SURGICAL RESIDENT CURRICULUM FOR DIVISION OF GASTROINTESTINAL SURGERY

Residency years included: PGY1 X  PGY2 X  PGY3  PGY5 X  Fellow X

I. Overview of Division of Gastrointestinal Surgery- Foregut/MIS

Clinical Focus Areas
  Swallowing Disorders (GERD, achalasia, hiatal hernias)
  Morbid Obesity
  Hernias
  Benign biliary diseases

Faculty
  Timothy Farrell, MD
  D. Wayne Overby,
  Hartwig Bunzendahl, MD
  Clinical Fellow

Residents
  PGY V, dedicated
  PGY II - shared
  PGY I – dedicated

This team of residents works cooperatively to provide preoperative, intraoperative, and postoperative care to our patients with gastrointestinal diseases.

PGY V: Chief residents focus on the longitudinal clinical care of patients. This includes preoperative clinics, operations, oversight of ward activities, and management of postoperative complications.

PGY II: Junior residents place special emphasis on preoperative and postoperative management. Junior residents will be operating resident for appropriate level cases, or a clinic participant.

II. Core Competencies and Learning Objectives

A. Patient care
B. Medical knowledge
C. Practice-based learning and improvement
D. Interpersonal and communication skills
E. Professionalism
F. Systems-based practice

**PGY I**

1. **Patient Care**
   a. To gather and interpret essential and accurate information about the patient’s health status.
   b. To do simple procedures including intravenous line placement, urinary catheter placement, central line placement, etc.
   c. To round on a daily basis on all hospitalized patients, performing a complete physical examination, acquiring an update on pertinent laboratory and radiological examinations, and compiling this information into a concise presentation to be made on morning rounds.

2. **Medical Knowledge**
   a. To learn the principles of preoperative and postoperative management including fluid and electrolyte management, pain control, wound care, drain management, aftercare, etc.
   b. To expand the resident’s fund of knowledge from medical textbooks, journals, and electronic media.

3. **Practice-Based Learning**
   a. To participate in the education of medical students and attend conferences.

4. **Interpersonal and communication skills**
   a. To communicate effectively with other housestaff, service attendings, other physicians, medical students, nurses and paramedical personnel.

5. **Professionalism**
   a. To demonstrate compassion and integrity through respectful patient care, family interactions, and communication with other care providers.
   b. To function as a part of the larger health team environment by respecting the opinion of others.

6. **System-based practice**
   a. To understand when expert medical advice is necessary.
   b. To present new and interesting ideas using the latest technology to provide high-quality patient care and education.

**PGY II**

1. **Patient Care**
   a. To gather and interpret essential and accurate information about the patient’s health status.
   b. To do straight-forward surgical procedures such as hernia repair, gallbladder removal, line placement, etc.
under supervision.
c. To evaluate new patients and take new consultations, with the goal of identifying the major surgical problem and developing a plan for diagnosis and treatment.

2. Medical Knowledge
   a. To learn principles of care of the critically ill patient and function within the intensive care unit setting.
   b. To expand the fund of knowledge from medical textbooks, journals, and electronic media.

3. Practice-based Learning
   a. To participate in the education of medical students and interns and attend and present at conferences.

4. Interpersonal and communication skills
   a. To communicate effectively with other housestaff, service attendings, other physicians, medical students, nurses and paramedical personnel.
   b. To demonstrate compassion and integrity through respectful patient care, family interactions, and communication with other care providers

5. Professionalism
   a. To understand when expert medical advice is necessary.

6. System-based Practice
   a. To function as a part of the larger health team environment by respecting the opinion of others.
   b. To present new and interesting ideas using the latest technology to provide high-quality patient care and education.

PGY V

1. Patient Care
   a. To gather and interpret essential and accurate information about the patient’s health status.

2. Medical Knowledge
   a. To learn and teach non-operative and operative management of gastrointestinal and general surgical diseases.
   b. To perform and supervise gastrointestinal and general surgical procedures ranging from the straightforward to complex operations and assume responsibility and be accountable for patients’ outcomes.

3. Practice-based learning
   a. To develop a life-long, self-directed educational program that includes journal reading and electronic media and to disseminate this information to the health care team.
   b. To lead the education of the medical students and
residents and to attend and present at conferences.

4. Interpersonal and communication skills
   a. To assume a leadership role in effective communication with housestaff, service attendings, other physicians, medical students, nurses, and paramedical personnel.
   b. To demonstrate compassion and integrity through respectful patient care, family interactions, and communication with other care providers.
   c. To instruct medical students on presentation skills so that clinical information is clear and concise

5. Professionalism
   a. To understand when expert medical advice is necessary.

6. System-based practice
   a. To function as a part of the larger health team environment by respecting the opinion of others.
   b. To present new and interesting ideas using the latest technology to provide high-quality patient care and education.

