Introduction to Clinical Research
Welcome to the Introduction to Clinical Research Rotation

This is a 2 week PGY I rotation to gain knowledge and understanding of general research guidelines and protection of human subjects. Additional research training takes place longitudinally throughout all 3 years. PGY II and PGY III residents’ requirements directly follow the specific 2 week rotation. Longitudinal requirements include the preparation and presentation of a scientific research abstract and clinical vignette and poster presentation, and/or case-report suitable for publication. All Medicine residents participate in the annual research seminar, monthly Journal Club activities, and are strongly encouraged to collaborate with faculty on research projects currently in progress.

Goals:

- Introduce selected aspects of clinical and bio-medical research, including general research guidelines and protection of human subjects.
- Promote new research skills and knowledge, and an attitude of scholarly critique and inquiry through self-directed learning.

Required Activities (Please refer to calendar as well):

- Attend all lectures scheduled
- Complete rounds with Adult Medicine/Critical Care to identify potential questions for activities below
- Plan a theoretical clinical research study (group activity)
  - Develop a clinical research question based on your experiences and gaps in the literature; use examples from quality improvement, systems based practice, the application of evidence based medicine, etc
  - Develop a plan of study and a brief proposal. Include necessary components such as the Introduction/Need for study with literature review, research methods, proposed analysis and future directions
  - Integrate the research plan into an UIUC IRB proposal
  - Receive feedback and resubmit the proposal
- Develop a scholarly abstract and presentation (individual)
  - Develop a clinical question of interest that research has been completed on; obtain the question from adult medicine or critical rounds
  - Complete a thorough literature review
  - Compile the question, literature review and other pertinent details into an abstract of journal quality
  - Create an oral presentation of approximately 10 minutes on the subject for core conference
  - Review and receive peer/faculty feedback
- Critical Appraisal (Group and individual)
  - Select 2 new article of interest to the group from a major peer reviewed journal
  - Complete a process of critical appraisal and submit a summary
  - Be able to extract relevant methods, describe statistics, analysis as well
Abstract and Presentation Guidelines

- This is an individual activity
- Develop a clinical question of interest that research has been completed on; obtain the question from adult medicine or critical rounds (Deadline for question to be emailed to Smita: **October 23, 2008**)
  - Start rounds with critical care or adult medicine from Tuesday **October 21, 2008**
  - Pay attention to questions asked by the attending or interesting cases
    - It would be great to offer to research a question or teaching point an attending asks of the group; if such an opportunity arises, offer to research the topic
  - Compile a list of potential topics and choose one that is feasible, interesting and relevant; remember this will be presented at Thursday’s conference
  - Previous topics include new guidelines, evidence based medicine, evaluation of drug therapies and case studies
  - Remember, the topic is not the feature; the abstract and presentation preparation mean more
- Complete a thorough literature review (Deadline for literature review: **October 23, 2008**)
  - Use library session skills
  - Collect reputable references
  - Don’t have too many references; 3-6 should be plenty
- Compile the question, literature review and other pertinent details into an abstract of journal quality
  - Follow usual format
    - For review abstract: Introduction, methods, review, discussion
    - For case: Introduction, case presentation, discussion
    - Make sure you include a title, your name, affiliation and references in proper format
  - Submit draft to Smita; Smita and Dr. Kirby will review and give feedback (Deadline for abstract draft to be emailed to Smita: **October 24, 2008**)
  - Submit final abstract (Deadline for abstract final to be emailed to Smita: **October 27, 2008**)
- Create an oral presentation of approximately 10 minutes on the subject for core conference
Use skills from presentations/powerpoint lectures
Compile 10-20 slides; use abstract as a guide
Submit a draft (Deadline for presentation draft to be emailed to Smita: October 27, 2008)
Practice presentation with Smita (Date TBA)
Submit Final (Deadline for presentation final to be emailed to Smita: October 29, 2008)
Present at conference October 30, 2008
Receive feedback and evaluations at conference
Review and receive peer/faculty feedback
Review video and presentation with Smita TBA
Plan a Theoretical Clinical Research Study

- This is a group activity
- Develop a clinical research question based on your experiences and gaps in the literature; use examples from quality improvement, systems based practice, the application of evidence based medicine, etc
  - Think small and simple
  - Ie Quality Improvement projects
  - Ie testing two therapies
  - Ie Staff satisfaction surveys
  - Can involve patients or staff or students or community
- Develop a plan of study and a brief proposal. Include necessary components such as the Introduction/Need for study with literature review, research methods, proposed analysis and future directions
  - Integrate the research plan into an UIUC IRB proposal (Deadline for draft to be emailed to Smita: October 27, 2008)
  - http://www.irb.uiuc.edu/ for forms and reference
- Receive feedback and resubmit the proposal (Deadline for final to be emailed to Smita: October 31, 2007)
Critical Appraisal

- As a group, choose two recent articles from two major journals in internal medicine
- Complete critical appraisal with the following sections (Critical Appraisal Due Date: October 23, 2008)
  - You introductory paragraph (narrative on critical appraisals and why we should do them)
  - Cover each section of the lecture attached for one article, and then the other: Introduction, Methods, Results, Discussion, Conclusion, Other review points
    - Use bullet points
    - Describe what is presented and your evaluation of it
  - Your concluding remarks (paragraph on what you got out of the critical appraisal)
- Discuss critical appraisal with one another (Date TBA, Week 2)