## Inpatient GI Curriculum Gastroenterology Fellowship Program Riverside Medical Center

**Description**: The overall goal of the inpatient GI rotation is to train gastroenterologists who are competent to manage the broad spectrum of gastrointestinal conditions that would be encountered in the setting of hospitalized patients. The clinical experience will be provided by rotation on the inpatient service and will be mentored and overseen by the attending gastroenterologist. This experience will include inpatient consultation and management of the ongoing gastrointestinal disorder solely as well as in conjunction with the primary services. The emphasis will be on care for the diseases of the gastrointestinal tract but also will include how these diseases interact with and play a role in the other medical conditions faced by the patient. The fellow will also be expected to perform in whole or in-part, the endoscopic interventions required to help in the care and management of the hospitalized patient.

Trainees will acquire a broad knowledge base through daily rounds, journal clubs, didactics lectures, radiology and pathology rounds as well as personal reading and teaching internal medicine residents.

#### **Patient Care**

**Goal**: Fellows must demonstrate the ability to effectively treat patients, provide medical care, patient empathy, awareness of behavioral issues, the incorporation of preventative medicine, and health promotion. *Fellows must be able to provide patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health.* 

- PC1 Data Gathering and Non-Procedural Diagnostic Testing
- PC2 Patient Management in Gastrointestinal and Liver Disease
- PC3 Procedures Cognitive Components
- PC4 Procedures Technical Components

Objectives	Teaching Method	Evaluation Method	PGY
Fellows are expected to:	_		Level
<ol> <li>Demonstrate competence in prevention, evaluation and management of the following:         <ul> <li>Acid peptic disorders of the gastrointestinal tract</li> <li>Acute and chronic gallbladder and biliary tract disease</li> <li>Acute and chronic liver disease</li> <li>Acute and chronic pancreatic diseases</li> <li>Disease of the esophagus</li> <li>Disorders of nutrient assimilation</li> </ul> </li> </ol>	Board Review Bedside Teaching Role Modeling Computer Module	End of Rotation Evaluation 360 Degree Evaluation Annual PD Evaluation In-Training Exam Direct Observation Indirect Supervision	PGY4 PGY5 PGY6

<ul> <li>Gastrointestinal and hepatic neoplastic disease</li> <li>Gastrointestinal bleeding</li> <li>Gastrointestinal diseases with an immune basis</li> <li>Gastrointestinal emergencies in the acutely-ill patient</li> <li>Gastrointestinal infections, including retroviral, mycotic, and parasitic diseases</li> <li>Geriatric gastroenterology</li> <li>Inflammatory bowel diseases</li> <li>Patients under surgical care for gastrointestinal disorders</li> <li>Vascular disorders of the gastrointestinal tract</li> <li>Women's health issues in digestive diseases</li> </ul>	Didactics	End of Rotation Evaluation	DCV4
2. Perform appropriate GI patient work-up.	Board Review Bedside Teaching Clinical Teaching Rounds Role Modeling Independent Learning Computer Module	Ambulatory Clinic Evaluation Annual PD Evaluation In-Training Exam Direct Observation Indirect Supervision	PGY4
Organize and prioritize patients' GI medical problems and differential diagnoses.	Didactics Board Review Bedside Teaching Clinical Teaching Rounds Role Modeling Independent Learning Computer Module	End of Rotation Evaluation Ambulatory Clinic Evaluation Annual PD Evaluation In-Training Exam Direct Observation Indirect Supervision	PGY4
<ol> <li>Gather and critically appraise references for therapy in peer-reviewed and other resources.</li> </ol>	Board Review Journal Club	Direct Observation Journal Club discussion	PGY4
5. Make informed recommendations about preventative, diagnostic and therapeutic options with guidance of the attending.	Didactics Board Review Bedside Teaching Clinical Teaching Rounds Role Modeling Independent Learning Computer Module	End of Rotation Evaluation Ambulatory Clinic Evaluation Annual PD Evaluation In-Training Exam Direct Observation Indirect Supervision	PGY4
Independently make informed recommendations about preventative, diagnostic and therapeutic options for common ambulatory and inpatient conditions.	Didactics Bedside Teaching Clinical Teaching Rounds Role Modeling Independent Learning Computer Module	End of Rotation Evaluation Ambulatory Clinic Evaluation Annual PD Evaluation In-Training Exam Direct Observation Indirect Supervision	PGY5

7. Perform advanced work up of patients with basic and complex GI disorders.	Didactics Board Review Bedside Teaching Clinical Teaching Rounds Role Modeling Independent Learning Computer Module	End of Rotation Evaluation Ambulatory Clinic Evaluation Annual PD Evaluation In-Training Exam Direct Observation Indirect Supervision	PGY6
8. Define and prioritize nutrition and motility issues.	Didactics Board Review Bedside Teaching Clinical Teaching Rounds Role Modeling Independent Learning Computer Module	End of Rotation Evaluation Ambulatory Clinic Evaluation Annual PD Evaluation In-Training Exam Direct Observation	PGY6
Use evidence based medicine in the management of all assets of basics and complex GI disorders.	Didactics Board Review Bedside Teaching Clinical Teaching Rounds Role Modeling Independent Learning Computer Module	End of Rotation Evaluation Ambulatory Clinic Evaluation Annual PD Evaluation In-Training Exam Direct Observation	PGY6
Independently make informed recommendations about preventative, diagnostic and therapeutic options.	Didactics Board Review Bedside Teaching Clinical Teaching Rounds Role Modeling Independent Learning Computer Module	End of Rotation Evaluation Ambulatory Clinic Evaluation Annual PD Evaluation In-Training Exam Direct Observation Indirect Supervision	PGY6
11. Demonstrate competence in the practice of health promotion, disease prevention, diagnosis, care and treatment of patients of each gender, from adolescence to old age, during health and all stages of illness.	Didactics Board Review Bedside Teaching Clinical Teaching Rounds Independent Learning	End of Rotation Evaluation Ambulatory Clinic Evaluation Annual PD Evaluation Direct Observation Indirect Supervision	PGY4 PGY5 PGY6

## **Medical Knowledge**

**Goal**: Fellows are expected to demonstrate and apply knowledge of accepted standards of clinical gastroenterology, remain current with new developments in gastroenterology, and participate in life-ling learning activities, including research and review of the literature. *Fellows must demonstrate knowledge of established and evolving biomedical, clinical, epidemiological and social-behavioral sciences, as well as the application of this knowledge to the care of patients with gastrointestinal diseases.* 

**Reporting Milestones:**MK1 – Clinical Knowledge of Gastrointestinal and Liver Disease (Non-Procedural)
MK2 – Clinical Reasoning

MKZ – Clinical Reasoning	To a slate at Models and	Frankrich Made al	DCV
Objectives Fellows are expected to:	Teaching Method	Evaluation Method	PGY Level
<ol> <li>Demonstrate knowledge of the following content areas:         <ul> <li>Basic science, including:</li> <li>Anatomy, physiology, pharmacology, pathology, and molecular biology related to the gastrointestinal system, including the liver, biliary tract and pancreas</li> <li>Interpretation of abnormal liver chemistries</li> <li>Liver transplantation</li> <li>Nutrition</li> <li>Prudent, cost-effective, and judicious use of special instruments, test, and therapy in the diagnosis and management of gastroenterological disorders</li> <li>Sedative pharmacology</li> <li>Surgical procedures employed in relation to digestive system disorders and their complications.</li> </ul> </li> </ol>	Board Review Bedside Teaching Role Modeling Independent Learning Computer Module	End of Rotation Evaluation 360 Degree Evaluation Annual PD Evaluation In-Training Exam Direct Observation Indirect Supervision	PGY4 PGY5 PGY6
Demonstrate fundamental knowledge as it pertains to formulating a GI diagnosis and treatment plan.	Didactics Workshop Bedside Teaching Clinical Teaching Rounds Role Modeling Independent Learning Computer Module	End of Rotation Evaluation Ambulatory Clinic Evaluation Annual PD Evaluation In-Training Exam Direct Observation	PGY4
Access and critically evaluate medical information and scientific information relevant to patient care.	Didactics Board Review Bedside Teaching Clinical Teaching Rounds Role Modeling Independent Learning Computer Module	End of Rotation Evaluation Ambulatory Clinic Evaluation Annual PD Evaluation In-Training Exam Direct Observation Indirect Supervision	PGY4
Demonstrate comprehension of pathophysiological basis of GI conditions and rationale for therapy including mechanism of action of treatment modalities.	Didactics Bedside Teaching Clinical Teaching Rounds Role Modeling Independent Learning Computer Module	End of Rotation Evaluation Ambulatory Clinic Evaluation Annual PD Evaluation In-Training Exam Direct Observation	PGY5 PGY6
<ol><li>Access and critically evaluate medical information and scientific evidence regarding all diseases gastrointestinal.</li></ol>	Didactics Board Review Clinical Teaching Rounds	End of Rotation Evaluation Ambulatory Clinic Evaluation Annual PD Evaluation	PGY6

		Independent Learning Computer Module	Indirect Supervision	
6.	Demonstrate knowledge of the scientific method of problem solving and evidence-based decision making	Didactics Board Review Independent Learning	End of Rotation Evaluation Ambulatory Clinic Evaluation Annual PD Evaluation	PGY4 PGY5 PGY6
7.	Demonstrate a knowledge of indications, contraindications, limitations, complications, techniques, and interpretation of results of those diagnostic and therapeutic procedures integral to the discipline, including the appropriate indications for and use of screening tests/procedures	Board Review Bedside Teaching Clinical Teaching Rounds Role Modeling Independent Learning	End of Rotation Evaluation Ambulatory Clinic Evaluation Annual PD Evaluation Direct Observation	PGY4 PGY5 PGY6

## **Practice-based Learning and Improvement**

**Goal**: Fellows must demonstrate the ability to investigate and evaluate their care of patients, to appraise and assimilate scientific evidence, and to continuously improve patient care based on constant self- evaluation and life-long learning.

#### **Reporting Milestones:**

PBLI1 – Evidenced-Based and Informed Practice

PBLI2 – Reflective Practice and Commitment to Personal Growth

Objectives:	Teaching Method	Evaluation Method	PGY Level
Fellows are expected to:			
Identify strengths, deficiencies, and limits in one's knowledge and expertise	Board Review Bedside Teaching Clinical Teaching Rounds Independent Learning	End of Rotation Evaluation Ambulatory Clinic Evaluation Annual PD Evaluation In-Training Exam Direct Observation	PGY4 PGY5 PGY6
2. Set learning and improvement goals	Board Review Independent Learning	In-Training Exam	PGY4 PGY5 PGY6
3. Identify and perform appropriate learning activities	Didactics Board Review Independent Learning Computer Module	In-Training Exam	PGY4 PGY5 PGY6
Systematically analyze practice, using quality improvement methods, and implement changes with the goal of practice improvement.	Board Review Bedside Teaching Computer Module	End of Rotation Evaluation Ambulatory Clinic Evaluation Annual PD Evaluation Direct Observation	PGY4 PGY5 PGY6
5. Incorporate formative evaluation feedback into daily practice	Bedside Teaching	End of Rotation Evaluation	PGY4

		Clinical Teaching Rounds	Ambulatory Clinic Evaluation Annual PD Evaluation	PGY5 PGY6
6.	Locate, appraise, and assimilate evidence from scientific studies related to their patients' health problems.	Didactics Board Review Independent Learning Computer Module	End of Rotation Evaluation Annual PD Evaluation Direct Observation	PGY4 PGY5 PGY6
7.	Use information technology to optimize learning	Didactics Computer Module	End of Rotation Evaluation In-Training Exam	PGY4 PGY5 PGY6
8.	Participate in the education of patients, families, students, fellows and other health professionals	Board Review Bedside Teaching Clinical Teaching Rounds Role Modeling	End of Rotation Evaluation 360 Degree Evaluation Ambulatory Clinic Evaluation Direct Observation	PGY4 PGY5 PGY6
9.	Obtain procedure-specific informed consent by competently educating patients about rationale, technique, and complications of procedures.	Board Review Bedside Teaching Clinical Teaching Rounds Role Modeling	360 Degree Evaluation Ambulatory Clinic Evaluation Direct Observation	PGY4 PGY5 PGY6

## **Interpersonal and Communication Skills**

**Goal**: Fellows must demonstrate interpersonal and communication skills that result in the effective exchange of information and collaboration with patients, their families, and health professionals.

### **Reporting Milestones:**

ICS1 – Patient- and Family-Centered Communication

ICS2 – Interprofessional and Team Communication

ICS3 – Communication within Health Care System

Objecti	ives:	Teaching Method	Evaluation Method	PGY Level
Fellows	s are expected to:			
1.	Communicate effectively with patients, families, and the public, as appropriate, across a broad range of socioeconomic and cultural backgrounds.	Bedside Teaching Clinical Teaching Rounds Role Modeling	End of Rotation Evaluation Ambulatory Clinic Evaluation Direct Observation 360 Degree Evaluation	PGY4 PGY5 PGY6
2.	Communicate effectively with physicians, other health professionals, and health related agencies.	Bedside Teaching Clinical Teaching Rounds Role Modeling	End of Rotation Evaluation Ambulatory Clinic Evaluation Annual PD Evaluation Direct Observation 360 Degree Evaluation	PGY4 PGY5 PGY6
3.	Work effectively as a member or leader of a health care team or other professional group.	Bedside Teaching Clinical Teaching Rounds	End of Rotation Evaluation 360 Degree Evaluation	PGY4 PGY5

	Role Modeling	Annual PD Evaluation	PGY6
4. Act in a consultative role to other physicians and health professionals.	Bedside Teaching Clinical Teaching Rounds Role Modeling	End of Rotation Evaluation Ambulatory Clinic Evaluation Annual PD Evaluation Direct Observation	PGY4 PGY5 PGY6
5. Maintain comprehensive, timely, and legible medical records if applicable.	Role Modeling Computer Module	Annual PD Evaluation Direct Observation	PGY4 PGY5 PGY6

## **Professionalism**

**Goal**: Fellows must demonstrate a commitment to carrying out professional responsibilities and an adherence to ethical principles.

### **Reporting Milestones:**

PROF1 – Professional Behavior and Ethical Principles

PROF2 – Accountability/Conscientiousness

PROF3 – Self-Awareness and Help-Seeking

Object Fellow	rives: <i>es are expected to:</i>	Teaching Method	Evaluation Method	PGY Level
1.	Demonstrate compassion, integrity, and respect for others	Bedside Teaching Clinical Teaching Rounds Role Modeling	End of Rotation Evaluation Ambulatory Clinic Evaluation Annual PD Evaluation Direct Observation	PGY4 PGY5 PGY6
2.	Demonstrate responsiveness to patient needs that supersedes self-interest	Bedside Teaching Clinical Teaching Rounds Role Modeling	End of Rotation Evaluation Ambulatory Clinic Evaluation Annual PD Evaluation Direct Observation	PGY4 PGY5 PGY6
3.	Demonstrate respect for patient privacy and autonomy.	Bedside Teaching Clinical Teaching Rounds Role Modeling	End of Rotation Evaluation 360 Degree Evaluation Ambulatory Clinic Evaluation Annual PD Evaluation Direct Observation	PGY4 PGY5 PGY6
4.	Demonstrate accountability to patients, society and the profession.	Didactics Board Review Computer Module	Ambulatory Clinic Evaluation In-Training Exam Direct Observation	PGY4 PGY5 PGY6
5.	Demonstrate sensitivity and responsiveness to a diverse patient population, including but not limited to diversity in gender, age, culture, race, religion, disabilities, and sexual orientation.	Bedside Teaching Clinical Teaching Rounds Role Modeling	End of Rotation Evaluation 360 Degree Evaluation Ambulatory Clinic Evaluation Annual PD Evaluation Direct Observation	PGY4 PGY5 PGY6

## **System-Based Practice**

**Goal**: Fellows must demonstrate an awareness of and responsiveness to the larger context and system of healthcare, as well as the ability to call effectively on other resources in the system to provide optimal health care.

