Dean’s Message

Welcome to the 3rd issue of the College of Science’s newsletter featuring brief summaries of news about our students, faculty, staff, alumni, and friends.

Not everyone is aware of the breadth of our college. The College of Sciences includes eight departments: Astronomy, Biology, Chemistry & Biochemistry, Computer Science, Geological Sciences, Mathematics & Statistics, Physics, and Psychology. The college’s departments and interdisciplinary programs, offer bachelor’s and master’s degrees, as well as joint doctoral degrees in Cell & Molecular Biology, Chemistry, Clinical Psychology, Computational Sciences, Ecology, Evolutionary Biology, and Geophysics.

The college maintains off-campus research facilities at the Mt. Laguna Observatory, Coastal Waters & Marine Institute, and nearly 9,000 acres comprising four field-research stations. Our faculty remain leaders in their disciplines through their research, enabling our students to benefit from a wide range of practical classroom instruction and hands-on laboratory work.

We hope you enjoy the newsletter. If you have any questions or comments, we would love to hear from you.

Stanley Maloy
Dean, College of Sciences

A Better Look at Heart Disease
BioScience Center’s new imaging system will help track the spread of disease and damage after a heart attack.

Thanks to $395,000 in federal stimulus funding, San Diego State University’s BioScience Center will be able to expand its research. The American Recovery and Reinvestment Act (ARRA) grant from the National Institutes of Health will allow the center to purchase a new in-vivo imaging system (the IVIS Spectrum from Caliper Life Sciences) to help visualize disease processes inside the body, such as damage after a heart attack. “This high-tech tool will enhance research being done at the BioScience Center, bringing us closer to identifying the connections between various infections and heart disease,” said Roberta Gottlieb, director of the SDSU BioScience Center.

Eric Frost Receives Lifetime Achievement Award in Cybersecurity
SDSU Professor Eric Frost was honored for his contributions to cybersecurity at the first annual Cybersecurity Awards.

For Frost, the award was an extraordinary honor. “I was deeply humbled by the recognition from the community. Thinking about cybersecurity in difficult settings is something we work on every day, so being recognized in such a way was very meaningful.” Frost and the entire Viz Lab are constantly highly involved in humanitarian disaster relief. Since their efforts involve using the Internet in a positive way, cybersecurity is of the utmost importance. “Given our homeland security effort here in humanitarian disaster relief, we end up dealing with cybersecurity in a major way.”

Treating Anxiety with the Click of a Mouse
An SDSU psychology professor developed a computer program as an alternative to therapy and medication.

Social anxiety disorder, the most common anxiety disorder in the country, is often treated with medication or cognitive behavior therapy. But if medication doesn’t work, and therapy is too expensive, what other option is there? San Diego State psychology professor Nader Amir has come up with a new, third approach: a simple computer program. Played for only 10–15 minutes twice a week for four weeks, it helps shift a person’s attention from negative thinking, which eases anxiety symptoms.

Building Molecules in Classrooms
SDSU professor Andrew Cooksy brings chemistry into classrooms with 3-D software.

San Diego State chemistry professor Andrew Cooksy visited Castle Park Middle School last month, bringing a bit of university science into the classroom as part of a new outreach program to serve San Diego area schools. His project is supported by the National Science Foundation (NSF) and The Campanile Foundation, the philanthropic arm of the university. It allows SDSU students to join Cooksy in neighborhood chemistry classrooms, where they bring laptop computers preloaded with software that builds individual molecules from an interactive periodic table and allows students to visualize the results in 3-D.
“Doc” Retires

Physics professor, Richard H. Morris, Ph.D. announced his retirement after 53 years of teaching at SDSU.

Professor Morris’ teaching interests include teaching an undergraduate laboratory in physical measurements at the junior level, and graduate courses in electromagnetic theory and tensor analysis for physicists. His primary research projects, which have included both undergraduate and graduate students, are in electromagnetism and optics. He has supervised over thirty graduate theses in the above mentioned subjects. In celebration of his 50 years of teaching at SDSU, in 2007, the Department of Physics named the “Doc Morris Public Lecture Series” after Professor Morris. (Doc is the longest serving faculty member at SDSU)

Female Philanthropists Fund Science Scholarships

The funds will support 14 graduate students in the College of Sciences and College of Engineering.

The all-women group presented the check to SDSU President Stephen L. Weber during an event last week. The ARCS San Diego Chapter, one of 16 chapters across the country, has provided continued support of San Diego State University students studying to complete degrees in science and engineering since 1988. A nonprofit, all-women, volunteer organization with 16 chapters nationally, ARCS is dedicated to helping the best and brightest U.S. graduate and undergraduate science, engineering and medical students. The organization was formed nationally in 1958 in response to Sputnik and the lack of U.S. supremacy in the technology race.

Recent Alumni Updates:

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Professor Emeritus Andrew C. Olson, Jr., Ph.D.

After his recent visit to the Parma Payne Goodall Alumni Center, Andrew decided there was something missing from the collection. “I thought they could use a microscope,” says Olson, who is a lifetime member of the SDSU Alumni Association. So the following week he returned with a personal keepsake to donate— the microscope he once used as a zoology professor at San Diego State. “I think looking through a microscope is just as illuminating as looking through books,” he explains. “It’s just part of learning...”