



Historically Black Colleges and Universities Undergraduate Program (HBCU-UP)

Research Initiation Awards

Proposal Preparation Guidance Webinar

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Division of Equity for Excellence in STEM (EES) STEM Education Directorate National Science Foundation

Solicitation: Historically Black Colleges and Universities Undergraduate Program (HBCU-UP) (nsf23563) | NSF - National Science Foundation

PAPPG (NSF 23-1) dated January 30, 2023







- Historically Black Colleges and Universities Undergraduate Program Overview
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- For Your Consideration





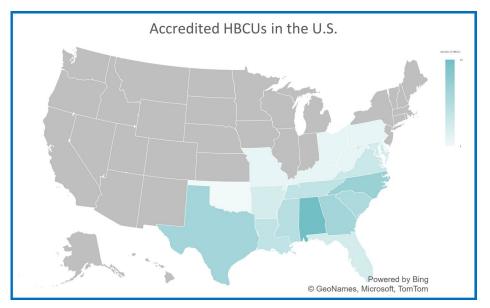
Historically Black Colleges and Universities Undergraduate Program (HBCU-UP) Overview





Historically Black Colleges and Universities-Undergraduate Program (HBCU-UP)

 <u>Goal</u>: To enhance undergraduate STEM education and research at HBCUs in order to broaden participation in the nation's STEM workforce and STEM graduate programs.







HBCU-UP

Supports development, implementation, and the study of evidence-based, innovative models and approaches to prepare HBCU undergraduates for STEM workforce.

- ✓ Innovation in instruction and curriculum development
- ✓ STEM research experiences for undergraduates
- Critical transitions (K-12 to undergraduate, 2-year to 4year, retention from freshman to sophomore, undergraduate to graduate)
- ✓ STEM faculty professional and leadership development
- ✓ Enhance STEM faculty research
- ✓ Research capacity building
- ✓ Broadening participation research in STEM Education
- ✓ STEM teacher preparation





HBCU-UP Funding Tracks (NSF 23-563)

- Research on Broadening Participation in STEM
- Research Initiation Awards
- Targeted Infusion Projects
- Implementation Projects
- Broadening Participation Research Centers
- Other Funding Opportunities
 - Conference, Planning, Rapid Response Research (RAPID), Early-Concept Grants for Exploratory Research (EAGER)





How do you seek to advance STEM Education and Research?

Faculty Research

- Research on Broadening Participation in STEM
- Research Initiation Awards

Institutional Change

- Targeted Infusion Projects
- Implementation Projects

National Impact

Broadening Participation Research Centers





Research Initiation Awards (RIA)





RIA Goal(s)

Research Initiation Awards provide support for a STEM faculty member at the HBCU to pursue research at:

1. Home institution,

- 2. (Another) Research intensive institution,
- 3. NSF-funded Center, or
- 4. National laboratory

The project should help to further the faculty member's **research capability** and **effectiveness**, to improve research and teaching at the home institution.





RIA PI Eligibility

- Principal Investigator Faculty member in a STEM or STEM education discipline at the HBCU.
- Co-Principal Investigators and senior personnel are <u>not permitted</u>.
- RIA awards are for faculty who are starting to build or rebuild a research program. Faculty members who hold or have held an <u>external research award</u> within the last three years are not eligible for the Research Initiation Award.





RIA Institutional Eligibility

- An eligible institution can submit no more than <u>two</u> Research Initiation Award proposals per year.
- <u>Note</u>: When considering applying for this funding opportunity, be reminded that HBCU-UP funded projects typically can NOT be transferred to non-HBCU institutions.





Discipline-Specific Research Alignment

Eligible

- Basic Science Research across STEM Disciplines
- Social, Behavioral and Economic Sciences

Ineligible

- Clinical (nursing), social work, business management
- Community and other population-based intervention trials.
- Research on diseaserelated goals

When in doubt, contact a program officer and/ or review previously awarded projects.





Research Initiation Awards

- In FY24, HBCU-UP anticipates funding up to 25 RIA projects.
- The maximum duration of a project is 3 years.
- The budget for RIA awards is up to **\$450,000** total (includes both direct and indirect costs).
 - Equipment costs are permitted but may not exceed
 30% of the total budget.





