



Gilliam Fellowships for Advanced Study

2021 PROGRAM ANNOUNCEMENT



Application Opens
OCTOBER 27, 2020

Application Deadline
DECEMBER 10, 2020

Award Notification
JUNE 2021

Fellowship Term Begins
SEPTEMBER 1, 2021

Howard Hughes Medical Institute

www.hhmi.org

The Howard Hughes Medical Institute (HHMI) plays a powerful role in advancing scientific research and education in the United States. HHMI's program in biomedical research rests on the conviction that scientists of exceptional potential, commitment, and imagination will make fundamental discoveries for the betterment of human health if they receive the resources, time, and freedom to pursue challenging questions. The Institute's science education programs support initiatives with the power to transform education in the life sciences for all students, especially those from populations historically excluded from and underrepresented in science.

Our objectives are to recruit and develop students with the potential to become future leaders of science and science education, to partner with faculty and institutions committed to advancing diversity and inclusion in science, and to promote scientific literacy. Just as today's researchers solve complex questions by working across scientific disciplines and integrating tools from these disciplines, HHMI seeks to support science education by integrating a variety of tools and approaches that will engage students in science.

The James H. Gilliam Jr. Fellowships for Advanced Study

www.hhmi.org/gilliam

The Gilliam Fellowships for Advanced Study was created in 2004 in honor of the late James H. Gilliam, Jr., a charter Trustee of HHMI and chair of its Audit and Compensation Committee. Mr. Gilliam was a respected business and civic leader who spent his life nurturing excellence and diversity in science and education. The goals of the Gilliam program are to ensure that populations historically excluded from and underrepresented in science are prepared to assume leadership roles, including as college and university faculty, and to foster the development of a healthier, more inclusive academic scientific ecosystem. The program provides awards to pairs of dissertation advisers and their graduate students based on what HHMI values and considers essential components of the environment, particularly the institution and adviser's commitment to advance diversity and inclusion in the sciences and the student's potential for scientific leadership.

Eligibility

HHMI's *Gilliam Fellowships for Advanced Study* is open to eligible pairs comprising thesis advisers and PhD students ("adviser-student pairs"). Application for the *Gilliam Fellowships for Advanced Study* is by invitation only.

- Adviser-student pairs from eligible disciplines¹ must be nominated by the HHMI-designated institutional representative.
- Prospective fellows must be i) U.S. citizens, U.S. permanent residents, undocumented childhood arrivals, or undocumented individuals who have been granted temporary permission to stay in the US (DACA)², and ii) be from populations excluded from science³, or Alumni of the HHMI EXROP and iii) be at the appropriate stage of their PhD training.

Nominations must be made for students typically in their second or third year of a PhD program who have or will advance to candidacy by September 1, 2021.

Students who are enrolled in an MD/PhD or other dual-degree program are not eligible.

1 The adviser-student pairs must be studying scientific problems in biomedical sciences, life sciences, and biological questions in related disciplines. This initiative does not support social science research.

2 <https://www.uscis.gov/archive/consideration-deferred-action-childhood-arrivals-daca#guidelines>

3 Populations excluded from and underrepresented in science

For the purpose of this initiative, we define excluded groups to be persons who identify as Black or African American, Latinx or Hispanic American, American Indian, Native Hawaiian, Alaska Native, and from groups indigenous to the Pacific Island territories of the United States. Persons with disabilities—defined as those with a physical or mental impairment that substantially limits one or more major life activity—are also significantly underrepresented in U.S. science. International students are not eligible.

Further, it is recognized that underrepresentation can vary from setting to setting. As such, individuals from racial or ethnic groups other than the groups listed above who come from a social, cultural, or educational environment that can be convincingly demonstrated to be historically marginalized or underrepresented at the post-secondary educational level and for whom the proposing institution has created programs similar in focus to the HHMI initiative may be considered.

