

## NATIONAL SCIENCE FOUNDATION 2415 EISENHOWER AVENUE ALEXANDRIA, VIRGINIA 22314

#### NSF 24-047

Dear Colleague Letter: Supplemental Funding Opportunity: NSF Innovation Corps (I-Corps™) Training for Pathways to Enable Open-Source Ecosystems (POSE) Phase II Recipients

January 11, 2024

### Dear Colleagues:

The U.S. National Science Foundation's Pathways to Enable Open-Source Ecosystems (POSE) program aims to harness the power of open-source development for the creation of open-source ecosystems (OSEs) to advance key technologies and address problems of national, societal, and geostrategic importance. Each POSE Phase II award invests in the establishment of a sustainable OSE based on a robust open-source product.

The POSE solicitations (NSF 22-572 and NSF 23-556) state that, "A maximum of three members of each awarded team are expected to attend a mandatory OSE training to be held virtually ...." NSF is providing this mandatory training by drawing on the methods and customer discovery curriculum of the NSF Innovation Corps (I-Corps™) program, hereafter described as I-Corps for POSE training. Taught by National I-Corps instructors, the I-Corps for POSE training provides an immersive experience that pushes project teams to develop more robust connections to end-user ecosystems, appropriate governance strategies, and sustainable OSEs. This Dear Colleague Letter provides an optional supplemental funding opportunity to obtain additional support for training-related expenses.

The I-Corps for POSE training program is conducted in a virtual format once per proposal submission cycle and lasts several weeks, requiring approximately one day of effort per week from each participating training team member. At the end of the training program, each training team will understand how to match the development, structure, and governance of the OSE to their user and contributor needs. The teams will also understand issues and strategies related to achieving sustainability.

#### HOW TO RESPOND TO THIS SUPPLEMENTAL FUNDING OPPORTUNITY

## 1. Team Registration

Register for the I-Corps for POSE training program via <a href="https://nsfiip.force.com/icorps/s/login/">https://nsfiip.force.com/icorps/s/login/</a>. Once users create an account, please submit an I-Corps Executive Summary, which requests brief biographies of the team members who will participate in the training, a description of the technology, application/market (commercialization applications), and current sustainability plan (current commercialization plan).

**Team Members:** The team must designate individuals to fill the following three roles:

**Technical Lead (TL):** The TL is typically the Principal Investigator (PI), co-PI, Senior Personnel, or subawardee who possesses deep expertise in the technology/innovation being developed and has decision-making authority over project direction. The TL will serve as the technical director and is responsible for analyzing information from enduser discovery from the point of view of the technical understanding of the desired capabilities, functionalities, and potential applications. The TL works with the team to ensure that the technical aspects of the innovation align with the identified OSE community needs and opportunities.

**Entrepreneurial Lead (EL):** The EL will serve as the outreach coordinator for the team and should be active and engaged in the OSE project activities including in devising a strategy for sustaining the OSE beyond the POSE award. This individual acts as the team lead/organizer by focusing on outreach, identifying and setting up interviews with stakeholders, and preparing weekly reports. The EL could be a graduate student, postdoctoral fellow, or early-stage investigator seeking an opportunity to develop leadership skills.

**Industry Mentor (IM):** The key word here is "mentor." This team member is someone with extensive experience developing OSEs and deep understanding of how they operate. The IM could be someone already serving with the POSE project team, possibly on an advisory committee, a key collaborator, or an experienced OSE leader who wants to support development of the OSE. The IM plays a pivotal role by offering insights from their perspective of industry practices, OSE governance, and OSE standards and sustainability models. The IM works with the team to ensure there are linkages between the work being done internally with the real-world needs of external OSE stakeholders.

**Additional Team Members:** The team may invite a co-EL or co-TL to participate on the team. These individuals should only be included if they plan to attend all sessions and engage in all ecosystem discovery activities.

All team members should review and agree to the program conditions (details below).

#### PROGRAM REQUIREMENTS

The I-Corps for POSE training team is required to participate in all meetings and to conduct a minimum of 60 interviews over the course of the training. This curriculum includes a kick-off meeting, weekly sessions, and a closing session. More course information will be provided by NSF's I-Corps program in the weeks before the training start date.

