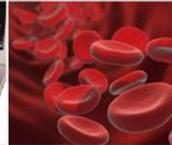




WHERE DISCOVERIES BEGIN



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

Implementation Projects Proposal Preparation Guidance Webinar

Program Directors:

Joyce Belcher, Alfred Hall, LeRoy Jones II,
Carleitta Paige-Anderson and Tori Rhoulac Smith

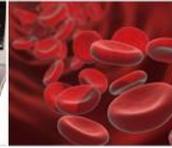
**Division of Equity for Excellence in STEM (EES)
STEM Education Directorate
National Science Foundation**

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

[PAPPG \(NSF 23-1\) dated January 30, 2023](#)



Request this document in an accessible format by visiting [nsf.gov/accessibility](https://www.nsf.gov/accessibility)



Agenda

- Historically Black Colleges and Universities Undergraduate Program Overview
- Implementation Projects (IMP)
 - Eligibility
 - Overview
- Proposal Preparation and Submission Guidelines
- Merit Review Process
- For Your Consideration



WHERE DISCOVERIES BEGIN

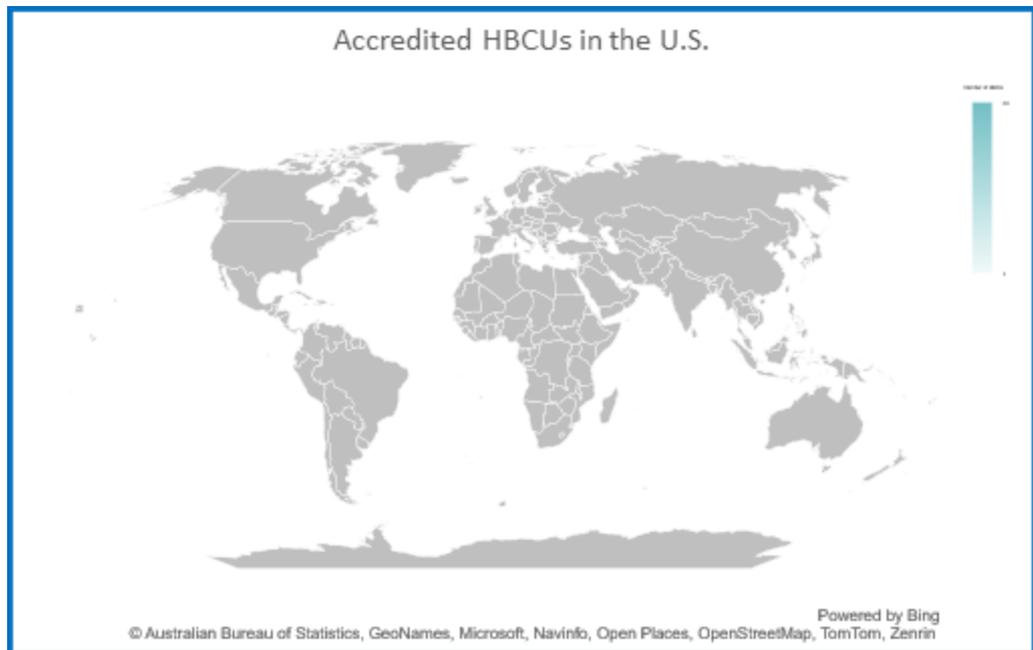


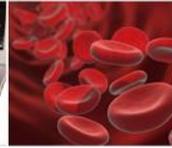
Historically Black Colleges and Universities Undergraduate Program (HBCU-UP) Overview



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

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

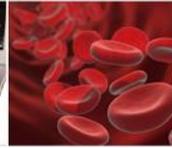




HBCU-UP

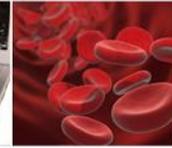
Supports development, implementation, and the study of evidence-based, innovative models and approaches to prepare HBCU undergraduates for STEM workforce.

