

#### NSF 23-072

# Frequently Asked Questions (FAQs) for ART - Accelerating Research Translation (NSF 23-558)

### **GENERAL INFORMATION**

- 1. Where can I find information about proposal preparation and submission?
- 2. How can I sign up for the ART email listserv for up-to-date information?
- 3. What support is available for prospective proposers?
- 4. Can we send you a one-page description of my idea?
- 5. Is tech transfer and commercialization the primary goal of the ART program?

### **ELIGIBILITY INFORMATION**

- 6. Can you confirm that the only types of organizations eligible to submit a proposal in response to the ART program solicitation are Institutions of Higher Education (IHEs)?
- 7. The solicitation states the target IHEs for ART are those with a high level of fundamental research output, but a relatively low level of involvement in translational research. Could you provide more information about the metrics to determine fundamental research output and the metrics for translational research?
- 8. Our IHE overall has a high level of fundamental research across many disciplines. We also have a robust translational system in one or two disciplines, but the level of translational activity is significantly lower in other disciplines. Are we eligible to apply for ART program?
- 9. We are a satellite/regional campus of an IHE. Can we submit our own proposal?
- 10. Are different universities in a given university system allowed to submit proposals?
- 11. We have multiple institutes within a single IHE, each with their own Unique Entity Identifier (UEI), and we typically submit proposals independently to NSF. Can we each submit our own proposal to the program?

12. Who does the program suggest serve as senior personnel and serve in a leadership role on an ART proposal?

### **PARTNERSHIPS**

- 13. Is there a limit to the number of partners that can be on the ART proposal?
- 14. Is it a requirement that a proposer must partner with an IHE that has a high level of fundamental research and a robust, well-established ecosystem and a proven track record for accelerating the translation of fundamental research into products/services that create economic and societal impacts?
- 15. Can we partner with more than one IHE that has high fundamental research levels and a robust translational research ecosystem?
- 16. We are an IHE with a high level of fundamental research and a well-established ecosystem for research translation. Can we serve as a partner on multiple ART proposals led by different IHEs that meet the eligibility criteria?
- 17. Are international partners allowed?
- 18. Can we submit a proposal without a partner?

#### PROPOSAL PREPARATION AND REVIEW

- 19. While translational research is defined across all scientific fields, can our ART proposal focus on a central theme or specific field?
- 20. Can the STRPs be in disciplines not typically supported by NSF, e.g., those considered to be the traditional domains of the National Institutes of Health or U.S. Department of Energy?
- 21. Will the initial STRPs need to be identified in the proposal? Or simply the criteria/process for selecting them?
- 22. Do the STRPs have to be interdisciplinary?
- 23. Can the STRPs be led by the PI or Co-PI?
- 24. How many STRPs are allowed during the four-year award, i.e., overlapping 2-year long projects?
- 25. Can a partner IHE (i.e., one with a high level of fundamental research and a high level of translational research) be involved in activities related to STRPs?
- 26. What sections should be included in the Project Description section?
- 27. Should partners submit collaborative proposals or a single proposal with subawards?

- 28. Can STRPs involve any IHE, industry or other partners?
- 29. Who should submit letters of collaboration?
- 30. Should the lead institution provide a letter of collaboration?
- 31. Will we need Institutional Review Board (IRB) approval of the evaluation activities and instruments described in our proposal?
- 32. How will the proposals submitted to this program be reviewed?

### **BUDGET**

- 33. Will ART awards be issued as grants or cooperative agreements?
- 34. Where can I find information about preparing a budget for a proposal?
- 35. What if my organization or institution does not have a negotiated indirect cost rate?
- 36. Is budgeting for a Project Coordinator required?
- 37. Can the budget for STRPs vary from year to year?
- 38. Can we budget some funding for a partner company to support a STRP?
- 39. Can ART funds be used for infrastructure such as renovation of laboratories or to construct a physical space for the operations of a technology transfer office/activities?
- 40. Can the IHE use NSF funds to make convertible note or equity investments in research projects? Can the IHE recoup funds from these seed translational research project investments upon successful translation or other milestones?
- 41. How much funding should be set aside for the ART Ambassadors' travel to program meetings?

#### **GENERAL INFORMATION**

# 1. Where can I find information about proposal preparation and submission?

Detailed proposal preparation instructions specific to the ART program (including deviations from the NSF Proposal & Award Policies & Procedures Guide (PAPPG), can be found in the current solicitation (NSF 23-558) under section "V. Proposal Preparation and Submission Instructions" subsection "A. Proposal Preparation Instructions." Proposals submitted to NSF must be submitted via Research.gov or Grants.gov. Further information on each system is available in the PAPPG, Chapter I.A.

