

Nifty 50 Scientists: UC San Diego's Leading Researchers Visit Local Middle and High Schools

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Kristin Luciani

The annual San Diego Science Festival, the largest celebration of science on the West Coast, announces this year's Nifty 50 program. Nifty 50 is a speaker series in which science professionals from a wide range of fields and backgrounds provide motivational presentations to classrooms across San Diego County, raising educational interest and awareness in STEM (Science, Technology, Engineering and Mathematics). Presented by Life Technologies Foundation, a platinum corporate sponsor of the San Diego Science Festival, the program will bring 50 science role models-30 of whom are from the University of California, San Diego-into local classrooms. Nifty 50 kicks off Thursday, Feb. 3 at 5:30 p.m. with a reception at the Reuben H. Fleet Science Center in Balboa Park that will bring together scientists, teachers and select students.

"At Life Technologies, we strive to demystify the world of life science and empower today's children to become tomorrow's scientific leaders," said Heather Virido, head of Corporate Giving for Life Technologies. "With current budget restrictions, schools are struggling more than ever; therefore, the scientific community needs to be actively engaged more than ever. We are proud to have Life Technologies' scientists participating and to sponsor the Nifty 50 program."

From Poway and Sweetwater school districts, to many in between, the Nifty 50 scientists will visit diverse middle and high schools to speak to students about the rewards and challenges of these fields, their own career paths and today's "hottest" careers in science. The scientists will also give a preview of the upcoming activities for the San Diego Science Festival, encouraging students to take advantage of the numerous free activities offered.

"Nifty 50 is a great opportunity for students in San Diego to get 'up close and personal' with some of the world's leading scientists and researchers," said Loren Thompson, assistant vice chancellor for Student Educational Advancement at UC San Diego and director of community outreach for the San Diego Science Festival. "From stem cell researchers and medical innovators, to engineers pioneering new technology, the Nifty 50 is an exciting group of role models to inspire the next generation of science leaders."

The Nifty 50 is a diverse group composed of prominent scientists from local and regional research institutions and establishments, including UC San Diego, University of San Diego, San Diego State University, Sanford-Burnham Medical Research Institute, The Scripps Research Institute, The Salk Institute, Space and Naval Warfare (*SPAWAR*) and a host of telecommunications, information technology, defense, biotechnology and renewable energy companies.

This year, 30 of the 50 scientists are from UC San Diego, including Chancellor Marye Anne Fox, recent recipient of the National Medal of Science. Following is just a sampling of UC San Diego's world-renowned researchers who are participating in the Nifty 50 program. For a complete list of the Nifty 50 scientists, visit www.sdsciencefestival.com.

Juan Carlos del Alamo, Ph.D., *Assistant Professor, Biomechanics*

Del Alamos's research interests include bioengineering, fluid dynamics and flow turbulence. His work has applications in a variety of engineering disciplines, from airplane design to developing new medical instruments. Del Alamo will talk with students at the Language Academy about the movement of fluid in the heart and body.

Marye Anne Fox, Ph.D., *Chancellor, UC San Diego*

A world-renowned chemist, Fox is known for her innovative research in physical organic chemistry, which has led to applications in materials science, solar energy conservation and environmental chemistry. Fox's visit to Serra High School will focus on the role of women in science, and her personal experience as a pioneering female scientist.

Larry Goldstein, Ph.D., *Director, UC San Diego Stem Cell Program*

Goldstein's cutting-edge research uses stem cells to study the genetic basis of hereditary Alzheimer's disease. Goldstein's research team recently received a \$1.8 million grant from the state of California for a translational research project to develop a cost-effective, non-labor intensive method of generating stem cells for research. Goldstein will be discussing stem cells with biology and physiology students at Mira Mesa High School in San Diego.

Dena Plemmons, Ph.D., *Project Scientist, UC San Diego Research Ethics Program*

Plemmons' research explores profound ethical implications for society with new advances in science and medicine, and technologies which are on the cutting edge. Through the after-school Ethics and Science Issues at Montgomery program (at Montgomery Middle School in San Diego), Plemmons engages students with these ethical issues, and in the process, teaches them more about what science is and how it actually works.

Mike Sailor, Ph.D., *Professor, Chemistry and Biochemistry*

Sailor's innovative research in nanomaterials ranges from the development of "smart dust," low-power sensors that can detect environmental toxins and pollutants, to new devices for detecting and treating cancer. Chemistry students at Castle Park High School in Chula Vista will be doing hands-on activities when Sailor visits their school.

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For more information about the 2011 San Diego Science Festival, including event details, corporate sponsors, frequently asked questions and comments from science community leaders, please visit www.sdsciencefestival.com.

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