### **Division of Gastroenterology, Hepatology and Nutrition**

## Curriculum Jewish Hospital

### Goals:

- 1. Consultative and management prevalence in hepatology, pre- and post-liver transplantation.
- 2. Offer diagnostic and therapeutic procedure experience.

### Learning Objectives:

Patient care: Patient care is accomplished via patient contact, hospital and ambulatory care, attending rounds, presentations at divisional conferences/lectures,, and evaluations from peers, faculty, nurses, residents, and patients. Most patients have end-stage liver disease, admitted via the emergency service with urgent gastrointestinal problems including gastrointestinal bleeding, liver failure, abdominal pain, and trauma. Clinical encounters include patients admitted with acute and emergent gastrointestinal disorders, as well as patients admitted electively (or transferred from outlying hospitals semi-electively) for an in-hospital diagnostic and therapeutic intervention. Fellows will demonstrate compassionate, appropriate, and effective patient care with competence in completing gastroenterology, hepatology and nutrition history and physical examinations, obtain and interpret laboratory data, and understand indications for referrals. Fellows will manage gastroenterology, hepatology and nutrition care of patients with GI disorders, infections, bleeding, liver diseases, swallowing disorders, and management of patients under surgical care with gastrointestinal disorders. Fellows will demonstrate skills in endoscopic procedures such as EGD, dilation, flexible sigmoidoscopies, colonoscopy (with/without polypectomy), liver biopsy, PEG, enteral intubation, and nonvariceal/variceal hemostasis utilizing conscious sedation, including choice of drugs, dosage, and adjustment based on clinical situation. Fellows keep a log of all procedures performed which is placed in their academic portfolio and is reviewed annually with the Program Director. This information is also used at the end of their three-year training to assist in confirming that the minimum number of procedures has been performed, competency has been achieved, and the fellow can practice independently.

PGY-5 will demonstrate above as well as have in-depth knowledge of liver diseases and further knowledge in management of gastrointestinal/liver disorders. They will demonstrate proficiency in procedures to include liver biopsy, paracentesis, and esophageal variceal sclerotherapy/banding. Frequently, individuals awaiting transplantation are in the intensive care unit and require very close follow-up and monitoring. Fellows will have ability to perform emergency procedures for gastrointestinal hemorrhage including esophageal variceal banding, heater probe and hemoclip application.

PGY-6 will demonstrate above as well as have further in-depth knowledge of gastrointestinal disease and treatment, further skill in endoscopic diagnostic/therapeutic techniques, including ERCP.

**Medical knowledge:** Medical knowledge is accomplished via hospital and ambulatory patient care, attending rounds, presentations at divisional conferences/lectures,, and evaluations. Fellows will acquire knowledge of epidemiology, etiology, pathophysiology, risk factors, clinical manifestations, exam/diagnostic findings, and appropriate management of GI disorders, infections, bleeding, liver diseases, swallowing disorders, and management of patients under surgical care with gastrointestinal disorders. Fellows will identify the patient problem and formulate a prioritized differential diagnosis, and appropriate initial diagnostic/therapeutic plan. Read about each patient encounter in a general medicine or subspecialty text, or applicable AGA or AASLD guidelines.

PGY-5 fellows will demonstrate above as well as progression in knowledge and analytical thinking, formulate a plan based on current scientific evidence, and anticipate/minimize adverse consequences of the therapeutic plan.

PGY-6 fellows will demonstrate all of the above as well as regularly show self-initiative to stay current with new medical knowledge.

**Practice Based Learning and Improvement:** Practice based learning and improvement is accomplished via hospital and ambulatory patient care, attending rounds, presentations at divisional conferences/lectures, and attending evaluations. Fellows will utilize available resources to make timely and appropriate diagnostic and management decisions, emphasize use of evidence-based medicine, and seek formative feedback, and use it to improve performance. Fellows will demonstrate self-motivation to acquire knowledge, familiarize self with applicable evidence-based guidelines, and locate scientific literature to support decision-making.

PGY-5 fellows should demonstrate above as well as knowledge of impact of study design on validity or applicability to individual patient situations.

PGY-6 fellows should demonstrate above as well as model independent learning and identify knowledge deficits and work to remedy them.

Interpersonal and Communication Skills: Interpersonal and communication skills are accomplished via hospital and ambulatory patient care, attending rounds, presentations at divisional conferences/lectures,, and evaluations Fellows should demonstrate interpersonal/communication skills resulting in an effective exchange of information/collaboration with

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patients, their families, and health professionals. Medical information will be legible, complete and timely and will identify questions and wishes of the physician requesting the consultation.

PGY 5 and PGY-6 fellows will demonstrate above as well as facilitate education of other health care professionals.

**Professionalism:** Professionalism is accomplished via hospital and ambulatory patient care, attending rounds, presentations at divisional conferences/lectures,, and evaluations Fellows will demonstrate respect and compassion in interactions with colleagues, patients, and their families, including sensitivity and responsiveness to their race, gender, age, and other defining characteristics, uphold patient confidentiality and informed consent, and recognize/ admit mistakes and notify the attending, and (when appropriate, with guidance from the attending) the patient when mistakes are found.

PGY-5 fellows will demonstrate above as well as effectively coordinate care with other health care professionals and guide patients through the complex health care system, if needed.

PGY-6 fellows will demonstrate above as well as knowledge of methods to control health care costs while preserving high quality care.

**Systems-Based Practice**: Systems-based practice is accomplished via hospital and ambulatory patient care, attending rounds, presentations at divisional conferences/lectures,, and evaluations Fellows will become familiar with the practice of inpatient and outpatient gastroenterology, access/utilize necessary resources within these systems to provide optimal patient care, including EBM and cost conscious strategies, learn to work with health team members to develop new strategies to improve systematic processes of care when deficiencies are found.

PGY-5 fellows will demonstrate above as well as effectively coordinate care with other health care professionals and guide patients through the complex health care system, if needed.

PGY-6 fellows will demonstrate above as well as knowledge of methods to control health care costs while preserving high quality care.

Required Reading: Applicable guidelines are available at <u>www.louisville.edu/medschool/gimedicine</u>

Suggested Reading: Rigas B, Spiro H, Clinical Gastroenterology, Sleisenger MH, Fordtran JS, <u>Gastrointestinal and Liver</u> Disease: Pathophysiology, Diagnosis, Management; Zakim D, Boyer TD, <u>Hepatology: A Textbook of Liver Diseases</u>; *Up to Date* online.

**Expectations:** Punctuality/attendance for all patient care activities and educational lectures. Notify the Chief Fellow if an emergency arises, requiring absence or tardiness so that coverage can be arranged. Discharge summaries completed within 24 hours of discharge. Attending and fellow evaluations are to be completed via New Innovations. Attending should meet with fellow mid-month to give necessary feedback and suggestions for improvement. Procedure logs are entered into New Innovations

### **Division of Gastroenterology, Hepatology and Nutrition**

## Curriculum Norton Hospital

#### Goals:

1. Expand knowledge base and management skills of consultative patient care in gastrointestinal/liver diseases.

2. Expand diagnostic/therapeutic experience in endoscopic procedures.

#### Learning Objectives:

**Patient care:** Patient care is accomplished via patient contact, hospital and ambulatory care, attending rounds, presentations at divisional conferences/lectures,, and evaluations from peers, faculty, nurses, residents, and patients. Fellows will demonstrate compassionate, appropriate, and effective patient care with competence in completing gastroenterology, hepatology and nutrition history and physical examinations, obtain and interpret laboratory data, and understand indications for referrals. Fellows will manage gastroenterology, hepatology and nutrition care of patients with GI disorders, infections, bleeding, liver diseases, swallowing disorders, and management of patients under surgical care with gastrointestinal disorders. Fellows will demonstrate skills in endoscopic procedures such as EGD, dilation, flexible sigmoidoscopies, colonoscopy (with/without polypectomy), liver biopsy, PEG, enteral intubation, and nonvariceal/variceal hemostasis utilizing conscious sedation, including choice of drugs, dosage, and adjustment based on clinical situation. Fellows keep a log of all procedures performed which is placed in their academic portfolio and is reviewed annually with the Program Director. This information is also used at the end of their three-year training to assist in confirming that the minimum number of procedures has been performed, competency has been achieved, and the fellow can practice independently.

PGY-5 will demonstrate above as well as in-depth knowledge of gastrointestinal disorders and further knowledge in management of complicated gastroenterology, hepatology and nutrition disorders. Fellows will demonstrate ability outlined above, as well as emergency procedures for gastrointestinal hemorrhage, including esophageal variceal banding, heater probe and hemoclip application.

PGY-6 will demonstrate above as well as further in-depth knowledge of gastrointestinal/hepatology diseases and treatment, skill in endoscopic diagnostic and therapeutic techniques, including ERCP, endoscopic ultrasound, capsule endoscopy, and esophageal motility.

**Medical Knowledge:** Medical knowledge is accomplished via hospital and ambulatory patient care, attending rounds, presentations at divisional conferences/lectures,, and evaluations. Fellows will acquire knowledge of epidemiology, etiology, pathophysiology, risk factors, clinical manifestations, exam/diagnostic findings, and appropriate management of GI disorders, infections, bleeding, liver diseases, swallowing disorders, and management of patients under surgical care with gastrointestinal disorders. Fellows will identify the patient problem and formulate a prioritized differential diagnosis, and appropriate initial diagnostic/therapeutic plan. Read about each patient encounter in a general medicine or subspecialty text, or applicable AGA or AASLD guidelines.

