

Information *for* Colleges *and* Universities
Awarded Undergraduate Grants

Undergraduate Science Education Program

2008

HHMI

HOWARD HUGHES MEDICAL INSTITUTE

Office of Grants and Special Programs

Howard Hughes Medical Institute

www.hhmi.org

The Howard Hughes Medical Institute is a medical research organization dedicated to biomedical research and education. Its principal objectives are the advancement of fundamental knowledge in the biomedical sciences and the application of that knowledge to alleviate disease and promote health.

Through its grants and special programs, HHMI seeks to strengthen science education and biomedical research by supporting current and future leaders to advance scientific knowledge, develop educational products, and implement outstanding educational practices.

Undergraduate Science Education Program

Grants are intended to strengthen the quality of college-level education in biology and related sciences and to attract students to research and teaching careers. Support is provided to colleges and universities and to research scientists who are active in undergraduate education. Grants to colleges and universities are used to make research opportunities available to undergraduates, attract and retain faculty, support new courses and laboratories, and create outreach programs for students and teachers at elementary and secondary schools, community colleges, and other four-year institutions. Grants made through the HHMI Professors Program support individuals and are intended to empower research-active faculty to work more closely with undergraduates at their home institutions and provide other institutions with innovative models for transmitting the excitement and values of scientific research to undergraduate education. A partnership between the Institute's Science and Grants programs called the Exceptional Research Opportunities (EXROP) Program provides unique research opportunities to disadvantaged students to encourage them to consider pursuing research and academic careers. For more information on the undergraduate science education program and other HHMI grant initiatives, go to www.hhmi.org/grants.

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Program Policies and Procedures

TERMS AND CONDITIONS

Grant Purpose. Grants provide support of educational programs that are executed or supervised by grantee institutions. These institutions agree to use grant funds in a manner that conforms to

- the *Terms and Conditions* agreement and its appendixes that are signed at the time of the grant award by representatives of the grantee institution and the Institute;
- the policies and procedures set forth in this information booklet and any further documents provided by the Institute;
- the grantee institution's original proposal to the Institute and any changes set forth in Appendix A (Recommendation for Grant Award) and Appendix C (Program Modifications) of the *Terms and Conditions* agreement;
- Appendix B (Budget) of the *Terms and Conditions* agreement, in which the grantee institution sets forth its program budget and which is the basis for financial reports to the Institute;
- any subsequent programmatic or budgetary amendments approved by the Institute; and
- all applicable Institute policies and procedures.

The Institute reserves the right to terminate a grant if the requirements set forth in the *Terms and Conditions* agreement or this information booklet, and any other requirements that the Institute may determine to be necessary, are not met. If a program supported by an Institute grant (or the grant itself) is terminated at any time, any unused funds must be promptly returned to the Institute and all required reports submitted.

As noted in the program announcement, institutions are expected to make every effort to sustain the successful elements of Institute-supported programs after the expiration of grant funds. For example, institutions should continue to support new faculty positions that are initially funded by Institute grants.

Grant Term and Payments. Grants have a four-year term and are paid in annual installments. Grant funds are to be spent within the term of the grant or as soon thereafter as program goals permit. The Institute does not provide supplemental funding to grantee institutions.

As part of the Institute's annual budget process, the Institute Trustees each year must be asked to authorize the continued funding of previously approved grants. Accordingly, all grant payments must be approved by the Trustees each August when they consider the Grants program budget for the Institute's next fiscal year, which begins on September 1. Grant payments in each fiscal year are contingent on this approval and on approval of all necessary documents and reports submitted by grantees.

Use of Funds. Funds are to be used only for expenditures directly related to the activities outlined in the grantee institution's proposal and any modifications thereof, as set forth in the *Terms and Conditions* agreement and its appendixes and approved by both the Institute and the grantee institution. Expenses must be in keeping with the allocations specified in the approved budget.

Grantee institutions may shift modest amounts among budget components (subtotals) or line items without Institute approval, provided that the program policies stated in the grant budget continue to be met. However, if a grantee institution proposes to establish a new program activity

or increase the cumulative budget subtotal by more than 25 percent, it must

- submit to the Institute, via GrantsCentral (see “Progress and Financial Reporting,” page 7), a budget amendment form justifying the change, followed by a signed hard copy; and
- obtain official approval from HHMI.

