



National Aeronautics and
Space Administration

The NASA Hubble Fellowship Program: Creating 21st Century Leaders in Astronomy

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Status of the NHFP Program

- NHFP program is healthy and it is one of the top priorities for the Astrophysics division due to its impact on the science and the state of our profession.
- The NHFP salary and benefit package is competitive compared to other similar programs
- The NHFP is one of the most sought post-PhD opportunities (2024 oversubscription is 22:1)
- The NHFP Fellows have embraced their roles as ambassadors and role models

NASA is looking forward to continue its support and respond to the community feedbacks to strengthen the program in the incoming years through continue communication and collaboration.



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Beyond the NHFP Review

Thanks to the Community

NHFP Mission Statement

The NASA Hubble Fellowship Program fosters **excellence** and **inclusive** leadership in astrophysics by supporting a **diverse** group of exceptionally promising and **innovative** early career astrophysicists.

The Five areas of Improvement

In the past two years, NASA response to the NHFP Review covered all areas, though sometimes the need for additional funding hindered our progress.

1. Mission
of NHFP
100%

2. Management
86% (6/7)

3. Application
and Review
50% (5/10)

4. IDEA
focus
38% (3/8)

5. Support of
the Fellows
50% (3/5)



NASA Response to
the Report

The 21st Century NHFP

Most of the Report recommendations that required modest investments have been implemented and have clearly addressed some of the Fellows and the Program management needs.

Thanks to the community input we were able to re-focus some of the Report recommendations that have not been addressed yet. We identify two main areas, starting in 2024:

- 1) Continue our alignment with NASA core value of Inclusion, while investigating the best way to attract diverse pool of candidate (**area 3 and 4 of the Report**).
- 2) Focus on providing fellows resources that will benefit their broad career goals as well as broader the appeal of non-traditional host institutions (**area 5 of the Report**).

Definition from the Community of Inclusive Leaders

- **NHFP fellows understand the importance of fostering an inclusive working environment and take action to create it.**
 - As the go-to person in their research sub-fields they are seen as role models by many colleagues
 - As they advance in their career they become mentors, advisors, chairs, deans...
- **NHFP fellows should ensure that all team member's contributions are valued and recognized**
 - They provide opportunities to others to “be seen”, emerge, and be recognized for their work
 - They understand the importance of the team as well as of the different individuals
- **Promote Diversity in Astrophysics**
 - Fellows recognize their role as ambassadors of the program, showcasing NASA research achievements as well as the value of diverse researchers (e.g. AMP-UP)
 - Fellows may engage in outreach or IDEA (Inclusion, Diversity, Equity and Accessibility) initiatives that will benefit people around them directly or indirectly

Ways the NHFP might implement these ideas

- Refining the language in the NHFP Announcement of Opportunity (call for proposals) and the Evaluation Criteria
- Investigating other fellowships' evaluation practice (e.g. separating science from letters of recommendations, anonymizing part of the application package)
- Expanding the pool of reviewers to include colleagues from smaller Ph.D. granting institutions
- Expanding the NHFP proactive outreach at professional societies (e.g. NSBP, SACNAS)
- Expanding invitation to the NHFP Symposium to a broader audience (e.g. virtually)
- Supporting Fellows in their career growth (e.g. mentoring, grant managing, NASA peer reviews)

Expanding the NHFP sphere of influence

- ❖ **Fellows' needs have changed/expanded beyond the research they pursue**
 - They want to become good mentors, good communicators, good grant managers
- ❖ **Fellows want to impact the community**
 - They want to help prospective fellows (see AMP-UP effort)
 - They want to become role models for young individuals (because "representation matters")
- ❖ **Fellows want to engage with other historically excluded research communities**
 - They want to attend professional societies meetings to foster interest in the NHFP
 - They want to attend IDEA-focused best practices trainings
- ❖ **NHFP should consider providing resources to Fellows that may consider non traditional hosts**

NHFP support to a new generations of Fellows

We will continue to seek funding augmentations over the years to make sure we can sustain some (all) new ideas.