#### **Reporting Milestones:**

SBP1 – Patient Safety and Quality Improvement

SBP2 – System Navigation for Patient-Centered Care SBP3 – Physician Role in Health Care System

Objective	es:	Teaching Method	Evaluation Method	PGY Level
Fellows 8	are expected to:			
	Work effectively in various health care delivery setting and systems relevant to their clinical specialty.	Bedside Teaching Clinical Teaching Rounds Role Modeling Independent Learning	End of Rotation Evaluation 360 Degree Evaluation Ambulatory Clinic Evaluation Annual PD Evaluation Direct Observation	PGY4 PGY5 PGY6
	Coordinate patient care within the health care system relevant to their clinical specialty.	Clinical Teaching Rounds Role Modeling Independent Learning	End of Rotation Evaluation 360 Degree Evaluation Ambulatory Clinic Evaluation Annual PD Evaluation Direct Observation	PGY4 PGY5 PGY6
	Incorporate considerations of cost awareness and risk-benefit analysis in patient and/or population- based care as appropriate.	Didactics Board Review Clinical Teaching Rounds Role Modeling Independent Learning Computer Module	End of Rotation Evaluation Ambulatory Clinic Evaluation Direct Observation	PGY4 PGY5 PGY6
4. /	Advocate for quality patient care and optimal patient care systems.	Bedside Teaching Clinical Teaching Rounds Role Modeling Computer Module	End of Rotation Evaluation 360 Degree Evaluation Ambulatory Clinic Evaluation Direct Observation	PGY4 PGY5 PGY6
	Work in interprofessional teams to enhance patient safety and improve patient care quality.	Bedside Teaching Clinical Teaching Rounds Role Modeling	End of Rotation Evaluation 360 Degree Evaluation Ambulatory Clinic Evaluation Annual PD Evaluation Direct Observation	PGY4 PGY5 PGY6
	Participate in identifying system errors and implementing potential systems solutions.	Workshop Simulation Bedside Teaching Clinical Teaching Rounds Role Modeling Independent Learning	360 Degree Evaluation	PGY4 PGY5 PGY6

# Radiology Curriculum Gastroenterology Fellowship Program Riverside Medical Center

**Description**: The overall goal of the radiology rotation is to give exposure to radiographic interpretation as it relates to the gastrointestinal tract. Included is a further understanding of the impact that these findings have on the care of the patient and also how to further evaluate patients based on these findings and to arrive at treatment and care of the patient. This will be accomplished through daily interpretation of GI radiographic exams of present patients and from examining case files of prior studies. Side by side interpretation will be facilitated by the attending Radiology staff and personal reading will be expected.

#### **Patient Care**

**Goal**: Fellows must demonstrate the ability to effectively treat patients, provide medical care, patient empathy, awareness of behavioral issues, the incorporation of preventative medicine, and health promotion. *Fellows must be able to provide patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health.* 

#### **Reporting Milestones:**

PC1 – Data Gathering and Non-Procedural Diagnostic Testing

PC2 – Patient Management in Gastrointestinal and Liver Disease

PC3 – Procedures Cognitive Components

PC4 - Procedures Technical Components

Tet Troccadies recrimical components			
Objectives	Teaching Method	Evaluation Method	PGY
Fellows are expected to:			Level
Demonstrate competence in prevention, evaluation and management of the	Independent Learning	End of Rotation Evaluation	PGY4
following:	Computer Module		
<ul> <li>Acid peptic disorders of the gastrointestinal tract</li> </ul>			
<ul> <li>Acute and chronic gallbladder and biliary tract disease</li> </ul>			
Acute and chronic liver disease			
Acute and chronic pancreatic diseases			
Disease of the esophagus			
Gastrointestinal and hepatic neoplastic disease			
Gastrointestinal bleeding			
Genetic/inherited disorders			
Geriatric gastroenterology			
Inflammatory bowel diseases			
Motor disorders of the gastrointestinal tract			

	<ul> <li>Patients under surgical care for gastrointestinal disorders</li> <li>Vascular disorders of the gastrointestinal tract</li> <li>Women's health issues in digestive diseases</li> </ul>			
2.	Perform appropriate GI patient work-up.	Didactics Board Review Bedside Teaching Clinical Teaching Rounds Role Modeling Independent Learning Computer Module	End of Rotation Evaluation Ambulatory Clinic Evaluation Annual PD Evaluation In-Training Exam Direct Observation Indirect Supervision	PGY4
	Gather and critically appraise references for therapy in peer-reviewed and other resources.	Board Review Journal Club	Direct Observation Journal Club discussion	PGY4
	Perform advanced work up of patients with basic and complex GI disorders.	Didactics Board Review Bedside Teaching Clinical Teaching Rounds Role Modeling Independent Learning Computer Module	End of Rotation Evaluation Ambulatory Clinic Evaluation Annual PD Evaluation In-Training Exam Direct Observation Indirect Supervision	PGY6

## **Medical Knowledge**

**Goal**: Fellows are expected to demonstrate and apply knowledge of accepted standards of clinical gastroenterology, remain current with new developments in gastroenterology, and participate in life-ling learning activities, including research and review of the literature. *Fellows must demonstrate knowledge of established and evolving biomedical, clinical, epidemiological and social-behavioral sciences, as well as the application of this knowledge to the care of patients with gastrointestinal diseases.* 

#### **Reporting Milestones:**

MK1 – Clinical Knowledge of Gastrointestinal and Liver Disease (Non-Procedural)

MK2 – Clinical Reasoning

Objectives Fellows are expected to:	Teaching Method	Evaluation Method	PGY Level
<ul> <li>Demonstrate knowledge of the following content areas:         <ul> <li>Basic science, including:</li> <li>Anatomy, physiology, pharmacology, pathology, and molecular biology related to the gastrointestinal system, including the liver, biliary tract and pancreas</li> </ul> </li> </ul>	Didactics Role Modeling Independent Learning	End of Rotation Evaluation In-Training Exam Indirect Supervision	PGY4

	<ul> <li>Prudent, cost-effective, and judicious use of special instruments, test, and therapy in the diagnosis and management of gastroenterological disorders</li> <li>Surgical procedures employed in relation to digestive system disorders and their complications.</li> </ul>			
2.	Demonstrate fundamental knowledge as it pertains to formulating a GI diagnosis and treatment plan.	Didactics Workshop Bedside Teaching Clinical Teaching Rounds Role Modeling Independent Learning Computer Module	End of Rotation Evaluation Ambulatory Clinic Evaluation Annual PD Evaluation In-Training Exam Direct Observation	PGY4
3.	Access and critically evaluate medical information and scientific information relevant to patient care.	Didactics Board Review Bedside Teaching Clinical Teaching Rounds Role Modeling Independent Learning Computer Module	End of Rotation Evaluation Ambulatory Clinic Evaluation Annual PD Evaluation In-Training Exam Direct Observation Indirect Supervision	PGY4
4.	Demonstrate comprehension of pathophysiological basis of GI conditions and rationale for therapy including mechanism of action of treatment modalities.	Didactics Bedside Teaching Clinical Teaching Rounds Role Modeling Independent Learning Computer Module	End of Rotation Evaluation Ambulatory Clinic Evaluation Annual PD Evaluation In-Training Exam Direct Observation	PGY4
5.	Access and critically evaluate medical information and scientific evidence regarding all diseases gastrointestinal.	Didactics Board Review Clinical Teaching Rounds Independent Learning Computer Module	End of Rotation Evaluation Ambulatory Clinic Evaluation Annual PD Evaluation Indirect Supervision	PGY4
6.	Demonstrate knowledge of the scientific method of problem solving and evidence-based decision making	Didactics Board Review Independent Learning	End of Rotation Evaluation Ambulatory Clinic Evaluation Annual PD Evaluation	PGY4
7.	Demonstrate a knowledge of indications, contraindications, limitations, complications, techniques, and interpretation of results of those diagnostic and therapeutic procedures integral to the discipline, including the appropriate indications for and use of screening tests/procedures	Board Review Bedside Teaching Clinical Teaching Rounds Role Modeling Independent Learning	End of Rotation Evaluation Ambulatory Clinic Evaluation Annual PD Evaluation Direct Observation	PGY4

## **Practice-based Learning and Improvement**

**Goal**: Fellows must demonstrate the ability to investigate and evaluate their care of patients, to appraise and assimilate scientific evidence, and to continuously improve patient care based on constant self- evaluation and life-long learning.

#### **Reporting Milestones:**

PBLI1 – Evidenced-Based and Informed Practice

PBLI2 – Reflective Practice and Commitment to Personal Growth

Objectives: Fellows are expected to:	Teaching Method	Evaluation Method	PGY Level
Identify and perform appropriate learning activities	Didactics Board Review Independent Learning Computer Module	In-Training Exam	PGY4
Use information technology to optimize learning	Didactics Independent Learning Computer Module	End of Rotation Evaluation In-Training Exam	PGY4

### **System-Based Practice**

**Goal**: Fellows must demonstrate an awareness of and responsiveness to the larger context and system of healthcare, as well as the ability to call effectively on other resources in the system to provide optimal health care.

#### **Reporting Milestones:**

SBP1 – Patient Safety and Quality Improvement

SBP2 – System Navigation for Patient-Centered Care

SBP3 – Physician Role in Health Care System

Object Fellow	ives: s are expected to:	Teaching Method	Evaluation Method	PGY Level
1.	Coordinate patient care within the health care system relevant to their clinical specialty.	Clinical Teaching Rounds Role Modeling Independent Learning	End of Rotation Evaluation 360 Degree Evaluation Ambulatory Clinic Evaluation Annual PD Evaluation Direct Observation	PGY4
2.	Incorporate considerations of cost awareness and risk-benefit analysis in patient and/or population- based care as appropriate.	Didactics Board Review Clinical Teaching Rounds Role Modeling Independent Learning Computer Module	End of Rotation Evaluation 360 Degree Evaluation Ambulatory Clinic Evaluation Direct Observation	PGY4

# Pathology Curriculum Gastroenterology Fellowship Program Riverside Medical Center

**Description**: The overall goal of the Pathology rotation is to give exposure to pathologic interpretation of gastrointestinal tissue specimens. This will include further understanding of the impact and care of the patient based upon those findings, and examination of all types of gastrointestinal tissue directly with the attending Pathologist. Personal reading and evaluation of case files will be performed with the Pathologist.

#### **Patient Care**

**Goal**: Fellows must demonstrate the ability to effectively treat patients, provide medical care, patient empathy, awareness of behavioral issues, the incorporation of preventative medicine, and health promotion. *Fellows must be able to provide patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health.* 

- PC1 Data Gathering and Non-Procedural Diagnostic Testing
- PC2 Patient Management in Gastrointestinal and Liver Disease
- PC3 Procedures Cognitive Components
- PC4 Procedures Technical Components

PC4 – Procedures Technical Components			
Objectives	Teaching Method	Evaluation Method	PGY
Fellows are expected to:			Level
<ol> <li>Demonstrate competence in prevention, evaluation and management of the following:         <ul> <li>Acid peptic disorders of the gastrointestinal tract</li> <li>Acute and chronic gallbladder and biliary tract disease</li> <li>Acute and chronic liver disease</li> <li>Acute and chronic pancreatic diseases</li> <li>Disease of the esophagus</li> <li>Disorders of nutrient assimilation</li> <li>Gastrointestinal and hepatic neoplastic disease</li> <li>Gastrointestinal diseases with an immune basis</li> <li>Genetic/inherited disorders</li> <li>Geriatric gastroenterology</li> <li>Inflammatory bowel diseases</li> </ul> </li> </ol>	Didactics Board Review Bedside Teaching Clinical Teaching Rounds Role Modeling Independent Learning Computer Module	End of Rotation Evaluation 360 Degree Evaluation Ambulatory Clinic Evaluation Annual PD Evaluation In-Training Exam Direct Observation Indirect Supervision	PGY5

<ul> <li>Patients under surgical care for gastrointestinal disorders</li> <li>Vascular disorders of the gastrointestinal tract</li> <li>Women's health issues in digestive diseases</li> </ul>			
2. Perform appropriate GI patient work-up.	Didactics Board Review Bedside Teaching Clinical Teaching Rounds Role Modeling Independent Learning Computer Module	End of Rotation Evaluation Ambulatory Clinic Evaluation Annual PD Evaluation In-Training Exam Direct Observation Indirect Supervision	PGY5
<ol><li>Gather and critically appraise references for therapy in peer-reviewed and other resources.</li></ol>	Board Review Journal Club	Direct Observation Journal Club discussion	PGY5

### **Medical Knowledge**

**Goal**: Fellows are expected to demonstrate and apply knowledge of accepted standards of clinical gastroenterology, remain current with new developments in gastroenterology, and participate in life-ling learning activities, including research and review of the literature. *Fellows must demonstrate knowledge of established and evolving biomedical, clinical, epidemiological and social-behavioral sciences, as well as the application of this knowledge to the care of patients with gastrointestinal diseases.* 

#### **Reporting Milestones:**

MK1 – Clinical Knowledge of Gastrointestinal and Liver Disease (Non-Procedural)

MK2 – Clinical Reasoning

Objectives	Teaching Method	Evaluation Method	PGY
Fellows are expected to:			Level
<ol> <li>Demonstrate knowledge of the following content areas:         <ul> <li>Basic science, including:</li> <li>Anatomy, physiology, pharmacology, pathology, and molecular biology related to the gastrointestinal system, including the liver, biliary tract and pancreas</li> <li>Prudent, cost-effective, and judicious use of special instruments, test, and therapy in the diagnosis and management of gastroenterological disorders</li> </ul> </li> </ol>	Didactics Board Review Bedside Teaching Clinical Teaching Rounds Role Modeling Independent Learning Computer Module	End of Rotation Evaluation 360 Degree Evaluation Ambulatory Clinic Evaluation Annual PD Evaluation In-Training Exam Direct Observation Indirect Supervision	PGY5
Demonstrate fundamental knowledge as it pertains to formulating a GI diagnosis and treatment plan.	Didactics Workshop Bedside Teaching Clinical Teaching Rounds Role Modeling Independent Learning Computer Module	End of Rotation Evaluation Ambulatory Clinic Evaluation Annual PD Evaluation In-Training Exam Direct Observation	PGY5

3.	Access and critically evaluate medical information and scientific information relevant to patient care.	Didactics Board Review Bedside Teaching Clinical Teaching Rounds Role Modeling Independent Learning Computer Module	End of Rotation Evaluation Ambulatory Clinic Evaluation Annual PD Evaluation In-Training Exam Direct Observation Indirect Supervision	PGY5
4.	Demonstrate comprehension of pathophysiological basis of GI conditions and rationale for therapy including mechanism of action of treatment modalities.	Didactics Bedside Teaching Clinical Teaching Rounds Independent Learning Computer Module	End of Rotation Evaluation Ambulatory Clinic Evaluation Annual PD Evaluation In-Training Exam Direct Observation	PGY5
5.	Access and critically evaluate medical information and scientific evidence regarding all diseases gastrointestinal.	Didactics Board Review Clinical Teaching Rounds Independent Learning Computer Module	End of Rotation Evaluation Ambulatory Clinic Evaluation Annual PD Evaluation Indirect Supervision	PGY5

## **Practice-based Learning and Improvement**

**Goal**: Fellows must demonstrate the ability to investigate and evaluate their care of patients, to appraise and assimilate scientific evidence, and to continuously improve patient care based on constant self- evaluation and life-long learning.

#### **Reporting Milestones:**

PBLI1 - Evidenced-Based and Informed Practice

PBLI2 – Reflective Practice and Commitment to Personal Growth

Objectives: Fellows are expected to:	Teaching Method	Evaluation Method	PGY Level
Identify and perform appropriate learning activities	Didactics Board Review Independent Learning Computer Module	In-Training Exam	PGY5
Use information technology to optimize learning	Computer Module	End of Rotation Evaluation In-Training Exam	PGY5

## **System-Based Practice**

**Goal**: Fellows must demonstrate an awareness of and responsiveness to the larger context and system of healthcare, as well as the ability to call effectively on other resources in the system to provide optimal health care.

#### **Reporting Milestones:**

SBP1 – Patient Safety and Quality Improvement

SBP2 – System Navigation for Patient-Centered Care

SBP3 – Physician Role in Health Care System

Objectives:	Teaching Method	Evaluation Method	PGY Level
Fellows are expected to:			
Coordinate patient care within the health care system relevant to their clinical specialty.	Clinical Teaching Rounds Role Modeling Independent Learning	End of Rotation Evaluation 360 Degree Evaluation Ambulatory Clinic Evaluation Annual PD Evaluation Direct Observation	PGY5

# Research Curriculum Gastroenterology Fellowship Program Riverside Medical Center

**Description**: The goal of the research rotation is to allow time for the fellow to develop a project for evaluation and study. During this time, they will look at methods required to perform the study and will gather the information needed to perform statistical analysis with the help of the statistician. In the case of a prospective study they will present the study to the IRB and gain acceptance and approval to perform the study. Retrospective studies will require IRB approval as well, and will be performed under the supervision of an attending Gastroenterologist.

