

CTE Lab Researchers Reach Out in Outreach Event at BODIES

by Brad Hansen; ed. Johnny Du



EunHee Han, Brad Hansen, Pamela Tu, and Chris Kim—researchers from the CTE lab—explain arthritis and orthopedic implants. Photo courtesy J. Lee.

In conjunction with UCSD BioBridge, members of the Cartilage Tissue Engineering Lab presented information on bioengineering and orthopedic research at outreach events for high school students. Taking place on November 5, 2007, and January 31, 2008, the events were held as part of the BODIES exhibit to encourage future college students to pursue science and engineering majors. “I believe that the exhibition will help students to make decisions about college and even careers, because they learned that science is not limited to memorizing theoretical concepts and understanding formulas,” said CTE undergraduate Chris Kim.

Approximately 80-120 high school students, selected by their science and math teachers as top in their class, were bussed in from the Gartsman Union High, San Diego Unified, and Sweetwater Unified High School Districts. They began the day receiving information on different undergraduate science majors at UCSD. Their trip culminated in a scientific scavenger hunt and other activities at the



CTE undergrad Chris Kim answers high school students' questions. Photo courtesy J. Lee.

BODIES exhibit at the Westfield UTC Shopping Center.

Using an osteoarthritis model and several orthopedic implants, CTE researchers explained their work of investigating the causes and treatments of joint diseases. “The enthusiasm and curiosity from the students at our display of joint replacements was evident and was encouraging to see,” said CTE graduate student Eun Hee Han.

As Chris Kim pointed out, “They were very interested in bioengineering and knee replacement surgeries. Their curiosity made them keep on asking many questions to us.”

BODIES is a touring exhibit featuring 21 whole-body specimens and over 260 organs, all dissected and preserved using a polymer injection process. Eun Hee noted that “the exhibition was a fascinating display of the exquisite and intricate machine that is the human body,” but indicated that the exhibit overlooked the most interesting part of the body: “Cartilage could – and should – have been highlighted more like bone and muscle.” Nevertheless, CTE undergraduate Pamela Tu noted the exhibit was “cool.”

The UCSD BioBridge program endeavors to find future leaders in science and engineering from local high schools. Working with teachers, they identify top students in science and math and encourage them to study at UCSD. In the past, the program has included laboratory and computer demonstrations, aquarium visits, and poster sessions. Utilizing the BODIES exhibit, the organizers chose a human body themed event this year. This event will likely be repeated next year in a new location, potential offering another opportunity for the CTE Lab to reach out to future scientists.

The CTE Lab was represented by post-doctoral fellows Simon Gortz and Michele Temple-Wong, graduate researchers Elaine Chan, Brad Hansen, Eun Hee Han, Rebecca Rone, and undergraduates Chris Kim and Pamela Tu. Joint models and orthopedic implants were provided by CTE Lab director Dr. Robert Sah and PI Dr. William Bugbee.

For more information on the CTE lab, BODIES, or UCSD’s BioBridge, please visit <http://cte.ucsd.edu>, <http://www.bodiestheexhibition.com> and <http://biobridge.ucsd.edu>.

