**Dean’s Message**

Despite challenges of state budget reductions, our college had many successes in 2010. The success of College of Sciences students and faculty continues to enhance the reputation of SDSU. Although we cannot include them all in this newsletter, we’ve highlighted a few of these accomplishments from the last year. We are looking forward to an exciting and productive new year, and will continue to share our stories in this monthly newsletter.

We greatly appreciate the contributions of everyone who has donated to the College of Sciences during 2010. Your contributions have had a major impact on our students and faculty throughout the college. Your support has provided undergraduate scholarships and graduate fellowships for students, computer equipment for our courses, equipment and supplies for advanced courses – contributions that ensure our continuing excellence in teaching and research.

Thank you for your support and friendship over the last year.

Stanley Maloy
Dean, College of Sciences

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**Student Training**

**$4.95M Grant will Train Vets, Others for Biotech Careers** (February 16, 2010)

The BRIDGE project is a partnership linking training and higher education with employment opportunities that address the regional and state-wide workforce needs of the life sciences industry. The project will focus on the critical need for clinical laboratory scientists, medical laboratory technicians, medical physicists, and professional scientists.

Undergraduate Students Leading Beneficiaries of the Expanding Research Enterprise at SDSU (November 8, 2010)

“The best education we can give to all our students— including future scientists, is to have them actively participate in research,” said SDSU President Stephen L. Weber. “Research keeps our faculty sharp and current in their field and provides excellent learning environments for our students.

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**2010 Research Highlights**

**Department of Astronomy** (May 19, 2010)

Three of the novae stalled before reaching a peak, and all flickered or flared as the explosions ran their course, according to a new article in the Astrophysical Journal co-authored by San Diego State University astronomy professor Allen Shafter.

**Department of Biology** (March 23, 2010)

SDSU is a leader in the new field of metagenomics – determining the DNA sequence of communities of organisms and using this information to make predictions about the physiology, and ecology of microbial communities. This work has applications in human medicine as well as in environmental sciences. In addition to highly productive research, Prof. Liz Dinsdale started a new course to teach students how to do genomics and metagenomics. Her class sequenced the genome of the California Sea Lion— a major accomplishment for students and a first in this field.

**Department of Chemistry & Biochemistry** (November 18, 2010)

Two Chemistry professors won Innovation Challenge Grants from Clean Tech San Diego for their work on alternative energy. Prof. John Love received an award for his work on developing a new approach to extract biodiesel from cell membranes. Prof. Dough Grothjahn received an award for his work on the development of new catalysts for making hydrogen from water.

**Department of Computer Science** (February 19, 2010)

Building on the new technology of metagenomics, Prof. Rob Edwards’ lab has developed methods to annotate DNA sequences in minutes or hours, instead of days. The application, built by undergraduate student Daniel Cuevas, stores and retrieves the metagenome-annotated data on a server, allowing users of social networking sites to share data and analysis with the scientific community more widely and rapidly than ever before.

**Department of Geological Sciences** (August 19, 2010)

Researchers at SDSU and the San Diego Supercomputer Center at UCSD have created the largest-ever simulation of a magnitude 8.0 (M8) earthquake. M8 earthquakes are capable of tremendous damage; the 1994 Northridge earthquake was a magnitude 6.7 and caused billions of dollars in property damage.

**Department of Mathematics & Statistics** (September 13, 2010)

Rich Levine was elected ASA Fellow, he was chosen for his “outstanding methodological contributions and ground-breaking applications in the area of Monte Carlo statistical methods, for curricular developments and teaching innovations in computational statistics, and for exemplary service to the profession.”

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MORE STORIES ARE ONLINE  http://sciences.sdsu.edu

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2010 Chairs and Directors retreat at SDSUs Coastal and Marine Institute Laboratory
Where are You Now?
SEND US YOUR STORIES:
alumni@sciences.sdsu.edu
http://sciences.sdsu.edu

1959-2010

In Memoriam (October 7, 2010)
It is with deep sadness that we report the passing of our friend and
colleague Dr. Jared R. Morrow (1959-2010). Dr. Morrow was an
enthusiastic teacher who trained many students. In addition, he made
important research contributions to our understanding of meteorite
impact on the earth, and he was actively involved in his professional
society. Dr. Morrow lost his battle with cancer on October 7, 2010.

2010 Research Updates (continued)

Department of Physics (November 1, 2010)
Affectionately knows as “Doc Morris,” Professor Richard Morris
announced his retirement after 53 years of teaching at SDSU.
His hands-on, problem-solving approach to teaching physics has
influenced many undergraduates and graduate students over the
years. In celebration of his 50 years of teaching at SDSU in 2007,
the Department of Physics established the “Doc Morris Public
Lecture Series.”

Department of Psychology (May 18, 2010)
Psychology professor Jean Twenge received the Distinguished
Achievement Award from Sigma Xi for pioneering a new research
method, cross-temporal meta-analysis, and used it to become the
first psychologist to study birth cohort effects in a systematic way.
Her research on the effects of social rejection and exclusion on
behavior is commonly reported in the news media.

Collaborations

The Ethics Forum
We are partnering with UCSD
and USD to provide a public
forum for discussions of ethics
in science and technology.
These events occur the first
Wednesday of every month at
the Fleet Science Center at Balboa Park, and discussions are also
aired on KPBS. (http://www.ethicscenter.net/)

Institutions Join Forces for San Diego Bay Research
The Center for Bay and Coastal Dynamics unites efforts of
scientists in the SDSU College of Sciences, Scripps Institution
of Oceanography, Hubbs-SeaWorld Research Institute, and the
Unified Port District of San Diego to improve the quality and long
term sustainability of the San Diego Bay.