

EPID 805 – Clinical Research Skills III, Proposal Development

Fall Semester, 2016

Instructors: Bradley Gaynes (Director)
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TA: Melissa Stockton
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Time: 2:30 – 4:20; Friday

Place: Bondurant 2035

Website: <http://sakai.unc.edu> (You must have a UNC ONYEN account to access the website)

Objectives:

- 1) Develop skills in scientific thinking and writing, through a stepwise introduction to the research application writing process.
- 2) Develop core knowledge of clinical and epidemiologic study methods through practical application in research design.
- 3) Develop Specific Aims for a research application to be completed in EPID 806.

Description: The course comprises seminar/lecture sessions and small group sessions. The seminars are presented by a variety of faculty with expertise in the area being presented. Faculty members are asked to provide reading prior to the class. Most sessions are interactive. We strongly encourage students to participate actively.

Small group sessions are focused on scientific writing and thinking through the development of an original research grant application (see below). The small groups will actively review the work of their colleagues with guidance from a faculty member. Friday's small groups will focus on developing the specific aims for a research application.

Handouts: Handouts will be posted on the class website.

Reading: Reading will be posted to the website, and assigned from the course textbook (Hulley) or supplemental materials. Please make every effort to read the assigned readings prior to that class. The quality of seminar discussions will be enhanced substantially if all class members participate actively.

Attendance: Students are expected to attend nearly every session. Attendance at both seminar and small groups is required. For seminars, it is expected that students will display basic courtesy to the instructors by coming on time to class. Similarly, attendance at small groups is essential to ensure that all students have the maximal experience. The small groups are successful only with full participation. If you will be missing a small group, please inform the course director (Gaynes) and CC Melissa Stockton (mastockt@email.unc.edu) at least 2 weeks prior.

Proposal: A major focus of the course is the development of a 10-13 page (single spaced) research project proposal. This proposal may be a career development award (K-23, K08, foundation award), an NIH-style research grant (R-01, R-03, R-21, etc), or in some circumstances, a foundation-supported research grant. The minimum acceptable length of the proposal is 10 pages, unless a student is writing an R-03 or R-21 (6 pages). Proposal writing is an integral part of an academic career and students of all stages should be considering the development of a research proposal. Further, this extended exercise allows a unique and rigorous application of scientific thinking to an original question.

We encourage every participant to identify a funding mechanism that is an appropriate target for their project proposal. The goal is to have the proposal in a form that is nearly ready for

submission at the end of the academic year (completion of 806). The appropriate mechanism should be identified through discussions with your mentor and, to a lesser extent, your small group leader.

Students will commit to attending each small group and producing a *fully drafted* application over the course of the two semesters.

At the completion of the fall term, all students will be expected to have a near final draft of the specific aims of their proposal.

At the completion of the spring term, all students will be expected to have a near final draft of the full proposal.

We expect that all students will have a research mentor who will actively participate in the development of the research proposal. It is essential that the mentor provide feedback on the substantive aspects of the proposal. In addition, the mentor will be asked to provide at least one review of another student's proposal during the school year.

During the course of the year, students will provide critique of other students' proposals. This process is an important learning experience. The review of other proposals will improve your own proposal. We expect everyone to put time and effort into these reviews. It is unfair to your colleagues to provide half-hearted critiques. At times, you will be asked to review proposals that are not in your area of expertise. That is expected in a class of this nature. Simply do your best. We expect all proposals to be written at a level that an intelligent, educated clinical researcher can understand – and you are that intelligent, educated researcher.

Grades: Students will be evaluated based on the following criteria:

- a) Completion and quality of specific aims (EPID 805) or entire research proposal (EPID 806 – 50%)
- b) Completeness and quality of reviews of other students' proposals (30%)
- c) Class participation and completion of assignments (10%)
- d) Class attendance (10%)

Evaluations: Please complete the evaluations at the end of the courses. These evaluations provide us with critical information to improve the course in future years.