Suggested readings about Race/Ethnicity/Disability underrepresentation

- National Center for Science and Engineering Statistics (2019). *Women, Minorities, and Persons with Disabilities in Science and Engineering*. National Science Foundation. <https://nces.nsf.gov/pubs/nsf19304/>
- Working Group on Diversity in the Biomedical Research Workforce, The Advisory Committee to the Director (2012). *Diversity in the Biomedical Research Workforce Working Group Report*. National Institutes of Health. <https://acd.od.nih.gov/documents/reports/DiversityBiomedicalResearchWorkforceReport.pdf>
- Huelsman, M. (2018) *Social Exclusion: The State of State U for Black Students*. https://www.demos.org/sites/default/files/publications/SocialExclusion_StateOf.pdf

Fellowship Term

The Gilliam Fellowships for Advanced Study will support students for up to three years of their dissertation research, typically in years 3-5 of their PhD studies. The term of the fellowship is up to three consecutive years unless a leave of absence or deferment is granted by the fellowship institution and approved by HHMI (see “Deferment” section).

Conditions of Appointment

Recipients of HHMI’s Gilliam Fellowships for Advanced Study may begin the fellowship no earlier than September 1, 2021. Gilliam Fellows are required to be enrolled in a program leading to a PhD or equivalent degree in eligible disciplines. The degree program may include a reasonable amount of teaching or similar professional development activities. Scholarly development of the Fellow, and not service to the institution, should govern the participation of the Fellow in such activities.

Current Fellows (including those who choose to defer the award) are required to participate in the annual Gilliam Fellows meetings and one HHMI Science Meeting per academic year. HHMI will make all the arrangements for participation.

HHMI provides resources to support the development of mentoring skills of the thesis adviser. The Adviser is required to participate in all activities, including monthly on-line interactive webinars October 2021-March 2022 and two in-person workshops—the first will be in spring 2022, and the second will be in conjunction with the Gilliam Fellows annual meeting in the fall of 2022. During the application and processing of the 2021 awards, the thesis adviser will confirm their commitment to participate in the HHMI mentor development activities. Expenses for the mentor development activities will be paid by HHMI.

Research and behavioral conduct policy. Activities associated with this grant must be conducted in a responsible manner. The Fellow and the thesis adviser(s), and all other persons supported by the grant will be expected to conduct activities according to the highest scientific and ethical standards and in compliance with all applicable government laws and regulations and Grantee Institution policies, and the Institute’s policies, including those regarding creating an inclusive and respectful workplace, protection of human research subjects, humane care and use of laboratory animals, and laboratory safety. This extends to activities away from campus, including, for example, participation at meetings and workshops.

At each stage of this competition—including the nomination, the application, and the acceptance of the award and Terms and Conditions—the institution and the principals of the application/award will be required to certify, to the best of their knowledge, that there is no allegation or finding of misconduct by any of the principals being nominated, applying, or to be awarded the grant.

Deferral of Award/Leave of Absence

HHMI recognizes that students may be applying for and awarded multiple fellowships. If awarded another graduate fellowship, HHMI

program staff will work with the awarded Fellow and the Adviser to determine how and when to activate the Gilliam award.

Regardless of the reason, awarded Advisers and Fellows are expected to participate fully in HHMI programming as listed in the “Conditions of Appointment” section, even if they defer.

Leaves of absence may also be granted for other reasons, including activities intended to broaden the educational experiences of the Fellow.

Stipends and Allowances

For the 2021–2022 fellowship year, the total amount awarded will be \$50,000 per year for up to three years. The grant will be paid to the institution, which in turn, will pay the Adviser and Fellow. To allow for fiscal flexibility, the institution/Adviser may substitute or augment funds if the following minimal amounts are applied to each of the four categories. Grant funds may not be used to cover indirect costs.

