

HHMI regrets to announce that we are suspending this program. In light of the ongoing economic uncertainty triggered by the COVID-19 pandemic, we will be working to determine the right time to relaunch this important effort. Please visit the program page for more information about this decision and for program updates as they become available: hhmi.org/mts. (Last updated April 9, 2020.)



2021

Medically Trained Scientists Program

**Program
Announcement**



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Application due date

August 11, 2020, 3:00 p.m. (ET)

Finalist symposium

December 15, 2020

Award notification

January 2021

Grants may begin

July 1, 2021

The **Howard Hughes Medical Institute** (HHMI) believes in the power of individuals to advance science through research and education, making discoveries that benefit humanity. In supporting scientific research, HHMI seeks to promote fundamental understanding of biological processes and to apply those discoveries to unlocking new ways to understand our biological world.

Program web page:

hhmi.org/mts

Application site:

arc.hhmi.org

Program Overview

HHMI believes that basic research leads to a fundamental understanding of biological processes that forms the foundation for future human health advances. With their broad and deep knowledge of human biology and disease, medically trained scientists bring a valuable viewpoint to discovery science.

Accordingly, HHMI is launching a program to support biomedical researchers who hold a medical degree and are committed to academic careers in basic, fundamental research. The **Medically Trained Scientists Program (MTS)** will provide fellows with long-term support – starting with mentored postdoctoral training and transitioning to early years as independent faculty.

We seek applicants who will focus on research and have minimal or no clinical activities for the duration of the award. Fellows are expected to be creative and highly committed individuals whose research will impact significant biological problems. Up to ten fellows will be selected in this first open competition.

MTS is open to eligible scientists who hold an MD, a DO, or an MD, PhD degree, and have prior research training in discovery science and plan to pursue an academic career devoted to basic, fundamental research in a biomedical discipline.

This includes traditional fields such as biochemistry, cell biology, microbiology, immunology, genetics, neuroscience, and physiology, as well as biophysics, biomedical engineering, chemical biology, computational biology, and evolutionary biology. Proposals focused on epidemiology, health outcomes or clinical research will not be considered.

In brief, an MTS fellow will receive a grant for two to four years of postdoctoral training and, upon a successful scientific review, may continue to be supported for up to four years in an independent faculty position as an HHMI scientist.

A fellow in the postdoctoral phase will receive grant funding to cover salary and institutional health care benefits as well as a flexible expense allowance of \$30,000. A fellow in the faculty phase will receive full salary and benefits as an HHMI employee and an annual research budget of \$250,000. HHMI will sponsor a loan repayment program for fellows in the faculty phase. The program provides opportunities for career development and inclusion in the HHMI community during all phases.

Eligibility and Other Conditions

Applications will only be given consideration if the applicant and mentor each has a record of research achievements in basic, fundamental research in a biomedical discipline.

Eligible applicants must hold an MD, a DO, or an MD, PhD degree from a US institution by the award date. The date, or anticipated date, of conferral of the MD or DO degree must be less than eight years prior to the start of the award – no earlier than June 30, 2013 – and no later than July 1, 2021.

Applicants must be accepted to join a mentor's research program as a postdoctoral fellow at an eligible US research institution at the time of the application due date (August 11, 2020). (US government labs are not eligible.) The applicant's postdoctoral training mentor must hold a tenured or tenure-track position (or equivalent) at the proposed training institution at the time of the application due date. (See the [List of Eligible Institutions](#), available via the program web page and the online application site.)

If an applicant is currently in a postdoctoral research training position, they may not have completed more than 24 months of postdoctoral training by the application due date.

The entry phase of this award supports only mentored postdoctoral training. Any clinical training (e.g., medical school, residency, or clinical fellowship) must be completed (or terminated) before the start of the award. Fellows cannot be enrolled concurrently in a clinical training program or degree-granting program during the award period. Researchers who already hold faculty positions above an Instructor level are not eligible.

The program expects MTS fellows to focus on research and be engaged in minimal or no clinical activities during the entire award period.

Fellows are permitted to spend up to 10% effort on clinical activities during the postdoctoral training phase and up to 20% effort during the faculty phase, if they choose.

However, fellows may not receive compensation for clinical activities during either award phase.

This is an open competition in that no nomination letters are required, and there are no limits on the number of applicants or awardees affiliated with any given institution or mentor.

HHMI welcomes eligible applicants to the Medically Trained Scientists Program from all gender, racial, and ethnic identities.

