National Aeronautics and
Space Administration

NASA and NSF
RII Track IV
Informational Session 8

Last revised 2.25.21

EPSCoR Teams

NASA

Lester Morales and Grady Smith

NSF

Jose Colom-Ustariz and Chinonye Nnakwe Whitley

National Aeronautics and
Space Administration

NASA and NSF Established Program to Stimulate Competitive Research (EPSCoR)

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NASA

We will be at the forefront of exploration and science.

We will develop and transfer cutting-edge technologies in aeronautics and space.

We will establish a permanent human presence in space.

As we pursue our mission, we will enrich our Nation's society and economy.

NSF

It is all about discovery.

The NSF supports people and places to develop to develop tomorrow's scientists and engineers, and create new knowledge, in fields A to Z.

The only federal agency that supports fundamental research in all disciplines of science and engineering.

[Creating Knowledge to Transform Our Future]

NASA and NSF EPSCoR Fellows Advancing Science and Technology (*FAST*)

EPSCoR Research Infrastructure Improvement (RII) Track-4: EPSCoR Research Fellows, *FAST* MOU Collaboration between the NASA and NSF EPSCoR programs provides an opportunity to strengthen relationships between the respective research communities while also building on experience and know-how across the EPSCoR agencies. The collaboration will engage the NSF EPSCoR MSI community with NASA Researchers, as well as open new paths for NASA EPSCoR jurisdictions to compete for larger research projects.

Find solicitation here NSF 21-557

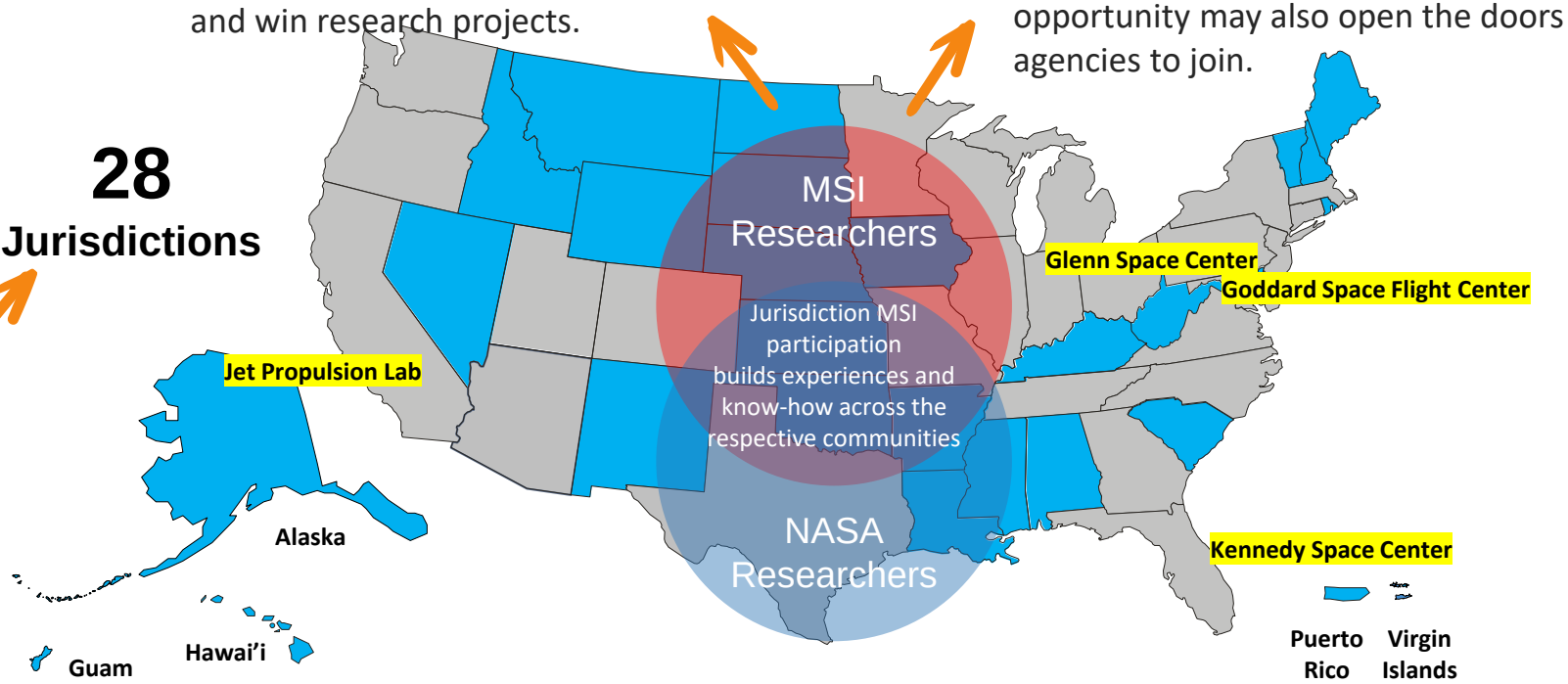
NASA and NSF EPSCoR (pilot) Fellows Advancing Science and Technology (*FAST*)

Extends interagency opportunities to MSI communities

Win-win collaborations like this also benefit the EPSCoR jurisdictions, opens a new path to compete for and win research projects.

