



APPENDIX 2: ROTATION-SPECIFIC GOALS AND OBJECTIVES

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CURRENT RSOs

ROTATION SPECIFIC OBJECTIVES

*Division of Gastroenterology, Department of Medicine
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INFLAMMATORY BOWEL DISEASE - MOUNT SINAI HOSPITAL**OVERVIEW**

MSH is a tertiary centre for inflammatory bowel disease (IBD). There is an inpatient ward (6 beds), on a combined medical –surgical ward (14S). This exposure provides trainees with a unique opportunity to learn the spectrum of IBD management, including medical and surgical treatment. Trainees will be involved in the care of patients with complex IBD. In addition, there is an opportunity for the trainees to interact with the surgical resident trainees and colorectal surgical faculty informally and on rounds, strengthening the collaborative role with surgical colleagues, as this is an extremely important role for gastroenterologists. The trainees are involved in the collaborative care either in the preoperative or postoperative planning, especially regarding issues of postoperative maintenance management, management of malabsorption and nutritional issues. There are combined multidisciplinary IBD rounds, at which cases are presented on a rota by surgical and medical faculty.

CANMEDS-BASED OBJECTIVES

At the end of this rotation, the GI Resident will be able to:

MEDICAL EXPERT

- Function effectively as consultants in gastroenterology to provide optimal, ethical and patient-centered medical care
- Demonstrate a broad knowledge of basic and clinical aspects of inflammatory bowel disease, as it pertains to adult gastroenterology
- Establish and maintain clinical knowledge, skills and attitudes appropriate to gastroenterology with a focus on inflammatory bowel disease
- Perform a complete and appropriate assessment of a patient for gastrointestinal disease with a focus on inflammatory bowel disease
- Learn to manage acute flares of inflammatory bowel disease in the ambulatory and inpatient setting
- Interprets gastrointestinal radiological studies (e.g. plain x-rays, CT enteroclysis, SBFT, SBE, CT colonography etc.)
- Recognize and describe relevant endoscopic features of inflammatory bowel disease
- Become familiar with the long-term management of inflammatory bowel disease and strategies to prevent long-term complications
- Demonstrate proficient and appropriate use of diagnostic and therapeutic colonoscopy and upper endoscopy

ROTATION SPECIFIC OBJECTIVES

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- Demonstrate proficient and appropriate use of colonoscopy, focusing on the diagnosis and staging of inflammatory bowel disease
- Obtain informed consent for procedures (endoscopic) and treatment (transfusion of blood products)

COMMUNICATOR

- Counsel patients on the indications and contraindications for the use of biologic agents in the treatment of inflammatory bowel disease and their adverse effects.
- Communicates with and counsels patients & families effectively regarding diagnosis, staging and management aspects of inflammatory bowel disease
- Develop rapport, trust and ethical therapeutic relationships with patients and families
- Accurately elicit and synthesize relevant information and perspectives of patients and families, colleagues and other professionals
- Accurately convey relevant information and explanations to patients and families, colleagues and other professionals
- Develop a common understanding on issues, problems and plans with patients and families, colleagues and other professionals to develop a shared plan of care
- Convey effective oral and written information about a medical encounter

COLLABORATOR

- Participate effectively and appropriately in an inter-professional healthcare team with a focus on interactions with surgical consultants, nutritionists, pharmacists, and nurse managers in the context of management of inflammatory bowel disease
- Effectively work with other health professionals to prevent, negotiate, and resolve inter-professional conflict
- Describe role of the colorectal surgeon and understand when surgery is appropriate, and what the risks and benefits of surgery are
- Seek appropriate consultation from other health professionals, recognizing the limits of their expertise
- Demonstrate effective and open communications skills with referring service with respect to consultant recommendations and results of endoscopic evaluation

LEADER

- Assume responsibility for the clinically appropriate use of healthcare resources in the care of hospitalized inflammatory bowel disease patients
- Develop skills to effectively manage time and balance workload between the gastroenterology inpatient service, ambulatory clinic, and consultation service
- Provide guidance and leadership for general medical residents and medical students on the gastroenterology team

ROTATION SPECIFIC OBJECTIVES

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HEALTH ADVOCATE

- Respond to patient health needs of inpatients on the gastroenterology service and issues as part of patient care
- Identify the determinants of health of the populations in the IBD population
- Advocate effectively on behalf of patients, particular involving access to medications (i.e. immunobiologic therapy) and supplies (ostomy supplies) for the patient with inflammatory bowel disease

SCHOLAR

- Maintain and enhance knowledge in inflammatory bowel disease through attendance at the weekly IBD conference
- Critically evaluate the medical literature, and apply this appropriately to practice decisions through participation in journal club and review of the literature with gastroenterology staff
- Facilitate the learning of patients, families, students, residents, other health professionals, the public, and others, as appropriate
- Contribute to the creation, dissemination, application, and translation of new medical knowledge and practices through opportunities to participate in IBD and GI clinical and translational research
- Attend and contribute to rounds (IBD Rounds, Journal Club Rounds)
- Demonstrate effective presentation skills

PROFESSIONAL

- Demonstrate a commitment to their patients, profession, and society through ethical practice
- Demonstrate a commitment to their patients, profession, and society through participation in profession-led regulation
- Demonstrate a commitment to physician health and sustainable practice
- Shows honesty, integrity, commitment, compassion and respect when working with patients, families and colleagues
- Demonstrate appropriate self-awareness and insights into his / her abilities (strengths and areas needing improvement)
- Recognize and deals with ethical issues surrounding consent, fertility and use of limited resources for the treatment of patients with inflammatory bowel disease.

ROTATION SPECIFIC OBJECTIVES

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LUMINAL – SUNNYBROOK HEALTH SCIENCES CENTRE (SHSC)**OVERVIEW**

The division provides inpatient and outpatient consultative services in support of key priority programs, including oncology, trauma and geriatrics. The trainee is responsible for supervising junior trainees (mainly GIM trainees) with regards to triaging, scheduling and performance of procedures on inpatients. He/she is also expected to provide informal teaching around cases to junior residents. SHSC has the unique opportunity of having a large cancer care centre, which provides trainees with significant on site exposure to the diverse inpatient and outpatient aspects of gastroenterology oncology care. More senior trainees may gain exposure and some experience in the performance of ERCP or endoscopic ultrasound

CANMEDS-BASED OBJECTIVES

At the end of the rotation, the GI Trainee will be able to:

MEDICAL EXPERT

- Provide an appropriate differential diagnosis, followed by a clear and appropriate investigation plan
- Incorporate sufficient basic science knowledge into clinical care to manage common gastroenterology problems
- Demonstrate sufficient knowledge to recognize, evaluate and manage GI emergencies, including acute GI hemorrhage, fulminant colitis, ascending cholangitis, and to remove ingested foreign bodies from the GI tract
- Demonstrate sufficient knowledge to diagnose and manage benign and malignant diseases of the anus, including novel techniques for the management of anal dysplasia
- Demonstrate knowledge regarding the diagnosis and treatment of malnutrition, including the appropriate use of nutrition support techniques, particular enteral diets
- Demonstrate the ability to recognize, evaluate and manage ascites and associated complications
- Recognize relevant endoscopic pathology
- Perform flexible sigmoidoscopy with / without biopsy
- Perform esophagogastroduodenoscopy with / without biopsy
- Perform colonoscopy with / without biopsy



ROTATION SPECIFIC OBJECTIVES

*Division of Gastroenterology, Department of Medicine
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- Perform therapeutic endoscopic procedures
 - endoscopic hemostasis (injection, thermal, endoclips therapy, variceal banding)
 - polypectomy
- Demonstrate knowledge of the indications, contraindications, risks and complications of diagnostic and therapeutic procedures:
 - Cyanoacrylate injection of gastric and ectopic varices
 - hemorrhoid band ligation
 - Argon Plasma Coagulation (APC)
 - endoluminal stenting
 - ERCP with and without stenting, with a focus on pancreaticobiliary disorders
 - endoscopic ultrasound and fine needle aspiration (FNA), with a focus on pancreaticobiliary disorders
 - PEG insertion and replacement
 - capsule endoscopy
 - paracentesis
- Demonstrate the ability to perform diagnostic and therapeutic paracentesis.
- Demonstrate familiarity with new advances in endoscopy for the management of gastrointestinal disorders, including obesity management.

COLLABORATOR

- Effectively communicate the results of investigations and clear management plan to patient and his / her family members
- Deliver information to the patient, family and caregivers in a humane manner and in such a way that it is understandable, encourages discussion and promotes the patient's participation in decision-making to the degree that they wish, in particular for patients who have cancer.
- Inform patients of the potential risks of feeding tubes, enteral feeding
- Develop management plans that take into consideration a patient's goals of care, particularly when dealing with elderly patients and patients with advanced malignancies.
- Record information about endoscopic procedures in an accurate and thorough manner



ROTATION SPECIFIC OBJECTIVES

*Division of Gastroenterology, Department of Medicine
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COLLABORATOR

- Work effectively with allied health professionals, including endoscopy nurses, ward nursing staff, dietitians, pharmacists
- Appropriately consult surgical and other services to effectively coordinate patient care with referring physicians, family physician and other consultants
- Develop care plans for patients including investigation, treatment and continuing care in collaboration with members of the interdisciplinary team, including dietitians, pharmacists, nurse managers, oncologists, and surgeons

LEADER

- Utilize hospital resources effectively, to appropriately triage investigations and procedures based on clinical need
- Manage time appropriately – in-patient consultation service, endoscopy service, outpatient clinic, academic endeavors
- Supervise more junior team members (e.g. Internal medicine trainees rotating through GI service) regarding patient care / treatment implementation and delegate the workload in an appropriate and equitable manner

HEALTH ADVOCATE

- Implement preventative measures (triage of emergency patients appropriately for endoscopy in the endoscopy unit, ICU, collaboration with anesthesia for possible airway protection during endoscopy)

SCHOLAR

- Critically appraises the literature and applies the data to patient care
- Demonstrates knowledge of key basic science principles (biochemistry, physiology, anatomy, pathology, genetics, pharmacology) as they apply to gastroenterology
- Effectively teaches other allied health professionals (nursing staff, dietitians, pharmacists), junior housestaff and medical students

PROFESSIONAL

- Demonstrate respect and honesty at all times toward patients, faculty, peer trainees, other health professionals

ROTATION SPECIFIC OBJECTIVES

*Division of Gastroenterology, Department of Medicine
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- Recognize and deals with ethical issues
- Prepare correspondence (procedure, consultation, follow-up notes) in a timely manner

ROTATION SPECIFIC OBJECTIVES

*Division of Gastroenterology, Department of Medicine
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LUMINAL - ST. MICHAEL'S HOSPITAL**OVERVIEW**

The division of gastroenterology at St. Michael's Hospital provides a core Gastroenterology rotation with particular focus on advanced therapeutic endoscopy. St. Michael's Hospital is the only Canadian centre of excellence in endoscopy recognized by the World Endoscopy Organization. In addition, St. Michael's Hospital is uniquely located in the inner city of Toronto, providing a unique opportunity for Residents to learn how to engage and manage patients, who may have difficulty in navigating the health care system, as it applies to gastroenterology resources. Undergraduate and postgraduate trainees participate in (1) in-patient activities on the Clinical Teaching Unit (CTU), (2) in-patient consultation services to the hospital, and (3) outpatient clinics and endoscopies.