Components of the Application

Research

- A description of the applicant’s prior mentored research experience(s) in basic, fundamental research (one or two projects)
- A selection of research articles in basic, fundamental research with statements of significance (up to five of the applicant’s articles, including submissions to

publicly available preprint servers)

- The applicant’s bibliography, including submissions to publicly available preprint servers
- A description of proposed research for the postdoctoral phase

Applicant Information

- A summary of the applicant’s educational and training record, employment history, and professional activities
- A personal statement relating to career goals

Postdoctoral Training Mentor

- The curriculum vitae of the postdoctoral training mentor (form provided)
- The training record of the postdoctoral training mentor (form provided)
- Three articles, authored and selected by the postdoctoral training mentor to highlight the opportunities for training the applicant in basic, fundamental research within a biomedical discipline

References

- A statement of support from the postdoctoral training mentor
- An evaluative statement from a mentor of a project from applicant’s prior research experience
- One additional letter of reference

Key Dates

Application due **August 11, 2020, 3:00 p.m. (ET)**

Mentor and reference letters due **August 18, 2020, 3:00 p.m. (ET)**

Finalist notification **November 2020**

Finalist symposium **December 15, 2020**

*Location: HHMI headquarters in Chevy Chase, Maryland
Finalists must arrive December 14th by 6:00 p.m. (ET) and plan to depart early December 16th.*

Awardee notification **January 2021**

Grants may begin **July 1, 2021**

Postdoctoral Training Phase

Award Components

This award provides funds annually to the training institution to support a salary for the fellow. The initial and subsequent salary amounts will be set according to years since terminal degree conferral date. The training institution may not supplement this salary. (See [Frequently Asked Questions](#) for Postdoctoral Salary Table; the FAQ is available via the program web page.)

The grant includes an institutional allowance of \$25,000 to the training institution. Health care benefits must be provided to the fellow (and family, if appropriate) by the training institution from these funds.

This grant award also provides an expense allowance of \$30,000 annually to the training institution that may be used at the discretion of the fellow for other benefit costs (e.g., dependent-care costs, retirement contributions). These funds may also be used for expenses related to scientific career development or standard research-related expenses, including support of research personnel (other than salary for the fellow).

Other Program Components

- Fellows will be expected to attend one HHMI scientific meeting each year, which may include career development activities.
- The postdoctoral training mentor will be invited to attend one HHMI scientific meeting with their trainee during the four-year award period.
- The postdoctoral training mentor will be expected to participate in a mentoring workshop at HHMI during the four-year award period.
- Fellows will be asked to submit annual progress reports related to research and other training activities with some components provided by the postdoctoral training mentor. The report will include a brief description of the use of grant funds.

Terms of Postdoctoral Phase Award

- The program expects fellows will be engaged in minimal or no clinical activities. Fellows are permitted to spend up to 10% of total professional effort during the postdoctoral training phase on clinical activities, if they choose. However, fellows may not receive compensation for clinical activities.
- Grants will be awarded only to US not-for-profit research institutions, universities, and academic hospitals on the [List of Eligible Institutions](#) (available via the program web page and the online application site). US government laboratories (e.g., National Institutes of Health, Veteran's Health Administration hospitals, and Centers for Disease Control and Prevention) are not eligible.
- The postdoctoral award is contingent upon receipt of verification of conferral date of the MD or DO degree, and any other subsequent terminal degree (see Eligibility and Other Conditions above).
- Fellows may not hold other postdoctoral fellowships or mentored K-series NIH grants during the postdoctoral training phase of this award. Research funding through competitive grants or institutional awards is allowed, as permitted by the training institution.

Awards may begin as early as July 1, 2021, or may be deferred for up to one year to July 1, 2022, on a case-by-case basis.

- Immigration issues or visa applications are the responsibility of the fellow and the training institution.
- HHMI will consider requests for breaks in continuity of funding on a case-by-case basis. It will be unusual to grant permission for a break between postdoctoral training and the faculty award except in cases of a no-cost extension of the postdoctoral training phase.

Review Process at Postdoctoral Selection Phase

The evaluation will focus on the applicant's potential for a career as an independent scientist in an academic setting as well as their commitment to pursuing basic, fundamental research in a biomedical discipline. These attributes will be assessed by the applicant's research achievements, letters of reference, and a personal statement, as well as the goals and quality of the planned research proposal. The research environment offered by the selected mentor will also be evaluated to

ensure a high-quality training experience. The mentor will be expected to demonstrate a record of basic, fundamental research and a commitment to fostering a path to independence for the fellow.

Applications will be reviewed by HHMI scientists and other distinguished researchers. Previous mentors and other scientists who provide reference letters, as well as individuals associated with the proposed postdoctoral training institution, will be excluded as reviewers.

The final stage of evaluation will include a scientific presentation to a panel of advisors and HHMI scientific leadership at a symposium to be held on December 15, 2020, at the HHMI campus in Chevy Chase, Maryland.

Applicants will be notified about their advancement to the finalist stage and receive details regarding this symposium in November. All applicants should reserve December 14-16, 2020, on their calendars. Finalists should plan to arrive on December 14th by 6:00 p.m. (ET) and depart early December 16th. Awardees will receive notification of selection by January 2021; the earliest award start date is July 1, 2021.

