

NOVEMBER 16, 2006

HHMI Initiative Boosts Support for Patient-Oriented Researchers

The Howard Hughes Medical Institute (HHMI) is announcing a new national competition for the appointment of outstanding physician-scientists as HHMI investigators. The Institute expects to select approximately 15 new researchers by Fall 2007 and is committing approximately \$200 million to their first term of appointment.

Highly creative researchers who bridge the gap between clinical medicine and basic science are in a unique position to exploit our knowledge of the human genome and other recent advances to make discoveries that will improve human health. Some examples of developments with substantial translational potential include progress in technology for biomedical imaging, the dramatic expansion of ways to identify markers of disease progression, the identification of new molecular targets for therapeutic intervention, and improved understanding of the biological processes that cause human disease.

"There has been such a decline in the number of physician-scientists who are pursuing careers in patient-oriented research that some have called this group an 'endangered species.'"

— **Thomas R. Cech**

The new competition seeks to identify researchers who lead patient-oriented research programs and whose scientific work is guided by their interaction with patients. These physician-scientists spend their professional lives crossing the boundaries between the bench and the bedside, convinced that their best science is conducted in the presence of patient contact. In 2002, the Institute completed its first competition dedicated to physician-scientists who conduct patient-oriented research. In that competition, 12 new HHMI investigators were selected from among 138 nominees. HHMI physician-scientists selected in the 2002 competition have identified new drug targets, developed new therapeutic agents, and improved our understanding of the genetic basis of disease.

There has been such a decline in the number of physician-scientists who are pursuing careers in patient-oriented research that some have called this group

an 'endangered species,' said HHMI President Thomas R. Cech. Unfortunately this decline is coming at a time when we can least afford it - a time of unprecedented opportunity for translating basic science discoveries into clinical treatments that benefit patients. By initiating this competition, HHMI is renewing its commitment to researchers who perform this vital work.

This competition will differ from all previous competitions for new investigators because eligible researchers with faculty appointments at 121 participating institutions will be able to apply directly to HHMI. Prior institutional approval will not be required. Other information about this competition may be found on the HHMI website, www.hhmi.org.

Our decision to solicit applications from individual faculty at leading institutions is a departure from our past practice of asking these institutions to nominate their best faculty, said Cech. We know our pool of candidates has been excellent in past competitions, but how can it not be even deeper and broader if we open up the process?

A second, general competition for HHMI investigators in all fields pertaining to biomedical research will be announced in Spring 2007.

Although some of the 300 current HHMI investigators are doing patient-oriented research, a large number of Hughes scientists focus on basic research directed toward understanding the genetic, molecular and cellular bases of human disease. Some of these projects can be generally characterized as being disease-oriented rather than patient-oriented, because the research does not require significant contact with patients.

Applicants for the patient-oriented research competition must meet the following requirements:

Have an M.D. or M.D./Ph.D. degree or the equivalent Have a current license to practice medicine in the United States Be a tenured or tenure-track (or equivalent) faculty member at one of the 121 eligible host institutions on the date of submission of the application Have between 4 and 16 years of faculty experience (i.e., assumed your first faculty appointment as an assistant professor or equivalent rank no earlier than January 1991 and no later than January 2003) Be engaged in the conduct of patient-oriented research Be the principal investigator on a funded NIH R01 grant or a project leader on a NIH P01 grant

HHMI has assembled review panels consisting of distinguished physician-scientists and biomedical scientists who will evaluate the applications, which must be submitted electronically by January 18, 2007. There will be a three-tier review process and it is anticipated that the appointments will be announced by Fall 2007.

HHMI enters into long-term collaboration agreements with universities and other academic research organizations, where its investigators hold faculty appointments. Under these agreements, HHMI investigators, who are directly

employed by the Institute, and their research teams carry out their research in HHMI laboratories located on various campuses. Through its flagship investigator program, HHMI has joined with more than 60 distinguished U.S. universities, hospitals, institutes, and medical schools to create an environment that provides flexible, long-term support for approximately 300 Hughes scientists and members of their research teams.

The Howard Hughes Medical Institute

The Howard Hughes Medical Institute, a non-profit medical research organization that ranks as one of the nation's largest philanthropies, plays a powerful role in advancing biomedical research and science education in the United States. In the past two decades HHMI has made investments of more than \$8.3 billion for the support, training, and education of the nation's most creative and promising scientists.

HHMI's principal mission is conducting basic biomedical research, which it carries out in collaboration with more than 60 universities, medical centers and other research institutions throughout the United States. Approximately 300 HHMI investigators, along with a scientific staff of more than 2,000, work at these institutions in Hughes laboratories. The Institute's biomedical research expenditures at the close of fiscal year 2006 totaled \$538 million. The Institute also has a philanthropic grants program that emphasizes initiatives with the power to transform graduate and undergraduate education in the life sciences. Additionally, it supports the work of biomedical researchers in many countries around the globe. Through aggregate investments of more than \$1.2 billion, the Institute has sought to reinvigorate life science education at both research universities and liberal arts colleges and to engage the nation's leading scientists in teaching. HHMI grants totaled \$87 million at the close of fiscal year 2006.

HHMI has an endowment of approximately \$16 billion. Its headquarters are located in Chevy Chase, Maryland, just outside Washington, D.C.