- ✓ Innovation in instruction and curriculum development
- ✓ STEM research experiences for undergraduates
- ✓ Critical transitions (K-12 to undergraduate, 2-year to 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 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

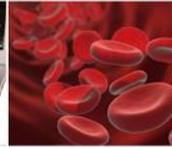
- Targeted Infusion Projects
- Implementation Projects

National Impact

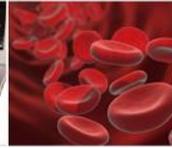
- Broadening Participation Research Centers



WHERE DISCOVERIES BEGIN



Implementation Projects (IMP)



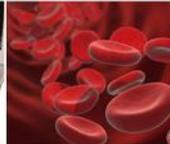
IMP Goal(s)

Implementation Projects provide support to design, implement, study, and assess comprehensive institutional efforts for:

1. Increasing the number of students receiving undergraduate degrees in STEM and
2. Enhancing their preparation by strengthening STEM education and research

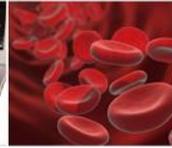


WHERE DISCOVERIES BEGIN



IMP PI Eligibility

- Principal Investigator and Co-Principal Investigators for IMP must be individuals who will be responsible for guiding the implementation of the project.
- A PI or Co-PI of an active BPRC may not be a PI or Co-PI on an IMP proposal if the Center would still be active at the start of the new award.

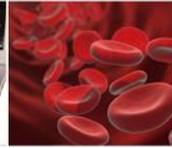


IMP Institutional Eligibility

- An institution may submit only one IMP proposal per year.
- An institution may have only one active IMP award. However, a new proposal may be submitted by an institution with an active award due to expire before the new award is set to begin.

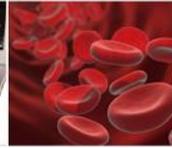


WHERE DISCOVERIES BEGIN



Implementation Project Awards

- In FY24, HBCU-UP anticipates funding up to 10 IMP awards.
- The maximum duration of a project is 4 years during the 1st round; up to 5 years thereafter.
- The budget for IMP awards is up to **\$1,250,000** for 1st round projects; up to **\$2,250,000** for 2nd and 3rd round projects; up to **\$3,000,000** for 4th round projects (and beyond).
- Equipment costs are permitted but may not exceed **30%** of the total budget.
- Grant Administration: IMP will be managed by NSF as continuing grants.



Point of Emphasis

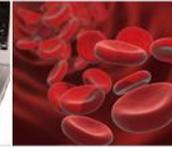
- There are no limitations on the number of IMP projects an institution can receive (although each institution can have only one active award).
- If an institution has previously received an Implementation Project or an ACE Implementation grant, it is critical that the proposal for a new Implementation Project provides complete information on the outcomes and impact of the previous Implementation Project(s).
 - Implementation Project proposals from past awardees must not simply propose continuing the previous Implementation Project grant activities.
- Efforts should be made to increase the number of students submitting competitive applications to the NSF Graduate Research Fellowship Program, and other competitive fellowship programs.
- The recruitment and retention of veterans in STEM fields to diversify and increase the STEM workforce is encouraged.



WHERE DISCOVERIES BEGIN



Proposal Preparation and Submission Guidelines



Important Proposal Submission Details

Letter of Intent

September 12, 2023*

*Second Tuesday in September, Annually Thereafter

Full Proposal

November 9, 2023*

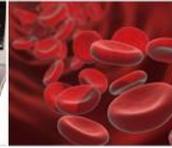
*Second Thursday in November, Annually Thereafter

- LOIs are required for IMP full proposal submissions.
- ALL full proposals should be submitted via [research.gov](https://www.research.gov)

Related Letter of Intent

Refer to funding opportunity [NSF 20-559](#) to determine letter of intent requirements. If needed, enter a letter of intent ID number that uses the same solicitation as this proposal.

