

GASTROENTEROLOGY FELLOWSHIP
RESEARCH ROTATION
GOALS AND OBJECTIVES
University of Toledo

Educational Purpose:

	<ul style="list-style-type: none"> The fellow will apply diagnostic and screening procedures to properly care patients participating in clinical research
Medical Knowledge	<ul style="list-style-type: none"> Attend core conferences and teaching rounds to learn the pathophysiology, epidemiology, disease management and procedure and medicine management skills for common and uncommon inpatient gastrointestinal diseases and related basic science, translational and clinical research. Accumulate and begin to solve the issues that he/she encounters from other trainees, attendings and related medical professionals. Begin to apply problem solving skills to research project analysis. Develop a commitment to inquisitiveness and novel thinking related to research investigations. While this objective is arguably innate and can be least affected by training, it is critical for success in independent investigations.
Practice-Based Learning and Improvement	<ul style="list-style-type: none"> Become familiar with the concepts of quality improvement. Participate in conferences such as the GI Research conference Begin to review, analyze and utilize scientific evidence from the gastrointestinal literature related to the fellow's research explorations and actual project.
Interpersonal and Communication Skills	<p>(if patient or human subject interactions are needed for Year I research project)</p> <ul style="list-style-type: none"> Interview patients and family members accurately, patiently and compassionately and present information in an understandable manner. Practice appropriate informed consent procedures. Ensure appropriate patient confidentiality measures. Plan patient and family conferences as needed. Communicate effectively with research mentor, research staff, administrative staff, peers, attending gastroenterologists, referring physicians and consultants as needed. Ensure reporting honesty and authorship fairness throughout research activities.
Professionalism	<ul style="list-style-type: none"> Learn to understand and demonstrate professional behavior in daily activities. Participate in professionalism based learning activities through conferences. Learn to interact collegially with his/her peer group and other healthcare professionals. Learn about and begin to practice appropriate research organizational skills including background study, hypothesis formulation, study design, statistics, data management and data interpretation. Learn to practice ethical principles with relation to medical research. Important ethical issues include confidentiality, informed consent, data safety, ownership and responsibility, reporting honestly, and authorship fairness. Learn to practice appropriate interactions with pharmaceut.

SystemsBased Practice	<ul style="list-style-type: none"> • Attend conferences concerning internal system research practices, research practices elsewhere, Internal Review Board (IRB) policies, and similar programs. • Achieve basic understanding of healthcare systems related to gastroenterology and hepatology research, related translational gastroenterology care and overall system activities. • Learn proper documentation skills to practice effective research activities. • Utilize an appropriate range of healthcare professionals to explore research opportunities. • Begin involvement to understand the standard operating procedures and quality improvement initiatives within the hospital. • Attend national gastroenterology conferences (e.g., ACG).
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Second Year Fellow

Goal: The primary research rotation blocks occur in Year I. The fellow will formulate a testable hypothesis, propose a study design and complete most of his/her investigations during Year II, and will concentrating on data acquisition and management. An understanding of statistical analysis should be achieved. Prior to their research rotation, Year II fellows will meet with the fellowship program director to ensure reasonable research goals, and Year II fellows are also expected to present their research plans at the GI Research conference. The fellow will work closely with his/her research mentor to ensure appropriate research ethics including patient privacy, complete actual research activities and begin abstract or publications.

