NATIONAL SCIENCE FOUNDATION
2415 EISENHOWER AVENUE
ALEXANDRIA, VIRGINIA 22314

NSF 21-011

Frequently Asked Questions (FAQs) About the National Artificial Intelligence (AI) Research Institutes Program (NSF 22-502)

PROGRAM-WIDE QUESTIONS

1. When is the webinar? How can I participate? Will the slides and recording be made available?

2. Can I submit an Institute proposal that responds to multiple themes? Is it a good idea?

3. Is it required that an Institute be multi-organizational? How important is this? How many organizations should comprise an AI Research Institute?

4. Would an AI Research Institute proposal from a single organization (with no or few subawards) be competitive?

5. Can a proposed AI research Institute focus on only a subset of the desiderata spelled out in the solicitation?

6. What is the appropriate balance between foundational AI research and use-inspired research?

7. Is it possible to provide any funding to industrial collaborators?

8. Must an AI Research Institute necessarily be a physical Institute or can it: be a network; have a hub and spokes structure; be wholly virtual?

9. Can Federal agencies or Federally Funded Research and Development Centers (FFRDCs) participate in proposals to this solicitation?

10. How does NSF view international collaboration?

11. Can a foreign organization, as a partner or subawardee, be financed with funds from an AI Research Institute award?

12. Can an existing "institute" or "center" participate in a proposal to this program?

13. Can National AI Research Institutes award funds be used to develop new infrastructure? If so, are there limitations on the type of infrastructure or the budget for

this?

14. Where can I submit proposals for planning activities? Will the program announce a funding opportunity for planning activities in the future?

15. The solicitation restricts the number of submissions by "senior personnel." Can you clarify what constitutes "senior personnel"?

16. I have a collaborator and wish to obtain a letter of collaboration from them. Is this allowed, and what are the requirements?

17. If an individual is listed as senior personnel in a proposal to this solicitation, may that individual provide a letter of collaboration for another proposal to this program?

18. We have industry partners that may serve as subawardees. May they apply fees to their budgets?

19. What is the limit on budgetary allocation to a subawardee or consultant?

20. Does the NSF two-month salary policy apply to (non-tenure track) research faculty whose salary is funded through directly billing contracts and grants? Does it apply to the Managing Director?

21. To which division should I submit my proposal?

22. Can you provide more information on the review process that will be used to evaluate proposals? How will proposals that touch on multiple themes be reviewed?

23. Can you provide more information on the number of awards anticipated in each institute theme? Is it possible that a theme might receive more than one Institute award?

24. How do the participating agencies' interests align with the Institute topics?

25. If I participate in a project awarded by a different NSF program, or have a proposal pending to such a program, am I at a disadvantage in applying to the National AI Research Institutes program?

26. Are AI Research Institutes awards going to be renewable for an additional five years?

27. What are the plans for this program for future Institute themes?

28. What relationship is expected between planning grants awarded in the program previously and future Institute solicitations?

29. How do I apply both the PAPPG instructions and the solicitation instructions related to the required sections of the proposal (e.g., Budget and Budget Justification, Data Management Plan, Postdoctoral Researcher Mentoring Plan, Current and Pending Support, Facilities, Equipment, and Other Resources)?

30. Is there a limit on the number of PIs, co-PIs, or Senior Personnel on my proposal?

31. Can individuals from organizations other than the lead (proposing) organization be listed as co-PI?

32. What is NSF's guidance regarding collaborations with a partner who would not be a subawardee, but instead an unfunded collaborator, and in which case such a collaborator might agree to provide their own funding or other sources of support to the institute?

33. What role will partner companies listed in this solicitation have in the review and recommendation of institute awards under this solicitation?

34. Do any restrictions apply to prior solicitation (NSF 20-604) partner companies or individuals affiliated with those companies?

35. Is there potential for other industry partners to join this solicitation or future solicitations?

36. What will the role of the partner companies be in the oversight of Institutes funded under the applicable themes?

37. What is the level of support being provided by industry partners?

38. Is a person precluded from serving as a Senior Personnel if their spouse or other family or household member is employed by, consulting for or has an active agreement to provide services for a partner company?

