



the next-generation
PHARMACIST is here...



University of Houston College of Pharmacy



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In the skills portion of the curriculum, UH pharmacy students practice educating “patients” on how to use their glucometers and understand the results.

Today’s pharmacists don’t simply count pills – they’re actively involved in the creation, evaluation and delivery of complex pharmaceuticals and therapeutics that enhance patient health.

Pharmacists are specialists in prescription and over-the-counter drugs and skilled communicators who counsel patients on drug interactions, side effects and chronic disease states, such as diabetes.

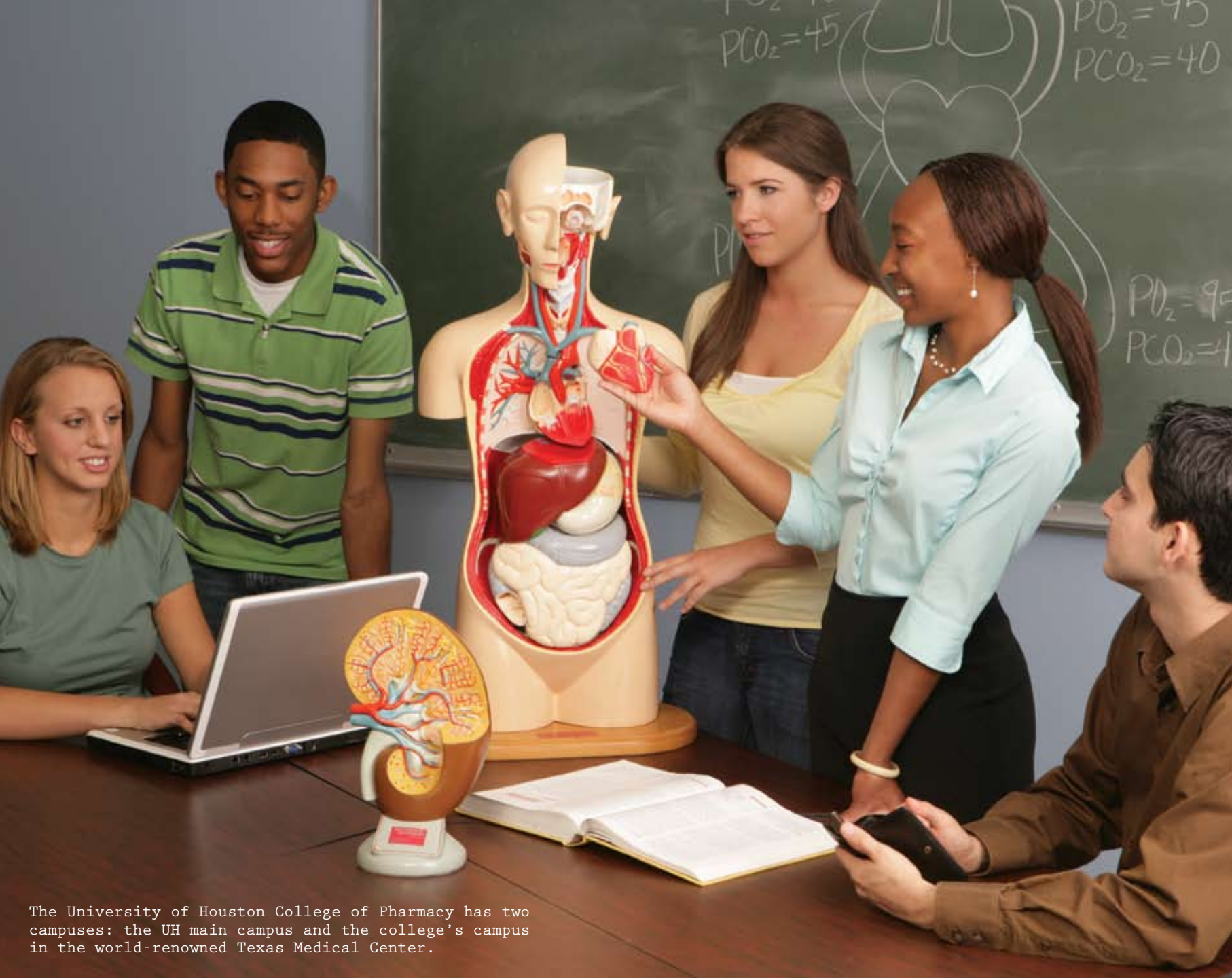
The pharmacy profession boasts a diverse range of career and employment options, from practicing in the community/retail setting, hospital environment and managed-care facilities to the pharmaceutical drug industry and government health/regulatory agencies.