PGY-5 fellows will demonstrate above as well as progression in knowledge and analytical thinking, formulate a plan based on current scientific evidence, and anticipate/minimize adverse consequences of the therapeutic plan.

PGY-6 fellows will demonstrate all of the above as well as regularly show self-initiative to stay current with new medical knowledge.

**Practice Based Learning and Improvement:** Practice based learning and improvement is accomplished via hospital and ambulatory patient care, attending rounds, presentations at divisional conferences/lectures,, and attending evaluations. Fellows will utilize available resources to make timely and appropriate diagnostic and management decisions, emphasize use of evidence-based medicine, and seek formative feedback, and use it to improve performance. Fellows will demonstrate self-motivation to acquire knowledge, familiarize self with applicable evidence-based guidelines (see link to U of L GI homepage listed under resources), and locate scientific literature to support decision-making.

PGY-5 fellows should demonstrate above as well as knowledge of impact of study design on validity or applicability to individual patient situations.

PGY-6 fellows should demonstrate above as well as model independent learning and identify knowledge deficits and work to remedy them.

**Interpersonal and Communication Skills:** Interpersonal and communication skills are accomplished via hospital and ambulatory patient care, attending rounds, presentations at divisional conferences/lectures,, and evaluations Fellows should demonstrate interpersonal/communication skills resulting in an effective exchange of information/collaboration with patients, their families, and health professionals. Medical information will be legible, complete and timely and will identify

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questions and wishes of the physician requesting the consultation.

PGY 5 and PGY-6 fellows will demonstrate above as well as facilitate education of other health care professionals.

**Professionalism:** Professionalism is accomplished via hospital and ambulatory patient care, attending rounds, presentations at divisional conferences/lectures,, and evaluations Fellows will demonstrate respect and compassion in interactions with colleagues, patients, and their families, including sensitivity and responsiveness to their race, gender, age, and other defining characteristics, uphold patient confidentiality and informed consent, and recognize/ admit mistakes and notify the attending, and (when appropriate, with guidance from the attending) the patient when mistakes are found.

PGY-5 fellows will demonstrate above as well as effectively coordinate care with other health care professionals and guide patients through the complex health care system, if needed.

PGY-6 fellows will demonstrate above as well as knowledge of methods to control health care costs while preserving high quality care.

**Systems-Based Practice**: Systems-based practice is accomplished via hospital and ambulatory patient care, attending rounds, presentations at divisional conferences/lectures,, and evaluations Fellows will become familiar with the practice of inpatient and outpatient gastroenterology, access/utilize necessary resources within these systems to provide optimal patient care, including EBM and cost conscious strategies, learn to work with health team members to develop new strategies to improve systematic processes of care when deficiencies are found.

PGY-5 fellows will demonstrate above as well as effectively coordinate care with other health care professionals and guide patients through the complex health care system, if needed.

PGY-6 fellows will demonstrate above as well as knowledge of methods to control health care costs while preserving high quality care.

**<u>Required Reading:</u>** Applicable guidelines are available at <u>www.louisville.edu/medschool/gimedicine</u>

Suggested Reading: Rigas B, Spiro H, Clinical Gastroenterology, Sleisenger MH, Fordtran JS, Gastrointestinal and Liver Disease: Pathophysiology, Diagnosis, Management; Zakim D, Boyer TD, Hepatology: A Textbook of Liver Diseases; Up to Date online.

**Expectations:** Punctuality/attendance for all patient care activities and educational lectures. Notify the Chief Fellow if an emergency arises, requiring absence or tardiness so that coverage can be arranged. Discharge summaries completed within 24 hours of discharge. Attending and fellow evaluations are to be completed via New Innovations. Attending should meet with fellow mid-month to give necessary feedback and suggestions for improvement. Procedure logs are entered into New Innovations

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## Curriculum University of Louisville Hospital (ULH)

### Goals:

1. Expand knowledge base and management skills of consultative patient care in gastrointestinal/liver diseases.

2. Expand diagnostic/therapeutic experience in endoscopic procedures.

### Learning Objectives:

**Patient care:** Patient care is accomplished via patient contact, hospital and ambulatory care, attending rounds, presentations at divisional conferences/lectures,, and evaluations from peers, faculty, nurses, residents, and patients. Fellows will demonstrate compassionate, appropriate, and effective patient care with competence in completing gastroenterology, hepatology and nutrition history and physical examinations, obtain and interpret laboratory data, and understand indications for referrals. Fellows will manage gastroenterology, hepatology and nutrition care of patients with GI disorders, infections, bleeding, liver diseases, swallowing disorders, and management of patients under surgical care with gastrointestinal disorders. Fellows will demonstrate skills in endoscopic procedures such as EGD, dilation, flexible sigmoidoscopies, colonoscopy (with/without polypectomy), liver biopsy, PEG, enteral intubation, and nonvariceal/variceal hemostasis utilizing conscious sedation, including choice of drugs, dosage, and adjustment based on clinical situation. Fellows keep a log of all procedures performed which is placed in their academic portfolio and is reviewed annually with the Program Director. This information is also used at the end of their three-year training to assist in confirming that the minimum number of procedures has been performed, competency has been achieved, and the fellow can practice independently.

PGY-5 will demonstrate above as well as in-depth knowledge of gastrointestinal disorders and further knowledge in management of complicated gastroenterology, hepatology and nutrition disorders. Fellows will demonstrate ability outlined above, as well as emergency procedures for gastrointestinal hemorrhage, including esophageal variceal banding, heater probe and hemoclip application.

PGY-6 will demonstrate above as well as further in-depth knowledge of gastrointestinal/hepatology diseases and treatment, skill in endoscopic diagnostic and therapeutic techniques, including ERCP, endoscopic ultrasound, capsule endoscopy, and esophageal motility.

**Medical Knowledge:** Medical knowledge is accomplished via hospital and ambulatory patient care, attending rounds, presentations at divisional conferences/lectures,, and evaluations. Fellows will acquire knowledge of epidemiology, etiology, pathophysiology, risk factors, clinical manifestations, exam/diagnostic findings, and appropriate management of GI disorders, infections, bleeding, liver diseases, swallowing disorders, and management of patients under surgical care with gastrointestinal disorders. Fellows will identify the patient problem and formulate a prioritized differential diagnosis, and appropriate initial diagnostic/therapeutic plan. Read about each patient encounter in a general medicine or subspecialty text, or applicable AGA or AASLD guidelines.

PGY-5 fellows will demonstrate above as well as progression in knowledge and analytical thinking, formulate a plan based on current scientific evidence, and anticipate/minimize adverse consequences of the therapeutic plan.

PGY-6 fellows will demonstrate all of the above as well as regularly show self-initiative to stay current with new medical knowledge.

**Practice Based Learning and Improvement:** Practice based learning and improvement is accomplished via hospital and ambulatory patient care, attending rounds, presentations at divisional conferences/lectures, and attending evaluations. Fellows will utilize available resources to make timely and appropriate diagnostic and management decisions, emphasize use of evidence-based medicine, and seek formative feedback, and use it to improve performance. Fellows will demonstrate self-motivation to acquire knowledge, familiarize self with applicable evidence-based guidelines (see link to U of L GI homepage listed under resources), and locate scientific literature to support decision-making.

PGY-5 fellows should demonstrate above as well as knowledge of impact of study design on validity or applicability to individual patient situations.

PGY-6 fellows should demonstrate above as well as model independent learning and identify knowledge deficits and work to remedy them.

**Interpersonal and Communication Skills:** Interpersonal and communication skills are accomplished via hospital and ambulatory patient care, attending rounds, presentations at divisional presentations at divisional conferences/lectures, and evaluations Fellows should demonstrate interpersonal/communication skills resulting in an effective exchange of information/collaboration with patients, their families, and health professionals. Medical information will be legible, complete and timely and will identify questions and wishes of the physician requesting the consultation.

PGY 5 and PGY-6 fellows will demonstrate above as well as facilitate education of other health care professionals.

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**Professionalism:** Professionalism is accomplished via hospital and ambulatory patient care, attending rounds, presentations at divisional conferences/lectures,, and evaluations Fellows will demonstrate respect and compassion in interactions with colleagues, patients, and their families, including sensitivity and responsiveness to their race, gender, age, and other defining characteristics, uphold patient confidentiality and informed consent, and recognize/ admit mistakes and notify the attending, and (when appropriate, with guidance from the attending) the patient when mistakes are found.

PGY-5 fellows will demonstrate above as well as effectively coordinate care with other health care professionals and guide patients through the complex health care system, if needed.

PGY-6 fellows will demonstrate above as well as knowledge of methods to control health care costs while preserving high quality care.

**Systems-Based Practice**: Systems-based practice is accomplished via hospital and ambulatory patient care, attending rounds, presentations at divisional conferences/lectures,, and evaluations Fellows will become familiar with the practice of inpatient and outpatient gastroenterology, access/utilize necessary resources within these systems to provide optimal patient care, including EBM and cost conscious strategies, learn to work with health team members to develop new strategies to improve systematic processes of care when deficiencies are found.