39. What sections are required in the preliminary/full proposal? What should I exclude?

40. The solicitation describes the preliminary proposal decision as "advisory" and "non-binding". May submitters who receive an unfavorable ("Discourage") review of the preliminary proposal nonetheless submit a Full proposal?

41. May an individual be listed as Senior Personnel on a preliminary proposal, and then later listed as Senior Personnel on a full proposal from another proposer (i.e., based on a different preliminary proposal)?

42. Does the title of the full proposal have to match the title of the preliminary proposal?

43. May role designations (e.g., PI, co-PI change between the preliminary and full proposal?

44. Can the full proposal be submitted by an organization different from the one that submitted the related preliminary proposal?

45. Can the full proposal be submitted to a theme different from the one to which the preliminary proposal was submitted?

46. I would like to consult with program contacts about my proposal plans. How should I do this? May I consult with program contacts after the preliminary proposal determination?

THEME-SPECIFIC QUESTIONS

THEME 1: Intelligent Agents for Next-Generation Cybersecurity

THEME 2: Neural and Cognitive Foundations of Artificial Intelligence

THEME 3: AI for Climate-Smart Agriculture and Forestry

THEME 3.1: How do I designate USDA-NIFA as the intended funding agency?

THEME 3.2: Can the USDA Agricultural Research Service (ARS) (or other USDA entity) be a subawardee on an AI Institute grant where the lead institution is a university?

THEME 3.3: In the section *Cost Sharing Requirements for awards made by USDA-NIFA*, to what types and levels of equipment requests does this requirement apply?

THEME 4: AI for Decision making

THEME 5: Trustworthy AI

THEME 6: AI-Augmented Learning to Expand Education Opportunities and Improve Outcomes

THEME 6.1: What is meant by "the research must address factors under the control of U.S. education systems?" Can the institute include research in settings that are not under the auspices of the U.S. education system?

THEME 6.2: Are we able to contact the Institute of Education Science (IES) program officers to receive feedback as we prepare a proposal?

Questions specific to TRACK A: AI-Driven Digital Platforms to Expand and Accelerate STEM Learning in PreK-12 Settings

THEME 6.A.1: What resources are available to provide guidelines for the measurement of short and long term learning outcomes?

Questions specific to TRACK B: AI-Augmented Learning for Individuals with Disabilities

THEME 6.B.1: Does the Institute need to specifically target outcome(s) impacted by COVID-19?

THEME 6.B.2: For Theme 6 Track B of this solicitation, how are the terms "disability" and "at risk for a disability" defined?

PROGRAM-WIDE QUESTIONS

1. **When is the webinar? How can I participate? Will the slides and recording be made available?**

   The webinar date has been announced. Registration information can be found on the program page under additional program resources. Be sure to check back for any changes or updates.

   Webinar materials (slides, recordings, transcripts) will be made available through the program web page soon after the conclusion of the event.

2. **Can I submit an Institute proposal that responds to multiple themes? Is it a good idea?**

   The solicitation does not prohibit this, but it is not encouraged, either. It is most effective to respond as fully as possible to the scope of the theme you addressed. Relevance to other themes might be identified in the proposal text and/or keywords included in the Project Summary. Where such relevance is particularly strong, NSF and partners may co-review such proposals in the secondary theme(s).

3. **Is it required that an Institute be multi-organizational? How important is this? How many organizations should comprise an AI Research Institute?**

   This program requires that "Institutes will be comprised of **multiple organizations working together to create significant new research capabilities**," as described more fully in that desideratum. It is the goal of the program to grow AI capacity throughout the country and engage organizations that can help to involve diverse populations in that growth. The number of collaborating organizations should be appropriate for the size, scale and scope of the proposed Institute.

