HHMI Awards $50 Million to Colleges

Forty-seven small colleges and universities have accepted a challenge: to create more engaging science classes, bring real-world research experiences to students, and increase the diversity of students who study science.

With HHMI grants totaling more than $50 million, these U.S. institutions will discuss strategies and share know-how with an eye toward eventually disseminating effective models more broadly.

The expectation is that the four-year grants, ranging from $800,000 to $1.5 million, will have a big impact on these small schools, which should be more nimble than larger research universities and better able to quickly develop and test new ideas.

Hope College in Holland, Michigan, plans to use some of its grant money to fund a research program for incoming freshmen the summer before they enroll. The grant will also provide continued funding for Hope’s Fostering a Community of Excellence in Science program, which pairs freshman and upperclassman minority students to encourage them to stay in the sciences. The program has already supported nearly 40 students and will expand to help meet the needs of transfer students in the coming years.

“HHMI is investing in these schools because they have shown they are superb incubators of new ideas and models that might be replicated by other institutions to improve how science is taught in college,” says Sean B. Carroll, vice president of science education at HHMI.

The Institute invited 215 schools to apply for the competition. Of those, 187 schools submitted proposals. After two rounds of peer review, a panel of 23 leading scientists recommended that 45 awards be made to 47 schools (a joint award went to five undergraduate schools in southern California known as the Claremont Colleges).

Each school chose to work on one of six overarching objectives (see box).

“The strategic theme-based approach is a new opportunity that enables the grants to organize into smaller groups so that faculty from schools can come together throughout the next four years to share ideas, challenges, solutions,” said David J. Asai, director of HHMI’s precollege and undergraduate program. “We anticipate that the theme-based programs will provide useful models that will inform other institutions, including larger research universities, about strategies that might be replicated.”

For More Information: To see a list of the 2012 awardees, visit www.hhmi.org/news/colleges20120524b.html.

ColleGE INITIATIVE STRATEGIC THEMES

- Preparing undergraduates to become K-12 teachers who understand inquiry-based learning.
- Creating curricula that emphasize learning competencies.
- Defining and assessing what it means for a student to be scientifically literate.
- Developing effective strategies that promote the persistence of all students in science.
- Creating course-based research experiences that will help students learn science by doing authentic research.
- Encouraging students to engage in research through one-on-one apprenticeship-based experiences.

Fifty International Students Get Support from HHMI

Elisa Araldi is studying in the United States to advance science in Italy. “The reason I came to the U.S. for my graduate education was to train in the best scientific environment in the world and bring my knowledge and expertise back to Italy,” she says. Thanks to an HHMI fellowship, she’s one step closer to her goal.

Araldi is one of 50 graduate students from 19 countries who were awarded HHMI International Student Research Fellowships. The program provides $43,000 a year to international science students studying in the United States. The fellowships fund the students during their third, fourth, and fifth years of graduate school—a pivotal point in their studies when they must delve into intense laboratory research for their doctoral dissertations.

“My current research is in macrophage biology at New York University’s Sackler Institute. Part of my project involves very sophisticated and expensive experiments, and this fellowship will allow me to perform more experiments.”

HHMI started the program because it recognized that international students in the U.S. often have difficulty securing funding to support their graduate studies. “Being an international student, it is virtually impossible to find fellowships that fully support my stipend,” says Araldi, who is studying macrophage biology at New York University’s Sackler Institute. “Part of my project involves very sophisticated and expensive experiments, and this fellowship will allow me to perform more experiments.”

And more experiments for Araldi means more scientific expertise for Italy.