

# BIOLOGY

## Purposes

The objectives of the Biology department coincide with the Point Loma Nazarene University mission summarized in the phrase: *To Teach, To Shape, To Send*.

**To Teach:** The department's commitment is to provide students the opportunity to build a broad foundation in the major disciplines of Biology, in the process of science skills, and in the critical thinking/quantitative skills that are required to apply their education to real world settings.

**To Shape:** In addition to the formal academic interactions, each student has opportunities to enter into mentoring relationships with department faculty through advising, lab assisting, research experiences, and departmental social functions. In these contexts, students can expect to dialogue about issues relating to their own personal and professional goals, the interface between the field of biology and society, and the relationship between faith and science.

**To Send:** The graduates of the Biology department will be able to apply both their faith and education in biology-related professions such as medicine, allied health fields, education, or industry. They will feel confident that they have been well prepared to contribute in a positive way in these fields, and society in general.

## Tradition of Excellence

The Department of Biology is dedicated to the success of the students, and offers a wealth of opportunities for students who are interested in pursuing work in science related fields. For students whose interests and academic needs lie in both biology and chemistry, an interdepartmental major in Biology-Chemistry has been designed to prepare students for biochemistry, immunology, molecular biology, pharmacology, physiology, medicine, and dentistry. Biology students have the opportunity to work side-by-side with professors doing faculty-assisted research projects, and may become co-authors on scholarly papers in national and international scientific journals. Many students present research at various science conferences. Students also have access to sophisticated instrumentation and computational resources for use in science courses and research labs.

All of these opportunities have been given to students through the help of numerous grants from governmental agencies such as the National Institutes of Health and the National Science Foundation, various private organizations including the Howard Hughes Medical Institute, cooperation from university administration, and strong financial backing by Biology and Chemistry alumni. Since 1977, alumni of the Department of Biology have contributed an average of more than \$12,000 per year in support of science instruction and research programs. Career Opportunities Students who graduate with a degree from the Department of Biology leave PLNU prepared for graduate schools or careers in industry. Over the last 25 years, approximately 80 percent of PLNU's applicants have gained acceptance to medical schools (roughly twice the national average); the acceptance rate for Biology and Chemistry students applying to graduate (M.A., M.S., and Ph.D.) and dental school programs is over 95 percent.

## Majors

Biology

- Organismal
- Cell and Molecular

Biology-Chemistry

Environmental Science

## Minors

Cell and Molecular Biology

Environmental Biology

Organismal Biology

## Courses

## Faculty

Dianne L. Anderson, Ph.D.

*University of California, San Diego and San Diego State University*

David E. Cummings, Ph.D.  
*University of Idaho*

Robert C. Elson, Ph.D.  
*University of Cambridge, England*

Darrel R. Falk, Ph.D., Chair  
*University of Alberta*

Rebecca J. Flietstra, Ph.D.  
*University of Kansas Medical Center*

Kerry D. Fulcher, Ph.D.  
*University of Idaho*

April L. Maskiewicz, Ph.D.  
*University of California, San Diego, and San Diego State University*

Michael R. McConnell, Ph.D.  
*Tufts University School of Medicine*

Michael S. Mooring, Ph.D.  
*University of California, Davis*

Dawne M. Page, Ph.D.  
*University of California, San Francisco*