### 2. How can I sign up for the ART email listserv for up-to-date information?

Enter your email address here. You will then be signed up to receive our updates on the ART program.

### 3. What support is available for prospective proposers?

Please check the NSF ART program website for webinar recordings/offerings and office hour dates and times, and well as other materials with information about the program.

# 4. Can we send you a one-page description of my idea?

NSF will not provide feedback on a one-pager, or any such information sent to us. The solicitation spells out the goals of the ART program along with eligibility information and guidance on proposal preparation.

# 5. Is tech transfer and commercialization the primary goal of the ART program?

No. The ART program seeks to scale up translational activities at IHEs that can lead to positive societal and/or economic impacts. NSF is expanding the definition of technology transfer to include positive impacts from translational research on local communities, data-informed policy, open-source ecosystems, formal and informal education, social entrepreneurship, etc. Proposers should be cognizant of this broader definition while describing their capacity-building activities, translational research projects and training for faculty, students, and postdoctoral fellows.

### **ELIGIBILITY INFORMATION**

6. Can you confirm that the only types of organizations eligible to submit a proposal in response to the ART program solicitation are Institutions of Higher Education (IHEs)?

Yes, as specified in the solicitation, proposals may only be submitted by IHEs accredited in and having a campus located in the U.S.

7. The solicitation states the target IHEs for ART are those with a high level of fundamental research output, but a relatively low level of involvement in translational research. Could you provide more information about the metrics to determine fundamental research output and the metrics for translational research?

This solicitation is aimed at Institutions of Higher Education (IHEs) that have a high level of overall fundamental research but a low level of translational research (as noted by their number of invention disclosures, patents issued, start-ups, licenses/options, revenue from royalties, the overall volume of industry-funded research, broad adoption

of research outputs by communities or constituents). IHEs should make their own individual assessments of these levels to determine their eligibility for the ART program and provide data and any other related information to support their determinations. NSF acknowledges that there are different metrics that can be used to describe the overall levels of fundamental and translational research and on the current capacity and status of infrastructure for translational research activities at an IHE. Moreover, for some translational research activities, there may not be an obvious quantitative metric. It is up to the IHEs to make the case of where they see themselves fitting into the ART goals and framework.

8. Our IHE overall has a high level of fundamental research across many disciplines. We also have a robust translational system in one or two disciplines, but the level of translational activity is significantly lower in other disciplines. Are we eligible to apply for ART program?

The ART program is aimed at an IHE that has a high level of fundamental research and low level of translational research for the entire institution. IHEs should make determinations of the appropriateness to apply to ART based on how they see alignment of the translational research activities within their institutions and the overall goals of the program.

9. We are a satellite/regional campus of an IHE. Can we submit our own proposal?

Satellite campuses that are part of the main/flagship IHE cannot submit separate proposals. Only one proposal per IHE is allowed. In addition to having its own UEI and being registered via an NSF electronic system, organizations must have separate Sponsored Projects Offices that can submit proposals directly to NSF. The campus would need to be listed as the awardee organization on the NSF Cover Sheet and if all of the above criteria are met, that organization would be considered independent for purposes of funding opportunities that have limited submissions.

10. Are different universities in a given university system allowed to submit proposals?

Different universities within a university system may each submit a separate proposal if they determine they are otherwise eligible as described in the answer to the question #9 above.

11. We have multiple institutes within a single IHE, each with their own Unique Entity Identifier (UEI), and we typically submit proposals independently to NSF. Can we each submit our own proposal to the program?

Please see response to question #9 above regarding institutional eligibility for IHEs. The

intent of the ART program is to support translational activities across the entire IHE, and therefore at most one proposal per IHE will be entertained. A proposal needs to articulate the status/assessment of overall research and translational levels at the entire IHE and not just some of departments or colleges/schools of an IHE.

12. Who does the program suggest serve as senior personnel and serve in a leadership role on an ART proposal?

NSF considers senior administrators, tech transfer office staff at an eligible institution, and entrepreneurs to be a vital part of an ART Ambassadors cohort. An institution can also designate anyone in a senior leadership position who is actively engaged in boosting the overall efforts related to translational research as senior personnel on a proposal. Please note the ART solicitation takes an expansive view of tech transfer and as a result any person the IHE sees as valuable from such organizations as regional business development organizations, community/regional social impact or social entrepreneurship related organizations can also serve as senior personnel.

