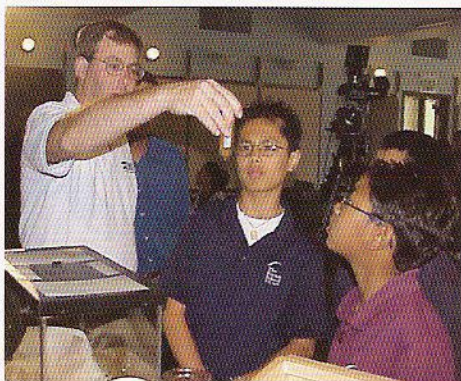
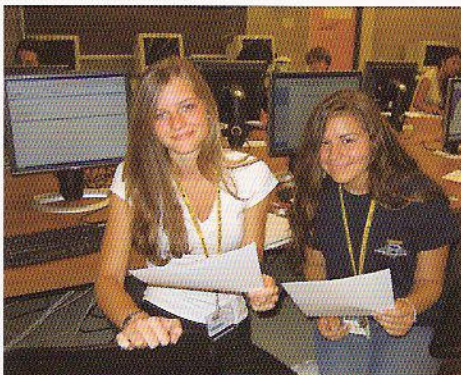


# UCSD Biological Sciences: Hooking Kids (and Grownups) on Science



**S**haring the excitement of scientific discovery with K-12 students, teachers and the greater community remains an important goal of the UCSD Division of Biological Sciences. As science and technology play an increasing role in day-to-day life, empowering people to make sound decisions about science is more crucial than ever. Furthermore, as employment in science and engineering occupations is projected to increase three times faster than the overall job growth rate, more K-12 students need to be encouraged to consider careers in science.



## For Students

At this year's Expanding Your Horizons conference, the Division's scientists presented hands-on/minds-on workshops to girls from all over San Diego County. In all, five hundred girls attended the conference, an annual event, in which presenters in science-related careers from the public and private sectors expose girls to the wide range of career opportunities in the sciences and kindle their passion for science. This past summer, another program that aims to improve the representation of women in science, the San Diego Science Alliance's Better Education for Women in Science and Engineering Program, brought a group of girls to UCSD to explore the mysteries of plant genetics.

UCSD biologist James Nieh and his group recently founded ORBS (Opportunities for Research in the Behavioral Sciences) to develop

exercises that raise awareness and interest in bee biology and the importance of native bees to local ecosystems. The program's goals are to involve students from tropical countries as well as local students; to reach a broad range of students from grade school through college; to provide exercises that teachers can use in the classroom; and to use the Internet to experiment with distance learning and new technologies that can assist the program in fulfilling its mission. A new website called TEACHING BEE is part of a collaboration with the University of São Paulo and is part of an international pollinators initiative being developed to promote public awareness of native bees and their importance to the ecosystem. For more information on this program and its resources for students and teachers, visit: [www.biology.ucsd.edu/labs/nieh/teachingbee.htm](http://www.biology.ucsd.edu/labs/nieh/teachingbee.htm).

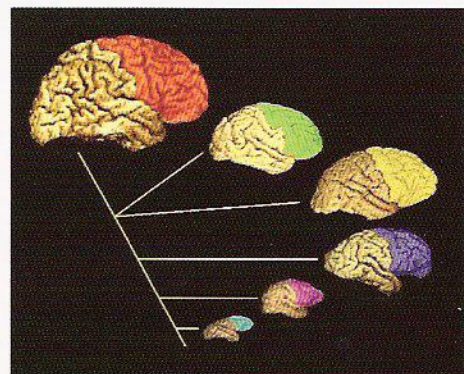


## For Teachers

Teachers have taken advantage of the Division's public lecture series Grey Matters, which explains advances in understanding the interaction between brain and mind, and last April's RNA symposium to further their professional development.

Because it is challenging for teachers to translate lectures on the latest advances in science into classroom activities, the Division is developing a series of curriculum units based on the Grey Matters lectures. The units consist of short video clips that illustrate key scientific concepts, background information, a study guide, questions for students to check their understanding, and questions for deeper thought and reflection, lesson ideas for teachers and additional links and resources (see <http://www.ucsd.tv/greymatters/>).

Teachers continue to have available to them the popular Science Matters Lecture Series that delves into the newest advances and research in the life sciences. Topics include: biodiversity, plant genetics, bee communication, and DNA. Materials include videos, learning activities, and curricula. To access Science Matters, visit: [www.ucsd.tv/sciencematters/](http://www.ucsd.tv/sciencematters/).



## For the Community

The Grey Matters Lecture Series has been very well received. More than 90 percent of the attendees at the lectures felt that the talks increased their interest and enhanced their understanding of the topic. Nearly 1,000 people attended the 2004-05 inaugural series of five lectures on stem cells, brain development, perception, the brain and addiction, and sleep. The lectures are being broadcast by UCSD-TV on five local cable channels and on UC-TV to five million cable subscribers nationwide. They are also available in streaming video on the web at <http://www.ucsd.tv/greymatters/archives.asp>. During 2005-06, the Grey Matters speakers are exploring brain imaging, language, cognitive development, music, and consciousness (see the back cover for more details, or visit: <http://greymatters.ucsd.edu>).

Other educational video programs developed recently include "Sleuthing Corn's Genetic Past" (<http://www.ucsd.tv/library2.asp?keyword=9332>) and "Profiles in Discovery with Dan Lindsley" (<http://www.ucsd.tv/library2.asp?keyword=8062>). Previous lectures in the Profiles in Discovery series are by Dr. Jonathan Singer and Dr. Russell Doolittle.

For more information on UCSD K-12 programs, contact Dr. Sherry Seethaler ([sseethaler@ucsd.edu](mailto:sseethaler@ucsd.edu)) and visit: <http://see.ucsd.edu>.