4. **Would an AI Research Institute proposal from a single organization (with no or few subawards) be competitive?**

   Refer to the answer in #3 above. It is possible (and permissible) for an organization to propose such an arrangement without the need for subawards to partner organizations. Such a proposal should make a strong case that the goals embodied in the desiderata are best achieved in the manner proposed. To assess the potential competitiveness of a proposal, note that the solicitation-specific review criteria refer to all six of the desiderata for Institutes provided in the Program Description.

5. **Can a proposed AI research Institute focus on only a subset of the desiderata spelled out in the solicitation?**

AI Research Institutes must address all six of the desiderata outlined in the Program Description of the solicitation. Proposed Institutes are expected to configure their functions relative to these desiderata in a way that is unique and appropriate to that Institute's vision. Proposers are reminded that the evaluation of all proposals will take into consideration the full range of solicitation-specific review criteria in the solicitation.

6. **What is the appropriate balance between foundational AI research and use-inspired research?**

   The program considers it a misapplication of the concept of "use-inspired research" to consider the first two desiderata to be in opposition to one another. The goal in this program is that each Institute engage in use-inspired research in such a way that the Institute will make the greatest possible gains in advancing AI. The Institute team should consider (and propose) what they consider the appropriate balance between the application of foundational AI and the *advancement* of foundational AI in that use-inspired context. It is not the intent of the program that Institutes should focus mainly on the application of AI. At the same time, it is the goal of this program that AI advances will be sought while also making *significant advances* in the domain, sector, or disciplinary science(s) relevant to that sector, and for greatest societal benefit. Institute plans that merely take inspiration from these sectors but do not significantly advance those sectors are also not the intent of this program.

7. **Is it possible to provide any funding to industrial collaborators?**

   Yes, it is allowable to include a for-profit organization as a subawardee to an Institute proposal. Please consult the NSF *Proposal and Award Policies and Procedures Guide (PAPPG)* Chapter II.C.2.g.(vi)(e) for guidance on subawards.

8. **Must an AI Research Institute necessarily be a physical Institute or can it: be a network; have a hub and spokes structure; be wholly virtual?**

   The program solicitation does not constrain the nature of a proposed Institute.

9. **Can Federal agencies or Federally Funded Research and Development Centers (FFRDCs) participate in proposals to this solicitation?**

   Federal agencies and FFRDCs are not eligible as proposing (lead) organizations.

   In general, NSF does not normally support research or education activities by scientists, engineers or educators employed by Federal agencies or FFRDCs. However, FFRDCs may, under certain circumstances, be included as subawardees to proposals to this program. PAPPG Chapter I.E.7 provides guidance on the circumstances under which this is appropriate.

In cases where a lead organization wishes to include a FFRDC under such an exception, the proposing organization is advised to follow the PAPPG guidance by coordinating with the relevant program points of contact (POCs) listed on the program webpage (this should include the POC listed first in that list at a minimum, and you are advised to copy all others as well as program leads). Proposals incorporating a subaward to a FFRDC must include a statement (uploaded as a supplementary document) substantiating the exception(s) applied.

10. **How does NSF view international collaboration?**

    NSF promotes international collaboration when it provides U.S. students and researchers the opportunity to benefit from foreign expertise and/or from resources, equipment, data and geographically-based phenomena that are located abroad. PIs are encouraged to consider how international engagement can enhance effectiveness in any or all of the six desiderata for Institutes, to include the potential to develop a globally-engaged U.S. workforce. NSF encourages a close working arrangement with local scientists and engineers in all international components of research projects. Projects in a foreign country should be designed to be of mutual benefit and must encourage wide distribution of the resulting materials, data, analyses, and publications within the host country as well as in the U.S.

11. **Can a foreign organization, as a partner or subawardee, be financed with funds from an AI Research Institute award?**

    NSF does not expect to fund foreign organizations as partners or subawardees. Extraordinary circumstances may be considered on a case-by-case basis, and when the proposed activities cannot be funded from sources in the foreign country. Such circumstances might include activities that require unique foreign expertise, access to unique foreign facilities, unique foreign data resources not generally available to U.S. investigators (or which would require significant effort or time to duplicate), or other foreign resources that are essential contributing factors to the success of the proposed project.