CANMEDS-BASED OBJECTIVES

At the end of the rotation, the GI Trainee will be able to:

MEDICAL EXPERT

- Incorporate basic science knowledge into clinical care
- Demonstrate clinical knowledge sufficient to manage common gastrointestinal conditions
- Demonstrate clinical knowledge sufficient to diagnose and manage rare gastrointestinal disorders
- Demonstrate an understanding of the epidemiology, pathophysiology, risk factors, diagnostic approach, treatment and prognosis of gastrointestinal, biliary and pancreatic disease
- Demonstrate knowledge of the anatomy, physiology and pathology of the gastrointestinal tract, with a particular focus on the pancreaticobiliary tract
- Demonstrate knowledge of the principles of management of parenteral nutrition, including the indications, risks and complications
- Interpret gastrointestinal radiological studies (small bowel contrast studies, CT, MRCP etc.)
- Interpret urea breath test for H. pylori persistence / eradication
- Recognize relevant endoscopic pathology
- Perform flexible sigmoidoscopy with / without biopsy
- Perform esophagogastroduodenoscopy with / without biopsy
- Perform colonoscopy with / without biopsy
- Perform the following therapeutic endoscopic procedures: endoscopic hemostasis (injection, thermal, endoclips therapy, variceal banding)
- polypectomy (basic technique, PGY4)

ROTATION SPECIFIC OBJECTIVES

*Division of Gastroenterology, Department of Medicine
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- advanced polypectomy technique (endoscopic mucosal resection, piecemeal removal with submucosal injection, PGY5)
- passive and wire-guided dilatation of strictures
- pneumatic dilatation of strictures
- Demonstrate knowledge of the indications, contraindications, risks and complications of diagnostic and therapeutic procedures:
 - principles of endoscopic hemostasis
 - endoclips for hemostasis
 - bipolar electrocautery for hemostasis
 - Argon plasma coagulation
 - Cyanoacrylate injection of gastric and ectopic varices
 - deep enteroscopy
 - ERCP and associated interventions
 - endoscopic ultrasound and fine needle aspiration
 - endoluminal stenting
 - management of massive upper gastrointestinal bleeds
- Demonstrate proficiency at diagnostic upper gastrointestinal biopsy with biopsies, flexible sigmoidoscopy with biopsies and colonoscopy with biopsies and polypectomy
- Demonstrate proficiency in obtaining informed consent for procedures (endoscopic, liver biopsy) and treatment (transfusion of blood products)

COMMUNICATOR

- Effectively communicate the results of investigations, a clear management plan to patients and their families
- Counsel patients on the management of acute and chronic pancreatitis

COLLABORATOR

- Work effectively with endoscopy nurses, other allied health care professionals (dietitians, TPN pharmacists, enterostomal nurses)
- Appropriately consult surgical and other services
- Work effectively with other housestaff in sharing responsibilities, including service, call, endoscopy and patient hand-over
- Demonstrate proficiency in soliciting input from and providing input to the multidisciplinary team
- Compile (written, dictation) comprehensive and thorough specialty-level consultation reports, discharge summaries, letters and progress notes

ROTATION SPECIFIC OBJECTIVES

*Division of Gastroenterology, Department of Medicine
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- Communicate case summaries on patients seen to peer trainees and consultants commensurate in detail with the purpose of the summary (i.e. handover, request for consultation)

LEADER

- Utilize health care resources appropriately
- Manage time appropriately – in-patient, consultative service, endoscopy
- Oversee the provision of care to in-patients and implements decisions regarding patient care, including the appropriate delegation of care

HEALTH ADVOCATE

- Understand the determinants of health
- Implement preventative measures (triage of emergency patients appropriately for endoscopy in the endoscopy unit, ICU, collaboration with anesthesia for possible airway protection during endoscopy)
- Demonstrate sensitivity to and addresses patient-centered limitations to management (i.e. psychosocial, financial, linguistic, etc.)

SCHOLAR

- Demonstrate self-directed learning (critical appraisal, review of literature for patient care, rounds)
- Demonstrate knowledge of basic scientific principles as they apply to gastroenterology, particularly pancreaticobiliary diseases and endoscopic principles
- Effectively teach other allied health professionals – nursing staff, dieticians, pharmacists etc., and junior housestaff
- Demonstrate the ability to generate clinical questions regarding patient care
- Demonstrate the ability to answer clinical questions in an evidence-based manner

PROFESSIONAL

- Demonstrate respect and honesty toward faculty, patients, peer housestaff and other allied health professionals
- Understand the ethical relationship with pharmaceutical / endoscopy equipment industry representatives as defined by the University of Toronto, RCPSC, CMA
- Prepare correspondence (procedure notes, consultation and discharge summaries) in a timely manner

ROTATION SPECIFIC OBJECTIVES

*Division of Gastroenterology, Department of Medicine
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- Demonstrate an attitude consistent with professional standards, including the delivery of patient care with integrity, honesty and compassion, especially in the context of care of patients in an inner city hospital

ROTATION SPECIFIC OBJECTIVES

*Division of Gastroenterology, Department of Medicine
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LUMINAL – TORONTO GENERAL HOSPITAL**OVERVIEW**

Toronto General Hospital (TGH) is a tertiary hospital, involved in the complex care of medical and surgical patients. There is the unique opportunity to provide consultation and endoscopy to admitted acutely ill oncology patients from Princess Margaret hospital, providing trainees with medical expertise in the diagnosis and management of GI complications of chemo- and radiation therapy, including graft versus host disease, and radiation colitis. In addition, there is a busy consultative service to general medicine and surgical services, as well as ICU, CCU.

Nutrition is also a site objective in the luminal rotation at TGH. Nutrition consultations will take place on the TGH inpatient and outpatient services. This will allow the trainee to assess and develop nutrition plans for patients with complex nutrition issues, including short bowel syndrome. In addition, nutrition education is integrated in the AHD, citywide journal club (critical appraisal of nutrition literature) and national CAG Basic Science Lecture Series.

CANMEDS-BASED OBJECTIVES

At the end of the rotation, the GI Trainee will be able to:

MEDICAL EXPERT

- Provide an appropriate differential diagnosis, followed by a clear and appropriate investigation plan.
- Incorporate sufficient basic science knowledge into clinical care to manage common gastroenterology problems
- Demonstrate knowledge in luminal aspects of general gastroenterology areas, with a particular focus on gastrointestinal disorders in the immunocompromised host, including Graft versus Host disease involvement of the gastrointestinal tract, esophageal motility, nutrition, radiation colitis
- Demonstrate knowledge regarding the indications and contraindications of enteral and total parenteral nutrition in various diseases, including inflammatory bowel disease, pancreatitis, short bowel syndrome, critically ill patients etc.
- Demonstrate knowledge and management of complications of enteral and parenteral nutrition, including refeeding, line sepsis
- Diagnose and provide an appropriate treatment plan for patients with short bowel syndrome

ROTATION SPECIFIC OBJECTIVES

*Division of Gastroenterology, Department of Medicine
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- Demonstrate proficiency in the management of obesity and malnutrition, including familiarity with the management of home TPN patients
- Demonstrate knowledge of neuromuscular physiology in the control of swallowing
- Demonstrate knowledge of the indications and contraindications of esophageal manometry (EMS) and ambulatory pH studies
- Interpret esophageal manometry tracings of common esophageal motor disorders (e.g. achalasia, scleroderma, nutcracker esophagus and diffuse esophageal spasm)
- Apply the results of esophageal manometry and ambulatory pH studies to formulate a comprehensive patient care management plan
- Demonstrate basic competency in the interpretation of radiological studies (e.g. plain radiographs, small bowel contrast studies, CT enteroclysis, CT, MRCP, etc.)
- Understand the principles of conscious sedation – dosing, monitoring, antidote for over sedation
- Recognize relevant endoscopic pathology, with a focus on the immunocompromised host, complex cardiac care patients
- Perform flexible sigmoidoscopy with / without biopsy
- Perform esophagogastroduodenoscopy with / without biopsy
- Perform colonoscopy with / without biopsy
- Perform therapeutic endoscopic procedures as follows:
 - endoscopic hemostasis (injection, thermal, including ARGON therapy, endoclip therapy)
 - polypectomy
 - APC therapy - GAVE
 - Ablation of vascular lesions
- Understand the indications for / and performs basic endoscopic procedures for the management of esophageal motor disorders i.e. pneumatic dilatation, Botox injection
- Manage gastrointestinal bleeding in the patient with multi-system disorders, including complex cardiac care patients with transplant, LVAD

COMMUNICATOR

- Effectively communicate the results of investigations and clear management plan to patient and his / her family members to facilitate their medical care
- Obtain informed consent for procedures (endoscopy, esophageal and ambulatory pH studies, feeding tubes, enteral feeding, PICC lines, parenteral nutrition)
- Demonstrate respectful dialogue with a patient, who clearly understands the sequelae of not proceeding with recommendations, but declines to proceed with recommended investigations, medical, surgical or nutritional therapy

ROTATION SPECIFIC OBJECTIVES

*Division of Gastroenterology, Department of Medicine
University of Toronto*

COLLABORATOR

- Work effectively with allied health professionals, including endoscopy nurses, TPN pharmacist, multidisciplinary (BED, Benign Esophageal Disorders) clinic members (surgeons, motility technicians, speech language pathologists)
- Appropriately consults surgical and other services to effectively coordinate patient care with referring physicians, family physician and other consultants

LEADER

- Utilize health care resources appropriately based on clinical need and urgency
- Manage time appropriately – in-patient consultation service, endoscopy service, outpatient clinic, academic endeavors
- Appropriately triage and assign patients to the emergency endoscopy schedule
- Effectively supervise more junior team members (e.g. Internal medicine trainees rotating through GI service) regarding patient care / treatment implementation and delegate the workload in an appropriate and equitable manner
- Understand the importance of telehealth in educational and clinical applications

HEALTH ADVOCATE

- Implement preventative measures (triage endoscopy cases, collaboration with anesthesia when airway protection is required for endoscopic procedures etc.)
- Understand the issues surrounding patient safety during decision analysis to provide or not to provide endoscopy in the acute setting for patients with complex cardiovascular, oncology disorders

SCHOLAR

- Demonstrate self-directed learning (critical review of the literature for patient care, rounds), with particular attention to gastrointestinal bleeding in the complex host, nutrition, esophageal motility
- Demonstrate knowledge of key basic science principles (biochemistry, physiology, anatomy, pathology, genetics, pharmacology) as they apply to gastroenterology

PROFESSIONAL

- Recognize and deal with ethical issues surrounding consent, futility, with a focus on critically ill patients, the complex care and immunocompromised patients



ROTATION SPECIFIC OBJECTIVES

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- Prepare consultant level correspondence (procedure, consultation, follow-up notes) in a timely manner
- Provide an environment of collegiality and respect amongst Residents on the gastroenterology and referring services, regarding acceptance of consultations, clinical discussions, timely consultations

ROTATION SPECIFIC OBJECTIVES

*Division of Gastroenterology, Department of Medicine
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LUMINAL – TORONTO WESTERN HOSPITAL**OVERVIEW**

The Luminal GI rotation at Toronto Western Hospital has a focus on ambulatory care service, with consultation to key priority programs – Neurosciences, Musculoskeletal and General Internal Medicine Programs, in addition to bariatric surgery and surgical oncology. The GI Resident is responsible for participation in patient care both on the inpatient and outpatient consultative services. The GI Resident is assigned at least 1 outpatient clinic per week, with at least one in Neurogastroenterology and Motility on alternate weeks. The GI Resident is expected to develop his / her CanMEDS role as a leader, on a rotation, which has multiple opportunities for learning, collaboration and service. During the rotation, the GI Resident will be expected to integrate radiology and outpatient endoscopy for the clinical care of patients. The trainee is expected to attend at least one half-day at the TWH GI Motility Investigative Unit to gain exposure in the application of anorectal manometry and/or anorectal Biofeedback. In addition, the presence of a world-class unit in rheumatologic diseases provides trainees with the unique opportunity to explore the linkage (and management of) between gastroenterology illnesses and connective tissue disorders, i.e. ankylosing spondyloarthropathies and inflammatory bowel disease, Sjogrens' syndrome, Scleroderma and celiac disease. In addition, TWH is one of the key sites for minimally invasive surgery, with a focus on bariatric surgery and surgical oncology, The GI Resident may be assigned to clinics in each of bariatric surgery and surgical oncology. The latter will provide the GI Resident the unique opportunity to learn about the principles of surgical oncology (pre-operative staging, tattoo application at endoscopy, relevant surgical anatomy) relevant to the gastroenterologist and the pre-operative work-up of the bariatric patients, types of bariatric surgery and their associated complications.

