

# UNLV College Of Sciences

SEPTEMBER 2006

[HTTP://SCIENCES.UNLV.EDU](http://sciences.unlv.edu)



*The College of Sciences includes the School of Life Sciences, the departments of chemistry, geoscience, mathematical sciences, and physics, and the Water Resources Management Program. These academic disciplines provide a place where our students and faculty can test themselves and each other in the search for knowledge that will make our community and our world a better, safer, and healthier place to live.*

- The college hosts a number of research facilities that engage students and faculty from across campus and around the world in collaborative teaching and research efforts, including the High Pressure Science and Engineering Center, UNLV Biotechnology Center, and centers for applied geophysics; applied mathematics and statistics; atmospheric, oceanic and space sciences; mathematics and science education; urban horticulture and water conservation; and volcanic and tectonic studies.
- Research facilities available for faculty and students include the Science and Engineering Building (under construction), Electron Microanalysis & Imaging Laboratory, Nevada Isotope Geochronology Laboratory, Soils Analyses Laboratory, Paleoclimatology/Carbonate Laboratory, XRF/XRD Laboratory, Las Vegas Center for Stress Genomics, Ecophysiological Research Facility, Elevated CO<sub>2</sub> Desert Environment Facility, and the Wesley E. Niles Herbarium.
- Only six to eight percent of the student population is enrolled in the College of Sciences, but in 2006, these students represented 50 percent of the graduates who received both university and departmental honors.

## FACILITIES AND EQUIPMENT

- The Science and Engineering Building will provide students and faculty with state-of-the-art facilities and equipment in a 190,000-square-foot structure containing laboratories, teaching space, conference rooms, and integrated research space.
- The Nevada Isotope Geochronology Laboratory (NIGL) is one of only 15 labs in the United States capable of dating rocks billions of years old. The NIGL computer-automated system produces the most accurate data yet available to geoscientists.
- The Electron Microanalysis and Imaging Laboratory facilitate the investigation of fluid inclusion populations, small sealed-in samples of subsurface fluids trapped within single mineral crystals.
- A 16-inch computer-operated photometric training telescope is mounted on the roof of the Bigelow Physics Building with computer workstations dedicated to digital processing of astronomical images.





## RESEARCH

- Faculty receive approximately \$13 million in peer-reviewed federal grant funds per year from agencies including the National Science Foundation, the National Institute of Health, and the Department of Energy.
- Faculty and graduate students are actively engaged in three major energy-related projects, including the development of a local hydrogen refueling station; the creation of high-temperature heat exchangers for hydrogen production and electrical energy conversion; and the study of high-efficiency, emissions-free generation of hydrogen fuels.
- The radiation chemistry program offers outstanding training to graduate students and addresses the critical shortage of trained radiation chemists, a major challenge to the security and safety of our nation.

## COMMUNITY SERVICE AND PARTNERSHIPS

- Faculty and students, with funding from the National Science Foundation, have created “Desert Survivors,” an educational television program aimed at fifth graders and dedicated to promoting scientific literacy.
- Each year, Alpha Epsilon Delta, the pre-health honor society for undergraduates pursuing careers in medicine, dentistry, veterinary medicine, and other health fields hosts the National Marrow Donor Program on campus.
- The College of Sciences, in collaboration with the Clark County School District, hosts the Beal Savings Bank Southern Nevada Regional Science and Engineering Fair each spring.

## COMMUNICATIONS AND DEVELOPMENT

We invite the formation of teaching, research, and community service partnerships in our endeavors. UNLV faculty and students of the college welcome your participation as we strive to enhance our academic programs and continue to improve the quality of life here in Southern Nevada.

For more information, please contact:

**William E. Brown, Jr.**  
Director of Planning and  
Communications  
(702) 895-2079  
william.brown@unlv.edu

You may also contact:

**UNLV Foundation**  
(702) 895-3641  
foundation.unlv.edu



**UNLV**  
UNIVERSITY OF NEVADA LAS VEGAS

<http://sciences.unlv.edu>