

# THE NATURAL PHENOMENA

SUMMER 2009



## Inside this Issue:

Message from the Dean .....	1
Commencement and Department Accomplishments .....	2
The Departments of Geology and Kinesiology.....	3
The Department of Mathematics and Water Resources Institute.....	4
Development Corner.....	5
Donor Thanks.....	6
CNS Outstanding Alumnus, Graduate and Undergraduate, and In Memory Of.....	7





## A MESSAGE FROM THE DEAN



B. Robert Carlson, Dean of the College of Natural Sciences

This year can best be characterized as “good news, bad news” as the most noteworthy items ranged from an observatory that is becoming a reality to the negative economy that is affecting all of us. The constants seem to be the faculty and students at Cal State San Bernardino who continue to excel.

The observatory project has been in planning stages for almost 15 years, having started with Leo Connolly of the Department of Physics, William Shum of the Capital Planning and Design office, and Jim Imborski of Associated Engineers. Since there was no state of California funding available to build this structure, developing a funding base in the private sector became important. Many engineering and design firms shared the vision for the observatory and donated their services to bring the construction plans to fruition. These firms (Hill Partnership of Laguna Beach, Associated Engineers of Ontario, Design West Engineering, Redland Engineering Co., Converse Consultants) have donated both time and expertise to bring us to the threshold of going out for bid. Roberto Redondo has worked with individual donors for almost eight years, with hundreds of individuals making small contributions toward the building of an observatory on campus. As the project gained legs, larger commitments were made by individuals such as Glenda Bayless of Victorville, the Evelyn Magnuson Estate, and the George and Pauline Murillo family. In the later case, the children wanted to recognize the importance of their parents to them personally by having the observatory named in their honor. So, at this point, we are preparing for the bidding process with the hope that construction will begin this summer. It has been a long trip with a lot of twists and turns, a trip that has been both fun and frustrating. I can't wait to see the faces of children the first time that they are able to see space objects up close!!

At the opposite extreme (bad news) is the

economy. Each of us has been affected by the downturn in the world economy in general and the California economy in particular. Cal State San Bernardino receives a significant portion of its support from the state of California, so it is no surprise that the downturn is affecting the university as well. Among the state of California offices, the universities are able to offset some of the budget reduction by increased student fees, but fee increases place additional hardships on many of our students. The size of this economic downturn will result in fewer classes being available and those classes that are taught will likely be larger. It is rather ironic that enrollments in colleges and universities normally increase during depressed economic times when resources to teach those students are at their lowest! When our demand is the highest, our resources to meet the demand are the lowest! We are very fortunate in the College of Natural Sciences to have faculty and staff who are really committed to do whatever we can to help students master the course material and experiences that lead to a degree. I am confident that we will continue to do what is reasonable and prudent given this proclivity that we have to assist students.

It appears that our staffing for next year will remain fairly constant among the fulltime faculty and staff. To date, we have no retirements reported and no faculty entering in the Faculty Early Retirement Program. The FERP program allows faculty to retire and teach part-time for a maximum of five years, a program that has proven to be quite helpful for faculty transitioning into full retirement. Bob Stein in mathematics finished his fifth year this winter and is now living in Portland, Ore., for those of you who might want to contact him. It also appears that the provost of the

university, Louis Fernandez, will actually retire this year after threatening to do so last year. Lou was a former dean of the College of Natural Sciences, so he has been quite influential in the evolution of the college over the last 17 years. His plans include staying in San Bernardino, so we are working on him to teach some geology classes for us.

It is with great sadness that I pass along news of the death of Dwight Gallo. Dwight was an integral part of the Department of Biology for many years, having received his M.S. in biology in 1976 and serving as their technician since 1984. He was dedicated to the teaching and research mission of the department, contributed immeasurably to the growth and development of the Department of Biology over the last 25 years, and was recognized with the CSUSB Outstanding Employee Award in 2005-2006.

I hope that you will take a moment to either write a note or e-mail to tell us where you are and what you are doing. As we share this information with others, it makes the world seem a little smaller and more caring. My wife and I remember many fellow students from our days as undergraduates and value hearing about them through our alumni office. If you will share updates with me at [carlson@csusb.edu](mailto:carlson@csusb.edu), I will be sure to pass them along to the appropriate offices.

My best wishes for a happy and healthy year,

Rob Carlson

Dean, College of Natural Sciences



# COMMENCEMENT 2009

The College of Natural Sciences' commencement ceremony takes place on June 20, 2009, at 6 p.m. in the Coussoulis Arena on the CSUSB campus. Before a crowd of their family and friends, more than 300 students will receive their diplomas that day. Among those students are several who are being singled out for various honors.

Each year the college chooses students it determines to be outstanding, both from the undergraduate and graduate student populations. This year, the outstanding graduate students are Ken Noriega, from biology; Brian Strader, from computer science and engineering; Gabriela Maerean, from mathematics; and Younglee Kim from nursing. These students have shown great promise in their chosen fields, and the college is proud to recognize them. The outstanding undergraduate students are Ryan Kindervater, from biology; Consuelo Beecher, from chemistry and biochemistry; Nick Navaroli,

from computer science; George Daly, from geology; Kari Provost, from health science and human ecology; Meghan Haas, from kinesiology; Jamie Nursall, from mathematics; Tory Lang from nursing; and Kenny Ryan, from physics. These students have worked very hard and richly deserve the honors.

