



**EDUCATIONAL GOALS AND OBJECTIVES FOR ROTATIONS ON:
GENERAL SURGERY WITH EMPHASIS ON MINIMALLY INVASIVE
SURGERY/ROBOTIC SURGERY, AND UPPER/LOWER GI ENDOSCOPY
(GENERAL SURGERY-GREEN SURGERY SERVICE)**

Goal

The overall goal of the Green Surgery Service is to continue the objectives of General Surgery with emphasis on Minimally Invasive Surgery including Robotic Surgery, and Upper/Lower GI Endoscopy. Objectives will be assessed in terms of clinical knowledge, interpersonal qualities, and operative skills through evaluations by faculty, peers, students and nursing staff.

Objectives for PGY-5 Residents: At the end of the PGY-5 residents will:

Patient Care

- Lead a team that cares for patients with core and advanced conditions in the SCORE curriculum.
 - Acute vs chronic abdominal pain
 - Abdominal hematoma
 - Inguinal, Femoral, Ventral, Umbilical, Epigastric, Incisional hernias and mesh infection
 - Bile duct injury, bile duct neoplasm, cholangitis, choledocholithiasis, choledochal cysts
 - Acute vs chronic cholecystitis, acalculous vs calculous gallbladder disease, gallbladder cancer, gallbladder polyps, gallstone ileus
 - Obstructive jaundice, biliary pancreatitis
 - Peptic ulcer disease, stress gastritis
 - Upper and lower GI bleeding
 - Enterocutaneous fistula
 - Intussusception
 - Meckel's diverticulum, Small intestine diverticulum
 - Mesenteric ischemia
 - Paralytic ileus
 - Pneumatosis
 - Radiation enteritis
 - Small bowel obstruction
 - Appendiceal incidental neoplasm
 - Acute appendicitis
 - Colitis (c diff, ischemic, inflammatory bowel disease)
 - Colon polyps
 - Colonic volvulus (cecal, sigmoid)

- Acute diverticulitis/acute diverticular bleeding
- Large bowel obstruction/pseudo-obstruction
- Anal disease: fissure, abscess, fistula, hemorrhoids, condylomas
- Benign and malignant breast disease
- Benign and malignant parathyroid disease
- Benign and malignant thyroid disease
- Soft tissue infections (including surgical site infection) and masses
- Pilonidal disease
- Hidradenitis
- Hydrocele
- Lymphadenopathy
- Sphincter of oddi dysfunction
- Gastroparesis
- Functional constipation, IBS
- Rectal prolapse
- Decubitus ulcer
- Acute abdomen
- MIS equipment and troubleshooting
- Physiologic changes associated with pneumoperitoneum
- Robotic surgery principles
- Effects of surgery on nutritional requirements and nutritional support
- Preoperative evaluation and perioperative care: surgical risk evaluation, steroid therapy management, anticoagulation management, pain management, cardiac risk, pulmonary risk, VTE prophylaxis
- Ethical issues in clinical surgery: confidentiality, decision-making, complications and poor outcomes/truth telling, professional obligations, conflict of interest, end-of-life
- Surgical professionalism and interpersonal communication education (SPICE): admitting mistakes, delivering bad news, feedback, stress of surgical practice, choices that define you, considering cost
- Delegate appropriate clinical tasks to other health care team members.
- Recognize atypical presentations of a large number of surgical conditions.
- Lead a team while providing supervision in the evaluation and management of complex postoperative problems such as sepsis, systemic inflammatory response syndrome, and multiple system organ failure.
- Demonstrate proficiency in use of instruments and equipment required for essential operations, guides conduct of most operations and makes independent intraoperative decisions.
- Perform most of the core operations and have significant experience in the advanced operations.