Strengthens relationships among NSF EPSCoR, NASA EPSCoR, the respective MSI communities and the NASA EPSCoR jurisdictions. This type of opportunity may also open the doors for other agencies to join.

28
Jurisdictions



Eligible NASA EPSCoR Jurisdictions 2021

Eligibility determined by National Science Foundation EPSCoR per NASA EPSCoR legislation

Key points

10 Funding rate (PI and apprentice)

Access to the NASA Facility starting Fall of 2021 to Fall of 2023

Teams will be required to visit the NASA facility a minimum of 24 weeks during the two-year timeline

The NASA mentor is also the NASA Technical Monitor for the project and will provide annual reports and site visits

National Aeronautics and
Space Administration

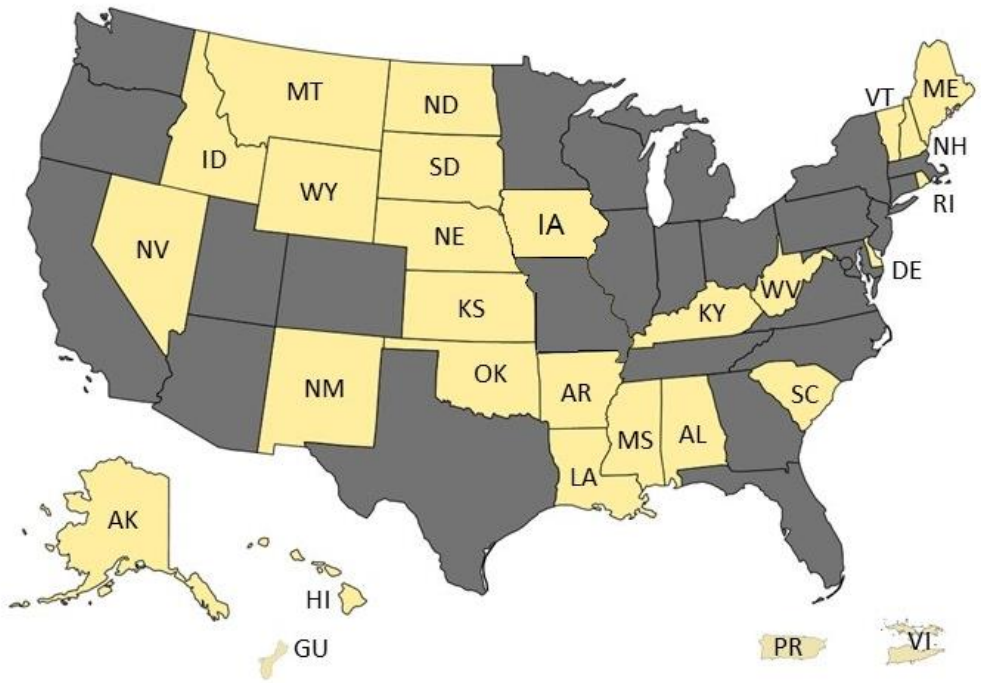
EPSCoR Research Infrastructure Improvement (RII) Track-4: EPSCoR Research Fellows

NSF EPSCoR

Overview

Jose Colom-Ustariz and Chinonye Nnakwe Whitley

NSF EPSCoR FY21 Eligibility



States

AL Alabama
AK Alaska
AR Arkansas
DE Delaware
HI Hawaii
IA Iowa
ID Idaho
KS Kansas
KY Kentucky
LA Louisiana
ME Maine
MS Mississippi
MT Montana
NE Nebraska
NH New Hampshire
NM New Mexico
ND North Dakota
NV Nevada
OK Oklahoma
RI Rhode Island
SC South Carolina
SD South Dakota
VT Vermont
WV West Virginia
WY Wyoming

Other

GU Guam
PR Puerto Rico
VI U.S. Virgin Islands

This includes twenty-five states, Guam, Puerto Rico, and the U.S. Virgin Islands.

