



# MPS-ASCEND POSTDOCTORAL PROGRAM

## MATHEMATICAL AND PHYSICAL SCIENCES ASCENDING POSTDOCTORAL RESEARCH FELLOWSHIPS – MPS-ASCEND ([NSF 23-501](#))

PROPOSAL DEADLINE, JAN. 25, 2023

OCT. 18, 2023, THIRD WEDNESDAY IN OCTOBER THEREAFTER

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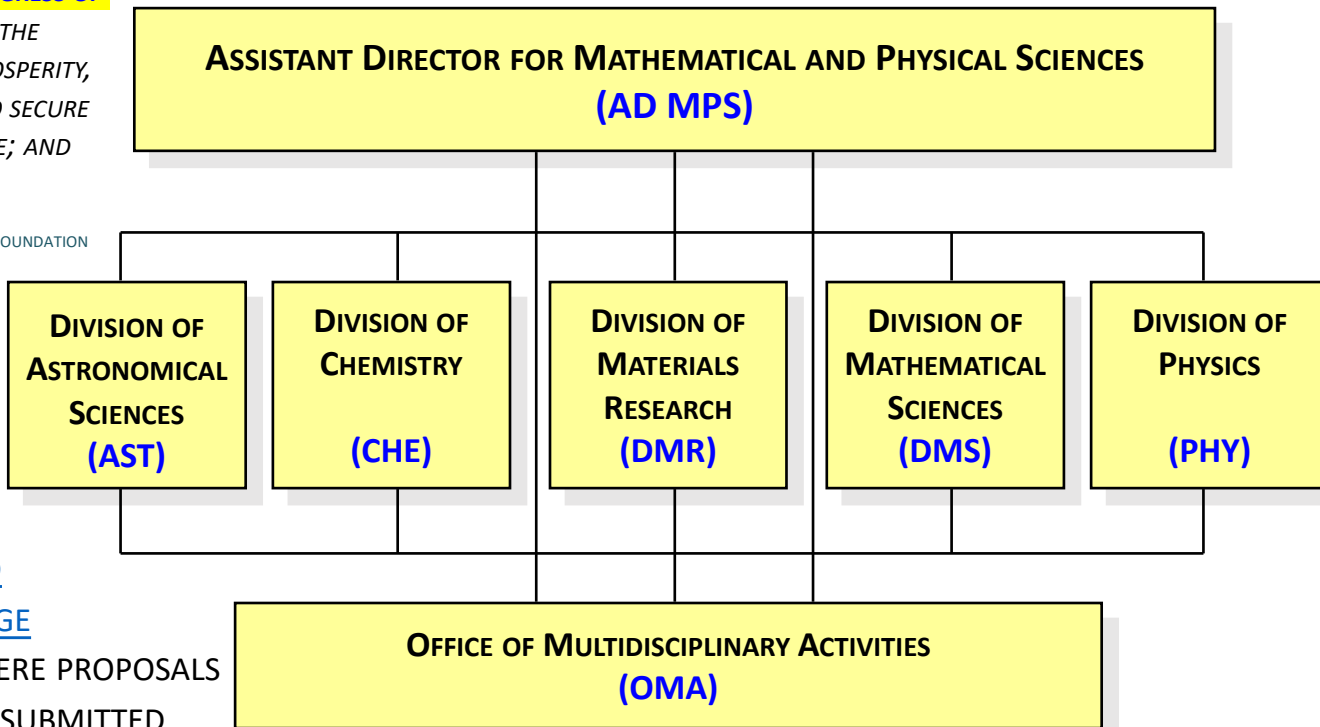
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# MATHEMATICAL AND PHYSICAL SCIENCES

**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)



[MPS-ASCEND PROGRAM PAGE](#)

WHERE PROPOSALS ARE SUBMITTED



DR. SEAN JONES

SCIENCE AREAS WHERE PROPOSALS ARE REVIEWED- SELECT AS SECONDARY UNIT OF CONSIDERATION



# THE MPS-ASCEND PROGRAM: EXCELLENCE THROUGH DIVERSITY

- **PURPOSE.** TO SUPPORT POSTDOCTORAL FELLOWS WHO WILL BROADEN THE PARTICIPATION OF MEMBERS OF GROUPS THAT ARE HISTORICALLY EXCLUDED AND CURRENTLY UNDERREPRESENTED (DEFINED IN THIS SOLICITATION AS BLACKS OR AFRICAN AMERICANS, HISPANICS, LATINOS, INDIGENOUS AND NATIVE AMERICANS, ALASKA NATIVES, NATIVE HAWAIIANS AND OTHER NATIVE PACIFIC ISLANDERS) 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 MEMBERS OF GROUPS HISTORICALLY EXCLUDED AND CURRENTLY UNDERREPRESENTED

