MPS-ASCEND POSTDOCTORAL PROGRAM

MATHEMATICAL AND PHYSICAL SCIENCES ASCENDING POSTDOCTORAL RESEARCH FELLOWSHIPS – MPS-ASCEND (NSF 22-501)

PROPOSAL DEADLINE, JAN. 6, 2022

MICHELLE BUSHEY, PROGRAM DIRECTOR
OFFICE OF MULTIDISCIPLINARY ACTIVITIES
DIRECTORATE FOR MATHEMATICAL AND PHYSICAL SCIENCES
NATIONAL SCIENCE FOUNDATION

PROGRAM CONTACTS:
HARSHAL GUPTA, AST, (703) 292-5039, HGUPTA@NSF.GOV
REBECCA PEEBLES, CHE, (703) 292-8809, RPEEBLES@NSF.GOV
NITSA ROSENZWEIG, DMR, (703) 292-7256, NIROSEN@NSF.GOV
SWAREE NAIK, DMS, (703) 292-4876, SNAIK@NSF.GOV
KATHLEEN MCCLOUD, PHY, (703) 292-8236, KMCCLOUD@NSF.GOV
MICHELLE BUSHEY, OMA, (703) 292-4938, MBUSHEY@NSF.GOV
Mathematical and Physical Sciences

TO PROMOTE THE PROGRESS OF SCIENCE; TO ADVANCE THE NATIONAL HEALTH, PROSPERITY, AND WELFARE; AND TO SECURE THE NATIONAL DEFENSE; AND FOR OTHER PURPOSES.

FROM THE NATIONAL SCIENCE FOUNDATION ACT OF 1950 (P.L. 81-507)

Assistant Director for Mathematical and Physical Sciences (AD MPS)

Division of Astronomical Sciences (AST)
Division of Chemistry (CHE)
Division of Materials Research (DMR)
Division of Mathematical Sciences (DMS)
Division of Physics (PHY)

Office of Multidisciplinary Activities (OMA)

OMA coordinates efforts but is not receiving proposals (unlike last year!)

The Divisions are the science areas and where proposals will be reviewed and where they are submitted.

Dr. Sean Jones
THE MPS-ASCEND PROGRAM: EXCELLENCE THROUGH DIVERSITY

● **PURPOSE.** TO SUPPORT POSTDOCTORAL FELLOWS WHO WILL BROADEN THE PARTICIPATION OF UNDERREPRESENTED GROUPS IN MPS FIELDS IN THE U.S., ENABLING FELLOWS TO DEVELOP AS FUTURE LEADERS IN SCIENCE. **RESEARCH FELLOWSHIP WITH SIGNIFICANT BROADENING PARTICIPATION AND PROFESSIONAL DEVELOPMENT COMPONENTS**

● **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.
  - Prepare fellows for their next career stage.

● **AWARDS WILL SUPPORT CUTTING EDGE RESEARCH IN ANY SCIENTIFIC AREA WITHIN THE PURVIEW OF THE FIVE MPS DIVISIONS: 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.**
BROADENING PARTICIPATION OF URMS

● UNDERREPRESENTED GROUPS (URGs) – BLACKS OR AFRICAN AMERICANS, HISPANICS, LATINOS, AND NATIVE AMERICANS (INCL. ALASKA NATIVES, NATIVE HAWAIJANS OR OTHER NATIVE PACIFIC ISLANDERS) – ARE STRONGLY ENCOURAGED TO APPLY.

● APPLICANTS ARE NOT REQUIRED TO BE MEMBERS OF GROUPS INDICATED ABOVE.

● APPLICANTS MUST HAVE A SUBSTANTIVE PLAN TO BROADEN PARTICIPATION OF THESE URGs IN MPS FIELDS. A RECORD OF PREVIOUS INTEREST AND PARTICIPATION IN ACTIVITIES THAT BROADEN PARTICIPATION OF THESE GROUPS IS DESIRABLE.
ELIGIBILITY

● PROPOSALS ARE SUBMITTED BY THE POTENTIAL POSTDOC (NOT POSTDOC MENTOR NOR HOST INSTITUTION).

● MUST BE U.S. CITIZENS (OR NATIONALS) OR PERMANENT RESIDENTS WHEN THE PROPOSAL IS SUBMITTED.

● MUST HAVE ALL REQUIREMENTS FOR A DOCTORAL DEGREE COMPLETED BEFORE THE STARTING DATE OF THE POSTDOCTORAL APPOINTMENT. (NO LATER THAN OCT 1, 2022).

● 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 FELLOW WILL CONDUCT RESEARCH AT AN INSTITUTION DIFFERENT FROM THEIR PHD-GRANTING OR CURRENT POSTDOCTORAL INSTITUTION. IF FELLOW PROPOSES TO REMAIN AT CURRENT INSTITUTION, PROPOSAL SHOULD STRONGLY JUSTIFY HOW THIS CHOICE BENEFITS THEIR RESEARCH AND CAREER DEVELOPMENT.
DURATION AND LEVEL OF SUPPORT

Up to 36 Months (minimum 12 months)

Award amount of $100,000 per year (paid directly to Fellow) includes:

- A monthly stipend of $5,833 (up to $70,000 annually)
- An annual allowance of $30,000 for:
  A) Expenses directly related to the conduct of the research and/or
  B) Support of fringe benefits, dependent care, and moving expenses.