Additional students have received departmental honors. From the **Department of Biology**: Jeremy Mercer; from the **Department of Chemistry and Biochemistry**: Liezl Barrett, Michael John Kornoff; from the **Department of Computer Science and Engineering**: Anthony DeLaLoza, James Finley, Jessiah Ruiz, Lori Snyder; from the **Department of Geology**: George Daly, Alonzo Poach, Cristina Velasquez; from the **Department of Kinesiology**: Amy Blair, Erin Casselle, Cheryl Eastwood, Benjamin Fisher, Meghan Haas, Sarah Harbert, Christina Hill, Melanie Hunt,

Meghan Jager, Angela Lepe, Crystal Omboli, Terri Potts, Jeremy Richter, Daniel Rincon, Brenda Wilson; from the **Department of Math**: Nicholas Andujo, Alicia Garcia, Robert Greenfield, Stefan Johnson, Bronson Lim, Jesenia Lopez, Xryl Malit, Jamie Nursall, Bethany Tasaka, Sarah Wade, Mary Whitlock; from the **Department of Nursing**: Chelizet Arzate, Nelia Baltazar, Paulette Bentsen, Casey Bice, Merlyn Byers, Jennifer Dahlen, Francesca Darmont, Nichole Erb, Thomas Gann, Victoria Haight, Jonathan Herbert, Shanna Hottinger, Sara Houzlow, Kristin Lee, Kelly McGrath, Aileen Molina, Delma Perez, Jennifer Poff, Elizabeth Rice, Nelson Rios, Deborah Schaeppi, Laurie Taylor, Norma Whitney and Nancy Wolf.

The College of Natural Sciences wishes all the new graduates the best of luck.

## DEPARTMENT ACCOMPLISHMENTS

### Department of Biology

This last year has seen a lot of activity in the Department of Biology. We finished our move back into the renovated Biology Building, complete with updated teaching and research laboratories. A number of faculty have secured major research grants from federal agencies, and continue to mentor undergraduate and graduate students in their research labs. Students and faculty alike have been active in publishing their research and presenting at national and international meetings, and a large number of students have been accepted into professional schools and graduate programs. Next fall the Department of Biology will enroll the first students in the bachelor of arts in biology – Integrated Teaching Track, a new degree option developed to meet the need for more and better science teachers. The Department of Biology continues to grow in both faculty and students, and we encourage alumni to keep in touch through our Web site at <http://biology.csusb.edu>

### Department of Chemistry

This year, Dr. Kimberley Cousins was awarded the 2008-2009 Golden Apple Award recipient, the university wide award for outstanding teaching. Math and Science Scholar Heidi Redden and Brandon Feenstra will graduate in June 2009. Drs. Brett Stanley and Jim Noblet, along with undergraduates Karen Antonio, Yuvrajsinh Solanki and M.S. in environmental sciences graduate student Heather Lutes are working with the Santa Ana Regional Dischargers Association to study the analytical chemistry of cyanide in wastewater. Dr. Stanley continued his work developing technologies to study fuel cell performance, durability and degradation through a grant from the university's Leonard Transportation Center. The M.S. Environmental Sciences program expects to graduate half a dozen students through this summer. Five grad students are working with the Water Resource Institute on projects through a USDA grant, and eight students participated in the Coyote Careers internship program. At Community Success Center,

the Chemistry Club members, under the direction of Dr. Dennis Pederson, lead elementary and middle school children in a series of hands-on chemistry activities such as plop-fizz kinetics and pH art.

### Department of Computer Science and Engineering

In fall of 2008, there was a substantial increase in the number of students choosing majors in the Department of Computer Science and Engineering. In particular, more than 40 entered the B.S. in Computer Engineering program. The B.S. in Computer Science program has been re-accredited by ABET, Inc, the recognized accreditor of higher education programs in applied science, computing, engineering, and technology. A student branch, the IEEE, (previously known as the Institute of Electrical and Electronics Engineers) has been formed. The chairperson is Jamie Greer and the faculty counselor is Dr. Yasha Karant. Faculty was active this year in making professional presentations: Dr. Art Concepcion on data reduction and mining, Dr. Josephine Mendoza on clickers, Dr. David Turner on game development, and Dr. Tong Yu on video compression. With the help of the Computer Science and Engineering Club, this year's open house of the department was again very successful, attended by more than 120 high school students.

### Department of Health Science

The Department of Health Science and Human Ecology enjoyed a successful transition to the newly renovated Physical Sciences Building this year. The second floor is home to department offices, classrooms, computer labs, and faculty offices for undergraduate programs in Child and Adolescent Health, Public Health, and Healthcare Management, as well as Master of Public Health and Master of Science in Health Services Administration programs. Additional classrooms, computer and research labs, and faculty offices for Environmental Health and Food Science and Nutrition are located on the third floor. We mourned the tragic loss of one of our graduate students this fall. We also welcomed two undergraduate program HSCI accreditation teams were to campus fall quarter. Several program and curriculum changes, including course re-numbering, have streamlined requirements and expectations for undergraduate

and graduate students. The department continues to benefit from quarterly academic advisement for all majors, and student involvement in extracurricular activities is at a high.

### Department of Nursing

The new Nursing Media/Computer Lab [HP 246] opened in September 2008 with 50 new computer stations and updated equipment for nursing student use. Kaiser Permanente-Fontana and Riverside provided a monetary gift of support to help make the lab possible. Dr. Marilyn Smith-Stoner, Dr. Mary Molle, Dr. Mikel Hand, and Dr. Ora Robinson have been actively engaged in nursing research and speaker presentations. In fall 2008, Dr. Teresa Dodd-Butera, a nurse toxicologist, joined the nursing faculty. The hybrid online M.S.N. program continues to slowly grow, with 15 applications for fall 2009 so far. In June 2009, there will be four graduates from the new hybrid online M.S.N. program. Our nursing students continue to be active in the student nurses organization – Coyote Nurses (SB) and Coyote Nurses of the Desert (PDC). These organizations are very active, both on campus and in the local communities. We are very proud of our student organizations!