- FY21 States, Commonwealths, and Territories that receive ≤ 0.75% of NSF research support funding averaged over most recent 3 years
- Eligibility table updated annually and publicly available: https://www.nsf.gov/od/oia/programs/epscor/nsf_oiia_epscor_eligible.jsp

RII Track-4 Vision

- Provides opportunities for non-tenured (or equivalent) investigators to further develop their individual research potential through extended collaborative visits to the nation's premier private, governmental, or academic research centers.
- Fellows will be able to:
  - learn new techniques
  - benefit from access to state-of-the-art equipment and facilities
  - strengthen collaborative partnerships
  - extend their research toward transformative directions
- Experiences gained through fellowships are intended to provide benefits that will impact the recipient's career in years to come.
- PIs may bring a trainee-level researcher along for the fellowship visit.
- These benefits to the Fellows are also expected to in turn enhance the research capacities of their institutions and jurisdictions.

EPSCoR Research Fellows Now Features Two Tracks

- New Solicitation NSF 21-557, Full proposals due: April 26, 2021

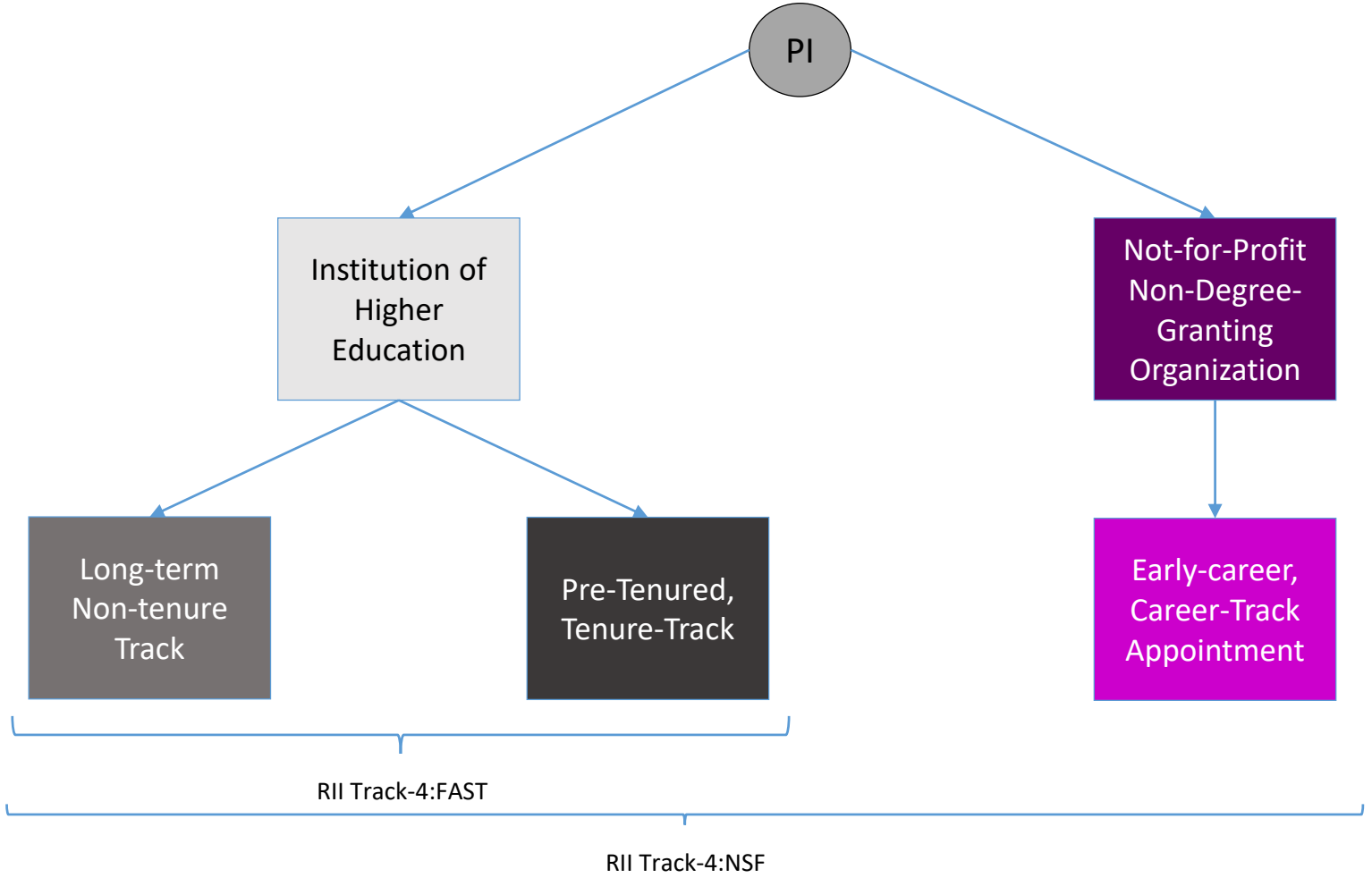
- RII Track-4:**NSF**, host sites may be any research institution within the United States or its territories/possessions
  - Generally expected to be beyond easy commuting distance
  - Any topic that NSF funds is eligible

