PhD in Pharmacological Sciences: Program Learning Outcomes

PLO 1 - Core Knowledge

- Discovery, design, development, and delivery of drugs
- Structure and dynamics of biological macromolecules
- Graduate-level basic pharmacology
- In-depth analysis of one drug-receptor system

PLO 2 – Research Methods and Analysis

- Methods and analysis performed during two research rotations during first year
- In-depth methods and analysis employed during pre-candidacy and dissertation research
- Acquire a skillset to apply methods and analyses to perform independently a graduate-level research

PLO 3 – Pedagogy

- Address common classroom and laboratory challenges
- Design lessons, assignments, and in some cases written examinations
- Direct upper-division writing if TAing PhrmSci 177L or 174L
- Mentor students in research laboratories

PLO 4 – Scholarly Communication

- Present written and oral report in PhrmSci 250
- Present written and oral report as part of the Candidacy Exam
- Organize and present relevant background literature, hypotheses, research methods, and research results in concise manner, both in written form and orally
- Publish research results and review articles in peer-reviewed journals

PLO 5 – Professionalism

- Achieve in-depth knowledge of the chosen research topic
- Present research results at professional meetings
- Attend scientific conferences and participate in scientific discussion
- Mentor other members of research group

PLO 6 – Independent Research

- Achieve independence in formulating scientific questions addressable by basic research experiments
- Design hypothesis-driven research projects