Licensed by the state, pharmacists may also choose to pursue certifications in several specialties, including nuclear, nutrition support, pharmacotherapy, psychiatric and oncology pharmacy.

As a critical member of the health-care team, pharmacists enjoy a respected position of trust among consumers* and excellent compensation/ opportunities (ranked No. 9 – ahead of engineers, lawyers and physicians – in a May 2006 Money/Salary.com survey of “50 Best Jobs”).

**According to annual CNN/USA Today/Gallup Poll survey of the most “honest/ethical” professions.*

DEGREES: The UH College of Pharmacy offers a four-year Doctor of Pharmacy (Pharm.D.) professional degree, a Doctor of Philosophy (Ph.D) in Pharmacology or Pharmaceutics, a Master of Science (M.S.) in Pharmacy Administration, a combined Pharm.D./Ph.D. and a combined Pharm.D./M.S.



Learning. Leading.

For more than 50 years, the University of Houston College of Pharmacy has provided students with the knowledge, skills and hands-on experience necessary to excel in the rewarding, opportunity-filled profession of pharmacy.

Students in the UH pharmacy program benefit from the college's affiliation with The Methodist Hospital and other institutions within the Texas Medical Center (TMC) as well as the resources of UH, Texas' premier urban teaching and research university.

In as little as six years, entering freshman can obtain their Pharm.D. degree and immediately begin making a positive impact in people's lives. With a student/faculty ratio of 9 to 1, the student-centered, competency-based UH pharmacy curriculum emphasizes critical-thinking and problem-solving exercises, case studies and small group instruction.

The UH Pharm.D. program is accredited by the Accreditation Council for Pharmacy Education, and the college is a member of the American Association of Colleges of Pharmacy.



The University of Houston College of Pharmacy has two campuses: the UH main campus and the college's campus in the world-renowned Texas Medical Center.

Our Students:

- ★ 99% pass rate for Pharm.D. graduates on the NAPLEX Exam, the national licensing exam for pharmacists (*The 2005 national pass rate average was 92%, as reported by NABP*)
- ★ 100% of our graduates for the past three years received job offers before graduating
- ★ One of only three colleges in the 2006 National Community Pharmacists Association student business plan competition finals
- ★ Elected 2004-2005 national president of APhA-ASP, the largest national student pharmacist organization
- ★ First Place winner, APhA-ASP National Patient Counseling Competition, 2004 and 2005
- ★ Captured first place at the 2005 TPA Innovative Pharmacy Project competition
- ★ Recognized nationally for 2004 Operation Immunization Project
- ★ Presented papers, posters and projects at national conventions, including NACDS, AACP, APhA and ASHP
- ★ Ranked 13th nationally in pharmacy degrees awarded to Hispanics
- ★ Participate in activities outside the formal classroom through 15 professional and social organizations
- ★ Nearly 50 graduates in the combined 2005 and 2006 class years accepted into residency programs across the nation



Pharmacy students are leaders, from presiding over national pharmacy student organizations to winning competitions.

Counseling and Caring

The University of Houston College of Pharmacy partners with numerous community organizations to give students an opportunity to enhance the traditional learning process, foster an understanding of social problems, and develop patient and professional relationships through hands-on health care service.

As part of the curriculum, every pharmacy student participates in at least one Community Wellness Event (CWE) each semester of their first three years. Held for the general public throughout the Houston area, CWEs allow students to give immunizations, take blood pressure and perform cholesterol screenings, diabetic foot exams and medication reviews.

UH pharmacy students also are active in providing health care to Houston's most needy population. The Houston Outreach Medicine, Education and Social Services (HOMES) Clinic is a multidisciplinary, multi-institutional clinic run by students under the supervision of licensed physicians and pharmacists. Students from the UH College of Pharmacy and other Texas Medical Center institutions evaluate

the homeless individual's condition, develop a treatment plan, and provide appropriate therapies or referrals.

UH pharmacy students also have the opportunity to travel beyond the U.S. border through sponsored Medical Mission Trips to the underserved colonias of Mexico, where many residents lack the resources to pay for or access health care. Pharmacy students and preceptors complement a multidisciplinary team that provides care to as many as 1,000 adults, children and even animals each year.

Student Organizations

PROFESSIONAL ORGANIZATIONS

Pharmacy Council
Academy of Student Pharmacists
Christian Pharmacists Fellowship International
Mexican-American Pharmacy Student Association
RXaggies
Student National Community Pharmacists Association
Society of Industrial Pharmacy Students
Student National Pharmaceutical Association
Student Society of Health-System Pharmacists
Vietnamese-American Pharmacy Student Society

FRATERNITIES

Kappa Epsilon
Kappa Psi
Phi Delta Chi

HONOR SOCIETIES

Phi Lambda Sigma
Rho Chi



Pharmacy students are introduced to patients as early as their first year, but the real day-to-day patient care opportunities take place in the fourth year. While on rotations, students interact with physicians, clinical faculty, pharmacist preceptors and other members of the health care team.