Proposal Preparation and Submission Guidelines





Research Initiation Awards

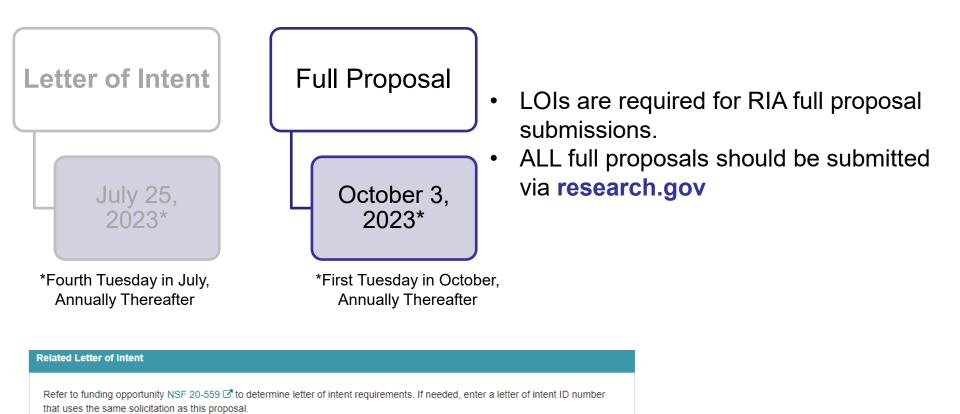
In addition to following the general format for research proposals as described in the Proposal and Award Policies and Procedures Guide (PAPPG), RIA proposals submitted must also adhere to the following special instructions:

<u>RIAs are research proposals for individual PIs</u>. These awards are <u>not</u> for curriculum or course development, establishment of student programs or new degree programs. If you are interested in those activities, please see the Targeted Infusion Projects track.





Important Proposal Submission Details



Letter of Intent ID Number (e.g., L7654321)





NSF Proposal Content

- Cover Sheet and Certifications
- Project Summary
 - Both intellectual merit and broader impacts described
- Table of Contents (Automatic)
- Project Description (up to 15 pages)
- References Cited
- Biographical Sketches
- Budgets and Budget Justification
- <u>Current and Pending Support</u>
- Facilities, Equipment and Other resources





NSF Proposal Content

- Special Information/Supplementary Documents
 - Data Management Plan
 - Letter of Support
 - Mentoring Plans
 - For the PI
 - Undergraduate student, Graduate student and/or Post-Doctoral research (if applicable)
 - Letter of Collaboration (PAPPG guidelines)
 - Quotes for Equipment
- Single Copy Documents
 - List of Suggested reviewers (Optional)
 - Collaborators and Other Affiliations





Cover Sheet

- Please begin the project title with "Research Initiation Award:"
- If applicable, mark the corresponding box regarding human subjects.
 - Pending review; Exempt; IRB approval (expiration date)
- Be sure to check all boxes that apply. Each box refers you to a section in the PAPPG, if you have questions.





Project Summary

- Each proposal must contain a summary of the proposed project not more than one page in length.
- The Project Summary consists of an **overview**, a statement on the **intellectual merit** of the proposed activity, and a statement on the **broader impacts** of the proposed activity.
- <u>Reminder</u>: Letters of Intent are required for RIA proposal submissions. Failure to do so may result in the proposal being returned without review.



Project Description

- Provide separate sections within the narrative, a discussion of the <u>intellectual merit and broader</u> <u>impacts</u> of the proposed activities.
 - This should **not** be merely a repeat of the statements from the project summary, but an expansion of these statements.
- Outline the general plan of work, including research questions or hypotheses, the broad design of activities to be undertaken, and provide a clear description of experimental methods and procedures.
- Proposers should address what they want to do, why they want to do it, how they plan to do it, how they will know if they succeed, and what benefits could accrue if the project is successful.





Project Description

- The project activities may be based on previously established and/or innovative methods and approaches, but in either case must be **well justified**.
- It is the responsibility of the PI to find a **research collaborator and** explain the rationale for the selection.
 - However, it is important to underscore the PI is leading the project's design and implementation.
- The relationship of the proposed activities the PI's projected longer-term research goals.