1. The annual Fellow’s stipend is \$33,000. Grant funds may not be used to provide an allowance for dependents.
2. In addition to the stipend, a \$4,000 Fellow’s discretionary allowance is provided to support the Fellow’s professional, career and personal development, including mental and emotional health and well-being.
3. HHMI also provides an annual institutional allowance of \$10,000 in lieu of tuition and other fees (including mandatory health insurance premiums/coverage).
4. If the cost of tuition and fees is less than \$10,000, any remaining funds are to be used to supplement the Adviser’s diversity and inclusion allowance (see #5) or the Fellow’s discretionary allowance. If the cost of tuition and fees exceeds \$10,000, the institution must agree to waive any amount greater than \$10,000.
5. The remaining funds of the HHMI award (at least \$3,000 per year) are designated as a diversity and inclusion allowance, to be used by the Adviser to support activities aimed at addressing challenges to diversity and inclusion at the graduate level. These funds are intended to be spent under the direction of the Adviser; Fellow involvement is not required.

Evaluation and Selection

HHMI’s Gilliam awards are made on the basis of the (1) commitment and demonstrated ability of the institution and the thesis adviser to develop outstanding scientists especially those from populations historically excluded from and underrepresented in science, (2) commitment of the institution and the thesis adviser to fostering a healthier, more inclusive academic scientific ecosystem and (3) the candidate’s promise as a scientific investigator, and potential for leadership in the scientific community, including as college and university faculty. The adviser’s and student’s qualifications and the mentoring environment, as described in the application materials, will be assessed by a panel of scientists and scientist educators selected by HHMI.

Nomination

All applicants must be nominated, including EXROP alumni. HHMI designates the institutional representative that will serve as the nominator and the number of slots allotted to each institution. EXROP alumni must be nominated by the same HHMI-designated institutional representative at their institution. HHMI staff will let the institutional representative know if they will receive additional slots to nominate EXROP alumni. The EXROP alumni do not count against the total number of nominations allocated to the invited institution. EXROP alumni interested in applying will receive instructions from HHMI staff in a separate message.

The nomination initiates the application process. For the 2021 competition, we are adjusting the nomination protocol. A list of nominated adviser-student pairs and their contact information must be submitted to HHMI via an online survey by the institutional representative. Notifications will be sent to the institutional representative by late summer. The online survey opens by early fall and the deadline for nominations for the 2021 competition is mid-September. As part of the nomination process, the institutional representative must certify no known allegations or findings of misconduct by any of the persons being nominated.

Eligibility Confirmation

In mid-September, log-in information to HHMI's online competition system (Pathway) will be provided to the adviser. The adviser will: (1) serve as the primary applicant; and (2) provide information to confirm how the student fits the eligibility criteria.

If eligibility is met, HHMI will open the application and inform the adviser. The adviser is responsible for adding the student and institutional representative that served as the nominator to the application. Once the student gains access to the system, they will be responsible for adding a previous research adviser who will provide a letter of support (third-party reference).

All the materials submitted by the institutional representative, adviser, student, and previous research adviser (third-party reference) will be critical elements in the evaluation of the application.

Application

To better understand the institution's efforts to foster a more inclusive academic scientific ecosystem for all members, including scientists and trainees from populations historically excluded from and underrepresented in science, the institutional representative that serves as the nominator will include the following information:

From the institutional representative:

- An explanation of how and why each adviser-student pair was selected for nomination;
- Evidence that the institution and the adviser's department is committed to advancing diversity and inclusion in science and ensuring a healthy academic scientific ecosystem for all members, including students, postdocs, and early career faculty;

- Evidence that the graduate program and/or department values career and professional development in the sciences;
- An explanation of how past Gilliam awards have impacted the quality of the graduate program and helped foster a more inclusive environment (if the institution has had Gilliam Fellows), or how the Gilliam award will help to improve the quality of the graduate program and create an inclusive environment (if the institution has not yet had a Fellow);
- A letter that provides evidence that the thesis adviser has the interest, demonstrated ability, and commitment to (1) successfully develop the talents of students, including those from populations historically excluded from and underrepresented in science; and (2) facilitate change to foster a more inclusive academic scientific environment;
- Doctoral enrollment and degree attainment data and a discussion of the institution's commitment to advancing diversity and inclusion in science and creating a healthier academic scientific ecosystem for all constituencies (e.g., students, postdocs, early career faculty); and
- Agreement with the terms, described above, to ensure responsible research and behavioral conduct.