CANMEDS-BASED OBJECTIVES

At the end of the rotation, the GI Trainee will be able to:

MEDICAL EXPERT

- Incorporate basic science knowledge into clinical care. Has clinical knowledge sufficient to manage common GI problems (e.g. GI Bleeding, intestinal motility problems, pancreaticobiliary disease)
- Demonstrate knowledge in luminal aspects of general gastroenterology areas, with a particular focus on neurogastroenterology and gastrointestinal manifestations of rheumatologic (Ankylosing spondylitis, scleroderma) and common hepatology disorders

ROTATION SPECIFIC OBJECTIVES

*Division of Gastroenterology, Department of Medicine
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- Demonstrate knowledge in the management of gastrointestinal bleeding in complex medical patients, with multiple comorbidities
- After appropriate diagnosis is considered, plan a clear and appropriate investigation plan
- Demonstrate basic competency in the interpretation of radiological studies (e.g. plain radiographs, small bowel contrast studies, CT enteroclysis, CT, MRCP, etc.)
- Demonstrate understanding of the principles of conscious sedation – dosing, monitoring, antidote for over sedation
- Recognize relevant endoscopic pathology
- Perform flexible sigmoidoscopy with / without biopsy
- Perform esophagogastroduodenoscopy with / without biopsy
- Perform colonoscopy with / without biopsy
- Perform therapeutic endoscopic procedures: endoscopic hemostasis (injection, thermal, endoclips therapy, variceal banding), polypectomy
- Demonstrate understanding of the indications for / and perform basic endoscopic procedures for the management of esophageal motor disorders i.e. pneumatic dilatation, botox injection
- Demonstrate knowledge of neuromuscular physiology of the control of defecation
- Demonstrate understanding of the indications of anorectal manometry
- Interpret the results of anorectal manometry studies of common entities (RAIR, pelvic floor dyssynergy) and apply the results to formulate a comprehensive patient care plan
- Understand the principles and indications and operator characteristics of hydrogen and carbon dioxide breath tests for the assessment of small bowel overgrowth
- Apply the results of different breath tests to formulate a comprehensive patient care plan
- Obtain informed consent for procedures (endoscopy, anorectal manometry) and treatment (anorectal biofeedback)
- Demonstrate familiarity with the principles of surgical oncology relevant to the gastroenterologist – i.e. application of tattoos, types of surgery and complications

COMMUNICATOR

- Communicate the results of investigations and clear management plan to patient and his / her family members
- In an ethnically diverse clinical setting, utilizes telephone interpreters, in addition to on site interpreters (professional, family members) in order to optimize clinical decision making and provision of clinical care
- Demonstrates effective skills in communication with patients presenting with challenging gastrointestinal disorders, with attention to trust and patients' values and autonomy

ROTATION SPECIFIC OBJECTIVES

*Division of Gastroenterology, Department of Medicine
University of Toronto*

COLLABORATOR

- Work effectively with allied health professionals, including endoscopy nurses, dieticians, TPN pharmacists, speech language pathologists and motility technician
- Appropriately consult surgical and other services to effectively coordinate patient care with referring physicians, family physician and other consultants
- Demonstrate the ability to form strong professional relationships with other medical and surgical specialties.
- Demonstrate effective communication skills, both verbal and written, with referring doctors, with an emphasis on the ability to synthesize data into a cohesive summary, with clear management plan, in a timely manner

LEADER

- Utilize health care resources appropriately
- Manage time appropriately – on the in-patient consultation service, endoscopy service, outpatient clinic, academic endeavors.
- Demonstrate acquisition of some of the skills required to manage a busy gastroenterology practice, including how to triage referrals, scheduling of follow-up visits, procedures and investigations

HEALTH ADVOCATE

- Implement preventative measures (triage endoscopy cases, collaboration with anesthesia when airway protection is required for endoscopic procedures etc.)
- Given the unique location of TWH in the inner city, is sensitive to and addresses patient-centred limitations to management (i.e. psychosocial, financial, linguistic)
- Demonstrate the knowledge of the determinants of health in various GI diseases
- Demonstrate knowledge that helps patients to navigate the health care system and to access additional appropriate learning resources, e.g. introduce creditable patient information web-based resources.

SCHOLAR

- Demonstrate self-directed learning (critical review of the literature for patient care, rounds)
- Demonstrate knowledge of key basic science principles (biochemistry, pathology, physiology, genetics, anatomy, pharmacology) as they apply to gastroenterology

ROTATION SPECIFIC OBJECTIVES

*Division of Gastroenterology, Department of Medicine
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PROFESSIONAL

- Be respectful and honest at all times toward patients, faculty, peer trainees, other health professionals
- Demonstrate an attitude consistent with professional standards, including the delivery of patient care, particularly in patients with functional GI disease.

ROTATION SPECIFIC OBJECTIVES

*Division of Gastroenterology, Department of Medicine
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HEPATOLOGY – INPATIENT – UNIVERSITY HEALTH NETWORK

The Hepatology Inpatient Consult service at TGH/ MSH and PMH provides a unique experience for GI trainees at UHN. TGH is home to the Toronto Centre for Liver Disease, the largest ambulatory care clinic and research unit devoted to liver disease in Canada. TGH is also home to the largest liver transplant program in Canada. TGH also has dedicated and talented expertise in liver-related imaging, liver histopathology, liver cancer care, interventional radiology and hepatobiliary surgery. TGH is the major referral resource for liver disease for the entire province. The service often sees interesting and complex consultations in liver disease from other hospitals, allowing trainees the opportunity to become medical experts in rare liver conditions. Throughout the rotation, trainees will have exposure to patients with complications of cirrhosis (variceal bleed, ascites, encephalopathy, hepatocellular carcinoma, acute kidney injury/hepatorenal syndrome), severe chronic hepatitis and acute liver failure, liver disease in cancer patients, transplant and immunosuppressed patients. Trainees will become familiar with the role of liver transplantation and become familiar with palliation for those with end stage liver disease. Trainees will also learn to optimize hospital resources and/or minimize repeat hospitalizations through collaboration with staff in the Urgent Liver Clinic, Medical Day Unit, Endoscopy Unit by providing urgent consultation, therapeutic paracentesis / thoracentesis, and/ or endoscopy as appropriate. An advanced nurse practitioner may also be able to see some patients post discharge.

COMPETENCY-BASED OBJECTIVES

At the end of the rotation, the GI Trainee will be able to:

MEDICAL EXPERT

- Formulate an appropriate patient assessment with demonstration of proficiency in performing:
 - a focused liver history
 - a targeted physical examination relevant to liver disease
 - interpretation of liver enzyme and function tests
 - Interpretation of basic viral hepatitis serology
 - interpretation of basic liver imaging studies
 - review of liver histology
 - focused differential diagnosis in liver disease
- Manage inpatient emergencies of the cirrhotic patient:
 - ascites
 - spontaneous bacterial peritonitis
 - hepatorenal syndrome

ROTATION SPECIFIC OBJECTIVES

*Division of Gastroenterology, Department of Medicine
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- hepatic encephalopathy
- variceal bleeding/ banding
- Manage outpatient liver disease
- Workup of elevated liver enzymes NYD
- Medical care of compensated cirrhosis
- Follow-up of patients with chronic HBV infection (on/off therapy)
- Follow-up of patients with chronic HCV infection (on/off therapy)
- Screening for HCC
- Screening for gastroesophageal varices
- Initiate appropriate liver transplant workup
- Effectively interpret imaging studies (US, CT, MRI)
- Demonstrate knowledge of the role of liver biopsy and key histopathological findings
- Incorporate basic science knowledge about immunology, virology, anatomy into clinical care
- Demonstrate an understanding of the role of gastroscopy in liver disease
- Demonstrate an understanding of the principles of conscious sedation in the context of liver disease
- Recognize relevant pathology
- Manage varices that have not bled
- Demonstrate an understanding of emergency endoscopy management of active bleeding
- Obtains informed consent for procedures (gastroscopy, biopsy, paracentesis)

COMMUNICATOR

- Effectively discuss the natural history and management of life threatening conditions
- Effectively communicate with patients and families:
 - Diagnosis and natural history of diagnosis
 - Cirrhosis
 - Acute liver failure
 - Acute hepatitis
 - Hepatocellular carcinoma
 - Management options (immediate)
 - Management of ascites (diet, diuretics, TIPS)
 - Management of encephalopathy (lactulose, rifaximin)
 - Management options (long term)
 - Need for regular follow-up, bloodwork and imaging studies
 - Potential need for long-term or short-term antiviral therapy
 - Indications for liver transplantation
 - Ablative therapies for HCC
 - Role of palliative care

ROTATION SPECIFIC OBJECTIVES

*Division of Gastroenterology, Department of Medicine
University of Toronto*

COLLABORATOR

- Effectively help transition of care between referring physicians and other consultants
- Effectively coordinate care with other members of the healthcare team (Radiology, Pathology, Surgery, Internal Medicine, Liver Transplant, Endoscopy Unit, Medical Day Unit)
- Work well with other team members and housestaff in sharing responsibilities including educational rounds, consult service and clinic, and patient hand-overs

LEADER

- Facilitate effective/ efficient patient triage between emergency room, inpatient ward and ambulatory care settings to optimize patient care
- Demonstrate an understanding of evidence-based, cost-appropriate investigations and care of patients with complex liver disease including hepatocellular carcinoma, end-stage liver disease, liver transplantation
- Demonstrate the ability to supervise junior trainees on the hepatology consultation service, including appropriate delegation of the clinical workload with team members
- Demonstrate the ability to effectively manage time with regard to clinical responsibilities
- Demonstrate an understanding of the utility of tests ordered and how they may or may not affect management; appreciation of costs of tests ordered
- Manage time and coordinate care with other residents and fellows appropriately regarding coverage of the in-patient consultation service, out-patient clinics, endoscopy service
- Identify areas of healthcare where quality might be improved

HEALTH ADVOCATE

- Advocate to prevent hospital re-admission by identifying and addressing and proposing measures to manage ascites, hepatic encephalopathy and prevent infection, variceal bleeds after discharge from hospital
- Help patients plan for end stage liver disease by advocating liver transplantation where appropriate versus plans for palliation, including discussions of code status, power of attorney, etc.
- Become familiar with drug cost as a barrier to care. Be aware of different mechanisms to obtain medications for patients post discharge, such as the Ontario Drug Benefit Program

SCHOLAR

ROTATION SPECIFIC OBJECTIVES

*Division of Gastroenterology, Department of Medicine
University of Toronto*

- Demonstrate the ability to critically appraise the literature relevant to management of patients with decompensated liver disease
- Demonstrate awareness for recent GI/ liver literature and or research findings
- Demonstrate effective presentation skills – rounds, journal club rounds
- Identify areas of healthcare where the quality of care might be improved based on evidence
- Effectively teach other allied health professionals – nursing, pharmacists and peer and junior housestaff

PROFESSIONAL

- Demonstrate respect for patients in a multicultural and multi-ethnic setting, including those who acquired disease via high risk practices (i.e. substance abuse, alcohol), at all times
- Demonstrate respect for other members of the team: shows up on time for teaching rounds, clinics, and notify team early of potential absenteeism
- Complete all documentation/ dictations and electronic medical records in a timely manner
- Demonstrate reliability and a professional work attitude
- Demonstrate an understanding of the ethical relationship with pharmaceutical industry representatives, as defined by the University of Toronto, RCPSC and CMA

ROTATION SPECIFIC OBJECTIVES

*Division of Gastroenterology, Department of Medicine
University of Toronto*

HEPATOLOGY (AMBULATORY)

The Toronto Centre for Liver Disease at the Toronto General Hospital is the largest liver clinic in Canada. The clinic space allows for multiple clinics to run concurrently in the mornings (0800-1200) and afternoons (1230-1600) from Monday to Friday. Clinics have different themes covering general Hepatology to those specializing in hepatitis B, hepatitis C, autoimmune liver disease, fatty liver, ascites, and hepatocellular carcinoma. Furthermore, each clinic will have a spot for seeing urgent referrals – generally patients from Emergency who require an urgent opinion but are not sick enough to warrant admission to hospital.

