

Curriculum on Research Danbury Hospital Internal Medicine Residency Program

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A. Educational Purpose and Goals

The research program is designed to provide each resident with an independent project that is an integral part of the teaching program. We hope to stimulate an environment of investigation and intellectual curiosity that goes beyond the mundane aspects of residency training. The clinical demands on our house staff are of primary concern and this curriculum is meant to be stepwise, providing a graded experience with ultimate presentation of a final project that is both institutional and societal. The residents will present their completed projects in a forum that will recognize their accomplishments and further patient care.

PGY1 year

Meet with the research faculty early to begin the process of *developing a research question and a study plan*. It is recommended that you work in teams with fellow residents. Meet with the library staff to learn how to *conduct a literature search*. Complete module 1 in the Research Methods Seminar offered by the Medical Education and Research Department lecture series to help you start and develop your research project. In the second half of the year we will meet on a monthly basis to discuss your research project.

Calendar

Sept/Oct: Drs. Petrini and Messina will set up a meeting with you to provide an overview. You will need to meet with Amanda Pomeroy to learn how to conduct a literature search
Oct-Dec: Complete the research methods seminar series designated as module 1
Jan: Begin to formulate your research project. We will meet on a monthly basis to discuss your projects
Feb: Faculty/resident session for research project review and discussion
May: Belsky Day Research Forum

*In the second half of your first year you will begin your ambulatory medicine elective. You are given a half day free to work on your research project.

PGY2 year

Continue your research efforts during your PGY2 year. Meet with Dr. Petrini and make sure you have IRB approval for your project. You will be asked to present your project ideas during our monthly research forum. This will be informal process to allow for open discussion to help you with your project. Make preparations for Belsky Day and the ACP as well.

Calendar.

*Clinic triage rotation: Half-day sessions for research time

- Sep: Abstracts due for the ACP meeting in Oct/Nov
Faculty/resident preparation session for ACP presentations
- Dec: Complete Research Methods Seminar module 2
- Jan: Begin meeting on a monthly basis to discuss your projects
- Feb: research outline/manuscript due for review with Drs. Petrini and Messina
- Mar: abstracts due for Research Day (Belsky Day)
- Apr: faculty/resident preparation session for Research day presentations
- May: Belsky Day Research Forum

PGY3 year

Continue the process of completion of your project for publication obtaining needed support from DHS faculty and external resources. Presentation at a National meeting approved by the Program Directors is strongly encouraged. Submit your final manuscript as a requirement for graduation. We will have a Spring Awards dinner for the best research project.

A. Teaching Methods

1. Learning to conduct literature searches
2. Yale faculty sponsored research course
3. Meetings with the research faculty to assist you with your project
4. Quarterly resident-faculty research forum
5. Annual Belsky Day Research Forum
6. National/Local Meetings of Interest

B. Educational Content

- a. Mix of Diseases: a variety of commonly encountered Internal Medicine problems, focusing on those problems with diagnostic or therapeutic aspects that warrant further investigation
- b. Patient characteristics: the usual mix of patients admitted to the medical service at Danbury Hospital or seen in the various outpatient experiences
- c. Types of clinical encounters: refer to the core competency curriculum
- d. Procedures and services: none
- e. Reading lists, other educational resources: see the specific assignments on the library website, additional references will be provided at our journal club and faculty research forum.

C. Method of Evaluation of Resident Competence

- a. Resident and Faculty Performance: residents will be asked to evaluate the elective experiences and course materials as well as the statistical consultations. Resident performance including submission of completed course material will be evaluated on E-Value.

D. Rotation Specific Competency Objectives

Please refer to the Core Curriculum for the expected General Medicine Curriculum core competency objectives and graded responsibilities.

- a. Patient Care
 - This exercise does not require a direct patient care component other than potential surveys or interviews.
 - Residents should become well versed in HIPPA rules.
 - Become familiar with the principles of the Danbury Hospital IRB process and its direct implication to patient care issues.
- b. Medical Knowledge
 - Residents should become proficient in basic statistical terms, research design and ability to critique the literature.
- c. Interpersonal and Communication Skills
 - Residents must demonstrate interpersonal and communication skills that result in the effective exchange of information for research purposes with patients, their families and professional associates.
 - Communicate effectively with patients and families across a broad range of socioeconomic and cultural backgrounds
 - Communicate effectively with physicians, other health professionals, and health related agencies

d. Professionalism

- Residents must demonstrate a commitment to carrying out professional responsibilities and an adherence to ethical principles.
- Compassion, integrity, and respect for others
- Responsiveness to patient needs that supersedes self-interest
- Interact with patients, their family, and colleagues in a compassionate, professional and respectful manner

e. Practice Based Learning

- Resident must demonstrate the ability to investigate and evaluate their care of patients, to appraise and assimilate scientific evidence and to continuously improve patient care based on constant self-evaluation and life-long learning.
- Identify strengths, deficiencies and limits in one's knowledge and expertise in epidemiology and statistical terms.
- Locate, appraise and assimilate evidence from scientific studies related to their patient's health problems
- Seek out and use the medical literature appropriately for patient care

f. Systems Based Practice

- Residents should use their research experience to broaden their horizons and "think out of the box" when it comes to situations that require a novel approach.
- Residents should use the research curriculum to enhance their awareness of and responsiveness to the larger context and system of health care
- Residents should be able to effectively call on other resources in the library system to provide optimal health care.
- Incorporate considerations of cost awareness and risk-benefit analysis in patient care after reviewing the literature in situations involving evidence based care principles
- Meet with other research professionals during scientific presentations to foster an environment of discovery with the goal of improved patient care