STRATEGIC INTERNATIONAL COLLABORATIVE RESEARCH PROGRAM (SICORP)

2023 JST-NSF JAPAN-U.S.

HUMAN-CENTERED DATA FOR DISASTER RESILIENCE RESEARCH (HCDDRR)

CALL FOR PROPOSAL GUIDELINES

I. OUTLINE

The Japan Science and Technology Agency (JST) of Japan has in cooperation with the National Science Foundation (NSF) of the United States decided to launch a call for research proposals titled Human-Centered Data for Disaster Resilience Research.

1. Field of Research

Human-Centered Data for Disaster Resilience Research (HCDDRR)

In recent years, technological advances in natural disaster modeling and simulation approaches have spurred innovation to the great benefit to the field of disaster mitigation. Increasingly, it has been recognized that at the core of disaster resilience is the human factor, including the way human behavior and decision-making influences disaster vulnerabilities, mitigation, and response in complex and sometimes adverse ways. Compounding factors, like climate change, infectious diseases, and war further add to this level of complexity in understanding disaster resilience.

In order to improve our understanding of these complexities, this call invites proposals for Japan-U.S. collaborative research which center on human dimensions of disaster resilience which employ data and data-driven science to bring forth new insights and improvements, including the use of new data and measurements, new combinations of data, and novel approaches to using data. Efforts to move beyond mainstream science and engineering approaches, including multidisciplinary and next-generation analysis, modeling and simulation are also encouraged. Projects that exploit unique synergies between the Japanese and U.S. research communities are of particular interest.

In applying to this call, researchers are expected to demonstrate how they will employ interdisciplinary approaches, what kind of data will be used or created, the kind of research infrastructure that will be employed or developed as a part of their research project and how the work would help improve the ability to reduce disaster risk.

This call encourages research that contribute to the implementation of the Sendai Framework for

Disaster Reduction 2015-2030 and the Sustainable Development Goals (SDGs).

Note on Team Submissions:

Each proposal will describe the full scope of work by both the Japan and U.S. researchers and must be submitted simultaneously to JST (in Japanese) and to NSF (in English). The budget proposal for the Japan side of the work will be submitted to JST only. The budget proposal for the U.S. side of the project will be submitted to NSF only. Each proposal will be reviewed by both JST and NSF.

Japan-side applicants must submit an application to JST through the e-Rad system and U.S.-side applicants must submit an application to NSF through the Research.gov system. Corresponding applications must be made to both JST and NSF.

U.S.-side applicants should refer to NSF Dear Colleague Letter (DCL) for more details. Proposals in response to this DCL are welcomed by the following NSF programs:

- Smart and Connected Communities (Integrative Research Grants, Track 2) in Computer and Information Science and Engineering (CISE)
- Cyber-Physical Systems (CPS) in Computer and Information Science and Engineering (CISE)
- Humans, Disasters, and the Built Environment (HDBE) in Engineering (ENG)
- Decision, Risk and Management Sciences (DRMS) in Social, Behavioral and Economic Sciences (SBE)

2. Call Eligibility

Japan-side applicants to this call for proposals must be affiliated with a university or other research institution in Japan.

3. Call Deadline

17:00, Saturday, August 19, 2023 (Japan Standard Time, JST)

4. Estimated Support

A maximum of three (3) projects for a three (3)-year period.

5. Call Schedule

April 20, 2023 - Call for proposals open

August 19, 2023, 17:00 Japan Standard Time - Call for proposals deadline

October 2023 - Eligibility confirmation and domestic evaluation

December 2023 – Joint evaluation and proposal selection (tentative)

April 2024 – Research commencement (tentative)

II. PROGRAM INFORMATION

1. Level of Support

JST and NSF will support the Japan-side and U.S.-side research teams respectively. The Japan-side of the team will be awarded a maximum of 75 million yen (including indirect expenses equivalent to 30% of direct expenses) for the three-year period.

2. Period of Support

Research is expected to be supported for a total of three (3) years starting from April 2024. The research period is expected to last until the end of March 2027 for JST-supported researchers.

3. Research Expenses

i. Direct expenses

Direct research expenses are expenses directly used for research purposes at the awarded research institution, and can be used for the following:

1. Equipment costs (equipment and consumables)
2. Travel costs
   In principle, travel costs are incurred in accordance with the guidelines of the awarded research institution. Travel expenses are applicable to travel directly related to the execution of the research, dissemination activities, etc.
3. Personnel costs
4. Miscellaneous
   In addition to the above, research expenses may include, for example:

a) Expenses for organizing and hosting events for research result dissemination

b) Outsourcing costs (excluding subcontracting)

c) Equipment leasing costs, transportation costs, for equipment used for the research project

ii. Indirect expenses

Indirect expenses go directly to the awarded research institution for the purposes of administrative purposes and must constitute 30% of the direct cost.

