

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

Broadening Participation Research Centers

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

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

(nsf23563) | NSF - National Science Foundation

PAPPG NSF 23-1 dated January 30, 2023 | NSF - National Science Foundation













Topics

- Historically Black Colleges and Universities Undergraduate Program (HBCU-UP) Overview
- Broadening Participation Research Centers (BPRCs)
 - Overview
 - Active BPRCs
 - Eligibility
- Preliminary Proposal Preparation and Submission Guidelines
- Full Proposal Submission Guidelines Overview
- Merit Review Process



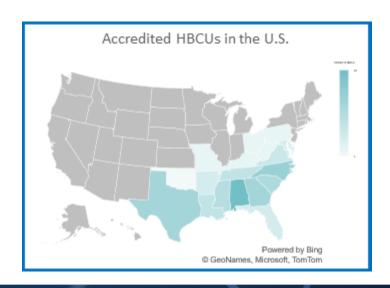






Historically Black Colleges and Universities Undergraduate Program (HBCU-UP)

Goal: To enhance the quality of 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 evidencebased, 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 4-year, retention) from freshman to sophomore, undergraduate to graduate)
- ✓ STEM faculty professional and leadership development
- ✓ Enhance STEM faculty research
- ✓ Research capacity building
- ✓ Research on broadening participation in STEM
- ✓ STEM teacher preparation











HBCU-UP Funding Tracks NSF 23-563

- Targeted Infusion Projects
- Research on Broadening Participation in STEM Projects
- Research Initiation Awards
- Implementation Projects
- Broadening Participation Research Centers
- Additional Funding Opportunities (e.g. EAGER, RAPID, Conference, Planning)





How do you seek to enhance 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













If you aim to lead efforts to disseminate the success of HBCUs in educating African American STEM undergraduates ...

Broadening
Participation Research
Centers

- Project Length: Up to five years
- Award size: Up to \$9 million
- Build the intellectual infrastructure to facilitate the creation, integration and transfer of new knowledge in broadening participation research





Broadening Participation Research Centers (BPRCs)

- Establish a culture in broadening participation research that will add to the research knowledge and enhance understanding of barriers that hinder and factors that enhance our ability to broaden participation in STEM.
- Offer the HBCU community a venue for interaction and an effective mechanism to undertake long-term integrated research and education activities focusing on broadening participation research.
- Gather and represent the collective intelligence of HBCU STEM higher education and serve as a national hub for the rigorous study and broad dissemination of the critical pedagogies and culturally sensitive interventions that contribute to the success of HBCUs in educating African American STEM undergraduates and other populations underrepresented in STEM.













Active BPRCs





















- Historically Black Colleges and Universities (HBCUs) that are accredited and offer undergraduate educational degree programs in science, technology, engineering and mathematics (STEM)
- Institutions that have been awarded three previous Implementation or ACE Implementation Projects are eligible to be the lead institution on a BPRC proposal
- The Principal Investigator and co-Principal must be the key personnel that will be responsible for guiding the implementation of the project or Center.
- An eligible institution can submit only one BPRC proposal and can have **only one active center**. The lead institution of the center proposal must demonstrate the capacity to conduct broadening participation research.











BPRC Proposal Preparation and Submission









Proposal Preparation Instructions

- HBCU-UP program solicitation
 <u>Historically Black Colleges and Universities Undergraduate</u>
 <u>Program (HBCU-UP) (nsf23563)</u>
- Proposal and Award Policies and Procedures Guide (PAPPG)
 PAPPG NSF 23-1











BPRC Proposal Submission – Deadlines

Preliminary Proposal

March 26, 2024

Full Proposal

November 26, 2024





Broadening Participation Research Centers – Preliminary Proposals

- Letters of Intent are not required for BPRC proposals.
- Preliminary Proposals (required): Preliminary proposals are required and must be submitted via research.gov, even if full proposals will be submitted via Grants.gov.
- Preliminary proposals that are not compliant with the guidelines may be returned without review, thus making the proposing team automatically ineligible for submitting a full BPRC proposal.