The I-Corps for POSE training curriculum provides real-world, hands-on, immersive learning to help develop an implementation strategy for the OSE community. The main activity is ecosystem discovery to evaluate potential stakeholder engagement and develop a sustainable governance structure and business model. The team's progress in ecosystem discovery will be shared with other teams in the cohort to facilitate group learning. At the end of the curriculum, teams are expected to have performed interviews with potential users, developers, stakeholders, and potential partners from their target OSE community. The EL and TL will be expected to spend time each week conducting discovery activities, including attendance at the required program activities (weekly sessions and office hours). The IM will be required to spend approximately a few hours per week on I-Corps for POSE training activities, in addition to attendance of the required program activities.

## 2. I-Corps for POSE Training Supplemental Funding Request Submission

The Authorized Organizational Representative (AOR) will submit the I-Corps for POSE training supplemental funding request through Research.gov.

# **Summary of Proposed Work (not to exceed 2 pages)**

Briefly describe the open-source (OS) product that is the basis for the OSE, a typical user of the product, and the current stage of development of the OSE. Briefly describe the composition of the training team and roles (EL, TL, IM) and provide brief, narrative biographies for each team member. The brief biographies should describe each member's OSE experience and their experience in collaborating with the other team members.

*Note:* Senior Personnel Documents are required if the training team includes any senior personnel who were not included at the time the proposal was submitted.

# **Justification for Supplemental Funding (not to exceed 2 pages)**

Briefly describe the ways in which key technologies and/or solutions to problems of national, societal, and/or geostrategic importance will be deployed more efficiently, and with enhanced safety, security, and privacy, as a result of the OSE. Briefly describe how

the group will sustain the OSE beyond the POSE award. Describe how the I-Corps for POSE training process will inform the ongoing development of the OS product that underpins the OSE, and how the OSE will interact with its developer community to influence development priorities.

The following text must be included at the end of this section of the request.

"The following program conditions have been discussed and agreed to by the training team. I-Corps for POSE training requires a substantial commitment. A condition of the supplemental funding includes:

- Attendance by the entire team at the course kick-off events;
- Participation by all team members in weekly web sessions following the completion of the kick-off course;
- Approximately one day of effort per week by the EL and TL in conducting interviews with potential customers (customer discovery);
- Weekly involvement by the IM in the I-Corps activities in addition to the I-Corps meetings;
- Attendance by the entire team at the lessons learned closing meeting;
- Completion of at least 60 interviews during the I-Corps for POSE training; and
- Exceptions will be given to the above conditions in the case of medical or family emergency."

#### **BUDGET JUSTIFICATION**

The requested I-Corps for POSE training supplement should be for up to \$20,000 to support participation of the team in the I-Corps for POSE training and ecosystem discovery activities. All POSE Phase II recipients with awards from either NSF 22-572 or NSF 23-556 are eligible for the full \$20,000 supplement, regardless of whether funding for mandatory training was included in their initial budget.

The Budget Justification may include the following components:

# Section 1. Ecosystem Discovery

- Virtual tools to facilitate interviews such as Zoom meeting subscriptions, LinkedIn Premium membership, headsets, and recommended books.
- Conference registration fees for attending in-person or virtual conferences (not "booths" or other marketing expenses).
- Travel expenses associated with travel in the U.S. to conduct in-person interviews and/or attend conferences. International travel is not allowed.

### Section 2. Personnel Expense

 Time and effort for the EL and TL for participating in the I-Corps for POSE (at the same pay rate in the POSE Phase II award budget). Support for the IM is also allowed. You may include fringe in this request.

Please note that the following items are **not** allowable expenses:

- gifts, gift certificates, meals, and beverages as incentives for interviewees;
- any expenses that would be classified as "marketing" or "sales" related; and
- the purchase of survey tools such as Survey Monkey.

For questions concerning this supplemental funding opportunity, please contact one of the NSF program directors listed below:

- Jeffrey Stanton (pose@nsf.gov); or
- Peter Atherton (pose@nsf.gov).

Sincerely,

Erwin Gianchandani Assistant Director for Technology, Innovation and Partnerships National Science Foundation