The Research Initiation Award Project Description should also include:

- A discussion of how the activities will benefit the research capacity at the institution.
- If appropriate, a discussion of how undergraduate or graduate students, or post-doctoral fellows will be involved in this research.
- A plan for dissemination of the research findings.
- A discussion of how the activity will be assessed.
 - On-going feedback, measures of success





References Cited:

 Provide the references cited in the proposal. <u>Follow the</u> <u>PAPPG</u>. Be sure your references reflect the most current state of the research in your field, and you are citing them properly in the proposal.

Biographical Sketches:

 Outline the experiences of the PI (three-page limit) using the PAPPG guidelines. If you wish, you can include the bio-sketch of the collaborator.

Current And Pending Support:

- Use the format provided in Research.gov.
 - Enter this proposal as pending support.





Budget

- All proposals should budget for the PI to attend a one to two-day meeting of grantees in the Washington, DC area annually.
- If a postdoctoral fellow will be included, be sure to include the salary, fringe benefits, and up to \$2000 annual travel allowance.
- Follow the PAPPG closely when preparing the budget, especially where participant support is involved.
- Consult with your SRO on indirect cost rate what categories it applies to, what the university's negotiated rate is etc.





Budget

- Support can be provided for
 - Faculty release time during the academic year,
 - Summer salary for the PI,
 - Travel and housing accommodations at the research site for the PI and students
 - Travel to conferences
 - Stipends for undergraduate student research experiences.
- <u>NO SALARY SUPPORT FOR THE RESEARCH</u> <u>COLLABORATOR</u>
- Include detailed budget justification.
- Voluntary cost-sharing is not allowed.





Equipment and Supplies (if applicable):

- Equipment cost **may not** exceed **30%** of the total budget. Quotes for equipment must be included.
- Quotes or estimates for major equipment purchases (any item over \$5000) should be included in the supplementary documents section.
- Please explain (in the project description) how recurring costs, such as lab supplies, will be supported after the project ends.
- Please explain (in the project description) how longterm maintenance of new equipment will be supported after the project ends.





Facilities, Equipment & Other Resources

- Provide a description of available facilities and priorities for their use, if applicable. Please note that this section is a required part of the proposal.
- This is the section where you may describe institutional support provided to your project that could be construed as cost-sharing. Such as, for example, the fact that the university may pay for your graduate student's tuition or may pay for part of a post-doc's salary.



Proposal Preparation Instructions

Data Management Plan:

- Proposals must include a supplementary document of no more than two pages labeled "Data Management Plan".
- This supplement should describe how the proposal will conform to NSF policy on the dissemination and sharing of research results. Consult the PAPPG for details or go to

http://www.nsf.gov/bfa/dias/policy/dmp.jsp

https://dmptool.org





Additional Supplementary Documents Required by NSF 23-563

- A letter of support from the proposer's Department Chair or Dean stating that the PI will have institutional support in terms of allowance for release time, travel for research purposes, and access to existing research facilities.
 - This document must clearly state that the university will grant the proposer release time, if requested in the budget.
- A mentoring plan for the proposer from the Department Chair, Dean, or senior faculty member.
- <u>Note</u>: If the letter of support and the mentoring plan are written by the same person, one document can be submitted.





Additional Supplementary Documents Required by NSF 23-563

- A letter of collaboration from the PI's research collaborator (follow the PAPPG guidance).
 - The nature of the research collaboration should be described in the project description.
- A mentoring plan from the PI for the undergraduate students, graduate students or post-doctoral fellow that may be involved in the project.
- All letters must be signed so that it can be determined who wrote the letter.





MERIT REVIEW PROCESS





NSF Merit Review Criteria

Both criteria, **Intellectual Merit** and **Broader Impact**, will be given full consideration during the merit review and decision-making process. Each criterion is necessary but neither, by itself, is sufficient. Proposers must fully address both criteria.

