



WHERE DISCOVERIES BEGIN



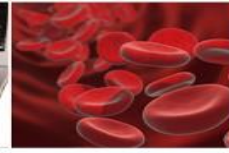
# Historically Black Colleges and Universities Undergraduate Program (HBCU-UP):

## Broadening Participation Research Centers

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**National Science Foundation  
Directorate for Education and Human Resources  
Division of Human Resource Development**

[Solicitation: Historically Black Colleges and Universities Undergraduate Program \(HBCU-UP\) \(nsf20559\) | NSF - National Science Foundation](#)  
[Proposal & Award Policies & Procedures Guide - PAPPG | NSF - National Science Foundation](#)



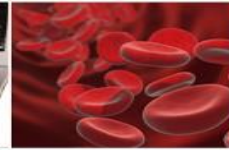
# Zoom Etiquette

## For a smooth experience, participants should:

- Update name to include institution
  - Example: Carleitta Paige-Anderson, School-Name
- Mute audio when not speaking
- Communicate via Chat during presentation
  - Select Everyone: general questions/comments
  - Select NSF staff member: private/personal situations
- Use “raise hand” function to engage during open discussion, unmute when called upon



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# Webinar Agenda

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

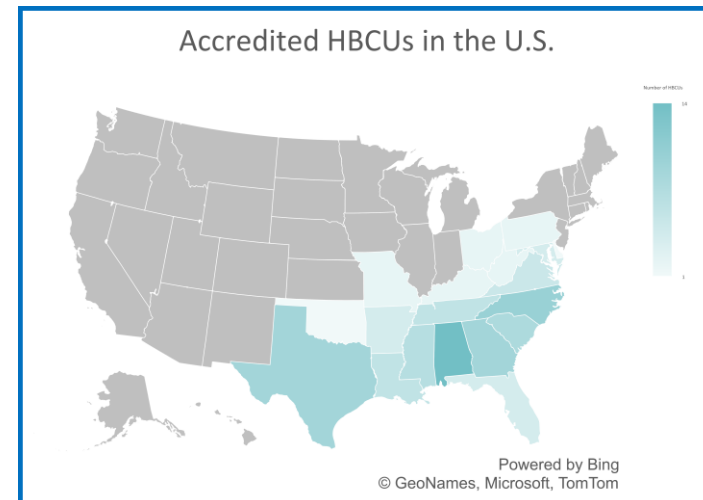


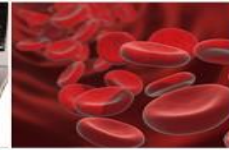
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# Historically Black Colleges and Universities Undergraduate Program (HBCU-UP)

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.



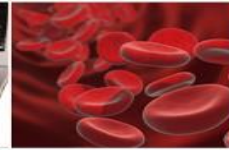


# HBCU-UP

Supports development, implementation, and the study of 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 4-year, 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 20-559)

- Broadening Participation Research in STEM
- Research Initiation Awards
- HBCU-Excellence in Research\*
  - HBCU-EiR is described under NSF solicitation [20-542](#)
  - Managed by the Office of Integrative Activities
- Targeted Infusion Projects
- Implementation Projects
  - Achieving Competitive Excellence (ACE)
- 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

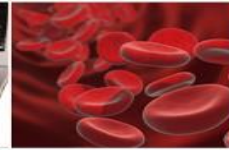
- Project Length: Up to five years
- Award size: Up to \$9 million
- Build the intellectual infrastructure to facilitate the creation, integration and transfer of new knowledge in broadening participation research



## Broadening Participation Research Centers (BPRCs)

- Establish a culture in broadening participation research that will add to the research knowledge and enhance understanding of the 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.**



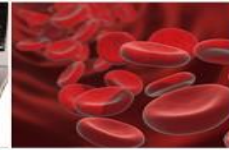


# Broadening Participation Research Centers Eligibility

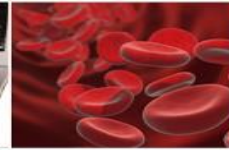
- **Eligible Institutions:** Historically Black Colleges and Universities (HBCUs) that are accredited and offer undergraduate educational degree programs in science, technology, engineering and mathematics (STEM)
- Institutions that have been awarded **three previous Implementation or ACE Implementation Projects** are eligible to be the lead institution to submit a proposal for a Broadening Participation Research Center (BPRC).
- 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 Broadening Participation Research Center proposal and can have only one active center.**
- The lead institution of the center proposal must demonstrate the **capacity to conduct broadening participation research.**