### Department of Physics

It has been a year of change for the Department of Physics. We moved back into the renovated Physical Sciences building. Dr. Paul Renteln finished his second term as chair, and Dr. Paul Dixon has taken the position. Maureen Murphy joined us in the department office. Dr. Karen Kolehmainen was promoted to full professor, and Dr. Sue Lederer was tenured and promoted to associate professor. Dr. Usher spent the year on sabbatical at University College Dublin as a Fulbright Scholar. Dr. Laura Woodney was awarded a NASA Planetary Atmospheres grant and a NASA Spitzer Space Telescope grant to observe cometary dynamics. The observatory has been moving ahead and is on target for ground-breaking this year. We want to thank everyone for their generous. Our Society of Physics Students earned the distinction as the outstanding chapter in Southern California. Alumni are encouraged to keep in touch. Visit in person, e-mail Dr. Dixon at [pdixon@csusb.edu](mailto:pdixon@csusb.edu), or contact your favorite professor directly at [physics.csusb.edu](mailto:physics.csusb.edu).



Department Chair: Alan Smith

Professors:  
Joan Fryxell  
Sally McGill

Associate Professors:  
James Noblet  
Britt Leatham  
Erik Melchiorre

Department Office:  
Christina Palmer

## THE DEPARTMENT OF GEOLOGY

In fall 2009, we will implement revised curricula in all three undergraduate options. The main changes are designed to give the geology curricula more flexibility and also allow our majors the opportunity to take courses on subjects related to the interests and expertise of the faculty. In addition we will be starting a new integrated B.A. option that will allow students to graduate with both a degree in geology and a teaching credential. At the graduate level we will also be offering a geology option in the M.S. program in Environmental Science in response to interest by both students and potential employers. Accomplishments by our geology majors include Alonzo Poach, Christina Velasquez and Joseph Salazar receiving national minority scholarships from the American Geological Institute for 2008-2009; Natasha Storni, Amanda Lopez, Alonzo Poach, Joseph Salazar, Judy Williams, and Matt Robles were given NSF-funded scholarships in the Math and Science Scholars (MASS) program administered by the College of Natural Sciences. A former MASS scholar, Shelby Harrell was accepted into the geology graduate program at Cal State Fullerton for fall 2008. Christina Velasquez, Stephanie Montgomery and George Daly are applying to graduate school for next year. Daly, who is the

campus' only 2008 Sally Casanova pre-doctoral scholar is planning to enter directly into a Ph.D. program and has used the funds with this award to visit graduate schools at Oregon State, SUNY Buffalo and Miami University of Ohio. As part of the department's emphasis on encouraging undergraduate students to participate in research, Velasquez, Daly and Harrell were principal authors on posters presented at various local and national meeting during the spring and fall quarters of 2008. Poach, Velasquez and Lopez were also funded by the NASA California Space Grant program to study nitrogen-bearing minerals under the supervision of Dr. Erik Melchiorre. Montgomery, Velasquez and Daly continued as the department's McNair scholars. Dr. Melchiorre is presently on NASA-funded sabbatical leave to the University of Hawaii Astrobiology Institute. While there, he will be using advanced instrumentation to unravel the record of early life which is preserved within minerals, as well as examine their modern analogues. Following the completion of this laboratory work in April, he will travel to South America to collect nitrogen minerals from the hyper-arid Atacama Desert as part of an international research effort to understand the mechanisms that form these rare minerals. During

2008 he also published a book entitled the Octave Gold Mine: The golden queen of Rich Hill, Ariz. Dr. Sally McGill continues her research on the San Andreas and San Jacinto faults, funded by the Southern California Earthquake Center, and by a three-year grant from the National Science Foundation's Earthscope program. There will be abundant opportunities for students to become involved in this research. Look for her recently published paper on the slip rate of the western Garlock fault in the March-April 2009 issue of the Geological Society of America Bulletin. Dr. Bonnie J. Brunkhorst received the National Science Teachers Association (NSTA) 2008 Robert H. Carleton Award, the most prestigious award in science education at the 2008 NSTA National Conference on Science Education.

Alumni are strongly encouraged to keep in contact with the department by contacting either individual professors (for addresses check out our website: [geology@csusb.edu](mailto:geology@csusb.edu)) or Christina Palmer at the department office at [cpalmer@csusb.edu](mailto:cpalmer@csusb.edu) to tell us what they are doing.

## THE DEPARTMENT OF KINESIOLOGY



Department Chair: Terry Rizzo

Professors:  
Chris Grenfell  
Greg Price  
Cliff Singh

Associate Professors:  
Sarah Boeh  
Bryan Haddock  
Steve Kiinzey  
Hosung So  
Linda Wilkin

Assistant Professors:  
Aaron Moffett  
Hyun-Kyoung Oh  
Shannon Siegel

Department Office:  
Leslie Morse  
Samantha Clawson

This edition of the *Natural Phenomena* offers a snapshot of the continued changes in the Department of Kinesiology. Kinesiology now has three concentrations (pedagogy, exercise science and pre-physical therapy), with enrollment in the major of more than 400 students. Our faculty now conducts research in kinesiology on the range of human abilities from gifted athletes to individuals with disabilities, with content areas including psychology, sociology, pedagogy, physiology, biomechanics (as it relates to physical activity), sport and exercise. You can review our accomplishments on our department Web page [<http://kine.csusb.edu/>], but let me highlight a few items of particular relevance. Dr. Bryan Haddock received another National Institute of Health grant to collaborate with Jennifer Lopez, a CSUSB graduate, to collect data on the energy expenditure of middle school students playing the Wii. Dr. Aaron Moffett was selected to be a coach/leader as part of the U.S. Paralympics Academy and went to the Beijing Paralympics Games. Dr. Terry Rizzo was the keynote presenter at the Asian Society of Adapted Physical Activity in Seoul Korea. He is also the president of California Association of Health, Physical Education, Recreation, and Dance (CAHPERD) and

