PHARMACY

Pharmacists are a vital part of a complete health care system. The increasing numbers of middle-aged and elderly people, who use more prescription drugs than younger people, will continue to spur demand for pharmacists in all employment settings and the pharmacist workforce will continue to see stability and expansion. In addition, new developments in genome research and medication distribution systems will increase the number of drug products available. As a result, the ever increasingly sophisticated health care consumer will attempt to seek out more and more resources for drug information, to determine the best prescription drug coverage plans for them, and investigate the new Medicare drug coverage program. All of this will contribute to the growth and stability within the pharmacy profession.

Pharmacy Colleges

There are 104 Colleges and Schools of Pharmacy in the U.S. The American Association of Colleges of Pharmacy (AACP) website, www.aacp.org, lists 91 Schools of Pharmacy that are AACP Regular Institutional Members, 5 Associate Institutional Members, and 8 Affiliate Institutional Members. U.S. colleges of pharmacy are accredited by the American Council on Pharmaceutical Education (ACPE), www.acpe.org. The American Pharmaceutical Association (APhA), www.aphanet.org, and the American Society of Health-System Pharmacists (ASHP), www.ashp.org, are two of several national professional societies of pharmacists.

The Doctor of Pharmacy (Pharm.D.) degree is generally obtained after completing a four year professional pharmacy program. There are six colleges of pharmacy located within Texas: Texas A & M University-Kingsville, Texas Southern University in Houston, Texas Tech at Amarillo, University of Houston, University of Incarnate Word in San Antonio, and University of Texas at Austin.

A student is usually in a pre-pharmacy or pre-health program prior to applying to pharmacy school and should be advised that a strong background in science and mathematics is essential. However, a student can be any major as long as all pre-pharmacy requirements are met. Most students take an average of 21/2-3 years to complete the course requirements for pharmacy college. A prior degree is not required, though the applicant pools reveal that over half of the applicants have a degree in some field of study.

The PCAT (Pharmacy College Admission Test) is required by all Texas pharmacy schools. In 2005, the PCAT format changed. In addition to the chemistry, biology, quantitative analysis, verbal ability and reading comprehension areas, a writing component has been added. The student should be advised to take the PCAT the summer or fall prior to the year they plan to apply.
All Texas colleges admit students only in the fall semester and are not a part of PharmCAS, a centralized application service. The student desiring to apply to other states should visit the website, www.pharmeas.org, and determine which colleges require the centralized process.

What does a strong applicant look like?

The successful applicant has a strong GPA of 3.4 or above, has scientific aptitude and has exhibited a strong bent toward helping others. Scores of 70% in all sections of the PCAT are considered competitive scores for most colleges. A student may take the PCAT exam more than once.

Pharmacy experience is helpful and encouraged. The community service and pharmacy experience should be evident in the interview process revealing the student’s passion and sensitivity toward others and the profession. The pharmacy technician certification is not a requirement for admission.

Essential traits and skills that must be observed include a conscientious mindset, strong verbal and written communication skills, an ability to pay attention to detail and sound decision making ability.

What about licensure after graduation?

The graduating Pharm.D. student must pass a state licensing examination in order to engage in professional practice. The North American Pharmacist Licensure Examination (NAPLEX) is required in all U.S. jurisdictions. The NAPLEX, which is developed by the National Association of Boards of Pharmacy (NABP), is a computer-adaptive test that assesses the candidate’s ability to apply knowledge gained in pharmacy school to practice situations. Most states require a drug law examination as a condition of licensure. The Multistate Pharmacy Jurisprudence Examination (MPJE) is tailored to assess the pharmacy jurisprudence of individual states.

What is the future outlook of the profession?

The future outlook of the profession of pharmacy is strong. In 2004, the U.S. Department of Labor reported that pharmacists held about 230,000 jobs, with approximately 61% working in the community sector and approximately 24% working in the hospital setting. The work environment for pharmacy continues to transform with the increasing needs within health care. Pharmacy settings are diverse: chain stores, independent, consulting, government agencies such as National Institutes of Health (NIH), Drug Enforcement Agency (DEA), Food and Drug Administration (FDA), academia, industry, hospitals, nursing homes, assisted-living facilities, home care settings, research centers, poison control centers, mail order, drug wholesalers, and pharmacy governing bodies.

One national compensation survey conducted by Mercer Human Resource Consulting reported the average salary of a staff pharmacist at $92,000.
What does a pharmacist do?

Pharmacists are responsible for all facets of patient care. One might find a pharmacist:

- Verifying orders for accuracy and protocol compliance
- Counseling patients on anticipated side effects
- Performing supportive care consults
- Reviewing all new investigational protocols
- Ensuring appropriate pharmaceutical preparation and administration for medications
- Working closely with physicians, fellows, nurses, and various medical personnel
- Screening for drug alternative therapy interactions with chemotherapy and investigational regimens
- Recommending specific medications for patients
- Providing wellness and preventive screenings, such as blood pressure, diabetes, and osteoporosis
- Analyzing trends and patterns in medication use in managed care organizations
- Analyzing the cost and benefit of different drug therapies
- Developing and practicing research and disease management
- Marketing for pharmaceutical manufacturing firms
- Exploring new areas of pharmacy informatics, biogenetics, and biomedical technologies to improve patient care and outcomes
Summary Information and Pre-Professional Requirements

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1 The pre-professional student may have additional prerequisites to complete before enrolling in a pharmacy program. Students are advised to stay abreast of changes or additional requirements which can be found on the pharmacy college websites. As admission is highly competitive, students are advised to apply to more than one college. The student can find course equivalency information and additional information at each college website.

2 January PCAT acceptable for regular admissions March 1 deadline.

3 80 hours of pharmacy shadowing experience is required for entry into the professional program.

4 Anatomy and Physiology is strongly recommended but not required.

5 Human Anatomy and Physiology with labs is accepted for credit.

6 A combined total of 15 hours social sciences and humanities is required.

7 Check website www.uh.edu/academics/corecurriculum for applicable courses.

8 A combined total of 15 hours fine arts, humanities, and social/behavioral science electives is required.

9 Check website http://pharmacy.tambhs.edu for applicable courses.
For further information on pharmacy programs in Texas contact:

Irma Lerma Rangel College of Pharmacy
Texas A&M Health Science Center
MSC 131
1010 West Avenue B
Kingsville, TX 78363-8202
361-593-4271
pagonzalez@pharmacy.tamhsc.edu
http://pharmacy.tamhsc.edu

College of Pharmacy and Health Sciences
Texas Southern University
3100 Cleburne Street
Houston, Texas 77004
713-313-4345
www.tsu.edu/pharmacy

Texas Tech University Health Sciences Center
School of Pharmacy
1300 S. Coulter St
Amarillo, TX 79106
806-354-5463
www.pharmacy.ama.ttuhsce.edu

University of Houston
College of Pharmacy
141 Science & Research II Bldg
4800 Calhoun
Houston, Texas 77204
713-743-1300
www.uh.edu/pharmacy/index2.html

University of the Incarnate Word
Feik School of Pharmacy
Office of Student Affairs
4301 Broadway, CPO #99
San Antonio, TX 78209
210-805-3024
rxadmissions@uiwtx.edu
www.uiw.edu/pharmacy
Professional Associations

American Association of Colleges of Pharmacy
www.aacp.org

American Society of Healthcare – System Pharmacists
www.ashp.org

National Association of Chain Drug Stores
www.nacds.org

Revised 02/08 by:
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University of Houston
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