Learning Beyond Books

Pharmacy students expand their knowledge, skills and abilities through experiential training. During rotations, students also discover a wide range of opportunities available with a Pharm.D. degree. In addition, they gain real-world experience and learn the keys to success from their preceptors.

The first rotation is a four-week introductory community pharmacy rotation in the summer following the second year. In the fourth year of the curriculum, Pharm.D. students complete a total of 7 six-week, full-time advanced practice experiential rotations – an intensive form of an internship.

Thanks to the college's affiliations with fellow Texas Medical Center institutions, new or long-running partnerships and extensive alumni network, UH pharmacy students have several unique practice sites in a variety of geographic areas and interdisciplinary work environments, where they can gain valuable experience in making the transition from student to pharmacist.

Examples of unique rotation sites include the U.S. Food and Drug Administration and National Institutes of Health in Bethesda, Maryland;

Indian Health Service facilities in Alaska, Arizona, New Mexico and the Pacific Northwest; the Texas State Board of Pharmacy in Austin; and M.D. Anderson Cancer Center in Houston.

There are three required experiential courses: advanced community pharmacy, advanced hospital pharmacy and institutional medicine. In addition, each student completes four experiential electives from the 36 available clinical specialty and administrative courses. Elective rotations include such diverse offerings as infectious diseases, pediatrics, emergency medicine, veterinary pharmaceutical care, neurology and nuclear pharmacy.





UH students have the opportunity to engage in cutting-edge research that could shape the next generations of medications.

Today's Research, Tomorrow's Discovery

UH pharmacy students benefit from direct interaction and collaboration with researchers – including faculty members, preceptors and alumni – who are on the forefront of the fight against numerous life-threatening diseases or illnesses that reduce people's quality of life.

For example, UH faculty members are investigating the causes of and effective strategies for dealing with AIDS/HIV, bacterial/fungal infections, asthma, diabetes and substance abuse. Current research projects are funded by such esteemed organizations as the National Institutes of Health, American Heart Association and NASA as well as some of the top companies in the pharmaceutical industry.

UH faculty members, alumni and even students are prolific authors and reviewers for highly respected national and international scientific, academic and professional journals, which contribute to the advancement of science and the development of effective treatments for people around the world.

By taking advantage of the college's creative collaborations with other TMC institutions, students receive virtually limitless opportunities to learn from the best and brightest minds in medicine and health care today. In fact, the University of Houston System and The Methodist Hospital – with award-winning programs in such specialties as neurology/ neurosurgery and psychiatry – recently signed a long-term agreement to expand and share education and clinical research opportunities.



UH pharmacy students receive IV admixture certification to practice in home care, hospitals and some community pharmacies.

Career Acceleration

In order to demonstrate advanced clinical proficiency and qualify for the most competitive positions, many new Pharm.D. graduates choose to enhance their future marketability by pursuing a post-graduate residency. The one- to two-year residency programs can be in general or specialized pharmacy practice areas, such as primary care, oncology, critical care, pediatrics and infectious diseases.

UH pharmacy graduates can participate in residency programs at numerous Houston-area facilities, including Kelsey-Seybold Clinic, Memorial Hermann Healthcare System, Harris County Hospital District, St. Luke's Episcopal Hospital, The Methodist Hospital and Michael E. DeBakey VA Medical Center.

But graduates seeking residency programs are not limited to the Houston area. UH pharmacy graduates have been accepted into residency programs at major hospitals and clinics throughout the country, specifically Atlanta, Chicago, Dallas, Memphis, Philadelphia, San Antonio and Seattle.



Residency programs offer the opportunity to specialize in pharmacy practice areas while improving technical skills, such as compounding medicinal lollipops for children and patients who have difficulty swallowing pills (pictured).



