



## MPS-Ascend and LEAPS-MPS

Two new MPS-wide funding opportunities:

- Mathematical and Physical Sciences Ascending Postdoctoral Research Fellowships – MPS-Ascend (NSF 21-573)
- Launching Early-Career Academic Pathways in the Mathematical and Physical Sciences – LEAPS-MPS (NSF 21-570)



# What is the MPS-Ascend program?

- Purpose: To support postdoctoral Fellows who will broaden the participation of groups that are significantly underrepresented in MPS fields in the U.S., enabling them to develop as future leaders in science.
- Intent: To recognize and support beginning investigators of significant potential in research experiences that will broaden perspectives, facilitate interdisciplinary interactions, and help broaden participation within MPS fields.
- Awards will support research in any scientific area within the purview of the five MPS Divisions: the Divisions of Astronomical Sciences (AST), Chemistry (CHE), Materials Research (DMR), Mathematical Sciences (DMS), and Physics (PHY).
  - Fellowships are awards to individuals, not institutions, and are administered by the Fellows.



# Eligibility

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- Proposals submitted by the potential postdoc (not the postdoc mentor).
- Must be U.S. citizens (or nationals) or legally admitted permanent residents of the United States at the time the proposal is submitted.
- Present research, professional development, and broadening participation plans that fall within the purview of one of the Divisions – **Astronomical Sciences, Chemistry, Materials Research, Mathematical Sciences, or Physics** – within the Directorate for Mathematical and Physical Sciences



## Eligibility (2)

- Must have a doctoral degree conferred before the postdoctoral appointment start date;
- Must not have submitted a fellowship proposal concurrently to another NSF program or to a similar program in another Federal agency (e.g., DOE, NASA);
- It is anticipated that the research will be conducted at an institution other than the Fellowship candidate's doctoral-granting or current postdoctoral fellowship institution. However, if the Fellowship candidate chooses to remain at their current institution, the Project Description should include a strong justification of how this choice benefits their research and career development.



# Underrepresented Minorities in MPS Fields

- Blacks or African Americans, Hispanics, Latinos, and Native Americans (incl. Alaska Natives, Native Hawaiians or other Native Pacific Islanders)
- Applicants are not required to be members of the groups indicated above, but they must have a substantive plan to broaden participation of these underrepresented minorities in MPS fields. Evidence of previous interest in and participation in activities that broaden participation of these groups is desirable.
- Underrepresented Minorities are strongly encouraged to apply.



# Level of Support

The Fellowship amount of \$100,000 per year for up to three years consists of two separate payments made directly to the postdoc (via EFT):

1. A monthly stipend of \$5,833 (up to \$70,000 annually) for full-time support is paid directly to the Fellow.
2. Annual allowance of \$30,000 provided to Fellow for:
  - a) expenses directly related to the conduct of the research and/or
  - b) support of fringe benefits, dependent care, and moving expenses.

*Fellow should keep records to document allowance expenditures.*



# Anticipated Future Support

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- NSF anticipates allowing Postdoctoral Fellows who choose an academic career to apply for further support through this program upon acceptance of a tenure track position at a U.S. college or university.
- NSF intends to provide more details through a future solicitation.



# What is the LEAPS MPS program?

- Emphasis: helping to launch the careers of **pre-tenure faculty** in Mathematical and Physical Sciences (MPS) fields at **minority-serving institutions (MSIs)**, **predominantly undergraduate institutions (PUIs)**, and **Carnegie Research 2 (R2) universities**,
- Intent: initiating viable independent research programs for researchers attempting to launch their research careers in MPS supported fields.
- Goal: achieving excellence through diversity and broadening participation to include members from groups underrepresented in the Mathematical and Physical Sciences, including Blacks and African Americans, Hispanics, Native Americans, Alaska Natives, and Native Hawaiians, and other Pacific Islanders.





## Eligibility (PIs) and details

- Principal Investigators in MPS research disciplines early in their careers (**tenure track but pre-tenure**), particularly at the aforementioned institutions.
- Principal Investigators must be U.S. citizens or lawfully admitted U.S. permanent residents at the time of proposal submission; visa-holders are not eligible.
- This LEAPS-MPS solicitation welcomes proposals from principal investigators who share NSF's commitment to diversity.
- **Awards are for 24 months and are up to \$250,000 total costs (direct plus indirect).**



# Important Aspects of the Proposal

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Proposers must:

- Present a specific plan that shows how the proposed activities will increase (1) the participation of scientists from underrepresented groups and (2) the numbers of such individuals that serve as role models for the scientific workforce of the future.
- Describe the research activities and how the research performed is: a) scientifically compelling and b) on a path that will lead to future opportunities.



# Supplemental Documents

- The submitting institution must provide a letter from the department chair or dean pledging their support for the proposed activities. Added to supplemental documents.
- **LEAPS-MPS Impact Statement (3 pages):** The statement is an opportunity to provide information that will help a reviewer assess:
  - i) the likely impact of the proposed project on the institutional research environment, especially in terms of enhancing research capabilities; and
  - ii) the impact on the career of the faculty participant, and on the ability of the involved department to better prepare students for entry into advanced-degree programs and/or careers in science and engineering, including any provisions that will increase the participation of groups underrepresented in science and engineering.