- RII Track-4:**FAST**, host sites are selected NASA Research Centers
  - Specific topics are eligible based on the NASA Research Center (links to these topics are available in the solicitation)
  - Specific Institution types are eligible

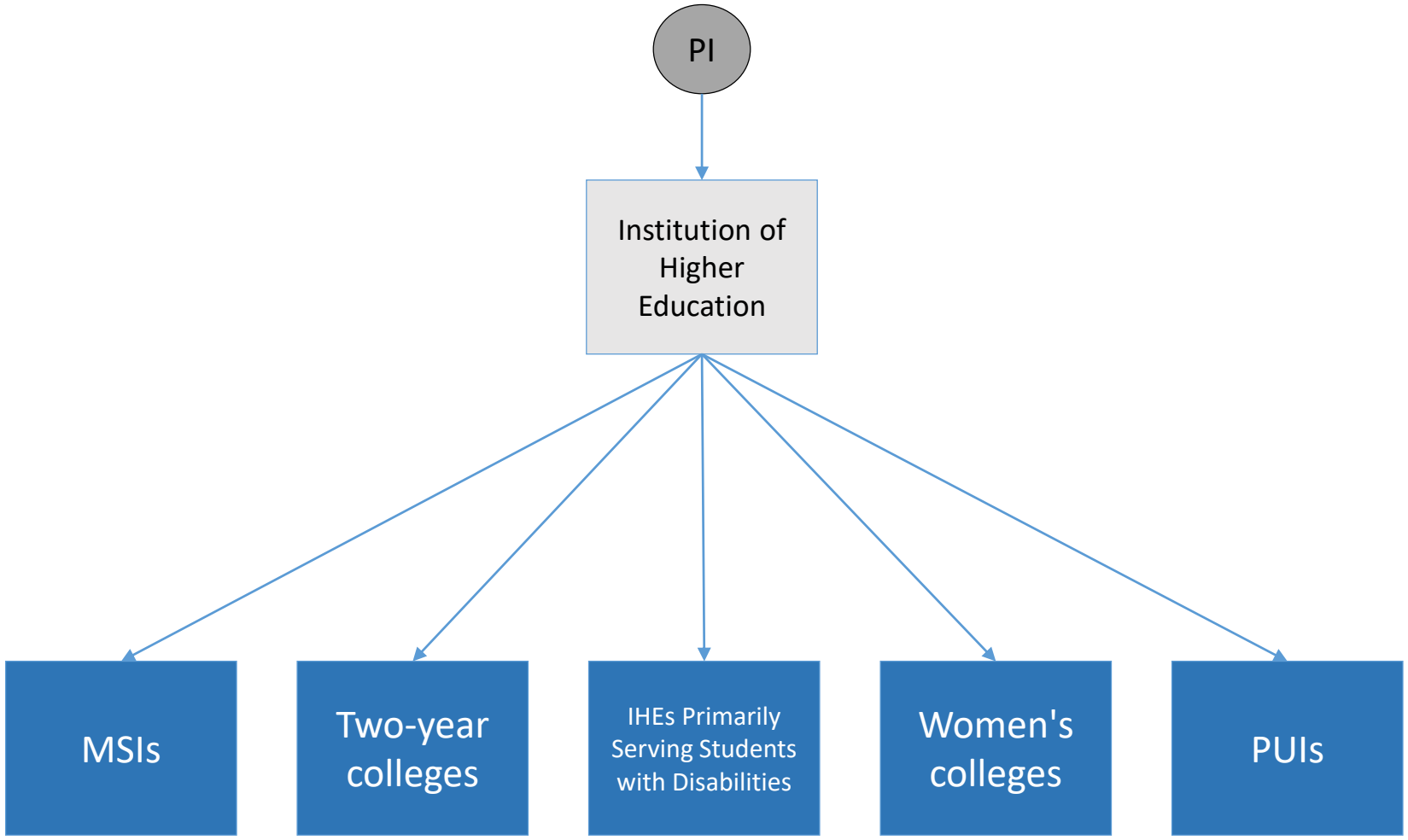
Track-4 Eligibility

- PIs must have their primary appointment at an eligible institution:
  - Must be at an EPSCoR RII-eligible jurisdiction
- At Institutions of Higher Education, PIs must hold a non-tenured faculty appointment:
  - Eligibility is determined by tenure status on proposal deadline date – April 26, 2021
  - Persons holding transitional (< 3 years) fixed-term postdoctoral appointments are not eligible for this program. This includes:
    - Postdoctoral Researchers
    - Visiting Assistant Professors
- Sole-PI proposals only; no co-PIs are allowed

RII Track-4:NSF Eligibility



RII Track-4:FAST Eligibility



Who can apply as a trainee?