To learn about how the adviser will support the student applicant and other doctoral students in their academic and career trajectory, and to ascertain the adviser's commitment to serve as a change-agent at their home institution to facilitate a more inclusive academic scientific environment, the thesis adviser will be asked to provide the following information:

From the thesis adviser:

- A current curriculum vitae that includes a list of 5 publications relevant to the student's research project, a trainee record, and trainee career outcomes;
- A list of current and pending research support, including the support that will fund the student's project;
- Doctoral enrollment and degree attainment data and a discussion of the department's commitment to advancing diversity and inclusion in science and creating a healthier academic scientific ecosystem for all constituencies, including students, postdocs, and early career faculty;
- A description of the challenges to diversity and inclusion at the graduate level at the institution and how the award will be used to address the stated challenges;
- A commitment from the adviser to participate in the HHMI mentor development activities;
- A mentoring plan that:
 - Is tailored to the student, including a discussion of strengths, motivations, and areas to be further developed;

- Reflects on the importance of diversity and inclusion (D&I) in science and the adviser's role as a change-agent in fostering a healthier academic scientific ecosystem;
- Includes a detailed description of the mental health/well-being resources on campus;
- Includes a conflict resolution strategy;
- Includes a narrative on what the adviser hopes to get out of the mentor training, how they will assess the effectiveness of the training, and how they will apply the lessons learned from the training within and beyond the adviser's home institution;
- A letter of support that details evidence of the student's:
 - Promise as a scientific investigator;
 - Potential for leadership in the academic and scientific community; and
- Agreement with the terms, described above, to ensure responsible research and behavioral conduct.

To get a sense of the student's enthusiasm for academic science and their potential for leadership in science, the prospective Fellow will be asked to provide the following information:

- Applicant's information, including name and email address;
- Educational history, including names of all undergraduate and graduate institutions attended, dates of attendance, and degrees obtained. Transcripts are not required;
- A list of publications authored or co-authored by the applicant, including a brief annotation that describes findings and the student's contributions to the published research;
- A dissertation research plan that can be understood by a scientist that is a non-expert in the field, with relevant literature cited;
- A career statement that details the applicant's professional career goal and personal aspirations;
- A leadership statement that describes the applicant's leadership approach, how the approach guides the science they do, and how they have and will lead efforts to advance science through research and/or science education for the benefit of a diverse society;
- A description of the mental health/well-being resources available to the student on campus;
- A conflict resolution strategy;
- Agreement with the terms, described above, to ensure responsible research and behavioral conduct; and
- A letter of support from a previous research adviser (third-party reference) that details evidence of the applicant's:

- Promise as a scientific investigator; and
- Potential for leadership in the academic and scientific community.

Deadlines

Nomination

2 pm Eastern Standard Time
September 14, 2020

Eligibility

September 30, 2020

Application (from the Institutional Representative, Adviser and Student)

2 pm Eastern Standard Time
December 10, 2020

External Letter of Support (from the student's previous research adviser)

2 pm Eastern Standard Time
December 10, 2020

All eligibility, application materials and the previous research adviser's letter of support must be submitted via HHMI's online application system (HHMI Pathway) by the deadlines.

For More Information

www.hhmi.org/gilliam

All inquiries and other correspondence regarding HHMI's Gilliam Fellowships for Advanced Study should be directed to:

Gilliam Fellowships for Advanced Study
Department of Science Education
Howard Hughes Medical Institute
4000 Jones Bridge Road
Chevy Chase, MD 20815-6789
Email: Gilliam@hhmi.org

This announcement sets forth basic program information. All awardees are subject to the provisions outlined in the Terms and Conditions.