#### **Patient Care**

**Goal**: Fellows must demonstrate the ability to effectively treat patients, provide medical care, patient empathy, awareness of behavioral issues, the incorporation of preventative medicine, and health promotion. *Fellows must be able to provide patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health.* 

#### **Reporting Milestones:**

- PC1 Data Gathering and Non-Procedural Diagnostic Testing
- PC2 Patient Management in Gastrointestinal and Liver Disease
- PC3 Procedures Cognitive Components
- PC4 Procedures Technical Components

Objectives Fellows are expected to:	Teaching Method	Evaluation Method	PGY Level
<ol> <li>Gather and critically appraise references for therapy in peer-reviewed and other resources.</li> </ol>	Board Review Journal Club	Direct Observation Journal Club discussion	PGY4

### **Medical Knowledge**

**Goal**: Fellows are expected to demonstrate and apply knowledge of accepted standards of clinical gastroenterology, remain current with new developments in gastroenterology, and participate in life-ling learning activities, including research and review of the literature. *Fellows must demonstrate knowledge of established and evolving biomedical, clinical, epidemiological and social-behavioral sciences, as well as the application of this knowledge to the care of patients with gastrointestinal diseases.* 

- MK1 Clinical Knowledge of Gastrointestinal and Liver Disease (Non-Procedural)
- MK2 Clinical Reasoning

Objectives Fellows are expected to:	Teaching Method	Evaluation Method	PGY Level
Access and critically evaluate medical information and scientific evidence regarding all diseases gastrointestinal.	Didactics Board Review Clinical Teaching Rounds Independent Learning Computer Module	End of Rotation Evaluation Ambulatory Clinic Evaluation Annual PD Evaluation Indirect Supervision	PGY6
Demonstrate knowledge of the scientific method of problem solving and evidence-based decision making	Didactics Board Review Independent Learning	End of Rotation Evaluation Ambulatory Clinic Evaluation Annual PD Evaluation	PGY4 PGY5 PGY6

## **Practice-based Learning and Improvement**

**Goal**: Fellows must demonstrate the ability to investigate and evaluate their care of patients, to appraise and assimilate scientific evidence, and to continuously improve patient care based on constant self- evaluation and life-long learning.

#### **Reporting Milestones:**

PBLI1 - Evidenced-Based and Informed Practice

PBLI2 – Reflective Practice and Commitment to Personal Growth

Objectives: Fellows are expected to:	Teaching Method	Evaluation Method	PGY Level
Identify and perform appropriate learning activities	Didactics Board Review Independent Learning Computer Module	In-Training Exam	PGY4 PGY5 PGY6
Locate, appraise, and assimilate evidence from scientific studies related to their patients' health problems.	Didactics Board Review Independent Learning Computer Module	End of Rotation Evaluation Ambulatory Clinic Evaluation Annual PD Evaluation Direct Observation	PGY4 PGY5 PGY6
Use information technology to optimize learning	Didactics Computer Module	End of Rotation Evaluation In-Training Exam	PGY4 PGY5 PGY6

#### **Professionalism**

**Goal**: Fellows must demonstrate a commitment to carrying out professional responsibilities and an adherence to ethical principles.

PROF1 – Professional Behavior and Ethical Principles			
PROF2 – Accountability/Conscientiousness			
PROF3 – Self-Awareness and Help-Seeking			
Objectives:	Teaching Method	Evaluation Method	PGY Level
Fellows are expected to:			
<ol> <li>Demonstrate sensitivity and responsiveness to a diverse patient population, including but not limited to diversity in gender, age, culture, race, religion, disabilities, and sexual orientation.</li> </ol>	Bedside Teaching Clinical Teaching Rounds Role Modeling	End of Rotation Evaluation 360 Degree Evaluation Ambulatory Clinic Evaluation Annual PD Evaluation Direct Observation	PGY4 PGY5 PGY6

## **System-Based Practice**

**Goal**: Fellows must demonstrate an awareness of and responsiveness to the larger context and system of healthcare, as well as the ability to call effectively on other resources in the system to provide optimal health care.

### **Reporting Milestones:**

SBP1 – Patient Safety and Quality Improvement

SBP2 – System Navigation for Patient-Centered Care

SBP3 – Physician Role in Health Care System

Objectives:	Teaching Method	Evaluation Method	PGY Level
Fellows are expected to:			
Advocate for quality patient care and optimal patient care systems.	Bedside Teaching Clinical Teaching Rounds Role Modeling Computer Module	End of Rotation Evaluation 360 Degree Evaluation Ambulatory Clinic Evaluation Direct Observation	PGY4 PGY5 PGY6

# Nutrition Curriculum Gastroenterology Fellowship Program Riverside Medical Center

This rotation will be performed at University of Chicago Medical Center. Portions of the curriculum for this rotation were written by Carol Semrad, MD at University of Chicago.

**Description**: The inpatient and outpatient Gastroenterology/Nutrition Service is designed to provide fellows with an education in the diagnosis and management of nutritional problems in a diverse population of patients. The fellow will be taught methods to access the gastrointestinal tract for enteral feeding. Education in the diagnosis and management of malabsorption and diarrheal diseases is provided in the outpatient setting. Training is provided to all fellows at a basic level and for those who wish to specialize in nutrition at an advanced level. Training is under the direct supervision of an attending Gastroenterologist with advanced training in Nutrition and a Fellow training at and advanced level of Nutrition.

**Nutrition Support Service:** The Nutrition Support Service (NSS) functions as a team consisting of an Attending Physicians, Clinical Nutrition Fellow, GI fellow, nurse, dietician, pharmacist and medical students. Through team discussions, the NSS provides a clinical consultative service to hospitalized patients requiring specialized nutritional support, manages outpatients receiving home parenteral and enteral nutrition and acts as a resource for clinical staff and students.

#### Resources

Textbook of Parenteral and Enteral Nutrition by Rombeau Up to Date Pub Med access to journal articles Cecil's Textbook of Medicine Yamada's Textbook of Gastroenterology

#### **Conferences**

GI Grand Rounds Clinical Conference GI Grand Rounds Research Conference GI Fellows Lecture Series Medicine Grand Rounds Pharmacy Lecture on designing Parenteral Nutrition formulas

#### **Patient Care**

**Goal**: Fellows must demonstrate the ability to effectively treat patients, provide medical care, patient empathy, awareness of behavioral issues, the incorporation of preventative medicine, and health promotion. *Fellows must be able to provide patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health.* 

PC1 – Data Gathering and Non-Procedural Diagnostic Testing PC2 – Patient Management in Gastrointestinal and Liver Disease PC3 – Procedures Cognitive Components PC4 – Procedures Technical Components Objectives	Teaching Method	Evaluation Method	PGY
Fellows are expected to:	_	Evaluation Method	Level
<ol> <li>Demonstrate competence in prevention, evaluation and management of the following:         <ul> <li>Acid peptic disorders of the gastrointestinal tract</li> <li>Acute and chronic gallbladder and biliary tract disease</li> <li>Acute and chronic liver disease</li> <li>Acute and chronic pancreatic diseases</li> <li>Disease of the esophagus</li> <li>Disorders of nutrient assimilation</li> <li>Gastrointestinal and hepatic neoplastic disease</li> <li>Gastrointestinal diseases with an immune basis</li> <li>Gastrointestinal infections, including retroviral, mycotic, and parasitic diseases</li> <li>Geriatric gastroenterology</li> <li>Inflammatory bowel diseases</li> <li>Irritable bowel syndrome</li> <li>Motor disorders of the gastrointestinal tract</li> <li>Patients under surgical care for gastrointestinal disorders</li> <li>Vascular disorders of the gastrointestinal tract</li> <li>Women's health issues in digestive diseases</li> </ul></li></ol> <li>Perform a comprehensive nutritional assessment.</li> <li>Adequate performance of a nutrition history and physical exam.</li> <li>Demonstrate compassion and empathy for patients especially in situations when nutrition support is withheld in end-of-life care.</li> <li>Rounds to review physical findings and tests to monitor nutrition care.</li> <li>Understand indications for home parenteral nutrition.</li> <li>Attending observation of fellow interaction with patient on rounds.</li> <li>Attending feedback at middle and end of rotation on above skills.</li> <li>Perform a comprehensive nutritional assessment.</li> <li>Determine appropriate enteral and/or parenteral feeding route.</li> <li>Place enteral tubes.</li> <li>Determine nutritional requirements.</li>	Each fellow will learn clinical nutrition in many different learning environments.  • As part of the Nutrition Support Service Team In-patient consults Out-patient clinic  • Endoscopy unit  • Gastroenterology /Nutrition fellow lecture series  • Gastroenterology Grand Rounds  • Self-education though reading textbooks and literature  • Nutrition Journal Club	Rotational Evaluation Procedure Reports	PGY 5

13. Manage diarrheal and malabsorptive diseases.
14. Monitor for complications of enteral and parenteral nutrition

## **Medical Knowledge**

**Goal**: Fellows are expected to demonstrate and apply knowledge of accepted standards of clinical gastroenterology, remain current with new developments in gastroenterology, and participate in life-ling learning activities, including research and review of the literature. *Fellows must demonstrate knowledge of established and evolving biomedical, clinical, epidemiological and social-behavioral sciences, as well as the application of this knowledge to the care of patients with gastrointestinal diseases.* 

#### **Reporting Milestones:**

MK1 – Clinical Knowledge of Gastrointestinal and Liver Disease (Non-Procedural)

MK2 – Clinical Reasoning

Title Cilifical Reasoning			
Objectives	Teaching Method	Evaluation Method	PGY
Fellows are expected to:			Level
<ol> <li>Demonstrate knowledge of the following content areas:         <ul> <li>Basic science, including:</li> <li>Anatomy, physiology, pharmacology, pathology, and molecular biology related to the gastrointestinal system, including the liver, biliary tract and pancreas</li> <li>Interpretation of abnormal liver chemistries</li> <li>Liver transplantation</li> <li>Nutrition</li> <li>Prudent, cost-effective, and judicious use of special instruments, test, and therapy in the diagnosis and management of gastroenterological disorders</li> <li>Surgical procedures employed in relation to digestive system disorders and their complications.</li> </ul> </li> <li>Understand how to diagnose malnutrition.</li> </ol>	Each fellow will learn clinical nutrition in many different learning environments.  • As part of the Nutrition Support Service Team In-patient consults Out-patient clinic  • Endoscopy unit  • Gastroenterology /Nutrition fellow lecture series  • Gastroenterology Grand Rounds  • Self-education though reading textbooks and literature  • Nutrition Journal Club	Rotational Evaluation Procedure Reports	PGY 5
3. Understand who is at risk for refeeding syndrome.			
4. Understand the indications for enteral and parenteral nutrition.			
<ol> <li>Understand how to replete abnormal electrolytes, MG, P before starting PN.</li> </ol>			
6. Understand the complications and management of EN and PN.			
7. Understand diarrhea and malabsorptive diseases.			
8. Understand diseases that impair oral intake.			
Understand how to interpret indirect calorimetry.			
10. Understand how to interpret Hydrogen Breath Tests.			
11. Develop disease specific nutrition support regimens.			

12. Design parenteral formulas.
<ol> <li>To understand the normal physiology of digestion, absorption and nutrient delivery.</li> </ol>
14. To understand the metabolic response to starvation and stress.
15. To learn how to assess nutrition status.
<ol><li>To understand the risks and benefits of enteral and parenteral nutrition in diverse disease states.</li></ol>
17. To learn methods of accessing the gastrointestinal tract for enteral nutrition.
18. To understand types of central venous access for parenteral nutrition.
19. To understand how to determine fluid, calorie and protein needs for a normal and stressed individual.
20. To understand indirect calorimetry measurements.
21. To learn how to design parenteral nutrition formulas and how to choose enteral formulas.
22. To learn how to monitor individuals on enteral or parenteral nutrition support for efficacy and safety of therapy.

## **Practice-based Learning and Improvement**

**Goal**: Fellows must demonstrate the ability to investigate and evaluate their care of patients, to appraise and assimilate scientific evidence, and to continuously improve patient care based on constant self- evaluation and life-long learning.

#### **Reporting Milestones:**

PBLI1 – Evidenced-Based and Informed Practice

PBLI2 – Reflective Practice and Commitment to Personal Growth

Objectives:  Fellows are expected to:	Teaching Method	Evaluation Method	PGY Level
<ul> <li>3. Read the medical literature to guide nutrition therapy.</li> <li>4. Teach residents by bringing nutrition literature to rounds.</li> <li>5. Review of daily laboratory tests to guide management.</li> </ul>	Each fellow will learn clinical nutrition in many different learning environments.  • As part of the Nutrition Support Service Team In-patient consults Out-patient clinic  • Endoscopy unit  • Gastroenterology /Nutrition fellow lecture series  • Gastroenterology Grand Rounds	Rotational Evaluation Procedure Reports	PGY 5

Self-education though reading	
textbooks and literature	
Nutrition Journal Club	

## **Interpersonal and Communication Skills**

**Goal**: Fellows must demonstrate interpersonal and communication skills that result in the effective exchange of information and collaboration with patients, their families, and health professionals.

#### **Reporting Milestones:**

- ICS1 Patient- and Family-Centered Communication
- ICS2 Interprofessional and Team Communication
- ICS3 Communication within Health Care System

Objectives:	Teaching Method	Evaluation Method	PGY Level
Fellows are expected to:			
<ul> <li>6. Develop communication skills with patients and families regarding nutrition care and comfort care when applicable.</li> <li>7. Function as part of the nutrition support team.</li> </ul>	Each fellow will learn clinical nutrition in many different learning environments.  • As part of the Nutrition Support Service Team In-patient consults Out-patient clinic  • Endoscopy unit  • Gastroenterology /Nutrition fellow lecture series  • Gastroenterology Grand Rounds  • Self-education though reading textbooks and literature  • Nutrition Journal Club	Rotational Evaluation Procedure Reports	PGY 5

### **Professionalism**

**Goal**: Fellows must demonstrate a commitment to carrying out professional responsibilities and an adherence to ethical principles.

- PROF1 Professional Behavior and Ethical Principles
- PROF2 Accountability/Conscientiousness
- PROF3 Self-Awareness and Help-Seeking

Objectiv		Teaching Method	Evaluation Method	PGY Level
Fellows	are expected to:			
2.	Demonstrate responsibility, trustworthiness, respect and empathy for patients.	Each fellow will learn clinical	Rotational	PGY 5
	Carry out duties thoroughly, carefully assess patients for procedures, set-up for procedures and moitor for complications.	nutrition in many different learning environments.	Evaluation Procedure Reports	
4.	Teach residents and medical students.	<ul> <li>As part of the Nutrition Support         Service Team         In-patient consults         Out-patient clinic</li> <li>Endoscopy unit</li> <li>Gastroenterology /Nutrition         fellow lecture series</li> <li>Gastroenterology Grand Rounds</li> <li>Self-education though reading         textbooks and literature</li> <li>Nutrition Journal Club</li> </ul>		

## **System-Based Practice**

Goal: Fellows must demonstrate an awareness of and responsiveness to the larger context and system of healthcare, as well as the ability to call effectively on other resources in the system to provide optimal health care.

#### **Reporting Milestones:**

SBP1 – Patient Safety and Quality Improvement

SBP2 – System Navigation for Patient-Centered Care SBP3 – Physician Role in Health Care System

Objectives:	Teaching Method	Evaluation Method	PGY Level
Fellows are expected to:			
Utilize consultants and diagnostic services.	Each fellow will learn clinical	Rotational	PGY 5
3. Use critical pathways and treatment protocols when applicable.	nutrition in many different learning	Evaluation	
To understand the ethical and legal issues of withholding or withdrawing nutritional support.	<ul> <li>environments.</li> <li>As part of the Nutrition Support Service Team In-patient consults Out-patient clinic</li> <li>Endoscopy unit</li> <li>Gastroenterology /Nutrition fellow lecture series</li> <li>Gastroenterology Grand Rounds</li> </ul>	Procedure Reports	

<ul> <li>Self-education though reading textbooks and literature</li> </ul>	
<ul> <li>Nutrition Journal Club</li> </ul>	

## **Patient Characteristics/Disease Mix**

**Hospitalized patients** – a diverse population is assessed for nutrition support.

- Surgical
- Critically III
- Medical patients with malnutrition, inability to eat, or guy dysfunction
- Inflammatory Bowel Disease
- Liver Disease
- Pregnant
- Obese
- Psychiatric

Fellows will learn how to tailor nutrition need to unique patient populations such as obesity, critically ill, liver failure, renal failure, pulmonary failure, pregnancy and rare metabolic diseases.