- PI selects the qualified trainee
- Undergraduate students
- Graduate students
- Students from neighboring institutions within the Jurisdiction or staff

RII Track-4:FAST Eligibility: Example of Eligible MSIs

- Federally Designated Minority Serving Institutions (MSIs)
  - Historically Black Colleges and Universities (HBCUs)
  - Hispanic-serving institutions (HSIs)
  - Tribal colleges or universities (TCUs)

- Other institutions that enroll a significant percentage of underrepresented minority students as defined by the U.S. Department of Education
  - Alaska Native-serving institutions
  - Native Hawaiian-serving institutions
  - Predominantly Black Institutions
  - Asian American and Native American Pacific Islander-serving institutions
  - Native American-serving non-tribal institutions

Link for MSI definitions and eligibility information

RII Track-4:FAST Eligibility: PUI Definition

- Primarily Undergraduate Institutions (PUIs)
  - PUIs are accredited colleges and universities that award Associates 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

Proposals Submission Considerations

- For RII Track-4:NSF there is an institutional limit of **three** proposals
- For RII Track-4:FAST there is an institutional limit of **six** proposals
  - Many institutions are running internal competitions for these slots – check with them for details!
  - For institutions eligible for both tracks the maximum number of submissions is **nine** proposals

Fellowship Details

- Fellowship provides support for the fellow to spend an extended period to conduct research at an identified host site
- For RII Track-4:NSF, host sites may be any research institution within the United States or its territories/possessions
  - University, Government, Corporate, Non-Profit facilities are all eligible
  - Must identify a single host site
  - Does not need to be in an EPSCoR jurisdiction
  - Generally expected to be outside of PI's home jurisdiction and beyond easy commuting distance
- For RII Track-4:FAST, host sites are selected NASA Research Centers
  - Specific topics are eligible based on the NASA Research Center (links to these topics are available in the solicitation)
  - Specific Institution types are eligible

Fellowship Details (cont.)

- If needed, funds may also be requested to bring a trainee-level researcher along for the fellowship visit:
  - Typically, a student or postdoc already working in the PI's group
  - Salary support (up to six months; including benefits & tuition)
  - Travel between host site and home institution
  - Living expenses at the host site (up to six months)

- Additional support will be allowed for the following direct costs associated with the work to be completed at the host site:
  - Up to $10,000 (total) for lab fees, supplies, shipping equipment, publication costs, *etc*.
  - Up to $5,000 (total) for other research-related travel

- NOT easily transferrable – If the PI takes a new position in a non-EPSCoR jurisdiction, the fellowship award will likely be terminated.

What Goes in the Proposal?

- Successful RII Track-4 proposals will present exciting, vibrant fellowship ideas that will positively impact and potentially transform the PI's individual career trajectory and more broadly impact his/her research field, institution, and jurisdiction.
- All proposals should include:
  - Motivation and research context for the work to be conducted
  - Defined, reasoned, and organized research objectives which could be driven by specific research questions or hypotheses
  - PI's specific plans for the fellowship period
  - Discussion for how the benefits gained from the fellowship would be sustained beyond the award
  - Clear specifications of fellowship goals, performance metrics, and a timetable
- Explain how/why the RII Track-4 award will advance the work – what specific opportunities will be made possible *via* the PI's extended visit(s) to the host site?
  - The parameters for the partnership should be clearly established.
- Describe how the activities will lead to long-lasting impacts for both the PI's career and the home institution/jurisdiction.

Solicitation-Specific Requirements

- Cover Sheet
  - Project title must begin with track type followed by a concise, informative title in the topic area;
    - Use “RII Track-4:NSF:” or
    - “RII Track-4:FAST”
  - Proposal Type should be marked as “Research” (**not** “Fellowship”)
  - Primary Place of Performance should list the host institution for the fellowship visit

- Project Summary
  - Must identify the proposed host site and primary research collaborator(s)
  - At the bottom, indicate the NSF Directorate, Division, and Program that most closely aligns with the proposal's research focus

- Project Description
  - Strict 10-page limit
  - Include separate sections on Intellectual Merit and Broader Impacts

EPSCoR Research Fellows: Budget Request Overview

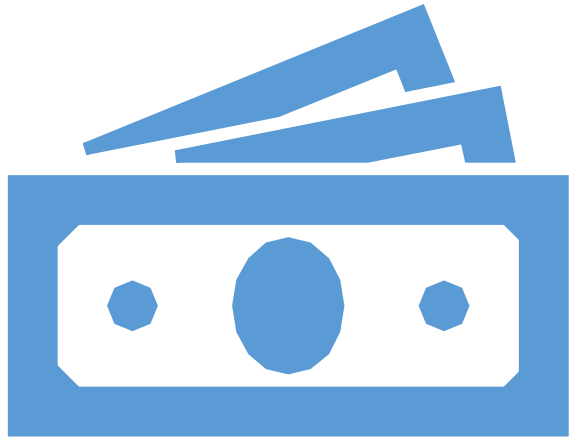
- For RII Track-4:FAST: NSF Budget requests may be up to $300,000 over a duration of **24 months**
  - Up to 6 months of salary support for the PI and **one** trainee-level participant
  - Includes up to $75,000 in travel and living expenses for the PI and trainee-level participant
  - Includes up to $10,000 (total) for fees, supplies, equipment, publication costs, *etc*
  - Includes up to $5,000 (total) for other research-related travel
  - **Additional** $60K RID grant from NASA for research infrastructure at home institution