PGY-5 fellows will demonstrate above as well as effectively coordinate care with other health care professionals and guide patients through the complex health care system, if needed.

PGY-6 fellows will demonstrate above as well as knowledge of methods to control health care costs while preserving high quality care.

Required Reading: Applicable guidelines are available at www.louisville.edu/medschool/gimedicine

Suggested Reading: Rigas B, Spiro H, Clinical Gastroenterology, Sleisenger MH, Fordtran JS, <u>Gastrointestinal and Liver</u> Disease: Pathophysiology, Diagnosis, Management; Zakim D, Boyer TD, <u>Hepatology: A Textbook of Liver Diseases</u>; *Up to Date* online.

**Expectations:** Punctuality/attendance for all patient care activities and educational lectures. Notify the Chief Fellow if an emergency arises, requiring absence or tardiness so that coverage can be arranged. Discharge summaries completed within 24 hours of discharge. Attending and fellow evaluations are to be completed via New Innovations. Attending should meet with fellow mid-month to give necessary feedback and suggestions for improvement. Procedure logs are entered into New Innovations

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## Curriculum Veterans Affairs Medical Center (VAMC)

#### Goals:

1. Consultative experience in the diagnosis and treatment of various gastrointestinal/liver diseases.

2. Offer diagnostic and therapeutic procedure experience.

#### Learning Objectives:

Patient care: Patient care is accomplished via patient contact, hospital and ambulatory care, attending rounds, presentations at divisional conferences/lectures, and evaluations from peers, faculty, nurses, residents, and patients. A majority of patients are veterans of American wars, 95% males clustered in age according to WWII, the Korean War, the Vietnam War and Desert Storm. Patients are admitted with urgent or chronic gastrointestinal problems including gastrointestinal bleeding, liver failure, abdominal pain, cirrhosis, as well as a host of other problems. Clinical encounters include patients admitted with acute or chronic gastrointestinal disorders, as well as patients admitted electively for an in-hospital diagnostic and therapeutic intervention. Fellows will demonstrate compassionate, appropriate, and effective patient care with competence in completing gastroenterology, hepatology and nutrition history and physical examinations, obtain and interpret laboratory data, and understand indications for consultations and referrals. Fellows will manage gastroenterology, hepatology and nutrition care of patients with GI disorders, infections, bleeding, liver diseases, swallowing disorders, and management of patients under surgical care with gastrointestinal disorders. Fellows will demonstrate skills in endoscopic procedures such as EGD, dilation, flexible sigmoidoscopies, colonoscopy (with/without polypectomy), liver biopsy, PEG, enteral intubation, and nonvariceal/variceal hemostasis utilizing conscious sedation, including choice of drugs, dosage, and adjustment based on clinical situation. A very large mix of diseases is found in this rotation that include patients with common gastrointestinal disorders such as peptic ulcer disease, inflammatory bowel disease, diverticulosis, malabsorption, abdominal pain, pancreatitis, liver disease, biliary tract disorders, liver disease, and functional gastrointestinal syndromes. Diseases most commonly found in veterans of previous wars including Gulf War Syndrome, alcoholism, viral hepatitis, etc. are seen on this rotation. Fellows keep a log of all procedures performed which is placed in their academic portfolio and is reviewed annually with the Program Director. This information is also used at the end of their three-year training to assist in confirming that the minimum number of procedures has been performed, competency has been achieved, and the fellow can practice independently.

PGY-5 will demonstrate above as well as in-depth knowledge and management of complicated gastrointestinal/hepatology disorders. Fellows will demonstrate ability outlined above, as well as emergency procedures for gastrointestinal hemorrhage, including esophageal variceal banding, heater probe and hemoclip application.

PGY-6 will demonstrate above as well as in-depth knowledge and management of complicated gastrointestinal/hepatology disorders, diseases and treatment, skill in endoscopic diagnostic and therapeutic techniques, including ERCP, endoscopic ultrasound, capsule endoscopy, and esophageal motility.

**Medical knowledge:** Medical knowledge is accomplished via hospital and ambulatory patient care, attending rounds, presentations at divisional conferences/lectures,, and evaluations. Fellows will acquire knowledge of epidemiology, etiology, pathophysiology, risk factors, clinical manifestations, exam/diagnostic findings, and appropriate management of GI disorders, infections, bleeding, liver diseases, swallowing disorders, and management of patients under surgical care with gastrointestinal disorders. Fellows will identify the patient problem and formulate a prioritized differential diagnosis, and appropriate initial diagnostic/therapeutic plan. Read about each patient encounter in a general medicine or subspecialty text, or applicable AGA or AASLD guidelines.

PGY-5 fellows will demonstrate above as well as progression in knowledge and analytical thinking, formulate a plan based on current scientific evidence, and anticipate/minimize adverse consequences of the therapeutic plan.

PGY-6 fellows will demonstrate all of the above as well as regularly show self-initiative to stay current with new medical knowledge.

**Practice Based Learning and Improvement:** Practice based learning and improvement is accomplished via hospital and ambulatory patient care, attending rounds, presentations at divisional conferences/lectures, and attending evaluations. Fellows will utilize available resources to make timely and appropriate diagnostic and management decisions, emphasize use of evidence-based medicine, and seek formative feedback, and use it to improve performance. Fellows will demonstrate self-motivation to acquire knowledge, familiarize self with applicable evidence-based guidelines (see link to U of L GI homepage listed under resources), and locate scientific literature to support decision-making.

PGY-5 fellows should demonstrate above as well as knowledge of impact of study design on validity or applicability to individual patient situations.

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PGY-6 fellows should demonstrate above as well as model independent learning and identify knowledge deficits and work to remedy them.

**Interpersonal and Communication Skills:** Interpersonal and communication skills are accomplished via hospital and ambulatory patient care, attending rounds, presentations at divisional conferences/lectures, and evaluations Fellows should demonstrate interpersonal/communication skills resulting in an effective exchange of information/collaboration with patients, their families, and health professionals. Medical information will be legible, complete and timely and will identify questions and wishes of the physician requesting the consultation.

PGY 5 and PGY-6 fellows will demonstrate above as well as facilitate education of other health care professionals.

**Professionalism:** Professionalism is accomplished via hospital and ambulatory patient care, attending rounds, presentations at divisional conferences/lectures,, and evaluations Fellows will demonstrate respect and compassion in interactions with colleagues, patients, and their families, including sensitivity and responsiveness to their race, gender, age, and other defining characteristics, uphold patient confidentiality and informed consent, and recognize/ admit mistakes and notify the attending, and (when appropriate, with guidance from the attending) the patient when mistakes are found.

PGY-5 fellows will demonstrate above as well as effectively coordinate care with other health care professionals and guide patients through the complex health care system, if needed.

PGY-6 fellows will demonstrate above as well as knowledge of methods to control health care costs while preserving high quality care.

**Systems-Based Practice**: Systems-based practice is accomplished via hospital and ambulatory patient care, attending rounds, presentations at divisional conferences/lectures,, and evaluations Fellows will become familiar with the practice of inpatient and outpatient gastroenterology, access/utilize necessary resources within these systems to provide optimal patient care, including EBM and cost conscious strategies, learn to work with health team members to develop new strategies to improve systematic processes of care when deficiencies are found.

PGY-5 fellows will demonstrate above as well as effectively coordinate care with other health care professionals and guide patients through the complex health care system, if needed.

PGY-6 fellows will demonstrate above as well as knowledge of methods to control health care costs while preserving high quality care.

Required Reading: Applicable guidelines are available at <u>www.louisville.edu/medschool/gimedicine</u>

<u>Suggested Reading:</u> Rigas B, Spiro H, <u>Clinical Gastroenterology</u>, Sleisenger MH, Fordtran JS, <u>Gastrointestinal and Liver</u> <u>Disease: Pathophysiology, Diagnosis, Management</u>; Zakim D, Boyer TD, <u>Hepatology: A Textbook of Liver Diseases</u>; *Up to Date* online.

**Expectations:** Punctuality/attendance for all patient care activities and educational lectures. Notify the Chief Fellow if an emergency arises, requiring absence or tardiness so that coverage can be arranged. Discharge summaries completed within 24 hours of discharge. Attending and fellow evaluations are to be completed via New Innovations. Attending should meet with fellow mid-month to give necessary feedback and suggestions for improvement. Procedure logs are entered into New Innovations

### **Division of Gastroenterology, Hepatology and Nutrition**

## Curriculum **Advanced Therapeutic Endoscopy**

Goals: Primary care and consultative experience in the diagnosis and management of patients with severe gastrointestinal and liver disease who are admitted to the hospital, either emergently or electively by PGY-5 and PGY-6 fellows.

Understand indications/contraindications for therapeutic procedures in gastrointestinal/liver disease. 1.

