



Pre-Pharmacy *Advisement*

Nature of the Work, Earnings and Occupational Outlook

Pharmacists are health professionals who are concerned with serving the pharmaceutical needs of patients and communities. The American Association of Colleges of Pharmacy reports the principal goal of pharmaceutical care is “to achieve positive outcomes from the use of medication which improves patients’ quality of life. These outcomes include: cure of a disease, elimination or reduction of symptoms, arresting or slowing a disease process, prevention of disease, diagnosis of disease, and desired alterations in physiological processes, all with minimum risk to patients.” As a result of society’s changing health and social issues, Pharmacists today do much more than simply compound and dispense medication. Their roles have broadened to include direct patient care, education, and case management duties.

Pharmacists can be found in a variety of settings including community and consultant pharmacies, hospitals and institutions, managed care organizations, the pharmaceutical industry, academics and research, government agencies and many more. The most common setting is community pharmacies, which include independent, prescription only pharmacies, such as those found in medical office buildings, and chain pharmacies (local drug stores), which generate income from the sale of other merchandise. Opportunities are becoming increasingly available for pharmacists with advanced training to work as clinical pharmacists in recognized pharmacy practitioner specialties such as ambulatory care, clinical pharmacokinetics, geriatrics, oncology, psychopharmacology, drug information, and nutrition support. The advanced training for such programs usually requires a fellowship or residency after the Pharm.D. degree.

The Occupational Outlook Handbook (<http://stats.bls.gov/oco/home.htm>) reports that employment of pharmacists is expected to grow faster than the average for all occupations through the year 2010 due to the increased pharmaceutical needs of a larger and older population and greater use of medications. The median annual of wage-and-salary pharmacists in May 2006 were \$94,520. The middle 50% earned between \$83,180 and \$108,140 a year. Salaries vary by work setting and geographic location.

Education

Currently there are 101 accredited pharmacy programs offering the Doctor of Pharmacy (Pharm.D.) professional degree. The Pharm.D. is a four-year program that produces a scientifically and technically competent pharmacist that can use their knowledge to provide maximum health care services to patients. Pharmacy students gain experience in patient-centered learning experiences and in working in close, cooperative relationships with health practitioners. After completing a Pharm. D. degree, graduates have the option to pursue residency training in institutional and community pharmacy practice.

Pharmacy College Application Service (PharmCAS)

Since July of 2003, Pharmacy College Application Service (PharmCAS), a centralized web-based application service for applicants to pharmacy colleges and schools allowed applicants to submit one application and apply to multiple first-year professional pharmacy degree programs. Currently, 59 programs participate in PharmCAS. Applicants to programs that do not participate in PharmCAS should apply directly to each institution using the traditional application process. All of the CA pharmacy programs participate in the PharmCAS application service except for Loma Linda. For more information and a list of schools participating, please visit the PharmCAS web site at www.pharmacas.org.

Pre-Pharmacy Preparation (College)

Requirements for admission to colleges of pharmacy vary. The vast majority of students who enter a pharmacy program have completed a minimum of three years of pre-pharmacy courses or a bachelor’s degree. Common coursework completed includes calculus, inorganic chemistry, organic chemistry, biology, physics, and additional courses in the humanities and social sciences. Approximately 75% of students admitted to Pharm.D. programs in CA have completed four or more years of university work.

Some programs require applicants to take the Pharmacy College Admissions Test (PCAT) offered four times a year in January, June, August and October. None of the eight California PharmD. programs currently require the PCAT. Programs select applicants based on a variety of characteristics, including academic background, clinical experience, personal statement, interview, letters of recommendation and personal qualities including motivation, communication, critical thinking skills, and empathy. Some schools set minimum prerequisite and cumulative GPA requirements that vary between 2.4 and 3.0. Most schools expect applicants to gain firsthand paid or volunteer experience in a pharmacy setting to confirm their interest in the pharmacy profession. As pharmacists become more involved in educating patients, communication and interpersonal skills are increasingly important to demonstrate.

Listed below are the eight Pharmacy programs in California. For further information on these programs or Pharmacy programs outside of California, consult the Pharmacy School Admissions Requirements book, available at <http://www.aacp.org>.

UNIVERSITY OF CALIFORNIA, SAN DIEGO

UNIVERSITY OF CALIFORNIA, SAN FRANCISCO Minimum GPA 2.8 (avg. GPA 3.5)

CALIFORNIA NORTHSTATE COLLEGE OF PHARMACY (accreditation: pre-candidate status) Minimum GPA 2.7 Cumulative

***LOMA LINDA UNIVERSITY**

***UNIVERSITY OF SOUTHERN CALIFORNIA** Minimum GPA 3.0 (avg. GPA – 3.4)

***UNIVERSITY OF THE PACIFIC**

TOURO UNIVERSITY Minimum cumulative and science GPA 2.75

***WESTERN UNIVERISTY OF HEALTH SCIENCES**

*To view Santa Ana College courses which meet admission requirements for these programs go to www.sac.edu/students/counseling/sacstg/independent.html

3/09 Information courtesy of the CSU, Long Beach Health Professions Advising Office, www.sascenter.org