- For RII Track-4:NSF: Budget requests may be up to $300,000 over a duration of **24 months**
  - Up to 6 months of salary support for the PI and one trainee-level participant
  - Includes up to $75,000 in travel and living expenses for the PI and trainee-level participant
  - Includes up to $10,000 (total) for fees, supplies, equipment, publication costs, *etc*
  - Includes up to $5,000 (total) for other research-related travel

NASA Research Infrastructure Development Award

From NASA: **Additional** $60K RID award ($30K/year)

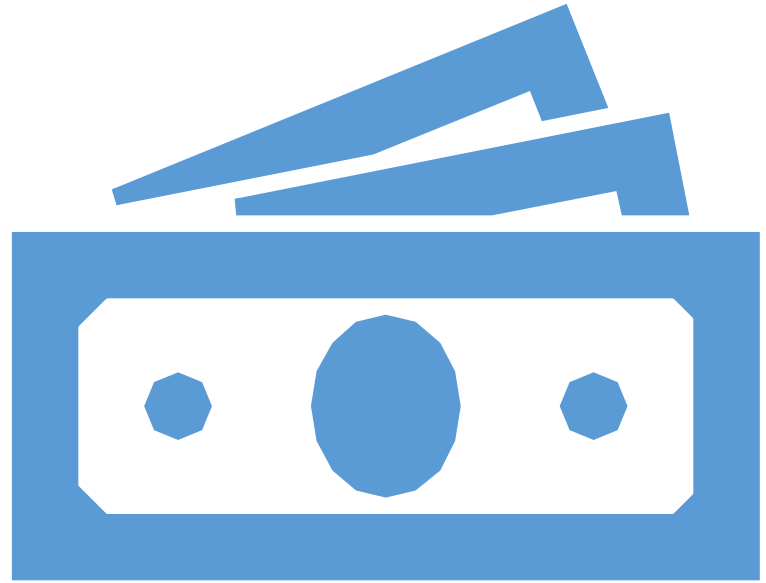
- Research Infrastructure and Development Augmentation for the winning jurisdictions
  - NASA manages the process, do not include in budget requests to NSF
  - Institutions will need to apply for these fund though the NASA EPSCoR Lead institution
- Technical Monitor travel for site visit
  - At least once during the research period maybe two depend on the both researchers (NASA and faculty)
- Professional Conference travel for the NASA mentor/ Technical monitor
  - Encouragement to apply and summit peer review papers and co-present



NASA EPSCoR RID Process ($60K)

NASA EPSCoR RID will not be part of your NSF EPSCoR funding statement

- RID augmentation will be initiated once we know which Jurisdiction received a FAST award
- Only those with FAST award will get the extra 60k over two years performance period above your NASA RID award
- That augmentation follows the same rules and regulations as any other RID augmentation
- The awarded FAST institution ***must*** apply through the same process as other institution do when applying for RID in your Jurisdiction



Required Letters For RII Track-4

Please provide all letters as supplementary documents

At least one letter is required in each of these three categories:

1. From the appropriate supervisory administrator at the PI's home institution.
   - Should confirm the institution's support of the PI's plans and particularly should verify that the PI will receive release time from other academic duties to complete the project as proposed.
   - Should also confirm the PI's employment status at the home institution as it pertains to eligibility for the RII Track-4 competition.
2. From the identified primary research collaborator(s) at the host site.
   - Should confirm the collaborator's understanding of the goals of the fellowship and provide evidence to demonstrate that the PI will receive the support necessary to complete the proposed activities.

Required Letters For RII Track-4 (cont.)

3. From the appropriate administrative managers at the host institution.
   - Should confirm that all necessary logistical arrangements (site access, office space, cyber connectivity) to ensure that the project can proceed as proposed.
   - In the rare cases where the PI believes the primary research collaborator at the host site is also the appropriate administrative manager, the PI should contact a program officer from NSF EPSCoR for guidance.

Additional Letters of Support from other parties may be submitted only if they are needed to verify specific tangible commitments related to activities described in the proposal. PIs will be required to remove letters that do not meet this standard.