2. Learn techniques/skills involved in therapeutic gastrointestinal procedures.

#### **Learning Objectives:**

Patient care: Patient care is accomplished via patient contact, hospital and ambulatory care, attending rounds, presentations at divisional conferences/lectures,, and evaluations from peers, faculty, nurses, residents, and patients. Fellows will demonstrate compassionate, appropriate, and effective patient care with competence in completing gastroenterology, hepatology and nutrition history and physical examinations, obtain and interpret laboratory data, and understand indications for referrals. Patients are referred from a large referral area (approximately a 200 mile radius) for evaluation and therapy by the Advanced Therapeutic Endoscopy team, many of whom are graduates from our fellowship program. They represent challenging problems and require considerable clinical judgment and expertise. These patients may be seen in consultation or admitted by the Advanced Therapeutic Endoscopy team for treatment. Fellows will demonstrate skills in endoscopic procedures such as ERCP, endoscopic ultrasound, stent placement, dilation, photodynamic therapy, pseudo cyst drainage, stone removal utilizing conscious sedation, including choice of drugs, dosage, and adjustment based on clinical situation Fellows keep a log of all procedures performed which is placed in their academic portfolio and is reviewed annually with the Program Director. This information is also used at the end of their three-year training to assist in confirming that the minimum number of procedures has been performed, competency has been achieved, and the fellow can practice independently.

PGY-6 will demonstrate above as well as further in-depth knowledge of ERCP and therapeutic techniques, including direct therapeutic intervention.

Medical Knowledge: Medical knowledge is accomplished via hospital and ambulatory patient care, attending rounds, presentations at divisional conferences/lectures,, and evaluations. Fellows will acquire knowledge of epidemiology, etiology, pathophysiology, risk factors, clinical manifestations, exam/diagnostic findings, and appropriate management of biliary disorders. Fellows will identify the patient problem and formulate a prioritized differential diagnosis, and appropriate initial diagnostic/therapeutic plan. Read about each patient encounter in a general medicine or subspecialty text, or applicable AGA or AASLD guidelines. Fellows will demonstrate progression in knowledge and analytical thinking, formulate a plan based on current scientific evidence, and anticipate/minimize adverse consequences of the therapeutic plan.

PGY-6 fellows will demonstrate all of the above as well as regularly show self-initiative to stay current with new medical knowledge.

Practice Based Learning and Improvement: Practice based learning and improvement is accomplished via hospital and ambulatory patient care, attending rounds, presentations at divisional conferences/lectures, and attending evaluations. Fellows will utilize available resources to make timely and appropriate diagnostic and management decisions, emphasize use of evidence-based medicine, and seek formative feedback, and use it to improve performance. Fellows will demonstrate self-motivation to acquire knowledge, familiarize self with applicable evidence-based guidelines, and locate scientific literature to support decision-making. Fellows should demonstrate impact of study design on validity or applicability to individual patient situations.

PGY-6 fellows should demonstrate above as well as model independent learning and identify knowledge deficits and work to remedy them.

Interpersonal and Communication Skills: Accomplished by face-to-face interaction with the patient and attending physician as well as team members of the outpatient clinic. Fellows will demonstrate ability to discuss complex therapeutic procedures with patients, consulting physicians, and family members, carefully detailing the risks and benefits, show skills involved to communicate negative news, complications, adverse events with patients and families, and consulting physicians on the current management plan/future follow up of patients undergoing therapeutic intervention.

PGY-6 fellows will demonstrate above as well as facilitate education of other health care professionals.

Professionalism: Accomplished in all educational and patient-care activities; evaluated by attending evaluation. Fellows will demonstrate respect for the patient and uphold their wishes regarding healthcare when ethically possible, uphold patient confidentiality and informed consent, show respect and patience in interactions with colleagues, patients, and family members, and sensitivity to race, gender, age, and other defining characteristics that may be important in interventional treatment. Fellows will effectively coordinate care with other health care professionals and guide patients through the

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complex health care system, if needed.

PGY-6 fellows will demonstrate above as well as knowledge of methods to control health care costs while preserving high quality care.

**Systems-Based Practice:** Accomplished in multidisciplinary and attending rounds and evaluated by attending physicians. Fellows will understand the process of referral and concentrate on the efficiency and obtaining quality care for the patient in an expeditious fashion and learn to work with health team members in a multidisciplinary session to maximize many of the needs of patients with gastrointestinal/liver disease, with particular reference to therapeutic intervention.

PGY-6 fellows will demonstrate above as well as knowledge of methods to control health care costs while preserving high quality care.

Required Reading: Applicable guidelines are available at www.louisville.edu/medschool/gimedicine

Suggested Reading: Rigas B, Spiro H, Clinical Gastroenterology, Sleisenger MH, Fordtran JS, <u>Gastrointestinal and Liver</u> Disease: Pathophysiology, Diagnosis, Management; Zakim D, Boyer TD, <u>Hepatology: A Textbook of Liver Diseases</u>; *Up to Date* online.

**Expectations:** Punctuality/attendance for all patient care activities and educational lectures. Notify the Chief Fellow if an emergency arises, requiring absence or tardiness so that coverage can be arranged. Discharge summaries completed within 24 hours of discharge. Attending and fellow evaluations are to be completed via New Innovations. Attending should meet with fellow mid-month to give necessary feedback and suggestions for improvement. Procedure logs are entered into New Innovations

### **Division of Gastroenterology, Hepatology and Nutrition**

## Curriculum Consult/Endoscopy

**Goals:** Primary care and consultative experience in the diagnosis and management of patients with gastrointestinal and liver disease who are admitted to the hospital or require outpatient endoscopy, either emergently or electively.

- 1. Understand indications/contraindications for gastrointestinal/liver procedures in gastrointestinal/liver disease.
- 2. Learn techniques/skills involved in gastrointestinal/liver procedures.

#### Learning Objectives:

Fellows will manage gastroenterology/hepatology care of patients with GI disorders, infections, bleeding, liver diseases, swallowing disorders, and management of patients under surgical care with gastrointestinal disorders. Fellows will demonstrate skills in endoscopic procedures such as EGD, dilation, flexible sigmoidoscopies, colonoscopy (with/without polypectomy), liver biopsy, PEG, enteral intubation, and nonvariceal/variceal hemostasis utilizing conscious sedation, including choice of drugs, dosage, and adjustment based on clinical situation. Fellows keep a log of all procedures performed which is placed in their academic portfolio and is reviewed annually with the Program Director. This information is also used at the end of their three-year training to assist in confirming that the minimum number of procedures has been performed, competency has been achieved, and the fellow can practice independently.

PGY-5 will demonstrate above as well as in-depth knowledge of gastrointestinal disorders and further knowledge in management of complicated gastroenterology/hepatology disorders. Fellows will demonstrate ability outlined above, as well as emergency procedures for gastrointestinal hemorrhage, including esophageal variceal banding, heater probe and hemoclip application.

PGY-6 will demonstrate above as well as further in-depth knowledge of gastrointestinal/hepatology diseases and treatment, skill in endoscopic diagnostic and therapeutic techniques, including ERCP, endoscopic ultrasound, capsule endoscopy, and esophageal motility.

**Medical Knowledge:** Medical knowledge is accomplished via hospital and ambulatory patient care, attending rounds, presentations at divisional conferences/lectures,, and evaluations. Fellows will acquire knowledge of epidemiology, etiology, pathophysiology, risk factors, clinical manifestations, exam/diagnostic findings, and appropriate management of GI disorders, infections, bleeding, liver diseases, swallowing disorders, and management of patients under surgical care with gastrointestinal disorders. Fellows will identify the patient problem and formulate a prioritized differential diagnosis, and appropriate initial diagnostic/therapeutic plan. Read about each patient encounter in a general medicine or subspecialty text, or applicable AGA or AASLD guidelines.

PGY-5 fellows will demonstrate above as well as progression in knowledge and analytical thinking, formulate a plan based on current scientific evidence, and anticipate/minimize adverse consequences of the therapeutic plan.

PGY-6 fellows will demonstrate all of the above as well as regularly show self-initiative to stay current with new medical knowledge.

**Practice Based Learning and Improvement:** Practice based learning and improvement is accomplished via hospital and ambulatory patient care, attending rounds, presentations at divisional conferences/lectures, and attending evaluations. Fellows will utilize available resources to make timely and appropriate diagnostic and management decisions, emphasize use of evidence-based medicine, and seek formative feedback, and use it to improve performance. Fellows will demonstrate self-motivation to acquire knowledge, familiarize self with applicable evidence-based guidelines (see link to U of L GI homepage listed under resources), and locate scientific literature to support decision-making.

PGY-5 fellows should demonstrate above as well as knowledge of impact of study design on validity or applicability to individual patient situations.

PGY-6 fellows should demonstrate above as well as model independent learning and identify knowledge deficits and work to remedy them.

**Interpersonal and Communication Skills:** Interpersonal and communication skills are accomplished via hospital and ambulatory patient care, attending rounds, presentations at divisional presentations at divisional conferences/lectures, and evaluations Fellows should demonstrate interpersonal/communication skills resulting in an effective exchange of information/collaboration with patients, their families, and health professionals. Medical information will be legible, complete and timely and will identify questions and wishes of the physician requesting the consultation.

PGY 5 and PGY-6 fellows will demonstrate above as well as facilitate education of other health care professionals.

