

## Asai Named as HHMI Undergraduate Science Education Program Director

WHEN DAVID ASAI DELIVERED HIS FIRST LECTURE TO A SEA OF sophomores taking an introductory biology class, his sole training as a public speaker consisted of a high school debate class. That's when he realized that teaching students about science required more than a Ph.D.

Now Asai has been named director of HHMI's undergraduate science education program and he hopes to rewrite the rule book for how science, and science teachers, should be taught. He comes to HHMI from Harvey Mudd College. In his new position, he will oversee an annual portfolio of over \$50 million in initiatives that are reinvigorating life science education at research universities and liberal arts colleges and engaging the nation's leading scientists in teaching.

"We support innovative programs that bring the content, excitement, and relevance of science to students and David has shown that he can deliver exactly this sort of program," says Peter J. Bruns, HHMI's vice president for grants and special programs.

A cell biologist, Asai knows firsthand the impact the Institute's grants can have: he has overseen HHMI programs at both Purdue University and Harvey Mudd College.

Asai hopes that, with HHMI support, his college and university colleagues will take on big questions: How is science best taught across

disciplines? How can students be best prepared to learn about science? How can the ranks of scientists be diversified? How can faculty members become better teachers?

Going out on a limb in education programs will lead to the answers, Asai believes. "HHMI grants cause the institutions to commit to trying something new," he says. "It really is a quid pro quo. You want this grant? You've got to do something different."

Asai, who grew up in Hawaii, got hooked on science through a National Science Foundation summer research program for high school students, similar to programs funded by HHMI. He received his undergraduate degree from Stanford University and then went to graduate school at the California Institute of Technology. His research has focused on understanding the structure of dynein—a molecular motor responsible for many cellular activities.

After 19 years as a faculty member at Purdue, Asai was recruited to Harvey Mudd, where he served as biology department chair for the last 5 years, teaching and continuing his research. ■



## HHMI Appoints Carlson as Senior Scientific Officer



MARIAN B. CARLSON, A GENETICIST and microbiologist, has been appointed as senior scientific officer of HHMI. Carlson will support the research of HHMI investigators in more than 300 laboratories across the nation.

Coming to HHMI is "an opportunity to have a broader impact on the scientific research community," she says, "because HHMI is an organization with the resources to fund innovative science, at a time when NIH funding is tight."

Previously, she was at Columbia University College of Physicians and Surgeons, where she was vice dean for research as well as a professor of genetics and development and microbiology. She has been a faculty member at Columbia since 1981. She joined HHMI April 1, 2008.

Carlson will continue to manage her laboratory at Columbia, where she studies a family of proteins, known as the SNF1/AMP-activated protein kinases, that plants, animals, and fungi use to alter their metabolism and gene activity in response to stress. In

humans, these protein kinases are associated with metabolic disorders such as diabetes and obesity.

Together with scientific officer Carl Rhodes, Carlson will be the driving force behind HHMI's new Early Career Scientist Program, launched in March 2008. She will work to identify opportunities for the Institute to assist young researchers in managing successful laboratories.

"Marian Carlson brings a richness of academic and administrative perspectives to the HHMI science department," says Jack E. Dixon, vice president and chief scientific officer.

Carlson is no stranger to HHMI. She is married to HHMI investigator Stephen P. Goff of the Columbia University College of Physicians and Surgeons, who studies the replication of retroviruses.

Carlson received her A.B. summa cum laude in biochemical sciences from Harvard College and her Ph.D. in biochemistry from Stanford University. She did her postdoctoral training at the Massachusetts Institute of Technology. She is a fellow of the American Academy of Arts and Sciences and a fellow of the American Academy of Microbiology, and has also served as president of the Genetics Society of America. ■