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

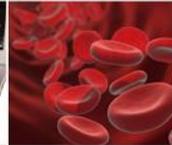


NSF Proposal Content

- 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
- [Current and Pending Support](#)
- Facilities, Equipment and Other resources



WHERE DISCOVERIES BEGIN



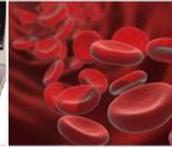
NSF Proposal Content

Special Information/Supplementary Documents

- Data Management Plan
- Letter of Support
- Mentoring Plans
 - Undergraduate student, Graduate student and/or Post-Doctoral research (if applicable)
- Letters of Commitment from Collaborators
- Quotes for Equipment, if applicable
- Research Project Description (2nd round and later projects)

Single Copy Documents

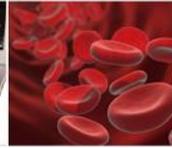
- List of Suggested reviewers (Optional)
- Collaborators and Other Affiliations



Proposal Preparation Instructions

Cover Sheet

- Please begin the project title with “**Implementation Project:**”
- 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.



Proposal Preparation Instructions

Project Summary

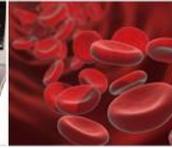
- Each proposal must contain a summary of the proposed project not more than one page in length.
- The Project Summary consists of an **overview**, a statement on the **intellectual merit** of the proposed activity, and a statement on the **broader impacts** of the proposed activity.



Proposal Preparation Instructions

Project Description

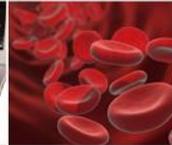
- Provide separate sections within the narrative, a discussion of the **intellectual merit and broader impacts** of the proposed activities.
 - This should **not** be merely a repeat of the statements from the project summary, but an expansion of these statements.
- Outline the general plan of work, 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.



Proposal Preparation Instructions

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**.
- Reminder: An evaluation section should be included to describe how the project will be evaluated in determining the accomplishment of the project's goals and impact. The evaluation should be led by an expert independent evaluator or evaluation team, depending on the size and scope of the project.

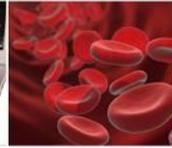


Proposal Preparation Instructions

The IMP Project Description should also include:

Background and Context -

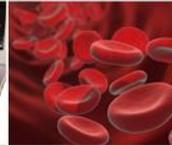
- A statement of the problem(s) to be addressed.
- Information on the institution's current STEM education research capability (baseline data).
- Information on the extent and use of evidence-based instructional practices in STEM degree programs.
- A description of prior efforts and the results of those efforts, especially if an HBCU-UP Planning Grant was received.
- Identification of the areas that have not been understood, determined, verified, tested, or resolved by previous efforts. Highlight the areas in need of improvement and will be addressed with project activities.



Proposal Preparation Instructions

The IMP Project Description should also include:

- Goals and Objectives
 - Anticipated outcomes, and potential impact on the institution
- Detailed Project Plan
 - Evidence-based strategies
 - Suggestion: Logic Model
 - Collaboration: Describe the nature of the collaboration
- Plans for...
 - Dissemination: Audience? Mechanism?
 - Project Management: Roles and responsibilities, Sustainability
 - Evaluation: Formative and Summative Evaluation efforts



Proposal Preparation Instructions

References Cited:

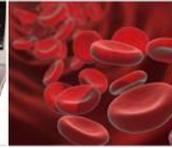
- Provide the references cited in the proposal. **Follow the PAPPG**. Be sure your references reflect the most **current** state of the research in your field, and you are citing them properly in the proposal.

Biographical Sketches:

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

Current And Pending Support:

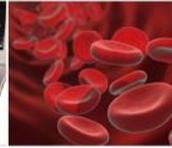
- Use the format provided in Research.gov.
 - **Enter this proposal as pending support.**



Proposal Preparation Instructions

Budget

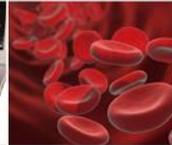
- All proposals should budget for the PI/Co-PIs to attend a one to two-day meeting of grantees in the Washington, DC area annually.
- If a postdoctoral fellow will be included, be sure to include the salary, fringe benefits, and up to \$2000 annual travel allowance.
- Follow the PAPPG closely when preparing 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.