    Full information regarding NSF support to foreign organizations can be found in PAPPG Chapter I.E.6. PAPPG Chapter II.D.8 also provides general guidance regarding International activities.

12. **Can an existing "institute" or "center" participate in a proposal to this program?**

    There is no restriction regarding how an existing institute or center may participate in a proposal to this program. Any new Institute funded under this solicitation is expected to build significant new capacity in the six desiderata outlined in this program. This includes proposals that build upon or collaborate with existing organizations, including

existing Institutes or centers. Proposers are reminded that as a network of multiple organizations that together serve as nexus points for collaborative efforts, proposed Institutes must be meaningfully integrated in such a way that it creates a capability that is more than just the sum of the parts.

13. **Can National AI Research Institutes award funds be used to develop new infrastructure? If so, are there limitations on the type of infrastructure or the budget for this?**

The program solicitation does not constrain the budget items that can be requested. However, Institutes are expected to build on other NSF investments and are expected to coordinate and integrate with ongoing and new initiatives, including center-scale research, infrastructure, and workforce development activities. The Institute teams are expected to coordinate with their constituent organizations and partners to develop a concrete and workable plan for leveraging existing infrastructure resources.

If major infrastructure investment is needed to address the proposed research challenge, the appropriate venue is not this program, but rather other NSF sources of funding specifically for experimental research infrastructure, such as the Major Research Instrumentation program and the Mid-Scale Research Infrastructure programs.

14. **Where can I submit proposals for planning activities? Will the program announce a funding opportunity for planning activities in the future?**

This solicitation does not accept proposals for planning activities. At this time, we are not announcing plans regarding future opportunities to submit planning proposals.

15. **The solicitation restricts the number of submissions by "senior personnel." Can you clarify what constitutes "senior personnel"?**

See Exhibit II-3 of the PAPPG for definitions of categories of personnel. "Senior personnel" includes the PI and co-PIs, hence the solicitations clarifying language: "An individual may be designated as senior personnel (which includes but is not limited to PI or co-PI) on at most ONE project team submitting to this solicitation. In the event that an individual exceeds these limits, proposals will be accepted based on earliest date and time of proposal submission, i.e., the first proposal will be accepted, and the remainder will be returned without review."

16. **I have a collaborator and wish to obtain a letter of collaboration from them. Is this allowed, and what are the requirements?**

As noted in the solicitation, you are advised to obtain **letters of collaboration** from your unfunded collaborators. Letters of collaboration are not necessary for subawardee organizations, whose commitment is explicit in the proposal.

It is important that these letters of collaboration conform to the guidance in the PAPPG (see Chapter II.C.2.j), providing only a specified statement about the intent to collaborate as described in the proposal. **Letters of Support are not permitted**. Note that **any statement of support, either in a letter of collaboration or in separately-submitted documents, will not be allowed**. Also note that while Advisory Boards will be required for an Institute upon time of award, please do not specify potential members (or include associated letters of collaboration) in the proposal.

Occasionally, a collaborator might wish to state additional information on the letter of collaboration, specifying the nature of the agreement to collaborate. This is permissible if brief and if this refers to activity that is fully described in the proposal as required. Note that a letter of collaboration in a proposal serves to demonstrate that you have a substantive potential to collaborate. This letter is for proposal documentation only, and does not obligate the letter writer to anything between them and NSF or them and the proposing organizations.

While letter writers might also wish to include in their letter of collaboration statements describing their organization and their capabilities, **this is not permitted**.

17. **If an individual is listed as senior personnel in a proposal to this solicitation, may that individual provide a letter of collaboration for another proposal to this program?**
Yes, this is permissible. Note that these letters must conform to the requirements for letters of collaboration (see question #16 in this FAQ).

18. **We have industry partners that may serve as subawardees. May they apply fees to their budgets?**
Payment of fees (profit) is not authorized by the solicitation.