#### **PARTNERSHIPS**

13. Is there a limit to the number of partners that can be on the ART proposal?

There is no limit to the number of partners. However, the number and type of partners should be appropriate for the scope of the project. The expectation is that these partners will have a unique value proposition that will benefit the ART project activities in the short or long terms. This value proposition of each added partner should be laid out in the proposal in the Project Description and Letters of Collaboration and should include actionable commitments. Please note that amount of funds budgeted for all the subawards cannot exceed 20% of the total award budget.

14. Is it a requirement that a proposer must partner with an IHE that has a high level of fundamental research and a robust, well-established ecosystem and a proven track record for accelerating the translation of fundamental research into products/services that create economic and societal impacts?

This is not required but strongly encouraged. It is important that the primary beneficiary of this partnership be the lead IHE. The idea behind this partnership is for the lead IHE to benefit by leveraging the experience and expertise for translational research activities that already exists at the partner institution. In this way, the lead institution can get a head start in building its own infrastructure and capacity for translational research activities.

15. Can we partner with more than one IHE that has high fundamental research levels and a robust translational research ecosystem?

Yes, however, the need for such partnerships must be clearly justified and the primary beneficiary must be the lead IHE submitting the proposal.

16. We are an IHE with a high level of fundamental research and a well-established ecosystem for research translation. Can we serve as a partner on multiple ART proposals led by different IHEs that meet the eligibility criteria?

Yes, if each proposal can clearly demonstrate a meaningful engagement with the lead institution and that the primary beneficiary will be the lead IHE.

## 17. Are international partners allowed?

Yes. However, like any other partnership, the specific need for involvement of any international partners must be justified. Award funds cannot be used to fund non-US entities. Please follow the guidance in the PAPPG.

18. Can we submit a proposal without a partner?

Yes. However, NSF strongly encourages meaningful partnerships as a very important way for building and scaling institutional capacity for translational research. This can include (but not be limited to) partnerships with other academic institutions, venture funds, accelerators, incubators, government agencies, economic development entities, and other organizations that can play a supportive role in the ecosystem that your institution is building as a part of an ART proposal.

#### PROPOSAL PREPARATION AND REVIEW

19. While translational research is defined across all scientific fields, can our ART proposal focus on a central theme or specific field?

The ART program is intended to build the entire institution's capacity for translational research activities. Initially, you may choose to focus on specific themes or disciplines as a way to gain momentum to achieving this longer-term goal; however, the proposal should make clear how these initial efforts will ultimately become broader and lead to scaling translational research activities at the entire IHE. The Seed Translational Research Projects (STRPs) selected over the course of the program should represent the diversity of research funded at the IHE.

20. Can the STRPs be in disciplines not typically supported by NSF, e.g., those considered to be the traditional domains of the National Institutes of Health or U.S. Department of Energy?

The program expects that any STRP supported by NSF funds should be justifiable as a demonstrable application of research outcomes from areas supported by NSF. The

central theme that forms the core of a STRP funded through the ART program must be firmly rooted in these areas although it could **additionally** include work in other disciplines not listed here.

# 21. Will the initial STRPs need to be identified in the proposal? Or simply the criteria/process for selecting them?

**At least two** initial STRPs should be identified and described in the proposal. The process and rationale that was used for identifying these projects as well for identifying future ones should also be articulated in the proposal. It is expected that the review committee will involve stakeholders within the institution (and potentially outside of it) who have experience and expertise translating technologies.

# 22. Do the STRPs have to be interdisciplinary?

The seed projects could be, but do not need to be, interdisciplinary. It is important to have them at a high maturity level, i.e., they are ready for translation and can be on their way to start producing measurable impacts in a short time (e.g., within 2 years). They could need more time to garner larger-scale impact beyond this period, but some outcomes should be evident in the short term.

# 23. Can the STRPs be led by the PI or Co-PI?

Given the significant other tasks related to leading the entire project, NSF prefers the PI to focus on the activities related to leading the project and not in leading an individual STRP. Co-PIs can choose lead a seed project and can involve other faculty, post-doctoral researchers and graduate/undergraduate students as needed.

# 24. How many STRPs are allowed during the four-year award, i.e., overlapping 2-year long projects?

The expectation is that, during every year of the project, there will be at least two new STRPs that will be defined and initiated. If a STRP makes great progress and is ready to graduate, another STRP should be put in place as soon as practical. On the other hand, pass-fail criteria should be defined to rapidly identify and replace a STRP that is not meeting its key milestones.