- Diagnostic laparoscopy
- Intraabdominal abscess drainage
- Inguinal, Femoral, Ventral, Umbilical, Epigastric, Incisional hernia repair
- Open and laparoscopic cholecystectomy, intraoperative cholangiogram
- Cholecystostomy
- Repair of perforated ulcer disease, gastrostomy, pyloroplasty
- Adhesiolysis
- Jejunostomy
- Ileostomy and reversal
- Small bowel resection
- Open and laparoscopic appendectomy
- Partial colectomy (open, laparoscopic, robotic)
- Colostomy and reversal
- anal fistulotomy/seton, drainage, biopsy, hemorrhoidectomy
- esophagogastroduodenoscopy, colonoscopy/sigmoidoscopy/proctoscopy
- mastectomy (partial, total), SLNB vs ALND, breast biopsy
- parathyroidectomy
- thyroidectomy (partial, total)
- pilonidal cystectomy
- excisional and incisional biopsy of skin and soft tissue lesions
- incision and drainage of soft tissue infections
- hydrocelectomy
- lymph node biopsy
- tracheostomy (open, percutaneous)
- nerve block (peritoneal)
- abdominal wall reconstruction/component separation
- common bile duct exploration (open/laparoscopic), choledochoscopy, bile duct injury acute repair
- stricturoplasty
- subtotal colectomy with ileorectal anastomosis
- total colectomy
- rectal prolapse repair
- abdominoperineal resection
- transanal resection
- abdominal access
- exploratory laparotomy
- Effectively guide other residents in core operations.
- Attend at least clinics per week

Medical Knowledge

- Have a comprehensive knowledge of the varying patterns of presentation and alternative and adjuvant treatments for the core diseases in the SCORE curriculum, as well as make the diagnosis and provide initial care for the advanced diseases in the SCORE curriculum.
 - Acute vs chronic abdominal pain
 - Abdominal hematoma
 - Inguinal, Femoral, Ventral, Umbilical, Epigastric, Incisional hernias and mesh infection
 - Bile duct injury, bile duct neoplasm, cholangitis, choledocholithiasis, choledochal cysts
 - Acute vs chronic cholecystitis, acalculous vs calculous gallbladder disease, gallbladder cancer, gallbladder polyps, gallstone ileus
 - Obstructive jaundice, biliary pancreatitis
 - Peptic ulcer disease, stress gastritis
 - Upper and lower GI bleeding
 - Enterocutaneous fistula
 - Intussusception
 - Meckel's diverticulum, Small intestine diverticulum
 - Mesenteric ischemia
 - Paralytic ileus
 - Pneumatosis
 - Radiation enteritis
 - Small bowel obstruction
 - Appendiceal incidental neoplasm
 - Acute appendicitis
 - Colitis (c diff, ischemic, inflammatory bowel disease)
 - Colon polyps
 - Colonic volvulus (cecal, sigmoid)
 - Acute diverticulitis/acute diverticular bleeding
 - Large bowel obstruction/pseudo-obstruction
 - Anal disease: fissure, abscess, fistula, hemorrhoids, condylomas
 - Benign and malignant breast disease
 - Benign and malignant parathyroid disease
 - Benign and malignant thyroid disease
 - Soft tissue infections (including surgical site infection) and masses
 - Pilonidal disease
 - Hidradenitis
 - Hydrocele
 - Lymphadenopathy
 - Sphincter of oddi dysfunction

- Gastroparesis
- Functional constipation, IBS
- Rectal prolapse
- Decubitus ulcer
- Acute abdomen
- MIS equipment and troubleshooting
- Physiologic changes associated with pneumoperitoneum
- Robotic surgery principles
- Effects of surgery on nutritional requirements and nutritional support
- Preoperative evaluation and perioperative care: surgical risk evaluation, steroid therapy management, anticoagulation management, pain management, cardiac risk, pulmonary risk, VTE prophylaxis
- Ethical issues in clinical surgery: confidentiality, decision-making, complications and poor outcomes/truth telling, professional obligations, conflict of interest, end-of-life
- Surgical professionalism and interpersonal communication education (SPICE): admitting mistakes, delivering bad news, feedback, stress of surgical practice, choices that define you, considering cost
- Have comprehensive level of knowledge of the operative steps, perioperative care, and postoperative complications for the core operations in the SCORE curriculum with a basic knowledge of many of the advanced operations.
 - Diagnostic laparoscopy
 - Intraabdominal abscess drainage
 - Inguinal, Femoral, Ventral, Umbilical, Epigastric, Incisional hernia repair
 - Open and laparoscopic cholecystectomy, intraoperative cholangiogram
 - Cholecystostomy
 - Repair of perforated ulcer disease, gastrostomy, pyloroplasty
 - Adhesiolysis
 - Jejunostomy
 - Ileostomy and reversal
 - Small bowel resection
 - Open and laparoscopic appendectomy
 - Partial colectomy (open, laparoscopic, robotic)
 - Colostomy and reversal
 - anal fistulotomy/seton, drainage, biopsy, hemorrhoidectomy
 - esophagogastroduodenoscopy, colonoscopy/sigmoidoscopy/proctoscopy
 - mastectomy (partial, total), SLNB vs ALND, breast biopsy
 - parathyroidectomy
 - thyroidectomy (partial, total)
 - pilonidal cystectomy

