CTSC 5010  
Clinical Research Protocol Development

**Faculty:** Jon O. Ebbert, M.D.  
**Credits:** 2  
**Quarters:** Fall & Spring  
**Prerequisites:** CTSC 5300, 5310 and 5600

*This course is limited to CTS students (and T32 trainees with faculty approval) only and is required for the CTS Postdoctoral Master’s Degree, Postdoctoral Diploma, and Predoctoral programs.*

**Overview**  
The goal of this course is to systematically teach the process by which one takes a conceptual idea for a clinical research project and converts it into a research proposal or grant application. Students will use their own research question to build a proposal for a research project that can be conducted in the future. By the end of the course, students will have a research proposal that could be refined to serve as their certificate research project, their master’s thesis, and/or as an application for intra-mural or extra-mural research funding.

**Objectives**  
- To understand the key elements of clinical research design, such as articulation of testable hypotheses and specific aims, selection of study subjects, measurement techniques, analytic approaches, sample size and power will be reinforced throughout the course  
- To expertly conduct and respond to peer reviews of research proposals  
- To develop a well-written proposal for an original, important, valid, ethical, feasible clinical research project.

**Evaluation**  
This course will evaluate students on class participation, a research proposal, a written peer review and a peer review response. At the end of the course, students will submit a final research proposal.

Students will be expected to spend approximately four to six hours per week on content from this 2-credit course.

Additional online modules related to this topic are available through the [Continuous Professional Development website](#).

For specific dates and times this course is provided, please see the [quarterly detailed course schedule](#).