

# SCHOOL OF SCIENCE, TECHNOLOGY AND HEALTH

## Vision and Mission

The School of Science, Technology and Health is equipping a new generation of ethically thoughtful professionals in the sciences and health care, grounded in a Christian worldview, educated in an academically rigorous environment, ready to assume positions of leadership, and able to provide the clear moral vision the world desperately needs.

## Overview

In February 2016, Biola University broke ground on the most ambitious building project in its history. The new facility, an expansive new \$63 million, 91,200 square ft. science facility that will serve as the home to the new School of Science, Technology, and Health, is comprised of some of the university's fastest and highest demand job opportunities. The building will open in early 2018 and will triple the amount of space devoted to science education at Biola and enable students and faculty to study state-of-the-art laboratories and classrooms with cutting-edge equipment.

## Additional Educational Opportunities and Distinctives

The rapidly evolving fields of science and medicine need scientists and clinicians who are not only prepared academically and intellectually, but also guided by a strong ethical core. Biola's science, technology, and health programs offer several key advantages:

**Integration of Science and Faith.** The School of Science, Technology, and Health at Biola University is dedicated to understanding how science fits into the Biblical narrative, helping equip students to thoughtfully engage the broad world of ideas and offer a morally-grounded foundation built on compassion and stewardship of all forms of life. Small class sizes and laboratory sections give students the opportunity to spend significant time in close mentorship with their professors, who remain active scientists in their respective fields.

**Laboratories with State-of-the-Art Equipment** for analyzing gene expression, immunohistochemistry, fluorescence and scanning electron microscopy, high-performance liquid chromatography, proton NMR, high performance liquid chromatograph, a high-speed centrifuge, atomic absorption spectrometer, infrared and fluorescence spectrometers, supercomputing cluster, and an atomic force microscope offer strong resources and rich opportunities for directed research.

**3+2 Engineering Program.** The first three years of the engineering physics program will be spent at Biola, studying physics, chemistry, mathematics, biblical studies and the liberal arts – all from a Christian worldview. The following two years will be spent at the University of Southern California (<http://viterbiadmission.usc.edu/threetwo>) or another accredited engineering school. At the end of this five-year program, students will earn a B.S. in engineering physics from Biola and a B.S. degree in the field of engineering chosen by the student.

**Locale and A Variety of Habitats for Study** are within driving distance to do field work in marine, coastal, desert, and alpine ecology. In addition, Biola's Organic Garden and Aquaculture site allow for research projects

on campus. Our close Christian partner, the Au Sable Institute, offers field classes in Michigan, Washington, Costa Rica and India.

**The Nursing Simulation Lab** gives students hands-on experience in a variety of different simulated hospital environments caring for a variety of patients in a safe structured setting. These may include medical/surgical, critical care, obstetrics or pediatric settings and patients.

**Top Tier Hospital Training.** Biola has partnered with multiple top tier, magnet hospitals in Los Angeles and Orange County including UCLA, Children's Hospital of Los Angeles, University of California, Irvine, St. Joseph's, City of Hope, Children's Hospital of Orange County, Hoag, St. Jude's, and the Kaiser Health Care System as well as many other community hospitals allowing students to receive rigorous, hands-on clinical training in a real hospital environment.

**Speech and Hearing Clinics.** An on-campus speech lab provides state-of-the-art equipment including a digital endoscope, Visipitch, a nasometer, and many AAC devices. The Communication Sciences and Disorders Program provides experiences in both on- and off-campus clinics for work with patients from the community.

**The Human Performance Lab and Athletic Training Room** are on-campus resources for students to practically apply skills they've learned in classes. Faculty facilitate opportunities for students to participate in research and students are able to volunteer and gain experience working with special populations and the local community.

**Clinical Shadowing Program** provides weekly opportunities to observe and interact with physicians to explore a field of interest, gain valuable clinical experience, make connections that provide a source for letters of recommendation, and witness first-hand what it means to be a Christian health professional.

**Medical Missions.** Students can participate in medical missions work in hospitals overseas and across the country including Manila, Mindanao, Thailand, Mexico, Rwanda or Alaska. They are also actively involved in the running and management of many community-based, underserved, outreach clinics locally like the La Mirada Activity Center serving older adults, a clinic serving the Homeless in Costa Mesa, and the Fred Jordan Mission. This allows them to gain invaluable cross cultural, clinical, service learning experiences which are beneficial for their future clinical nursing careers as well as a solid foundation for future graduate school pursuits.

**All Pre-Med and Pre-Health Majors** have access to individualized advising and support from the Biola Office of Health Professions Advising (BOHPA). BOHPA provides application workshops, interview prep, graduate admissions exam support, and individual curriculum planning and advising as students prepare for medical school. BOHPA also sponsors the Health Careers Club (HCC), a student-led group that educates, supports, and builds community among all our pre-med/health career students on the Biola campus. BOHPA and the HCC together help to prepare Biola students to impact the world for our Lord Jesus Christ through future careers as health professionals. With the support of Biola's pre-med committee, recent applicants to medical school have had close to a 90% success rate across all applications in recent years. Biola graduates have been accepted into a variety of medical schools both locally and around the country, including UCLA, UCI, UC Davis, UC San Diego, Loma Linda, USC, Dartmouth, Yale, Georgetown, University of Washington, Oregon Health Sciences University, University of Wisconsin, University of Arizona, University of Texas, University of New Mexico, and St. Louis University.

## Program Accreditations

State of California Board of Registered Nursing (1966)

Commission on Collegiate Nursing Education (2007)

## Program Affiliations

American Association of Health, Physical Education and Recreation

California Association of Health, Physical Education, and Recreation

Western Council on Higher Education for Nursing

## Faculty

**Dean:** Dr. Paul W. Ferguson

**Associate Dean:** Dr. Walt Stangl

**Emeriti Faculty:** P. Coad, R. Coad, Crawford, Fleeger, Fuller, Kilander, Kuld, Kurtz, A. Lin, McLaughlin, Norman, Orr, Payne, Rynd, Charles Sarver, Connie Sarver, Thurber, Woo

**Professors:** Bloom, Chen, Ferguson, Gewe, S. Lin, McCarty, Silzel

**Associate Professors:** Apkarian, Bacon, Billock, Campbell, Cruzen, Dantuma, DiMuro, Dixon, Ebeling, Havoonyan, Henry, Kobayashi, Larson, Lew, Newport, Rouse, Stangl, Styffe, Tresser, Uranga-Hernandez, Van Niekirk, Varamini, Wilson, Welty, Yan, Yee

**Assistant Professors:** Allen, Altamirano, Chang, Clemons, Fallon, Gardner, Johnson, Lee, Lu, Peterson, McReynolds, Neiggemann, O' Dell, Pichaj, Sanchez

## Programs

### Programs Offered

- Speech-Language Pathology, M.S. (<http://catalog.biola.edu/science-technology-health-graduate/speech-language-pathology-ms>)