COMPETENCY-BASED OBJECTIVES

At the end of the rotation, the GI Trainee will be able to:

MEDICAL EXPERT

- Formulate a focused history and performs a targeted physical examination to target investigations to help establish a diagnosis
- Formulate an appropriate patient assessment with demonstration of proficiency in performing:
 - a focused liver history
 - a targeted physical examination relevant to liver disease
 - interpretation of liver enzyme and function tests
 - interpretation of liver imaging studies
 - review of liver histology
- Manage outpatients with:
 - Acute or subacute liver disease
 - specific liver diseases (viral hepatitis, autoimmune liver disease, fatty liver)
 - Chronic liver disease
 - Cirrhosis and complications of cirrhosis (varices, ascites/SBP, hepatorenal syndrome, encephalopathy, hepatoma) and discusses the pros and cons of liver transplantation for individual cases
- Demonstrate familiarity of liver biopsy and non-invasive markers of liver fibrosis
- Incorporate basic science knowledge about immunology, virology, anatomy into clinical care

ROTATION SPECIFIC OBJECTIVES

*Division of Gastroenterology, Department of Medicine
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- Obtains informed consent for procedures (biopsy, paracentesis, transfusions)

COMMUNICATOR

- Effectively discuss the natural history and management of life threatening conditions
- Effectively communicate with families and patients on the following:
 - Diagnosis and natural history of diagnosis
 - Role of treatment to modify natural history
 - Diagnosis and natural history of end stage liver disease
 - Liver failure
 - Hepatocellular carcinoma
 - Management options (immediate)
 - Management of ascites (diet, diuretics, TIPS)
 - Management of encephalopathy
 - Management options (long term)
 - Liver transplantation
 - Palliation
 - Prepare correspondence (procedure, consultation, follow-up notes) in a timely manner

COLLABORATOR

- Effectively work with team members outside of the clinic environment: family physicians, referring specialists, allied health care professionals
- Effectively work with team members inside the clinic environment: office clerks, nurses, other physicians
- Effectively coordinate patient care with referring physicians, family physicians and other consultants (e.g. internists, surgeons, other gastroenterologists, subspecialists, transplant physicians / surgeons, psychiatrists) as well as the inpatient Hepatology consult service

LEADER

- Facilitate patient movement between the ER setting, hospital inpatient setting and ambulatory care setting to optimize patient care
- Demonstrate an understanding of management processes for evidence-based, cost-appropriate investigations and care of patients with decompensated liver disease, hepatocellular carcinoma, end-stage liver disease, liver transplantation
- Demonstrate an understanding of the utility of tests ordered and how they may or may not affect management; appreciation of costs of tests ordered

ROTATION SPECIFIC OBJECTIVES

*Division of Gastroenterology, Department of Medicine
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- Demonstrate an understanding of the role of health care and investigations in the inpatient versus outpatient setting
- Identify areas of healthcare where quality of care might be improved

HEALTH ADVOCATE

- Demonstrate familiarity with drug cost as a barrier to care. Be aware of different mechanisms to obtain medications for patients, such as the Ontario Drugs Benefit Program
- Advocate to prevent hospital re-admission by identifying and addressing and proposing measures to manage ascites, encephalopathy and prevent infection, variceal bleeds after discharge from hospital
- Help patients plan for end stage liver disease by advocating liver transplantation where appropriate versus plans for palliation, including discussions of code status, power of attorney, etc.
- Effectively counsel patients on risk factors for acquiring viral infections and risks for liver disease progression

SCHOLAR

- Demonstrate the ability to critically appraise the literature relevant to management of patients with decompensated liver disease
- Demonstrate effective presentation skills – rounds, journal club rounds.
- Demonstrate the ability to use evidence-based medicine in clinical context by knowing what kinds of studies exist, what is the magnitude of the treatment effect, and the impact of these studies in their application to encountered clinical scenarios
- Recognize how patient care contributes to potential research through the hepatology clinical database

PROFESSIONAL

- Demonstrate respect for the patients, including those who acquired disease via high risk practices (i.e. substance abuse, alcohol), at all times
- Demonstrate respect and honesty at all times toward faculty, peer and junior trainees, patients and other allied health professionals
- Attend teaching and clinical assignments fully: show up on time and notifies team early of potential absenteeism
- Understand the ethical relationship with pharmaceutical industry representatives, as defined by the University of Toronto, RCPSC and CMA

ROTATION SPECIFIC OBJECTIVES

*Division of Gastroenterology, Department of Medicine
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LIVER TRANSPLANTATION UNIVERSITY HEALTH NETWORK

OVERVIEW

Orthotopic liver transplantation (OLT) is the treatment of choice for end-stages of acute and chronic liver diseases of various etiologies. General and community gastroenterologists play a key role in the selection of potential candidates and their timely referral for evaluation of liver transplantation. Given the increasing demand for and the rising number of long-term survivors after liver transplantation, the (community-based) Gastroenterologist will be increasingly confronted with management issues in liver transplant candidates and liver transplant recipients. This rotation aims at providing you with the basic knowledge/skills to master these challenges. This rotation is usually assigned to PGY-5 Residents following completion of at least 2 months of Hepatology.

GENERAL GOALS

- To expose the GI Resident to all aspects of liver transplantation
- To enable the GI Resident to appropriately contribute as treating gastroenterologist hepatologist to the selection of patients for liver transplantation, and to their pre- and long-term postoperative care

CANMEDS-BASED OBJECTIVES

At the end of the rotation, the GI Resident will be able to:

MEDICAL EXPERT

- Demonstrate sufficient basic (immunology, pharmacology, cellular biology, molecular biology/genetics) knowledge relevant to transplantation
- Describe the indications and contraindications for liver transplantation
- Demonstrate knowledge of the outcomes of patients post liver transplantation, including rejection, infection, metabolic abnormalities, renal dysfunction and malignancy
- Demonstrate basic science knowledge about the mechanisms of rejection
- Demonstrate basic knowledge about the principles of Immunosuppression and the mechanism(s) of action/side effects of the major immunosuppressive agents, including calcineurin inhibitors, corticosteroids, azathioprine, Mycophenolate, Sirolimus etc.
- Demonstrate sufficient clinical knowledge relevant to transplantation to manage common problems occurring in pre- and post-liver transplant patients (e.g. SBP, HRS, acute cellular rejection, recurrent HCV)

ROTATION SPECIFIC OBJECTIVES

*Division of Gastroenterology, Department of Medicine
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- Demonstrate sufficient clinical knowledge to manage pre- and post-liver transplant patients under emergency conditions (e.g. fulminant hepatic failure, septic complications)
- Demonstrate clinical knowledge sufficient to aid with decision making regarding transplant candidacy and acceptance of candidates on the liver transplant waiting list
- Provide an appropriate diagnosis (after consideration of differential diagnosis) and investigation and treatment plan
- Demonstrate an understanding of the principles of common imaging studies in pre- and post-liver transplant patients (ultrasound, Doppler ultrasound, CT, MRI, MRCP)
- Perform upper endoscopic procedures in pre- and post-transplant patients appropriate for a gastroenterologist (i.e. variceal banding)
- Perform non-endoscopic procedures appropriate for a gastroenterologist (liver biopsy)
- Perform non-endoscopic procedures appropriate for an internist (paracentesis)
- Obtain informed consent for procedures (endoscopy, liver biopsy) and treatment (blood product transfusion)

COMMUNICATOR

- Communicate the results of investigations and a clear management plan to patients and their families
- Communicate with and counsel patients and their families effectively regarding the patient's status and issues surrounding transplantation

COLLABORATOR

- Participate effectively and appropriately in an interprofessional healthcare team with a focus on Hepatobiliary surgeons, charge nurse, pharmacists in the context of the transplant patient.
- Work effectively with other health care team members (nursing, allied health members and Hepatobiliary surgeons) to best manage the patient's care.

LEADER

- Manage time appropriately i.e. in-patient consultation service, endoscopy service, outpatient clinic, academic endeavors.

ROTATION SPECIFIC OBJECTIVES

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HEALTH ADVOCATE

- Demonstrates and understanding of determinants of health in pre- and post-transplant patients (risk factors for underlying liver disease, such as HBV, HCV, but also risk factors for long-term post-transplant outcomes, including rejection, infection, malignancy, cardiovascular dysfunction, renal dysfunction and recurrent disease)
- Understand and address patient-centered limitations to management appropriately (e.g. psychosocial, financial, linguistic, cultural factors etc.)
Demonstrate an understanding of the principles of the ethical issues related to transplantation, including an understanding of advocacy for patients to be moved up the list

SCHOLAR

- Demonstrate the ability to evaluate the medical literature and apply it critically to transplant patients.
- Attend and contributes to rounds (transplant rounds, Hepatobiliary rounds)
- Demonstrate effective teaching of other allied health professionals – nursing staff, dieticians, pharmacists.

PROFESSIONAL

- Show honesty, integrity, commitment, compassion and respect when working with patients, families, colleagues and allied health professionals
- Recognize and discuss ethical issues surrounding consent, urgency / utility, organ allocation and other health care resource utilization / costs of liver transplantation
- Demonstrate an understanding of privacy issues surrounding live organ donation

ROTATION SPECIFIC OBJECTIVES

*Division of Gastroenterology, Department of Medicine
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AMBULATORY ROTATION**GOAL**

During this rotation, the trainee will have the opportunity to see new and follow-up patients, develop an appropriate working diagnosis and plan for further investigation and management, with the possible opportunity for follow-up and reassessment during the same rotation. More importantly, the trainee learns an approach to the care of ambulatory patients from experienced clinicians. Evaluation of the trainee will be provided by each of the supervisors, and a composite evaluation will be completed by one of the assigned supervisors or program director.

CANMEDS-BASED OBJECTIVES

The resident will learn to function as a consultant in the ambulatory setting integrating all of the CanMEDS roles, and at the end of the rotation will be able to.