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**Professionalism:** Professionalism is accomplished via hospital and ambulatory patient care, attending rounds, presentations at divisional conferences/lectures,, and evaluations Fellows will demonstrate respect and compassion in interactions with colleagues, patients, and their families, including sensitivity and responsiveness to their race, gender, age, and other defining characteristics, uphold patient confidentiality and informed consent, and recognize/ admit mistakes and notify the attending, and (when appropriate, with guidance from the attending) the patient when mistakes are found.

PGY-5 fellows will demonstrate above as well as effectively coordinate care with other health care professionals and guide patients through the complex health care system, if needed.

PGY-6 fellows will demonstrate above as well as knowledge of methods to control health care costs while preserving high quality care.

**Systems-Based Practice**: Systems-based practice is accomplished via hospital and ambulatory patient care, attending rounds, presentations at divisional conferences/lectures,, and evaluations Fellows will become familiar with the practice of inpatient and outpatient gastroenterology, access/utilize necessary resources within these systems to provide optimal patient care, including EBM and cost conscious strategies, learn to work with health team members to develop new strategies to improve systematic processes of care when deficiencies are found.

PGY-5 fellows will demonstrate above as well as effectively coordinate care with other health care professionals and guide patients through the complex health care system, if needed.

PGY-6 fellows will demonstrate above as well as knowledge of methods to control health care costs while preserving high quality care.

Required Reading: Applicable guidelines are available at www.louisville.edu/medschool/gimedicine

Suggested Reading: Rigas B, Spiro H, Clinical Gastroenterology, Sleisenger MH, Fordtran JS, <u>Gastrointestinal and Liver</u> Disease: Pathophysiology, Diagnosis, Management; Zakim D, Boyer TD, <u>Hepatology: A Textbook of Liver Diseases</u>; *Up to Date* online.

**Expectations:** Punctuality/attendance for all patient care activities and educational lectures. Notify the Chief Fellow if an emergency arises, requiring absence or tardiness so that coverage can be arranged. Discharge summaries completed within 24 hours of discharge. Attending and fellow evaluations are to be completed via New Innovations. Attending should meet with fellow mid-month to give necessary feedback and suggestions for improvement. Procedure logs are entered into New Innovations

### **Division of Gastroenterology, Hepatology and Nutrition**

## Curriculum EUS/Nutrition

**<u>Goals</u>**: To offer consultative services in the diagnosis and management of gastrointestinal, liver disease, and clinical nutrition in patients that may require chronic ventilating/nutritional support.

- 1. Meaningful clinical and/or nutrition rotation.
- 2. Develop protocol, write inform consent and have an opportunity to perform quality research.

#### Learning Objectives:

**Patient Care:** Patient care is accomplished via patient contact, hospital and ambulatory care, attending rounds, presentations at divisional conferences/lectures, and evaluations from peers, faculty, nurses, residents, and patients. Fellows will recognize nutritional deficiency by history, physical, and laboratory evaluation, appropriately study the nutritional deficiency, and treat nutritional deficiencies on a protocol basis. A very large mix of diseases is found on this rotation, including patients with common gastrointestinal disorders such as peptic ulcer disease, inflammatory bowel disease, diverticulosis, malabsorption, abdominal pain, pancreatitis, liver disease, biliary tract disorders, and functional gastrointestinal syndromes, and gastrointestinal complications of chronically debilitated patients requiring chronic mechanical ventilation and nutrition support. Fellows keep a log of all procedures performed which is placed in their academic portfolio and is reviewed annually with the Program Director. This information is also used at the end of their three-year training to assist in confirming that the minimum number of procedures has been performed, competency has been achieved, and the fellow can practice independently.

**Medical Knowledge:** Accomplished via outpatient clinic setting, direct contact with the attending, interdisciplinary rounds, evaluated by attending evaluation. Fellows will attend didactic presentations by faculty, read extensively on nutritional deficits, and undergo training for clinical research, including institutional, state, federal, and ethical considerations.

**Practice-Based Learning and Improvement:** Accomplished via outpatient clinic setting, interdisciplinary and attending rounds, evaluated by attending evaluation. Fellows will utilize available research to conduct clinical and basic research, emphasize the scientific method and ethical clinical research, have a basic knowledge of statistics as applicable to studies and protocol, and demonstrate self-motivation to obtain more knowledge.

**Interpersonal and Communication Skills:** Accomplished via outpatient clinic setting, interdisciplinary and attending rounds, evaluated by attending evaluation. Fellows will demonstrate ability to present the research in a condensed, organized, and understandable fashion, develop speaking skills so that accepted abstracts can be presented at regional and national meetings, and acquire proficiency in discussing protocols with patients, family, and referring physicians.

**Professionalism:** Accomplished in all educational and patient care activities, evaluated by attending evaluation. Fellows will demonstrate respect and compassion in interactions with colleagues, patients, and their families including sensitivity in responsiveness to their race, gender, age, and other defining characteristics, uphold patient confidentiality and inform consent, and respect and uphold patient wishes regarding their participation in clinical protocols.

**System-Based Practice**: Accomplished in multidisciplinary and attending intervention evaluated by attending evaluation. Fellows will learn UofL regulations, state of Kentucky, and the US government regarding research on human subjects, collaborate with faculty members in a multidisciplinary setting to maximize clinical results, attend all required/applicable training sessions offered by the University of Louisville on research compliance.

**<u>Required Reading:</u>** Reading material will be supplied according to the applicable research protocol.

Expectations: Punctuality/attendance. Notify the Chief Fellow if an emergency arises, requiring absence or tardiness so that coverage can be arranged.

### **Division of Gastroenterology, Hepatology and Nutrition**

## Curriculum Motility/IBD

Goals: To offer consultative services in the diagnosis and management of motility and inflammatory bowel disease patients.

- 1. Meaningful motility and IBD rotation.
- 2. Develop protocol, write inform consent and have an opportunity to perform quality research.

### Learning Objectives:

**Patient Care:** Patient care is accomplished via patient contact, hospital and ambulatory care, attending rounds, presentations at divisional conferences/lectures,, and evaluations from peers, faculty, nurses, residents, and patients. Fellows will recognize nutritional deficiency by history, physical, and laboratory evaluation, appropriately study the nutritional deficiency, and treat nutritional deficiencies on a protocol basis. A mix of patient diseases including motility and inflammatory bowel disease disorders are observed. Fellows keep a log of all procedures performed which is placed in their academic portfolio and is reviewed annually with the Program Director. This information is also used at the end of their three-year training to assist in confirming that the minimum number of procedures has been performed, competency has been achieved, and the fellow can practice independently.

**Medical Knowledge:** Accomplished via inpatient and outpatient clinic setting, direct contact with the attending, interdisciplinary rounds, evaluated by attending evaluation. Fellows will attend didactic presentations by faculty, read extensively on nutritional deficits, and undergo training for clinical research, including institutional, state, federal, and ethical considerations.

**Practice-Based Learning and Improvement:** Accomplished via inpatient and outpatient clinic setting, interdisciplinary and attending rounds, evaluated by attending evaluation. Fellows will utilize available research to conduct clinical and basic research, emphasize the scientific method and ethical clinical research, have a basic knowledge of statistics as applicable to studies and protocol, and demonstrate self-motivation to obtain more knowledge.

**Interpersonal and Communication Skills:** Accomplished via inpatient and outpatient clinic setting, interdisciplinary and attending rounds, evaluated by attending evaluation. Fellows will demonstrate ability to present the research in a condensed, organized, and understandable fashion, develop speaking skills so that accepted abstracts can be presented at regional and national meetings, and acquire proficiency in discussing protocols with patients, family, and referring physicians.

**Professionalism:** Accomplished in all educational and patient care activities, evaluated by attending evaluation. Fellows will demonstrate respect and compassion in interactions with colleagues, patients, and their families including sensitivity in responsiveness to their race, gender, age, and other defining characteristics, uphold patient confidentiality and inform consent, and respect and uphold patient wishes regarding their participation in clinical protocols.

**System-Based Practice**: Accomplished in multidisciplinary and attending intervention evaluated by attending evaluation. Fellows will learn UofL regulations, state of Kentucky, and the US government regarding research on human subjects, collaborate with faculty members in a multidisciplinary setting to maximize clinical results, attend all required/applicable training sessions offered by the University of Louisville on research compliance.

**<u>Required Reading:</u>** Reading material will be supplied according to the applicable research protocol.

**Expectations:** Punctuality/attendance. Notify the Chief Fellow if an emergency arises, requiring absence or tardiness so that coverage can be arranged.

## **Division of Gastroenterology, Hepatology and Nutrition**

## Curriculum Research

### Goals:

- 1. To offer a meaningful clinic or basic research experience.
- 2. Develop protocol, write inform consent and have an opportunity to perform quality research.

### Learning Objectives:

**Patient Care** Patient care is accomplished via patient contact, hospital and ambulatory care, attending rounds, presentations at divisional conferences/lectures, and evaluations from peers, faculty, nurses, residents, and patients. Fellows will recognize goals and objectives outlined in the protocol and enter patients according to criteria, which may include history, physical, laboratory evaluation, etc. A very large mix of diseases is found, including common gastrointestinal disorders such as peptic ulcer disease, inflammatory bowel disease, abdominal pain, liver diseases, and functional gastrointestinal syndromes.

