



May 17, 2011

FOR IMMEDIATE RELEASE

Contact: Susan Opava

Cal Poly Research and Graduate Programs

805-756-1508; [sopava@calpoly.edu](mailto:sopava@calpoly.edu)

## Cal Poly Students Succeed at Statewide Research Competition

### Pharmaceutical Research and Device to Prevent Building Collapse Take First Place Awards

SAN LUIS OBISPO – Three Cal Poly projects were among the statewide winners recently at the 25th Annual California State University student research competition. The student projects ranged from an exploration of the roots of the Wright Brothers' inventiveness, to a mathematical solution for non-invasive detection of melanoma, and a non-toxic coating to prevent corrosion in metal structures.

Each spring more than 200 students representing the 23 campuses of the CSU system gather to present the results of their original research, scholarship and creative work to panels of judges. A team of ten students represented Cal Poly at the 2011 competition, held on May 6 and 7 at Fresno State University.

Cal Poly had three winners among its eight entries:

Victor Sanchez Escalera, a civil and environmental engineering graduate student from Visalia, took first place in the engineering and computer science category for his research on using thin infill panels to reinforce steel buildings prone to the progressive collapses seen in catastrophic failures such as the World Trade Center and the federal building in Oklahoma.

[For more information on Escalera and his journey to this accomplishment](#)



Undergraduate students Kellan Candee, a chemistry major from Paso Robles, and Melanie Miller, a biochemistry major from Fremont, were awarded first place in the physical and mathematical sciences category for their research investigating the reactions of strained molecules. An understanding of the behavior of these compounds could lead to the development of new methods for making organic molecules with pharmacological and therapeutic benefits.

[For more information on their molecule ring bonds](#)

Aubrey Smith, a biomedical engineering graduate student from Folsom, received a second-place award in the health, nutrition and

clinical sciences division for her research examining a method for testing intravascular devices such as the stents used to prop open arteries that have been blocked by atherosclerosis. Her bench-top method uses replicas of human arteries grown from pig blood vessels to test the effectiveness of the devices before implantation into humans.

Also representing Cal Poly were biomedical engineering graduate student Ricky Hennessy; undergraduate physics students Grant Olson and Galen Cauble; industrial engineering graduate student Ronald Sloat; graduate history student Daniel Slusser; and graduate polymers and coatings student Greg Strange.

All participants were first nominated by their respective colleges, and then selected in a preliminary competition at Cal Poly. Final competitors submitted written papers and made oral presentations to juries of experts.

For more information on the competition, go to [www.csufresno.edu/grants/programs/students/student.shtml](http://www.csufresno.edu/grants/programs/students/student.shtml)

###

---

[CP Home](#) • [CP Find It](#) • [Get Adobe Reader](#) • [Help Accessing Public Affairs Web Content](#)

[Cal Poly News Web](#) • [Cal Poly Magazine](#) • [Cal Poly Update](#)  
[E-newsletter](#)

[Giving to Cal Poly](#)

Public Affairs Office  
California Polytechnic State University  
San Luis Obispo, CA 93407

[polynews \[at\] calpoly.edu](mailto:polynews[at]calpoly.edu)