

LEARNING OUTCOMES: BIOCHEMISTRY, MS

Learning Outcomes for the Master of Science in Biochemistry

At the conclusion of the degree program students will be able to:

1. Develop and demonstrate an in-depth knowledge of a specific area of biochemical research, which may include (but is not limited to) protein, nucleic acid and/or membrane biochemistry, cancer and molecular immunology, computational and quantitative biology, etc.
2. Demonstrate independent and critical skills necessary to formulate specific experiments aimed at understanding molecular processes.
3. Gain the necessary experience and skills to train others in the performance of experiments.
4. Develop communication skills suitable to discuss scientific outcomes at a level for the layperson to understand but critical enough for peers. Typically, such training is developed through writing and editing scientific manuscripts, with input from a faculty advisor.
5. Deliver effective oral and written presentations of the results and conclusions of experimental work.
6. Be able to ask and answer questions within the research areas of Biochemistry.
7. Develop skills and abilities for effective teaching of Biochemistry in a course room setting.
8. Develop the skills and intellectual background to succeed at postdoctoral work in academics or in the commercial sector.
9. Demonstrate ethical conduct within the research process and the responsibilities of the scientist.