serves as the editor of the Adapted Physical Activity Quarterly. Dr. Hosung So organized a one-week intercultural exchange with students from local universities in Korea. Twenty-five CSUSB students will meet Korean kinesiology students to see how the curricula differ and how students from different backgrounds can work together to provide physical education programs for children. Dr. Stephen Kinzey serves as a reviewer for several professional journals, and Dr. Hyun-Kyoung Oh has assumed a leadership role in developing the adapted physical education standards for California. Ms. Janys Antonio was elected Vice President of Dance of the Southwest District of American Alliance of Health, Physical Education, Recreation and Dance. Along with our faculty, kinesiology students have also excelled. Desiree Atienza (pre-physical therapy), Jeremy Richter (exercise science) and Monique Comley (pedagogy) each won the National Association of Sport and Physical Education Major of the Year Award. Under the tutelage of our faculty members, in particular Dr. Linda Wilkin and Dr. Oh, several of our students are preparing for graduate school by presenting at conferences: Matthew Jackson, Jeremy Richter, Antoinette Cheryl, Erin Arbizu, Matt Garner, and Monique Comley. Twelve

students completed their master's projects last year. With guidance from Dr. Moffett, Michael Richter has developed a kinesiology and recreational sports sponsored learn-to-swim program for individuals with disabilities. In addition to the All-Star Swim program, many of our students help Drs. Moffett, Oh, Rizzo, and Shannon Siegel to create the annual DisAbility Sports Festival. Speaking for the entire faculty, I am grateful for the support many of you have given to our department. Please continue to remember us and make a gift to the CSUSB Foundation Gift account dedicated to the **Department of Kinesiology**. In addition, send us information about your career achievements so that we can include you in our department newsletter. As we continue our quest of becoming a regional leader in kinesiology, I want to invite you back to campus to experience the activities we are engaged in. Your continued support is the life-blood of our university.





## THE DEPARTMENT OF MATHEMATICS

Department Chair: Peter Williams

### Professors:

Susan Addington	Joe Chavez
Hajrudin Fejzic	David Fischman
Chris Freiling	Gary Griffing
Zahid Hasan	James Okon
Chetan Prakash	Dan Rinne
John Sarli	Chuck Stanton
Rollie Trapp	Belisario Ventura
Paul Vicknair	Wenxiang Wang

### Associate Professors:

Nadejda Dyakevich	Ilseop Han
Yuichiro Kakihara	Laura Wallace
Shawnee McMurran	

### Assistant Professors:

Corey Dunn	Madeleine Jetter
Giovanna Lloset	Min-Lin Lo

### Department Office:

Nancy Pennington	Donna Murphy
Leeanne Richardson	

The Department of Mathematics has revised the B.S. Mathematics degree for 2008-2009. The revised program is suitable for students who are preparing for graduate programs, either in mathematics (pure or applied), or in an interdisciplinary program such as mathematical finance or bioinformatics. The department has added three new courses to the program in conjunction with new B.S. program. These are Math 455, Math 531, and Math 570. The department now offers two programs designed for students planning a career in secondary mathematics teaching: the B.A. in Mathematics, Teaching Track (BATT) and the B.A. in Mathematics, Integrated Teaching Track (BAITT). Both of these tracks are CSET waiver subject matter programs approved by the California Commission on Teacher Credentialing and include courses specifically designed to connect the major with classroom teaching including an early field experience. BATT students need to complete a fifth year of education courses to earn their single subject credential. BAITT program allows prospective single subject teachers the opportunity

to earn their degree and credential concurrently, making it possible for a full time student to complete both in four years. The Math Club is a student oriented club and was founded in spring of 2007 under the leadership of Jesus Nolasco. The purpose of this club is to promote the study, discussion and understanding of mathematics and related disciplines. The following students succeeded the presidency: Jennifer Winter, Michelle Garner and Angela Preedanon. With the help of the advisers Dr. Min-Lin Lo and Dr. Corey Dunn the Math Club has grown. It is now offering regular activities such as Study Marathon (a club sponsored tutoring/study session for math finals), Pi Day and Halloween Party. In October 2008, Dr. David Fischman and Dr. Giovanna Lloset in collaboration with Dr. Joseph Jesunathadas from the College of Education and in partnership with the Ontario-Montclair School District won funding for a new professional development project to help improve elementary school teaching in the core content area of mathematics. The partnership has been awarded a four-year grant of \$991,404. Dr. Fischman

also obtained continuing funding for the Inland Counties Mathematics Project that provides infrastructure and support for projects such as the Supporting Teachers to Increase Retention (STIR) project. She presented preliminary results from the STIR research at the California Mathematics Council-South and the MAA annual conferences. Dr. Susan Addington and Dr. Madeleine Jetter contributed a paper at the International Congress of Mathematical Education and gave a presentation at the California Mathematics Council Southern Section Conference. Dr. Jetter also gave another presentation at the MAA SoCal-Nevada section meeting. Dr. Corey Dunn has been invited as Bucknell University's "Distinguished Visiting Professor" and gave two talks there. Dr. Min-Lin Lo coauthored and published two papers at the Electronic Journal of Mathematics and Technology. Dr. Nadejda Dyakevich published a paper in collaboration with two students in the Electronic Journal of Differential Equations. She also developed a hybrid college algebra course taught this academic year.