Outpatients- a diverse population is assessed

- Celiac disease
- Short Bowel Syndrome
- Diarrheal and malabsorptive diseases
- Intestinal pseudoobstruction
- Dysphagia
- Gastroparesis
- Obesity
- Weight loss
- Home TPN patients
- Enteral tube feeding patients

#### **Skills**

#### Assess for malnutrition

History: weight history (weight loss or gain)

gastrointestinal symptoms oral intake

strength

Physical exam: height/weight

muscle wasting

skin

strength

edema

Laboratory: Albumin/Prealbumin, creatinine, transferrin levels

#### • Determine risks and benefits of nutrition support in select groups

Surgical patients

Cancer

Critical Illness

Gastrointestinal disease

Renal failure

**Pancreatitis** 

Liver disease

Transplantation

Pregnancy

#### • Determine route of nutrition support

Understand complications of enteral and parenteral tube placements Understand the indications for PICC and tunneled central IV catheters Chest x-ray interpretation for tip position of central catheter in SVC

#### Procedures for enteral feeding

Percutaneous Endoscopic Gastrostomy (PEG) tube placement

PEG with a J-tube extender

Direct Percutaneous Endoscopic Jejunostomy (PEJ) tube placement

Endoscopic Nasojejunal tube placement

#### • Estimating fluid, protein and calorie requirements

Adjusting body weight for obesity and edema

BMR by Harris-Benedict Equation

Knowledge of multipliers for activity and stress

RMR by indirect calorimetry

Assessing nitrogen needs by nitrogen balance

#### Designing parenteral formulas

Calculate volume, calorie and protein requirements

Calculate lipid requirements

Calculate electrolyte, calcium, phosphorous, magnesium requirements

Add appropriate vitamins and trace elements

Calculate Insulin requirements when needed

#### • Choosing enteral tube feeding formulas

Learn isotonic, hypertonic and specialized enteral formulas

Calculate rate for optimal calories and protein

Calculate free water needs

#### • Managing glucose and electrolyte abnormalities

Learn electrolyte limits in PN formulas

Learn glucose dosing in PN formulas

#### • Understanding indirect calorimetry

Learn how to interpret values and R/Q

#### • Patient monitoring

Common PN complications: Hyper- or hypoglycemia

Hypo- or hypernatremia Hypertriglyceridemia

Edema

Line infection

Venous thrombosis

Common EN complications: Aspiration

High gastric residuals

Diarrhea Weight Electrolytes

Re-feeding syndrome

Adequacy of nutrition support (pre-albumin)

Weight

Electrolytes

Re-feeding syndrome

Adequacy of nutrition support (pre-albumin)

## Hepatology Curriculum Gastroenterology Fellowship Program Riverside Medical Center

This rotation will be performed at University of Chicago Medical Center. Portions of the curriculum for this rotation were written by Donald Jensen, MD and Gautham Reddy, MD at University of Chicago.

**Description**: The overall goal of the hepatology rotation is to train gastroenterologists who are competent to manage the broad spectrum of liver-related problems encountered in a typical gastroenterology practice. The clinical experience will be provided by rotation on an inpatient hepatology service, interaction with hepatology and liver transplant physicians, and through participation in an outpatient clinic dedicated to hepatology patients and problems. Trainees will acquire a broad knowledge of the physiology of the liver and a thorough knowledge of the management of patients with hepatobiliary diseases obtained through teaching rounds, outpatient clinic experience, didactics conferences and personal reading and research. The program will ensure exposure to the following specific basic knowledge/skills:

- 1. Significant knowledge about genetic markers of liver disease, immunology, virology, and other pathophysiological mechanisms of liver injury; the basic biology and pathobiology of the liver and biliary systems as well as a thorough understanding of the diagnostic and treatment of a broad range of hepatobiliary disorders.
- 2. Skill in the performance of certain diagnostic and therapeutic procedures.
- 3. An appreciation of the indications and use of a number of diagnostic and therapeutic procedures that are needed to manage hepatobiliary disorders.

#### **Resources:**

- 1. Up to Date
- 2. Zakim and Boyer's Hepatology

#### **Conferences:**

- 1. Weekly liver transplant conference
- 2. Bimonthly hepatology pathology conference
- 3. Bimonthly radiology (liver tumor) conference
- 4. Monthly hepatology journal club
- 5. Monthly hepatology research conference
- 6. Biweekly multidisciplinary "chief's" rounds
- 7. Biweekly housestaff teaching rounds

#### **Patient Care**

**Goal**: Fellows must demonstrate the ability to effectively treat patients, provide medical care, patient empathy, awareness of behavioral issues, the incorporation of preventative medicine, and health promotion. *Fellows must be able to provide patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health.* 

- Reporting Milestones:

  PC1 Data Gathering and Non-Procedural Diagnostic Testing
  PC2 Patient Management in Gastrointestinal and Liver Disease
  PC3 Procedures Cognitive Components
  PC4 Procedures Technical Components

Objectives Fellows are expected to:	Teaching Method	Evaluation Method	PGY Level
<ol> <li>Demonstrate competence in prevention, evaluation and management of the following:         <ul> <li>Acid peptic disorders of the gastrointestinal tract</li> <li>Acute and chronic gallbladder and biliary tract disease</li> <li>Acute and chronic liver disease</li> <li>Liver Transplant</li> <li>Acute and chronic pancreatic diseases</li> <li>Disease of the esophagus</li> <li>Disorders of nutrient assimilation</li> <li>Gastrointestinal and hepatic neoplastic disease</li> <li>Gastrointestinal bleeding</li> <li>Gastrointestinal diseases with an immune basis</li> <li>Gastrointestinal emergencies in the acutely-ill patient</li> <li>Genetic/inherited disorders</li> <li>Geriatric gastroenterology</li> <li>Inflammatory bowel diseases</li> <li>Patients under surgical care for gastrointestinal disorders</li> <li>Vascular disorders of the gastrointestinal tract</li> <li>Women's health issues in digestive diseases</li> </ul> </li> <li>Demonstrate compassion and empathy for patients.</li> <li>Daily rounds to review key physical findings.</li> <li>Have general understanding of usual prognoses for given disease, and ability to discuss issues of prognosis should they arise in discussion with patients or families.</li> <li>Attending observation of the interaction of the fellow with the patient.</li> <li>Attending feedback mid-rotation and end of rotation.</li> </ol>	<ol> <li>Daily inpatient rounds.</li> <li>a. Primary management service of hepatology inpatients</li> <li>b. consultative care on critically ill patients as well as service to other non-ICU ward services.</li> <li>c. Emergency room consultations.</li> <li>Weekly outpatient hepatology clinic</li> <li>Weekly liver transplant evaluation conference</li> <li>Biweekly multidisciplinary "chief's" rounds with medical directors of both hepatology and live transplant services.</li> <li>Biweekly housestaff teaching rounds.</li> <li>Bimonthly hepatology pathology conference.</li> <li>Bimonthly radiology (liver tumor) conference</li> <li>Monthly hepatology journal club</li> <li>Monthly hepatology research conference</li> <li>Interaction with subspecialties services pertinent to the care of hepatology patients</li> <li>Interaction with liver related support services</li> <li>Fellows will be responsible for liver related teaching and supervision of internal medicine residents as well as medical students interaction with the liver service.</li> </ol>	1. Direct observation by qualified faculty during: a. work and teaching rounds, b. patient history-taking and physical examination; c. procedures; d. conferences  2. Log books and objective competency determinations for al procedures  3. Periodic patient care record reviews  4. Portfolios  5. Patient surveys  6. 360 Degree global rating by all members of the health care team.  7. Formal in-service examinations to test the clinical skills and medical knowledge of the trainee, including mastery of interpretation of liver biopsy.	PGY 5

13. Participation in the other routine fellowship conferences in mandatory during the hepatology	
rotation.	

## **Medical Knowledge**

Goal: Fellows are expected to demonstrate and apply knowledge of accepted standards of clinical gastroenterology, remain current with new developments in gastroenterology, and participate in life-ling learning activities, including research and review of the literature. Fellows must demonstrate knowledge of established and evolving biomedical, clinical, epidemiological and social-behavioral sciences, as well as the application of this knowledge to the care of patients with gastrointestinal diseases.

#### **Reporting Milestones:**

MK1 – Clinical Knowledge of Gastrointestinal and Liver Disease (Non-Procedural)

MK2 – Clinical Reasoning			
Objectives Fellows are expected to:	Teaching Method	Evaluation Method	PGY Level
<ol> <li>Demonstrate knowledge of the following content areas:         <ul> <li>Basic science, including:</li> <li>Anatomy, physiology, pharmacology, pathology, and molecular biology related to the gastrointestinal system, including the liver, biliary tract and pancreas</li> <li>Interpretation of abnormal liver chemistries</li> <li>Liver transplantation</li> <li>Nutrition</li> <li>Prudent, cost-effective, and judicious use of special instruments, test, and therapy in the diagnosis and management of gastroenterological disorders</li> <li>Surgical procedures employed in relation to digestive system disorders and their complications.</li> </ul> </li> </ol>	<ol> <li>Daily inpatient rounds.         <ul> <li>a. Primary management service of hepatology inpatients</li> <li>b. consultative care on critically ill patients as well as service to other non-ICU ward services.</li> <li>c. Emergency room consultations.</li> </ul> </li> <li>Weekly outpatient hepatology clinic</li> <li>Weekly liver transplant evaluation conference</li> <li>Biweekly multidisciplinary "chief's" rounds with medical directors of both hepatology and live transplant services.</li> </ol>	3. Periodic patient care	PGY 5
<ol><li>Knowledge of hepatology in the key areas will be imparted through this curriculum, key references and clinical cases in ambulatory clinic and on rounds.</li></ol>	<ul><li>5. Biweekly housestaff teaching rounds.</li><li>6. Bimonthly hepatology pathology</li></ul>	record reviews 4. Portfolios 5. Patient surveys	
<ol> <li>Knowledge of hepatology will be assessed in the in training exams and through a variety of evaluation tools.</li> </ol>	conference. 7. Bimonthly radiology (liver tumor) conference 8. Monthly hepatology journal club 9.Monthly hepatology research conference	<ul><li>6. 360 Degree global rating by all members of the health care team.</li><li>7. Formal in-service examinations to test the clinical skills and medical</li></ul>	

10. Interaction with subspecialties services pertinent to the care of hepatology patients  11. Interaction with liver related support services 12. Fellows will be responsible for liver related teaching and supervision of internal medicine residents as well as medical students interaction with the liver service.  13. Participation in the other routine
--

## **Practice-based Learning and Improvement**

**Goal**: Fellows must demonstrate the ability to investigate and evaluate their care of patients, to appraise and assimilate scientific evidence, and to continuously improve patient care based on constant self- evaluation and life-long learning.

#### **Reporting Milestones:**

.

PBLI1 – Evidenced-Based and Informed Practice

PBLI2 – Reflective Practice and Commitment to Personal Growth

Objectives: Fellows are expected to:	Teaching Method	Evaluation Method	PGY Level
<ol> <li>Utilization of medical literature, especially relevant clinical trials, to guide recommendations to patients and inpatient treatment strategies.</li> <li>Attendings and fellows should incorporate such medical literature into daily rounds.</li> <li>Review relevant liver pathology and imaging into daily rounds.</li> </ol>	1. Daily inpatient rounds. a. Primary management service of hepatology inpatients b. consultative care on critically ill patients as well as service to other non-ICU ward services. c. Emergency room consultations. 2. Weekly outpatient hepatology clinic 3. Weekly liver transplant evaluation conference 4. Biweekly multidisciplinary "chief's" rounds with medical directors of	Direct observation by qualified faculty during: a. work and teaching rounds, b. patient history-taking and physical examination; c. procedures; d. conferences     Log books and objective competency determinations for al procedures	PGY 5

both hepatology and live transplant services.  5. Biweekly house staff teaching rounds.  6. Bimonthly hepatology pathology conference.  7. Bimonthly radiology (liver tumor) conference  8. Monthly hepatology journal club  9.Monthly hepatology research conference  10. Interaction with subspecialties services pertinent to the care of hepatology patients  11. Interaction with liver related	3. Periodic patient care record reviews 4. Portfolios 5. Patient surveys 6. 360 Degree global rating by all members of the health care team. 7. Formal in-service examinations to test the clinical skills and medical knowledge of the trainee, including mastery of interpretation of liver
hepatology patients 11. Interaction with liver related support services 12. Fellows will be responsible for liver related teaching and supervision of internal medicine residents as well as medical	mastery of
students interaction with the liver service.  13. Participation in the other routine fellowship conferences in mandatory during the hepatology rotation.	

## **Interpersonal and Communication Skills**

**Goal**: Fellows must demonstrate interpersonal and communication skills that result in the effective exchange of information and collaboration with patients, their families, and health professionals.

- ICS1 Patient- and Family-Centered Communication
- ICS2 Interprofessional and Team Communication
- ICS3 Communication within Health Care System

Objectives: Fellows are expected to:	Teaching Method	Evaluation Method	PGY Level
<ol> <li>Develop improved communication skills with patients and families conveying unexpected new and discussing end-of-life issues.</li> </ol>	1. Daily inpatient rounds.	Direct observation by qualified faculty	PGY 5

Involve social and nutritional services in everyday practice.	<ul> <li>a. Primary management service of hepatology inpatients</li> <li>b. consultative care on critically ill patients as well as service to other non-ICU ward services.</li> <li>c. Emergency room consultations.</li> <li>2. Weekly outpatient hepatology clinic</li> <li>3. Weekly liver transplant evaluation conference</li> <li>4. Biweekly multidisciplinary "chief's" rounds with medical directors of both hepatology and live transplant services.</li> <li>5. Biweekly housestaff teaching rounds.</li> <li>6. Bimonthly hepatology pathology conference.</li> <li>7. Bimonthly radiology (liver tumor) conference</li> <li>8. Monthly hepatology journal club</li> <li>9.Monthly hepatology research conference</li> <li>10. Interaction with subspecialties services pertinent to the care of hepatology patients</li> <li>11. Interaction with liver related support services</li> <li>12. Fellows will be responsible for liver related teaching and supervision of internal medicine residents as well as medical students interaction with the liver service.</li> <li>13. Participation in the other routine fellowship conferences in mandatory during the hepatology rotation.</li> </ul>	during: a. work and teaching rounds, b. patient history-taking and physical examination; c. procedures; d. conferences  2. Log books and objective competency determinations for al procedures  3. Periodic patient care record reviews  4. Portfolios  5. Patient surveys  6. 360 Degree global rating by all members of the health care team.  7. Formal in-service examinations to test the clinical skills and medical knowledge of the trainee, including mastery of interpretation of liver biopsy.	

## **Professionalism**

**Goal**: Fellows must demonstrate a commitment to carrying out professional responsibilities and an adherence to ethical principles. **Reporting Milestones**:

PROF1 – Professional Behavior and Ethical Principles

PROF2 – Accountability/Conscientiousness

PROF3 - Self-Awareness and Heln-Seeking

		,	
Objectives:	Teaching Method	Evaluation Method	PGY Level
Fellows are expected to:			
1. Demonstrate integrity, respect, compassion and empathy for patients.  2. Demonstrate timeliness, respect toward duties, and respect for team members.  A compassion and empathy for patients.	<ol> <li>Daily inpatient rounds.         <ul> <li>a. Primary management service of hepatology inpatients</li> <li>b. consultative care on critically ill patients as well as service to other non-ICU ward services.</li> <li>c. Emergency room consultations.</li> </ul> </li> <li>Weekly outpatient hepatology clinic</li> <li>Weekly liver transplant evaluation conference</li> <li>Biweekly multidisciplinary "chief's" rounds with medical directors of both hepatology and live transplant services.</li> <li>Biweekly housestaff teaching rounds.</li> <li>Bimonthly hepatology pathology conference.</li> <li>Bimonthly radiology (liver tumor) conference</li> <li>Monthly hepatology journal club</li> <li>Monthly hepatology research conference</li> <li>Interaction with subspecialties services pertinent to the care of hepatology patients</li> <li>Interaction with liver related support services</li> <li>Fellows will be responsible for liver related teaching and supervision of internal medicine</li> </ol>	1. Direct observation by qualified faculty during: a. work and teaching rounds, b. patient history-taking and physical examination; c. procedures; d. conferences 2. Log books and objective competency determinations for al procedures 3. Periodic patient care record reviews 4. Portfolios 5. Patient surveys 6. 360 Degree global rating by all members of the health care team. 7. Formal in-service examinations to test the clinical skills and medical knowledge of the trainee, including mastery of interpretation of liver biopsy.	PGY 5

students' interaction with the liver
service.
13. Participation in the other routine
fellowship conferences in
mandatory during the hepatology
rotation.

## **System-Based Practice**

**Goal**: Fellows must demonstrate an awareness of and responsiveness to the larger context and system of healthcare, as well as the ability to call effectively on other resources in the system to provide optimal health care.

#### **Reporting Milestones:**

SBP1 – Patient Safety and Quality Improvement

SBP2 – System Navigation for Patient-Centered Care

SBP3 – Physician Role in Health Care System

Objectives: Fellows are expected to:	Teaching Method	Evaluation Method	PGY Level
Effectively utilize consultants and diagnostic services.  1. Effectively utilize consultants and diagnostic services.	<ol> <li>Daily inpatient rounds.         <ul> <li>a. Primary management service of hepatology inpatients</li> <li>b. consultative care on critically ill patients as well as service to other non-ICU ward services.</li> <li>c. Emergency room consultations.</li> </ul> </li> <li>Weekly outpatient hepatology clinic</li> <li>Weekly liver transplant evaluation conference</li> <li>Biweekly multidisciplinary "chief's" rounds with medical directors of both hepatology and live transplant services.</li> <li>Biweekly housestaff teaching rounds.</li> <li>Bimonthly hepatology pathology conference.</li> <li>Bimonthly radiology (liver tumor) conference</li> <li>Monthly hepatology journal club</li> </ol>	1. Direct observation by qualified faculty during: a. work and teaching rounds, b. patient history-taking and physical examination; c. procedures; d. conferences  2. Log books and objective competency determinations for al procedures  3. Periodic patient care record reviews  4. Portfolios  5. Patient surveys  6. 360 Degree global rating by all members of the health care team.	PGY 5

9.Monthly hepatology research	7. Formal in-service	
, , , , , , , , , , , , , , , , , , , ,		
conference	examinations to test	
10. Interaction with subspecialties	the clinical skills and	
services pertinent to the care of	medical knowledge of	
hepatology patients	the trainee, including	
11. Interaction with liver related	mastery of	
support services	interpretation of liver	
12. Fellows will be responsible for	biopsy.	
liver related teaching and		
supervision of internal medicine		
residents as well as medical		
students interaction with the liver		
service.		
13. Participation in the other routine		
fellowship conferences in		
mandatory during the hepatology		
rotation.		