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# BPRC Proposal Preparation and Submission



# BPRC Full Proposal Preparation

- Historically Black Colleges and Universities Undergraduate Program (HBCU-UP) Program Solicitation, NSF 20-559
- NSF Proposal and Award Policies and Procedures Guide (PAPPG), NSF 22-1



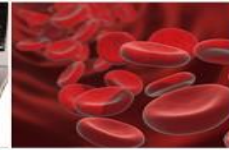
# BPRC Proposal Submission – Deadlines

Preliminary Proposal

March 22, 2022

Full Proposal

November 22, 2022



# Broadening Participation Research Centers – Full Proposal Content

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





# Broadening Participation Research Centers – Full Proposal Content

## Special Information/Supplementary Documents

- Mentoring Plans  
*Undergraduate student, Graduate student and/or Post-Doctoral research (if applicable)*
- Data Management Plan
- Letters of Commitment and Collaboration
- Quotes for Equipment
- Project Evaluation

## Single Copy Documents

- List of Suggested reviewers (Optional)
- Collaborators and Other Affiliations
- The list of Partner Institutions and Project Personnel that were required in the preliminary proposal must be updated to reflect any changes occurring since the time of preliminary proposal submission. You can also use up to 2 pages to briefly describe the partnering institutions.



# Broadening Participation Research Centers – Full Proposals





# BPRC Full Proposals – Project Summary

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





# 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.



# BPRC Full Proposals: Project Description continued



## Introduction and Rationale for the Center (4-page limit suggested)

- Describe Center background and expected significance
- Explain unique opportunities that a Center will provide
- Describe what will be achieved as a Center that could not be achieved otherwise
- Describe how Center will build a community of scholars in the science of broadening participation
- Explain how the Center will incorporate and promote the connection of HBCUs to mainstream STEM higher education reform
- Discuss Center goals and objectives
- Include baseline data to provide context for the Center's impact
- Describe the Center's potential legacy







# BPRC Full Proposals: Project Description continued



## Description of Center Research Objectives (up to 10 pages)

- State overall vision and long-range research goals
- Describe proposed research areas/themes and how they integrate with each other to realize the Center's research vision
- Indicate the lead role of each partner organization or participant in each research topic/goal area
- Explain how the research focus is sufficiently long-term to justify a Center and flexible enough to permit change as the research progresses
- Provide detailed research plan
- Indicate the potential impact or expected significance of the Center's research





# BPRC Full Proposals: Project Description continued



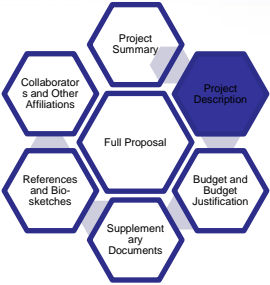
## Description of Center Education Objectives (suggested 2 pages)

- Describe the education plan and how the Center will integrate research and education
- Describe the proposed activities and explain how activities are evidence-based and developed in the context of current education research
- Describe plans for the mentoring and professional development of junior faculty, post-doctoral fellows, and students involved in the Center's education activities
- Describe plans for recruiting students and describe the proposed activities in sufficient detail





# BPRC Full Proposals: Project Description continued



## Description of Center Outreach and Knowledge Transfer Objectives

(suggested 1.5 pages for each)

- Describe how the Center will conduct outreach to the scientific and academic communities and the general public
- Describe plans for providing technical assistance to Historically Black Colleges and Universities and other institutions
- Explain how the Center will communicate the results and outcomes of the Center to the scientific community in STEM education and research
- Describe how the Center will be a hub for dissemination of research on broadening participation and will connect the research community
- Describe other ways of knowledge transfer





# BPRC Full Proposals: Project Description continued



## Description of Management Plan (suggested 3-page limit)

- Explain the Center's management plan
- Identify key members of the Center Management Team and explain their specific roles and areas of responsibility
- Describe the Center Director's capacity to develop and lead a team to fulfill the Center's vision
- Explain the Center Management Team's management experience and qualifications to administer their component of the Center
- Clearly describe the responsibilities of the lead and partner organizations







# BPRC Full Proposals: Project Description continued



## Description of Management Plan (suggested 3-page limit)

- Describe the processes that will be used to prioritize Center activities; select and integrate research projects with one another and with other Center activities
- Explain how the Center will allocate funds and equipment across Center activities and among partners
- Describe the process for selecting a replacement for the Center Director, if needed
- Describe plans for sustainability or institutionalization of the Center
- Describe the members and roles of the external advisory committee (required)







