

# UC VALLEY CONNECTION

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HIGHLIGHTING THE UNIVERSITY OF CALIFORNIA'S CONNECTIONS AND CONTRIBUTIONS TO THE SAN JOAQUIN VALLEY

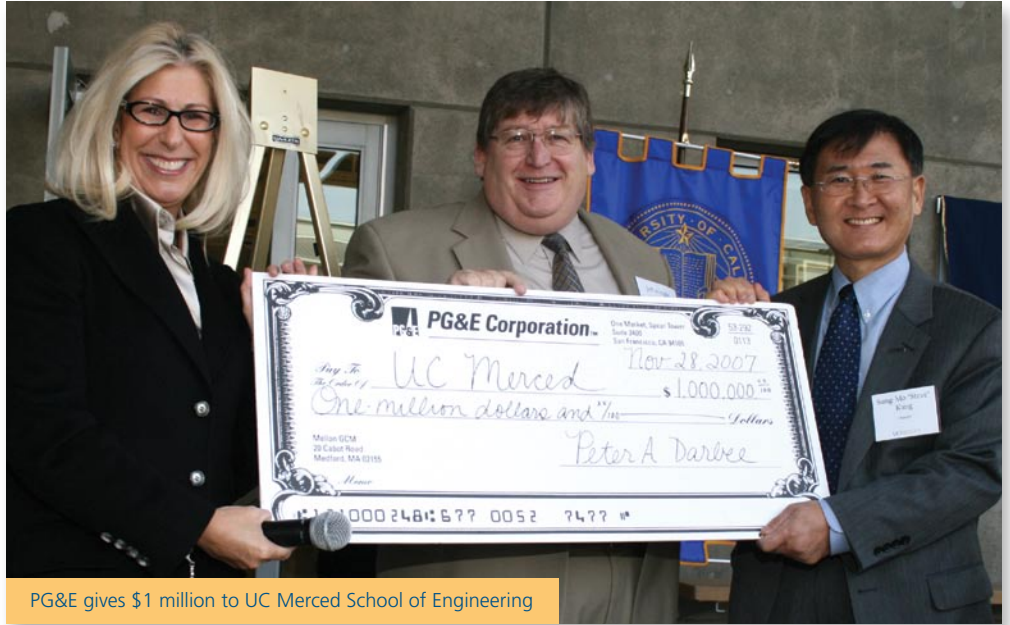
## QUOTEWORTHY

**“The world needs engineers who are prepared to make a difference. UC Merced is committed to educating those engineers, and the support of PG&E greatly enhances our ability to do so.”**

Steve Kang  
Chancellor  
UC Merced

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PG&E gives \$1 million to UC Merced School of Engineering

## PG&E million-dollar gift supports UC Merced engineering students

By Ana Shaw | UC Merced | Office of Communications

Representatives from Pacific Gas and Electric Co. recently visited the University of California, Merced and left behind a few important items, including a \$1 million check. The gift is part of a five-year partnership between PG&E and UC Merced's School of Engineering and is aimed at supporting student recruitment and retention programs. The gift is particularly timely since the Labor and Workforce Development Agency projects a shortage of nearly 40,000 engineers in California by 2014 unless the state takes action now.

“The world needs engineers who are prepared to make a difference,” said UC Merced Chancellor Steve Kang. “UC Merced is committed to educating those engineers, and the support of PG&E greatly enhances our ability to do so.”

PG&E Senior Vice President Nancy

McFadden presented UC Merced with a \$1 million check and unveiled a new sign naming the PG&E Engineering Service Learning Laboratory in a ceremony outside the campus' Science and Engineering Building.

“PG&E is proud to partner with UC Merced to support and inspire future engineers who will lead advancements in energy efficiency, renewable power and technology to promote a healthy environment,” said McFadden. “This donation is part of our continued commitment to support environmental leadership and the economic vitality of the Central Valley communities we are honored to serve.”

PG&E's contribution will be provided to UC Merced's School of Engineering over the course of the partnership. The gift will enhance student recruitment and retention through several initiatives, including expand-



## UCD faculty member receives national award

James P. Reynolds, chief of clinical services, dairy production medicine, at the UC Davis Veterinary Medicine Teaching and Research Center in Tulare, received the 2007 Animal Welfare Award from the American Veterinary Medical Association (AVMA) for his contributions to animal well-being, animal care and the community and society. Reynolds was one of 16 individuals honored with the AVMA's highest honors.

