Participants at Science Festival Roll Up Sleeves to Learn About Science

Annual fair organized by UC San Diego draws about 30,000

Ioana Patringenaru | March 29, 2010

They got to touch sheep brains and try to figure out the differences between dolphin and human brains. They learned about mechanical engineering by playing with convoluted contraptions. They played with toy California lobsters, starfish and octopus.

More than 30,000 residents of San Diego County and beyond turned out at PETCO Park Saturday for the second annual Science Festival EXPO Day. The event offered a bonanza of hands-on activities for the young and the young-at-heart, including more than 25 UC San Diego booths. This year's venue also offered more room for activities, plenty of parking, food and room to sit down.

The EXPO's goal is to inspire San Diego's youth to pursue science-oriented education and careers. For UCSD faculty and graduate students, it's also an opportunity to communicate their love of science to the public. The EXPO is the culmination of the San Diego Science Festival. UCSD is lead organizer for the week of community events, designed to raise awareness of the importance of science, technology, engineering and mathematics education.

"This is a unique, incredible opportunity for today's students to get really excited about becoming tomorrow's scientists, as well as for our San Diego community to learn more about their region's leading research university and all it contributes to scientific research," said Loren Thompson, assistant vice chancellor for Student Educational Advancement at UCSD and director of community outreach for the San Diego Science Festival.

Saturday, children and students with different levels of interest in science turned out for EXPO day. Casey Hullfish, 8, has his own science laboratory in his family's garage, said his mother, Karen. He won the principal's award at his school's science fair for his project on how to best kill germs on toothbrushes (UV rays are the answer).

"I just like chemistry," Casey explained. "I just like to see the stuff that it does."
Entertainment at Casey's birthday parties has usually been provided by Mad Science, said his mother. So the Science Festival EXPO is a great opportunity for Casey, she added. I am so happy this is here, Karen Hullfish said.

Casey was one of the many children hovering around two Rube-Golberg-like contraptions at a booth run by UCSD's COSMOS program. The structures were designed by high school students during the four-week summer program, said Raymond De Callafon, a professor at UCSD's Jacobs School of Engineering. Students also programmed the controllers that determined the contraptions' movements and used a computer program to design different parts.

Saturday, children dropped small plastic balls down the structures ramps and slides and watch them careen about. The EXPO gives UCSD a chance to get students excited about engineering, said De Callafon. "Engineers aren't just nerds," said De Callafon. "Engineering is fun."

It wasn't just boys hovering around the contraptions, either. Dylan Gebhardt, 8, was one of several girls who took interest. It's very cool, she said. She added she likes science. "It's always going to be a mystery what you do next," she said.

Nearby, many gathered around a booth manned by UCSD's neurosciences program, where students showed off brains in jars and on trays. The goal was to teach visitors about the many aspects of neuroscience, from the whole brain down to individual neurons, said graduate student Emily Caporello.

Visitors were invited to guess which brains belonged to a dolphin, a tortoise and a stingray, among others. Then they could don plastic gloves to handle sheep brains. Finally, they could listen to the activity of individual neurons. It was William Quan's first time touching a brain. The 15-year-old freshman at The Preuss School at UCSD peppered Stephanie Alfonso, a UCSD senior, with questions. "I thought it was pretty cool," William said. "I didn't know it would feel that squishy."

"It's nice to get out of the lab and share your knowledge," Caporello said. "This is an amazing experience," she said. "I always leave feeling great and connected to the general public again."

Another UCSD booth was manned by graduate students at the Scripps Institution of Oceanography, in partnership with the Birch Aquarium. The students designed the booth's activities during an ocean science class, to teach children about tidepool animals and their adaptations, said graduate student Alison Cawood.

Cawood showed off a plastic California lobster, without claws, to two little boys, ages 7 and 2. They're not lobsters, they're just roaches, joked the boys' father, Steven Pirie-Shepherd. He works in drug development for cancer.

"It's good to come out and have kids inspired," Pirie-Shepherd said.