# 25. Can a partner IHE (i.e., one with a high level of fundamental research and a high level of translational research) be involved in activities related to STRPs?

Yes, the partner can support the STRPs at the lead IHE. However, the total budget for this IHE (with high level of fundamental research and high level of research translation) cannot exceed 10% of the total budget for the entire project (inclusive of direct and indirect costs) per year.

### 26. What sections should be included in the Project Description section?

The ART program solicitation provides an outline of the expected sections. Please see Section V.A. of the solicitation.

# 27. Should partners submit collaborative proposals or a single proposal with subawards?

A single IHE must serve as the lead and all other partner organizations aiming to receive funds should participate only as sub-awardees. Collaborative proposals arranged as separate submissions from multiple organizations will not be accepted in response to this solicitation.

### 28. Can STRPs involve any IHE, industry or other partners?

Yes, as long as the lead IHE has a clear agreement with partners on intellectual property rights stemming from the STRP. Subawards can be made to other organization types, except for-profit institutions. The total budgeted amount for all subawards must not exceed 20% of the total budget requested.

### 29. Who should submit letters of collaboration?

As documented in Section V.A.4. of the solicitation, up to 3 letters of collaboration should be from external contributors or constituents to the ART project activities and shall include plans to make specific contributions to the ART project activities (including short- and long-term) and their unique value proposition for the project.

# 30. Should the lead institution provide a letter of collaboration?

No. As documented in Section V.A.4. of the solicitation, the lead institution is required to provide a separate statement attesting to their current levels of fundamental and translational research (no more than 3 pages).

# 31. Will we need Institutional Review Board (IRB) approval of the evaluation activities and instruments described in our proposal?

NSF supports research involving human subjects when the project has been certified by a responsible party to follow the federal government's "Common Rule" for the protection of human subjects. More information about this policy can be found in the current NSF PAPPG (Chapter II.D.5). Here is the official NSF version of Code of Federal Regulations 45 CFR 690.101-124.

### 32. How will the proposals submitted to this program be reviewed?

The review process is described in Section VI.A. and Section VI.B. of the program

solicitation.

#### **BUDGET**

### 33. Will ART awards be issued as grants or cooperative agreements?

ART awards will be made as cooperative agreements.

### 34. Where can I find information about preparing a budget for a proposal?

Instructions for preparing the budget may be found in Section V.B the current solicitation (NSF 23-558) and in the NSF PAPPG (Chapter II.D.2.f).

# 35. What if my organization or institution does not have a negotiated indirect cost rate?

Proposers that have never received a NICRA (Negotiated Indirect Cost Rate Agreement) should consult the current NSF PAPPG (Chapter II.D.2.f).

## 36. Is budgeting for a Project Coordinator required?

Given the multi-faceted nature and the full spectrum of translational research activities expected on the project, budgeting for a full-time, experienced project manager/coordinator/facilitator is strongly recommended but not required.

# 37. Can the budget for STRPs vary from year to year?

Yes, the total budget for STRPs can vary from year to year, depending upon the resources needed for the projects.

# 38. Can we budget some funding for a partner company to support a STRP?

No, the solicitation does not permit sub-awards from the project to support for-profit organizations. However, industry and other partners are welcome to take additional steps that will help accelerate the graduation timeline of these projects selected as STRPs.

# 39. Can ART funds be used for infrastructure such as renovation of laboratories or to construct a physical space for the operations of a technology transfer office/activities?

ART funding is not to be used to build, construct, acquire, or renovate physical office or laboratory space. Similarly, ART funding is not to be used for purchase or acquisition of major pieces of equipment or instrumentation. Refer to Section V.A.3(c) of the solicitation for more information.

40. Can the IHE use NSF funds to make convertible note or equity investments in research projects? Can the IHE recoup funds from these seed translational research project investments upon successful translation or other milestones?

Funding provided for this program should not be used to make convertible note or equity investments.

41. How much funding should be set aside for the ART Ambassadors' travel to program meetings?

Teams should set aside funds of \$10,000 per year to cover the cost of attending an annual ART meeting. It is expected that a select group of the PI, Co-PIs, postdoctoral researchers, graduate students, and/or any other individuals who are deemed essential for the success of the ART project can attend this meeting and should meaningfully participate in ART activities throughout the award period. Teams can budget travel funds for other project-related activities in addition to this travel, as long as the travel is justified.