The Division of Pharmacotherapy and Experimental Therapeutics at the UNC Eshelman School of Pharmacy strives to generate and disseminate new knowledge in pharmacotherapy and accelerate its application to improve patient care.

**Ph.D. in Pharmaceutical Sciences**

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

Our Ph.D. program offers two curricular tracks based on the students’ previous 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
- Pharmacokinetics/
  Pharmacodynamics/
  Pharmacometrics
- Pharmacogenomics
- Clinical trial design and statistical analysis
- Experimental therapeutics
- Mechanisms of drug toxicity

**Areas of Therapeutic Application**

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

**Contact**

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**To Apply**

Applicants must complete the UNC Graduate School online application (pharmacy.unc.edu/phd). Applicants are strongly encouraged to apply by December 7 in order to be considered for a merit-based University or School fellowship.
Fellowship Programs

Clinical Research/Drug Development and Medical Affairs Fellowships

Fellows participate in clinical research studies with School faculty in the first year and with members of a clinical research/drug development or medical affairs team in the second year at United Therapeutics, GlaxoSmithKline or PPD, Inc.

This fellowship provides:
• Training and experience in the conduct of clinical drug trials;
• Participation in clinical research and medical affairs projects;
• Didactic instruction in courses that supplement training and professional interests; and
• Exposure to ethical, legal and regulatory issues in research involving investigational and marketed drugs.

Clinical Pharmacokinetics/Pharmacodynamics/Pharmacometrics Fellowships

Fellows participate in clinical pharmacokinetics (PK), pharmacodynamics (PD), pharmacometrics (PM) and drug transport and metabolism studies with School faculty in the first year and with members of a clinical pharmacokinetics team at Quintiles or Nuventra in the second year.

This fellowship provides:
• Experience in PK study design and related clinical trials;
• Experience in PK, PD and PM data analysis;
• Experience in conducting clinical drug trials;
• In vitro and in vivo laboratory methods to evaluate drug absorption, metabolism, transport and pharmacogenomics; and
• Didactic instruction in courses that supplement PK and PD training.

Academic Fellowships

Fellows prepare for careers as independent researchers with emphasis on any of the following: clinical trials, preclinical model systems, bioanalytical and molecular methods and pharmacometrics.

Fellows will also focus on protocol and grant writing, scientific writing, presentations and teaching. They will also take appropriate coursework emphasizing study design, biostatistics and pharmacogenomics.

Fellows will work closely with School faculty in one of the following therapeutic areas:
• Cardiology
• Hepatology/Gastroenterology/Transplant
• Infectious disease
• Oncology/Hematology

Global Regulatory Affairs Fellowships

This fellowship provides practical training and experience in key regulatory functions to help fellows gain expertise in the regulatory requirements of drug development.

The coursework and rotations provide fellows the opportunity to train in the academic setting as well as the pharmaceutical and regulatory setting with GlaxoSmithKline.

North Carolina Collaborative Clinical Pharmacology T32 Postdoctoral Fellowships

This multidisciplinary, collaborative training program prepares clinician scientists for academic, industrial or regulatory careers in clinical pharmacology with an emphasis in pediatrics and drug safety. The program develops innovative clinical pharmacologists who will conduct cutting-edge research and mentor the next generation of clinician-scientists. Fellows learn contemporary methods of laboratory and clinical research and are equipped to address critical problems in clinical pharmacology.

To Apply

Applicants must complete the UNC Fellowship online application (pharmacydpetfellowships.web.unc.edu). Applicants are strongly encouraged to apply by November 15 for early consideration. The final deadline is January 1.
UNC Eshelman School of Pharmacy

The UNC Eshelman School of Pharmacy is an internationally recognized leader in progressive pharmaceutical care practice, education and research with a reputation for cutting edge research, rigorous training programs, and outstanding faculty, staff, and students. It is the number one pharmacy school in the nation as ranked by U.S. News & World Report and number two among U.S. pharmacy schools in total research funding. 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 UNC Health Care, with pharmaceutical and biotech companies based in nearby Research Triangle Park and 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. Since 2009, the School has added 150,000 square feet of state-of-the-art research space in two new buildings built in collaboration with the UNC School of Medicine.

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 2016, the University generated nearly $847 million in research funding and was ranked 10th in the world in pharmacy and medicine by QS World University Rankings and number two 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.