MEDICAL EXPERT

- Identify deficiencies, and continue to expand medical expertise regarding clinical problems encountered in an outpatient gastroenterology clinic
- Gather data, obtain a targeted history and physical examination to arrive at a differential diagnosis for common and uncommon gastrointestinal and liver disorders
- Demonstrate effective patient management of common and complex gastroenterology / Hepatology problems in the outpatient setting
- Interpret investigations: blood tests, radiology, endoscopy, pathology, motility studies, etc. in context with data gathered on history and physical examination
- Demonstrate a thorough knowledge of the indications, limitations and major complications of liver biopsy, endoscopy, ERCP, esophageal motility studies and radiology of the GI tract
- Make informed diagnostic and therapeutic decisions based on patient information, current scientific evidence, clinical judgment and patient's preference / goals of care
- Adopt a holistic approach, being aware that a specific illness and treatment in the GI ambulatory care setting may impact illness and treatment in other area

COMMUNICATOR

- Deliver to patient and family members: clear and effective communication that reports the diagnosis and inherent implications: prognosis, options for therapy, including a discussion of the potential sequelae of not adopting the suggested recommendations

ROTATION SPECIFIC OBJECTIVES

*Division of Gastroenterology, Department of Medicine
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- Effectively liaison with family members or other health care givers in the setting where additional information is required to optimize patient care or decision-making.
- Identify and acknowledge social factors that may impact on an individual's willingness to accept recommended investigations and treatments
- Develop rapport, trust and an ethical therapeutic relationship with patients and their families.
- Identifies and acknowledges social, religious and cultural factors that may impact on the doctor-patient relationship and an individual's willingness to accept recommended investigations

COLLABORATOR

- Deliver to healthcare team (referring physician, family physician, etc.) by means of notes and letters: clear and concise consultant-level communication that answers questions that were asked in the reason for referral, and also to answer unasked questions that are relevant to the clinical case.
- Recognize and integrate into case management, the roles of other health care providers including surgeons, physician specialists within your own specialty (i.e. therapeutic endoscopist), nursing staff, dieticians, psychiatrists and social workers
- Effectively work with an office assistant to schedule investigations, follow-up visits, referrals to other physicians

LEADER

- Utilize investigative and therapeutic interventions in a cost-effective manner, while not compromising the quality of patient care, yet recognizing the finite resources of our healthcare system
- Develop the ability to prioritize patients and problems, as well as endoscopic procedures recognizing the time constraints implicit in the ambulatory clinic setting
- Demonstrates effective time management skills given allocation to multiple clinics
- Prioritize patient scheduling, i.e. timing of scheduling for investigations, endoscopic procedures, follow-up visits, referrals to other health care providers

HEALTH ADVOCATE

- Identify opportunities for advocacy, health promotion and disease prevention in individual patients and develop strategies to intervene in a time effective manner appropriate to the outpatient setting, i.e. colorectal neoplasia and Barrett's screening / surveillance, colorectal neoplasia screening for family members, referral for genetic counseling where appropriate, vaccination etc.

ROTATION SPECIFIC OBJECTIVES

*Division of Gastroenterology, Department of Medicine
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- Help the patient access and navigate the health care system, as deemed appropriate, i.e. how to access Ontario Drugs Benefits (ODB) formulary, Trillium, Industry-based Compassionate Drug Programs
- Appreciate patient autonomy and the religious, ethnic and psychosocial factors which influence the doctor-patient relationship and to take such factors into account in the understanding of patient decisions

SCHOLAR

- Incorporate evidence-based medicine and critical appraisal skills to support diagnostic and therapeutic practice and disseminate relevant information to patients, families and referring physicians as appropriate
- Demonstrate self-assessment and self-directed learning skills and continuing medical education,
- Teach peers and junior colleagues under his / her supervision.

PROFESSIONAL

- Demonstrate honesty, integrity, commitment, compassion, respect and altruism
- Demonstrate a commitment to arrive at clinic in a timely fashion, and to ensure that the clinic supervisor is advised in advance of any foreseeable absenteeism during the block
- Understand and implement patient privacy

ROTATION SPECIFIC OBJECTIVES

*Division of Gastroenterology, Department of Medicine
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LONGITUDINAL CLINIC

The longitudinal clinic is a 12-month block, which runs concurrently with core and other rotations during the academic year (length may vary in view of interruption of the rotation while on one month specialty or community rotations) of the PGY-5 year. The Resident will attend a half-day weekly clinic with a faculty member of his / her choice. The rotation will allow the trainee an in depth exposure to a continuity clinic, with a greater opportunity for follow-up of patients seen in initial consultation or follow-up. The objectives are essentially the same as the ambulatory clinic rotation.

The resident will learn to function as a consultant in the ambulatory setting integrating all of the CanMEDS roles. This block will allow the PGY5 trainee to gain experience in the management of an outpatient clinical practice, and to gain competencies in the all CanMEDS roles, with Medical Expert focus in general gastroenterology or hepatology, or a particular area of subspecialty focus. A catalogue has been formulated based on voluntary participation by faculty members in the academic and community (CVH, NYGH, and SJH) sites. At the end of his / her PGY-4 year, the Resident selects a supervisor / clinic from this catalogue. Trainees who are on Research and core luminal or Hepatology rotations are expected to attend the longitudinal clinic, as a continuity experience. While on one-month specialty rotations, trainees are exempt from the longitudinal clinic. In view of potential overlap with one-month rotations, the longitudinal experience will span over the duration of the academic year. The Resident is expected to evaluate at least 4 to 6 patients per half-day, when averaged over the block, and to follow at least 6 to 8 new patients over the duration of the block. The trainee will be exposed to the management of post surgical problems, and the evaluation and referral to surgery for appropriate indications.

CANMEDS-BASED OBJECTIVES

At the end of this rotation, the GI Resident will be able to:

MEDICAL EXPERT

- Identify deficiencies, and continue to expand medical expertise regarding clinical problems encountered in an outpatient gastroenterology clinic
- Demonstrate medical expertise in the recognition and management of common and uncommon manifestations of common gastroenterology disorders encountered in an outpatient GI luminal/hepatology clinic
- Demonstrate an investigatory and analytic approach to clinical problem solving and knowledge acquisition, with the ability to document accurate information gathered from and given to each patient
- Perform and interpret a complete physical examination as it pertains to gastroenterology conditions

ROTATION SPECIFIC OBJECTIVES

*Division of Gastroenterology, Department of Medicine
University of Toronto*

- Gather data accurately and efficiently to obtain a targeted history and physical examination to arrive at a differential diagnosis for common and uncommon GI luminal/hepatology diseases
- Demonstrate knowledge of the diagnosis and treatment of common problems encountered in an outpatient GI luminal/hepatology clinic
- Adopt a holistic approach by being aware that a specific illness and treatment in the GI ambulatory care setting may impact illness and treatment in other areas
- Interpret investigations: laboratory data, radiology, endoscopy, pathology, motility studies, etc. in context with data gathered on history and physical examination
- Demonstrate a thorough knowledge of the indications, limitations and major complications of gastroenterology tract radiology, endoscopy, liver biopsy, ERCP, esophageal and motility studies
- Make informed diagnostic and therapeutic decisions based on patient information, current scientific evidence, clinical judgment and patient's preference / goals of care
- Carry out patient management plans, including appropriate follow-up of diagnostic tests ordered
- Describe how to deal with urgent outpatient issues

COMMUNICATOR

- Deliver to patient and family members: clear and effective communication that reports the diagnosis and inherent implications: prognosis, options for therapy, including a discussion of the potential sequelae of not adopting the suggested recommendations
- Effectively liaison with family members or other health care givers in the setting where additional information is required to optimize patient care or decision making
- Create and maintain an ethical, therapeutic relationship with patients and families
- Identify and acknowledge social factors that may impact on an individual's willingness to accept recommended investigations and treatments

COLLABORATOR

- Recognize and integrate into case management, the roles of other health care providers including surgeons, physician specialists within your own specialty (i.e. therapeutic endoscopist), nursing staff, dieticians, psychiatrists and social workers.
- Communicate effectively and respectfully with all members of the health care team
- Deliver to healthcare team (referring physician, family physician, etc.) by means of notes and letters: clear and concise consultant-level communication that answers questions that were asked in the reason for referral, and also to answer unasked questions that are relevant to the clinical case, in a timely manner
- Effectively discuss coordination of care or shared care of a patient with his/her other care provider

ROTATION SPECIFIC OBJECTIVES

*Division of Gastroenterology, Department of Medicine
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LEADER

- Use investigative and therapeutic interventions in a cost-effective manner, recognizing the finite resources of our healthcare system
- Prioritize patients and problems, as well as endoscopic procedures recognizing the time constraints implicit in the ambulatory clinic setting
- Triage the management plan items, i.e. timing of scheduling for investigations, endoscopic procedures, follow-up visits, referrals to other health care providers
- Describe what to look for a potential office space for an outpatient gastroenterology practice.
- Design an efficient office schedule
- Describe strategies to balance time between professional activities, including inpatient and outpatient responsibilities
- Describe strategies to effectively balance time between professional and personal life
- Compare benefits and drawbacks of different patient charting options (paper, electronic systems)
- Discuss strategies to locate and utilize community resources to help optimize a patient's care
- Discuss principles of dealing with patients who do not show up for scheduled appointments (documentation, charging patients)
- Demonstrate how to effectively follow up laboratory and test results in a time-appropriate manner, based on differing urgencies
- Demonstrate knowledge regarding insurance agents for non-Canadian residents
- Demonstrate familiarity with Ministry of Health Billing Systems via shadow billing

HEALTH ADVOCATE

- Discuss strategies for advocacy (for university students with chronic illness, Accessibility Services Office), health promotion and disease prevention (i.e. colon cancer screening, disease screening for family members, vaccination (HBV, in the setting of immunosuppressive, immunobiologic therapy)
- Help the patient access and navigate the health care system, as deemed appropriate – completion of the steps required to request coverage for specific drugs not routinely covered by provincial health care plans - Ontario Drugs Benefits (ODB) formulary
- Appreciate patient autonomy and the religious, ethnic and psychosocial factors which influence the doctor-patient relationship and to take such factors into account in the understanding of patient decisions

SCHOLAR

- Locate, appraise and assimilate evidence from scientific studies related to their patients' problems

ROTATION SPECIFIC OBJECTIVES

*Division of Gastroenterology, Department of Medicine
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- Integrate medical knowledge into clinical practice thereby providing accurate information to patients.
- Recognize the requirement for self-assessment, and the critical role of self-directed learning and continuing medical education.

PROFESSIONAL

- Demonstrate a commitment to arrive at clinic in a timely fashion, and to ensure that the clinic supervisor is advised in advance of any foreseeable absenteeism during the block
- Demonstrate an ability to provide patient-centered care with adequate discussion
- Discuss strategies to promote ethical practice when interacting with representatives from the pharmaceutical industry
- Demonstrate the ability to initiate ethical discussions where appropriate
- Understand and implement patient privacy, including the use of email with patients, consent, and storage of emails.
- Describe how to appropriately end a physician-patient relationship

ROTATION SPECIFIC OBJECTIVES

*Division of Gastroenterology, Department of Medicine
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COMMUNITY ROTATION

A significant proportion of subspecialty trainees eventually end up in the community. In view of above, it is paramount that our program offers trainees opportunities to learn from our community colleagues and gain exposure in busy outpatient and in-patient community practices, as part of our community bridges program. These opportunities meet many of the CanMEDS roles, especially manager, collaborator and communicator. The core community sites are the following: Scarborough Health Network, Trillium Health Partners, North York General Hospital and St. Joseph's Health Centre.

