EPSCoR Research Infrastructure Improvement(RII) Track - 4: EPSCoR Research Fellows

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What is EPSCOR RII T4?

A research fellowship opportunity resulting from an interagency agreement between NASA and NSF, that provides faculty/research investigators with an opportunity to conduct research which is of significant interest to NASA and NSF at a host-site. The fellowship offers an opportunity to further develop individual research potential through collaborations with investigators from the nation's premier private, governmental, or academic research center. The fellowships are funded 100% by NSF, and NASA provides an additional $60K for faculty/research investigators from institutions with high enrollments of students from underrepresented populations in STEM .

How Do I Become a Fellow?

To be considered, research investigators (RI) must submit a proposal in response to the NSF solicitation, and it must be received by April 9, 2024 at 5 p.m. submitter's local time. The solicitation has two sub-tracks. One track for NSF and one track for NASA (i.e., @NASA). The @NASA research fellowship is contingent upon the RI matching with a NASA researcher. Therefore, RIs wanting to perform research at a NASA Center must review the NASA research area focus list and notify the NASA EPSCOR program office as early as possible and they will work to match the RI with a NASA scientist/engineer. Once a match has been made, the RI will receive a collaboration letter which must be included as part of the proposal.

Who's Eligible?

All faculty/research investigators (except full tenured professors) in EPSCOR jurisdictions are eligible to submit a proposal to either track (NSF or @NASA), with the exception that research investigators wanting to work with NASA must be a US citizen or have a Green Card (i.e., Legal Permanent Resident- LPR).

What is the award amount?
Each award is funded by NSF at $300,000 and NASA provides an additional $60K for faculty/research investigators from institutions with high enrollments of students from underrepresented populations in STEM . Refer to solicitation for more information.

How many proposals can be submitted by an institution? :
- Institutions eligible for the NSF sub track can submit a maximum of 4 proposals per institution
- Institutions eligible for the @NASA sub track can submit a maximum of 8 proposals per institution. However, only 4* of the 8 proposals are eligible for the additional $60,000 of NASA funds.
  - *Please consult with your university's sponsored projects office for selection, eligibility, etc.

What is the Award's Period of Performance?
The award duration will be for a maximum of 24 months. For planning purposes, PIs should assume that the award start date will be approximately nine months after the proposal deadline date.

What is proposal due date?
Full Proposals are due on April 9, 2024, which is the second Tuesday of April 2024 at 5 p.m. submitter's local time.

Where do I submit my completed proposal?:
- Full proposals should be submitted to Research.gov.
  - Please review the solicitation for submission instructions

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# EPSCOR Background

What is EPSCoR?

The Established Program to Stimulate Competitive Research (EPSCoR) is designed to fulfill the mandate of the National Science Foundation (NSF) to promote scientific progress nationwide. EPSCoR jurisdictions that are eligible for Research Infrastructure Improvement (RII) competitions are listed in the RII Eligibility table. Through this program, NSF establishes partnerships with government, higher education, and industry that are designed to effect sustainable improvements in a jurisdiction's research infrastructure, Research and Development (R&D) capacity, and hence, its R&D competitiveness.

The mission of EPSCoR is to assist the National Science Foundation in its statutory function "to strengthen research and education in science and engineering throughout the United States and to avoid undue concentration of such research and education."

- 1979: National Science Foundation (NSF) created the Established (formerly Experimental) Program to Stimulate Competitive Research (EPSCoR) in response to concern over the uneven distribution of federal research and development grants.

- 1992: Public Law 102-588 authorized NASA to initiate NASA EPSCoR to strengthen the research capability of jurisdictions that have not in the past participated equably in competitive aerospace research activities.

- EPSCoR now spans six federal agencies:
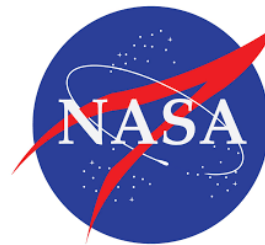
EPSCoR goals are to:

- Catalyze the development of research capabilities and the creation of new knowledge that expands jurisdictions' contributions to scientific discovery, innovation, learning, and knowledge-based prosperity;

- Establish sustainable Science, Technology, Engineering, and Mathematics (STEM) education, training, and professional development pathways that advance jurisdiction-identified research areas and workforce development;

- Broaden direct participation of demographically diverse individuals, institutions, and organizations in the project's science and engineering research and education initiatives;

- Effect sustainable engagement of project participants and partners, the jurisdictions, the national research community, and the general public through data-sharing, communication, outreach, and dissemination; and

- Impact research, education, and economic development beyond the project at academic, government, and private sector levels.

