All first year gastroenterology fellows will be required to participate in a 2 week endoscopy rotation in addition to their inpatient rotations at The Hospital of the University of Pennsylvania (HUP), Penn Presbyterian Medical Center (PPMC), and The Philadelphia VA Medical Center (PVAMC). As described elsewhere in this handbook, first year fellows will also be required to rotate on the inpatient liver service at HUP and the combined gut/liver services at PPMC and PVAMC. The endoscopy rotation will not interfere with required rotations on these services.

First year fellows will be required to learn endoscopic techniques at The Penn Medicine Clinical Simulation (Sim) Center in combination with endoscopic training at HUP, PPMC, PVAMC, and the Perelman Center for Advanced Medicine (CAM). The Penn Sim Center is a state of the art facility that provides high quality training for physicians, students, and healthcare professionals throughout The University of Pennsylvania Healthcare System (UPHS), The University of Pennsylvania School of Medicine, neighboring institutions, and the global healthcare field with the goal of improving patient safety and satisfaction with increased efficiency. Please refer to the Penn Medicine Clinical Simulation Center website for additional details about mission and vision, staff, courses, calendar of events, and news. The center is located at Penn Medicine at Rittenhouse which is a state of the art 22,000 square foot facility. The center includes human patient simulators set in realistic hospital settings for team training and task trainers for individual instruction in procedural skills such as fiberoptic endoscopy. Additional facilities include procedure rooms, multi-purpose skills labs, conference rooms, locker rooms and lounge, computer labs, and administrative offices. All sessions at the Sim Center can be viewed, manipulated, recorded, and replayed via a technologically advanced control center located in the core of the facility. The control room also enables viewing of live procedures at HUP.

Second and third year fellows will also be required to perform endoscopy during their inpatient and outpatient rotations. As addressed elsewhere in this handbook and the Division of Gastroenterology website, second and third year fellows must follow the requirements set forth by their NIH T-32 training grants for basic science and Master’s in Clinical Epidemiology (MSCE) tracks. Protected time for research is mandatory during these years.
As addressed elsewhere in the manual and the Division of Gastroenterology web site, fellows will be required to perform procedures on the patients during inpatient rotations at HUP, PPMC, and PVAMC. Preferably, fellows should also perform necessary procedures on their patients whom they see in the required continuity clinic.

Gastroenterology fellows will have formal instruction and will demonstrate competence in the performance of the following procedures. A skilled preceptor will be available to teach and supervise the fellows in the performance of these procedures which must be documented in the fellow’s record giving the indications, outcomes, diagnoses, and supervisor(s). Assessment of procedural competence should not be based solely on a minimum number of procedures performed, but on a formal evaluation process. These evaluations will include objective performance criteria (e.g. rate of successful cecal intubation for colonoscopy). Fellows will become proficient in the performance of esophagogastroduodenoscopy (EGD) and they must perform a minimum of 130 supervised studies. Fellows will become proficient in esophageal dilation and they must perform a minimum of 20 supervised studies. Fellows will become proficient in flexible sigmoidoscopy and they must perform a minimum of 30 supervised studies. Fellows will become proficient in colonoscopy with polypectomy and fellows must perform a minimum of 140 supervised colonoscopies and 30 supervised polypectomies. Fellows will become proficient in percutaneous liver biopsy and they must perform a minimum of 20 supervised studies. Fellows will become proficient in percutaneous endoscopy gastrostomy (PEG) and they must perform a minimum of 15 supervised studies. Fellows will become proficient in biopsy of the mucosa of the esophagus, stomach, small bowel, and colon as well as demonstrate proficiency in gastrointestinal motility studies and 24-hour pH monitoring. Fellows will become proficient in upper and lower gastrointestinal non-variceal hemostasis and they must perform 25 supervised cases including 10 cases with active bleeding. Fellows will become proficient in variceal hemostasis and they must perform a minimum of 20 supervised cases including 5 cases with active bleeding. Fellows will become proficient in other diagnostic and therapeutic procedures utilizing enteral intubation. Fellows will become proficient in moderate and conscious sedation. The gastroenterology program at HUP, PPMC, PVAMC, and CAM will provide formal instruction and clinical experience in the interpretation of the following diagnostic and therapeutic techniques and procedures: gastric, pancreatic, and biliary secretory testing, enteral and parenteral nutrition, pancreatic needle biopsy, ERCP in its diagnostic and therapeutic applications, imaging of the digestive system including but not limited to ultrasound, endoscopic ultrasound, computed tomography, magnetic resonance imaging, vascular radiography, contrast radiography, nuclear medicine, and percutaneous cholangiography.