Pharmaceutical Sciences

Master of Science in Pharmaceutical Sciences
Doctor of Philosophy

For More Information

Campus address: Pharmacy Building (PHR) 4.220, phone (512) 471-6590; campus mail code: A1900

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URL: https://pharmacy.utexas.edu/programs/ms-phd

Facilities for Graduate Work

State-of-the-art research facilities are available for graduate education. Laboratories are equipped with the latest instrumentation and specialized support units for research in all of the areas of study mentioned below. Research space on the Austin campus is located in two pharmacy buildings, the Biomedical Engineering Building, the Dell Pediatric Research Institute, and in the Animal Resources Center. In San Antonio, basic laboratory and clinical research space is available in the McDermott Building on the campus of the University of Texas Health Science Center, and at affiliated institutions. Additional facilities for collaborative research in Austin are available in the College of Natural Sciences, the Cockrell School of Engineering, the Institute for Neuroscience, and the Institute for Cellular and Molecular Biology. Students pursuing either the MS or PhD in the Pharmacotherapy area will have courses, lab and clinical hours in San Antonio. Students in both Austin and San Antonio have access to extensive electronic journal holdings through the University Libraries website.

Drug Dynamics Institute. The Drug Dynamics Institute provides novel approaches and solutions that promote the preclinical development of technologies, facilitate bioscience startups, and cultivate interdisciplinary technology readiness utilizing state of the art translational research tools, laboratory facilities, and educational approaches. The Drug Dynamics Institute uses its extensive scientific expertise in seamless collaboration with our academic, industry, and government partners to foster and facilitate advancement of health innovations to commercialization. The institute serves as a training opportunity for graduate and postdoctoral researchers across the health disciplines working on projects ranging from material characterization and formulation new therapies to conduction analytical, animal, and stability studies to allow innovations to move from preclinical development to clinical trials. The Drug Dynamics Institute closes the gap between academia and industry in three key areas: **TherapeUTex**: a preclinical core lab/service center, **UTech Dorm Room**: the wet lab incubator spacer bioscience startups, and **UT Advance**: innovation, entrepreneurship, and education programs.

Texas Center for Health Outcomes Research & Education (TxCORE). Texas Center for Health Outcomes Research and Education (TxCORE). TxCORE addresses population and individual patient health through innovative, high-quality research and education, and serves our community by responding to critical health care issues that impact patients' daily lives. The interdisciplinary team of researchers has expertise in health care utilization and costs, health outcomes and value assessment, medication use and adherence, health behavior and health disparities, public health and policy, and integrative clinical practice, pharmacy practice, and education. The Center's researchers and graduate students provide research design, data collection, and data analysis expertise to health care providers, payers, institutions, and organizations, as well as the pharmaceutical industry. Center personnel also develop, present, and support educational programs focused on the delivery of high-quality health care. For more information, visit the TxCORE website.

Center for Molecular Carcinogenesis and Toxicology. The University of Texas at Austin has established an interdisciplinary Center for Molecular Carcinogenesis and Toxicology (CMCT). The mission of the CMCT is to provide leadership for the expansion of programs of excellence in environmental health sciences education and research and to prepare students for careers that address the molecular and cellular mechanisms by which environmental agents instigate toxicity and disease, including cancer. CMCT faculty come from a variety of colleges and departments of The University of Texas at Austin including: the Division of Pharmacology and Toxicology and the Division of Chemical Biology & Medicinal Chemistry of the College of Pharmacy; the Department of Cell and Molecular Biology and the UT Marine Science Institute in the College of Natural Sciences; the Departments of Nutritional Science and Pediatrics of the Dell Medical School; and the Department of Epigenetics and Molecular Carcinogenesis of the UT MD Anderson Cancer Center.

The CMCT fosters interdisciplinary graduate training programs by providing the mechanism by which students can work with a range of faculty interested in toxicology. This includes facilitating interdisciplinary research collaborations and providing ancillary student and research infrastructure support. The center's faculty represent a wide variety of scientific disciplines, including pharmacology, toxicology, medicinal chemistry, pharmaceutics, neuroscience, nutrition, biochemistry, chemistry, marine biology, and civil and mechanical engineering.

Areas of Study

The College of Pharmacy offers graduate study leading to the Master of Science in Pharmaceutical Sciences and the Doctor of Philosophy with a major in pharmaceutical sciences. Both degrees are STEM Designated Degree Programs, as identified by the Department of Homeland Security for purposes of the 24-month STEM optional practical training extension. Areas of doctoral specialization are: chemical biology and medicinal chemistry, pharmacology and toxicology, molecular pharmaceutics and drug delivery. Areas of masters and doctoral specialization are: health outcomes and pharmacotherapy. Students pursuing either the Master of Science or the Doctor of Philosophy who hold a PharmD degree from a pharmacy program accredited by the Accreditation Council for Pharmacy Education have opportunities for advanced practice training. They may complete a specialty practice residency while pursuing the graduate degree. More information is available from the graduate advisor.

Graduate Studies Committee

The following faculty members served on the Graduate Studies Committee (GSC) in the spring 2023 semester.

Anton Avancena
Jamie C Barner
Carolyn M Brown
M Lynn Crismon
Maria A Croyle
Zhengrong Cui
Kevin N Dalby
Patrick J Davis
Sharon DeMorrow
John Digiovanni
Christine L Duvauchelle
Walter L Fast
Laura K Fonken
Christopher R Frei
Debadyuti Ghosh
Rueben A Gonzales
Andrea C Gore
Michael T Johnsrud
Hyeun Ah Kang
Dawit Kidane-Mulat
Jim M Koeller
Kenneth A Lawson Jr
Grace Lee
Seongmin Lee
Hung-Wen Liu
Mohammed Maniruzzaman
Michela Marinelli
Robert Messing
S J Mihic
Leticia R Moczygemba
Somshuvra Mukhopadhyay
Luis A Natividad
Kimberly Nixon
Chanhyun Park
Samuel Poloyac
John T Powers
Karen L Rascati
Kelly Renee Reveles
Kristin McKeithan Richards
John H Richburg
Hugh D Smyth
Carla L Vandenberg
Karen Marie Vasquez
Christian P Whitman
Robert O Williams III
Kun Yang
Feng Zhang

Admission Requirements

The applicant should have a bachelor's degree in pharmaceutical sciences, biology, chemistry, or a related field, or a professional pharmacy degree from an accredited institution in the United States or another country. Students are admitted to the program upon recommendation of the Graduate Studies Committee, provided that their undergraduate training includes appropriate work in fields related to the pharmaceutical and health sciences. Applicants without the appropriate background may be required to complete additional coursework after admission. For some areas of study, preference is given to students who have a Doctor of Pharmacy degree from a college accredited by the Accreditation Council for Pharmacy Education. Preference is also given to applicants for the doctoral degree.