See Figure 1 for an example.

If investment income is earned on an Institute grant, the income should not be reported to HHMI but must be applied to the purposes of the award, as specified in the *Terms and Conditions* agreement. Use of the income is subject to the same terms that govern the use of principal funds. Grantee institutions may not use Institute grant funds to make grants to other public or private organizations.

Grantee institutions should note that funds for assessment and dissemination and for direct administrative costs pertaining to all grant components are to be placed in the following two budget components, respectively: program assessment and program administration. Funds for program administration may not exceed 10

percent of the total program budget or expenses. No more than 10 percent of the budget for student research and broadening access to science may be allocated for honoraria for faculty of the grantee institution to supervise undergraduates in summer research. Similarly funds for laboratory renovations and equipment together may not exceed 50 percent of the total grant budget or expenses.

Unused Funds and No-Cost Grant Extensions.

Grant funds not spent in the year for which they were budgeted may be carried over to the next budget year in the same component for which they were budgeted without prior approval, provided that the conditions stated above in “Use of Funds” (page 2) are met.

Unspent funds that remain at the end of the grant term may, with official approval from the Institute, continue to be used for the purposes for which the grant was awarded.

Grantee institutions may request a no-cost grant extension in one-year increments for a maximum of two years beyond the original grant term. Extension requests may not be made earlier than the final year of the grant. In special circumstances that provide compelling justification, the

**FIGURE 1
EXAMPLE OF PROPOSED BUDGET AMENDMENT**

In this example, the grantee institution’s budget for the budget component Student Research and Broadening Access to Science is listed in the “Approved budget subtotal” row of the table.

	Year 1	Year 2	Year 3	Year 4	Total
Approved budget subtotal	\$50,000	\$50,000	\$50,000	\$50,000	\$200,000
Proposed budget amendment subtotal	\$50,000	\$50,000	\$90,000	\$50,000	\$240,000

At the end of Year 2, the grantee institution has spent \$50,000 per year, as initially projected, but foresees spending \$90,000 in Year 3. Since the grantee is about to start Year 3 and expenses for Years 1 to 3 will be \$190,000 (i.e., \$40,000, or 27 percent, more than the \$150,000 originally projected for Years 1 to 3), a budget amendment must be formally requested of HHMI.

Institute will consider a further extension for a maximum of one year. Please note that approval of extensions to program administration and/or other program components does not confer an increase in the program administration budget. Grantee institutions must continue to submit annual progress and financial reports to the Institute until all grant funds have been spent. Requests for grant extensions are made via GrantsCentral (see “Use of GrantsCentral,” page 7), and the electronic request must be followed by a signed hard copy. Notification of approval will occur via e-mail.

OWNERSHIP AND OTHER LEGAL CONSIDERATIONS

Title to Equipment. All equipment, including computers, purchased with grant funds will be owned by the grantee institution, but only on condition that during the term of the grant such equipment is used for the purposes for which the grant was awarded. If the equipment is not kept available for this purpose during the term of the grant, title will revert to the Institute. After the grant term, the Institute’s recommendation is that equipment, including computers, acquired with Institute grant funds continue to be used for instructional purposes and not principally for research. After the term of the grant, the equipment may be donated by the grantee institution to other nonprofit or governmental organizations (e.g., local school districts), but it may not be sold.

Capital Projects. Grant funds may not be used for construction of new facilities. Grant funds may be used for renovations as described in the proposal and indicated in appendixes to the *Terms and Conditions*—i.e., Appendix B (Budget) and Appendix C (Program Modifications)—that the Institute has approved. Support for renovations and equipment together is limited to 50 percent of the total grant amount.

Transfer of Grant. In no event may a grant be transferred to another institution. A program director who changes institutional affiliation during the term of the grant may not apply to the Institute for transfer of the grant. Please note that the grantee institution is required to notify the Institute of a change in program director (see “Change of Program Director or Program Director Information,” page 6).