EPSCoR Jurisdictions

- Twenty-five states, the Commonwealth of Puerto Rico, the U.S. Virgin Islands and Guam currently participate in NASA EPSCoR project.

- Current eligibility threshold is 0.75% of total NSF funding

The EPSCoR Research Fellowship program:

> **<u>Transforms Career Trajectory:</u>** provides awards to build research capacity in institutions and transform the career trajectories of investigators and further develop their individual research potential through collaborations with investigators from the nation's premier private, governmental, or academic research centers that would not otherwise be possible without the fellowship. The fellowship provides opportunities to establish strong collaborations through extended or periodic collaborative visits to a selected host site.

> **<u>Provides Opportunities for New Techniques:</u>** provides collaborative research activities with the host site, that result in the Fellows being able to learn new techniques, develop new collaborations, advance existing partnerships, benefit from access to unique equipment and facilities, and/or shift their research toward potentially transformative new directions. The experiences gained through the fellowships are intended to have lasting impacts that will enhance the Fellows' research trajectories well beyond the award period.

> **<u>Improves Research Capacity:</u>** is expected to improve the research capacity of their institutions and jurisdictions, where the Fellows work, more broadly.

> **<u>Provides Strong Collaborations</u>**; provides an opportunity for early career and non-tenured and tenured assistant/associate professor faculty to establish strong collaborations with the option to spend extended or periodic time (e.g., one-, two-, or three-month summer extended visit) at the nation's premier research facilities.

Please review the solicitation for additional details.

My institution is in an EPSCOR state, and I would like to submit a proposal.

Now what?

Let's determine if you're eligible to submit a proposal. To be eligible,

➢ All faculty/research investigators (except full tenured professors) must be from an EPSCOR jurisdiction
➢ Research investigators wanting to work with NASA must be a US citizen or have a Green Card (i.e., Legal Permanent Resident- LPR).
➢ Research Investigators wanting to work with NASA must be matched with a NASA researcher and the NASA EPSCOR office will initiate the matching process.
➢ Please see solicitation for additional details.

Yes,

- Only single-PI proposals will be considered.
- No co-PIs should be included in the proposal.
- Persons who hold transitional fixed-term ?postdoctoral appointments are not eligible to apply as PI, even if their organizations classify such appointments as 'faculty' for administrative purposes.
- For submissions from a Primarily Undergraduate Institution a letter from the institution's Authorized Organizational Representative certifying their status as such is required. See Section V.A. for further information.
- The PI may hold or accept fellowships of equal caliber (i.e., similar intent, funding level, and or prestige) concurrently with a Track-4 Fellow award.
- The PI may hold a non-tenured faculty position at a degree-granting institution of higher education; or a faculty member who hold long-term 7 positions outside of the tenure track regardless of their position title or rank. be in an early-career, career-track position at an eligible non-degree-granting organization; hold a non-tenured or tenured faculty position at the Assistant or Associate Professor rank (or in an equivalent position) at an institution that is eligible to submit as described under "Who May Submit Proposals;" or For the faculty category of applicants, the faculty ranking should be determined by the faculty rank at the proposal's deadline date
- In all cases, the required letter from the PI's supervisory administrator should verify the PI's eligibility relative to these criteria.

Contact your Organization's Sponsored Projects Office (SPO)

The organization's Sponsored Projects Office is required to ensure that a maximum of 4/8 proposals. Contact your SPO to ensure your proposal is processed accordingly.

1. Participate in NSF office hours/webinars for any/all questions
2. [Download the solicitation](#)
3. Continue working with your university's SPO
4. Review the NASA Research Focus Area (RFA) list and contact the NASA EPCoR program office to begin the NASA scientists/engineer matching process
   - Review list of NASA's research interests: https://www.nasa.gov/stem/epscor/rii-track-4/index.html and identify a research area.
   - Applicants must contact the NASA EPSCoR coordinator through the Agency-EPSCoR-rii-track-4@mail.nasa.gov expressing their interest, and include their CV, contact information, and research interest to the NASA EPSCoR coordinator.
   - Once a research topic is identified, the NASA EPSCoR coordinator will facilitate research discussions and collaborations with the NASA Mentor.
   - In some cases, PIs may have prior research collaboration with NASA Scientists/Engineers, this information should be shared with the EPSCoR coordinator to proceed with possible match.