CANMEDS-BASED OBJECTIVES

At the end of the rotation, the Resident will be able to:

MEDICAL EXPERT

- Demonstrate clinical knowledge sufficient to manage common gastrointestinal problems
- Demonstrate clinical knowledge sufficient to diagnose and manage rare gastrointestinal problems
- Demonstrate clinical reasoning skills to arrive at an appropriate diagnosis, after consideration of a differential diagnosis
- Provide a clear and concise management plan
- Recognize the need for transfer to tertiary care, and facilitate arrangement of referral and / or transfer
- Function effectively as consultant in an inpatient and office setting
- Demonstrate knowledge of endoscopic procedures, indications, and complications
- Demonstrate proficiency in elective/in-patient endoscopic procedures and the use of a variety of endoscopic accessories, including:
 - Perform esophagogastroduodenoscopy with / without biopsy
 - Perform flexible sigmoidoscopy with / without biopsy
 - Perform colonoscopy with / without biopsy
 - Perform passive (Mallory bougienage), pneumatic dilatation and wire-guided dilatation
 - Demonstrate proficiency in the performance of the following therapeutic maneuvers
 - endoscopic hemostasis (injection, variceal banding, thermal, endoclips)
 - polypectomy

ROTATION SPECIFIC OBJECTIVES

*Division of Gastroenterology, Department of Medicine
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- Demonstrate knowledge of complicated luminal and pancreaticobiliary endoscopic techniques
- Demonstrate an understanding of the principles, indications and limitations of EUS
- Demonstrate knowledge of the endoscopic management of malignant GI diseases – ERCP, luminal stenting for palliation of malignancy and other advanced therapeutic procedures
- Demonstrate the ability to obtain informed consent for procedures (endoscopy, liver biopsy, paracentesis) and treatment (transfusion of blood products)
- Demonstrate proficiency in recognition of common endoscopic pathology
- Demonstrate an understanding of the principles of conscious sedation – dosing, patient monitoring, when to solicit the assistance of anesthesia, and the appropriate use of antidote for oversedation

COMMUNICATOR

- Provide the results of investigations and a clear management plan to the patient and his / her family members
- Proficient in eliciting and synthesizing relevant patient information and to accurately convey information to patients and families

COLLABORATOR

- Demonstrate that he/she is a team player
- Consult effectively with other physicians
- Work effectively with endoscopy nurses and other health care professionals (TPN pharmacists, dieticians, enterostomal nurses etc.) to optimize patient care
- Effectively communicate assessment and management plans to referring physicians and other health care providers involved in the circle of care

LEADER

- Demonstrate good time management skills
- Demonstrate the ability to prioritize care issues
- Allocate the appropriate and cost effective use of resources available in a community hospital.
- Demonstrate the knowledge and skills required to organize and function effectively in a private medical office
- Demonstrate experience in triage and follow-up patients in an outpatient practice, so as to improve long-term management of gastroenterology patients in this setting
- Discuss the principles of recruiting, hiring and managing support staff personnel [i.e. nurses in IBD / Hepatology settings), secretaries

ROTATION SPECIFIC OBJECTIVES

*Division of Gastroenterology, Department of Medicine
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HEALTH ADVOCATE

- Demonstrate knowledge of the determinants of health
- Demonstrate sensitivity to and addresses patient-centered limitations to management (e.g. psychosocial, financial, linguistic, etc.)

SCHOLAR

- Critically evaluate information and relevant literature, and apply this appropriately to practice decisions Describe strategies, opportunities and methods to promote lifelong learning in a community setting
- Describe how to accommodate medical students and residents in a community practice
- Describe how to locate mentorship opportunities in a community setting
- Gain exposure to the potential research opportunities in a community setting
- Demonstrates self-directed learning and assessment of one's learning needs and strengths

PROFESSIONAL

- Recognize limitations (e.g. knowledge, stressful situations) and seeks help or advice when needed
- Attend clinics, rounds and demonstrates timeliness
- Treat patients ethically and with respect.
- Treat all health professionals ethically and with respect.
- Prepare correspondence (procedure notes, consultation, discharge notes) in a timely manner
- Understand the ethical relationship with drug / endoscopic equipment representatives in the community setting, in accordance with the University of Toronto, RCPSC and CMA policies
- Advise the supervisor of an intended or unintended absenteeism
- Demonstrate integrity and honesty at all times

ROTATION SPECIFIC OBJECTIVES

*Division of Gastroenterology, Department of Medicine
University of Toronto*

RESEARCH

The RCPCS specifies that a period of research be undertaken during the gastroenterology residency to a maximum of six months. Dr. Nazia Selzner (Nazia.Selzner@uhn.ca) and Dr. Jordan Feld (Jordan.Feld@uhn.ca) are the directors of research. Our training program provides three months of research, which may not necessarily occur consecutively. At least 6 months prior to the first research month, the trainee is expected to identify a research supervisor, outline the main aspects of the research project, define the aims of the project, review the background literature and outline the methodology. Data collection, analysis, and the preparation of abstracts and papers can be completed within the subsequent research months, as well as throughout the academic year. During the 8-week ambulatory block, one half day is also dedicated to the above. Any other clinical activity during Research blocks must be discussed with the supervisor and Dr. Jordan Feld or Dr. Nazia Selzner. In order for a trainee to forfeit one month of the 3-month Research block for clinical or other academic activities, discussion and approval must be given by the project supervisor, Dr. Selzner, Dr. Feld and the program director. The request must be made during the PGY4 year.

CANMEDS-BASED OBJECTIVES

At the end of this rotation, the GI Resident will be able to:

MEDICAL EXPERT

- Demonstrates knowledge of the relevant medical information inherent to the research question

COMMUNICATOR

- Effectively present his / her research data (verbal or written)

COLLABORATOR

- Work effectively with a supervisor or supervisors, and other colleagues on a research project
- Interact well with supervisor and other members of his / her research team (Research Ethics Board, allied health personnel, clerical workers, statisticians etc.)

LEADER

- Demonstrate attention to detail and organization

ROTATION SPECIFIC OBJECTIVES

*Division of Gastroenterology, Department of Medicine
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HEALTH ADVOCATE

- Maintain patient safety within the context of clinical research studies

SCHOLAR

- Pose a research question (clinical, basic or population health);
- Develop a proposal to solve the research question:
 - conduct an appropriate literature search based on the research question
 - identify, consult and collaborate with appropriate content experts to conduct the research
 - propose a methodological approach to solve the question
- Complete the research outlined in the proposal
- Disseminate the results of the research at the University of Toronto Research Day
- Demonstrate the ability to critically appraise the literature relevant to his / her research

PROFESSIONAL

- Demonstrate integrity and honesty regarding research methodology, proportion of work completed by individual and results
- Meet research target timelines, including completion and submission of a research summary / manuscript on Research Day
- Ensure that patient data is maintained confidential at all times

ROTATION SPECIFIC OBJECTIVES

*Division of Gastroenterology, Department of Medicine
University of Toronto*



**DEPARTMENT OF MEDICINE
CO-LEARNING CURRICULUM IN QUALITY IMPROVEMENT
(C-QUIPS)**

CURRICULUM OVERVIEW

This co-learning curriculum, via the DoM, is a longitudinal quality improvement (QI) and patient safety (PS) curriculum for all Gastroenterology Residents at the University of Toronto. The curriculum provides trainees the skills required to participate and lead QuiPS initiatives at their institution and in their daily practice. In designing a PS or QI project, Residents will gain the leadership and teamwork skills required for successful PS and QI collaborations.

C-QUIPS GOALS

1. **Residents and faculty are co-learners** – PGY4 and PGY5 level
Residents and faculty members (both the program director and designated faculty leads) will attend the formal teaching sessions together, and participate in group experiential learning activities to develop knowledge and skills in QI.
2. **Residents work with a faculty lead in teams to carry out their QI project** – Residents will work together on a single QI project. The team-based design allows individual team members to take a more active role during lighter clinical rotations, while handing the project off to other team members while on busier rotations. Wherever appropriate, teams should consider whether other health professionals should be included.
3. **QI projects should align with divisional quality priorities** – wherever possible, the focus of the improvement activities should align with ongoing quality initiatives. Program directors and faculty leads should engage Divisional Directors and discuss potential QI initiatives, and present project teams with several options for them to consider.

ROTATION SPECIFIC OBJECTIVES

*Division of Gastroenterology, Department of Medicine
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**CANMEDS-BASED OBJECTIVES**

By the end of the curriculum, the Resident will be able to:

MEDICAL EXPERT

- Identify important quality gaps in their clinical environment as opportunities for improvement and select ideal quality problems as targets for improvement activities

COMMUNICATOR

- Clearly and effectively present the QI project in oral and/or written format (including mid-year and final project presentations)

COLLABORATOR

- Collaborate effectively with other members of QI team and faculty
- Engage relevant stakeholders effectively and appropriately

LEADER

- Employ a systems-based approach to address QI and patient safety issues
- Apply QI tools (e.g. Fishbone, process mapping, PDSA cycles) appropriately to identify gaps in patient care and develop possible solutions
- Demonstrate knowledge of the six aims of quality, demonstrate an understanding of basic QI principles, and be able to explain the differences between evaluative research and QI
- Distinguish between measurement for quality improvement as compared to evaluative research

HEALTH ADVOCATE

- Advocate for best interests of patients affected by the QI project

SCHOLAR

- Critically appraise relevant medical and QI literature

ROTATION SPECIFIC OBJECTIVES

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- Use appropriate methods for data collection and analysis (i.e. gap analysis, run or control charts)
- Describe language to use and avoid when preparing a Research Ethics Board (REB) submission

PROFESSIONAL

- Contribute meaningfully to QI project and fulfill duties responsibly
- Recognize ethical issues in quality improvement and address them appropriately
- Demonstrate commitment to improving health care quality and patient safety

ROTATION SPECIFIC OBJECTIVES

*Division of Gastroenterology, Department of Medicine
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ELECTIVE - PATHOLOGY

This elective is offered at UHN and SMH. With the collaboration of our colleagues in pathology at UHN and SMH, we have developed a structured elective in liver and luminal pathology. The goals and objectives have been developed specifically for this rotation; however, trainees may pursue an elective in pathology at other sites. On this rotation, the trainee will have the opportunity to review pathology from inpatients and outpatients directly with the pathologist and / or pathology Resident / Fellow. During this elective, trainees will also learn about the requirement for a strong collaboration between gastroenterologists and pathologist to optimize patient care.