#### **Procedures**

**Goal**: Fellows must be able to competently perform all medical diagnostic, and surgical procedures considered essential for the area of practice.

The trainees must demonstrate understanding of the indications, contraindications, limitations, complications, and interpretation of the following:

- Paracentesis
  - o Diagnostic
  - o Large volume
- · Percutaneous liver biopsy with ultrasound marking
- Endoscopic control of variceal hemorrhage

## **Patient Characteristics/Disease Mix**

Fellows will participate in the care of patients with a broad variety of hepatic disorders. The patients include many ethnicities covering numerous socioeconomic backgrounds. Comprehensive teaching of the following topics will be provided:

1. The biology and pathophysiology of liver diseases

- 2. Diagnosis and management of patients with the wide variety of diseases of the liver and biliary tract systems, including the following:
  - a. Acute hepatitis: viral, drug, toxic, drug induced
  - b. Fulminant hepatic failure, including the timing to transplant, management of cerebral edema, coagulopathy, and other complications associated with acute hepatic failure
  - c. Chronic hepatitis (and cirrhosis); chemical, biochemical, serological, and histopathologic diagnosis of chronic viral hepatitis
  - d. Use of antiviral agents in the treatment of liver disease
  - e. Management of the complications of chronic liver disease; including complications of portal hypertension (ascites, spontaneous bacterial peritonitis, prevention and treatment of bleeding esophageal varices and gastropathy), hepatic encephalopathy, hepatorenal syndrome
  - f. Management of the bleeding liver patient (including resuscitation, coagulation correction, endoscopic treatment and timing of shunt control)
  - g. Hepatocellular carcinoma (screening and diagnostic options, treatment options)
  - h. Nonviral causes of chronic liver disease, such as alcohol, nonalcoholic fatty liver disease (including nonalcoholic steatohepatitis), Wilson's disease, primary biliary cirrhosis, autoimmune hepatitis hemochromatosis, and 1-antitrypsin deficiency
  - i. Gallstone disease, including the appropriate use of medical and surgical therapies (see Task Force on Training in Biliary Tract Diseases and Pancreatic Disorders)
  - j. Hepatobiliary disorders associated with pregnancy, including care of patients with abnormal liver tests as well as those with severe liver disease associated with pregnancy
  - k. Perioperative care of patients with defined disease of the liver or evidence of hepatobiliary dysfunction
  - I. Selection and care of patients awaiting liver transplantation, including the assessment of the candidacy of patients for transplantation
  - m. Care of patients following liver transplantation, including an understanding of the use of immunosuppressive agents; diagnosis and management of rejection; and recognition of other complications of transplantation, such as certain infections and biliary tract and vascular problems
- 3. Management of the nutritional problems associated with chronic liver disease (see Training in Nutrition)
- 4. Liver pathology, including histological interpretation and specific pathological techniques (see Training in Gastrointestinal and Hepatic Pathology)
- 5. Pediatric and congenital hepatobiliary disorders (see Training in Pediatric Gastroenterology)
- 6. Liver imaging modalities including interpretation of computed tomography, magnetic resonance-based techniques (magnetic resonance imaging, magnetic resonance angiography, magnetic resonance cholangiography), hepatic angiography, and ultrasound (including Doppler evaluation of hepatic vasculature). The limitations of each modality should be understood. Some programs may choose to provide selected fellows with hands-on training in hepatic ultrasound for liver biopsy guidance; formal training in liver biopsy requires an understanding of the use of ultrasound in the setting of liver biopsy.
- 7. An understanding of the principles of experimental design, clinical biostatistics, and epidemiology sufficient to critically interpret the medical literature (see Training in Research).

# Skills

Competence in the following will be demonstrated by fellows:

- 1. History taking
- Physical exam
   Laboratory interpretation
- 4. Imaging interpretation5. Development and execution of clinical plans of action for all liver patients

# IBD Curriculum Gastroenterology Fellowship Program Riverside Medical Center

This rotation will be performed at University of Chicago Medical Center. Portions of the curriculum for this rotation were written by Russell Cohen and Sunanda Kane at University of Chicago.

**Description**: The IBD rotation involves outpatient clinic and endoscopy experiences on a daily basis. The fellows rotate through the outpatient clinics of most of the IBD faculty, and are also expected to see urgent patients scheduled in clinic. There are no "private patients" here that exclude fellow coverage. An IBD attending should be available for overview on all cases. Additional outpatient exposure occurs in the IBD Surgical Clinic, and with patients undergoing infusions of infliximab or iron therapy.

The IBD fellow is expected to participate in numerous educational conferences during their rotation. A multi-disciplinary IBD Pathology Conference is held twice monthly, and an IBD Clinical Research Conference monthly. Fellows typically present interesting or complicated patients at the weekly GI Clinical Conference, and are encouraged to review recent studies in the weekly Fellows' Journal Club.

#### **Resources**

- All fellows currently receive a personal copy of the following textbook:
  - o Cohen RD, ed. Inflammatory Bowel Disease: Diagnosis and Therapeutics. Totowa, New Jersey: Humana Press, 2003.
- Copies of leading GI textbooks in fellows' work areas.
- · Teaching Slide Sets available for fellows' use
- Electronic Resources
  - o Up-To-Date
  - o Crerar Library Science Electronic Journal Access
  - o Department of Medicine Electronic Medical Information Databases

#### **Conferences**

- Gastroenterology Section
  - $\circ \quad \text{GI Fellows' Teaching Conference} \\$
  - $\circ \quad \text{IBD Pathology Multi-Disciplinary Conference} \\$
  - Liver Pathology Multi-Disciplinary Conference
  - o GI Research Conference
  - o GI Clinical Conference
  - o GI Fellows' Board Review
  - Housestaff Lecture Series
- Department of Medicine
  - Grand Rounds
  - Morning Report

- Housestaff Lecture Series
- Special Lecture Series

#### **Patient Care**

**Goal**: Fellows must demonstrate the ability to effectively treat patients, provide medical care, patient empathy, awareness of behavioral issues, the incorporation of preventative medicine, and health promotion. *Fellows must be able to provide patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health.* 

- PC1 Data Gathering and Non-Procedural Diagnostic Testing
- PC2 Patient Management in Gastrointestinal and Liver Disease
- PC3 Procedures Cognitive Components
- PC4 Procedures Technical Components

ojectives ellows are expected to:	Teaching Method	Evaluation Method	PGY Level
<ol> <li>Demonstrate competence in prevention, evaluation and management of the following:         <ul> <li>Acid peptic disorders of the gastrointestinal tract</li> <li>Acute and chronic gallbladder and biliary tract disease</li> <li>Acute and chronic liver disease</li> <li>Acute and chronic pancreatic diseases</li> <li>Disease of the esophagus</li> <li>Disorders of nutrient assimilation</li> <li>Gastrointestinal and hepatic neoplastic disease</li> <li>Gastrointestinal bleeding</li> <li>Gastrointestinal diseases with an immune basis</li> <li>Gastrointestinal emergencies in the acutely-ill patient</li> <li>Gastrointestinal infections, including retroviral, mycotic, and parasitic diseases</li> <li>Genetic/inherited disorders</li> <li>Geriatric gastroenterology</li> <li>Inflammatory bowel diseases</li> <li>Irritable bowel syndrome</li> <li>Motor disorders of the gastrointestinal tract</li> <li>Patients under surgical care for gastrointestinal disorders</li> <li>Vascular disorders of the gastrointestinal tract</li> <li>Women's health issues in digestive diseases</li> </ul> </li> <li>Adequate performance of history and physical.</li> </ol>	<ul> <li>Didactics lectures from IBD attendings</li> <li>Clinical presentations to IBD team</li> <li>Clinical case presentations to GI faculty</li> <li>Hands-on interaction and delivery of care to patients in the outpatient IBD clinic</li> <li>Hands-on interactions and delivery of care to patients in the outpatient surgical IBD clinic</li> <li>Direct inpatient care of medical IBD patients</li> <li>Consultative care of medical patients for IBD-related issues</li> <li>Consultative care of surgical IBD patients</li> <li>Endoscopic evaluation of IBD patients</li> </ul>	Daily feedback from IBD faculty during inpatient and outpatient settings     Rotational evaluations     Endoscopy log	PGY 5

3	<ul> <li>Demonstrate compassion and empathy for patients, and emphasize the continued integrity of each patient.</li> </ul>	Radiographic evaluation     of IBD patients	
4	. Daily rounds	Pathological evaluation of	
5	. Attending observation of interaction of fellows with patient and family members.	specimens from IBD patients	
6	. Demonstrate and understanding of the unique quality of life issues regarding young patients with chronic diseases.	<ul> <li>Fellow Board Review</li> <li>Fellow Journal Club</li> <li>Interactions with Clinical Trial Staff</li> <li>Interactions with patient support staff, such as ostomy nurses, dieticians, physical therapists</li> </ul>	

## **Medical Knowledge**

**Goal**: Fellows are expected to demonstrate and apply knowledge of accepted standards of clinical gastroenterology, remain current with new developments in gastroenterology, and participate in life-ling learning activities, including research and review of the literature. *Fellows must demonstrate knowledge of established and evolving biomedical, clinical, epidemiological and social-behavioral sciences, as well as the application of this knowledge to the care of patients with gastrointestinal diseases.* 

#### **Reporting Milestones:**

MK1 – Clinical Knowledge of Gastrointestinal and Liver Disease (Non-Procedural)

MK2 – Clinical Reasoning

Objectives	Teaching Method	Evaluation Method	PGY
Fellows are expected to:			Level
<ol> <li>Demonstrate knowledge of the following content areas:         <ul> <li>Basic science, including:</li> <li>Anatomy, physiology, pharmacology, pathology, and molecular biology related to the gastrointestinal system, including the liver, biliary tract and pancreas</li> <li>Interpretation of abnormal liver chemistries</li> <li>Liver transplantation</li> <li>Nutrition</li> <li>Prudent, cost-effective, and judicious use of special instruments, test, and therapy in the diagnosis and management of gastroenterological disorders</li> <li>Sedative pharmacology</li> <li>Surgical procedures employed in relation to digestive system disorders and their complications.</li> </ul> </li> </ol>	<ul> <li>Didactics lectures from IBD attendings</li> <li>Clinical presentations to IBD team</li> <li>Clinical case presentations to GI faculty</li> <li>Hands-on interaction and delivery of care to patients in the outpatient IBD clinic</li> <li>Hands-on interactions and delivery of care to patients in the outpatient IBD clinic</li> </ul>	Daily feedback from IBD faculty during inpatient and outpatient settings     Rotational evaluations     Endoscopy log	PGY 5

2.	Understanding of necessary tests required to diagnose and evaluate new patients, and manage established patients.	Direct inpatient care of medical IBD patients
3.	Develop competence in management of complications from IBD and its therapies.	Consultative care of medical patients for IBD-
4.	Ability to interpret laboratory, radiographic, endoscopic and pathologic results.	related issues
5.	Learn the current genetic markers and subtypes for IBD patients.	Consultative care of
6.	Demonstrate confidence in evaluation and treatment of sever fulminant ulcerative colitis.	surgical IBD patients  • Endoscopic evaluation of
7.	Identify the various extraintestinal manifestations of IBD.	IBD patients  • Radiographic evaluation
8.	Identify the pediatric manifestations of IBD.	of IBD patients
9.	Demonstrate ability in the approach to the IBD patient contemplating pregnancy, the pregnant patient, and the post-partum patient.	Pathological evaluation of specimens from IBD
10	Perform appropriate colorectal cancer surveillance in patients with chronic colitis.	patients  • Fellow Board Review
11	. Understand the evaluation and treatment of post-operative patients with diarrhea.	Fellow Journal Club     Interactions with Clinical
12	. Manage effectively patients with intestinal malabsorption.	Trial Staff
13	B. Understand treatment regimens for acute and chronic pouchitis.	Interactions with patient support staff, such as ostomy nurses, dieticians, physical therapists

# **Practice-based Learning and Improvement**

**Goal**: Fellows must demonstrate the ability to investigate and evaluate their care of patients, to appraise and assimilate scientific evidence, and to continuously improve patient care based on constant self- evaluation and life-long learning.

#### **Reporting Milestones:**

PBLI1 – Evidenced-Based and Informed Practice

PBLI2 – Reflective Practice and Commitment to Personal Growth

Objectives: Fellows are expected to:	Teaching Method	Evaluation Method	PGY Level
<ol> <li>Utilization of the medical literature to guide recommendations to patients and inpatients treatment strategies.</li> <li>Review relevant pathology, radiography, and endoscopy with attendings.</li> <li>Evaluate patients for possible inclusion in experimental clinical therapeutic trials.</li> </ol>	<ul> <li>Didactics lectures from IBD attendings</li> <li>Clincial presentations to IBD team</li> <li>Clinical case presentations to GI faculty</li> </ul>	<ul> <li>Daily feedback from IBD faculty during inpatient and outpatient settings</li> <li>Rotational evaluations</li> <li>Endoscopy log</li> </ul>	PGY 5

Hands-on interaction and delivery
of care to patients in the outpatient
IBD clinic
Hands-on interactions and delivery
of care to patients in the outpatient
surgical IBD clinic
Direct inpatient care of medical IBD
patients
Consultative care of medical
patients for IBD-related issues
Consultative care of surgical IBD
patients
Endoscopic evaluation of IBD
patients
Radiographic evaluation of IBD
patients
Pathological evaluation of
specimens from IBD patients
Fellow Board Review
Fellow Journal Club
Interactions with Clinical Trial Staff
Interactions with patient support
staff, such as ostomy nurses,
dieticians, physical therapists

# **Interpersonal and Communication Skills**

**Goal**: Fellows must demonstrate interpersonal and communication skills that result in the effective exchange of information and collaboration with patients, their families, and health professionals.

- ICS1 Patient- and Family-Centered Communication
- ICS2 Interprofessional and Team Communication
- ICS3 Communication within Health Care System

Objectives: Fellows are expected to:	Teaching Method	Evaluation Method	PGY Level
<ol> <li>Develop communication skills with patients and families conveying relevant information, prognosis and treatment options.</li> </ol>			PGY 5

Act as a team player with social services, ostomy nurse specialists, nutritionists, and relevant consultants.	Didactics lectures from IBD attendings	Daily feedback from     IBD faculty during
	Clinical presentations to IBD team	inpatient and
<ul> <li>3. Develop communication skills with referring physicians.</li> <li>4. Demonstrate the ability to discuss with patients the risk and benefits of post-operative prevention of Crohn's disease relapse.</li> </ul>	<ul> <li>Clinical presentations to IBD team</li> <li>Clinical case presentations to GI faculty</li> <li>Hands-on interaction and delivery of care to patients in the outpatient IBD clinic</li> <li>Hands-on interactions and delivery of care to patients in the outpatient surgical IBD clinic</li> <li>Direct inpatient care of medical IBD patients</li> <li>Consultative care of medical patients for IBD-related issues</li> <li>Consultative care of surgical IBD patients</li> <li>Endoscopic evaluation of IBD patients</li> <li>Radiographic evaluation of IBD patients</li> <li>Pathological evaluation of specimens from IBD patients</li> <li>Fellow Board Review</li> <li>Fellow Journal Club</li> <li>Interactions with Clinical Trial Staff</li> <li>Interactions with patient support staff, such as ostomy nurses, dieticians, physical therapists</li> </ul>	inpatient and outpatient settings • Rotational evaluations • Endoscopy log

## **Professionalism**

**Goal**: Fellows must demonstrate a commitment to carrying out professional responsibilities and an adherence to ethical principles.