III. APPLICATION PREPARATION AND SUBMISSION

1. Application Documents

i. The Japan-side application should be prepared using the provided forms:

A1) Japan-side Application Form (日本側申請提案様式)

A2) The following NSF-application documents, merged into a single PDF:
 a) Project Summary
 b) Project Description
 * The two above documents a) and b) should be identical to those submitted to NSF by the U.S.-side applicant. Any discrepancies in the documents may be disadvantageous in the evaluation process.

ii. The U.S.-side application should be prepared based on the forms as instructed by NSF for the relevant program.

2. Application Submission

i. Application documents by the Japan-based researcher should be submitted through the online e-Rad platform. The e-Rad application should include documents listed in (i) Application Documents above.

e-Rad deadline: 17:00, Saturday, August 19, 2023 (Japan Standard Time, JST) (https://www.e-rad.go.jp/)

ii. Applications documents by the U.S.-based researched should be submitted to the

Research.gov system (https://www.research.gov/research-web/).

IV. SELECTION PROCESS AND EVALUATION CRITERIA

1. Selection Procedure

JST and NSF will review the applications and jointly make a selection of projects to fund.

2. Evaluation Criteria

Proposals will be evaluated on the basis of the general criteria as well as the call-specific criteria listed below.

- i. General criteria
  1. Consistency with the research field and objectives of the call
  2. Suitability of Principal Investigator (PI)
  3. Potential for research impact and continuity
  4. Quality of research plan
- ii. Call-specific criteria
  1. Research which contributes to science and technology through new data infrastructure
  2. Interdisciplinary research, including theories and methodologies which cut across disciplines, such as engineering, history, geography, humanities, psychology, behavioral sciences, disaster medicine, data science, informatics, and others
  3. Integration of stakeholders and relevant communities in the research
  4. Synergy effects in Japanese-U.S. collaboration
  5. Potential to benefit social and public policy decision-making

V. POINTS OF NOTE

Applicants to this call for proposals should pay particular attention to the following points.

1. JST-funded Research Organization Responsibilities
   i. Research organizations (including research representative and research collaborator research organizations) will, if funded, conclude a research contract with JST and must follow the stipulations of this contract. Intellectual property rights such as patents derived from the research will in principle belong to the research organization, provided that the organization

complies with Article 17 of the Industrial Technology Enhancement Act (Japanese equivalent of the Bayh-Dole Act) as stipulated in the research contract. Note that this does not apply to overseas partner institutions (See Section 3.2 in「SICORP 日本側応募者への応募にあたっての注意事項」).

ii. If the research organization is a national or local government (including organizations under the jurisdiction of MEXT) body lacking a juridical personality such as that of a national university, it is the responsibility of the contracted research organization to carry out the necessary budgetary measures and other relevant procedures in advance of entering into the contract. In such cases, please contact JST in advance of making an application (See Section 3.4 in「SICORP 日本側応募者への応募にあたっての注意事項」).

iii. Research organizations are required to enter into a Collaborative Research Agreement (CRA) with the involved domestic and foreign partner research organizations which stipulates matters of intellectual property rights, confidentiality, research publications and potential damage liability. The CRA should in principle be concluded by the research organization and be concluded within the first six (6) months of the period of support. A copy of the CRA should be submitted to JST.

The supported research organization is required to undertake necessary measures to ensure that research is implemented and research results are handled vis-à-vis foreign partner research organization(s) in a way which is consistent with the stipulations of the contract concluded between the research organization and JST.

2. JST-funded Researcher Responsibilities

The Japan-based representative researcher must have completed a designated educational course on research ethics. A failure to demonstrate evidence of the completion of such a program will be considered as grounds for the researcher being ineligible for receiving research support (See Section 4.1 in「SICORP 日本側応募者への応募にあたっての注意事項」).

3. NSF-funded Organization and Researcher Responsibilities

NSF-funded institutions and researchers must comply with NSF's Proposal and Award Policies and Procedures Guide. (https://nsf.gov/publications/pub_summ.jsp?ods_key=pappg)

VI. INQUIRIES

U.S. Cooperation Coordination Group

Department of International Affairs

Japan Science and Technology Agency (JST)

Email: jointus(at)jst.go.jp (replace (at) with @)