**Medical Knowledge**: Accomplished via research of protocol, investigator/coordinator meetings. Didactic research presentations are scheduled throughout the fellowship experience to inform on current research protocols, resultant data, and national/international presentations from research faculty. Principals of the scientific method include development of a research plan and protocol, Institutional Review Board, data accumulation and analysis, presentation and publication.

**Practice-Based Learning and Improvement:** Accomplished via rotation experience with qualified, certified, and accomplished investigators. Fellows will utilize available research to conduct clinical and basic research, emphasize the scientific method and ethical clinical research, have a basic knowledge of statistics as applicable to studies and protocol, and demonstrate self-motivation to obtain more knowledge. Research preceptors are evaluated on the performance of the fellows and research they are precepting. Fellows have the opportunity to participate with any research faculty, all of whom have specialized areas of interest. Bench research experience is offered n the Medical Dental Research Building.

**Interpersonal and Communication Skills:** Accomplished via outpatient clinic setting where patients are recruited from the Ambulatory Internal Medicine (AIM) Continuity Clinic. Fellows will demonstrate ability to present research in a condensed, organized, and understandable fashion, develop speaking skills so that accepted abstracts can be presented at regional and national meetings, and acquire proficiency in discussing protocols with patients, family, and referring physicians. Scheduled research conferences occur regularly.

**Professionalism:** Accomplished in all educational and patient care activities, evaluated by attending evaluation. Fellows will demonstrate respect and compassion in interactions with colleagues, patients, and their families including sensitivity in responsiveness to their race, gender, age, and other defining characteristics, uphold patient confidentiality and inform consent, and respect and uphold patient wishes regarding their participation in clinical protocols.

**System-Based Practice**: Accomplished in multidisciplinary and attending intervention evaluated by attending evaluation. Fellows will learn UofL regulations, state of Kentucky, and the US government regarding research on human subjects, collaborate with faculty members in a multidisciplinary setting to maximize clinical results, attend all required/applicable training sessions offered by the University of Louisville on research compliance.

**<u>Required Reading:</u>** Reading material will be supplied according to the applicable research protocol.

**Expectations:** Punctuality/attendance. Notify the Chief Fellow if an emergency arises, requiring absence or tardiness so that coverage can be arranged.

Contact: Program Director at 852-6991 for questions regarding the rotation.

#### Research blocks are NOT required by ACGME

## **Division of Gastroenterology, Hepatology and Nutrition**

## Curriculum Continuity Clinic – Ambulatory Internal Medicine (AIM)

### Goals:

- 1. Offer primary care experience in the diagnosis and management of patients with gastrointestinal and liver diseases in an outpatient setting with continuity of care.
- 2. Provide consultative input into the diagnosis and management of patients with gastrointestinal and live diseases from referring patients in the University and community.

#### Learning Objectives.

**Patient care:** Patient care is accomplished via ambulatory patient contact, presentations at divisional conferences/lectures, and evaluations from peers, faculty, nurses, residents, and patients in a continuity clinic with attending supervision. A majority of patients are Medicaid or indigent, who are referred by private physicians for either a second opinion or initial evaluation by a gastroenterologist/hepatologist. Patients may also have been seen in follow-up after having been seen on the University of Louisville Hospital rotation while acutely hospitalized. Clinical encounters include patients with gastrointestinal disorders, as well as patients for post-therapeutic intervention. via one-on-one interaction with the attending physician, social worker, nursing service, and evaluated by attending on an outpatient basis. Fellows will demonstrate compassionate, appropriate, and effective patient care with competence in completing gastroenterology, hepatology and nutrition history and physical examinations, obtain and interpret laboratory data, and understand indications for referrals. Modalities include pharmacological therapy, medical devices, and surgery. Fellows will manage continuity of gastroenterology, hepatology and nutrition care of patients with GI disorders, infections, bleeding, liver diseases, swallowing disorders, and management of patients under surgical care with gastrointestinal disorders. A very large mix of diseases is found in this rotation. They include patients with common gastrointestinal disorders such as peptic ulcer disease, inflammatory bowel disease, diverticulosis, malabsorption, abdominal pain, pancreatitis, liver disease, biliary tract disorders, liver disease, and functional gastrointestinal syndromes.

PGY-5 will demonstrate above as well as in-depth knowledge and management of complicated gastrointestinal/hepatology disorders. Fellows will demonstrate ability outlined above, as well as emergency procedures for gastrointestinal hemorrhage, including esophageal variceal banding, heater probe and hemoclip application.

PGY-6 will demonstrate above as well as in-depth knowledge and management of complicated gastrointestinal/hepatology disorders, and diseases and treatment.

**Medical knowledge** Accomplished by outpatient evaluation with attending interaction. Fellows will familiarize themselves with common gastrointestinal and liver diseases, have the availability of reference material, such as *Up to Date* for unusual disease processes, understand the concepts of competency and goals of care, how they impact on decision making in patients, and formulate an appropriate diagnostic/therapeutic management plan. Fellows work closely with attending, nursing staff, social workers, and other subspecialty areas of medicine in diagnostic work-up of gastrointestinal/liver disease, understanding of the pathophysiology of gastrointestinal/liver disease states, ethical issues, and compassionate medication administration by the pharmaceutical industry.

PGY-5 fellows will demonstrate above as well as progression in knowledge and analytical thinking, formulate a plan based on current scientific evidence, and anticipate/minimize adverse consequences of the therapeutic plan.

PGY-6 fellows will demonstrate all of the above as well as regularly show self-initiative to stay current with new medical knowledge.

**Practice-Based Learning and Improvement:** Accomplished by one-on-one interaction with the attending, nursing staff, social services, and other members; evaluated by attending evaluation. Fellows will utilize available resources to make diagnostic and management decisions, emphasize the use of evidence-based medicine, seek formative feedback and use it to improve performance, acquire knowledge on disease states and pathophysiology on an ongoing basis.

PGY-5 fellows should demonstrate above as well as knowledge of impact of study design on validity or applicability to individual patient situations.

PGY-6 fellows should demonstrate above as well as model independent learning and identify knowledge deficits and work to remedy them.

**Interpersonal and Communication Skills:** Accomplished by face-to-face interaction with the patient and attending physician as well as team members of the outpatient clinic. Fellows will demonstrate the ability to communicate with patient and their family, discuss opinions/management decisions with referring physicians, and respond to questions raised by the consulting physician and other healthcare personnel.

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PGY 5 and PGY-6 fellows will demonstrate above as well as facilitate education of other health care professionals.

**Professionalism:** Accomplished in all educational and patient-care activities; evaluated by attending evaluation. Fellows will demonstrate respect and compassion in interactions with colleagues, patients, and their families, including sensitivity in responsiveness to their race, gender, age, and other defining characteristics, uphold patient confidentiality and inform consent, and respect and uphold patient wishes regarding their healthcare when ethically possible.

PGY-5 fellows will demonstrate above as well as effectively coordinate care with other health care professionals and guide patients through the complex health care system, if needed.

PGY-6 fellows will demonstrate above as well as knowledge of methods to control health care costs while preserving high quality care.

**Systems-Based Practice**: Systems-based practice accomplished via the continuity clinic and attending supervision. Fellows will become familiar with the practice of inpatient and outpatient gastroenterology, access/utilize necessary resources within these systems to provide optimal patient care, including EBM and cost conscious strategies, learn to work with health team members to develop new strategies to improve systematic processes of care when deficiencies are found.

PGY-5 fellows will demonstrate above as well as effectively coordinate care with other health care professionals and guide patients through the complex health care system, if needed.

PGY-6 fellows will demonstrate above as well as knowledge of methods to control health care costs while preserving high quality care.

Required Reading: Applicable guidelines are available at www.louisville.edu/medschool/gimedicine

Suggested Reading: Rigas B, Spiro H, Clinical Gastroenterology, Sleisenger MH, Fordtran JS, Gastrointestinal and Liver Disease: Pathophysiology, Diagnosis, Management; Zakim D, Boyer TD, Hepatology: A Textbook of Liver Diseases; Up to Date online.

**Expectations:** Punctuality/attendance for all clinics. Notify the Chief Fellow if an emergency arises, requiring absence or tardiness so that coverage can be arranged.

Contact: Program Director at 852-6991 for questions regarding the rotation.

Prioritized Scheduling: Hospital follow-ups, IM referrals (AIM, Surgery, etc.), Jefferson Co,(outside Jefferson Co); and outside of KY.

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## Curriculum Continuity Clinic - Hepatology

#### Goals:

1. Offer primary care experience in the diagnosis and management of patients with liver diseases in an outpatient setting with continuity of care.

2. Provide consultative input into the diagnosis and management of patients with liver diseases from referring physicians in the University and community.