19. **What is the limit on budgetary allocation to a subawardee or consultant?**
No limit is imposed by the program or PAPPG. This is to be determined by the proposing organization; and the merit of the arrangement will be evaluated by reviewers and funding agencies.

20. **Does the NSF two-month salary policy apply to (non-tenure track) research faculty whose salary is funded through directly billing contracts and grants?Does it apply to the Managing Director?**

NSF salary policy, as contained in PAPPG Chapter II.C.2.g.(i)(a), applies to senior personnel and limits salary compensation to no more than two months of their regular salary in any one year. If anticipated, any compensation for such personnel in excess of two months must be disclosed in the proposal budget, justified in the budget justification, and must be specifically approved by NSF in the award notice budget.

This program requires that an Institute be staffed with a Managing Director or Project Manager (potentially distinct from the lead PI) and a suitable Management Team to oversee the operations of the Institute. It is anticipated that such personnel might include those who are not on a regular organizational salary. Regardless of the category of senior personnel and the proposed role, proposers are encouraged to staff the Institute for success and provide adequate justification for the salary request.

The NSF two-month salary policy does not apply to proposals submitted for consideration by USDA-NIFA.

21. **To which division should I submit my proposal?**

All proposals will be submitted to the Computer and Information Science and Engineering (CISE) Division of Information and Intelligent Systems (IIS). This will be the only available option under Unit of Consideration at time of submission.

22. **Can you provide more information on the review process that will be used to evaluate proposals? How will proposals that touch on multiple themes be reviewed?**

All information about proposal processing and review is provided in Section VI of the solicitation. Our anticipated timeline for this review process is included in the Program Description. Lead PIs will be notified of any significant deviations from this.

23. **Can you provide more information on the number of awards anticipated in each institute theme? Is it possible that a theme might receive more than one Institute award?**

NSF estimates approximately 7 awards on the expectation that each of Themes 1-5 will result in a new AI Research Institute, and that each "Track" in Theme 6 will result in one award. Funding agencies may fund more or fewer institutes based on agency/foundation priorities, quality of proposals received, and availability of funds.

24. **How do the participating agencies' interests align with the Institute topics?**

Participating agency interests in themes for the National AI Research Institutes program are included in the solicitation as part of the theme description.

25. **If I participate in a project awarded by a different NSF program, or have a proposal pending to such a program, am I at a disadvantage in applying to the National AI Research Institutes program?**

    Proposals to other NSF programs do not preclude senior personnel from submitting proposals to this program. Nor does involvement in other NSF-funded centers or projects preclude submission to the program. Note, however, that this program aims to support activities of a different scale and scope from those of other programs. Successful National AI Research Institute proposals will make clear the distinction between the proposed activity and other projects in the Current & Pending Support section for the senior personnel.

26. **Are AI Research Institutes awards going to be renewable for an additional five years?**

    While the solicitation does not explicitly provide for the renewal of Institute awards beyond the first five years, it is possible that NSF will offer such opportunities competitively in the future. The current solicitation is the first step in what is expected to be a longer-range, multi-agency investment in AI research and education. Future Institute funding opportunities will be evaluated according to the evolving needs of the research community and national priorities in artificial intelligence.

27. **What are the plans for this program for future Institute themes?**

    Future solicitations may continue the use of identified themes corresponding to high-priority areas, invite proposals for institutes not limited to such research themes, or both. The identification of an Institute theme in any given solicitation does not preclude the possibility that Institute proposals in that same theme or related ones would be welcome in future solicitations.

    NSF and partners strive to be responsive to the research priorities emerging from the community, and will also evaluate future investment priorities on the basis of the quality of proposals, progress in funded projects, and emerging national research priorities.

28. **What relationship is expected between planning grants awarded in the program previously and future Institute solicitations?**

    NSF does not comment on future funding opportunities. If applicable, future "themes" may be announced in areas corresponding to the research areas supported as part of the program's previously-funded planning activities, but will not necessarily be limited to those areas.

