

# Division of Pharmacotherapy and Experimental Therapeutics









# Graduate Program

pharmacy.unc.edu/phd

### Ph.D. in Pharmaceutical Sciences

The Ph.D. program in the Division of Pharmacotherapy and Experimental Therapeutics develops scientists from diverse backgrounds, experiences, and training who excel at conducting innovative, translational, and clinically relevant research that integrates biomedical and pharmaceutical sciences in laboratory-based models and humans.

Our Ph.D. program offers two curricular tracks based on the students' experience: clinician for students with a Pharm.D., M.D. or similar degree and nonclinician for students with no previous clinical training. Graduates from both tracks have enjoyed an outstanding employment rate in academia, pharmaceutical industry and the Food and Drug Administration.

# Areas of Graduate Coursework and Research

- Drug metabolism and transport
- Pharmacometrics (PM)
  - Pharmacokinetics (PK)
  - Pharmacodynamics (PD)
- Pharmacogenomics
- Clinical trial design and statistical analysis
- Experimental therapeutics
- Mechanisms of drug toxicity

# Areas of Therapeutic Application

- Hepatology/ Gastroenterology/ Transplant
- Infectious Disease
- Central Nervous Disease
- Oncology/ Hematology
- Pulmonology
- Cardiology

### Contact

Carter Cao, Ph.D. yanguang@email.unc.edu

# To Apply

Applicants must complete the UNC Graduate School online application (gradschool.unc.edu/admissions). Applicants are strongly encouraged to apply by November 28, 2023 in order to be considered for a merit-based University or School fellowship.

The Division of Pharmacotherapy and Experimental Therapeutics offers numerous industry-sponsored fellowships. Our Division has a distinguished fellowship program history which began more than 40 years ago.

In general, during the first year, industry-sponsored fellows are on campus in Chapel Hill working with faculty to obtain a real-world research experience in their respective areas of interest. Fellows participate in coursework, monthly forums, and seminars. During the second year, fellows transition to the industry setting to gain handson experience in the pharmaceutical industry with one of our sponsor companies. We also offer an academic fellowship in oncology/hematology, and a NiH sponsored UNC-Duke Collaborative Clinical Pharmacology Postdoctoral Training program.

While the focus of each fellowship program varies, fellowships may provide:

- Training and experience in the design and conduct of clinical drug trials;
- · Didactic instruction in courses that supplement training and professional interests;
- · Exposure to ethical, legal, and regulatory issues in research involving investigational and marketed drugs;
- Protocol and grant writing, scientific presentations, and teaching; and
- Exposure to in vitro and in vivo laboratory methods and clinical studies to evaluate drug absorption, metabolism, and transport as well as pharmacometric data analysis and pharmacogenomics.

# **Available Fellowships**

- Clinical Research/ **Drug Development**
- Medical Affairs
- Regulatory Affairs
- Global Drug Safety/ Pharmacovigilance
- Pharmacometrics (PM)
  - Pharmacokinetics (PK)
  - Pharmacodynamics (PD)
- Clinical Pharmacology
- Clinical Neurology
- T32 Training Program

#### Contact

Robert Dupuis, Pharm.D. fellowships@unc.edu

#### To Apply

Applicants must complete the UNC Fellowship online application (pharmacydpetfellowships.web.unc). The application deadline for early consideration is October 31, 2023; final deadline is November 21, 2023. Offers extended starting December 13, 2023.

To obtain an application for the T32 Training Program, contact Kirsten Leysieffer at kleysief@email.unc.edu.

# **Areas of Therapeutic Application**

- Cardiology
- Hepatology/ Gastroenterology/ Transplant
- Infectious disease/HIV
- Neurology
- Oncology/Hematology
- Pulmonology

# **Industry Sponsors**

- Bristol Myers Squibb
- Genentech
- GlaxoSmithKline
- Janssen Research
- PPD, Inc.
- United Therapeutics
- UCB



### **UNC Eshelman School of Pharmacy**



At the UNC Eshelman School of Pharmacy, everything we do begins and ends with a patient in mind. We are preparing the next generation of scientists, clinicians and practitioners to discover solutions to the world's most challenging health care issues. Throughout our history, the School has built a reputation for cutting edge research, rigorous training programs, and outstanding faculty, staff, and students. A world-class university, a model Area Health Education Center (AHEC) system, an award-winning hospital system, and an international center for pharmaceutical research and development, and close proximity to the Research Triangle Park, creates

one of the most dynamic centers of learning in the nation. The School is one of five health affairs schools on the campus of the University of North Carolina at Chapel Hill and benefits from close collaborations with many on-campus research programs, including the Carolina Center for Genome Sciences, the Lineberger Comprehensive Cancer Center, the Center for Infectious Diseases, and the McAllister Heart Institute. The School is the number one ranked pharmacy program based on the U.S. News & World Report ranking and is one of the leaders among schools of pharmacy in research funding.

# University of North Carolina at Chapel Hill



The University of North Carolina at Chapel Hill is one of the leading public universities in the nation and has built a strong reputation as a global research university. In 2022, the University generated over \$1.3 billion in research funding and in 2023 was ranked third in the world in pharmacy and medicine by QS World University Rankings and number

ten in the world in pharmacology and toxicology by U.S. News & World Report. The University has strong research programs in a number of scientific and healthcare fields, including oncology, infectious diseases, cardiology, chemistry, nanomedicine, public health, drug discovery and genetics.

# Chapel Hill and Research Triangle Park



Chapel Hill is widely regarded as one of the best college towns in America. Franklin Street, the town's main thoroughfare, borders the UNC Chapel Hill campus and offers shops, cafes, restaurants, theaters and houses of worship. Chapel Hill has multiple parks and greenways, malls, a vibrant historic district and multiple recreational facilities. The town is eighteen miles from Raleigh-Durham International Airport and centrally located between North

Carolina's scenic beaches and mountains. Chapel Hill is located at the western point of the Research Triangle, which is created by UNC, Duke University and North Carolina State University and encompasses the Research Triangle Park. RTP is home to a vibrant culture of scientific research and more than 200 global companies, a number of which have close ties to the School and the University.