

The School of Pharmacy and Pharmaceutical Sciences

The newest professional school on the UCSD campus is the School of Pharmacy and Pharmaceutical Sciences. Approved by the Regents in summer 2000, the target date for enrollment of a charter class of students is fall 2002. This class of twenty-five students is the first to study an innovative curriculum dedicated to educating future pharmacy practitioners to provide the pharmaceutical care needs of our growing and increasingly diverse society. The goal of the Doctor of Pharmacy curriculum is to prepare students to be leaders in the profession of pharmacy and to provide them with the tools to effectively practice in a wide variety of currently existing and potential future roles in academia, hospitals and clinics, long-term facilities and home care, government, health policy, the pharmaceutical industry, and innovative community pharmacy practice settings. It is expected that the emerging fields of pharmacogenomics and bioinformatics will have a profound influence on the future practice of pharmacy, and that graduates of the UCSD School of Pharmacy and Pharmaceutical Sciences will be in an excellent position to bring these advances to the patient care setting.

Future growth in enrollment in the School of Pharmacy and Pharmaceutical Sciences is planned for twenty-five students in the class entering in 2003 and thirty students in 2004. The Pharmaceutical Sciences Building, which will house the administrative, teaching, and research activities of the school, is scheduled for occupancy in fall 2005. Until these facilities are available, enrollment will be limited to a maximum of thirty students in each class. Once the building is available for occupancy, the entering class size is planned to increase to sixty students.

Rather than duplicate existing departments on the UCSD campus and in the School of Medicine, the founding faculty of the school draw upon the strengths of the basic and biomedical science departments that have provided an outstanding education to undergraduate, graduate, and medical students for more than thirty years. Faculty from campus departments and the School of Medicine join School of Pharmacy and Pharmaceutical Sciences faculty in teaching the pre-clinical

courses in the curriculum. Clinical faculty, who are active practitioners in a variety of medical center, community, and industry locations, provide both classroom instruction as well as guidance of students during advanced pharmacy practice clinical experiences.

During the first years of implementation, the curriculum will be dynamic, under constant review, and using faculty and student input, updated by interdisciplinary faculty committees. Presently, the four-year curriculum leading to the Doctor of Pharmacy degree is designed as follows:

In the first year, students are enrolled in courses in anatomy and histology, pharmaceutical chemistry, pharmaceuticals, bioinformatics, law and ethics, biostatistics and an introduction to the practice of pharmacy. Students gain their first exposure to patient care by working alongside medical students in UCSD sponsored, student-run, free medical clinics in San Diego. In the second year, pharmacy and first year medical students are concurrently enrolled in courses that serve as a foundation for understanding disease and disease management. In this unique environment, pharmacy and medical students study cell biology and biochemistry, organ physiology, pharmacology, neurosciences and endocrinology, reproduction and metabolism, laboratory medicine and health policy. This is another step in developing the collegial relationship they encounter in the patient care setting. Courses, specific to the needs of pharmacy students, such as additional coursework in pharmacology, drug study design, and pharmacy practice are also provided. The third year focuses on the application of the information learned in the previous years with additional coursework in microbiology, pharmacology, drug information, pharmaceutical chemistry, pharmaceuticals, and pharmacogenomics. A major course sequence in drug therapeutics begins the process of applying the knowledge gained in the basic sciences to the clinical management and care of patients. The fourth year is devoted entirely to advanced pharmacy practice clinical experiences where students learn to apply the skills and knowledge obtained in the curriculum in a variety of patient care settings. Many of these advanced practice experiences take place

at UCSD-affiliated medical centers, such as UCSD Medical Center–Hillcrest, UCSD Medical Center–La Jolla, the Veteran's Administration Medical Center in La Jolla, and San Diego Children's Hospital and Medical Center. In addition, many other health care facilities throughout the region are utilized. Not only do students participate in the care of patients in many of the most modern medical facilities in the San Diego area, but they also learn to appreciate the challenges faced in providing care to some of the less advantaged citizens of the region. Both classroom elective courses as well as advanced practice experience electives provide flexibility for the student to explore the many facets of the profession and provide an opportunity for the curriculum to meet a particular student's educational goals and objectives.

The San Diego region ranks third in the nation in the development of new biotechnology. The school is developing relationships with this burgeoning biotechnology industry, which is adjacent to the UCSD campus. There are advanced practice and research experiences available to students in these exciting new areas of practice.

The common required and elective coursework taken by pharmacy and medical students and advanced practice clinical experiences where medical and pharmacy students work closely together have been created to foster the development of cooperation between the professions as well as to develop an appreciation for the unique roles that each professional provides in the care of patients.

For the past twenty-five years, UCSF School of Pharmacy students have been enrolled in advanced practice clinical activities at UCSD Medical Centers. This long-standing relationship is continuing and being expanded by the UCSD School of Pharmacy. Fourth-year UCSF students are assigned as mentors for first year UCSD pharmacy students. This allows the first-year students to observe their mentors functioning in the clinical environment and provides the first-year students with an early exposure to pharmacy practice and patient care. Also, the two schools are utilizing distance-learning facilities to enhance communication and to share educational and research experiences between students and faculty on the two campuses.