**Purpose**

To establish a procedure on how to gross bowel specimens for ulcerative colitis, Crohn’s disease or indeterminate colitis.

**Procedure**

1. Determine the operative procedure:
	* Right Hemicolectomy: One end is terminal ileum, the other is right colon.
	* Partial Colectomy: One piece of any length is submitted. Both ends are colon.
	* Total Abdominal colectomy: the entire abdominal colon from cecum through sigmoid. The terminal ileal margin (the proximal resection margin) may be hidden in a row of metal staples on the medial wall of the cecum
	* Total Proctocolectomy: These days, total proctocolectomies are performed for ulcerative pancolitis or familial adenomatous polyposis, and an ileal pouch-anal sphincter anal-anastomosis is generally also performed. This may be one piece with terminal ileum at one end and anus at the other. However, two pieces may be submitted. In such a case, the proximal end of resection will still be terminal ileum, the distal end will still be anus, and there will also be two ends that are rectosigmoid colon. These latter ends are really not resection margins but are simply the two ends of sigmoid or descending colon at the point where the anterior segment is removed, separately from the posterior segment. Do not sample these two colonic ends as resection margins. The terminal ileal margin (the proximal resection margin) may be hidden in a row of metal staples on the medial wall of the cecum.
2. Open the specimen along the anterior tenia, unless there is a focal lesion. Photograph all specimens in the following way:
	* One overview of the entire specimen laid out in the normal anatomic way with cecum on the lower left, transverse colon along the top and descending colon, sigmoid and rectum on the right (see diagram). Identify the transverse colon by the attachment of the omentum.
	* Selected close-up shots of different mucosal patterns or specific lesions such as tumors, giant inflammatory pseudopolyps, strictures, big ulcers, etc.
	* Note the location of each shot.
	* Pin the entire specimen flat on a Styrofoam sheet and immerse in formalin.

***Description***

Part of bowel removed, length of specimen.

General features: uniform or variable from one area to another.

Mucosa: type of lesions, extent of ulcers (linear or transverse or serpiginous or mixture; continuous or skip), depth of ulcers, pseudopolyps, hemorrhage, fissures (only seen on sections through the wall),

Wall: thickening or thinning (focal or diffuse), atrophy, fibrosis, necrosis.

Serosa: exudate, adhesions. Thickness of mesentery, fat-wrapping.

Other lesions such as diverticula, masses or polyps.

**Orient the Specimen**

1. Find the ileal margin. Sometimes, this is only a line of sutures or staples in the medial cecal wall. If stapled, cut off the few millimeter of ileum that contains the staples.
2. Find the ileocecal valve.
3. Find the transverse colon - that area with a mesenteric pedicle attachment and omentum
4. Find the sigmoid colon - a smaller mesenteric pedicle.
5. Place the specimen on the cutting board as illustrated in the diagram.

**Sections for Histology:**

Preferably, samples are to be taken in a longitudinal direction, but there may be exceptions. Always sample from proximal end to distal. Routine samples include:

* + Ileum margin: If more than 2 cm of ileum is included, best sample is along the mesenteric attachment. This should be a cross section.
	+ Terminal ileum, if more than 4 cm of ileum were resected, one cross section along the mesenteric attachment.
	+ Ileocecal valve. If only a nubbin of ileum was resected, then the only ileal section will include the valve.
	+ Appendix (as for appendectomy specimen).
	+ Cecum
	+ Ascending colon
	+ Hepatic flexure
	+ Mid transverse
	+ Splenic flexure
	+ Descending colon
	+ Sigmoid colon
	+ Rectum
	+ Ano-rectal junction - there is no need to take the entire anal circumference; just one cut across the junction longitudinally.
	+ No lymph nodes, unless carcinoma is suspected.
	+ In addition, unusual abnormalities, such as strange ulcers, polyps, masses, strictures.

Note: If the disease is segmental or asymmetric, make certain that both involved and uninvolved areas are sampled. They can often be included in the same cut.