29. **How do I apply both the PAPPG instructions and the solicitation instructions related to the required sections of the proposal (e.g., Budget and Budget**

Justification, Data Management Plan, Postdoctoral Researcher Mentoring Plan, Current and Pending Support, Facilities, Equipment, and Other Resources)?

The solicitation addresses deviations from the PAPPG, including elimination of some sections in the preliminary proposal, and program-specific instructions for certain sections in both the preliminary and full proposal preparation instructions. Where not otherwise addressed, submissions must conform fully to the Proposal Preparation Instructions outlined in the PAPPG, including all required Sections of the Proposal.

30. **Is there a limit on the number of PIs, co-PIs, or Senior Personnel on my proposal?**

    The proposing organization can list one PI and up to four co-PIs, who will appear on the Cover Sheet of the proposal. There is no limit on the number of additional senior personnel who can be included in the proposal. However, it is advisable that proposing organizations list personnel in any of these roles **only where those personnel are described as playing a substantive role in the proposed project**. Such a substantive role is usually accompanied by a request in the budget for salary support of the individual corresponding to that individual's commitment to the project. Proposing organizations are advised against listing unfunded senior personnel who are not actively contributing to the project.

    The designation of roles on your subawards is a decision to be taken between the proposing organization and the subawardee organizations. However, we recommend you follow the same principles above when choosing to list people in the submission.

31. **Can individuals from organizations other than the lead (proposing) organization be listed as co-PI?**

    PAPPG Chapter II.D.3 provides guidance. See the section, Submission of a collaborative proposal from one organization:

    "The single proposal method allows investigators from two or more organizations who have developed an integrated research project to submit a single, focused proposal. A single investigator bears primary responsibility for the administration of the grant and discussions with NSF, and, at the discretion of the organizations involved, investigators from any of the participating organizations may be designated as co-PIs. Note, however, that if awarded, a single award would be made to the submitting organization, with any collaborators listed as subawards. (See Chapter II.C.2.g(vi)(e) for additional instructions on preparation of this type of proposal.)"

32. **What is NSF's guidance regarding collaborations with a partner who would not be a subawardee, but instead an unfunded collaborator, and in which case such a collaborator might agree to provide their own funding or other sources of support**

to the institute?

The NSF guidelines for unfunded collaborations apply. Please follow the guidance in PAPPG Chapter II.C.2.d.(iv).

Take care also to not structure this as voluntary committed cost sharing, which is prohibited(see PAPPG Chapter II.C.2.g.(xii).

33. **What role will partner companies listed in this solicitation have in the review and recommendation of institute awards under this solicitation?**

As stated in the solicitation, partner companies will not participate in or observe the merit review of proposals. This means that they may not review proposals or observe panels. This applies to proposals across the entire solicitation, not just within a theme.

After completion of the merit review process, NSF may share with partner company representatives the subset of proposals in the relevant theme which are under consideration for funding by NSF, along with corresponding unattributed reviews, panel summaries, and Reverse Site Visit reports. Partners may provide feedback on these selections after the merit review process is complete. NSF will take into consideration the input of all funding partners prior to making final funding decisions but will retain final authority for making all award decisions.

34. **Do any restrictions apply to prior solicitation (NSF 20-604) partner companies or individuals affiliated with those companies?**

No. Guidelines listed in the Program Description apply only to the partner company listed in this solicitation.

35. **Is there potential for other industry partners to join this solicitation or future solicitations?**

It is not possible to add new partner companies to the current solicitation. NSF welcomes interest in developing new partnerships for future funding opportunities. Please contact AIInstitutesProgram@nsf.gov if you are interested in partnering with this program in the future. Companies that are not partners on this solicitation are eligible and encouraged to collaborate with teams submitting proposals to this solicitation.

36. **What will the role of the partner companies be in the oversight of Institutes funded under the applicable themes?**

NSF will administer awards under the program in accordance with standard NSF policies and procedures. All awards will be subject to standard NSF terms and conditions. Industry partners will not oversee the activities or use of funds by grantees

under this program, but may engage with grantees post-award, as outlined below.