1. Complete the proposal on or before the due date.
2. Familiarize Yourself with NSF research proposal submission process/instructions
3. If this is your first time submitting a proposal to NSF, start preparing NOW.
4. Submit the completed proposal package to Research.gov by April 9, 2024, which is the second Tuesday of April 2024 at 5 p.m. submitter's local time.

See solicitation for additional details.

I'm ready to begin writing my proposal, but how will I be evaluated?

All proposals will be evaluated against 2 criteria:

1. Intellectual Merit
2. Broader Impact

Let's look at each of them....

All NSF proposals are evaluated through use of the two National Science Board approved merit review criteria:

A. Intellectual Merit: The Intellectual Merit criterion encompasses the potential to advance knowledge; and
B. Broader Impacts: The Broader Impacts criterion encompasses the potential to benefit society and contribute to the achievement of specific, desired societal outcomes

The following elements will be considered in the review for both criteria:

1. What is the potential for the proposed activity to,
   a. Advance knowledge and understanding within its own field or across different fields and how NASA will benefit (e.g., Intellectual Merit)
   b. Benefit society or advance desired societal outcomes (e.g., Broader Impacts)?

2. To what extent do the proposed activities suggest and explore creative, original, or potentially transformative concepts?

3. Is the plan for carrying out the proposed activities well-reasoned, well-organized, and based on a sound rationale? Does the plan incorporate a mechanism to assess success?

4. How well qualified is the individual, team, or organization to conduct the proposed activities?

5. Are there adequate resources available to the PI (either at the home organization or through collaborations) to carry out the proposed activities?

6. Is the plan for carrying out the proposed activities well-reasoned, well-organized, and based on a sound rationale? Does the plan incorporate a mechanism to assess success?

- What evidence is presented to demonstrate that the proposed research outcomes can be achieved within the constraints of the fellowship period, with the work being performed in collaboration with the host site?

- How will the fellowship have a transformative impact on the trajectory of the PI's research career both during the period of the award and beyond?

- How will the fellowship yield tangible benefits to the home institution and/or jurisdiction beyond the individual benefits to the PI?

- What evidence is there that the home institution and the host site are each committing the necessary resources, both scientific and administrative, to lend confidence that the fellowship project will be successful in achieving its intended outcomes?

1. **The project title**
2. **Project Summary**
3. **Project Description**
4. **Budget Pages and Budget Justification**.
5. **Facilities, Equipment, and Other Resources**.
6. **Supplementary Documentation**
7. **Additional Proposal Guidance**

*Refer to solicitation for additional details.

1. **The project title** must begin with "RII Track-4:NSF: or RII Track-4:@NASA:", depending on the track, and follow with an informative title in the topic area. The Research Proposal Type should be selected, and the Primary Place of Performance on the cover sheet should list the host institution for the fellowship visit and not the submitting institution.

2. **Project Summary** (1 page maximum). Provide an overview that briefly describes: the vision and goals of the fellowship project; the role of the host site and its personnel in achieving the project's vision and goals; a summary of the objectives and methods to be employed; the expected outcomes and impacts of the proposed activities; and plans for sustaining the project's impacts beyond the award period. In separate statements, provide a succinct summary of the intellectual merit and broader impacts of the project. The Project Summary must identify the proposed host site and primary research collaborator(s). At the bottom of the Project Summary, PIs should also indicate the NSF Directorate, Division, and Program that most closely aligns with the proposal's research focus.

3. **Project Description** (10 pages maximum). This section should present the activities for the proposed fellowship in a clear, detailed, compelling way and describe how the activities will lead to long-lasting impacts to the PI's research career trajectory. In addition to the requirements contained in PAPPG Chapter IID.2, the project description must articulate the motivation and context for the proposed fellowship project using language understandable to a scientific audience with broad disciplinary expertise. The goals and objectives for the fellowship project should be clearly stated, and the research plan for achieving the goals and objectives should be presented in sufficient detail to facilitate reviewers' assessment of the proposal. The project description should specify the expected outcomes from the fellowship and should include a timeline for meeting the project goals and objectives. It is crucial that the project description explain clearly how the PI will specifically benefit from the unique opportunities provided by the fellowship. It should also detail both the role of the host site in achieving the research goals and objectives and how the benefits to the PI's research career will be sustained beyond the award period.

The project description must describe the fellowship project's expected Intellectual Merit and Broader Impacts. In addition to addressing the Intellectual Merit of the project, the narrative should describe the project's research-focused activities and how these activities will enhance the PI's individual research capacity beyond the duration of the fellowship period. Per the guidance in the PAPPG, the Project Description must contain, as a separate section within the narrative, a section labeled "Broader Impacts". This section should articulate the benefits to the PI's home institution and/or jurisdiction that are expected to derive from the fellowship project. Additional benefits that fall under NSF's Broader Impacts merit review criterion should also be discussed in this section.

