University of Southern California
SCHOOL OF PHARMACY

Master of Science in Clinical and Experimental Therapeutics

Program Learning Objectives

The USC School of Pharmacy Masters program in Clinical and Experimental Therapeutics (CXPT) will prepare students with foundational coursework in translational sciences, pharmacology, and clinical development to facilitate their performance at high-level basic, translational, and applied research in the discipline specific to the graduate's area of emphasis. This may include a combination of drug screening, preclinical development, ADME (e.g. absorption, distribution, metabolism, elimination) and safety evaluation, and clinical testing. Students will be given a wide spectrum of basic science and translational science training that will allow them to engage in drug development, optimized combination therapy, and individualize therapeutics (e.g. pharmacogenomics, infectious diseases, and metabolomics). This foundational training will enable the graduates to be highly competitive for Ph.D. programs in pharmacology and related disciplines or employed in the pharmaceutical or biotech industry, or government (e.g. FDA, NIH).

Masters students enrolled in the program will be able to:

- Demonstrate competency on how to conduct interdisciplinary research across scientific disciplines including drug development, pharmacology, toxicology, regulatory science, and clinicians.
- Demonstrate an understanding of core scientific concepts utilized in basic and translational science techniques.
- Demonstrate methodological skills and an understanding of contemporary research in their respective area of emphasis, and be able to apply innovative research concepts and practices to their research under guidance of their faculty advisor.
- Demonstrate the ability to synthesize, integrate, and evaluate data from diverse sources into their research.
- Demonstrate an understanding of the statistical methods required to conduct translational research.
- Complete a research-based thesis in their respective area of emphasis under the guidance of their faculty advisor, which may form part or all of a publishable original research paper.