Specifically, as noted in the solicitation, subsequent to Institute awards, industry partners may make available, at a minimum to all Institutes funded within the associated themes, direct contributions of resources including but not limited to software (prototypes or products), data sets, and/or other computing infrastructure. No awardee will be required to use any company's offered contributions.

In addition, an industry partner may also arrange to fund its own personnel as researchers-in-residence (RinR) to directly participate, part-time or full-time, with funded AI Institutes within the theme(s) in which they are participating. These arrangements will be optional and upon the mutual consent of the companies and respective Institutes. No Institute will be required to accept a RinR.

37. **What is the level of support being provided by industry partners?**

The industry partner is contributing about $1 million per year over five years to support one or more institutes funded in the associated theme. The industry partner may also contribute additional resources as described in Section II.C of the Program Description in the solicitation.

38. **Is a person precluded from serving as a Senior Personnel if their spouse or other family or household member is employed by, consulting for or has an active agreement to provide services for a partner company?**

No, the person's eligibility is NOT affected by such activities of spouses or other family or household members.

39. **What sections are required in the preliminary/full proposal? What should I exclude?**

Note that the solicitation contains separate Proposal Submission Instructions for preliminary and full proposals. Complete instructions are provided for each, including solicitation-specific instructions and deviations from the PAPPG.

40. **The solicitation describes the preliminary proposal decision as "advisory" and "non-binding". May submitters who receive an unfavorable ("Discourage") review of the preliminary proposal nonetheless submit a Full proposal?**

Yes, this is allowable. Consult the PAPPG guidance on Preliminary proposals. Please note that the program will provide "Discourage" determinations to help members of the research community make careful decisions about expending effort preparing proposals unlikely to succeed in a competition in which few awards are expected. Significant revision would be needed to make a subsequent full proposal more likely to succeed. In

addition, personnel associated with discouraged proposals might consider joining other proposals.

41. **May an individual be listed as Senior Personnel on a preliminary proposal, and then later listed as Senior Personnel on a full proposal from another proposer (i.e., based on a different preliminary proposal)?**

    Yes, this is allowable, as long as the individual is listed on at most one proposal at each stage.

42. **Does the title of the full proposal have to match the title of the preliminary proposal?**

    No.

43. **May role designations (e.g., PI, co-PI change between the preliminary and full proposal?**

    Yes. Decisions on designation of the roles of PI and co-PI are for the proposing organization to make.

44. **Can the full proposal be submitted by an organization different from the one that submitted the related preliminary proposal?**

    No, the proposal must be submitted by the same lead organization.

45. **Can the full proposal be submitted to a theme different from the one to which the preliminary proposal was submitted?**

    No, the proposal must be submitted to the same theme unless otherwise instructed by an NSF National AI Research Institutes Program Lead.

46. **I would like to consult with program contacts about my proposal plans. How should I do this? May I consult with program contacts after the preliminary proposal determination?**

    BEFORE THE PRELIMINARY PROPOSAL DEADLINE

    You are encouraged to email the program contacts listed in the solicitation for the relevant theme(s). When emailing theme-specific questions, please **address all program contacts in the theme**. For feedback on the responsiveness of a proposal idea, include a project summary of up to two pages in your inquiry.

    AFTER THE PRELIMINARY PROPOSAL DEADLINE

    Proposal-specific inquiries to program contacts should be limited to **requests for**

clarification of the feedback received on the preliminary proposal. These requests for clarification must be submitted to Theme contacts (again, please **address all program contacts in the theme**).

THEME-SPECIFIC QUESTIONS

THEME 1: Intelligent Agents for Next-Generation Cybersecurity

No theme-specific questions in this release.

THEME 2: Neural and Cognitive Foundations of Artificial Intelligence

No theme-specific questions in this release.

THEME 3: AI for Climate-Smart Agriculture and Forestry

THEME 3.1: How do I designate USDA-NIFA as the intended funding agency?