# BPRC Full Proposals: Project Description continued



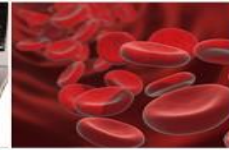
## Description of Evaluation Plan (suggested 3-page limit)

- Provide a formative evaluation plan with strategies to monitor operations and activities of the Center as they evolve
- Describe how evaluation findings will inform and guide the efforts of the Center
- Describe the criteria that will be used to evaluate the quality and impact of the Center's activities
- Explain the process for collecting and analyzing information
- Provide a summative evaluation plan with strategies to assess the effectiveness and impact of the Center
- Include capability statement and credentials of the evaluator(s) (in supplemental documents)





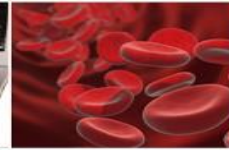
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Coming together is the beginning...

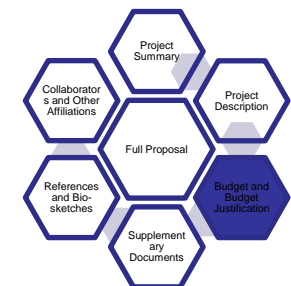
Keeping together is progress...

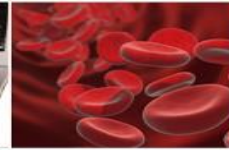
Working together results in maximum impact!



# BPRC Full Proposals: Budget and Budget Justification

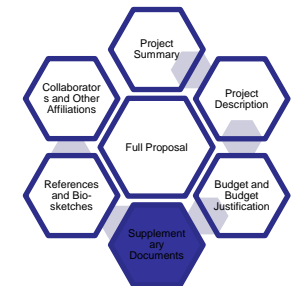
- Provide a budget for each of the five years
- Budget and budget justification should reflect start-up activities at the commencement of Center activities
- Submit a separate budget and budget justification for each participating institution





# BPRC Full Proposals: Supplementary Documents

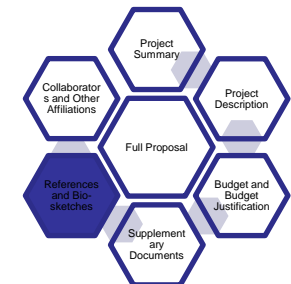
- Update list of partner institutions and project personnel (required in preliminary proposal)
- 2 pages can be used to describe partnering institutions
- Provide a timeline for all activities (limit 2 pages)
- Include letter of collaboration indicating specific institutional support for project activities from the president of the lead institution





# BPRC Full Proposals: References and Biographical Sketches

- **References Cited (2-page limit):** See NSF PAPPG instructions for format
- **Biographical Sketches (3-page limit per person):** Required for the PI and co-PIs only
- Note new format for [Biographical Sketches](#)

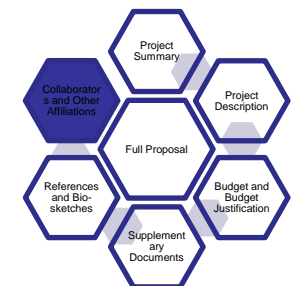






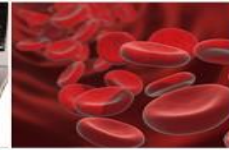
# BPRC Full Proposals: Collaborators & Other Affiliations

- 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>
- Please note that proposers using the COA template for more than 10 senior project personnel will encounter proposal print preview issues. Please see the COA website for updated guidance.





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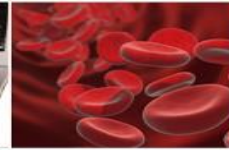
# MERIT REVIEW PROCESS



# 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.

- What is the potential for the proposed activity to advance knowledge and understanding within its own field or across different fields (**Intellectual Merit**)?
- What is the potential for the proposed activity to benefit society or advance desired societal outcomes (**Broader Impacts**)?
- 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 well-reasoned, 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 collaboration
- Other supplementary documents



