

## PHARMACY PHD PROGRAMS

### General Info:

- The Doctor of Pharmacy (Pharm.D.) is the professional degree to prepare licensed pharmacy practitioners
- The Pharmacy Ph.D. is granted after a four-year professional program following a minimum two years of pre-pharmacy college coursework
- Most students who enter Pharm.D. Programs complete the bachelor's degree. However, there are some six-year Pharm.D. Programs that accept "transfer" students into the first year of their professional program after completing the pre-requisite courses. (A Ph.D. in pharmaceutical sciences, pharmacology or a related field is the degree that prepares students for research careers.)
- Students should complete a BA/BS for admission to competitive programs (all programs in California are competitive)
- A small percentage of schools require the PCAT exam
- Programs should be accredited by ACPE (American Council on Pharmaceutical Education)
- Fluency in a foreign language is desirable

### Excellent resources for counselors and students:

- Most applications are processed by one central agency, the Pharmacy College Application Service (PharmCAS) at <http://www.pharmacas.org/>
- Accreditation Council for Pharmacy Education; <http://www.acpe-accredit.org/>
- Pharmacy Career Information Center provided by the American Association of Colleges of Pharmacy: <http://www.aacp.org/Pages/Default.aspx>
- American Society of Health System Pharmacists Pharmacy Student Forum: <https://www.ashp.org/Pharmacy-Student/Pharmacy-Student-Forum>
- American Pharmaceutical Association: <http://www.pharmacist.com>
- California Society of Health System Pharmacists: <http://www.cshp.org>
- California Pharmacists Association: <http://www.cpha.com>

### Touro University - California College of Pharmacy

<http://admissions.tu.edu>

- Offers a full-time, 4-year professional program leading to the Pharm.D. degree
- A B.A. degree from a regionally accredited institution of higher education is required
- For Fall 2016, there were 2,000+ applicants and 100 students were accepted
- The average GPA is 3.15 on a 4.0 scale
- There are no requirements for any standardized tests

### University of California, San Diego Skaggs School of Pharmacy & Pharmaceutical

Sciences. <http://pharmacy.ucsd.edu/>

- A B.A./B.S. degree from a regionally accredited institution of higher education is required
- In 2016, there were 900+ applicants and 249 students were accepted
- The average GPA is 3.71 on a 4.0 scale
- TOEF scores computer based and internet based are needed.
- There are no requirements for any standardized tests
- Supplement application is required.

### University of California, San Francisco School of Pharmacy <http://pharmacy.ucsf.edu/pharmd>

- No B.A./B.S. degree required, but highly recommended

- The combined degree programs (PharmD/PhD & PharmD/MPH) entail a second application after admission to the Pharm.D. program
- In 2016, there were 1,200+ applicants and 122-127 students admitted
- Admitted students average GPA is about a 3.54 on a 4.0 scale
- There are no requirements for any standardized tests

#### University of Southern California School of Pharmacy

<http://pharmacyschool.usc.edu/>

- A Bachelor's degree is not required, but highly recommended
- The USC School of Pharmacy offers numerous dual degree, joint degree and certificate programs in California
- In 2016, there were 80+ applicants, 329 students admitted and, entering class of 188 students.
- The average GPA of entering students is about 3.54 on a 4.0 scale
- An entrance examination is not required; however PCAT scores will be highly considered for admission

#### University of the Pacific Thomas J. Long School of Pharmacy & Health Sciences

<http://www.pacific.edu>

- Aside from the Pharm.D. program, the School of Pharmacy offers a combined Pharm.D./PhD. degree program, a Pharm.D./MBA, and a Pharm.D./M.S
- A Bachelor's degree is not required, but highly recommended
- In the last several years, there were 1,350-1,500 applicants and approximately 100 students admitted; early applicants have the advantage of more available interview spaces
- The average G.P.A. is 3.4 on a 4.0 scale
- An entrance examination is not required. If PCAT are sent, they will not take the scores into consideration

#### Western University of Health Sciences College of Pharmacy

<http://www.westernu.edu/>

- A Bachelor's degree is not required, but highly recommended
- In 2016, there were 1,116 applicants, and 244 students admitted.
- The average G.P.A. was 3.39 on a 4.0 scale
- An entrance examination is not required

#### Common Pharm.D. Prerequisites:

- **Communications:** One semester of College English, English Composition, and Speech Communication
- **Biological Sciences:** One semester of Human Anatomy with Lab, Human Physiology with Lab, and Microbiology with Lab
- **Chemistry:** Two semesters of General Chemistry with lab, Organic Chemistry with lab, and Biochemistry
- **Physics:** One year with lab
- **Calculus:** One Semester of calculus or if quarter units, must have two quarters
- **Electives:** Two semesters with each elective taken from a different department  
Must be met from two (2) of the three (3) following areas: Public Speaking, Social Sciences, and Economics

**FYI:** Employment of pharmacists is expected to grow by 3 percent between 2014 and 2024. Demand will increase in community pharmacies, hospital pharmacies, assisted living facilities, home care organizations, patient education, vaccination administration, and managed care organizations. Median annual wages of wage & salary pharmacists in 2016 as \$122,230.

#### Resources:

Bureau of Labor Statistics, U.S. Department of Labor, *Occupational Outlook Handbook, 2016-17 Edition*, Pharmacists, on the Internet at <http://www.bls.gov/ooh/healthcare/pharmacists.htm> (site visited July 2017)