Independent Faculty Phase

Transition Process

Continuation of the award into the faculty phase will require a scientific review and acceptance of HHMI employment conditions. The review will include evaluation of the research completed during the mentored postdoctoral phase, the proposal for independent research, and the continued commitment to an academic career focused on basic, fundamental research in a biomedical discipline.

The following materials will be requested for the scientific review:

- A progress report for the postdoctoral training phase
- A selection of up to five articles from the postdoctoral training phase
- A plan for the proposed four years of independent research

- A personal statement related to career goals
- An updated curriculum vitae
- Letters of reference from the postdoctoral training mentor and a second biomedical researcher with knowledge of the fellow's achievements during the postdoctoral phase
- A copy of the offer letter for the faculty position confirming its tenure-track status and describing research start-up funds, dedicated laboratory space, and any required non-research activities
- Written confirmation from the chair of department that the fellow will have at least 80% protected research time and will not receive any salary supplementation or compensation from the host institution for the duration of the award.

Award Components

Fellows in the faculty phase will be HHMI employees and receive full salary and benefits from the Institute. Salary levels will be determined according to the HHMI Lab Head Scale, which includes adjustments for geographic location and receipt of a medical degree. The HHMI salary cannot be supplemented by the host institution for any reason, including compensation for clinical, administrative, or other professional activities. Additional information regarding salary will be provided at the finalist advancement stage.

Fellows will be provided with an annual budget of \$250,000 for standard research supplies, equipment, and personnel. Research personnel, excluding students, would also become HHMI employees, if supported by the HHMI budget.

Research funding through competitive grants or institutional awards is allowed, as permitted by the host institution.

Loan Repayment Plan

Recognizing that heavy loan burdens can impede choosing a research-focused career, MTS includes a loan repayment plan. Once a fellow is employed by HHMI in the faculty phase, HHMI will provide payments to retire loan amounts of greater than \$20,000 and up to \$200,000 of any qualifying medical school debt still owed by the awardee, with payments of up to \$50,000 made annually over the course of the faculty phase award.

Loan repayment amounts will be reported annually as income to the IRS and may result in an increase in the fellow's federal, state, and local tax liabilities. HHMI will approximate the additional tax liabilities associated with loan repayment income using applicable tax rates each year and pay this amount directly to the fellow at the time of each repayment. Additional details will be provided at the time of the award.

Other Program Components

- Fellows will be expected to attend one HHMI scientific meeting each year, which may include career development activities.
- Fellows' research programs will be supported by HHMI administrative, legal, and scientific staff in coordination with their host institution.

Terms of Faculty Phase Award

- To transition to the faculty phase, fellows must obtain a tenure-track (or equivalent) faculty position at an eligible US research institution. If the institution has a tenure-track, the position must be in the tenure-track.
- The fellow must commit at least 80% of their professional activities to research for the duration of the faculty phase. The remaining 20% effort can be devoted to other institutional and professional responsibilities, including clinical activities, teaching, and service, or to outside activities, such as consulting.
- The program expects the fellows to be engaged in minimal or no clinical activities. Fellows are permitted to spend up to 20% of their professional effort during the faculty phase on clinical activities, if they choose; however, fellows may not receive compensation for clinical activities.
- Appointments will be made only at US not-for-profit research institutions, universities, and academic hospitals on the [List of Eligible Institutions](#) (available via the program web page and the online application site). US government laboratories (e.g., National Institutes of Health, Veteran's Health Administration hospitals, and Centers for Disease Control and Prevention) are not eligible.

- The fellow's institution will become a designated HHMI "host" institution with a collaborative agreement with HHMI to cover conduct-of-research compliance, intellectual property terms, etc. This agreement will be provided to the host institution during the transition to the faculty phase.
- HHMI employees have ongoing responsibilities and compliance expectations according to HHMI policies, which will be provided at the time of appointment. HHMI Research Policies are posted at [hhmi.org/about/policies](https://www.hhmi.org/about/policies).
- The host institution must provide a start-up package and dedicated space to support the establishment of the fellow's independent research program.
- The fellow must have access to an accredited PhD graduate training program in the field of interest of the fellow through their primary faculty appointment or an affiliate-type appointment.
- Transfers to a different host institution will not be considered during the faculty phase.

Additional Information

Program web page:

[hhmi.org/mts](https://www.hhmi.org/mts)

Online application site:

arc.hhmi.org

FAQ (check for periodic updates):

[hhmi.org/mts/faq](https://www.hhmi.org/mts/faq)

List of Eligible Institutions:

[hhmi.org/mts/eligible-institutions](https://www.hhmi.org/mts/eligible-institutions)

For questions, contact HHMI program staff at:

MTScientists@hhmi.org