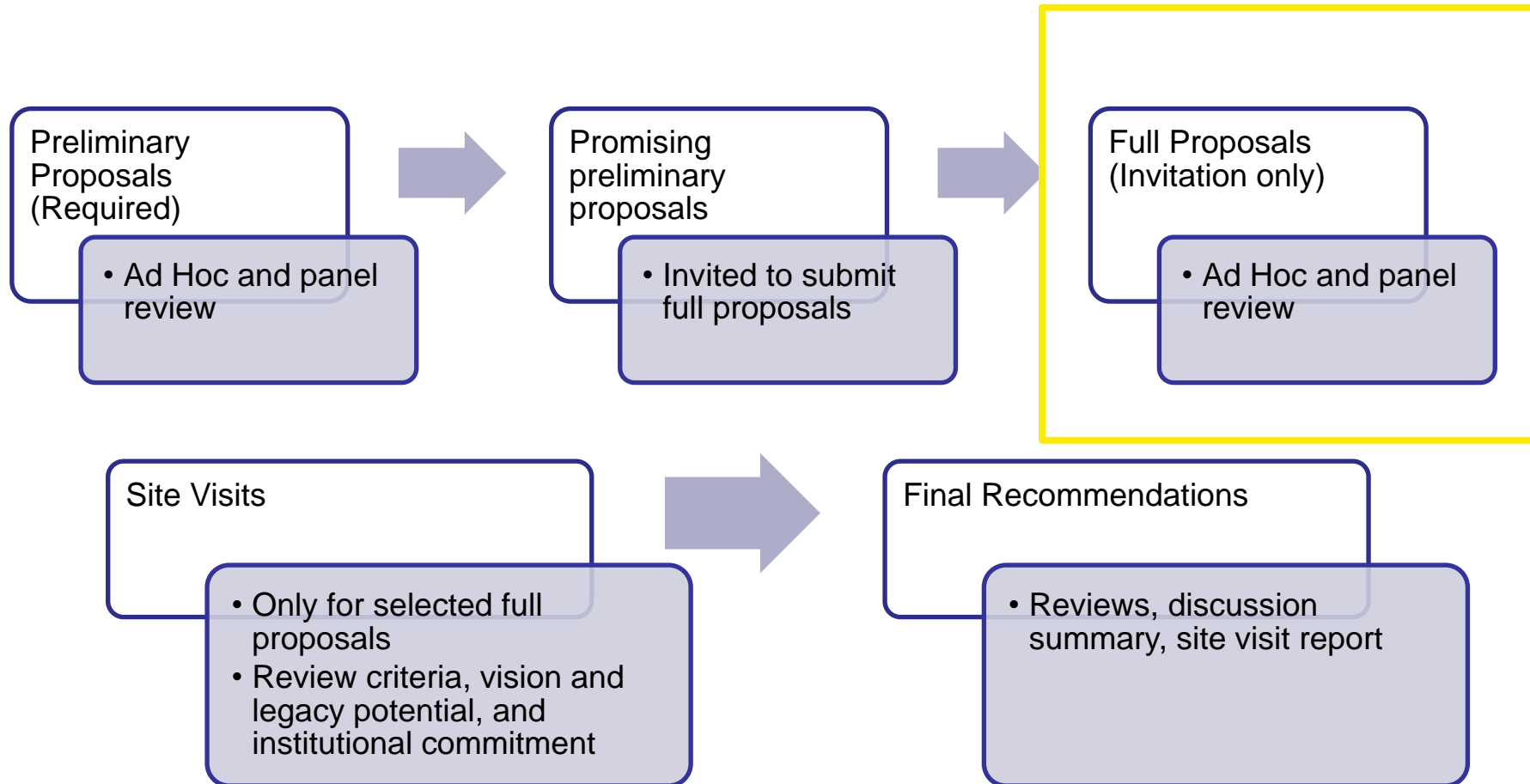
## Broadening Participation Research Centers – Additional Review Criteria

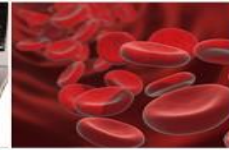
- Does the proposal convey a **vision** for how the Center will establish a culture in broadening participation research that will produce work that adds to the research knowledge base?
- How are the **research, education, outreach, and knowledge transfer** efforts strategically embedded and integrated 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?





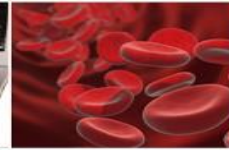
# Multi-Phase Merit Review Process





# Stay Informed

- Join the HBCU-UP List Serv
  - To subscribe:
    - 1) Send an e-mail to [LISTSERV@LISTSERV.NSF.GOV](mailto: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](mailto:HBCU_UP@nsf.gov)



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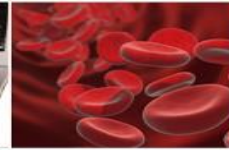
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# Thank You!

## Q&A