The following elements will be considered in the proposal's review:

- What is the potential for the proposed activity to:
 - advance knowledge and understanding within its own field or across different fields (Intellectual Merit); and
 - benefit society or advance desired societal outcomes (Broader Impacts)?



NSF Merit Review Criteria

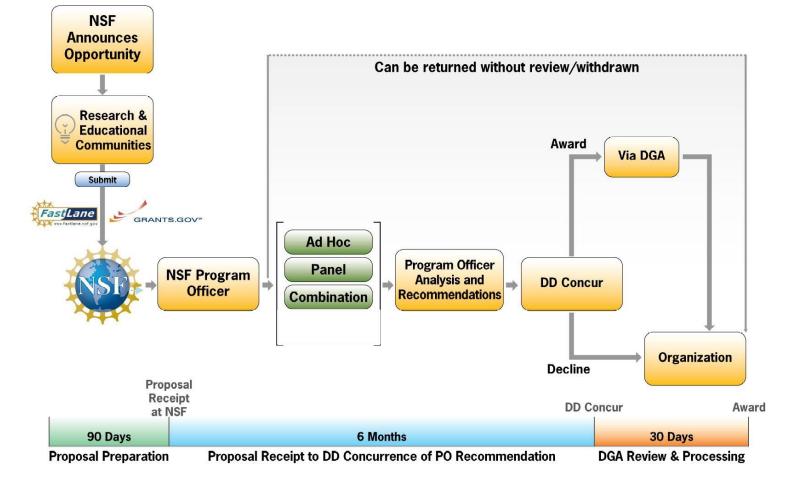
WHERE DISCOVERIES BEGIN

- To what extent do the proposed activities suggest and explore creative, original, or potentially transformative concepts?
- Is the plan for carrying out the proposed activities wellreasoned, well-organized, and based on a sound rationale? Does the plan incorporate a mechanism to assess success?
- How well qualified is the individual, team, or institution to conduct the proposed activities?
- Are there adequate resources available to the PI (either at the home institution or through collaborations) to carry out the proposed activities?





Proposal Processing: Average duration







For Your Consideration



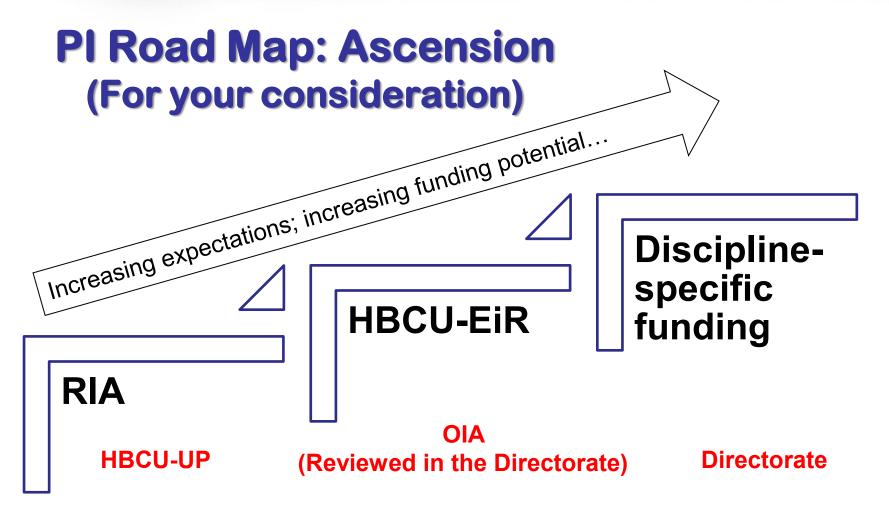


Common Concerns Leading to Declined Proposals

- Missing required documents
- Lack of detail regarding the research hypothesis
- Lack of detail regarding experimental methods/design
- Limited information regarding Broader Impacts
- Incorrect Solicitation











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- To subscribe:
- 1) Send an e-mail to LISTSERV@LISTSERV.NSF.GOV
- 2) Leave the subject line blank
- 3) The body of the message should say: subscribe HBCU 'your full name'
- Example of the body of your message:
- subscribe HBCU Percy Julian
- General Questions:
 - HBCU_UP@nsf.gov





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