Required Letters For RII Track-4:FAST

4. Primarily Undergraduate Institutions (PUIs)
   - For this category, a fourth letter, from an Authorized Organizational Representative, certifying that the originating and managing institution is
     - an accredited college or university
       - that awards Associates degrees, Bachelor's degrees, and/or Master's degrees in NSF-supported fields
       - but has awarded 20 or fewer PhD/DSci degrees in all NSF-supported fields during the combined previous two academic years

Merit Review Criteria

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

- Intellectual Merit—the potential to advance knowledge
- Broader Impacts—the potential to benefit society and contribute to the achievement of specific, desired societal outcomes

—From NSF PAPPG 19-1 Ch III A 2

Merit Review Criteria (cont.)

For each of these criteria, the following elements are considered as part of the merit review process:

1. What is the potential for the proposed activity to:
   a. Advance knowledge and understanding within its own field or across different fields (Intellectual Merit); and
   b. Benefit society or advance desired societal outcomes (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?

—From NSF PAPPG 19-1 Ch III.A.2

Merit Review Criteria (cont.)

- Solicitation-Specific Criteria:
  - 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 primarily at 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?

What's new for the NSF 21-557 Solicitation?

Partnership Considerations

- The solicitation states that if the PI proposes to visit a host site that is not beyond a reasonable commuting distance, using standard means of transportation from the home institution, the PI is expected to provide additional justification for the selection of that site.

- Proposing to work with a prior graduate or postdoctoral advisor is not encouraged unless the PI proposes to move in a new and independent research direction.

NSF EPSCoR Office Hours

- NSF EPSCoR welcomes interested applicants to register for one or more of the following office hour sessions:

  Office Hour Dates—all times at 3:00PM ET

  - **February 24, 2021**
  - **March 17, 2021**
  - **March 31, 2021**
  - **April 21, 2021**

Webinar Outline

- The NSF EPSCoR Program
- The EPSCoR Research Fellows Mechanism
- Proposal Content Overview and Requirements
- Merit Review Criteria
- What's New in the NSF 21-557 Solicitation?
- Closing Remarks

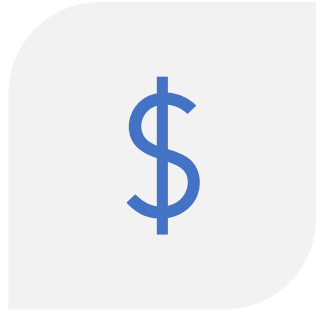
- Please Submit questions in advance to cwhitley@nsf.gov
- While real time captioning will be available, requests for additional accommodations may be sent to cwhitley@nsf.gov 14 days in advance.
- Please register via this link: https://nsf.zoomgov.com/webinar/register/WN_YvGRx_cvQqmjerkYI9eG3w

Limitations to be aware

NO MORE THAN SIX APPLICANTS PER INSTITUTION

A TWO-YEAR NASA FACILITY ACCESS LIMIT

A TWO-YEAR RESEARCH PERIOD*



* A NO COST EXTENSION MAY BE GRANTED, DEPENDING ON THE RESEARCH BEING PERFORM

Important dates

Full application is due
April 26, 2021

Awards for Late
Summer/ early Fall

NASA On-boarding
Late Summer/early Fall

Full award period Fall
2021 to Fall of 2023

Wrap up!

Steps to a successful application: all being handle through https://www.fastlane.nsf.gov/

1. Choose a NASA location
2. Go over all the research areas available from that location, select one
3. Contact POC, obtain letter(s) of support
4. Obtain letter of support from your institution

Contact Information

- National Science Foundation:
  - Chinonye Nnakwe Whitley, NSF, telephone: (703) 292-8458, email: cwhitley@nsf.gov
  - Jose Colom-Ustariz, NSF, telephone: (703) 292-7088, email: jcolom@nsf.gov
  - Andrea Johnson, NSF, telephone: (703) 292-5164, email: andjohns@nsf.gov
  - Subrata Acharya, NSF, telephone: (703) 292-2451, email: acharyas@nsf.gov
- National Aeronautics and Space Administration:
  - Jeppie Compton, NASA, telephone: (321) 867-6988, email: jeppie.r.compton@nasa.gov
  - Lester Morales, NASA, telephone: (321) 867-4411, email: lester.morales@nasa.gov
  - Grady Smith, NASA, telephone: (321) 867-4155, email: grady.l.smith@nasa.gov

- Please consult the NSF EPSCoR Website for information on Office Hours to be hosted in February, March and April 2021

FAQ: Citizenship

- RII Track IV:NSF
  - There are no citizenship requirements.
- RII Track IV:*FAST*
  - Both PI and apprentice / trainee must be US citizens.
- These provisions pertain to the pilot cycle (2021), which will be reviewed and evaluated for subsequent cycles.
- Subsequent cycles will include additional NASA sites, and additional review of NASA policies, which may also impact these provisions.
- Coordinate with the NASA site for potential site-specific requirements and additional information.

