

GENERAL UNIVERSITY NEWS

Stony Brook Receives Science Education Grant from Astellas USA Foundation
Award used for the fifth annual Protein Modeling Challenge for high school students

STONY BROOK, NY, November 21, 2011 – Stony Brook University's [Center for Science and Mathematics Education \(CESAME\)](#), received a \$15,700 grant from the [Astellas USA Foundation](#) to support the [Protein Modeling Challenge](#), an annual high school science competition that allows high school students to demonstrate their knowledge of a specific topic in biomedical research by constructing a protein model. The competition was previously supported by the OSI Pharmaceuticals Foundation; OSI Pharmaceuticals was purchased by the Astellas Corporation in 2010.

Now in its fifth year, the competition is scheduled for February 29, 2012 at the Charles B. Wang Center. The competition comprises teams of high school students and their teachers who will use information from scientific databases and current research literature to build a model of the featured protein. This year's theme is [rational drug design](#) where students will focus on constructing models of the [c-Met protein](#), an important target of cancer chemotherapy research.

During the competition, teams will have an opportunity to explain the function of the protein and their model of it to university students and professional scientists and researchers from Stony Brook and Astellas. Competitors will be evaluated on their background knowledge and accuracy of the model. Select teams are then invited to use computer design software to design and build a three-dimensional model of the topic protein using Stony Brook's new 3-D rapid prototyping machine, purchased with a grant from the [Howard Hughes Medical Institute](#).

[Joan Kiely](#), Director of the Stony Brook Biotechnology Teaching Center and Principal Investigator of this award, will provide background information for teachers in protein chemistry, computer visualization software, scientific databases and the use of molecular models in the classroom. Training sessions are open to interested teachers and pre-service teachers throughout the New York metropolitan area. The [deadline for teams to enter the competition](#) is December 9, 2011. "Last year's competition attracted more than 100 high school students," said Kiely, noting how they created models of the [Epidermal Growth Factor Receptor](#) and learned about its role in lung cancer. "Their energy, understanding and work ethic was incredible. It gives me the sense that the future will be in good hands."

[Dr. David Bynum](#), Director of CESAME added, "Joan is like the pied piper for science education. Whether she is teaching graduate students in the science education program, undergraduates in her Cancer Biology class or high school students in the Biotechnology Teaching Laboratory, she increases student levels of interest, understanding and confidence. Innovative educators like her are a gift to the next generation."

For more information about the Challenge, please contact Joan Kiely at joan.kiely@stonybrook.edu.



A team from Cold Spring Harbor High School participates in last year's Protein Modeling Challenge at Stony Brook University. From left to right are: Victoria Natoli and Kimberly Arena.



Joan Kiely