## WATER RESOURCES INSTITUTE



Director: Susan Longville

### Associate Director:

Gigi Hanna

### Archivist:

Suzie Earp

### Research Associate:

Lisa Pierce

Entering its 10th year, the Water Resources Institute (WRI) is a busy place, not just because the historical water resource archives located on the 4<sup>th</sup> floor of the Pfau Library continues to expand, but from the successful partnerships that have made the university a destination for water-related public policy and communications. The WRI's largest project, coordinating the Governor's **Alluvial Fan Task Force** for the California Department of Water Resources, began in December 2007 and is expected to be completed by the end of 2009. The task force—comprised of 33 members has been creating a voluntary planning manual for communities and developers to utilize when considering development on alluvial fans. This work was funded by a pre-disaster mitigation grant from the Federal Emergency Management Agency. Closer to home, the Institute has been involved in local projects in and around **Lytle Creek**, an impaired waterway under federal and state law, that have provided **Watershed Manage-**

**ment Interns** with hands-on water quality research conducted by Dr. James Noblet and fish population research conducted by Dr. Tony Metcalf. Other activities in Lytle Creek included a public education campaign to keep pollution out of the stream and encourage overall watershed health. More than 25 **Watershed Management Interns** since 2007 have worked on projects ranging from water conservation, floodplain management, mapping biological data using GIS to water history. Another aspect of watershed health is being addressed by the **Upper Santa Ana Landscape Alliance**. The Alliance is sponsored by the **San Bernardino Valley Municipal Water District**, in partnership with area retail water agencies and local governments. It is an effort to educate local cities about AB1881, a law that, in essence, requires more stringent landscape water conservation regulations. This new law will take effect in 2010. The WRI has coordinated four workshops that explained the legislation. Preparations have begun for the **9<sup>th</sup> Annual Lifetime Achievement and**

**Water Hero Award Banquet**. The awards recognize people with significant contributions to the water world while raising funds for students engaged in water resource studies. The Lifetime Achievement Award recipient this year is Gerald Thibeault, the executive officer of the California Regional Water Quality Control Board, Santa Ana Region. Gerard has both an undergraduate and a graduate degree in Civil Engineering and has been a regional water quality control board staff member for more than three decades. The Water Hero this year is Robert Holcomb, former mayor of the city of San Bernardino, who was largely responsible for the California State University selecting San Bernardino for an inland campus, primarily because of the abundant water supply that was available. He is best remembered for his opposition to the San Bernardino Valley joining the Metropolitan Water District of Southern California. The dinner is set for Nov. 14, 2009.

## DEVELOPMENT CORNER

This has been a very successful year for philanthropy in the College of Natural Sciences. After years of planning, talking with people, and watching the costs of construction escalate, the CSUSB observatory appears to be a reality! The plans have been drawn, the funds appear to be in the bank, and bidding commenced in May. With a successful bid, construction should begin in July with completion in the early spring, 2010. This building is being built without the use of state of California funds. People have been enormously generous with in-kind contributions of services and products as well as monetary contributions. The lead gift for the observatory was arranged by the children of George and Pauline Murillo, who wanted to recognize their parents. The Murillo family is a long-time San Bernardino family that is heavily involved in the community and the San Manuel Band of Indians. The observatory will be named the Murillo Family Observatory. Other large contributors to the funding for the observatory are the W.M. Keck Foundation, the U.S. Department of Energy, Evelyn Magnuson Estate, California Portland Cement, Associated Engineers/Parsons Brinkerhoff (Jim Imbierski), Weingart Foundation, Hill Partnership Inc. (Dennis Brown), Southern California Edison, and Glenda Bayless. I would be remiss if I did not also recognize the significant contributions made by university personnel from Capital Planning and Development (Hamid Azhand and Michael Wahl), the college office (Roberto Redondo and John Craig), and the Department of Physics (Leo Connolly, Susan Lederer and Laura Woodney). Without these individuals being involved over an extended period of time, this observatory would not be a reality. A second area of synergy between the public and the university has been with the preparation of students for entry into the field of nursing. The significant shortage of nurses has resulted in programmatic support for CSUSB to increase

the number of students admitted to the nursing major. For the San Bernardino campus, Riverside Community Hospital has been the primary supporter for increasing the size of the entering class from 44 to 84 for each of two classes per year. Mt. San Antonio Hospital is another partner that has supported the nursing department. Likewise, the three Coachella Valley hospitals (Eisenhower Medical Center, Desert Regional Medical Center and John F. Kennedy Memorial Hospital) have been the primary support for starting a B.S. in nursing program at CSUSB's Palm Desert Campus. Last year, 33 students were admitted, with a



THE MURILLO FAMILY

similar number this year. Next year's class will bring the size of the program to 99 students, which will be stabilized at that enrollment. Two foundations (The California Endowment and California Wellness) have also been significant contributors to starting this program. The recently completed Health Science Building at the Palm Desert Campus has proven to be well-suited for the nursing program. The third area of emphasis for fundraising has been in the area of scholarships, particularly scholarships to support the President's Academic Excellence Scholars (PAES) in the College of Natural Sciences. These students represent the top 1 percent of the high school graduates in San Bernardino County. Last year, almost 20 percent of the eligible students selected CSUSB as their school of choice,

making CSUSB the leading destination campus for this group of high school scholars. Of the 44 new scholars last year, 22 were in the College of Natural Sciences. The college provides 50 percent of the scholarship cost, while the campus provides the remaining 50 percent. Our portion of the scholarship cost was almost \$140,000 last year, so PLEASE HELP if you can!! Dr. Prem Reddy has been a significant benefactor for this program, having created an endowment at CSUSB that supports the scholarship for two of the PAES scholars who are going into medically-related fields. His first student (Audra Wise) graduated in three years as a CSUSB pre-med student and is in her last year of medical school at Loma Linda University. These are very talented students who grew up in the Inland Empire and want to make their life here. They deserve our support, for they will become the leaders of the future in this area. I have mentioned some of the persons that have made larger gifts to the college and its departments. Each gift is important, though, so I have compiled a list of the donors by broad category. Each gift is making a difference, many of which are going directly to deserving students in the form of scholarship assistance to go to school. I can not begin to express my appreciation for the support of each and every one of you. Our campus continues to change, so I hope that you will take time to visit the campus. We now have more than 17,000 students attending CSUSB, and the College of Natural Sciences has more than 4200 majors. If I can help arrange a visit for you to the campus, please contact the college office at your convenience. We would like for you to continue to be part of the CSUSB family, even though you are no longer an active student. Whether it is your expertise, your contacts, or your money, our students can benefit from your participation.