#### Learning Objectives:

**Patient care:** Patient care is accomplished via ambulatory patient contact, presentations at divisional conferences/lectures, and evaluations from peers, faculty, nurses, residents, and patients in a continuity clinic with attending supervision. A majority of patients are referred by private physicians for either a second opinion or initial evaluation by a gastroenterologist/hepatologist. Patients may also have been seen in follow-up after having been seen on the University of Louisville Hospital rotation while acutely hospitalized. Clinical encounters include patients with liver disorders, as well as patients for post-therapeutic intervention via one-on-one interaction with the attending physician, social worker, nursing service, and evaluated by attending on an outpatient basis. Fellows will demonstrate compassionate, appropriate, and effective patient care with competence in completing gastroenterology, hepatology and nutrition history and physical examinations, obtain and interpret laboratory data, and understand indications for referrals. Modalities include pharmacological therapy, medical devices, and surgery. Fellows will manage continuity of gastroenterology, hepatology and nutrition care of patients with liver disorders, infections, liver diseases, abdominal pain, pancreatitis, biliary tract disorders, alcoholism, viral hepatitis, etc.

PGY-6 will demonstrate above as well as in-depth knowledge and management of complicated gastrointestinal/hepatology disorders. Fellows will demonstrate ability outlined above, as well as emergency procedures for gastrointestinal hemorrhage, including esophageal variceal banding, heater probe and hemoclip application, as well as in-depth knowledge and management of complicated gastrointestinal/hepatology disorders, diseases and treatment.

**Medical knowledge** Accomplished by outpatient evaluation with attending interaction. Fellows will familiarize themselves with common gastrointestinal and liver diseases, have the availability of reference material, such as *Up to Date* for unusual disease processes, understand the concepts of competency and goals of care, how they impact on decision making in patients, and formulate an appropriate diagnostic/therapeutic management plan. Fellows work closely with attending, nursing staff, social workers, and other subspecialty areas of medicine in diagnostic work-up of gastrointestinal/liver disease, understanding of the pathophysiology of gastrointestinal/liver disease states, ethical issues, and compassionate medication administration by the pharmaceutical industry.

PGY-6 fellows will demonstrate above as well as progression in knowledge and analytical thinking, formulate a plan based on current scientific evidence, anticipate/minimize adverse consequences of the therapeutic plan, as well as regularly show self-initiative to stay current with new medical knowledge.

**Practice-Based Learning and Improvement:** Accomplished by one-on-one interaction with the attending, nursing staff, social services, and other members; evaluated by attending evaluation. Fellows will utilize available resources to make diagnostic and management decisions, emphasize the use of evidence-based medicine, seek formative feedback and use it to improve performance, acquire knowledge on disease states and pathophysiology on an ongoing basis.

PGY-6 fellows should demonstrate above as well as knowledge of impact of study design on validity or applicability to individual patient situations, model independent learning, and identify knowledge deficits and work to remedy them.

**Interpersonal and Communication Skills:** Accomplished by face-to-face interaction with the patient and attending physician as well as team members of the outpatient clinic. Fellows will demonstrate the ability to communicate with patient and their family, discuss opinions/management decisions with referring physicians, and respond to questions raised by the consulting physician and other healthcare personnel.

PGY-6 fellows will demonstrate above as well as facilitate education of other health care professionals.

**Professionalism:** Accomplished in all educational and patient-care activities; evaluated by attending evaluation. Fellows will demonstrate respect and compassion in interactions with colleagues, patients, and their families, including sensitivity in responsiveness to their race, gender, age, and other defining characteristics, uphold patient confidentiality and inform consent, and respect and uphold patient wishes regarding their healthcare when ethically possible.

PGY-6 fellows will demonstrate above as well as effectively coordinate care with other health care professionals, guide patients through the complex health care system, if needed, and demonstrate knowledge of methods to control health care

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costs while preserving high quality care.

**Systems-Based Practice**: Systems-based practice accomplished via the continuity clinic and attending supervision. Fellows will become familiar with the practice of inpatient and outpatient gastroenterology, access/utilize necessary resources within these systems to provide optimal patient care, including EBM and cost conscious strategies, learn to work with health team members to develop new strategies to improve systematic processes of care when deficiencies are found.

PGY-6 fellows will demonstrate above as well as effectively coordinate care with other health care professionals, guide patients through the complex health care system, if needed, and demonstrate knowledge of methods to control health care costs while preserving high quality care.

Required Reading: Applicable guidelines are available at <u>www.louisville.edu/medschool/gimedicine</u>

Suggested Reading: Rigas B, Spiro H, Clinical Gastroenterology, Sleisenger MH, Fordtran JS, Gastrointestinal and Liver Disease: Pathophysiology, Diagnosis, Management; Zakim D, Boyer TD, Hepatology: A Textbook of Liver Diseases; *Up to Date* online.

**Expectations:** Punctuality/attendance for all clinics. Notify the Chief Fellow if an emergency arises, requiring absence or tardiness so that coverage can be arranged.

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### Curriculum

**Continuity Clinic -Veterans Affairs Medical Center (VAMC)** 

#### Goals:

1. Offer primary care experience in the diagnosis and management of patients with gastrointestinal and liver diseases in an outpatient setting with continuity of care.

2. Provide consultative input into the diagnosis and management of patients with gastrointestinal and live diseases from referring patients in the University and community.

#### Learning Objectives

**Patient care:** Patient care is accomplished via ambulatory patient contact, presentations at divisional conferences/lectures, and evaluations from peers, faculty, nurses, residents, and patients in a continuity clinic with attending supervision. A majority of patient population are veterans of American wars (95% males, 5% females) who are referred by primary care physicians from the VAMC for gastroenterology, hepatology and nutrition disorder management. Patients may also be seen in follow-up after having been seen on the Veterans Affairs Medical Center rotation while acutely hospitalized. There is a very large mix of diseases including inflammatory bowel disease, peptic ulcer disease, gastroesophageal reflux disease, liver disease (particularly hepatitis C and alcoholic liver disease) and patients who are potential candidates for liver transplantation. After careful initial evaluation, patients are scheduled for procedures or other diagnostic modalities with a return visit thereafter. Occasionally, patients may need hospitalization as an initial approach to their disease state. Fellows will demonstrate compassionate, appropriate, and effective patient care with competence in completing gastroenterology, hepatology and nutrition history and physical examinations, obtain and interpret laboratory data, and understand indications for referrals. Modalities include pharmacological therapy, medical devices, and surgery. Fellows will manage continuity of gastroenterology, hepatology and nutrition care of patients with GI disorders, infections, bleeding, liver diseases, swallowing disorders, and management of patients under surgical care with gastrointestinal disorders.

PGY-5 will demonstrate above as well as in-depth knowledge and management of complicated gastrointestinal/hepatology disorders. Fellows will demonstrate ability outlined above, as well as emergency procedures for gastrointestinal hemorrhage, including esophageal variceal banding, heater probe and hemoclip application.

PGY-6 will demonstrate above as well as in-depth knowledge and management of complicated gastrointestinal/hepatology disorders, and diseases and treatment.

**Medical\_knowledge** Accomplished by outpatient evaluation with attending interaction. Fellows will familiarize themselves with common gastrointestinal and liver diseases, have the availability of reference material, such as *Up to Date* for unusual disease processes, understand the concepts of competency and goals of care, how they impact on decision making in patients, and formulate an appropriate diagnostic/therapeutic management plan. Fellows work closely with attending, nursing staff, social workers, and other subspecialty areas of medicine in diagnostic work-up of gastrointestinal/liver disease, understanding of the pathophysiology of gastrointestinal/liver disease states, ethical issues, and compassionate medication administration by the pharmaceutical industry.

PGY-5 fellows will demonstrate above as well as progression in knowledge and analytical thinking, formulate a plan based on current scientific evidence, and anticipate/minimize adverse consequences of the therapeutic plan.

PGY-6 fellows will demonstrate all of the above as well as regularly show self-initiative to stay current with new medical knowledge.

**Practice-Based Learning and Improvement:** Accomplished by one-on-one interaction with the attending, nursing staff, social services, and other members; evaluated by attending evaluation. Fellows will utilize available resources to make diagnostic and management decisions, emphasize the use of evidence-based medicine, seek formative feedback and use it to improve performance, acquire knowledge on disease states and pathophysiology on an ongoing basis.

PGY-5 fellows should demonstrate above as well as knowledge of impact of study design on validity or applicability to individual patient situations.

PGY-6 fellows should demonstrate above as well as model independent learning and identify knowledge deficits and work to remedy them.

**Interpersonal and Communication Skills:** Accomplished by face-to-face interaction with the patient and attending physician as well as team members of the outpatient clinic. Fellows will demonstrate the ability to communicate with patient and their family, discuss opinions/management decisions with referring physicians, and respond to questions raised by the consulting physician and other healthcare personnel.

PGY 5 and PGY-6 fellows will demonstrate above as well as facilitate education of other health care professionals.

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**Professionalism:** Accomplished in all educational and patient-care activities; evaluated by attending evaluation. Fellows will demonstrate respect and compassion in interactions with colleagues, patients, and their families, including sensitivity in responsiveness to their race, gender, age, and other defining characteristics, uphold patient confidentiality and inform consent, and respect and uphold patient wishes regarding their healthcare when ethically possible.

PGY-5 fellows will demonstrate above as well as effectively coordinate care with other health care professionals and guide patients through the complex health care system, if needed.

PGY-6 fellows will demonstrate above as well as knowledge of methods to control health care costs while preserving high quality care.