#### **Reporting Milestones:**

PROF1 – Professional Behavior and Ethical Principles

PROF2 – Accountability/Conscientiousness

PROF3 – Self-Awareness and Help-Seeking

Objectives:

Fellows are expected to:

Teaching Method

Evaluation Method

PGY Level

		T -:	T =	1 1
	Demonstrate integrity, respect, compassion and empathy for patients.	Didactics lectures from IBD	Daily feedback from	PGY 5
2.	Demonstrate timeliness, respect toward duties and respect for other team	attendings	IBD faculty during	
	members.	Clinical presentations to IBD team	inpatient and	
		Clinical case presentations to GI	outpatient settings	
		faculty	<ul> <li>Rotational evaluations</li> </ul>	
		<ul> <li>Hands-on interaction and delivery</li> </ul>	<ul> <li>Endoscopy log</li> </ul>	
		of care to patients in the outpatient		
		IBD clinic		
		<ul> <li>Hands-on interactions and delivery</li> </ul>		
		of care to patients in the outpatient		
		surgical IBD clinic		
		Direct inpatient care of medical IBD		
		patients		
		Consultative care of medical		
		patients for IBD-related issues		
		Consultative care of surgical IBD		
		patients		
		Endoscopic evaluation of IBD		
		patients		
		Radiographic evaluation of IBD		
		patients		
		Pathological evaluation of		
		specimens from IBD patients		
		Fellow Board Review		
		Fellow Journal Club		
		Interactions with Clinical Trial Staff		
		<ul> <li>Interactions with patient support</li> </ul>		
		staff, such as ostomy nurses,		
		dieticians, physical therapists		

# **System-Based Practice**

**Goal**: Fellows must demonstrate an awareness of and responsiveness to the larger context and system of healthcare, as well as the ability to call effectively on other resources in the system to provide optimal health care.

- SBP1 Patient Safety and Quality Improvement
- SBP2 System Navigation for Patient-Centered Care
- SBP3 Physician Role in Health Care System

Objectives: Fellows are expected to:	Teaching Method	Evaluation Method	PGY Level
Incorporation of multi-disciplinary team in the care of patients, including surgeons, pathologists, radiologist and stoma therapists.      Discussion of appropriate resource utilization including third party payor issues of coverage for biologic therapies and for surgical interventions      Assessment of length of stay and adequate resource utilization for the geographic bed assignments for inflammatory bowel disease patients.      Understanding the economic considerations when treating patients with longstanding, chronic, relapsing diseases.	<ul> <li>Didactics lectures from IBD attendings</li> <li>Clinical presentations to IBD team</li> <li>Clinical case presentations to GI faculty</li> <li>Hands-on interaction and delivery of care to patients in the outpatient IBD clinic</li> <li>Hands-on interactions and delivery of care to patients in the outpatient surgical IBD clinic</li> <li>Direct inpatient care of medical IBD patients</li> <li>Consultative care of medical patients for IBD-related issues</li> <li>Consultative care of surgical IBD patients</li> <li>Endoscopic evaluation of IBD patients</li> <li>Radiographic evaluation of IBD patients</li> <li>Pathological evaluation of specimens from IBD patients</li> <li>Fellow Board Review</li> <li>Fellow Journal Club</li> <li>Interactions with Clinical Trial Staff</li> <li>Interactions with patient support staff, such as ostomy nurses, dieticians, physical therapists</li> </ul>	Daily feedback from IBD faculty during inpatient and outpatient settings     Rotational evaluations     Endoscopy log	PGY 5

### **Procedures**

**Goal**: Fellows must be able to competently perform all medical diagnostic, and surgical procedures considered essential for the area of practice.

Fellows will have the opportunity to participate in various gastrointestinal procedures while rotating through the IBD service; the degree of participation will be dependent upon their prior experience in endoscopy and advanced procedures. All procedures are supervised by an attending physician. Most procedures will be on inpatients; fellows with outpatient continuity clinics will be expected to perform procedures on their patients as well.

#### **Procedures:**

- Upper endoscopy
- Colonoscopy
- Enteroscopy
- Ileoscopy / colonoscopy through a stoma
- Pouchoscopy
- In some cases, Fellows will gain exposure as an observer or assistant to double-balloon enteroscopy, ERCP, endoscopic ultrasound, therapeutic endoscopic dilations, and surgical management of IBD.

## **Patient Characteristics/Disease Mix**

- Crohn's disease
  - Initial evaluation
  - Diagnostic workup
  - Disease severity grading
  - Therapeutic options
  - Surgical options
  - o Management of disease-related complications
- Ulcerative colitis
  - Initial evaluation
  - Diagnostic workup
  - Disease severity grading
  - Therapeutic options
  - Surgical options
  - Management of disease-related complications
- Indeterminate colitis
  - Initial evaluation
  - Diagnostic workup
  - Therapeutic options
- Microscopic colitidies
  - Collagenous colitis
    - Initial evaluation
    - Diagnostic workup
    - Therapeutic options
  - Lymphocytic colitis
    - Initial evaluation
    - Diagnostic workup
    - Therapeutic options
  - Eosinophilic colitis
    - Initial evaluation
    - Diagnostic workup
    - Therapeutic options
- Ulcerative enteritis
  - o Initial evaluation
  - Diagnostic workup
  - Therapeutic options

## Skills

- Physical examination
- Interpretation of laboratory tests.
  - o Including specialized IBD testing:
    - TPMT, 6TGN, 6MMP
    - ASCA, ANCA, ompC, flagellin
    - Infliximab and HACA levels
- Interpretation of radiographic tests
- Interpretation of histological samples
- Interpretation of endoscopic findings
- Interpretation of video capsule studies

# Motility Curriculum Gastroenterology Fellowship Program Riverside Medical Center

#### **Description**:

Week 1:

Esophageal manometry basics

Review Chicago Classification V3 and treatment of abnormal esophageal motility

High resolution esophageal manometry: editing a study High resolution esophageal manometry: interpreting a study

Work through cases independently and review them with Attending to confirm accurate editing and interpretation of studies

Week 2:

**Anorectal Manometry basics** 

Review ACG guideline: Management of Benign Anorectal Disorders Review Article: Dyssynergic Defecation and Biofeedback Therapy Observe and Assist with ARM testing during week 1 and 2

Interpret ARM studies

Work through cases independently and review them with Attending to confirm accurate interpretation of studies

During this month we will also review on a conceptual level: esophageal impedance studies, esophageal pH studies, Gastric emptying studies, and Radiopaque marker testing (Sitzmarks).

## **Patient Care**

**Goal**: Fellows must demonstrate the ability to effectively treat patients, provide medical care, patient empathy, awareness of behavioral issues, the incorporation of preventative medicine, and health promotion. *Fellows must be able to provide patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health.* 

#### **Reporting Milestones:**

PC1 – Data Gathering and Non-Procedural Diagnostic Testing

PC2 – Patient Management in Gastrointestinal and Liver Disease

PC3 – Procedures Cognitive Components

PC4 – Procedures Technical Components

Objectives	Teaching Method	Evaluation Method	PGY
Fellows are expected to:			Level

1.	Demonstrate competence in prevention, evaluation and management of the following:  • Disease of the esophagus  • Motor disorders of the gastrointestinal tract	Didactics Independent Learning	End of Rotation Evaluation Indirect Supervision	PGY6
2.	Perform appropriate GI patient work-up.	Didactics Board Review Bedside Teaching Clinical Teaching Rounds Role Modeling Independent Learning Computer Module	End of Rotation Evaluation Ambulatory Clinic Evaluation Annual PD Evaluation In-Training Exam Direct Observation Indirect Supervision	PGY6
3.	Gather and critically appraise references for therapy in peer-reviewed and other resources.	Board Review Journal Club	Direct Observation Journal Club discussion	PGY6
4.	Make informed recommendations about preventative, diagnostic and therapeutic options with guidance of the attending.	Didactics Board Review Bedside Teaching Clinical Teaching Rounds Role Modeling Independent Learning Computer Module	End of Rotation Evaluation Ambulatory Clinic Evaluation Annual PD Evaluation In-Training Exam Direct Observation Indirect Supervision	PGY6
5.	Define and prioritize nutrition and motility issues.	Didactics Board Review Bedside Teaching Clinical Teaching Rounds Role Modeling Independent Learning Computer Module	End of Rotation Evaluation Ambulatory Clinic Evaluation Annual PD Evaluation In-Training Exam Direct Observation	PGY6
6.	Independently make informed recommendations about preventative, diagnostic and therapeutic options.	Didactics Board Review Bedside Teaching Clinical Teaching Rounds Role Modeling Independent Learning Computer Module	End of Rotation Evaluation Ambulatory Clinic Evaluation Annual PD Evaluation In-Training Exam Direct Observation Indirect Supervision	PGY6

# Medical Knowledge

**Goal**: Fellows are expected to demonstrate and apply knowledge of accepted standards of clinical gastroenterology, remain current with new developments in gastroenterology, and participate in life-ling learning activities, including research and review of the literature. *Fellows must demonstrate knowledge of established and evolving biomedical, clinical, epidemiological and social-behavioral sciences, as well as the application of this knowledge to the care of patients with cardiovascular diseases.* 

#### **Reporting Milestones:**

MK1 – Clinical Knowledge of Gastrointestinal and Liver Disease (Non-Procedural)

MK2 – Clinical Reasoning

Objecti <i>Fellow</i> :	ives s are expected to:	Teaching Method	Evaluation Method	PGY Level
1.	Demonstrate fundamental knowledge as it pertains to formulating a GI diagnosis and treatment plan.	Didactics Workshop Bedside Teaching Clinical Teaching Rounds Role Modeling Independent Learning Computer Module	End of Rotation Evaluation Ambulatory Clinic Evaluation Annual PD Evaluation In-Training Exam Direct Observation	PGY6
2.	Access and critically evaluate medical information and scientific information relevant to patient care.	Didactics Board Review Bedside Teaching Clinical Teaching Rounds Role Modeling Independent Learning Computer Module	End of Rotation Evaluation Ambulatory Clinic Evaluation Annual PD Evaluation In-Training Exam Direct Observation Indirect Supervision	PGY6
3.	Demonstrate comprehension of pathophysiological basis of GI conditions and rationale for therapy including mechanism of action of treatment modalities.	Didactics Bedside Teaching Clinical Teaching Rounds Role Modeling Independent Learning Computer Module	End of Rotation Evaluation Ambulatory Clinic Evaluation Annual PD Evaluation In-Training Exam Direct Observation	PGY6
4.	Access and critically evaluate medical information and scientific evidence regarding all diseases gastrointestinal.	Didactics Board Review Clinical Teaching Rounds Independent Learning Computer Module	End of Rotation Evaluation Ambulatory Clinic Evaluation Annual PD Evaluation Indirect Supervision	PGY6
5.	Demonstrate knowledge of the scientific method of problem solving and evidence-based decision making	Didactics Board Review Independent Learning	End of Rotation Evaluation Ambulatory Clinic Evaluation Annual PD Evaluation	PGY6
6.	Demonstrate a knowledge of indications, contraindications, limitations, complications, techniques, and interpretation of results of those diagnostic and therapeutic procedures integral to the discipline, including the appropriate indications for and use of screening tests/procedures	Board Review Bedside Teaching Clinical Teaching Rounds Role Modeling Independent Learning	End of Rotation Evaluation Ambulatory Clinic Evaluation Annual PD Evaluation Direct Observation	PGY6

# **Practice-based Learning and Improvement**

**Goal**: Fellows must demonstrate the ability to investigate and evaluate their care of patients, to appraise and assimilate scientific evidence, and to continuously improve patient care based on constant self- evaluation and life-long learning.

#### **Reporting Milestones:**

PBLI1 - Evidenced-Based and Informed Practice

PBLI2 – Reflective Practice and Commitment to Personal Growth

Objectives: Fellows are expected to:		Teaching Method	Evaluation Method	PGY Level
<ol> <li>Identify strengths, deficiencies, an expertise</li> </ol>	d limits in one's knowledge and	Board Review Bedside Teaching Clinical Teaching Rounds Independent Learning	End of Rotation Evaluation Ambulatory Clinic Evaluation Annual PD Evaluation In-Training Exam Direct Observation	PGY4 PGY5 PGY6
2. Set learning and improvement goa	ls	Board Review Independent Learning	In-Training Exam	PGY4 PGY5 PGY6
3. Identify and perform appropriate le	earning activities	Didactics Board Review Independent Learning Computer Module	In-Training Exam	PGY4 PGY5 PGY6
4. Participate in the education of pati other health professionals	ents, families, students, fellows and	Board Review Bedside Teaching Clinical Teaching Rounds Role Modeling	End of Rotation Evaluation 360 Degree Evaluation Ambulatory Clinic Evaluation Direct Observation	PGY4 PGY5 PGY6
	d consent by competently educating e, and complications of procedures.	Board Review Bedside Teaching Clinical Teaching Rounds Role Modeling	360 Degree Evaluation Ambulatory Clinic Evaluation Direct Observation	PGY4 PGY5 PGY6

# **Interpersonal and Communication Skills**

**Goal**: Fellows must demonstrate interpersonal and communication skills that result in the effective exchange of information and collaboration with patients, their families, and health professionals.

#### **Reporting Milestones:**

- ICS1 Patient- and Family-Centered Communication
- ICS2 Interprofessional and Team Communication
- ICS3 Communication within Health Care System

	Objectives: Fellows are expected to:	Teaching Method	Evaluation Method	PGY Level
·	Communicate effectively with physicians, other health professionals, and health related agencies.	Bedside Teaching Clinical Teaching Rounds Role Modeling	End of Rotation Evaluation Ambulatory Clinic Evaluation Annual PD Evaluation Direct Observation	PGY4 PGY5 PGY6
	<ol><li>Work effectively as a member or leader of a health care team or other professional group.</li></ol>	Bedside Teaching Clinical Teaching Rounds Role Modeling	End of Rotation Evaluation 360 Degree Evaluation Annual PD Evaluation	PGY4 PGY5 PGY6

#### **Professionalism**

**Goal**: Fellows must demonstrate a commitment to carrying out professional responsibilities and an adherence to ethical principles.

#### **Reporting Milestones:**

PROF1 – Professional Behavior and Ethical Principles

PROF2 – Accountability/Conscientiousness

PROF3 – Self-Awareness and Help-Seeking

Objectives: Fellows are expected to:	Teaching Method	Evaluation Method	PGY Level
Demonstrate compassion, integrity, and respect for others	Bedside Teaching Clinical Teaching Rounds Role Modeling	End of Rotation Evaluation Ambulatory Clinic Evaluation Annual PD Evaluation Direct Observation	PGY4 PGY5 PGY6
Demonstrate responsiveness to patient needs that supersedes self-interest	Bedside Teaching Clinical Teaching Rounds Role Modeling	End of Rotation Evaluation Ambulatory Clinic Evaluation Annual PD Evaluation Direct Observation	PGY4 PGY5 PGY6
3. Demonstrate respect for patient privacy and autonomy.	Bedside Teaching Clinical Teaching Rounds Role Modeling	End of Rotation Evaluation 360 Degree Evaluation Ambulatory Clinic Evaluation Annual PD Evaluation Direct Observation	PGY4 PGY5 PGY6
4. Demonstrate accountability to patients, society and the profession.	Didactics Board Review	Ambulatory Clinic Evaluation In-Training Exam	PGY4

	Computer Module	Direct Observation	PGY5 PGY6
<ol> <li>Demonstrate sensitivity and responsiveness to a diverse patient population,</li></ol>	Bedside Teaching	End of Rotation Evaluation 360 Degree Evaluation Ambulatory Clinic Evaluation Annual PD Evaluation Direct Observation	PGY4
including but not limited to diversity in gender, age, culture, race, religion,	Clinical Teaching Rounds		PGY5
disabilities, and sexual orientation.	Role Modeling		PGY6

# **System-Based Practice**

**Goal**: Fellows must demonstrate an awareness of and responsiveness to the larger context and system of healthcare, as well as the ability to call effectively on other resources in the system to provide optimal health care.

#### **Reporting Milestones:**

SBP1 – Patient Safety and Quality Improvement

SBP2 – System Navigation for Patient-Centered Care

SBP3 – Physician Role in Health Care System

Objecti Fellows	ives: s are expected to:	Teaching Method	Evaluation Method	PGY Level
1.	Work effectively in various health care delivery setting and systems relevant to their clinical specialty.	Bedside Teaching Clinical Teaching Rounds Role Modeling Independent Learning	End of Rotation Evaluation 360 Degree Evaluation Ambulatory Clinic Evaluation Annual PD Evaluation Direct Observation	PGY4 PGY5 PGY6
2.	Coordinate patient care within the health care system relevant to their clinical specialty.	Clinical Teaching Rounds Role Modeling Independent Learning	End of Rotation Evaluation 360 Degree Evaluation Ambulatory Clinic Evaluation Annual PD Evaluation Direct Observation	PGY4 PGY5 PGY6
3.	Incorporate considerations of cost awareness and risk-benefit analysis in patient and/or population- based care as appropriate.	Didactics Board Review Clinical Teaching Rounds Role Modeling Independent Learning Computer Module	End of Rotation Evaluation Ambulatory Clinic Evaluation Direct Observation	PGY4 PGY5 PGY6

# Radiation Oncology Curriculum Gastroenterology Fellowship Program Riverside Medical Center

#### **Description**

The goal of this clinical rotation is for Fellows in Gastroenterology to learn the fundamentals of radiation oncology. Fellows will find this rotation useful to understand radiation oncology as a specialty and therefore better be able to coordinate and deliver optimal multi-disciplinary care and counsel future patients. They will also gain a broader understanding of the management of acute and late toxicities related to radiation therapy.