Second Year Fellow

<p>Skills</p>	<p>compassionately and present information in an understandable manner.</p> <ul style="list-style-type: none"> • Practice appropriate informed consent procedures. • Ensure appropriate patient confidentiality measures. • Plan patient and family conferences as needed. • Communicate effectively with research mentor, research staff, administrative staff, peers, attending gastroenterologists, referring physicians and other consultants as needed. Ensure reporting honesty and authorship fairness throughout research activities. • Learn to become a teacher of gastroenterology research to junior trainees, medical students and other healthcare professionals.
<p>Professionalism</p>	<ul style="list-style-type: none"> • Begin to mentor medical students, other trainees and Year I fellows in professional conduct. • Understand and demonstrate professional behavior in daily activities. • Participate in professionalism-based learning activities through conferences. • Interact collegially with his/her peer group and other healthcare professionals, including acting responsibly in the larger context of pursuing programmatic and research successes. • Practice appropriate research organizational skills including background study, hypothesis formulation, study design, statistics, data management and data interpretation. Present research plans and data-research outcomes to peers through presentations and, as relevant, in publications. • Continue to attend to the ethical principles activities and commitment achieved in Year I. Important ethical issues include confidentiality, informed consent, data safety, ownership and responsibility, reporting honestly, and authorship fairness. • Practice interactions with pharmaceutical representatives and be unbiased in research investigations. • Interact appropriately and present all needed document to the system's Internal Review Board (IRB). • Practice sensitivity to cultural, age, gender and disability issues. • Crosscover colleagues' services when needed and conduct this coverage carefully with appropriate feedback to responsible colleagues. • Participate in program planning, including annual Faculty Meeting attendance, Fellow Curriculum Committee participation and Program Director meetings, when requested.
<p>SystemsBased Practice</p>	<ul style="list-style-type: none"> • Attend conferences concerning all aspects of research investigation and discovery as well as healthcare system patient management and components of systems of healthcare. • Understand and practice proper research organization and evaluation. • Assist other trainees in the utilization of appropriate research resources. • Model appropriate interactions in multidisciplinary planning, including standard operating procedures and quality improvement initiatives. • Attend national gastroenterology or hepatology conferences (e.g., DDW or AASLD).

Third Year Fellow:

Goal:

The senior level, Year III fellow should demonstrate comprehensive understanding of their area of study, study design, data acquisition and analysis. In addition, they are expected to prepare a manuscript based on their work for publication in a peer-reviewed journal. Year III fellows typically use the rotations to finalizing their research projects and writing about their research outcomes. The development of abstract and/or publication submissions of the fellows' research project should occur early during Year III. In cases where the Year III fellows has established themselves in research and has made strides toward a career as an independent researcher, this fellow could mentor a Year I fellow in conjunction with a faculty researcher. Fellows are required to present or publish their research before graduation. Year III fellows are expected to present their research outcomes and plans for project outcome submissions in national publications at the research conference.

Patient Care	Third Year Fellow <ul style="list-style-type: none">With the help of the research mentor, the resident will hone skills in identifying an understanding of clinical research histories and exams needed to evaluate patients participating in a clinical research.
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Professionalism

- Ensure reporting honesty and authorship fairness throughout research activities.
- Learn to become a teacher of gastroenterology research to junior trainees, medical students and other healthcare professionals.
- Demonstrate proficiency in Year II objectives.
- Mentor medical students, other trainees and Year I fellows in professional research conduct.
- Make a commitment to finalize the research project early in Year III, so that appropriate writing and application submissions may be made for research publications and national gastroenterology and hepatology meetings.
- Write about research project outcomes and work with research mentor to submit project documentation, abstracts and/or articles to national meetings and peer reviewed journal reviewers.
- Consider the multidisciplinary implications of the fellow's research project. the res

communicate with his/her research mentor and with all relevant research staff and collaborators related to all investigative studies.

Research Format and Expectations:

The Gastroenterology Fellowship Program is committed to a rigorous, challenging and rewarding research experience for its fellows. While most research skills may be taught and/or mentored, some critical components of research investigations related to investigator eagerness, commitment and novel thinking are instinctive and may only be encouraged and mentored via high quality teaching. Research faculty, therefore, maintain strong and valuable commitments to fellow research productivity and are committed to developing fellows' career goals related to a research/academic career. The GI Research Rotation incorporates the following targeting research training.

Goals:

- A commitment to research ethics including issues related to confidentiality, informed consent, data safety, ownership and responsibility, reporting honestly and authorship fairness.
- A commitment to the thorough and thoughtful review of relevant gastroenterology and hepatology literature, including identifying, reading and understanding this literature.
- A commitment to appropriate data acquisition and management both in the lab and among potential subjects.
- A commitment to inquisitiveness and novel thinking. This is an innate ability perhaps least affected by

