



NSCI 790: Neuroscience Laboratory Survey

Course Description: A survey of up to six research laboratories in the Program in Neuroscience.

Credit Hours: 3-3

Course Prerequisites: Must be a first-year student in good standing in the Program in Neuroscience and must be enrolled in NSCI 701.

Course Dates: Fall and Spring semesters

Course Times: N/A

Course Location: N/A

Instructor: Course Director - Dr. J. Javier Miguel-Hidalgo, Ph.D., room TR417, phone extension 45791, jmiguel-hidalgo@umc.edu. Laboratory Mentors are any active and funded research scientists in the Program in Neuroscience.

Required Text and Other Learning Resources:

-Each mentor will assign at least 3 publications from the laboratory and recommend additional publications or reviews as needed.

Course Overview: This course provides students with an opportunity to survey up to 6 active research laboratories in the Program in Neuroscience by providing them with a series of 5-week rotations of 15 hrs. per week. Students will observe and assist in ongoing projects in these laboratories as well as participating in any laboratory meetings, seminars, etc. In doing so, students learn about the different research interests, projects, techniques and research mentors in the Program in Neuroscience. This helps them make informed decisions in choosing a laboratory, mentor and project for later dissertation research.

COVID-19-related plans: As in any other activities in campus face masks will be required for students while in campus until further notice by the PIN. Activities in the laboratories of rotation mentors will follow the general guidelines of social distancing and wearing of facial coverings. Assignments of scientific article readings and discussions with mentors and other laboratory members are encouraged to take place whenever possible using available online tools such as Bigbluebutton which is provided by UMC within the Canvas learning online environment.

Course Objectives: Upon completion of this course, students will be able to:

1. Describe the biographies, projects and techniques used in up to six Program in Neuroscience laboratories.

2. Compare projects and techniques across laboratories.
3. Students will be able to judge the "fit" between them and each laboratory.

Grading Policy and Rubric. Grading is Pass/Fail and based on two assessments:

- 1). At the conclusion of each rotation, students will prepare a one-page research report (single spaced, font Arial 11). This report will summarize the major interests of the laboratory, and provide the background, hypotheses and methods of the projects observed during the rotation. These will be submitted to the course director who will grade the report as either completed or incomplete. If incomplete, the director will tell the student what information is needed and the student will revise and resubmit the report. If the student chooses to return to the same laboratory for an additional rotation the student will complete another report that focuses on describing in more detail the project(s) and/or technique(s) and that summarizes two additional papers from the laboratory related to the projects/techniques of interest. Successful completion of six reports is required to pass the course.
- 2). Grade assigned by the research mentor.

Course Policies: Students are expected to spend at least 15 hours per week in the rotation laboratory, except during weeks in which there is an examination in NSCI 701.

University Policies:

Students with disabilities (ADA) statement Refer to UMC policy
Academic honesty statement Refer to UMC and SGSHS policies