III. Didactic Curriculum Structure (see Appendix A)

Departmental Conferences
   A. Grand Rounds
   B. Teaching M/M
   C. Journal Club
   D. Resident Topic Conferences
   E. Resident as Teacher Conference

SRZ Conferences
   F. Weekly preoperative SRZ work conference
   G. Weekly GI Medicine/Surgery Conference (PGY II, V’s present)
   H. Divisional M/M (weekly)

IV. Technical Skills Curriculum Structure (see Appendix B)

Departmental Activities
   A. PGY 1-2 resident wet lab (yearly)
   B. PGY 3-5 resident wet lab (yearly)
   C. Intern Boot Camp
   D. Vascular Anastomosis Workshop
   E. Industry-sponsored laparoscopic courses (rotating)

SRZ Activities
   F. FLS training certification (PGY Is)
   G. Basic Laparoscopic Skills Modules on LapSim (PGY Is)
   H. Basic EGD and Colonoscopy Modules on Flexible Endoscopy Simulator (PGY IIs)
I. Lap Chole and Lap Hernia Cases on LapSim (PGY IIs)
J. ERCP and Advanced Colonoscopy Modules on Flexible Endoscopy Simulator (PGY IVs)
K. Lap Suturing Modules on LapSim (PGY IVs)
L. Suturing Video and Box Trainer Practice (PGY Vs)
M. Lap Gastric Bypass Modules on LapSim (PGY Vs)

V. Evaluation

Residents are evaluated by the faculty. The senior residents participate in the evaluation of the junior residents. End-of-the-rotation faculty meetings assess the strengths and weaknesses of the residents. Evaluation forms are completed and the residents are encouraged to meet with the faculty at the conclusion of the rotation. Feedback is distributed during the rotation such that resident can address deficiencies. The faculty takes into account patient care, operative techniques, attitude and communication with others. The opinions of paramedical personnel, patients, families, and others are considered during the evaluation process. The residents are encouraged to provide feedback to the faculty regarding the strengths and weakness of the surgical experience on the Gastrointestinal Surgery service.
Appendix A – SRZ Didactic Curriculum

<table>
<thead>
<tr>
<th>A. Abdominal Wall/Hernias</th>
<th>D. Hepato-Biliary</th>
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<tbody>
<tr>
<td>Inguinal</td>
<td>LFTs</td>
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<td>Direct vs indirect</td>
<td>Stones</td>
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<td>Nerve injuries</td>
<td>Types and Etiology</td>
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<td>Patent processes vaginalis</td>
<td>Biliary Colic</td>
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<td>Hydrocele</td>
<td>Acute Cholecystitis</td>
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<td>Lap versus open</td>
<td>Chronic Cholecystitis</td>
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<td>Mesh versus native tissue</td>
<td>Acalculous Cholecystitis</td>
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<tr>
<td>Procedures</td>
<td>Gallstone Pancreatitis</td>
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<td>Recurrences</td>
<td>Choledocholithiasis</td>
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<td>Anesthesia considerations</td>
<td>Cholangitis</td>
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<tr>
<td>Incisional</td>
<td>ERCP</td>
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<tr>
<td>Procedures</td>
<td>Biliary dyskinesia</td>
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<td>Complications</td>
<td>Cholecystectomy</td>
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<td>IOC, CBDE</td>
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<td>Spilled stones</td>
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<td>Bile duct injury</td>
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<td>Biliary Tract</td>
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<td>Porcelain gallbladder</td>
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<td>GB (procedures, rx)</td>
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<td>Bile duct (procedures, rx)</td>
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<td>GERD</td>
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<td>EGD, pH, mano, GES</td>
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<td>Medical Rx</td>
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<td>Procedures</td>
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<td>Achalasia</td>
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<td>EGD, Mano, BaSw</td>
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<td>Rx options</td>
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<td>Esophageal Diverticula</td>
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<td>Types and etiologies</td>
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<td>Surgical W/U</td>
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Appendix B – SRG Technical Skills Curriculum

General Open Skills
Abdominal Entry
LOA
Resection
Vascular Control
GI Anastomosis
Abdominal Closure

General Endoscopic Skills
Basic Flexible Endoscopic Skills (safety, sedation, scope operation)
Basic Laparoscopic Skills (laparoscope operation, tissue handling, ligation, energy sources)
Advanced Laparoscopic Skills (suturing, stapling)

Core Open Procedures
Primary Inguinal Hernia Repair
Recurrent Inguinal Hernia Repair
Umbilical Hernia Repair
Incisional Hernia Repair
Small Bowel Resection

Core Laparoscopic Procedures
Cholecystectomy
IOC
Ventral Hernia
Fundoplication
TEP

Specialty Procedures Lap
Heller
Lap Paraesophageal Hernia
Lap GIST resection
Lap Band Lap
Gastric Bypass
Sleeve Gastrectomy