CANMEDS-BASED OBJECTIVES

At the end of the rotation, the Resident will be able to:

MEDICAL EXPERT

- Demonstrate a basic understanding of the normal histology of the liver and luminal gastrointestinal tract
- Demonstrate a basic level of competence at examination of gastrointestinal biopsy and resection materials (liver and luminal GI tract).
- Achieve basic competence in oncologic gastrointestinal pathology as well as the range of benign/inflammatory changes in the GI tract.
- Demonstrate an understanding of the role of Pathologists as consultants, as well as developing the interaction between the Pathology and Gastroenterology teams, thereby integrating all of the CanMEDS Roles to provide optimal, ethical and patient-centered medical care

COMMUNICATOR

- Demonstrate an understanding of the content information required to formulate written reports based upon macroscopic and microscopic observations for gastrointestinal/liver biopsy and resection specimens with suitable clinicopathological correlations
- Act as consultant to colleagues on the interpretation and relevance of pathological findings, with particular regard to their significance in the management of the patient
- Demonstrate effect rapport, trust and professional relationships with other physicians and allied health care workers and patients and families (as needed)
- Accurately elicit and synthesize relevant information and perspectives of colleagues and other professionals

ROTATION SPECIFIC OBJECTIVES

*Division of Gastroenterology, Department of Medicine
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- Accurately convey relevant clinical or pathophysiological information and explanations to colleagues and other professionals

COLLABORATOR

- Participate effectively and appropriately in an inter-professional healthcare team
- Effectively work with other health professionals to prevent, negotiate, and resolve inter-professional conflict
- Demonstrate an understanding of the role of Pathologists as consultants, as well as the need for the interprofessional interaction between the pathologist and the gastroenterologist, thereby integrating all of the CanMEDS Roles to provide optimal, ethical and patient-centered medical care
- Demonstrate an understanding of the content information required to formulate written reports based upon macroscopic and microscopic observations for gastrointestinal/liver biopsy and resection specimens with suitable clinicopathological correlations
- Accurately convey relevant clinical or pathophysiological information and explanations to colleagues and other professionals
- Act as consultant to colleagues on the interpretation and relevance of pathological findings, with particular regard to their significance in the management of the patient
- Demonstrate the ability to effectively and appropriately seek consultation from other health professionals, recognizing the limits of his/her expertise

LEADER

- Utilize time and resources effectively to balance the learner needs and rotation-specific expectations.
- Demonstrate an understanding for appropriate quality assurance / quality control knowledge to ensure patient safety and accuracy of medical reports

HEALTH ADVOCATE

- Demonstrate an understanding of the important determinants of health affecting patients pertaining to gastrointestinal processes

SCHOLAR

- Apply the principles of critical appraisal to sources of medical information
- Participate in rounds, conferences and teaching sessions
- Maintain and enhance professional activities through ongoing learning
- Critically evaluate information and its sources, and apply this appropriately to practice decisions

ROTATION SPECIFIC OBJECTIVES

*Division of Gastroenterology, Department of Medicine
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PROFESSIONAL

- Deliver the highest quality of care with integrity, honesty and compassion
- Practice medicine in an ethical manner and with a sensitivity to diverse patient and co-worker populations
- Exhibit appropriate professional behavior and perform duties in a dependable and responsible manner
- Demonstrate commitment to excellence and ongoing professional development
- Demonstrate effective rapport, trust and professional relationships with other physicians and allied health care workers

ROTATION SPECIFIC OBJECTIVES

*Division of Gastroenterology, Department of Medicine
University of Toronto*

ELECTIVE – MEDICAL IMAGING

This elective is offered at MSH. Gastroenterology specialists frequently utilize medical imaging tests for the investigation of patient's symptoms. The number and type of imaging tests utilized are very specific to this patient population. With introduction of newer imaging techniques such as CT Enterography, MRI and contrast ultrasound, proper understanding of the utility of these and other conventional techniques is important, especially with the evolving constraints of our health care resources. With the advent of PACS, the Gastroenterology Residents interact infrequently with the Gastroenterology Medical Imaging specialists to learn algorithmic approaches to radiologic investigations, learn interpretation of imaging studies, and deciphering medical imaging reports. Over the past several years, formal didactic (sometimes interactive) sessions were introduced to meet some of these needs. A formal elective in Medical Imaging was developed to address the above issues and also to help these Gastroenterology Residents formalize a referral pattern when in clinical practice for difficult clinical cases

TARGET GROUP:

The Gastroenterology Medicine Program is a two-year residency program, PGY-4 and PGY-5 years, after completion of three years of core internal medicine training. The elective would be predominantly for PGY-5 trainees or PGY-4 trainees in the latter half of their first year of subspecialty training. The elective period is a 4-week block, anytime from September to June of the academic year.

CANMEDS-BASED OBJECTIVES

At the end of the rotation, the Resident will be able to:

MEDICAL EXPERT

- Demonstrate knowledge of the types of medical imaging studies, including the indications and limitations in the investigation of patients with gastroenterology symptoms.
- Demonstrate basic knowledge about how the various imaging studies are performed, so that the trainees are able to better communicate this information to their patients in advance of the scheduled procedure
- Demonstrate knowledge of the interpretation of imaging studies and understanding the nuances of medical imaging reports
- Demonstrate an approach to reading abdominal X-rays and CT scan of the abdomen, with emphasis on:
 - small bowel obstruction
 - large bowel obstruction
 - bowel edema / inflammation

ROTATION SPECIFIC OBJECTIVES

*Division of Gastroenterology, Department of Medicine
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- viscous perforation, portal air
 - liver masses – benign vs. malignant
 - common pancreatic masses
 - complications of liver disease - portal vein, splenic vein thrombosis, Budd-Chiari, ascites, varices
-
- Demonstrate an approach to review and interpretation of small bowel studies – small bowel follow-through, small bowel enema, CT enteroclysis, with emphasis on:
 - the utility of one of the above studies vs. other
 - small bowel masses
 - diagnosis and staging of inflammatory bowel disease
 - Understand the importance of providing appropriate and critical clinical history to radiologists for triage of patient investigations and interpretation of imaging studies.
 - Review imaging studies independently of a wide variety of clinical case scenarios using pathologically confirmed teaching files.
 - Understand and communicate the benefits and risks of radiological investigation and treatment
 - Recognize when radiological investigation or treatment would be detrimental to the health of a patient

COMMUNICATOR

- Communicate knowledge of how procedures are performed to a patient in advance of a scheduled procedure

COLLABORATOR

- Interact with various Medical Imaging specialists (e.g. MRI, Contrast ultrasound, Interventional radiologists etc.) to understand their role in providing specialized imaging studies and procedures and utilize their expertise on when to refer special and difficult clinical cases for further radiologic investigation
- Communicate relevant clinical information to the radiologist, so as to optimize the consultative interaction and reporting of investigations
- Demonstrate the ability to function as a member of a multidisciplinary health care team

ROTATION SPECIFIC OBJECTIVES

*Division of Gastroenterology, Department of Medicine
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LEADER

- Use information technology to optimize patient care
- Use health care resources effectively to balance patient care, learning needs
- Work effectively and efficiently in a health care organization

HEALTH ADVOCATE

- When faced with multiple potential radiologic procedures to evaluate illness, choose the option that provides the least radiation exposure in the setting of optimal medical information
- Demonstrate an understanding of the impact of radiation exposure on patients, especially young patients with chronic illness

SCHOLAR

- Be able to critically appraise sources of medical information
- Interact with and teach Medical Imaging resident (On Abdominal Imaging Service) on the various clinical investigational and treatment gastroenterology diseases aspects of medical imaging

PROFESSIONAL

- Accurately assess one's own performance, strengths and weaknesses
- Recognize and resolve ethical issues as they arise in clinical practice
- Recognize and deal with unprofessional behaviour in clinical practice

ROTATION SPECIFIC OBJECTIVES

*Division of Gastroenterology, Department of Medicine
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ELECTIVE - ETHIOPIA UNIVERSITY OF ADDIS ABABA

OVERVIEW & GOALS

The GI division has teamed up with the University of Addis Ababa (Toronto Addis Ababa Academic Collaboration or TAAAC) to develop a GI Residency Training Program for Ethiopia. The University of Toronto has a collaborative project between Addis Ababa University (AAU) in Ethiopia and the Department of Medicine, University of Toronto, to help AAU develop and implement their Subspecialty Residency Training Program. In January 2010, AAU set up initiatives to expand subspecialty training in the areas of Endocrinology, Hematology and Gastroenterology. Development of the gastroenterology program was facilitated by Dr. Jordan Feld and Dr. Louis Liu. Dr. David Wong has taken over Dr. Liu's position since 2016. The ultimate goal of this program is to increase the local level of expertise, so that they can optimize their local resources to care for their own patients and will eventually recruit an adequate number of academic GI faculty to sustain their program. In March 2012, the first cohort of 3 adult GI fellows joined the program. Each of the fellows graduated in April 2014, and remained on as academic GI faculty. As a result of an increase in local expert capacity, the Toronto GI Program was able to obtain a donation in kind, with the assistance of Dr. Des Leddin (Director, WGO Endoscopy Training Centre) and Dr. Jim Toouli (WGO President) to set up the first Endoscopy Training Centre in Ethiopia, at Black Lions Hospital, under the local leadership of Dr. Abate Bane, Addis Ababa University Faculty.

This elective provides the trainee with a unique opportunity to be involved in a global health initiative, in teaching peer learners formally and informally in an underdeveloped health care setting. The trainee also has the unique opportunity to learn how to assess and manage a patient in a setting

CANMEDS-BASED OBJECTIVES

At the end of this rotation, the GI Resident will be able to:

MEDICAL EXPERT

- Demonstrate an understanding of issues in global health
- Perform a detailed history and complete gastrointestinal and nutritional assessment
- Demonstrate knowledge of the epidemiology and pathophysiology of locally prevalent infectious diseases, as they apply to gastroenterology
- Demonstrate an understanding of the natural history of illnesses, in a setting with limited medical resources

RSOs Ethiopia

Reviewed by the RPC at the Dec 2016 Education Working Retreat, and by PGME 2017/ Reviewed and approved by RPC Aug. 2019

ROTATION SPECIFIC OBJECTIVES

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- Provide an appropriate differential diagnosis based on a detailed history and complete gastrointestinal and nutritional assessment and develops a care plan

COMMUNICATOR

- Demonstrate effective communication skills (via interpreters) with the Ethiopian patients, in a setting where there is a language barrier (Amharic)

COLLABORATOR

- Effectively work with University of Toronto Gastroenterology faculty and Ethiopian medical faculty and residents for the common goal of ongoing curriculum development
- Effectively work with University of Toronto Gastroenterology faculty and Ethiopian medical residents on research projects

LEADER

- Effectively manage time in an extremely busy outpatient clinic
- Demonstrate an understanding of how to practice in a health-care system that is resource-limited, with focus on physical examination

HEALTH ADVOCATE

- Engage in development of the tools to develop and sustain a local comprehensive health care system, which will allow development and support of allied health care professionals
- Demonstrate understanding of how to help develop a culturally relevant curriculum of postgraduate gastroenterology subspecialty education adapted for the local issues, conditions

SCHOLAR

- Engage in one or two research projects, which are culturally and locally relevant
- Co-train along with University of Toronto faculty, the Ethiopian Residents and learners
- Develop an understanding of how to provide education in postgraduate gastroenterology subspecialty education that is culturally relevant and adapted to locally endemic health disorders
- Prepare and teach didactic lectures to Ethiopian Residents
- Teach endoscopy skills to Ethiopian Residents

ROTATION SPECIFIC OBJECTIVES

*Division of Gastroenterology, Department of Medicine
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PROFESSIONAL

- Demonstrate honesty and integrity at all times
- Demonstrate good stewardship in the role of physician ambassador for the University of Toronto Gastroenterology Residency Program
- Develop collegial and professional relationships with faculty and Residents from the University of Toronto and Ethiopia

ROTATION SPECIFIC OBJECTIVES

*Division of Gastroenterology, Department of Medicine
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SELECTIVE WCH**OVERVIEW**

Women's College Hospital (WCH) provides a "Selective" opportunity for the GI Resident to focus entirely on ambulatory care, clinics and endoscopy. The educational site director is Dr. Talia Zenlea.