Proposal Preparation Instructions

Budget

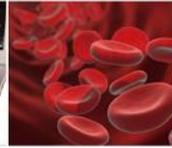
- Support can be provided for
 - Faculty release time during the academic year,
 - Summer salary for PI and Co-PIs,
 - Travel to conferences
 - Stipends for undergraduate student research and development experiences.
 - IMP proposals may offer a postdoctoral research fellowship to a social science or educational researcher to provide opportunities early in their career.
- Include detailed budget justification.
- **Voluntary cost-sharing is not allowed.**



Proposal Preparation Instructions

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 long-term maintenance of new equipment will be supported after the project ends.



Proposal Preparation Instructions

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.



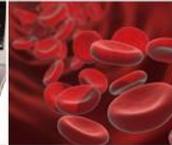
Proposal Preparation Instructions

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

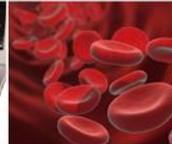
<http://www.nsf.gov/bfa/dias/policy/dmp.jsp>

<https://dmptool.org>



Additional Supplementary Documents Required by NSF 23-563

- A **letter of support** indicating specific institutional support for project activities from an appropriate administrator.
- A **five-page, supplementary research project description** that aligns with proposed approaches and interventions and formally assesses if such approaches work in the unique setting of the HBCU. Research that investigates novel aspects of the proposal is encouraged.
- A **postdoctoral mentoring plan** must be included, if a postdoctoral fellow will be supported on the project.

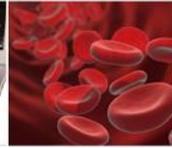


Additional Supplementary Documents Required by NSF 23-563

- A **student mentoring plan** must be included, if undergraduate/graduate students will be supported on the project.
- **Letters of commitment** from collaborators may be included as supplementary documents.
 - NOTE: General letters of support from individuals not involved in the implementation of project activities should not be included. Letters of collaboration should follow the PAPPG guidelines.
- Include the **capability statement** and **credentials (i.e., bio-sketch)** of the external evaluator as supplementary documents.



WHERE DISCOVERIES BEGIN



MERIT REVIEW PROCESS

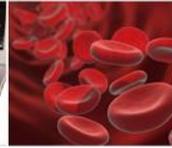


NSF Merit Review Criteria

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:

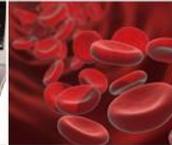
- What is the potential for the proposed activity to:
 - advance knowledge and understanding within its own field or across different fields (**Intellectual Merit**); and
 - benefit society or advance desired societal outcomes (**Broader Impacts**)?



Proposal Preparation Instructions

NSF Merit Review Criteria

- 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?



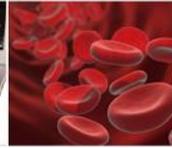
Proposal Preparation Instructions

Additional Merit Review Criteria

- Does the proposal describe a **convincing rationale and appropriate methods** for the project activities that are **research-based/evidence-based**?
- How appropriate are the project design and methods to the project's scope, scale, and setting, and are they linked to measurable outcomes?
- What is the likelihood that the project will **produce high-quality results** that contribute to the undergraduate STEM education knowledge base? How probable is it that the project will positively impact STEM education, student learning, and faculty practice at the institution?
- How adequate is the **project management plan** and does it include clear roles and responsibilities of the personnel who will contribute to the project? How suitable is the plan for effective and scholarly dissemination of results?
- What evidence is provided that the **institutional leadership is committed** to the implementation process of the project?
- How well does the **evaluation plan** define indicators and benchmarks to inform the project team and others about the operations and effectiveness of the implementation?



