GS07 1092: Topics in Microbiology and Infectious Diseases
Tuesday/Thursday 9 – 10 AM (MMG Library – MSB 1.180)
Course Director: Ziyin Li (Ziyin.Li@uth.tmc.edu)

Instructors:
Kevin Morano
Michael Lorenz
Anne Marie Krachler
Samuel Shelburne
Terri Koehler

This course has two main objectives:

1. Critically evaluate literatures pertaining to a research topic and gain general understanding of the subject leading to formulation of a hypothesis (50% of grade)

   • For this component of the course, students will be assigned research articles to critically read and analyze. One student will be assigned to lead the discussion of each paper in detail in class. The discussion leader will be expected to introduce the background of the paper that will open the discussion but all the students are expected to be capable of discussing all parts of the paper. Topics covered will be:

<table>
<thead>
<tr>
<th>DATE</th>
<th>Assignment due</th>
<th>BLOCK</th>
<th>TOPIC</th>
<th>INSTRUCTOR</th>
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<tr>
<td>TUES 8/29/17</td>
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<td><strong>How to write a grant - I</strong></td>
<td>Koehler</td>
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<tr>
<td>THURS 8/31/17</td>
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<td><strong>How to write a grant - II</strong></td>
<td>Koehler</td>
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<tr>
<td>TUES 9/5/17</td>
<td>Block #1</td>
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<td><strong>Molecular parasitology</strong></td>
<td>Koehler</td>
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<td>THURS 9/7/17</td>
<td>Block #1</td>
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<td><strong>Molecular parasitology</strong></td>
<td>Koehler</td>
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<tr>
<td>TUES 9/12/17</td>
<td>Block #1</td>
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<td><strong>Molecular parasitology</strong></td>
<td>Koehler</td>
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<tr>
<td>THURS 9/14/17</td>
<td>Pick a research topic and an advisor</td>
<td>Block #2</td>
<td><strong>Molecular parasitology</strong></td>
<td>Li</td>
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<td></td>
<td>A draft of AIMS due</td>
<td>Block #3</td>
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<td>Shelburne</td>
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**TUES** 10/3/17 | Block #3 | Shelburne
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**THURS** 10/5/17 | **Student aims presentation** | 
**FRI** 10/6/17 | **Student aims presentation** | 
**THURS** 10/12/17 | Block #3 | Shelburne
**TUES** 10/17/17 | Block #3 | Shelburne
**THURS** 10/19/17 | Block #4 | Krachler
**TUES** 10/24/17 | Block #4 | Krachler
**THURS** 10/26/17 | Block #4 | Krachler
**TUES** 10/31/17 | Block #4 | Krachler
**THURS** 11/2/17 | Block #5 | Morano
**TUES** 11/7/17 | **Grant Due** | Morano
**THURS** 11/9/17 | Block #5 | Morano
**TUES** 11/14/17 | Block #5 | Morano
**THURS** 11/16/17 | **Critiques Back** | **How to respond to critiques** | Koehler
**TUES** 11/21/17 | **THANKSGIVING week** | 
**THURS** 11/23/17 | **THANKSGIVING week** | 
**TUES** 11/28/17 | Block #6 | Lorenz
**THURS** 11/30/17 | Block #6 | Lorenz
**TUES** 12/5/17 | Block #6 | Lorenz
**THURS** 12/7/17 | **Revised Grant Due** | Block #6 | Lorenz

*Note that no paper is assigned for the classes marked in bold. Students are expected to attend all of these classes including the aims presentation classes when you are not presenting.

2. Develop specific aims and relevant experimental designs to test the hypothesis. (50% of grade)
For this component of the course, students will first choose a research topic distinct from their own thesis topic along with a faculty member among the 6 faculty member involved in Topics course this year (Morano, Lorenz, Garsin, Krachler, Shelburne, and Li) who can serve as a mentor. During the semester, students will:

1) Write a draft of specific aims and present to faculty members for input
2) Revise the specific aims and write a 6-page minigrant in the format of NIH R21 or F31 grant proposal.
3) After review of the grants by the faculty members, students will submit revised grants based on the critiques along with one page introduction addressing the critiques directly.

Due dates for the Writing assignments:
Pick research topic and advisor: Sept 15th
AIM presentations: Oct 5th, Oct 10th
Grant Due: Nov 7th
Revision Due: Dec 7th