

TSCI 5080 - Fall 2019
Integrating Molecular Biology with Clinical Research (Practicum)

Course Director:

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Course format:

This course will consist of two parts

- Meeting personally with Dr. Ghosh Choudhury to discuss the research experience of the student.
- Practicums in an investigator's research laboratory.

Laboratory Research for a minimum of 40 hours arranged with Dr.

During this 48-hour practicum degree candidates will be in the laboratory of a UTHSCSA investigator to learn and apply either basic or modifications of methods discussed to a basic/clinical research question. The research practicum will be arranged on an individual basis in consultation with Dr. Ghosh-Choudhury during the months of June and July. This 48 hours research is necessary to fulfill the requirement for this course. Dr. Ghosh-Choudhury will contact each student to discuss individual research interests and will try to find a laboratory for each to do some hands on research using different molecular biology techniques. If the students already have any identified interests, they should bring this to Dr. Ghosh-Choudhury's attention to see if arrangements can be made for that interest. Respond to Dr. Ghosh-Choudhury when he contacts you by email to schedule your practicum.

Expectations: After finishing the research component of this course, students are expected to write a one or two page summary of what they have actually done or what different techniques they have learned. As an alternative, if a student finds that it is difficult to perform the expected experimental research, the individual can contact Dr. Ghosh-Choudhury who will meet with them and determine an alternate activity. One possibility is to identify a topic of interest and write a short literature review on that topic.

Learning Objectives:

By the end of the course, students will be able to:

1. Define and appropriately use one or two common molecular biology/cell biology techniques.
2. Describe principles and perform the molecular techniques
3. Analyze the results of the designed experiments.
4. Communicate and discuss the results with the lab mentor.
5. Describe the technique and the results in a written presentation and submit to the course director.

Recommended textbooks: These are not required. However, the students are urged to discuss the principles of the techniques with the lab mentors.

Grading: This course is graded as Satisfactory / Unsatisfactory. In order to receive a satisfactory grade students are expected to complete the research component.

Recording of Learning Activities Policy: Recording of any activities in this course by any means, e.g., video, audio, etc., is not permitted unless approved by the instructor or required for compliance with the American with Disabilities Act (ADA).

Absence for Religious Observance: Students requesting an excused absence for religious holidays should follow the guidelines outlined in the UT Health Science Center Catalog.

Requests for Accommodations for Disabilities: Information on requesting accommodations for disabilities is available in the UTHSCSA Catalog. Students who wish to request accommodations for disabilities should meet with Dr. Pat Brewer, Assistant Dean for Students--SAHS, to complete a Student/Resident Request for Accommodations under the Americans with Disabilities Act form (Form ADA-100). The form and additional information may be obtained at <http://www.uthscsa.edu/eeo/request.html>

Scholastic Dishonesty: Scholastic dishonesty in any form will not be tolerated at this institution. See the Student Handbook for further philosophy and procedure details.

Email Policy: Every student is issued a University email address and account at the time when the student first enrolls. As a standing University Policy, only the students' University email address shall be used for any electronic institutional communications of an official nature.

Cell phones, pagers, etc.: Cell phones, pagers, etc. should be turned to vibrate during the learning activities. Internet surfing is rude and distracting to other students and presenters and should not be done during learning activities.

* The following website <http://www.biointeractive.org/> is an excellent site to experience a virtual PCR laboratory. Click on 'virtual labs' and then 'bacterial ID lab'. Other similar virtual labs are available at this site.