**Systems-Based Practice**: Systems-based practice accomplished via the continuity clinic and attending supervision. Fellows will become familiar with the practice of inpatient and outpatient gastroenterology, access/utilize necessary resources within these systems to provide optimal patient care, including EBM and cost conscious strategies, learn to work with health team members to develop new strategies to improve systematic processes of care when deficiencies are found.

PGY-5 fellows will demonstrate above as well as effectively coordinate care with other health care professionals and guide patients through the complex health care system, if needed.

PGY-6 fellows will demonstrate above as well as knowledge of methods to control health care costs while preserving high quality care.

**<u>Required Reading:</u>** Applicable guidelines are available at <u>www.louisville.edu/medschool/gimedicine</u>

Suggested Reading: Rigas B, Spiro H, Clinical Gastroenterology, Sleisenger MH, Fordtran JS, Gastrointestinal and Liver Disease: Pathophysiology, Diagnosis, Management; Zakim D, Boyer TD, Hepatology: A Textbook of Liver Diseases; *Up to Date* online.

**Expectations:** Punctuality/attendance for all clinics. Notify the Chief Fellow if an emergency arises, requiring absence or tardiness so that coverage can be arranged.

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## Curriculum Internal Medicine Resident

### Goals:

1. Expand knowledge base and management skills of common gastroenterology problems.

#### Learning Objectives:

**Patient care:** Accomplished via hospital consultations, clinic, GI conferences, Grand Rounds; evaluated by attending and fellow evaluations.

PGY-1, PGY-2, PGY-3 residents will demonstrate competence in gastroenterology-targeted history and physical exam, ability to initiate workup of common hepatology and gastroenterology problems, understanding of indications for GI referral, indications/contraindications, and after care of commonly utilized diagnostic evaluations (upper and lower endoscopy and ERCP), appreciation of utility of complementary support services, including radiology, therapeutic endoscopy and surgery, ability to perform therapeutic procedures including paracentesis supervised by a qualified and credentialed instructor. The resident may observe, and in select cases, participate in endoscopic and other procedures.

PGY-2 residents will demonstrate above and acquire a history in a precise, logical and efficient manner and detect subtle physical findings

PGY-3 residents will demonstrate above and understand sensitivity/specificity of specific physical exam maneuvers

Medical Knowledge: Accomplished via hospital consultations, clinic, GI conferences, Grand Rounds; evaluated by attending and fellow evaluations

PGY-1, PGY-2, PGY-3 residents will acquire knowledge of the epidemiology, etiology, pathophysiology, risk factors, clinical manifestations, exam and diagnostic evaluation findings, and appropriate ambulatory and inpatient management of abdominal pain, dysphagia, GERD, peptic ulcer disease, GI bleeding, irritable bowel syndrome, pancreatitis, inflammatory bowel disease, biliary tract disease, abnormal liver tests, motility disorders, diarrhea, hepatitis, constipation, acute/chronic liver failure, complications of liver failure (coagulopathy, variceal bleeding, encephalopathy, ascites).

PGY-1 residents will formulate a prioritized differential diagnosis, formulate an appropriate initial diagnostic and therapeutic plan, read about each patient encounter in a general medicine or subspecialty text, or applicable AGA or AASLD guidelines.

PGY-2 and PGY-3 residents will also demonstrate a progression in knowledge and analytical thinking, formulate a plan based on current scientific evidence, anticipate and minimize adverse consequences of therapy.

**Practice Based Learning and Improvement:** Accomplished via hospital consultations, clinic, GI conferences, Grand Rounds; evaluated by attending and fellow evaluations. Residents should utilize available resources to make timely and appropriate diagnostic and management decisions, emphasize use of evidence-based medicine, seek formative feedback, and use it to improve performance, and demonstrate self-motivation to identify knowledge deficits and work to remedy them.

PGY-2 residents should, in addition to above, demonstrate knowledge of impact of study design on validity or applicability to individual patient situations

PGY-3 residents should accomplish all of the above, and model independent learning

**Interpersonal and Communication Skills:** Accomplished via hospital consultations, clinic, GI conferences, Grand Rounds; evaluated by attending and fellow evaluations. Residents will demonstrate ability to interact with other physicians, nursing, and clinic staff, the patients and their families in a professional, respectful and effective manner, keep legible, complete and timely medical records and dictations, identify questions and wishes of the consulting physician, and demonstrate competence in oral presentation.

PGY-2 and PGY-3 residents will also facilitate education of other health care professionals.

**Professionalism:** Accomplished in all patient care and educational activities; evaluated by attending and fellow evaluations. Residents will demonstrate respect and compassion in interactions with colleagues, patients, and their families, including sensitivity and responsiveness to their race, gender, age, and other defining characteristics, uphold patient confidentiality and informed consent, and recognize and admit mistakes and notify the attending, and (when appropriate, with guidance from the attending) the patient when mistakes are found.

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**Systems Based Practice:** Accomplished via hospital consultations, clinic, GI conferences, Grand Rounds; evaluated by attending and fellow evaluations. Residents will become familiar with the practice of inpatient and outpatient gastroenterology at a University or VA hospital, and access/utilize necessary resources within these systems to provide optimal patient care, including EBM and cost conscious strategies.

PGY-2 residents will effectively coordinate care with other health care professionals and guide patients through the complex health care system, if needed.

PGY-3 residents will demonstrate all of the above and demonstrate knowledge of methods to control health care costs while preserving high quality care.

**<u>Required Reading:</u>** Applicable guidelines are available at <u>www.louisville.edu/medschool/gimedicine</u>

Suggested Reading: Rigas B, Spiro H, Clinical Gastroenterology, Sleisenger MH, Fordtran JS, Gastrointestinal and Liver Disease: Pathophysiology, Diagnosis, Management; Zakim D, Boyer TD, Hepatology: A Textbook of Liver Diseases; *Up to Date* online.

**Expectations:** Punctuality/attendance for all patient care activities and educational lectures, especially MKSAP sessions held throughout the educational experience. Notify the Chief Fellow if an emergency arises, requiring absence or tardiness so that coverage can be arranged. Discharge summaries completed within 24 hours of discharge. Resident evaluations are to be completed via New Innovations. Assigned supervisor should meet mid-month to give necessary feedback and suggestions for improvement.

## **Division of Gastroenterology, Hepatology and Nutrition**

## Curriculum Medical Student

#### Goals:

- 1. Appreciation for gastrointestinal/liver disease.
- 2. Interaction of the liver and gastrointestinal tract with the rest of the systems, especially in patients with end-stage disease.

### Learning Objectives:

**Patient care:** Accomplished via the hospital consults, interdisciplinary key meetings, attending rounds, evaluated by the attending evaluation. Students will develop the ability to perform an appropriate history and physical examination focused on gastrointestinal/liver diseases and appropriately develop a diagnostic and management plan.

**Medical Knowledge:** Accomplish via hospital consults attending rounds and interdisciplinary rounds evaluated by attending evaluation. Students will familiarize themselves with common gastrointestinal diseases and have the availability of reference material for unusual or rare disease states, understand the impact of acute and chronic disease states on the patient's family and life plans, and formulate an appropriate diagnostic and therapeutic plan.

**Practice-Based Learning and Improvement:** Accomplished via hospital consults, interdisciplinary and attending and evaluated by attending evaluation. Students will develop an understanding of the infrastructure of the healthcare system and its impact on appropriate diagnostic and management decisions, emphasize use of evidence-based medicine, seek constructive criticism, continually build our knowledge base, remedy any knowledge deficits.

**Interpersonal and Communication Skills:** Accomplish via hospital consults, multidisciplinary and attending rounds and team meetings evaluated by attending evaluation. Students will demonstrate ability to take an adequate history, physical examination, conduct a family conference, demonstrate the ability to communicate bad news and carry on in an appropriate fashion, identify questions and wishes of the consulting physicians, and respond to questions raised by consulting physicians and facilitate the education of other healthcare professionals.

**Professionalism:** Accomplished in all educational and patient care activities, evaluated by attending evaluation. Students will demonstrate respect and compassion and interaction with colleagues, patients, and their families including sensitivity in responsiveness to their race, gender, age, and other defining characteristics, uphold patient confidentiality and inform consent, and respect and uphold the patient wishes regarding their healthcare when ethically possible.

**System-Based Practice:** Accomplished in a multidisciplinary and attending; evaluated by attending evaluation. Students will facilitate care through the healthcare system with which they're working, learn to work with health team members in a multidisciplinary approach meeting the needs of patients with gastrointestinal/liver disease, effectively coordinate care with other healthcare professionals, guide the patient through the complex healthcare system, and demonstrate knowledge of methods to control healthcare costs while providing for high quality care.

Required Reading: Applicable guidelines are available at www.louisville.edu/medschool/gimedicine

<u>Suggested Reading:</u> Rigas B, Spiro H, <u>Clinical Gastroenterology</u>, Sleisenger MH, Fordtran JS, <u>Gastrointestinal and Liver</u> <u>Disease: Pathophysiology, Diagnosis</u>, <u>Management</u>; Zakim D, Boyer TD, <u>Hepatology: A Textbook of Liver Diseases</u>; *Up to Date* online.

**Expectations:** Punctuality/attendance for all patient care activities and educational lectures. Notify the Chief Fellow if an emergency arises, requiring absence or tardiness so that coverage can be arranged.