Engineering Research And Technology Advances To Be Featured At UCSD Jacobs School Of Engineering 23rd Annual Research Review, February 27

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Twenty UCSD Jacobs School of Engineering faculty will present research advances on topics ranging from tissue engineering and blood substitutes to next generation networks at the School's 23rd Annual Research Review. The theme is "Living Labs: application driven technology testbeds" and featured faculty speakers will describe how new technologies are being integrated and deployed, setting the stage for emerging markets in biotechnology, defense, and information technology. Attendees will also tour laboratories, see technology demonstrations, and view more than 200 research posters by Jacobs School graduate students. The event takes place Friday, February 27, 2004, from 8 a.m. to 3 p.m., in the Price Center on the UCSD campus in La Jolla, California. A $55 registration fee includes lunch and conference materials. Registration and information is available at www.jacobsschool.ucsd.edu/RR.

The keynote speaker is Joe McCarthy of Intel Research Seattle, who will describe his work on "active environments" that can sense and respond to people and their activities. McCarthy recently used a computer engineering conference to test a suite of proactive displays. The displays served as digital icebreakers, presenting background information, interests and pictures of attendees in the vicinity, and even highlighting mutual interests shared among the participants.

Featured Jacobs School faculty speakers include:

Stefan Savage, professor of computer science and member of the Cooperative Association for Internet Data Analysis (CAID), who will describe a new monitoring system to track global Internet attacks;

Sangeeta Bhatia, professor of bioengineering who was recently named one of the top 100 young innovators in the world by MIT Technology Review, who will talk about her breakthrough research in liver tissue engineering, and growing liver cells on silicon chips for testing the toxicity of new drugs;

John Kosmatka, professor of structural engineering, who along with researchers at the Scripps Institution of Oceanography is developing an unmanned aerial vehicle (UAV) for environmental monitoring; and

Serge Belongie, professor of computer science, who will describe his machine vision system for monitoring the health and behavior of laboratory animals.

Following the exhibit session and featured presentations in the morning, the Jacobs School's five academic departments will host afternoon breakout sessions including faculty talks, laboratory tours and exhibits. Among the topics for discussion during the afternoon breakout sessions are:

A new computer graphics program that has revolutionized the movie industry with more realistic depictions of computer-generated characters such as Gollum in Lord of the Rings. Computer science professor Henrik Wann Jensen will receive a 2004 Academy Award for technical achievement for the work;

Innovations in practical, real-time measurements of combustion and fire bi-products and other environmental contaminants to be presented by Mechanical and Aerospace Engineering Professor Steven Buckley;

The development of a $20 million field station for one-of-a-kind structural testing, including the world's first outdoor shake table which will allow researchers to test the earthquake safety of full-scale bridges and buildings. Structural Engineering Professor Jose Restrepo will also invite participants to tour the field station which is now under construction; and

Ongoing clinical trials of a blood substitute by UCSD spin-out and local San Diego biotech company Sangart, Inc. Bioengineering Professor Marcos Intaglietta will describe new information about how oxygen is transported in the microcirculation which led to the core State of California.

Approximately 700 corporate technologists, engineers, UCSD alumni, and Jacobs School faculty and students are expected to attend. Research Review is supported through the Jacobs School Corporate Affiliates Program (CAP), a service through which the school cultivates and sustains relationships with industry.

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