FAQ: IHE Eligibility

- Institution of Higher Education (IHEs) are required to be from at least one of the five categories:
  - Minority Serving Institutions (MSIs)
  - Those that primarily serve populations of students with disabilities
  - Women's colleges
  - Two-year colleges
  - Primarily Undergraduate Institutions (PUIs)
- PUIs are accredited colleges and universities (including two-year community colleges) that award Associates degrees, Bachelor's degrees, and/or Master's degrees in NSF-supported fields, but have awarded 20 or fewer Ph.D./DSci. degrees in all NSF-supported fields during the combined previous two academic years.
- The submitting institutions must be in the US (state or territory), as listed in the U.S. Department of Education's definitions and lists of eligible postsecondary institutions.
- Research lab examples such as museums and science centers who have a robust research are also eligible for RII Track IV:**NSF**.

FAQ: PI Eligibility

- Principal Investigators must either hold a non-tenured faculty appointment at an institution of higher education or an early-career, career-track appointment at an eligible non-degree-granting institution.
- Eligible PIs include employees of eligible non-degree-granting organizations who hold an early-career career-track position that includes a significant independent research.
- Professors must be located at the submitting institution, visiting professors are not eligible.
- Listing of additional researchers as Co-Investigators is not accepted for this solicitation.

FAQ: Funding

- There is not a cost-sharing requirement for this solicitation. Additionally, in accordance with the solicitation, inclusion of voluntary committed cost sharing is prohibited.
- The funding levels presented represent the full funding amounts for the entire period of performance of 2 years.
- No Cost Extension (NCE) requests for the Track-4:**NSF** are requested only to NSF.
- No Cost Extension request for the Track-4:**FAST** are requested to both NASA and NSF EPSCoR.

FAQ: RID Funding

- The $60K is additional RID funding that will be initiated separately, for each award to obtain / upgrade instrumentation & equipment / to build research capacity and infrastructure.
- Special purpose equipment purchases are allowed; those with a unit cost of $5,000 or more must have the prior written approval of the Federal awarding agency / NASA Grants Officer.
- Upon award notification, awardees should coordinate with the NASA POC to initiate the provision, and ensure that the funds are requested properly, concurrent with the research.
- This award is managed solely by NASA EPSCoR and should not be included in budget requests for RII Track-4:FAST proposals.
- The funds go to the jurisdiction RID (thus following standard RID protocols), but are earmarked to the researcher's institution (where the faculty is located).
- The budget period will be the same as the project period of performance (2 years), during which the funds must be expended.
- The proposed budget should not include the RID funding amount.

FAQ: Proposal Process

- Full proposals should be submitted to the NSF via FastLane or Grants.gov.
- Proposal limits per institution (maximum = nine proposals)
  - RII Track IV:NSF = three proposals
  - RII Track IV:FAST = six proposals
- The managing NSF Office: Office of Integrative Activities (OIA), EPSCoR Section
- For previous Track 4 Fellows, proposals to *FAST* are permitted once the previous award has ended.
- Proposals for Cycle Two (2022) will not be accepted early, due to the research areas will be revised for that cycle.

FAQ: Proposal Content

- RII Track-4:NSF proposals may focus on any area of science or engineering that NSF supports.
- RII Track-4:FAST awards focus on NSF/NASA areas of interest, ensure alignment with the host site. Applicant must adhere to the participating centers and research areas per the solicitation, no deviation is permitted.
- Proposals must include Letters of Support from the primary research collaborators confirming their understanding of the nature of the fellowship and providing sufficient evidence to demonstrate that the PI will receive the support necessary to complete the proposed activities.
- An additional Letter of Support is required from an appropriate host site administrator verifying that the PI will be provided with whatever site access is necessary to complete the project as proposed.
- For PUI proposal submissions, a letter is required from an Authorized Organizational Representative, certifying that the originating and managing institution is an accredited college or university that awards Associates degrees, Bachelor's degrees, and/or Master's degrees in NSF-supported fields, but has awarded 20 or fewer PhD/DSci degrees in all NSF-supported fields during the combined previous two academic years must be provided as a supplementary document.

FAQ: NASA Support

- The NASA Mentor will be aligned with the research as an SME by the NASA Center POC.
- Awardees will have the opportunity to collaborate with NASA Subject Matter Experts (SMEs) for the duration of the award. This SME will serve as a research collaborator, a technical monitor and will have support from NASA to conduct extended, collaborative visits with awardees.
- The schedule was originally set for summer months however, due to COVID-19 considerations, access will be allowed for all 24 months, for the *FAST* awarded proposals.
- Logistic support (ie: locating housing) will be made available as part of the Onboarding Process, to support access to NASA sites.

National Aeronautics and
Space Administration

Thank you!