: FOUNDATIONS and FRONTIERS). Deadline: 2/14/22

- NRI-3.0 (National Robotics Initiative 3.0: Innovations in Integration of Robotics). Submission window: 2/8-22/22
- RETTL (Research on Emerging Technologies for Teaching and Learning). Deadline: 10/18/21
- SAI (Strengthening American Infrastructure).
- S&CC (Smart and Connected Communities).
- SaTC (Secure and Trustworthy Cyberspace). Small, Medium and EDU proposals accepted any time.
- SCH (Smart Health and Biomedical Research in the Era of Artificial Intelligence and Advanced Data Science). Deadline: 11/20/21

RESEARCH INFRASTRUCTURE

CISE Programs

- CESER (Cyberinfrastructure for Emerging Science and Engineering Research). See also the Dear Colleague Letter NSF 21-045. Deadline: Proposals accepted any time
- CSSI (Cyberinfrastructure for Sustained Scientific Innovation).

SBE Program

- HNDS-I (Human Networks and Data Science – Infrastructure). Deadline: 2/3/22

SINGLE DIRECTORATE PROGRAMS

- CISE Core Programs (This CISE-wide program solicitation includes links to webpages describing individual programs that may be of interest to SBE researchers in addition to CISE researchers. Proposers may request joint review by CISE and SBE if appropriate.) The solicitation and deadlines are updated yearly.
- SBE Programs (Core SBE programs may be of interest to CISE researchers in addition to SBE researchers. Proposers may request joint review by CISE and SBE if appropriate.) Programs have yearly or biyearly target dates.

Sincerely,
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