#### Clinical Experience

During the rotation, fellows work with Radiation Oncologists who are faculty at the University of Chicago who specialize in treatment of a variety of disease sites. They will also work with physicists, dosimetrists and radiation therapists in the Department of Radiation Oncology at the University Of Chicago Comprehensive Cancer Center at Silver Cross. Fellows actively participate in the work-up, evaluation, and development of radiation treatment recommendations for patients seen in consultation for both curative and palliative intent. Fellows will attend weekly departmental planning rounds, morning reports, and multi-disciplinary tumor boards, including a weekly multidisciplinary gastrointestinal tumor board. Fellows are also encouraged to participate in patient simulations, treatment planning and dosimetry, and radiation treatments.

#### Didactics

Fellows will have lectures on the fundamentals of radiation oncology, radiation biology and physics, and patient set-up and immobilization. Additionally, as part of the curriculum fellows can complete hands-on treatment planning and contouring workshops with a physician or physicists preceptor.

#### Equipment

The University of Chicago Comprehensive Cancer Center at Silver Cross is state of the art facility on the campus of Silver Cross Hospital. The Radiation Oncology Department is a Joint Venture with Silver Cross and the University of Chicago.

The Radiation Oncology Department has two True Beam linear accelerators, a dedicated Large Bore CT simulator and a Pinnacle treatment planning system. The department is staffed by two Board Certified Radiation Oncologists who are faculty in the Department of Cellular and Radiation Oncology at the University of Chicago Medicine, two nurses, a medical assistant, 9 radiation therapists, three physicists and a dosimetrist.

#### **Patient Care**

**Goal**: Fellows must demonstrate the ability to effectively treat patients, provide medical care, patient empathy, awareness of behavioral issues, the incorporation of preventative medicine, and health promotion. *Fellows must be able to provide patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health.* 

- PC1 Data Gathering and Non-Procedural Diagnostic Testing
- PC2 Patient Management in Gastrointestinal and Liver Disease
- PC3 Procedures Cognitive Components
- PC4 Procedures Technical Components

Objectives Fellows are expected to:	Teaching Method	Evaluation Method	PGY Level
1. How to clinically evaluate patients with cancer.	Didactics Bedside Teaching Independent Learning	End of Rotation Evaluation Direct Supervision	PGY6
How to develop a clinical oncology treatment recommendation.	Didactics Bedside Teaching Independent Learning	End of Rotation Evaluation Direct Supervision	PGY6
3. Fundamentals of patient immobilization and simulation.	Didactics Bedside Teaching Independent Learning	End of Rotation Evaluation Direct Supervision	PGY6
4. Basics of developing and evaluating a radiation treatment plan.	Didactics Bedside Teaching Independent Learning	End of Rotation Evaluation Direct Supervision	PGY6

## **Medical Knowledge**

**Goal**: Fellows are expected to demonstrate and apply knowledge of accepted standards of clinical gastroenterology, remain current with new developments in gastroenterology, and participate in life-ling learning activities, including research and review of the literature. *Fellows must demonstrate knowledge of established and evolving biomedical, clinical, epidemiological and social-behavioral sciences, as well as the application of this knowledge to the care of patients with cardiovascular diseases.* 

#### **Reporting Milestones:**

MK1 – Clinical Knowledge of Gastrointestinal and Liver Disease (Non-Procedural)

MK2 – Clinical Reasoning

Objectives Fellows are expected to:	Teaching Method	Evaluation Method	PGY Level
The basic history of radiation oncology as a medical specialty.	Didactics Bedside Teaching Independent Learning	End of Rotation Evaluation Direct Supervision	PGY6

2. Early and late sequelae of radiation therapy.	Didactics Bedside Teaching Independent Learning	End of Rotation Evaluation Direct Supervision	PGY6
3. Basic radiation biology and physics.	Didactics Bedside Teaching Independent Learning	End of Rotation Evaluation Direct Supervision	PGY6

# **Practice-based Learning and Improvement**

**Goal**: Fellows must demonstrate the ability to investigate and evaluate their care of patients, to appraise and assimilate scientific evidence, and to continuously improve patient care based on constant self- evaluation and life-long learning.

#### **Reporting Milestones:**

PBLI1 – Evidenced-Based and Informed Practice

PBLI2 – Reflective Practice and Commitment to Personal Growth

Objectives: Fellows are expected to:	Teaching Method	Evaluation Method	PGY Level
The importance of using evidence to determine treatment recommendations.	Didactics Bedside Teaching Independent Learning	End of Rotation Evaluation Direct Supervision	PGY6

## **System-Based Practice**

**Goal**: Fellows must demonstrate an awareness of and responsiveness to the larger context and system of healthcare, as well as the ability to call effectively on other resources in the system to provide optimal health care.

- SBP1 Patient Safety and Quality Improvement
- SBP2 System Navigation for Patient-Centered Care
- SBP3 Physician Role in Health Care System

Objectives:	Teaching Method	Evaluation Method	PGY Level
Fellows are expected to:			
The basic flow and structure of a radiation oncology clinic.	Didactics Bedside Teaching	End of Rotation Evaluation Direct Supervision	PGY6
	Independent Learning		

2. How radiation oncology optimally integrates into multi-disciplinary cancer care.	Didactics Bedside Teaching Independent Learning	End of Rotation Evaluation Direct Supervision	PGY6

# Advanced Endoscopy Curriculum Gastroenterology Fellowship Program Riverside Medical Center

**Description:** Fellows rotating on the Interventional Endoscopy rotations will be exposed to ERCP, EUS, and other advanced procedures such as stent placement, BaaRx Barretts ablation, deep enteroscopy and other advanced procedures.

This will require their participation in attending supervised consultation on inpatients for whom the GI interventional services are consulted.

The fellow will help perform ERCP's during this rotation. Additionally the fellow will help perform EUS procedures during this rotation.

Fellows will observe and may participate in the performance of Barrett's ablation procedures, stent placements and deep enteroscopy as these procedures become available during the month.

Fellows rotating on the interventional service will attend two half days of clinic per week and will see patient's under attending supervision in an outpatient clinical setting. They will be expected to see a minimum of 4 patients during each afternoon or morning clinic.

Fellows will be expected to give one learning case conference to the residents and fellows during morning report with an evidence based journal review.

**Suggested Reading**: Ginsber, G et al. Clinical Gastrointestinal endoscopy, 2<sup>nd</sup> Ed. Elsevier Saunders, 2012. Section III; Pancreatobiliary Disorders.

### **Patient Care**

**Goal**: Fellows must demonstrate the ability to effectively treat patients, provide medical care, patient empathy, awareness of behavioral issues, the incorporation of preventative medicine, and health promotion. *Fellows must be able to provide patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health.* 

- PC1 Data Gathering and Non-Procedural Diagnostic Testing
- PC2 Patient Management in Gastrointestinal and Liver Disease
- PC3 Procedures Cognitive Components
- PC4 Procedures Technical Components

Objectives	Teaching Method	Evaluation Method	PGY
Fellows are expected to:			Level

<ol> <li>Demonstrate competence in prevention, evaluation and management of the following:         <ul> <li>Acute and chronic gallbladder and biliary tract disease</li> <li>Acute and chronic pancreatic diseases</li> <li>Disease of the esophagus</li> <li>Gastrointestinal and hepatic neoplastic disease</li> <li>Gastrointestinal emergencies in the acutely-ill patient</li> <li>Gastrointestinal infections, including retroviral, mycotic, and parasitic diseases</li> <li>Geriatric gastroenterology</li> <li>Inflammatory bowel diseases</li> <li>Patients under surgical care for gastrointestinal disorders</li> <li>Vascular disorders of the gastrointestinal tract</li> <li>Women's health issues in digestive diseases</li> </ul> </li> </ol>	Board Review Bedside Teaching Role Modeling Independent Learning	End of Rotation Evaluation In-Training Exam	PGY6
<ol> <li>Develop expertise in the diagnosis, treatment and management of acute and chronic pancreaticobiliary illnesses in a hospital setting.</li> </ol>	Board Review Bedside Teaching Role Modeling Independent Learning	End of Rotation Evaluation In-Training Exam Direct Observation	PGY6
3. Develop ability to formulate a complete differential diagnosis and to systematically evaluate treatment options in order to develop a comprehensive treatment plan with attending gastroenterologists.	Bedside Teaching Role Modeling Independent Learning	End of Rotation Evaluation Direct Observation	PGY6
4. Learn to provide inpatient care that is safe and compassionate and to develop the ability to thoroughly and clearly educate the inpatient in the relevant areas of disease prevention, detection, progression and therapy to promote gastrointestinal health.	Bedside Teaching Role Modeling	End of Rotation Evaluation Annual PD Evaluation Direct Observation	PGY6
5. Follow a patient's disease course during the patient's hospital stay.	Bedside Teaching Role Modeling	End of Rotation Evaluation Direct Observation	PGY6
6. Obtain exposure to the performance of advanced endoscopic procedures including but not limited to: achalasia pneumatic dilation, luminal stent placement, endoluminal therapy for Barretts, deep enteroscopy.	Bedside Teaching Role Modeling	End of Rotation Evaluation Direct Observation	PGY6
7. Obtain exposure to endoscopic ultrasonography and EMR.	Bedside Teaching	End of Rotation Evaluation In-Training Exam	PGY6
8. Obtain exposure to the performance of therapeutic ERCP.	Bedside Teaching Role Modeling	End of Rotation Evaluation Direct Observation	PGY6

# **Medical Knowledge**

**Goal**: Fellows are expected to demonstrate and apply knowledge of accepted standards of clinical gastroenterology, remain current with new developments in gastroenterology, and participate in life-ling learning activities, including research and review of the literature. *Fellows must demonstrate knowledge of established and evolving biomedical, clinical, epidemiological and social-behavioral sciences, as well as the application of this knowledge to the care of patients with gastrointestinal diseases.* 

#### **Reporting Milestones:**

MK1 – Clinical Knowledge of Gastrointestinal and Liver Disease (Non-Procedural)

MK2 – Clinical Reasoning

Objecti	ves s are expected to:	Teaching Method	Evaluation Method	PGY Level
1.	<ul> <li>Demonstrate knowledge of the following content areas:         <ul> <li>Basic science, including:</li> <li>Anatomy, physiology, pharmacology, pathology, and molecular biology related to the gastrointestinal system, including the liver, biliary tract and pancreas</li> <li>Interpretation of abnormal liver chemistries</li> <li>Nutrition</li> <li>Prudent, cost-effective, and judicious use of special instruments, test, and therapy in the diagnosis and management of gastoenterologic disorders</li> <li>Surgical procedures employed in relation to digestive system disorders and their complications.</li> </ul> </li> </ul>	Board Review Bedside Teaching Role Modeling Independent Learning Computer Module	End of Rotation Evaluation 360 Degree Evaluation Annual PD Evaluation In-Training Exam Direct Observation Indirect Supervision	PGY6
2.	Develop and understanding of the pathophysiology of common and uncommon pancreaticobiliary diseases.	Board Review Bedside Teaching Role Modeling Independent Learning	End of Rotation Evaluation Annual PD Evaluation In-Training Exam	PGY6
3.	Develop a knowledge base in the epidemiology of pancreaticobiliary diseases, including common and uncommon pathology.	Role Modeling Independent Learning	End of Rotation Evaluation In-Training Exam	PGY6
4.	Learn the most current evidence-based medicine for treating pancreaticobiliary diseases.	Board Review Role Modeling	End of Rotation Evaluation In-Training Exam Direct Observation	PGY6
5.	Learn the management of pancreaticobiliary emergencies and medication side effects.	Bedside Teaching Independent Learning	In-Training Exam Direct Observation	PGY6
6.	Learn to perform detailed interviews and evaluations for pancreaticobiliary diseases.	Bedside Teaching Independent Learning	End of Rotation Evaluation In-Training Exam	PGY6
7.	Demonstrate knowledge and competency in the performance of all gastroenterology procedures, especially pancreaticobiliary endoscopy.	Bedside Teaching Role Modeling	End of Rotation Evaluation Direct Observation	PGY6
8.	Learn to perform inpatient consults on complicated medical and surgical patients.	Bedside Teaching Role Modeling Independent Learning	End of Rotation Evaluation Annual PD Evaluation Direct Observation	PGY6

<ol><li>Learn the role of EUS in the management of GI malignancies and other pancreatic, esophageal and gastric lesions.</li></ol>	Role Modeling Independent Learning Videos	End of Rotation Evaluation In-Training Exam	PGY6
<ol> <li>Learn the indications for deep enteroscopy in the managing lesions of the small bowel.</li> </ol>	Board Review Role Modeling Independent Learning Videos	End of Rotation Evaluation In-Training Exam Direct Observation	PGY6
11. Learn the role of palliative stent placement in gastrointestinal malignancies.	Bedside Teaching Role Modeling Independent Learning Videos	End of Rotation Evaluation Direct Observation	PGY6
12. Learn the role of endoluminal therapy in patient with GERD.	Bedside Teaching Role Modeling	End of Rotation Evaluation Direct Observation	PGY6
<ol> <li>Learn to review inpatient hospital records efficiently and effectively to retrieve pertinent patient admissions records and histories.</li> </ol>	Role Modeling	End of Rotation Evaluation Direct Observation	PGY6
14. Learn to perform diagnostic procedures at the bedside and appropriately document findings	Role Modeling	End of Rotation Evaluation Direct Observation	PGY6
15. Learn to interact with the primary team to facilitate patient care.	Role Modeling	360 Degree Evaluation	PGY6

# **Practice-based Learning and Improvement**

**Goal**: Fellows must demonstrate the ability to investigate and evaluate their care of patients, to appraise and assimilate scientific evidence, and to continuously improve patient care based on constant self- evaluation and life-long learning.

#### **Reporting Milestones:**

PBLI1 – Evidenced-Based and Informed Practice

PBLI2 – Reflective Practice and Commitment to Personal Growth

Objectives: Fellows are expected to:	Teaching Method Select all that apply	Evaluation Method Select all that apply	PGY Level
<ol> <li>Review, analyze, and utilize scientific evidence from the gastrointestinal and pancreaticobiliary, &amp; GI malignancy literature in the management of the GI patient.</li> </ol>	Board Review Role Modeling Independent Learning	In-Training Exam	PGY6
<ol><li>Learn about the most effective therapeutic modalities for the treatment of pancreaticobiliary in patients with those disorders.</li></ol>	Role Modeling	End of Rotation Evaluation Direct Observation	PGY6
3. Identify and perform appropriate learning activities	Board Review Independent Learning	In-Training Exam	PGY6

# **Interpersonal and Communication Skills**

**Goal**: Fellows must demonstrate interpersonal and communication skills that result in the effective exchange of information and collaboration with patients, their families, and health professionals.

#### **Reporting Milestones:**

- ICS1 Patient- and Family-Centered Communication
- ICS2 Interprofessional and Team Communication
- ICS3 Communication within Health Care System

Objectives:	Teaching Method	Evaluation Method	PGY Level
Fellows are expected to:	Select all that apply	Select all that apply	
<ol> <li>Learn to communicate effectively with staff, peers, attending gastroenterologists, referring physicians and consultants.</li> </ol>	Role Modeling	Direct Observation	PGY6
<ol> <li>Learn to listen patiently and attentively to gastrointestinal patients' history and concerns.</li> </ol>	Role Modeling	Direct Observation	PGY6
3. Learn to effectively discuss the patients' diagnoses and treatment plans (with side effects) as well as patients' questions.	Role Modeling	Direct Observation	PGY6
Learn to become a teacher of gastroenterology to junior residents, medical students and other healthcare professionals.	Bedside Teaching Role Modeling	360 Degree Evaluation Direct Observation	PGY6

## **Professionalism**

**Goal**: Fellows must demonstrate a commitment to carrying out professional responsibilities and an adherence to ethical principles.

- PROF1 Professional Behavior and Ethical Principles
- PROF2 Accountability/Conscientiousness
- PROF3 Self-Awareness and Help-Seeking

Objectives: Fellows are expected to:	Teaching Method Select all that apply	Evaluation Method Select all that apply	PGY Level
Learn to perform all expected professional responsibilities.	Role Modeling	Direct Observation Indirect Supervision	PGY6
<ol><li>Learn to practice ethical principles in relation to patient care and confidentiality.</li></ol>	Role Modeling	Direct Observation	PGY6
<ol> <li>Practice interactions with pharmaceutical representatives and be unbiased in prescribing habits.</li> </ol>	Role Modeling	Direct Observation	PGY6
4. Learn to be sensitive to cultural, age, gender and disability issues.	Role Modeling	360 Degree Evaluation	PGY6

	Direct Observation	
	Direct Observation	

## **System-Based Practice**

**Goal**: Fellows must demonstrate an awareness of and responsiveness to the larger context and system of healthcare, as well as the ability to call effectively on other resources in the system to provide optimal health care.