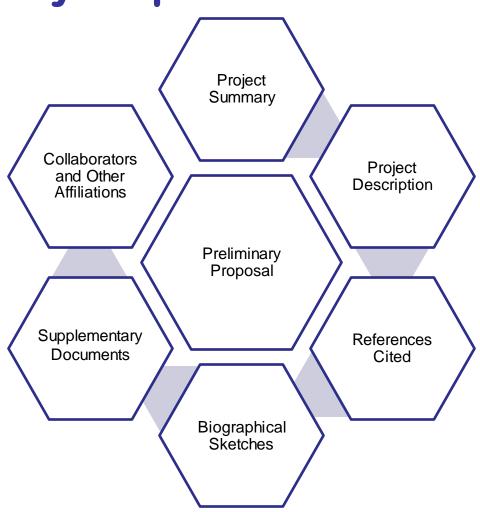








Preliminary BPRC proposals will contain an overview of the proposed vision, strategic plan, partnerships, research, education, outreach, and knowledge transfer activities with sufficient detail to allow assessment of the intellectual merit and broader impacts of the proposed Center.











Project Description



BPRC Preliminary Proposals – Project Summary

- 1-page maximum
- Provide an overview of the proposed Center, addressing separately the intellectual merit and broader impacts of the project











BPRC Preliminary Proposals – Project Description

- 12-pages maximum
- Articulate a vision for the proposed Center that clearly outlines the challenges being addressed
- Describe the proposed research
 - should be sufficiently complex and long-term to justify a Center
 - should be flexible enough to permit change as the research proceeds
 - should include an outline of research themes
 - should include illustrative examples of specific research directions with sufficient detail to be evaluated by reviewers









BPRC Preliminary Proposals – Project Description (continued)

- Describe how the integration of research, education, outreach, and knowledge transfer in a Center-level activity will advance the proposed research in a way that other funding mechanisms cannot.
- Describe each team member's contribution to the project
- Describe the team's efforts to facilitate coordination across collaborating institutions
- Discuss how all institutions will support a collaborative infrastructure and the extent to which leadership, communication, and integration of activities will be addressed
- Include Results from Prior NSF Support











BPRC Preliminary Proposals – References and Biographical Sketches

References Cited (2-page limit):
 See NSF PAPPG instructions for format



• Biographical Sketches (3-page limit per person):
Biographical Sketches are required for PI and co-PIs only

Effective 10/23/23, use of <u>SciENcv</u> is mandatory for preparation of biographical sketches and current and pending support.

Fillable PDFs can no longer be uploaded in Research.gov and Grants.gov.











BPRC Preliminary Proposals – Supplementary Documents

- List all project personnel who have a role in the management, research, education, outreach, and knowledge transfer components of the Center. Provide the last name, first name, and institution/ organization.
- Include a one-page table indicating an estimate of funds that will be allocated to each participating institution broken down by category, i.e., research, education, outreach, and knowledge transfer.











BPRC Preliminary Proposals – Collaborators & Other Affiliations

Information specified in the PAPPG should be submitted using the instructions and spreadsheet template found on the Collaborators and Other Affiliations Information website at

https://www.nsf.gov/bfa/dias/policy/coa.jsp







BPRC Proposal Submission – Deadlines

Preliminary Proposal

March 26, 2024

Full Proposal

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^{*} A video focused on full proposal preparation will be posted following preliminary proposal submission.



Broadening Participation Research Centers – Full Proposal Content

- Cover Sheet and Certifications
- **Project Summary** (describing both the intellectual merit and broader impacts)
- Table of Contents (Automatic)
- Project Description (up to 25 pages)
- References Cited
- Biographical Sketches (new SciENcv format)
- Budget(s) and Budget Justification(s)
- Current and Pending Support (new SciENcv format)
- Facilities, Equipment and Other resources











Broadening Participation Research Centers – Full Proposal Content

- Special Information/Supplementary Documents
 - List of Partner Institutions and Project Personnel Updates
 - Timeline for All Activities
 - Letter of Support (indicating specific institutional support for the project activities from the president or appropriate leader at the lead institution)
 - Letters of Collaboration
 - Mentoring Plans (for undergraduate or graduate students and/or post-doctoral researchers, if applicable)
 - Data Management Plan
 - Quotes for Equipment
 - Project Evaluation Plan