As chief of clinical services, Reynolds instructs veterinary and graduate students in clinical dairy production medicine. He promotes efficient and humane production medicine techniques for livestock farming, and conducts fieldwork in disease control and epidemiologic research addressing problems of food animals. His goals include working on disease control on a herd or area basis and helping provide livestock health management systems to developing countries for food production. During the foot-and-mouth disease outbreak of 2001, he consulted on dairy projects in Madagascar, Tunisia, Lithuania, Mexico, Armenia and England.

An integral part of the UC Davis School of Veterinary Medicine, the VMTRC trains food animal veterinarians and offers graduate clinical and academic programs.

The AVMA, founded in 1863, is one of the oldest and largest veterinary medical organizations in the world.



## UCSF Fresno physician receives volunteerism & community service award

Dominic Dizon, MD, a faculty member with the UCSF Fresno Medical Education Program, recently received the volunteerism and community service award from the American College of Physicians, California Northern Region.

"It is an honor to be recognized for my service to the community," said Dizon. "I find public service personally rewarding, it contributes to the community where I live and work and I believe it makes me a better physician."

Dizon was nominated for the award by Michael Peterson, MD, UCSF Fresno's chair of internal medicine because of a unique service project he conceived four years ago. The idea involved engaging medical residents in the community by having them volunteer at various local nonprofits such as The Poverello House and the Holy Cross Clinic.

The goal was to give internal medicine residents an opportunity to contribute to the community and to develop a model for future volunteerism in their profession.

Thanks to Dizon, community service is now available to all UCSF Fresno medical residents.

He and his wife, Nhuha, also established and personally fund a community service award recognizing one outstanding medical resident.



## Photo exhibition captures UC Merced's founding students

"Facing the Future: Portraits of UC Merced's Founding Students," an exhibition of photography by Roger J. Wyan, will be on display at the UC Merced Fresno Center, beginning Feb. 1.

Featuring large-scale black and white photographic portraits of students, the images were made by Wyan over the course of UC Merced's first year. Using a white backdrop to essentially separate the students from their environment, the photographs are the intersection of facial expression, ethnicity, clothing as an expression of individuality, body language and the nuances of the human face.

Having watched the earliest beginnings of UC Merced, from selection of the site in the Central Valley years ago to the day the campus opened its doors in 2005, Wyan decided to focus his lens on documenting the first students who chose to pioneer UC's 10th campus.

Wyan's work as a photojournalist has won numerous awards from professional media organizations and his portraits have been described by The Sacramento Bee as "a glimpse into the heart and soul."

The UC Merced Fresno Center is located at 550 E. Shaw Ave., across from Fashion Fair Mall. The exhibit is open to the public during center business hours.



## UC Merced professor selected for presidential science & engineering award

Shawn Newsam, an assistant professor in the UC Merced School of Engineering, was selected for the Presidential Early Career Award for Scientists and Engineers. The award is given by the president's office of Science and Technology Policy to young researchers who have accomplished innovative research and community service. It is the highest honor bestowed by the U.S. government on young scientists and engineers. Newsam is the first UC Merced faculty member to receive it.

Newsam traveled to Washington, D.C., for a special ceremony at the White House, where he was recognized for his interdisciplinary research in knowledge discovery in complex data. At UC Merced, Newsam is pursuing collaborative research with air pollution scientists on using computer vision to monitor air pollution in the Central Valley and with biologists on projects studying the health effects of nanoparticles and analyzing computer simulations of unstructured proteins.

"I'm honored to receive this award, because it not only recognizes my research, but also my role in establishing UC Merced," Newsam said.

Newsam is one of eight awardees nominated by the U.S. Department of Energy.

## CONTACT INFORMATION

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Dr. Conrad Chao of UCSF Fresno is first in U.S. to use new fetal heart rate monitor.

## UCSF Fresno first to implement new fetal monitor aimed at reducing brain damage

A new, advanced type of fetal heart rate monitor geared toward reducing brain injury in newborns is now available in Fresno. The University of California, San Francisco Fresno Medical Education Program and Community Regional Medical Center have collaborated to be the first in the nation to offer patients the technology.

Conrad Chao, MD, chief of obstetrics and gynecology for UCSF Fresno, championed the effort to bring the monitor to the labor and delivery unit at Community, which has one of the highest patient volumes in the state with almost 7,000 births per year. Developed by Neovanta Medical Inc. of Sweden, the device is called the STAN Monitor.

“Obstetricians have struggled for more than 30 years with monitoring technology that has never lived up to its initial promise of reducing the rate of fetal brain damage.