#### **Reporting Milestones:**

SBP1 – Patient Safety and Quality Improvement

SBP2 – System Navigation for Patient-Centered Care

SBP3 – Physician Role in Health Care System

est s i rijereran rese in rieditir edre sjetern			
Objectives:	Teaching Method	Evaluation Method	PGY Level
Fellows are expected to:	Select all that apply	Select all that apply	
1. Learn how the hospital functions within health care arena.	Role Modeling	Direct Observation	PGY6
Learn proper documentation and billing skills.	Role Modeling	360 Degree Evaluation Direct Observation	PGY6
3. Practice cost-effective care.	Role Modeling	Direct Observation	PGY6
4. Be active in the standard operating procedures and quality improvement initiatives within the hospital as time permits.	Independent Learning	360 Degree Evaluation	PGY6

# Outpatient GI Curriculum Gastroenterology Fellowship Program Riverside Medical Center

**Description**: The overall goal of the outpatient GI rotation is to allow the Fellow under the supervision of an attending physician to develop a bank of patients which they will care for over the three years they are in the program. The expectation is that the Fellow will gain experience and expertise in caring for patients in a non- hospitalized setting. This will allow the Fellow the ability to embrace the evolution of a new patient complaint and follow through the work up and care of the underlying condition de novo. The anticipation is that there will be development of a strong physician to patient relationship. This will help to strengthen the Fellows understanding of the physical, psychological and social impact the condition plays on the patient's ability to function on a daily basis. The Fellows responsibilities will include initial evaluation of the patient and subsequent follow up in the office. They will refill prescriptions, order appropriate labs and radiographic testing and will communicate the results to the patient with collaborative discussion and agreement of the attending physician. There is also an expectation that they will be involved in endoscopic procedures performed on their patients.

#### **Patient Care**

**Goal**: Fellows must demonstrate the ability to effectively treat patients, provide medical care, patient empathy, awareness of behavioral issues, the incorporation of preventative medicine, and health promotion. *Fellows must be able to provide patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health.* 

- PC1 Data Gathering and Non-Procedural Diagnostic Testing
- PC2 Patient Management in Gastrointestinal and Liver Disease
- PC3 Procedures Cognitive Components

i de l'i deduction de de d'interior de l'inperior de l'inp			
PC4 – Procedures Technical Components			
Objectives	Teaching Method	Evaluation Method	PGY
Fellows are expected to:			Level
<ol> <li>Demonstrate competence in prevention, evaluation and management of the following:</li> </ol>	Bedside Teaching Role Modeling	End of Rotation Evaluation Ambulatory Clinic Evaluation	PGY4 PGY5
<ul> <li>Acid peptic disorders of the gastrointestinal tract</li> <li>Acute and chronic gallbladder and biliary tract disease</li> <li>Acute and chronic liver disease</li> </ul>	Independent Learning	Annual PD Evaluation In-Training Exam Direct Observation	PGY6
<ul><li>Acute and chronic pancreatic diseases</li><li>Disease of the esophagus</li></ul>			
<ul><li>Disorders of nutrient assimilation</li><li>Gastrointestinal and hepatic neoplastic disease</li></ul>			

	<ul> <li>Gastrointestinal bleeding</li> <li>Gastrointestinal diseases with an immune basis</li> <li>Gastrointestinal infections, including retroviral, mycotic, and parasitic diseases</li> <li>Genetic/inherited disorders</li> <li>Geriatric gastroenterology</li> <li>Inflammatory bowel diseases</li> <li>Irritable bowel syndrome</li> <li>Motor disorders of the gastrointestinal tract</li> <li>Patients under surgical care for gastrointestinal disorders</li> <li>Vascular disorders of the gastrointestinal tract</li> <li>Women's health issues in digestive diseases</li> </ul>			
2.	Perform appropriate GI patient work-up.	Board Review Role Modeling Independent Learning	End of Rotation Evaluation Ambulatory Clinic Evaluation In-Training Exam Direct Observation	PGY4
3.	Organize and prioritize patients' GI medical problems and differential diagnoses.	Role Modeling Independent Learning Computer Module	End of Rotation Evaluation Ambulatory Clinic Evaluation Direct Observation	PGY4
4.	Gather and critically appraise references for therapy in peer-reviewed and other resources.	Board Review Journal Club	End of Rotation Evaluation Direct Observation Journal Club discussion	PGY4
5.	Make informed recommendations about preventative, diagnostic and therapeutic options with guidance of the attending.	Bedside Teaching Role Modeling Independent Learning	End of Rotation Evaluation Ambulatory Clinic Evaluation Direct Observation	PGY4
6.	Independently make informed recommendations about preventative, diagnostic and therapeutic options for common ambulatory conditions.	Bedside Teaching Role Modeling Independent Learning	End of Rotation Evaluation Ambulatory Clinic Evaluation Indirect Supervision	PGY5
7.	Perform advanced work up of patients with basic and complex GI disorders.	Bedside Teaching Role Modeling Independent Learning	End of Rotation Evaluation Ambulatory Clinic Evaluation Direct Observation	PGY6
8.		Bedside Teaching Role Modeling Independent Learning	Ambulatory Clinic Evaluation Direct Observation	PGY6
9.	complex GI disorders.	Bedside Teaching Role Modeling Independent Learning	End of Rotation Evaluation Ambulatory Clinic Evaluation Direct Observation	PGY6
10.	Independently make informed recommendations about preventative, diagnostic and therapeutic options.	Role Modeling Independent Learning	End of Rotation Evaluation Ambulatory Clinic Evaluation Direct Observation	PGY6

		Indirect Supervision	
11. Demonstrate competence in the practice of health promotion, disease prevention, diagnosis, care and treatment of patients of each gender, from adolescence to old age, during health and all stages of illness.	Bedside Teaching	End of Rotation Evaluation Ambulatory Clinic Evaluation Direct Observation	PGY4 PGY5 PGY6

## **Medical Knowledge**

**Goal**: Fellows are expected to demonstrate and apply knowledge of accepted standards of clinical gastroenterology, remain current with new developments in gastroenterology, and participate in life-ling learning activities, including research and review of the literature. *Fellows must demonstrate knowledge of established and evolving biomedical, clinical, epidemiological and social-behavioral sciences, as well as the application of this knowledge to the care of patients with gastrointestinal diseases.* 

#### **Reporting Milestones:**

MK1 – Clinical Knowledge of Gastrointestinal and Liver Disease (Non-Procedural)

MK2 – Clinical Reasoning

Objectives Fellows are expected to:	Teaching Method	Evaluation Method	PGY Level
1. Demonstrate knowledge of the following content areas:     Basic science, including:     Anatomy, physiology, pharmacology, pathology, and molecular biology related to the gastrointestinal system, including the liver, biliary tract and pancreas     Interpretation of abnormal liver chemistries     Nutrition     Prudent, cost-effective, and judicious use of special instruments, test, and therapy in the diagnosis and management of gastoenterologic disorders     Surgical procedures employed in relation to digestive system disorders and their complications.		Ambulatory Clinic Evaluation Direct Observation	PGY4 PGY5 PGY6
Demonstrate fundamental knowledge as it pertains to formulating a GI diagnosis and treatment plan.	Role Modeling Independent Learning	End of Rotation Evaluation Ambulatory Clinic Evaluation In-Training Exam Direct Observation	PGY4
Access and critically evaluate medical information and scientific information relevant to patient care.	Didactics Board Review Bedside Teaching Clinical Teaching Rounds Role Modeling Independent Learning Computer Module	End of Rotation Evaluation Ambulatory Clinic Evaluation Direct Observation	PGY4

4.	Demonstrate comprehension of pathophysiological basis of GI conditions and rationale for therapy including mechanism of action of treatment modalities.	Bedside Teaching Role Modeling Independent Learning	Ambulatory Clinic Evaluation In-Training Exam	PGY5 PGY6
5.	Access and critically evaluate medical information and scientific evidence regarding all diseases gastrointestinal.	Role Modeling Independent Learning	Ambulatory Clinic Evaluation Annual PD Evaluation Indirect Supervision Direct Observation	PGY6
6.	Demonstrate knowledge of the scientific method of problem solving and evidence-based decision making	Independent Learning	Ambulatory Clinic Evaluation	PGY4 PGY5 PGY6
7.	Demonstrate a knowledge of indications, contraindications, limitations, complications, techniques, and interpretation of results of those diagnostic and therapeutic procedures integral to the discipline, including the appropriate indications for and use of screening tests/procedures	Role Modeling Independent Learning	Ambulatory Clinic Evaluation Direct Observation	PGY4 PGY5 PGY6

# **Practice-based Learning and Improvement**

**Goal**: Fellows must demonstrate the ability to investigate and evaluate their care of patients, to appraise and assimilate scientific evidence, and to continuously improve patient care based on constant self- evaluation and life-long learning.

### **Reporting Milestones:**

PBLI1 – Evidenced-Based and Informed Practice

PBLI2 – Reflective Practice and Commitment to Personal Growth

Objecti Fellows	ves: s are expected to:	Teaching Method	Evaluation Method	PGY Level
1.	Identify strengths, deficiencies, and limits in one's knowledge and expertise	Independent Learning	End of Rotation Evaluation Ambulatory Clinic Evaluation Direct Observation	PGY4 PGY5 PGY6
2.	Set learning and improvement goals	Board Review Independent Learning	In-Training Exam	PGY4 PGY5 PGY6
3.	Identify and perform appropriate learning activities	Board Review Independent Learning	In-Training Exam	PGY4 PGY5 PGY6
4.	Systematically analyze practice, using quality improvement methods, and implement changes with the goal of practice improvement.	Bedside Teaching	End of Rotation Evaluation Ambulatory Clinic Evaluation Direct Observation	PGY4 PGY5 PGY6
5.	Incorporate formative evaluation feedback into daily practice	Bedside Teaching	End of Rotation Evaluation	PGY4

			Ambulatory Clinic Evaluation	PGY5 PGY6
6.	Locate, appraise, and assimilate evidence from scientific studies related to their patients' health problems.	Independent Learning	End of Rotation Evaluation Ambulatory Clinic Evaluation	PGY4 PGY5 PGY6
7.	Participate in the education of patients, families, students, fellows and other health professionals	Bedside Teaching Role Modeling	End of Rotation Evaluation Ambulatory Clinic Evaluation Direct Observation	PGY4 PGY5 PGY6
8.	Obtain procedure-specific informed consent by competently educating patients about rationale, technique, and complications of procedures.	Role Modeling	Ambulatory Clinic Evaluation Direct Observation	PGY4 PGY5 PGY6

## **Interpersonal and Communication Skills**

**Goal**: Fellows must demonstrate interpersonal and communication skills that result in the effective exchange of information and collaboration with patients, their families, and health professionals.

#### **Reporting Milestones:**

ICS1 – Patient- and Family-Centered Communication

ICS2 – Interprofessional and Team Communication

ICS3 – Communication within Health Care System

Object	ives:	Teaching Method	Evaluation Method	PGY Level
Fellow	s are expected to:			
1.	Communicate effectively with patients, families, and the public, as appropriate, across a broad range of socioeconomic and cultural backgrounds.	Role Modeling	End of Rotation Evaluation Ambulatory Clinic Evaluation Direct Observation	PGY4 PGY5 PGY6
2.	Communicate effectively with physicians, other health professionals, and health related agencies.	Role Modeling	Direct Observation	PGY4 PGY5 PGY6
3.	Work effectively as a member or leader of a health care team or other professional group.	Role Modeling	360 Degree Evaluation Annual PD Evaluation Direct Observation	PGY4 PGY5 PGY6
4.	Act in a consultative role to other physicians and health professionals.	Role Modeling	End of Rotation Evaluation Ambulatory Clinic Evaluation Direct Observation	PGY4 PGY5 PGY6
5.	Maintain comprehensive, timely, and legible medical records if applicable.	Role Modeling	Direct Observation	PGY4 PGY5 PGY6

## **Professionalism**

**Goal**: Fellows must demonstrate a commitment to carrying out professional responsibilities and an adherence to ethical principles.

**Reporting Milestones:** 

PROF1 – Professional Behavior and Ethical Principles

PROF2 – Accountability/Conscientiousness

PROF3 – Self-Awareness and Help-Seeking

Objectives	s: re expected to:	Teaching Method	Evaluation Method	PGY Level
	Demonstrate compassion, integrity, and respect for others	Role Modeling	306 Degree Evaluation Direct Observation	PGY4 PGY5 PGY6
2. De	emonstrate responsiveness to patient needs that supersedes self-interest	Role Modeling	Direct Observation	PGY4 PGY5 PGY6
3. Do	emonstrate respect for patient privacy and autonomy.	Role Modeling	360 Degree Evaluation Direct Observation	PGY4 PGY5 PGY6
4. Do	emonstrate accountability to patients, society and the profession.	Role Modeling	Direct Observation	PGY4 PGY5 PGY6
in	demonstrate sensitivity and responsiveness to a diverse patient population, including but not limited to diversity in gender, age, culture, race, religion, isabilities, and sexual orientation.	Role Modeling	360 Degree Evaluation  Direct Observation	PGY4 PGY5 PGY6
ap	remonstrate high standards of ethical behavior, including maintaining ppropriate professional boundaries and relationships with other physicians and ther health care team members, and avoiding conflicts of interest.	Role Modeling	360 Degree Evaluation Direct Observation	PGY4 PGY5 PGY6

## **System-Based Practice**

**Goal**: Fellows must demonstrate an awareness of and responsiveness to the larger context and system of healthcare, as well as the ability to call effectively on other resources in the system to provide optimal health care.

#### **Reporting Milestones:**

SBP1 – Patient Safety and Quality Improvement

SBP2 – System Navigation for Patient-Centered Care

SBP3 – Physician Role in Health Care System

Objectives:	Teaching Method	Evaluation Method	PGY Level
Fellows are expected to:			

1.	Work effectively in various health care delivery setting and systems relevant to their clinical specialty.	Role Modeling	360 Degree Evaluation Direct Observation	PGY4 PGY5 PGY6
2.	Coordinate patient care within the health care system relevant to their clinical specialty.	Role Modeling	360 Degree Evaluation Direct Observation	PGY4 PGY5 PGY6
3.	Incorporate considerations of cost awareness and risk-benefit analysis in patient and/or population- based care as appropriate.	Role Modeling	Direct Observation	PGY4 PGY5 PGY6
4.	Advocate for quality patient care and optimal patient care systems.	Role Modeling	Direct Observation	PGY4 PGY5 PGY6
5.	Work in interprofessional teams to enhance patient safety and improve patient care quality.	Role Modeling	360 Degree Evaluation Direct Observation	PGY4 PGY5 PGY6
6.	Participate in identifying system errors and implementing potential systems solutions.	Independent Learning	360 Degree Evaluation	PGY4 PGY5 PGY6

#### **Procedures**

**Goal**: Fellows must be able to competently perform all medical diagnostic, and surgical procedures considered essential for the area of practice.

Fellows must demonstrate competence in and the performance of the following procedures:

#### PGY4:

- Upper endoscopy with biopsy, dilation of strictures both esophageal and pyloric, basic control of bleeding, polypectomy, PEG tube placement
- Colonoscopy/flexible sigmoidoscopy with biopsy, basic control of bleeding, non-complex polypectomy.
- Capsule endoscopy interpretation.
- Review PH studies and interpretation.
- Paracentesis perform and interpret results.
- Endoscopic retrograde cholangiopancreatography understand principles of ERCP; application of the procedure; ability to effectively and competently introduce the duodenoscope and gain proper position for performance of the procedure
- Conscious Sedation
- Retrieval of foreign bodies from esophagus

#### PGY5:

- Upper endoscopy with biopsy, dilation of strictures both esophageal and pyloric, basic control of bleeding, polypectomy, PEG tube placement continued advancement in technical skills to also include more complex polypectomy and control of bleeding including variceal hemorrhage.
- Colonoscopy/flexible sigmoidoscopy with biopsy, basic control of bleeding, non-complex polypectomy improvement in technical skills and performance of complex polypectomies control of bleeding using advanced techniques.
- Capsule endoscopy interpretation- interpretation with advanced ability to recognize and identify pathology.
- Review PH studies and interpretation
- Paracentesis perform and interpret results.
- Endoscopic retrograde cholangiopancreatography understand principles of ERCP; application of the procedure; ability to effectively and competently introduce the duodenoscope and gain proper position for performance of the procedure ability to gain access into Biliary and pancreatic ducts performance of sphincterotomy basic stone extraction and basic stent placement.

#### PGY6:

• Perform all aspects of upper and lower endoscopy with minimal input from attending and further skills in ERCP to allow independent performance at completion of program.