Pharm.D. Course of Study

Course Description	Course #	Hours
Pre-Pharmacy Requirements		
Intro. to Biological Science I and II with Lab Microbiology with Lab	Bio 1361-2/1161-2 Bio 2333/ 2133	8 3-4
Fundamentals of Chemistry I and II with Lab	Chem 1331-2/ 1111-2	8
Organic Chemistry I and II with Lab	Chem 3331-2/ 3221-2	8-10
College Physics OR 1 yr. high school Physics	Phys 1301	3
Calculus I	Math 1431	4
Intro. to Statistical Analysis	Math 2311	3
English Composition I and II	Eng 1303/ 1304	6
Fundamentals of Public Speaking	Comm 1332	3
United States History I and II	Hist 1377/ 1378	6
Political Science (Local, State and National)	Pols 1336/1337	6
Social Science**	Psyc 1300 or Soc 1300	3
Social Science - Writing Intensive***	See UH approved list	3
UH Humanities Elective**	See UH approved list	3
UH Performing/Visual Arts Elective**	See UH approved list	3

TOTAL Pre-Pharmacy Hours 57-72

Professional Requirements

Pharmacy Practice I, II, IV, V and VI	11
Cellular Life Sciences I and II	8
Organ Systems Life Sciences I and II	7
Pharmacy Management I, II, III	7
Pharmaceutics I and II	6
Pharmacy Law and Ethics	3
Pharmacy Skills Program I, II, III, IV, V and VI	12
Pharmacodynamics I, II, III, and IV	14
Pharmacokinetics	3
Toxicology	2
Physical Assessment/ Anatomy	4
Advanced Therapeutics I and II	10
Pharmacy Electives	6
Clinical Rotation - Community Pharmacy	4
Clinical Rotation - General Medicine	6
Clinical Rotation - Advanced Hospital &/or Advanced Community	12
Clinical Rotation Electives	24
Clinical Seminar	1

TOTAL for Pharm.D. Degree 140

* Contact the College of Pharmacy for complete admission and program information.

** Refer to www.uh.edu/academics/corecurriculum

^ Students who complete two social science courses (one must be Intro to Psych or Soc) prior to transferring to UH will not have to complete the writing intensive component



Students are trained in administering immunizations, with the opportunity to obtain professional certification.

Admissions

High School Students (Pre-Pharmacy)

A two-year pre-pharmacy program, or its equivalent, is required for admission into the professional program. Students who wish to enter pre-pharmacy at UH must apply for admission through the University.

College Students (Pharm.D. Admissions)

After applying online (www.uh.edu/pharmacy/admissions), applicants can check the site for the status of their application at any point during the admissions process to determine if all supporting documentation has been received.

Investment

A student's total annual education cost – including the two required summer semesters – depends on a variety of factors, such as housing choice, type of transportation, classification year and type/location of rotations. The current in-state tuition and fees for the academic year are approximately \$12,000; however, the current financial aid package of loans and scholarships can provide up to \$30,000 per academic year to assist with direct costs (tuition, books, etc.) and indirect costs (housing, transportation, etc.).

Checklist

- Obtain information from the UH College of Pharmacy: www.uh.edu/pharmacy/admissions

HIGH SCHOOL

- Take all of the math & science classes you can, including physics.
- Join a science/health professions club.
- Talk to a counselor about college requirements.
- Visit with a pharmacist.
- Develop good study skills.
- Visit college/university campuses.
- Attend college orientation.

PRE - PHARMACY

- Make and maintain contact with your college's pre-health or pre-pharmacy advisor.
- Attend a UH Step One Advising session. www.uh.edu/pharmacy/admissions/advising.htm
- Seek assistance from a professor and take advantage of tutoring and other academic services on campus.
- Use summer school for courses other than math and science.
- Transfer hours are limited to 66 semester hours of lower division coursework, determined by UH.
- Consider taking advanced math and sciences at a four-year institution to become acclimated to a graduate/professional program.
- Join a pre-pharmacy organization.
- Pharmacy experience is highly encouraged.
- Register and prepare for the PCAT. Scores in the 70th percentile or higher in all test areas are recommended. www.pcatweb.info.
- The average overall GPA was 3.4 for the previous three years' entering class.

APPLYING FOR PHARMACY ADMISSION

Read through all instructions carefully when preparing your application packet.

www.uh.edu/pharmacy/admissions/application.htm

- Prepare yourself for an interview, writing and team assessment exercises, if invited.
- Keep your email, phone number and address information current with the college.
- Apply for financial aid and complete FAFSA prior to April 1. www.fafsa.ed.gov
- **College of Pharmacy Application Deadline: February 15.**



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The University of Houston provides equal treatment and opportunity to all persons without regard to race, color, religion, national origin, sex, age, disability, veteran status or sexual orientation except where such distinction is required by law. This statement reflects compliance with Titles VI and VII of the Civil Rights Act of 1964, Title IX of the Educational Amendments of 1972 and all other federal and state regulations. Produced by the UH College of Pharmacy, 08/06.



For more information or to arrange a college visit, contact:

University of Houston College of Pharmacy
Office of Admissions

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713-743-1239 or email pharmacyadmissions@uh.edu

www.uh.edu/pharmacy/admissions