Up to 1 paid day of leave earned per month.
Cannot be used to increase duration or level of NSF support.
MPS-ASCEND PROGRAM: HOW TO APPLY

1. **Read the solicitation (NSF 22-501) in full, especially the parts that describe what is required in the proposal.** Follow guidelines in the NSF Proposal & Award Policies & Procedures Guide (PAPPG; NSF 22-1); where requirements in solicitation differ from ones in PAPPG, the solicitation takes precedence. –Note special instructions (Project Summary, etc.)

2. **Reach out to potential postdoc mentors.** To apply, you and a mentor will need to have a well-developed project and mentoring plan in hand.

3. **Ask questions (after reading the solicitation)!** There are contacts within each MPS Division and at OMA who are happy to help (see first and last slides).

Submit via NSF FastLane or grants.gov. **FastLane submission is strongly recommended** because these are fellowships with unique requirements. If submitting through Grants.gov, affirm that **ALL** required documents have been successfully uploaded into FastLane by the deadline date. Otherwise, proposal will be considered incomplete or late and will be returned without review.
MPS-ASCEND PROPOSAL: KEY COMPONENTS (1 OF 3)

**PROJECT DESCRIPTION (10 PAGES), WHICH ADDRESSES:**

- **What the postdoctoral fellow proposes to scientifically accomplish during the fellowship period and how it relates to the fellow’s career goals.**

- **A detailed description of how the applicant and project will serve to broaden the participation of URGs in MPS fields.**

- **How the proposed research is important within the context of MPS field(s)**
  - Proposal should target specialists and non-specialists
SPONSORING SCIENTIST STATEMENT (3 PAGES), WHICH DESCRIBES:

● How the sponsor and host institution will provide a vibrant and supportive environment for the fellow's proposed research and training activities and provide a basis for the fellow's future independent research career.

● A substantive mentoring plan, including experience and track record of mentoring postdocs and/or mentoring URMs, as well as broadening participation.

● Agreement to support applicant in cohort building and professional development (may be external to host institution).

● Applicant’s research achievements and goals and how they align with those of the sponsor.

● Suitability of the match between fellow and sponsor.

● Supervision or additional mentoring that takes place at other institutions (if applicable).

The statement should be co-signed by the sponsoring scientist and the department chair (or equivalent) at the host institution.
TWO OR THREE LETTERS OF REFERENCE:

- ONE REFERENCE LETTER FROM THE DOCTORAL ADVISER
- ALL REFERENCE LETTERS ARE FROM SCIENTIST(S) WHO KNOW(S) THE APPLICANT AND/OR THE APPLICANT'S RESEARCH WELL.
- THE SPONSORING SCIENTIST MAY NOT PROVIDE A REFERENCE LETTER, UNLESS THEY ARE ALSO THE APPLICANT'S DOCTORAL ADVISER.
- UPLOADED BY THE CANDIDATE, SO THESE ARE NOT CONFIDENTIAL

IF APPLICABLE, LETTERS OF COLLABORATION (E.G., THOSE REQUIRED FOR ACCESS TO EQUIPMENT AT NATIONAL LABS OR FACILITIES, OR ACCESS TO A COLLABORATOR, ETC.)
Merit Review Criteria

- **Intellectual Merit**: The Intellectual Merit criterion encompasses the potential to advance knowledge; and
- **Broader Impacts**: The Broader Impacts criterion encompasses the potential to benefit society and contribute to the achievement of specific, desired societal outcomes.

The evaluation of Ascend proposals will place special emphasis on:

- The scientific ability and potential of the proposed Fellow;
- the potential of the proposed Fellow and project to lead to increased representation of underrepresented minorities in MPS fields;
- the suitability and availability of the sponsoring scientist and other colleagues, as described in the sponsoring scientist statement;
- the likely impact of the Fellowship on the future career of the Fellow,
- the likely impact of the sponsoring scientist and the institution on the professional and scientific development of the Fellow; and,
- the scientific quality of the research likely to emerge from the fellowship experience.
Follow Directions/Start Early

- The deadline is just after the holidays.
  - Gather materials early

- You act as your own “AOR”.

- Read the solicitation carefully. More detail is included than we can address here.
SECOND YEAR OF MPS-ASCEND; THE PROGRAM MAY EVOLVE IN FUTURE CYCLES BASED ON:

- Community need and input
- Internal NSF evaluation

A RELATED PROGRAM IS ANNOUNCED:

- Support for cohort building and external mentoring (awarded to institutions)
  22-524 MPS ASCEND EXTERNAL MENTORING (MPS-ASCEND EM)

PLEASE ALSO CONSIDER EXISTING FUNDING PROGRAMS WITHIN MPS DIVISIONS. WE CAN HELP YOU FIND SUITABLE OPPORTUNITIES.

NOTE THAT ASCEND PROPOSALS ARE SUBMITTED TO OMA BUT IDENTIFY A SECONDARY UNIT OF CONSIDERATION, ONE OF FIVE PROGRAMS FROM THE PARTICIPATING DIVISIONS — SEE THE SOLICITATION FOR DETAIL.
THANKS! QUESTIONS?

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