Please specify USDA-NIFA as the intended funding agency in the Project Summary. It is expected that every proposal responding to *Theme 3: AI for Climate-Smart Agriculture and Forestry* is designating USDA-NIFA as the intended funding agency. It is not appropriate to indicate USDA-NIFA for other themes.

THEME 3.2: Can the USDA Agricultural Research Service (ARS) (or other USDA entity) be a subawardee on an AI Institute grant where the lead institution is a university?

If the proposal designates USDA-NIFA as the requested funding agency (by submitting to *Theme 3: AI for Climate-Smart Agriculture and Forestry* and specifying USDA-NIFA as the intended funding agency in the Project Summary), ARS is eligible to be a subawardee. Please refer to Section IV. Eligibility of the solicitation for more information.

THEME 3.3: In the section *Cost Sharing Requirements for awards made by USDA-NIFA*, to what types and levels of equipment requests does this requirement apply?

This cost-sharing requirement for equipment applies to all budgeted equipment expenditures in any proposal to USDA-NIFA, subject to the conditions for waiver specified. Proposers may justify a request for such a waiver initially in the Budget Justification section of the proposal.

THEME 4: AI for Decision-making

No theme-specific questions in this release.

THEME 5: Trustworthy AI

No theme-specific questions in this release.

THEME 6: AI-Augmented Learning to Expand Education Opportunities and Improve Outcomes

THEME 6.1: What is meant by "the research must address factors under the control of U.S. education systems?" Can the institute include research in settings that are not under the auspices of the U.S. education system?

Proposed research must be relevant to education in the United States and must address factors under the control of the U.S. education system (be it at the national-, state-, local-, or school-level). U.S. education systems are the systems that deliver programs to students in formal education settings, such as center-based prekindergarten, public and private K-12 schools, community colleges, and 4-year colleges and universities. Also in scope are programs under the control of such education systems that take place out of school including after-school, distance learning, and online programs.

For **Track A**, the research settings can also include adult literacy programs run through, for example, community-based organizations and in homeless shelters.

For **Track B**, the research settings can also include settings where students with or at risk for disabilities may receive education services: homes, natural settings for early childhood special education services, childcare centers, preschools, and alternative schools and settings (such as juvenile justice and residential treatment facilities).

While the primary focus of the institute should be to address factors under the control of the U.S. education system, other relevant research and activities (e.g., in laboratory, clinical or informal settings) are allowable.

THEME 6.2: Are we able to contact the Institute of Education Science (IES) program officers to receive feedback as we prepare a proposal?

PIs experienced in submitting grant applications to IES and NSF may have different expectations for the degree of contact with program officers at each agency. Please see FAQ #46 under Program-Wide Questions above for information on how to obtain feedback from the NSF/IES Theme 6 working group regarding the proposal responsiveness.

Questions specific to TRACK A: AI-Driven Digital Platforms to Expand and Accelerate STEM Learning in PreK-12 Settings

THEME 6.A.1: What resources are available to provide guidelines for the measurement of short and long term learning outcomes?

Questions specific to TRACK B: AI-Augmented Learning for Individuals with Disabilities

THEME 6.B.1: Does the Institute need to specifically target outcome(s) impacted by

COVID-19?

Yes. Because projects awarded under Theme 6 Track B will be funded in part with funds from the American Rescue Plan, the proposal must discuss how the work will respond to the needs of learners with or at risk for a disability in an area where the COVID-19 pandemic has further widened existing gaps and/or resulted in decreased access and opportunities for students with disabilities to learn and receive support services.

THEME 6.B.2: For Theme 6 Track B of this solicitation, how are the terms "disability" and "at risk for a disability" defined?

A child or youth with a disability is defined in Public Law 108-446 (https://sites.ed.gov/idea/statute-chapter-33/subchapter-i/1401). The proposal should clearly identify the disability or disability categories that are of primary focus for the institute research.

Please see the Standards for Excellence in Education Research for information about the standards, recommendations, and resources for selecting meaningful outcomes for measuring learners' success.