

ENGAGING SCIENCE

HHMI teams up with NOVA

HHMI has become a major sponsor of the innovative television program *NOVA scienceNOW*. An offshoot of the acclaimed TV series *NOVA*, the new program airs five times a year.

Viewers of the episode of *NOVA scienceNOW* that aired on April 17 learned about topics ranging from frozen frogs and stem cells to T. Rex and the Little People of Flores. The segment on stem cell research, by coincidence, included interviews with two HHMI investigators, Douglas A. Melton of Harvard University and Leonard I. Zon of Children's Hospital Boston of Harvard Medical School.

With a companion Web site devoted to educational outreach, *NOVA scienceNOW* meshes with HHMI's ongoing commitment to science education. Capitalizing on existing resources at the Institute, *NOVA*'s producers have plans to link to relevant online science content available through the HHMI Web site.

The next edition of *NOVA scienceNOW* is scheduled to air on July 26, 2005. To view past shows online, go to www.pbs.org/wgbh/nova/sciencenow/.

Strengthening Undergraduate Science

Collaboration, dissemination, and mentoring are at the heart of a new \$86.4 million competition for universities.

WHILE MANY AMERICANS WERE dropping last-minute tax returns in the mail, FedEx envelopes bearing good news headed for more than 200 research universities. Those packets included HHMI's invitation to compete for \$86.4 million in grants to strengthen undergraduate science education in the United States.

The Institute is encouraging teamwork, collaboration, mentoring, and dissemination as it searches for innovative undergraduate science education proposals. HHMI also is seeking programs that broaden access to science for women, underrepresented minorities, and nonscience majors.

Each university selected will receive a 4-year grant ranging from \$1.2 million to \$2.2 million. Universities may propose programs that provide undergraduate research opportunities and broaden access to science for majors and nonmajors. The grants may also support new courses in emerging fields such as computational biology, genomics, and bioimaging; mentoring programs; current and future faculty development; laboratory equipment; and cooperative programs with elementary and secondary schools. ■

- Jennifer Boeth Donovan -

Wanted: More Million-Dollar Professors

HHMI searches for a new cadre of scientist-educators who can inspire undergraduates in the lab and in the classroom.

- At the University of Pittsburgh, researcher Graham F. Hatfull turns high-school students into "phage hunters." Working with soil samples from backyards and barnyards—and notably the monkey pit at the Bronx Zoo—they have identified more than 30 new bacteriophages (viruses that infect bacteria). Genomic information learned from the phages has been so important, says Hatfull, that he and some of his high-school students were coauthors, together with HHMI investigator William R. Jacobs, on a research paper in the journal *Cell*.
- At Harvard University, Richard M. Losick places freshmen in research labs, where they learn, hands-on, how science is really done. Losick has also developed Web-based animations and video modules for teaching molecular biology concepts and procedures.
- Columbia University's Darcy B. Kelley and colleagues developed a course called "Frontiers of Science." Now a requirement for every entering student, it covers topics such as the origins of the universe, the evolution of language, and the future of the planet.

HATFULL, LOSICK, AND KELLEY ARE MEMBERS OF THE FIRST CLASS of HHMI professors—a group of 20 innovative research scientists, appointed in 2002, who are working to incorporate the excitement of scientific research and discovery into undergraduate education. They want everyone—science majors and non-science majors alike—to understand not only how research is done but also how it affects people's daily lives. Now, HHMI is looking for some more faculty who are similarly motivated.

One hundred research universities were invited to nominate one or two of their best scientist-educators. The deadline for nominations was May 2, 2005, and nominees must submit proposals by September 7, 2005. From this eminent group, a new class of up to 20 faculty members will be named HHMI professors in 2006, with each of them receiving a 4-year award of \$1 million.

The HHMI professors program is part of the Institute's long-term plan to improve science education at all levels, to help produce the next generation of research scientists, and to create a more science-literate public. To date, HHMI has awarded more than \$600 million to public and private colleges and universities as well as \$20 million to the first class of HHMI professors. ■

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