- excisional and incisional biopsy of skin and soft tissue lesions
- incision and drainage of soft tissue infections
- hydrocelectomy
- lymph node biopsy
- tracheostomy (open, percutaneous)
- nerve block (peritoneal)
- abdominal wall reconstruction/component separation
- common bile duct exploration (open/laparoscopic), choledochoscopy, bile duct injury acute repair
- stricturoplasty
- subtotal colectomy with ileorectal anastomosis
- total colectomy
- rectal prolapse repair
- abdominoperineal resection
- transanal resection
- abdominal access
- exploratory laparotomy
- Attend/participate in Morbidity and Mortality, Surgical Ground Rounds, didactic and service-specific conferences.

Practice-based Learning and Improvement

- Recognize teachable moments and readily and respectfully engage the learner.
- Be a highly effective teacher with an interactive educational style.
- Engage in constructive educational dialogue.
- Facilitate conferences and case discussions based on assimilation of evidence from the literature.
- Present and participate in multidisciplinary conferences, including Grand rounds, Morbidity and Mortality, and service specific rounds.
- Participate in local, regional, national activities including optional conferences and/or self-assessment programs.
- Demonstrate use of a system or process for keeping up with changes in the literature.
- Initiate assignments for other learners.
- Lead surgical skills experiences for students and residents and participate in skills curriculum development.
- Exhibit on-going self-evaluation and improvement that includes reflection on practice, tracking and analyzing patient outcomes, integrating evidence-based practice guidelines, and identifying opportunities to make practice improvements.
- Discuss and/or demonstrate application of M&M and/or other QI conference conclusions to own patient care.
- Lead a QI activity relevant to patient care outcomes.

- Complete the requirements of the robotic curriculum.

Professionalism

- Serve as a role model for ethical behavior.
- Positively influence others by assertively modeling professionalism.
- Consistently place the interest of patients ahead of self-interests when appropriate.
- Promote a healthy work environment.
- Recognize and appropriately address personal health issues in other members of the care team.
- Be proactive in modifying schedule or intervening in other ways to assure that those caregivers under their supervision maintain personal wellness and do not compromise patient safety.
- Set an example for conference attendance, promptness, and attention to assigned tasks.

Interpersonal and Communication Skills

- Customize emotionally difficult information.
- Be capable of negotiating and managing conflict among patients and their families.
- Assume overall leadership of a health care team responsible for their patients while also seeking and valuing input from the members of the team.
- Negotiate and manage conflict among care providers.
- Take responsibility for ensuring that clear hand-offs are given at transitions of care.
- Be capable of leadership with unexpected events occur in the operating room.
- Be able to communicate effectively with the family when unexpected events occur in the operating room.

Systems-based Practice

- Coordinate the activities of residents, nurses, social workers, and other health care professionals to provide optimal care to the patient at the time of discharge or transfer, and to provide post-discharge ambulatory care that is appropriate for the patient's particular needs.
- Participate in work groups or performance improvement teams designed to reduce errors and improve health outcomes.
- Understand the appropriate use of standardized approaches to care and participates in creating such protocols of care.