- MEMBERS OF UNDERREPRESENTED GROUPS (URGs) – BLACKS OR AFRICAN AMERICANS, HISPANICS, LATINOS, AND INDIGENOUS AND NATIVE AMERICANS (INCL. ALASKA NATIVES, NATIVE HAWAIIANS 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 (AT LEAST ONE 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 SEPT. 1, 2023)
  
- MAY NOT HAVE PREVIOUSLY BEEN A PRINCIPAL INVESTIGATOR OR CO-PRINCIPAL INVESTIGATOR OF AN NSF AWARD (OTHER THAN GRAD. RES. FELLOWSHIPS OR CONFERENCE/WORKSHOP AWARDS).
- MAY NOT SUBMIT A RESEARCH PLAN DUPLICATED IN ANOTHER NSF PROPOSAL CURRENTLY UNDER CONSIDERATION.
  
- IT IS ANTICIPATED THAT THE FELLOW WILL CONDUCT RESEARCH AT AN INSTITUTION DIFFERENT FROM THEIR PHD-GRANTING OR CURRENT POSTDOCTORAL INSTITUTION. **IF THE FELLOW PROPOSES TO REMAIN AT CURRENT INSTITUTION, THE 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)

NOTE: RESEARCH.GOV DEFAULTS TO 36 MONTHS.

INDICATE 12 OR 24 IN PROJECT SUMMARY AND BUDGET JUSTIFICATION

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 23-501](#)) 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.) NOTE: PAPPG [NSF 23-1](#) APPLIES TO PROPOSALS SUBMITTED JAN 30, 2023.
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 RESEARCH.GOV OR GRANTS.GOV. RESEARCH.GOV 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 BY THE DEADLINE DATE. OTHERWISE, PROPOSAL WILL BE CONSIDERED INCOMPLETE OR LATE AND WILL BE RETURNED WITHOUT REVIEW.



# MPS-ASCEND PROPOSAL: KEY COMPONENTS

## 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 MEMBERS OF URGs (AS DEFINED IN THE SOLICITATION) IN MPS FIELDS.
- HOW THE PROPOSED RESEARCH IS IMPORTANT WITHIN THE CONTEXT OF MPS FIELD(S)
  - PROPOSAL SHOULD TARGET SPECIALISTS AND NON-SPECIALISTS





# MPS-ASCEND PROPOSAL: KEY COMPONENTS

SCIENTIFIC MENTOR STATEMENT (3 PAGES IN SUPPLEMENTARY DOCUMENTATION), WHICH DESCRIBES:

- HOW THE MENTOR 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 PERSONS FROM URGs, 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 MENTOR.
- SUITABILITY OF THE MATCH BETWEEN FELLOW AND MENTOR.
- SUPERVISION OR ADDITIONAL MENTORING THAT TAKES PLACE AT OTHER INSTITUTIONS (IF APPLICABLE).

*THE STATEMENT SHOULD BE CO-SIGNED BY THE SCIENTIFIC MENTOR AND THE DEPARTMENT CHAIR (OR EQUIVALENT) AT THE HOST INSTITUTION.*



# MPS-ASCEND PROPOSAL: KEY COMPONENTS

## 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 SCIENTIFIC MENTOR 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.

And -



## Merit Review Criteria – Solicitation Specific:

The evaluation of Ascend proposals will place special emphasis on:

- The scientific ability and potential of the proposed Fellow;
- the scientific quality of the research likely to emerge from the Fellowship experience;
- the likely impact of the Fellowship on the future career of the Fellow;
  
- the potential of the proposed Fellow and project to lead to increased representation of members of historically excluded and currently underrepresented groups (as defined in the solicitation) in MPS fields;
  
- the suitability and availability of the Scientific Mentor and other colleagues, as described in the Scientific Mentor's statement;
- the likely impact of the Scientific Mentor and the institution on the professional and scientific development of the Fellow; and
  
- if the proposer chooses to remain at their current institution: the justification of how this choice benefits the Fellow's research and career development.



## Follow Directions/Start Early

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- The deadline is just after the holidays.
  - Gather materials early
- You act as your own “AOR”: Authorized Organizational Representative.
- Read the solicitation carefully. More detail is included than we can address here.



# CONCLUDING REMARKS

THIRD YEAR OF MPS-ASCEND; THE PROGRAM MAY EVOLVE IN FUTURE CYCLES BASED ON:

- COMMUNITY NEED AND INPUT
- INTERNAL NSF EVALUATION

A RELATED PROGRAM IS:

- 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 IN THE PROJECT SUMMARY, ONE OF FIVE PROGRAMS FROM THE PARTICIPATING DIVISIONS – SEE THE SOLICITATION FOR THIS IMPORTANT DETAIL.



THANKS! QUESTIONS?

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