Sincerely,

Rob Carlson  
Dean, College of Natural Sciences

# A HEARTFELT THANKS TO OUR DONORS

## **GREATER THAN \$100,000**

Mrs. Pauline Murillo  
Riverside Community Hosp  
The California Endowment  
**\$50,000 TO \$99,000**  
Eisenhower Med. Ctr  
John F. Kennedy Mem. Hosp.  
Tenet Healthcare Corp.  
**\$10,000 TO \$49,999**  
Southern California Edison  
Inland Empire Utilities Agency  
East Valley Water Dist  
San Bernardino County  
Dr. Ralph Petrucci  
Western Municipal Water Dist  
**\$1,000 TO \$9,999**  
The Community Foundation  
Mrs. Mary Ann MacVey  
Ms. Patricia Rowe Watt  
Terra Geosciences  
Dr. Hosung So  
Loma Linda University Med Ctr  
Dr. David Maynard  
SEIU Local 6434 Chapter  
Dr. Lynne Leach  
Albert A. Webb Associates  
Leighton and Associates  
Dr. Kim Clark  
Ms. Adriana Bitoun  
Mr. David Neighbors  
County of Riverside  
Inland Empire Health Plan  
Mr. Wing K. Lau  
Ralph Wagner Consulting Eng.  
Society for Conservation GIS  
**\$500 TO 999**  
Dr. Javier Torner  
Mr. John Tenayuca  
Mr. Charles Stanley  
Dr. James D. Crum  
Redlands Airport  
Mr. Stewart Boden  
Mrs. Diana Catalano  
Challenged Athletes Found  
Dr. Kimberley Cousins  
Dr. James Ferrari  
Mrs. Jenny Ramkissoon  
Ms. Cynthia Rosales  
SB Rotary Sunset Club  
Mrs. Coral Scherba  
Dr. J. Paul Vicknair  
YMCA of the East Valley  
Zamora Family Travel  
**\$100 TO \$499**  
Dr. Karl Plumlee  
Dr. Robert Schmitt  
Dr. David Silence  
CDM  
Jurupa Community Svcs Dist  
Mr. Mark Kinsey  
Dr. Phyllis Nix  
Mr. Steven Spencer  
Mrs. Lynne Youngstrom  
CSUSB Kinesiology Dept  
Mr. Paul Morton  
Dr. Owen Murphy  
Mr. Pittawat Narktawan  
Mrs. Connie Polino  
Dr. Jeff Thompson  
Youm-Tzib Software Solutions  
Dr. Mikel Hand  
A Special Place Children's Mus  
Miracle for Jade  
Mrs. Carol Parente  
Dr. Cindy Paxton  
Mr. Roberto Redondo  
Mrs. Susan Philo  
Mr. Michael Tecson  
Mr. Larry Wade

Mrs. Beryl Craig  
Dr. John Craig  
Mr. P.J. Grindstaff  
Ms. Joyce Ahlgren  
Mr. Ching-Yi Wang  
Dr. George Georgiou  
Ms. Frances Keeler  
Mr. Thomas Kite  
Ms. Christine Mitchell  
Mr. Daniel Moye  
Mr. Gorge Pulido  
Dr. Zeba Quadri  
Ms. Mary Rogers-Seels  
Soft Relations, Inc.  
Mr. Matthew Stan  
Ms. Chanritha Vong  
Dr. Donald Woods  
Mrs. Susan McGee-Stehsel  
Ms. Deborah Cohen  
Dr. Paul Orwin  
Dr. Marilyn Stoner  
Mrs. Jane Curnutt  
Mrs. Mary Cannon  
Mr. Man Do  
Mr. Jason Erbele  
Ms. Marilyn Chaisongkram  
San Bdn Valley Water Dist  
San Bdn Valley Water Cons  
Mr. William Prudhomme  
Ms. Mary-Christine Ulatan  
Seonaid Perkin  
Dr. David Polcyn  
Mr. Vincent Acosta  
Mrs. Susan Miller  
Mrs. Kristi Mueller  
Mr. Jason Siegersma  
Ms. Angela Garcia  
LA Galaxy  
Ms. Karen Lowande  
Mr. Steven Bauer  
Dr. Karen Kolehmainen  
Mr. Daniel Amaraz  
Ms. Jeanette Ball  
Ms. V. Jeanne Beckner  
Mr. Bert Brooks  
Mr. Bradley Brown  
California Faculty Assoc  
Ca Retired Teachers Assoc.  
Mr. Edward Carloni  
Dr. Michael Chao  
Mr. John Cheetham  
Mr. Xinsheng Chen  
Mr. James Cheney  
Ms. Jacqueline Clark  
Mrs. Michelle Estrada  
Mrs. Sharon Fabbri  
Mrs. Patricia Gericke  
Ms. Mary Hammer  
Mr. Kwon Han  
Mr. David Hellman  
Ms. Melinda Herndon  
Mrs. Lisa Iannolo  
Mr. Richard Jager  
Joseph Magro, D.O.  
Mr. Daniel Keller  
Mrs. Carol Kendall-Veifenhaimer  
Mr. Jeffrey King  
Mrs. Melodee Kistner  
Mrs. Sylvia Kite  
Euhnee Lee  
Mr. Ralph Leon, Jr.  
Ms. Anita Marquez  
Dr. Steven McDonald  
Dr. Josephine Mendoza  
Dr. Anthony Metcalf  
Dr. Mary Molle  
Mt. Baldy Ski  
Mrs. Pamela O'Connell