The impact of these initiatives need to be measured on a long timescale.

- NASA centered research resources
- More flexibility in research budget use
- Promote connections between Fellows and smaller institutions (travel, join hosting)
- Supporting Fellows in training opportunities (e.g. mentoring, grants, IDEA-focus)
- Additional funding (e.g. networking opportunities, student research, research at non traditional host institutions)
- ...and more

In Summary

NASA Astrophysics recognizes the importance of the NHFP Fellows and their impact on the advancement of NASA strategic goals.

We also recognize the role they play in defining Scientific and Inclusive Leadership as members of our diverse community.

- The program is financially healthy
- Since the 2022 Review report, many changes have been implemented
- Continued communication within and outside the NHFP program have led to robust positive changes
- We have a roadmap to continue implementing the Review recommendations
- We will continue to pilot new ideas and explore changes
- We will outline assessment mechanisms to check the impact of our initiatives



Back up slides



The Five Implementation Areas

Mission of
the NHFP

Rec. 1: Define a Mission statement aligned to NASA core values

Rec. 2: Review the existing policies and rules of the NHFP within the lens of the NASA core values

NHFP Mission Statement

The NASA Hubble Fellowship Program fosters excellence and inclusive leadership in astrophysics by supporting a diverse group of exceptionally promising and innovative early career astrophysicists.

The program has implemented policies and rules that provide Fellows with the necessary flexibility in order to maximize their research productivity while also increase their impact on the broader community and ***become inclusive leaders*** (e.g. partial remote work agreements, usage of funds for collaboration/ opportunities).

The Five Implementation Areas

Management
of the
program

Rec. 3-6: Provide resources to the program managers, clear processes for policies adoption. Better communication within the program and with the Fellows about their tenure

Rec. 7-9: Grant extensions of the fellow; remove the 3-yr criterion; do not require host selection in the application

- The taskforce has been very active in addressing many of the issues raised by the report in this regard, through improved internal communication and clarifying policies and procedures.
- An FAQ has been created, made publicly available, and shared with the NHFP Fellows during the orientation.
- The 3 year post-PhD limit has been extended to 4 years

The Five Implementation Areas



Review
Process

Rec. 10-13: Focus on Scientific Leadership; re-envision reference letters, increase number of fellowships

Rec. 14-19: Re-evaluate in-person review, review criteria, re-imagine the evaluation process

We have adopted a publicly available rubric that clearly emphasizes the importance of Scientific Leadership of the applicants.

The taskforce is taking many of these recommendations into considerations, but some require data collection (e.g. remote/in-person review) and others require more resources to make sure implementation is sustainable.

The Fellows have initiated mentoring programs for prospective applicants, especially focusing on people from smaller institutions and minority serving institutions.



The Five Implementation Areas

IDEA
Focus of
the NHFP

Rec. 20-22: More emphasis on Inclusive Leadership in the application; collect demographic information;

Rec. 23-27: Cap of # of Fellows for affiliated institution, NASA Centralized resources, xpand applicant pool, make the AO language more inclusive

The language in the AO has been adapted, and the rubric has explicit reference to “inclusive initiatives”.

The 2023 Feedback form has provided important data that will inform our strategy in the next few years on how to provide opportune resources to Fellows.

The taskforce is taking this set of recommendations as a key focus in 2024, while remaining conscious of the Agency and Divsion fiscal boundaries.



The Five Implementation Areas

Support of
the
Fellows

Rec. 28-29: Establish professional development program, including teaching, mentoring, outreach, IDEA. Make non-research activities integral part of the application evaluation

Rec. 30-32: Allowing temporary leave from the program; Employment status, NASA centers as hosts.

- The program piloted a mentoring training opportunity in 2023-2024
- Fellows now have employee status and the institutions that do that are listed in the NHFP page
- NASA Centers can host fellows*

The NHFP and the taskforce are continuing evaluating the resources needed to implement these recommendation.

*at the moment US Citizens only