Goals and Objectives: At the end of the course, the MIS fellow will be familiar with GI endoscopes, towers, and the instruments used for endoscopy and endoscopic surgery. The fellow will also be able to identify the most common types of GI pathology and options for management.

Course Chairs: Bryan Sandler, M.D., F.A.C.S and Jeff Marks, M.D., F.A.C.S.

Course Faculty: Eric Pauli M.D., Michael Ujiki M.D., Jeff Hazey M.D., David Kunkel M.D., Mike Kochman M.D., Leena Khaitan M.D., Ted Trus M.D., Ozanan Meireles M.D., Garth Jacobsen M.D., Sam Eisenstein M.D., Amber Shada M.D., Joslin Chevrie M.D., Marcos Michelotti M.D., Brian Smith M.D., Nikolai Bildzukewicz M.D.

Thursday, September 20, 2018

3:00-8:00pm Registration at the La Jolla Sheraton

7:00-8:30pm Faculty & Fellows Welcome Reception at the Sheraton La Jolla – Coast Ballroom

8:00-8:15pm Faculty Briefing Bryan Sandler

Friday, September 21, 2018

6:30am Meet in hotel lobby to shuttle to UCSD Center for the Future of Surgery

6:45am Breakfast- location CFS Learning Center, room 145

7:15-7:30am Introduction: Why you’re here, what we’re going to learn. Bryan Sandler & Jeff Marks

7:30-8:15am Panel I: Masses, Polyps, and Ulcers with Biopsy and Polypectomy Techniques (45 minutes)
Cases will be presented that illustrate the use of endoscopic biopsy forceps and snare, with emphasis on the type of pathology that are best suited for each of these instruments. Endoscopic video clips will be presented to enhance the fellow’s ability to recognize GI endolumenal pathology.
Moderator: Ted Trus
Panelists: Ozanan Meireles, Mike Kochman, Marcos Michelotti

Case 1: Colon cancer (5 minutes)
Biopsy forceps (cold) and biopsy brush

Case 2: Pedunculated polyp (5 minutes)
Snare Cautery Polypectomy

Case 3: Sessile cecal polyp (5 minutes)
Cold Snare Polypectomy

Case 4: Rectosigmoid hyperplastic polyp (5 minutes)
Cold vs hot biopsy forceps; mini-snare
8:15-8:30am  **Bleeding Management Overview**  
**Presenter:** David Kunkel

Energy sources: Different types of energy sources and instruments will be presented along with application techniques for GI endoscopy.

- Overview of the Tools of the Trade
- Overview of multimodal therapy
- Overview of clip types and capabilities

8:30-9:00am  **Panel 2: Control of Hemorrhage with Case Presentations:** Bleeding Ulcers, Anastomoses, GAVE, Post-Polypectomy Bleeding, Radiation Proctitis

Cases will be presented that illustrate how the types of energy sources are used in GI endoscopy, specifically, coaptive coagulation, radiofrequency ablation, Argon plasma and other laser applications. Endoscopic video clips will be presented to enhance the fellow’s ability to recognize GI endoluminal pathology.

**Moderator:** Bryan Sandler  
**Panelists:** David Kunkel, Leena Khaitan, Amber Shada

- Bleeding Management Cases- Thermal (5 minutes)  
- Prophylactic Vessel Management- Coag grasper (5 minutes)  
- Vascular lesion (AVM, DeLafoy) - Gold probe (5 minutes)  
- GAVE/Proctitis- APC (5 minutes)  
- Polyp Bleeding Prevention- Bipolar cautery/Hot Biopsy (5 minutes)

9:00-9:15am  **Clips, Suture and Nets:**

Types of endo-clips, suturing devices and retrieval nets utilized in GI endoscopy will be introduced along with the appropriate uses of these instruments.  
**Presenter:** Eric Pauli

9:15-9:30am  **Break**  
*(Refreshments provided in the CFS Learning Center –Room 145)*
9:30-10:15am  **Panel 3: Non-thermal Bleeding Case Presentations**

Cases will be presented that illustrate how the types of endoclips, suturing devices and retrieval nets are utilized in GI endoscopy, specifically, endoclips for control of hemorrhage, suturing devices for closure of a mucosotomy and a Roth net for either retrieval of a specimen or foreign body. Endoscopic video clips will be presented to enhance the fellow’s ability to recognize GI endoluminal pathology.

**Moderator:** Jeff Marks  
**Panelists:** Eric Pauli, Mike Kochman, Brian Smith, Marcos Michelotti

- Bleeding Management – Non-Thermal Cases (5 minutes)  
- Variceal Bleeding – Banding (5 minutes)  
- Variceal Bleeding – Blakemore tube (5 minutes)  
- Peptic Ulcer – Injection therapy (5 minutes)  
- Peptic Ulcer – topical medications (fibrin sealant) (5 minutes)  
- Gastric Varix – Cyanoacrilate Injection (5 minutes)  
- Staple line bleeding – Endoclip (5 minutes)  
- Peptic ulcer bleeding – OTSC (5 minutes)  
- Bleeding management – Overstitch (5 minutes)  
- Polyp Bleeding Prevention – Endoloop (5 minutes)

10:15-10:30am  **Dilators and Stents:**

Appropriate uses of dilators (e.g., Maloney, Savory, balloon, pneumatic) will be presented which are utilized in GI endoscopy to dilate benign, malignant esophageal strictures and esophageal stents used for treatment of esophageal strictures and perforation.