Intellectual Property Rights. The Institute claims no ownership rights in the results of grant-supported activities, which may include products, materials, inventions, or writings. However, the grantee institution agrees that the results of grant-supported activities will be made available to the public on reasonable terms and on a timely basis. Because improvement of science education depends in part on the sharing of useful educational materials, such as the ones that may be developed in connection with the HHMI undergraduate science education grants, HHMI asks for the right to make the program materials broadly available to the public. This in no way restricts the ability of the grantee institution or grant recipients to distribute these materials to the public as well. Accordingly, the grantee institution hereby grants to HHMI a nonexclusive, perpetual, irrevocable right to use, store, transmit, copy, perform, display, reproduce, adapt, distribute and have distributed (through multiple tiers of distribution), and create derivative works of the educational resources and tools described herein, in whole or in part, through (1) HHMI’s educational or other public websites or any other electronic media (e.g., e-mail, blogs, podcast, RSS) and (2) in print publications or other educational and informational materials developed and distributed by HHMI in various media. HHMI’s use of these educational resources and tools will be made available to the public only for not-for-profit educational and public information purposes.

Tax and Other Legal Considerations. The grantee institution is responsible for complying with all relevant federal, state, or local laws and regulations, including those relating to receipt and disbursement of grant funds from the Institute and to tax reporting and withholding requirements with respect to remuneration and stipends.

The Institute is committed to supporting programs with an objective of broadening access to science for all people, including women and members of underrepresented minority groups. Although some programs designed to increase educational diversity have been the subject of legal challenges, the Institute believes that such programs can be designed and conducted so as to comply with applicable law. The grantee institution represents that it has evaluated its Institute-funded programs and that it will operate them in compliance with applicable law.

The grantee institution must notify the Institute immediately of any change or expected change in its status as an organization exempt from federal income tax and, by letter, of any change or expected change in its name during the grant period.

HHMI does not provide any health insurance or other benefits to individuals supported by or participating in HHMI grant programs, and HHMI does not assume any liability or responsibility for incidents or accidents involving grant program participants (whether on travel, in the laboratory or classroom, or otherwise).

The *Terms and Conditions* agreement also includes a number of other provisions addressing legal issues—for example, liability, modification of the *Terms and Conditions* agreement, and what provisions survive termination of the agreement. These provisions are not summarized in this information booklet. Questions about these provisions may be directed to the appropriate program officer in the Institute’s Undergraduate Science Education Program (see “Contacting Program Staff,” page 9).

ACCOUNTABILITY

Reporting. The grantee institution must submit annual progress and financial reports on the grant’s activities. Payments on the grant are subject to submission of satisfactory reports. All reports are to be submitted via GrantsCentral (see “Progress and Financial Reporting” and “Use of GrantsCentral,” page 7).

Accounting and Audit. The grantee institution must record the receipt of grant funds and any expenditures in a manner (e.g., in a separate ledger account) that enables the Institute to verify that the funds were expended for the purposes for which the grant was awarded.

All pertinent records, including invoices, purchase orders, worksheets supporting allocations, and copies of reports submitted to the Institute, must be retained in the grantee institution’s files for at least three years after either the grant expires or the expenditure of all grant funds. The Institute reserves the right to audit these records, or to have them audited, during the grant term or thereafter.

GRANT ADMINISTRATION

Role of the Program Director. Grantee institutions must designate a program director to serve as the principal contact for the Institute and the liaison with the Institute. The program director represents those at the grantee institution who implement and administer the grant-supported program and is responsible for

- verifying receipt of grant payments and arranging for disbursement of grant funds;
- supervising the grant and complying with its requirements;
- submitting financial and progress reports in a timely manner via GrantsCentral and other reports as needed, and responding to any inquiries from the Institute related to these reports or to an audit of grant expenses;

- notifying the Institute of any allegations of scientific or other misconduct with respect to grant activities;
- responding to any inquiries from the Institute on any grant-related matters;
- notifying the Institute of any change in the tax or other legal status of the grantee institution; and
- obtaining Institute approval for public announcements about the grant award and submitting to the Institute copies of press releases or other public announcements.