Mr. Philip Ofton  
Mr. John O'Neal  
Ms. Sherry Quindara  
Mr. Lance Ray  
Mrs. Carolyn Ritchie  
Ms. Elizabeth Robinson  
Ms. Aleta Rodriguez  
Mr. Ramon Roman  
Mr. Antonio Ruta  
Mrs. Yolanda Simental  
Mr. Freeman Smith, Jr.  
Mr. Floran Sulit  
Mrs. Monica Taylor  
Mrs. Debra Trejo  
Mr. Walter Ware  
Dr. Christina Wistrom  
Dr. Shumei Yang  
**LESS THAN \$100**  
Best, Best & Krieger, LLP  
Mr. & Mrs. Richard Grindstaff  
Integrated Planning & Mgmt..  
Mrs. Nancy Kunz  
Dr. Daniel Fahey  
Dr. Joan Kritzbarg  
Mr. Chung-Ping Lin  
Dr. Robert Phalen  
Dr. Haiyan Qiao  
Dr. Ora Robinson  
Dr. Colleen Talbot-Bonney  
Dr. David Turner  
Dr. Kay Zemoudeh  
Mrs. Gina Van Quest  
Ms. Lilin Zhu  
Ms. Allison Mader  
Dr. Margaret Beeman  
Christian Bros Heating & Air  
Clark's Nutritional Center  
Dr. Christy Gorden  
Mrs. Karen Higgins-Wakamiya  
Mr. Reynaldo Padilla  
Mrs. Julie Bullock  
Ms. Marisa Crouch  
Mrs. Lisa Hayes  
Mr. Roberto Soto  
Wiens Family Cellars  
Mr. Mark Adelson  
Mrs. Geraldine Amene  
Mr. Aaron Barnett  
Dr. Nicole Bournias  
Mr. James Brigham  
Ms. Fernelynn Brown  
Mr. Antonio Cabrera  
Mrs. Carolyn Cardellio  
Mrs. Terry Cottle  
Mr. Victor Curtis  
Mr. Andrae Dempsey  
Mr. Bradley Dolter  
Mr. Alex Espin  
Mr. Raymond Glider  
Ms. Sandra Hull  
Mr. Lavell Hunter  
Jade Salon Spa  
Ms. Patricia Jenkins  
Ms. Arline Juarez  
La Cereza Winery  
Mr. Peter Landrum  
Mrs. Tracy Lech  
Mrs. Judy Matthews  
Mr. Manuel Mendoza  
Dr. Michael Silvas  
Mr. Alberto Nunez  
Mr. James O'Hearn  
Ms. Bianca Pantoja  
Mr. Timothy Pappas  
Mrs. Cynthia Paulo  
Mr. Scott Paulo  
Mrs. Huong Pham  
Mr. Robert Platt  
Mrs. Diana Pruiett

Mrs. Letia Robertson  
Ms. Louise Robinson  
Ms. Wanda Rodriguez  
Mr. Christopher Seipel  
Shandin Hills Golf Club  
Mr. Richard Staggs  
Ms. Marie Stevenson  
Mr. Albert Swank, III  
Mr. Danny Thomazin  
Ms. Susan Townsend  
Mr. Samuel Valle  
Mr. & Mrs. Paul Wielenga  
Mr. George Beliew  
Ms. Dawn Chin  
Mrs. Heidi Davis  
Ms. Martha David  
Mr. Rudolph Fandell  
Mr. Alan Grindstaff  
Mr. Ronald Kunz  
Law Offices of Susan Trager  
Mr. Timothy Quinn  
Ms. Johnnie Ralph  
Mr. Phil Rosentrater  
Mr. John Rossi  
Mr. Harold Willis  
Hangar 24 Craft Brewery  
Ms. Monica Latimer  
Dr. James Noble  
Ms. Linh Phan  
Team Hoyt  
Mrs. Lisa White  
Arrowhead United Way  
Ms. Victoria Bright  
Ms. Raquel Correa  
Mrs. Irene Heldstab  
Mrs. Skye Rivera  
Victorian Salon & Day Spa  
Dr. Kimberlyn Williams  
Mrs. Laura Roberts  
Dr. Scott Shaffer  
Ms. Jennifer Spellman  
Ms. Vinicia Gonzalez  
Ms. Nina Medley  
Scandia Amusement Park  
Mrs. Britt Wheatley  
Mrs. Rebecca Aguilar  
Mrs. Joanne Benton  
Mr. James Berger  
Mrs. Cecilia Branch  
Ms. Ashlee Brizzee  
Ms. Isabel Carvajal  
Mrs. Cristina Casas  
Chili's Bar & Grill  
Mrs. Clair Crockett  
Mrs. Veronica Elder  
The Elephant Bar  
Ms. Rebecca Fergus  
Ms. Roxie Findsen  
Mrs. Margaret Finnell  
Ms. Deborah Fischer  
Mr. Mack Flinspach, III  
Ms. Tracey Ford  
Mr. Zerafin Fregoso  
Mrs. Dana Gillette  
Ms. Mary Gordon  
Mrs. Elena Harris  
Ms. Victoria Harrod  
Mr. Clinton Hunter  
Mrs. Gail Keefe  
Ms. April Lane  
Mrs. Patricia Logan  
Mr. Jose Lopez  
Ms. Charleat Marshall  
Ms. Rosetta McNack  
Dr. D. Steven Meyering  
Mimi's Café  
Ms. Tracy Monroe  
Mr. Lawrence Neace  
Mrs. April Owens