Proposals must also include a section detailing the Results from Prior NSF Support; for PIs with no prior NSF support, a simple statement to that effect is sufficient.

4. Budget Pages and Budget Justification. Prepare budget pages for each year of support and a budget justification (not to exceed five pages). Because the fellowship-related travel (transportation and living expenses) is expected to represent a significant component of the budget, PIs should provide sufficient detailed documentation to justify the requested expenses.

    a.   *Cost Sharing*: Inclusion of voluntary committed cost sharing is prohibited.

    b.   *Indirect Cost (F&A) Limitations*: "Off campus" indirect cost rates may apply

    c.   *Budgetary Limitations(NSF and @NASA)*: Total funds requested may not exceed $300,000.

    d.   *Budgetary Limitations(@NASA ONLY):* Researcher investigators from institutions with high enrollments of students from underrepresented populations in STEM, may request an additional $60,000. Investigators requesting an additional $60,000 must be from one of the institutions below:

> ➤ MSI
>> • Minority-serving institutions, including Historically Black Colleges and Universities (HBCUs), Hispanic-serving institutions (HSIs), Tribal Colleges or Universities (TCUs), and other institutions that enroll a significant percentage of students from underrepresented populations as defined by the U.S. Department of Education (e.g., Alaska Native-serving institutions, Native Hawaiian-serving institutions, Predominantly Black Institutions, Asian American and Native American Pacific Islander-serving institutions, and Native American-serving non-tribal institutions;

4. Budget Pages and Budget Justification, cont.. Prepare budget pages for each year of support and a budget justification (not to exceed five pages). Because the fellowship-related travel (transportation and living expenses) is expected to represent a significant component of the budget, PIs should provide sufficient detailed documentation to justify the requested expenses.

      d. *Budgetary Limitations(@NASA ONLY):* Researcher investigators from institutions with high enrollments of students from underrepresented populations in STEM are eligible for an additional $60,000 from NASA EPSCoR to support their research at the home institution; this fund is awarded through the NASA EPSCoR, Research Infrastructure Development (RID) cooperative agreements, coordinated through the designated jurisdiction's director, and should help to build the awardees' research infrastructure and capacity. Investigators requesting an additional $60,000 must be from one of the institutions below:

        ➢ PUI

- Primarily Undergraduate Institutions (PUIs), including two-year colleges, that award associate's degrees, bachelor's degrees, and/or master's degrees in NSF-supported fields, but have awarded 20 or fewer Ph.D./D.Sci. degrees in all NSF-supported fields during the combined previous two academic years;
- Institutions of higher education that are dedicated to serve students with disabilities, as listed in Table 1, page 5 , of NSF's 2008 Broadening Participation report (https://nsf-gov-resources.nsf.gov/2022-03/nsf_frameworkforaction_0808.pdf);
- Degree-granting women's colleges, as listed in the U.S. Department of Education Digest of Education Statistics (https://nces.ed.gov/programs/digest/d21/tables/dt21_312.30.asp).

4. Budget Pages and Budget Justification, cont.. Prepare budget pages for each year of support and a budget justification (not to exceed five pages). Because the fellowship-related travel (transportation and living expenses) is expected to represent a significant component of the budget, PIs should provide sufficient detailed documentation to justify the requested expenses.

d. Funding requests should have a total duration of up to 24 months. In all cases the requested support is expected to closely align with the duration of the fellowship visit(s) to the host institution.
e. Budgets may include up to six months of salary and fringe benefit support for the PI over the course of the fellowship.
f. Budget justifications must clearly describe and justify travel expenses, to cover both the PI and one additional trainee

See solicitation for additional budget requirements.

5. **Facilities, Equipment, and Other Resources**. The PI should provide a description of the relevant facilities, equipment, and other resources at the home institution or within the home jurisdiction if applicable. Only the PI's resources should be described, with emphasis on those resources needed for the project's work and especially any equipment that will be transported for use at the host site. Any facilities, equipment, and other resources that belong to the host site and are needed for the project should be described in the project description and not in this section. See NSF PAPPG.