Each program director may expect to be invited once or twice during the grant term to the Institute's meeting of undergraduate program directors (held every other year). A program director may also be invited to make a presentation or lead a workshop at the meeting. These meetings serve as a resource to both the Institute and program directors and include representatives from private and government funders and others involved in science education. In general, invitations are sent in late spring and the meeting is held in the fall.

Program directors may be invited to serve in other capacities, such as on review or advisory panels.

The Institute is sometimes asked to approve the nomination of a program codirector. Although such arrangements are permissible, grantees should note that the name of only the designated program director will be listed in Institute publications. All reports and other communications to the Institute that are prepared by a program codirector or other personnel must be signed by the program director.

Change of Program Director or Program

Director Information. Program directors must update their contact information via GrantsCentral (see "Use of GrantsCentral," page 7). If a grantee institution wishes to designate a new program director, a responsible official of the grantee institution (senior to the program director) should

provide the Institute with a written explanation for the change and identify the new program director, who will be issued a GrantsCentral user ID and password and who must submit his or her curriculum vitae and full contact information via GrantsCentral.

Change of Program Objectives or Scope. Any request for a significant change in program activities or budget allocations should be submitted electronically via GrantsCentral (see "Use of GrantsCentral," page 7) and in signed hard copy by the program director to the Institute's program director for the undergraduate program.

Administration of Concurrent Grants. Several grantee institutions are concurrently administering undergraduate program grants awarded in different competitions. Although the objectives and activities of each program may be similar, each grant has its own number and must be administered separately. The policies and procedures set forth in the *Terms and Conditions* agreement, its appendixes, and this information booklet apply to all undergraduate program grants held by a grantee institution.

Institutions with concurrent grants must submit separate annual progress and financial reports for each grant. Each program director, however, will use only one user ID and password assigned by the Institute to access separate reports or other information for multiple grants under his or her designation. When corresponding with the Institute, grantee institutions with multiple undergraduate awards should refer to programs by their grant numbers.

RECEIPT OF GRANT PAYMENTS

All grant payments are sent to the grantee institution via electronic funds transfer. The program director must confirm to HHMI receipt of payment and ensure that accounts are in place, allowing access to grant funds by the relevant faculty

members and other individuals responsible for grant-supported activities.

PROGRESS AND FINANCIAL REPORTING

Annual Progress Report and Research and Outreach Opportunities. The grantee institution must submit to the Institute annual narrative and data reports on program activities via GrantsCentral. Progress reports cover the period from September 1 through August 31 and are due November 30; a final report is due at the end of the grant term or after all grant funds have been spent.

The grantee institution must also submit annually, along with the annual progress report, information on grant-supported research and outreach opportunities that are available to precollege teachers and students and visiting undergraduate faculty and students. The information is placed in a searchable database on the HHMI public website.

Institutions administering more than one Institute grant program must submit an annual report for each grant. For 2008 grantee institutions, the first progress and opportunities reports are due November 30, 2009.

Annual Financial Report. The grantee institution must submit annual financial reports to the Institute in two signed hard copies and via GrantsCentral. Grantees must provide explanations for data-validation issues flagged by the system before they will be allowed to submit their data to HHMI. Financial reports cover the period from September 1 through August 31 and are due November 30; a final report is due when the grant expires or after all grant funds are spent.

Institutions administering more than one Institute grant program must submit an annual financial report for each grant. For awards made in 2008, the first financial report is due November 30, 2009.

Use of GrantsCentral. The URL for GrantsCentral is www.hhmi.org/grantscentral. Each program director is assigned a user ID and password that will allow access to all Undergraduate Science Education Program and other HHMI program grants under his or her direction. The user is responsible for the security of the access information.

In the event the program director misplaces the access information, HHMI should be informed via e-mail at any of the addresses in “Contacting Program Staff” (page 9). A new password will be issued, but the user ID will remain the same. HHMI recommends that the program director change the initial password upon receipt to a password that is more easily remembered.

ASSESSMENT

Outcomes data will be considered in the evaluation of HHMI funded programs and will be a significant factor in the review of future grant proposals submitted by grantee institutions. Grantees are therefore encouraged to maintain records on HHMI participants indefinitely.