Mrs. Cynthia Proels  
Mr. Harprit Randhawa  
Mr. Frank Renteria  
Mr. Anthony Rosario  
Ms. Heidi Schlitt  
Ms. Vani Surangi  
Mrs. Linda Thomas  
Mrs. Rosemary Torres  
Ms. Davida Villalobos  
Mr. Ramon Villanueva  
Ms. Heidi Waechter  
Ms. Diane Whitehead  
Ms. Synetta Woods  
Mr. Emilio Zamora  
Zeta Tau Alpha, Kappa Theta  
Mr. Guillermo Acuna  
Mrs. Myung-Hee Bauer  
Ms. Nancy Butts  
Mr. Ian Donahue  
Mr. Kent Hickman  
Mrs. Rachel Hoffman  
Jerseys Pizza  
Mrs. Jeanette Knabenbauer  
Ms. Margaret Livingston  
Ms. Keri Maher  
Mr. Wesley Mamora  
Mr. Wayne McGilvery  
Ms. Samantha Miller  
Mr. Jim Monaghan  
Ms. Julie Nichols  
Mrs. Zaseles Ohm  
Mr. Jay Olegario  
Mr. Kenneth Poarch  
Mr. Marcelino Preciado  
Dr. Donna Rane-Szostak  
Mrs. Pamela Raymond  
Mrs. Deborah Reynolds  
Mrs. Yvonne Robbins  
Ms. Nancy Schlotthauer  
Mr. Dale Searle  
Dr. Lisa Shamansky  
Ms. Tammy Shearer  
Mr. Stacey Smith  
Mr. Jim Thomas  
Mr. Jermaine Watrous  
Mr. Curtis Westfall  
Dr. Tong Yu  
Ms. Elisabeth Anderson  
Mr. Tom Benson  
Ms. Claudia Braune  
Mr. Donald Buchanan  
Ms. Irene Carrasco  
Ms. Cindy Chrisler  
Mr. David Coffey  
Mrs. Ada Coleman  
Mrs. Terri Cortez  
Ms. Cheryl diPretoro  
Ms. Vera Durrant  
Mr. Dwight Gallo  
Mr. Scott Heywood  
Mrs. Martha Housel  
Mr. Robert LaChausse  
Dr. Britt Leatham  
Mr. Ken Makino  
Dr. Kenneth Mantei  
Dr. Larry Mink  
Mr. Bao Nghiem  
Mr. James Olier  
Mrs. Denise Rautmann-Garcia  
Dr. John Skillman  
Ms. Roberta Wright



## IN MEMORY OF DWIGHT GALLO



Dwight Gallo, instructional support technician in the Department of Biology, passed away April 14, 2009. Dwight received both his bachelor of science in biology and his master's degree in biology from CSUSB. After a short stint as a research associate at the Veterans Administration Medical Center in Loma Linda, Dwight returned to CSUSB and served 25 years as the department's instructional support technician. Dwight never lost his love of research, and continued to carry out research on anti-cancer agents until his death. Dwight was dedicated to the teaching and research mission of the department, and was instrumental in helping the department grow both technologically as well as programmatically over the last 25 years. Science departments are only as good as their technicians, and Dwight's skills and tireless efforts allowed the faculty and students in the Department of Biology to excel.



### CNS OUTSTANDING ALUMNUS

Sundip Doshi graduated with a B.S. in computer science in 1990 and since then has founded Surado Solutions, the emerging innovator in customer relationship management software. His company is committed to providing powerful, versatile and sensible solutions that help companies know their customers and keep them for life. Recognizing the tremendous business opportunity in the mid-market CRM software arena, Surado strategically positioned itself to capitalize on its expertise in building large, powerful and complex systems as well as out-of-the-box solutions to create the "just right" solution for the mid-market. The combination of power, features and functionality into an easy-to-use, quick to implement and affordable system with a high degree of customization, fast integration with third-party applications and advanced security options is turning heads, at corporations large and small. They also offer vertical solutions spanning banking and finance, healthcare, education, homeland security, manufacturing and technology.

agement software. His company is committed to providing powerful, versatile and sensible solutions that help companies know their customers and keep them for life. Recognizing the tremendous business opportunity in the mid-market CRM software arena, Surado strategically positioned itself to capitalize on its expertise in building large, powerful and complex systems as well as out-of-the-box solutions to create the "just right" solution for the mid-market. The combination of power, features and functionality into an easy-to-use, quick to implement and affordable system with a high degree of customization, fast integration with third-party applications and advanced security options is turning heads, at corporations large and small. They also offer vertical solutions spanning banking and finance, healthcare, education, homeland security, manufacturing and technology.



### CNS OUTSTANDING GRADUATE

Ken Noriega is a veteran of the U.S. armed forces and came to CSUSB after completing his undergraduate work at the Claremont Colleges. In his thesis work, Ken has mastered the

complex software products known as Maya and Z-Brush. These are standard tools in the technologically sophisticated world of film and special effects, but he has applied them to the study of dinosaurs, their structure, and their locomotion. Ken is the first to ever use actual fossil specimens to develop digitally generated dinosaur skeletal components. Every digital dinosaur ever seen on television and the movies have been modeled; his are the first to be based on actual specimens. Ken also secured the first-ever loan of large numbers of Canadian dinosaur specimens to an American institution. In addition, he secured the donation of more than \$50,000 in sophisticated software to the Department of Biology for use in his thesis work. Ken has presented his work at several national and international meetings. Finally, Ken was offered to teach at the Veterinary College at Western University of Health Sciences in Pomona before he finished his grad work at CSUSB.



### CNS OUTSTANDING UNDERGRADUATE

Nick Navaroli entered CSUSB as a President's Academic Excellence Scholar and is graduating with a GPA of 3.97. Nick first became involved with research when he accepted

an eight-week internship at the Center for Bio-Image Informatics at UC Santa Barbara in the summer of 2007. During the internship, Nick completed two independent projects: "Segmentation of Cone Photoreceptors" and Segmentation of Breast Cancer Cells." Nick has also worked on a research project with Dr. David Turner and Dr. Art Concepcion from the Department of Computer Science and Engineering which led to a presentation at the 22<sup>nd</sup> Annual CSU Student Research Competition. In addition, the results were published and presented at a conference in Taiwan. This past summer, Nick worked on two research pods with Dr. Haiyan Qiao from the Department of Computer Science and Dr. Rolland Trapp in the Department of Mathematics. His work with Dr. Trapp resulted in a presentation at the American Mathematics Society international meeting. Finally, Nick's research experience and skills have led to his acceptance into the PhD program in computer science at UC Irvine, where he will begin his studies and research in machine learning in fall 2009.