**Presenter:** Jeff Hazey

10:30-11:15am  **Panel 4: Stricture and perforation management**

Illustration of the types of dilators and stents and how they are used in GI endoscopy, specifically, dilation of a benign esophageal stricture (e.g. balloon, Savory), treatment of a benign or malignant esophageal stricture with a stent, and treatment of an esophageal perforation with a covered stent. Endoscopic video clips will be presented to enhance the fellow’s ability to recognize GI endoluminal pathology.

**Moderator:** Eric Pauli  
**Panelists:** Jeff Hazey, David Kunkel, Joslin Chevrie

Case 1: Anastomotic stricture (GJ post gastric bypass)  
Balloon dilation  
(10 minutes)

Case 2: Schatzki’s ring  
Balloon dilation (can traverse)  
(5 minutes)

Case 3: Esophageal cancer  
(10 minutes)
Stent (fully vs. partially covered)

Case 4: Colon cancer  
Stent (uncovered)  
(5 minutes)

Case 5: Sleeve gastrectomy leak  
Stent (covered, multiple)  
(10 minutes)

Case 6: Radiation induced cervical stricture  
Savary dilators, wire-guided, fluoroscopy  
(5 minutes)

11:15-11:35am  **Advanced Endoscopic Techniques**  
Endoscopic Mucosal Resection, Endoscopic Submucosal Dissection, Mucosal Ablation, and Per-Oral Endoscopic Myotomy: Introduction of tools and appropriate technique application of endoscopic mucosal resection, endoscopic submucosal dissection, mucosal ablation with either radiofrequency ablation or cryoablation, and per-oral endoscopic myotomy.  
**Presenter:** Michael Ujiki, Garth Jacobsen

11:35-11:55am  **Endoscopic Weight Loss Procedures**  
**Presenters:** Bryan Sandler

11:55-12:15pm  Obtain lunchboxes from CFS Learning Center, room 145 and return to lecture hall

12:15-12:45pm  **Lunch / Endoscopic GERD Management** (20 mins) and Lab Overview (10 mins)  
**Presenter:** Nikolai Bildezukewicz

1:00-5:00pm  **Hands-on Laboratory** (CFS staff escort participants to Lab)

*(Refreshments and Snacks provided in the CFS Lobby - LL Room 151)*

**Instructors:** Ozanan Meireles, Garth Jacobsen, Sam Eisenstein, Amber Shada, Joslin Chevrie, Marcos Michelotti, Brian Smith, Nikolai Bildezukewicz

Group I: 15 stations 30 fellows (Duration: 4 hours)

1. Tower Setup and Trouble Shooting  
2. Foreign Body Removal  
3. Sclerotherapy  
4. Variceal Banding  
5. Tattoo  
6. Saline Lift Polypectomy  
7. Management of Bleeding  
8. Application of Clips  
9. Polyloop Placement  
10. Balloon Dilation  
11. Enteral Access (PEG, PEG-JET)
12. POEM/POP

Group II: 10 stations 30 fellows (Duration: 4 hours- 24 minutes per station)

Table 16- EMR (Mike Ujiki)
Table 17- EMR (Mike Ujiki)
Table 18- TIF procedure for Reflux (Jeff Hazey)
Table 19- EndoFLIP (David Kunkel)
Table 20- Apollo overstitch (Michael Kochman)
Table 21- Apollo overstitch (Michael Kochman)
Table 22- Ovesco (Leena Khaitan)
Table 23- Lower Stenting (Jeff Marks)
Table 24- Upper Stenting (Eric Pauli)
Table 25- Barrx (Ted Trus)

5:15pm Meet in Center for the Future of Surgery for shuttle back to hotel

6:30pm Meet in hotel lobby to shuttle to (Casa Guadalajara) for Faculty & Fellows Dinner (1st shuttle depart Casa Guadalajara, return to hotel at 9pm and 2nd shuttle depart Casa Guadalajara, return to hotel at 12pm)

Saturday, September 22, 2018

8:00am Meet in Hotel lobby to shuttle to UCSD CFS

8:15-9:00am Breakfast in the CFS Learning Center, room 145

9:00-1:00pm Hands-on Lab: Group I will perform the techniques in Stations 16-25. Group II will perform the techniques in stations 1-15.

11:00am Break (Refreshments and Snacks provided in the CFS Lobby – LL room 151)

1:00pm Box lunch and Evaluations – CFS Learning Center, room 145

2:00pm Airport shuttle departs to San Diego International Airport (SAN)