Student Tracking. Grantees whose programs include student participation in undergraduate research are required to track the postbaccalaureate outcomes of the students. HHMI will provide a tracking instrument to be completed and submitted by each institution as requested by HHMI.

Future Faculty Tracking. Graduate students and postdoctoral fellows whose training in teaching was supported by HHMI undergraduate grants should be tracked beyond the term of their HHMI support. HHMI will provide a tracking instrument to be completed and submitted by each institution as requested by HHMI. Individual graduate students and postdoctoral fellows may also be contacted.

Surveys. Grantees providing undergraduate research experiences are required to participate in

one or two national assessment surveys, as appropriate, directed by Dr. David Lopatto at Grinnell College and supported by HHMI. One survey is called Survey of Undergraduate Research Experiences (SURE). The publications of the findings of SURE may be found in CBE—Life Sciences Education, the online journal of the American Society for Cell Biology (www.lifescied.org). The other survey is called Course-Related Undergraduate Research Experiences (CURE). Additional information about how to participate in these studies, including an update on the studies' findings, will be provided at the program directors' meetings.

OTHER MATTERS

Public Announcements and Attribution. The Institute will announce the undergraduate program grant awards and anticipates that the grantee institution also may wish to announce the award publicly. These announcements should be coordinated with the Institute by calling Andrea Widenner at (301) 215-8807. The Institute must review all announcements by the grantee institution before release, and the grantee institution must provide the Institute with copies of all press releases and other announcements.

An acknowledgment of Institute financial support must appear in any presentations or publications that derive from research or other activities funded by the grant. The Institute requires attribution of its role as the funding source in any materials (e.g., publications and curriculum materials such as educational software) that are based on or that describe grant-supported activities.

All references to the Institute's role as funder must use the full name "Howard Hughes Medical Institute." The Institute is a medical research organization, not a foundation, and should not be referred to as a foundation in any context. A suggested format for the acknowledgment follows:

This program was supported in part by a grant to [grantee institution name] from the Howard Hughes Medical Institute through the Undergraduate Science Education Program.

Titles of Program Participants. HHMI uses certain titles for its employees, such as investigator and associate, and several Institute programs support fellows or scholars. These and similar titles should not be used in conjunction with HHMI's name in referring to faculty members, students, and others supported through the undergraduate program. In addition, the title of HHMI professor should not be used other than for faculty members supported by HHMI through the HHMI Professors Program. The grantee institution may otherwise use the name of the Institute in designating programs or their participants. Any reference to funds received through this award should specify the association with the HHMI undergraduate program. Examples of appropriate titles for program participants are

- Howard Hughes Medical Institute undergraduate researchers;
- Howard Hughes Medical Institute high school science scholars; and
- Howard Hughes Medical Institute summer teacher-researchers.

For general advice about designating programs or their participants, grantee institutions should contact the appropriate program officer in the Institute's Undergraduate Science Education Program (see "Contacting Program Staff," on page 9).

Responsible Conduct of Research. Activities sponsored by the grantee institution for purposes of the grant must be conducted in a responsible manner. Individuals conducting research underwritten by grant funds are expected to conduct research according to the highest scientific and ethical standards and to comply with all applicable laws, regulations, and policies regarding the protection of human research subjects, the humane

care and use of laboratory animals, and laboratory safety.

If an allegation of scientific misconduct is brought against a researcher whose work is supported through a grant from the Institute's undergraduate program, the researcher will be subject to the procedures in place at the grantee institution. The grantee institution must notify the Institute's vice president for grants and special programs of the allegation, the procedures that will be followed to inquire into the allegation, and the outcome of these inquiries.

Relationship with the Institute. The relationship established under this program between the Institute and the grantee institution or any people at the grantee institution involved with the program of grant-supported activities is solely one of financial support. There is no employer-employee, principal-agent, or any other relationship created under this program.

The Institute does not assume responsibility for activities supported by the grant, for project results, or for their interpretation.

CONTACTING HHMI PROGRAM STAFF

Reports, requests, notifications, inquiries, and other correspondence should be directed to:

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