WHERE DISCOVERIES BEGIN



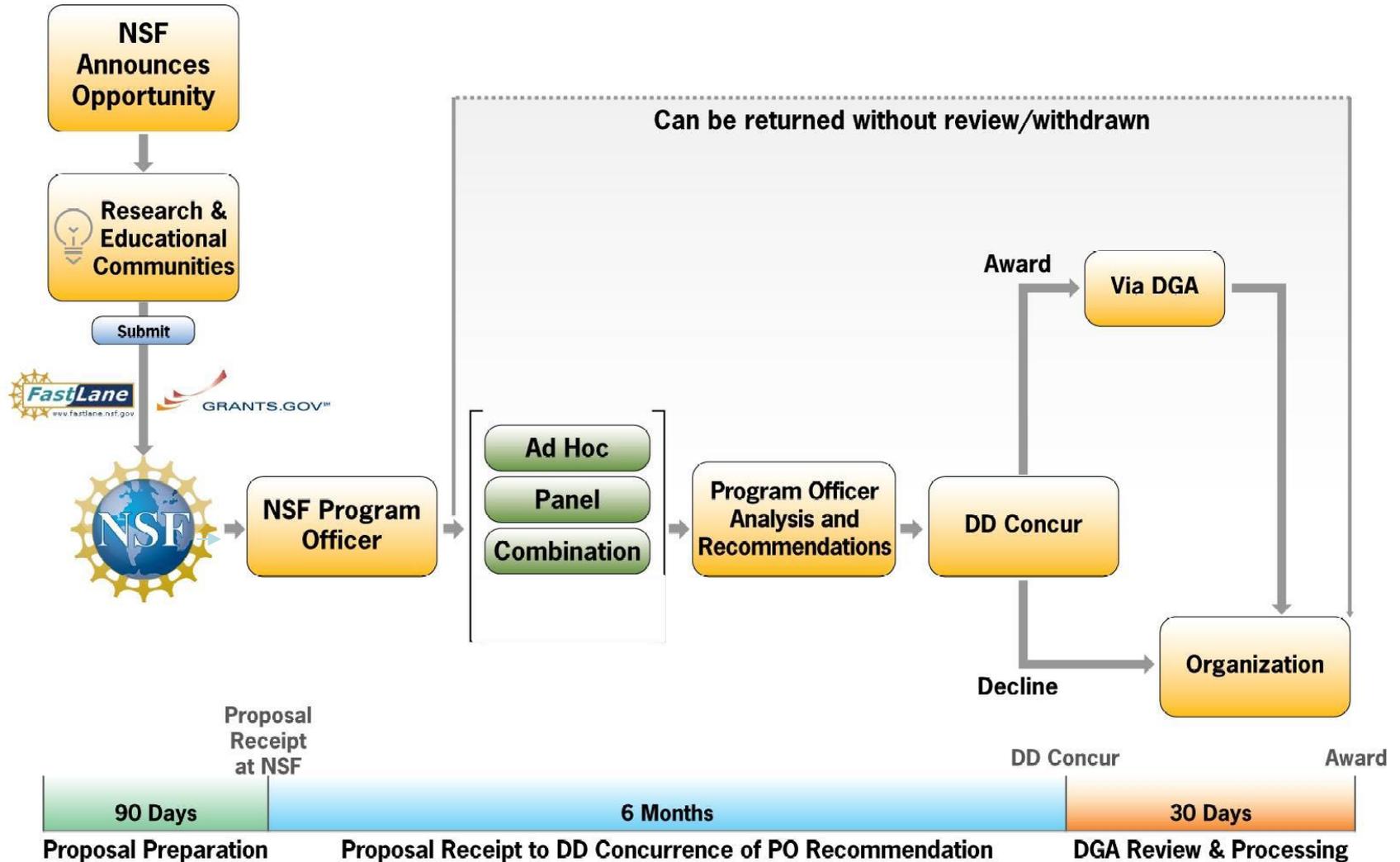
For Your Consideration

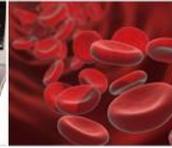


WHERE DISCOVERIES BEGIN



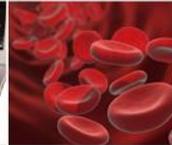
Proposal Processing: Average duration





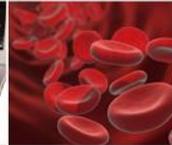
Common Concerns Leading to Declined Proposals

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



Stay Informed

- Join the HBCU-UP List Serv
 - 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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