Our high-volume, high-risk pregnancy center—combined with our academic program—is an ideal setting to pioneer implementation of this promising technology in the United States,” said Chao, who has conducted research on the fetal brain and the mechanisms of fetal brain injury.

According to Chao, the new monitor provides data that is more sophisticated than current monitoring equipment. Through a combination of modern signal processing and computer technology, it is able to automatically analyze the fetal electrocardiogram similar to the way a cardiologist detects a lack of oxygen in the adult heart during a treadmill test.

The monitor records detailed data on the baby’s heart rate and oxygen supply and generates an alert flag when there is a risk of oxygen deficiency to the baby that could

result in brain damage. The mother’s labor is then managed according to clinical guidelines and specifically tailored information provided by the monitor. The data makes it possible for the health care team to make an “educated decision” on whether the delivery can proceed at a normal pace or whether the baby must be delivered immediately because of oxygen deprivation, according to Chao.

More than 350 centers throughout Europe use the monitor. The Cochrane Library, a widely respected authority on the effectiveness of clinical interventions, has reported that use of the STAN Monitor has decreased the rate of brain injury at birth by two-thirds compared to conventional monitors. Clinical studies also showed that the new monitor decreases the need for additional procedures by 10 percent. ■

### PG&E million dollar gift from front page

ing the school’s Engineering Service Learning Laboratory, now named after PG&E. The lab provides a physical base for students working on cooperative engineering projects with local nonprofits such as A Woman’s Place Merced, the Merced County Office of Education and the California State Mining and Mineral Museum in Mariposa. Service learning is a requirement of UC Merced’s engineering curriculum and helps retain students by facilitating hands-on learning early in the engineering education process.

PG&E also presented the university with

two blue-flamed, custom-wrapped Honda Civics powered by natural gas. Engineering students traveling to off-campus service learning projects and professional conferences are already using the vehicles. PG&E provided a natural gas pump on campus to fuel the vehicles. Natural gas is one of the cleanest burning alternative transportation fuels available, reducing greenhouse gas emissions by 25 percent over petroleum-fueled vehicles.

According to some UC Merced engineering students, PG&E’s gift will make a

tremendous difference by supporting student organizations and projects as well as providing individual financial support for outstanding students.

“It is a magnificent statement to our students that a company with the stature of PG&E cares so deeply about their success as future engineering leaders of tomorrow,” said Dean Jeff Wright of the School of Engineering. “This gift will enable us to expand our support of their professional education and to provide them hands-on learning experiences that would otherwise not be possible.” ■

# Project manager starts on UC Merced's telehealth project

By Brandy Ramos Nikaido | UC Office of the President

Jennifer Smith understands the challenges faced by rural doctors. She “loves” working on multifaceted projects and is eager to take on an assignment that will enhance the quality of life in the San Joaquin Valley. Smith was recently named telemedicine project manager at UC Merced.

“Jennifer’s professional background, interests and enthusiasm make her an excellent choice to head up development of UC Merced’s telehealth project in the Valley,” said Dean Maria Pallavicini of the School of Natural Sciences.

Access to health care in the San Joaquin Valley is 31 percent lower than the rest of California as a whole. UC Merced, in partnership with UCSF Fresno Medical Education Program and UC Davis, is guiding efforts to offer enhanced health care in the region, including increasing access to specialty care, particularly to the underserved.

Last year, UC Merced received nearly \$1 million from AT&T, the California Emerging Technology Fund and the California Partnership for the San Joaquin Valley to establish the “San Joaquin Valley eHealth



photo by Scott Stehle

Network Project,” an initiative aimed at creating a telehealth network in the San Joaquin Valley.

The funding will enable UC Merced to establish four eHealth centers in the Valley and a hub on campus. The centers will be located at existing health care facilities and will provide telemedicine services via videoconferencing with electronic storage and forwarding capa-

bilities, training for physicians and staff and educational opportunities for high school and college students in the region.

More than 100 sites in the Valley from Stockton to Bakersfield and surrounding foothill communities are being considered as eHealth centers.

Smith and her husband, Dennis, recently returned to California after five years working in rural, northern North Dakota and southern Manitoba, Canada. Most recently, Smith served as clinic director for her husband, who is a chiropractic neurologist. Prior to that, she ran her own small business and served as a consultant to other small businesses.

“I know firsthand how limited access to medical specialists impacts the quality of life for people living in rural areas,” Smith said. “Many patients used to drive more than an hour to get to our office and more serious cases were referred to specialists who were six hours away.”

Currently, Smith is analyzing which sites will make the best telemedicine partners for UC Merced. ■

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