Trainees, who elect to pursue a Selective at WCH should contact Dr. Zenlea via email: talia.zenlea@wchospital.ca well in advance of the rotation to review the learner's goals and needs. The Selective may take place during the second half of the PGY4 year or anytime during the PGY5 year. On call duties will be at UHN-MSH during this Selective.

CANMEDS-BASED OBJECTIVES

At the end of this rotation, the GI Resident will be able to:

MEDICAL EXPERT

- Function effectively as a gastroenterology consultant, integrating all of the CanMEDS Roles to provide optimal, ethical, evidence-based and patient-centered care in the ambulatory setting.
- Gather data accurately and efficiently to obtain a targeted history & physical examination to arrive at a differential diagnosis for common and uncommon GI luminal / hepatology diseases
- Demonstrate an investigatory and analytic approach to clinical problem solving and knowledge acquisition
- Establish and maintain clinical knowledge in the area of ambulatory gastroenterology, as well as endoscopic skills when appropriate.
- Conduct appropriate and thorough consultations, physical exams, and formulate focused assessments and plans, taking into account the appropriate use of diagnostic tests and therapeutic interventions.

COMMUNICATOR

- Demonstrate an appreciation for the role of therapeutic communication (including shared decision-making and effective dynamic interactions) in the discussion of ambulatory gastrointestinal issues.
- Provide clear information to patients and their families about their diagnosis, prognosis, options for therapy and the potential sequelae of no therapy.

ROTATION SPECIFIC OBJECTIVES

*Division of Gastroenterology, Department of Medicine
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- Develop rapport, trust and an ethical therapeutic relationship with patients and their families

COLLABORATOR

- Deliver to healthcare team (referring physician, family physician, etc.) by means of notes and letters, clear and concise communication that answers questions that were asked in the reason for referral, and also to answer unasked questions that are relevant to the clinical case.
- Recognize and integrate into case management the roles of other health care providers, including surgeons, physician specialists within your own specialty (i.e. therapeutic endoscopist), nursing staff, dietitians, psychiatrists and social workers.
- Demonstrate effective oral and written communication skills, thereby facilitating integrated care for WCH patients who are managed using an innovative network of multidisciplinary healthcare providers within a single ambulatory facility and communicating through a state-of-the-art electronic medical record system.

LEADER

- Practice cost-effective health care and resource allocation that does not compromise the quality of care
- Prioritize patient issues, recognizing the time constraints implicit in the ambulatory clinic setting
- Triage the management plan items, i.e. timing of scheduling for investigations, endoscopic procedures, follow-up visits, referrals to other health care providers
- Demonstrate familiarity with Ministry of Health Billing Systems via shadow billing

HEALTH ADVOCATE

- Identify opportunities for advocacy, health promotion and disease prevention and develop strategies to intervene in a time effective manner appropriate to the outpatient setting, i.e. cancer screening / surveillance, disease screening for family members, vaccination etc.
- Help the patient access and navigate the health care system as deemed appropriate, i.e. Ontario Drug Benefits (ODB), Trillium
- Demonstrate a common understanding of the role of women's health issues in the area of gastroenterology and the unique perspective of female patients.

ROTATION SPECIFIC OBJECTIVES

*Division of Gastroenterology, Department of Medicine
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SCHOLAR

- Utilize the literature and critical appraisal skills to support diagnostic and therapeutic practice related to their patients' health problems, and disseminate the information to referring physicians, patients and their families.
- Recognize the requirement for self-assessment, as well as the need for continued self-directed learning and medical education

PROFESSIONAL

- Present to clinics as scheduled and on time
- Maintain patient privacy
- Follows up in a timely manner all results to patient and referring physician

ROTATION SPECIFIC OBJECTIVES

*Division of Gastroenterology, Department of Medicine
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SELECTIVE – NUTRITION**OVERVIEW**

Nutrition is a site objective in the luminal rotations at TGH and SMH. In addition, there is exposure to nutrition at each site, both on the inpatient and outpatient services, as nutrition is an integral part of any gastrointestinal consultation. At MSH, while the trainees are not responsible for the coverage of the nutrition service, the trainees are exposed to the complex issues surrounding nutrition in the context of inflammatory bowel disease. Hence, there is a continuum of nutrition education throughout the program. At SMH, these trainees will be a member of an interdisciplinary team, Nutrition Support Service, including dieticians and specialized pharmacists. While on the multi-site ambulatory rotation, the trainee will be assigned to a half-day nutrition clinic per week with Dr. Johane Allard. This will allow the trainee exposure to patients with complex nutrition issues, including short bowel syndrome. In addition, nutrition education is integrated in the AHD, citywide journal club (critical appraisal of nutrition literature) and national CAG Basic Science Lecture Series. Trainees may also pursue a Selective block, which focuses on nutrition and motility, to facilitate learning of the objectives outlined below.

NUTRITION: CANMEDS-BASED OBJECTIVES

At the end of the rotation, the GI Resident will be able to:

MEDICAL EXPERT

- Obtain a thorough and relevant nutrition-focused gastrointestinal history
- Demonstrate knowledge of key basic science principles (absorption, digestion) related to nutrition, and incorporate this knowledge into clinical care
- Demonstrate knowledge of macro- and micronutrients in health and disease, including the signs, symptoms and management of deficiencies and excesses
- Demonstrate familiarity with methods of nutritional assessment, including diet, physical examination (Subjective Global Assessment), laboratory methods for assessing energy expenditure and body composition
- Demonstrate an understanding of the indications and contraindications of enteral and total parenteral nutrition
- Demonstrate knowledge of access, requirements, prescription and complications of enteral and total parenteral nutrition, including refeeding syndrome, line sepsis, metabolic complications
- Demonstrate familiarity with the key differences and indication for clinical utility of various commercial enteral products, i.e. elemental vs. polymeric and parenteral solutions.

ROTATION SPECIFIC OBJECTIVES

*Division of Gastroenterology, Department of Medicine
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- Demonstrate an understanding of the role of nutrition in various diseases / conditions: inflammatory bowel disease, pancreatitis, intestinal failure/ short bowel syndrome, pancreatitis, end stage connective tissue disorders, eating disorders, chronic liver disease, celiac disease critically ill patients
- Demonstrate knowledge of the medical and surgical therapy options of the bariatric patient
- Demonstrate knowledge of the impact of gastrointestinal surgery on the patient's nutritional status (i.e. ileal resection, bariatric surgical procedures)

COMMUNICATOR

- Inform patients of the potential risks of feeding tubes, PICC lines, enteral feeding
- Communicate clearly telephone orders or verbal orders regarding changes in patient formulation based on change in laboratory data, patient status

COLLABORATOR

- Effectively work with allied health professionals, including TPN pharmacist, specialized nurses and dieticians, to formulate an appropriate nutritional regimen for the patient
- Develop a care plan for a patient, including investigations, treatment and ongoing care, in collaboration with members of the interdisciplinary nutrition care team
- Participate in interdisciplinary nutrition care team meetings, rounds

LEADER

- Utilize health care resources appropriately, as applied to nutrition (i.e. TEN versus TPN) both in the outpatient and inpatient settings
- Demonstrate effective time management skills in the comprehensive assessment of patients and timely dictation of consultation notes

HEALTH ADVOCATE

- Demonstrate knowledge of ethical issues in nutrition
- Demonstrate health promotion and disease prevention
- Demonstrates an understanding of the causes, consequences and prevalence of malnutrition in hospital inpatients
- Demonstrates an understanding of the determinants of health that may present as barriers for patients with nutritional compromise to remain in the ambulatory care setting

ROTATION SPECIFIC OBJECTIVES

*Division of Gastroenterology, Department of Medicine
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SCHOLAR

- Critically appraise the literature and applies the data to nutritional care of the patient
- Demonstrate, implement and monitor a personal education plan, which includes self-directed learning of topics in nutrition and review of the CAG Nutrition Modules

PROFESSIONAL

- Demonstrate respect and honesty at all times toward faculty, patients, peer trainees and other health professionals
- Prepare correspondence (procedure, consultation, follow-up notes) in a timely manner

ROTATION SPECIFIC OBJECTIVES

*Division of Gastroenterology, Department of Medicine
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SELECTIVE – MOTILITY**OVERVIEW**

During this selective, there will be emphasis on assessment tools and management of out-patients with common motility disorders, and focus on motility education, including evaluative tools: esophageal manometry, impedance, ambulatory pH assessment, anal manometry, gastric emptying studies. In addition, trainees will attend at least one half-day in the motility laboratory, where they have the opportunity to observe and learn to interpret motility tracings of common disorders. In addition, there is teaching on various breath tests, including ¹⁴C-Lactulose Hydrogen breath and xylose breath tests during case-based discussions during patient encounters. Endoscopy exposure will be limited to cases in which there is a distinct motility focus. Learning of these objectives occurs throughout the continuum of training at the various core sites, with emphasis at University Health Network (TGH and TWH), as well as during academic half day. Our national Basic Science Series, hosted by CAG for Canadian GI Residents. also highlight key motility topics on an annual basis.

CANMEDS-BASED OBJECTIVES

At the end of this rotation, the GI Resident will be able to:

MEDICAL EXPERT

- Demonstrate knowledge of neuromuscular physiology in the control of swallowing and defecation
- Demonstrate knowledge sufficient to manage common GI motility disorders (e.g. dysphagia, functional dyspepsia, gastroparesis, chronic nausea, recurrent vomiting, IBS, chronic constipation)
- Familiarity with the indications and contraindications of esophageal motility studies (EMS), anorectal manometry (ARM) and ambulatory pH studies
- Interpret esophageal manometry tracings of common esophageal motor disorders (e.g. achalasia), ineffective esophageal disorders (e.g. scleroderma) and esophageal spasm disorders, (e.g. jackhammer esophagus)
- Apply the results of the esophageal manometry study and ambulatory pH study to formulate a comprehensive patient care management plan
- Recognize and interpret common anorectal manometry findings (e.g. able to recognize RAIR, pelvic floor dyssynergy)
- Apply the results of the anorectal manometry study to formulate a comprehensive patient care management plan
- Demonstrate knowledge of the principles, indications and operator characteristics of hydrogen and carbon dioxide breath tests for the assessment of small bowel overgrowth and oro-cecal transit time (OCCT)

ROTATION SPECIFIC OBJECTIVES

*Division of Gastroenterology, Department of Medicine
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COMMUNICATOR

- Able to communicate the results of investigations and a clear management plan to patient / family

COLLABORATOR

- Work effectively with motility technicians, allied health care team (i.e. speech language pathologist and other subspecialties, (i.e. surgery and psychiatry)
- Effectively communicate key motility concepts and findings to referring physicians

LEADER

- Utilize health care resources appropriately
- Manage time appropriately – outpatient clinics, motility laboratory

HEALTH ADVOCATE

- Demonstrate sensitivity to and the ability to address patient-centred limitations to management (e.g. psychosocial, language barrier, etc.)

SCHOLAR

- Demonstrate knowledge of key basic science principles (biochemistry, physiology, anatomy, pathology, pharmacology) related to motility
- Present a motility topic during the rotation, to GI subspecialty and GIM trainees, in addition to GI Motility Fellow(s) and faculty
- Demonstrate self-directed learning (critical review of motility literature for patient care, rounds)

PROFESSIONAL

- Demonstrates respect for the patient at all times, in discussion of sensitive matters during interview, and during investigative procedures
- Demonstrate respect and honesty at all times toward faculty, patients, peer trainees and other health professionals
- Prepare correspondence (procedure, consultation, follow-up notes) in a timely manner