

Contract Sample
Office of Research-Basic Science
3 credit hour

Goals/Objectives

In order to learn more about laboratory research, the student will observe and practice several common immunohistochemistry techniques. The overarching goal, to gain laboratory experience, will be met by completing 96 hours in the laboratory.

Tasks for completing objectives (with timelines)

1. Attend Seahorse mini-workshop on 1/28/2014.
2. Quantify muscle fiber types in mouse model.
3. Observe cell culture techniques.
4. Use AxioVision software to take images of lectin-treated adipocytes pre- and post-exercise.
5. Use AxioVision software to quantify adipocytes/mm² and lectin / mm².
6. Catalogue the laboratory's inventory of primary antibodies using Excel.

Criteria, with percentages, for Assessment

- Attend Seahorse workshop. 90-100% = Attendance; 0% = Non-attendance.
- Complete 8 hours quantifying muscle fiber types in mouse model. 90-100 = Completion of 8 hours.
- Complete 15 hours observing cell culture techniques. 90-100% = Completion of 15 hours.
- Complete 25 hours imaging lectin-treated adipocytes. 90-100% = Completion of 25 hours.
- Complete 15 hours quantifying adipocytes/ mm² and lectin/ mm². 90-100% = Completion of 15 hours.
- Complete 11 hours cataloguing inventory. 90-100% = Completion of 11 hours.
- Complete 10 hours in software training. 90-100% = Completion of 10 hours.