6. **Supplementary Documentation** (in addition to those required by the PAPPG).
        Letters:
           a.   At least one letter must be included from:
               (i) **Letter from Supervisory Administrator**: The appropriate supervisory administrator at the PI's home institution is typically the PI's Department Chair or Dean. The purpose of this letter is to confirm the administrator's support of the PI's plans and particularly to verify that the PI will receive appropriate release time from other professional duties to complete the fellowship as proposed. This letter should also confirm the PI's employment status at the home institution as it pertains to eligibility for the competition. **AND**
               (ii) **NASA EPSCoR coordinator-** Please contact the NASA EPSCoR coordinator for assistance with letters from the host NASA center.(ONBOARDING SUPPORT)

        Proposals that do not include these two required letters will be returned without review. Where appropriate, more than one letter may be submitted for any of the categories.

What are some Expectations for Successful Proposals?

- **<u>Vibrant Ideas:</u>** Proposals will present exciting, vibrant fellowship ideas that will positively impact and potentially transform the PI's individual career trajectory. Proposals will be evaluated for the extent to which a fellowship has the potential to positively transform the PI's individual career trajectory.

- **<u>Sustainability</u>**:R2 T4 Fellowships are also expected to impact the PI's research field, potential scientific discoveries, institution, and jurisdiction. Therefore, all proposals should include well-defined, reasoned, and organized research objectives that could be driven by specific research questions or hypotheses, motivation, and context for the work to be conducted, the PI's specific research activities at the host site, and a discussion of how the benefits gained from the fellowship will be sustained beyond the award period. Note that clear specifications of research goals, activities, expected outcomes, and a project timetable are requirements for successful proposals.

- **<u>PI's Research Program:</u>** PI's It is also crucial that the proposal explain clearly how the PI's research program would specifically benefit from the fellowship mechanism – identifying what specific opportunities will be made possible via the PI's collaborations and visit(s) to the host site.

- **<u>Benefit to the Jurisdiction:</u>** Benefits to the Home Institution and/or Jurisdiction should be clearly articulated. The direct benefits of RII Track-4:NSF and RII Track-4:@NSF fellowships are expected to be to the PI's individual research career trajectory. However, consistent with its programmatic focus on jurisdictional research capacity, NSF and NASA EPSCoR expects successful fellowships to also yield benefits to the PI's home institution and/or jurisdiction. Narrative text that describes how improving the PI's individual research capacity will directly raise her/his institution's overall capacity must be included. It is expected that successful fellowships will include more proactive efforts to leverage the fellowship experience to achieve increased institutional or jurisdictional benefits. PIs are encouraged to present creative approaches for achieving this desired outcome within the overall constraints of the fellowship mechanism.

- **<u>Unique Interactions:</u>** As stated in the overview, this opportunity is intended to provide support for PIs to collaborate with facilities of national prominence that would not otherwise be possible without the fellowship. For this reason, the project description should include narrative text that explains why the interactions could not occur without the large injection of fellowship funding intended to support the collaboration.

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- **<u>Extended Host Site Visits:</u>** An extended visit/relocation or a number of short periodic visits of the PI to the host institution is considered a primary feature of this fellowship activity. It is expected that the PI will complete, as minimum, a one-month extended visit to the host institution, or an equivalent of several periodic visits totaling one month over the duration of the award.

1. Annual Report is due no later than 90 days prior to the end of the current budget period.

2. Final Report is due no later than 120 days following expiration of a grant, the PI also is required to submit a final project report, and a project outcomes report for the general public.

Who Should I contact with Any Questions:

Cognizant Program Officer(s):

Please note that the following information is current at the time of publishing. See program website for any updates to the points of contact:

Jose Colom-Ustariz, NSF, telephone: (703) 292-7088, email: jcolom@nsf.gov
Chinonye Whitley, NSF, telephone: (703) 292-8458, email: cwhitley@nsf.gov
Pinhas Ben-Tzvi, NSF, telephone: (703) 292-8246, email: pbentzvi@nsf.gov
Frank McDonald, NASA, telephone: 202-358-2146, email: Agency-EPSCoR-RII-Track-4@mail.nasa.gov
Dawn M. Martin, NASA, telephone: (321) 747-8093, email: Agency-EPSCoR-RII-Track-4@mail.nasa.gov
Kathy Loftin, NASA, telephone: 321-603-9973, email: Agency-EPSCoR-RII-Track-4@mail.nasa.gov

- NASA EPSCoR RII Track 4 information: EPSCoR Research Infrastructure Improvement (RII) Track-4 - NASA

- NSF RII Track 4 Solicitation: https://beta.nsf.gov/funding/opportunities/epscor-research-infrastructure-improvement-track-4-0

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