Single Copy Documents

- List of Suggested Reviewers (Optional)
- Collaborators and Other Affiliations





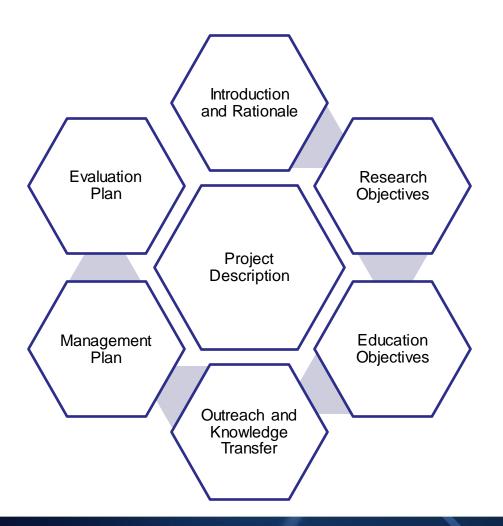








Broadening Participation Research Centers – Project Description



The Project Description must contain the indicated sections and cannot exceed 25 pages including tables and illustrations.

The broader impacts resulting from the proposed project must be addressed and described as an integral part of the narrative.











MERIT REVIEW PROCESS











Broadening Participation Research Centers - Merit Review

- NSF projects should be of the highest quality and have the potential to advance, if not transform, the frontiers of knowledge.
- NSF projects, in the aggregate, should contribute more broadly to achieving societal goals.
- Meaningful assessment and evaluation of NSF funded projects should be based on appropriate metrics, keeping in mind the likely correlation between the effect of broader impacts and the resources provided to implement projects.



Broadening Participation Research Centers – Merit Review

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)?











Broadening Participation Research Centers – Merit Review

- 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?



Broadening Participation Research Centers – Merit Review

Reviewers will also be asked to evaluate the following:

- Data Management Plan (required)
- Student Mentoring Plan and/or Postdoctoral Researcher Mentoring Plan (as appropriate)
- Letters of support and collaboration
- Other supplementary documents





Broadening Participation Research Centers-**Additional Review Criteria**

- Does the proposal convey a **vision** for how the Center will establish a culture in broadening participation research that will produce work that adds to the research knowledge base?
- How are the research, education, outreach, and knowledge transfer efforts strategically embedded and integrated in the proposed Center?
- To what extent are the research, educational, outreach, and knowledge transfer activities innovative and how do they contribute to the unifying mission of the proposed Center?
- To what extent does the proposed Center management have the vision, experience, and capacity to manage a complex and innovative enterprise that integrates research, education, outreach, and knowledge transfer?
- Does the evaluation plan define indicators and benchmarks to inform the project team and others about the operations and effectiveness of the implementation?



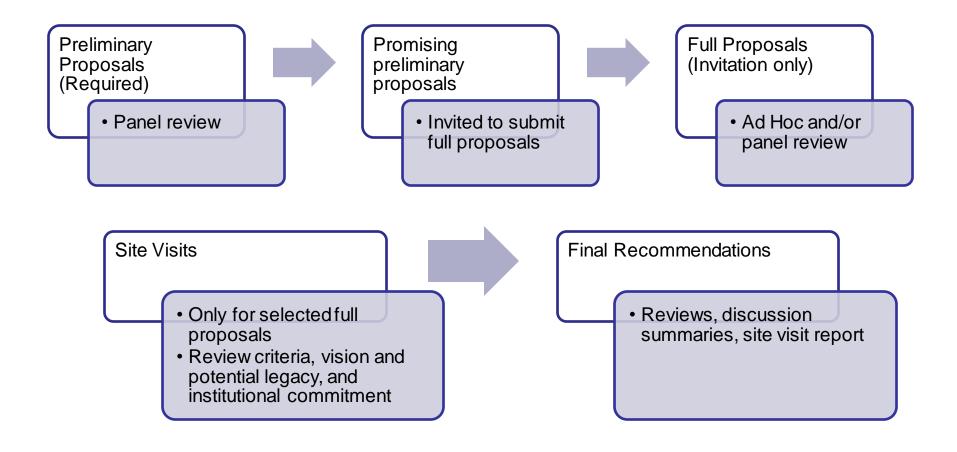








Multi-Phase Merit Review Process















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



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Thank You!