**EXECUTIVE SUMMARY**

**Program Overview**
The *15th Annual Surgery of the Foregut Symposium* will provide surgeons and other health care professionals a wide range of information related to new and well established topics in gastrointestinal surgery. Attendees will become familiar with surgical aspects of conventional, laparoscopic, robotic, and endoscopic surgery of the foregut. In addition, attendees will acquire in-depth information related to the diagnosis and management of disease processes of the esophagus, stomach, duodenum, liver, and biliary tree. The program will review complex case scenarios and complications after foregut procedures.

The *3rd Annual International Congress of Fluorescent Guided Imaging Surgery* is focusing on the new era of research on near infrared (NIR) imaging. The concept is based on the utilization of infrared light as a tool to guide surgery. This unique course will offer an updated and better understanding of the novel technique. Our goal is to foster the exchange of information and ideas on fluorescence imaging and its applications in surgery.

**Topics**
- Foregut Surgery
- Bariatric Surgery
- Fluorescent Guided Imaging Surgery
- Live Surgery Day

**Targeted Learners**
Physicians, surgeons, fellows, residents, nurses, and allied health professionals in the fields of surgical endoscopy, general surgery, hepato-pancreatic and biliary surgery, as well as laparoscopic and bariatric surgery.

**Learning Objectives**
After completing this educational activity, participants will be able to do the following:
- Review the basic concept of fluorescent imaging techniques and alternative fluorescent dyes, and discuss different applications of fluorescent imaging
- Review the indications for recent inguinal hernia repair, analyze the reasons for early and late recurrent, and discuss outcomes of recurrent inguinal hernia repair
• Identify technical pitfalls when repairing parastomal hernias, familiarize with alternative approaches to ventral hernia repair, and review mesh utilization when performing laparoscopic vs. open repairs
• Discuss how to recognize hiatal hernias, review technique of recurrent hiatal hernias repair using bared sutures, and present complications of repair
• Recognize signs and symptoms of achalasia, assess how to best manage complications such as epiphrenic diverticula, and review the new treatment modalities
• Provide the audience with surgical approaches to esophageal cancer, distinguish treatment modalities based on pathological exam, and discuss outcomes and oncological approaches
• Evaluate new approaches to Foregut disorders, analyze new techniques, and present technical pitfalls of reoperative foregut surgery
• Discuss diagnostic algorithms of CBDS’s, distinguish outcomes of endoscopic, laparoscopic and combined treatment modalities, and review of long term complications
• Identify common preventative measures to decrease the incidence of CBDI, analyze most common reasons for CBDI, and debate the best treatment modalities for CBDI
• Discuss the oncological application of HIPEC, discuss the most common diseases processes treated by HIPEC, and review the current literature on this complex approach
• Examine basic surgical techniques of Whipple procedure, discuss best approaches and how to prevent complications
• Appraise indication of liver transplantation, discuss current approaches of living related vs. cadaveric organ transplantation, and most common complications
• Describe mechanism of action of new drugs to treat obesity, analyze new endoscopic treatment modalities, and review neurostimulation as a new approach
• Present the current epidemiological data and trends of Gastroparesis, discuss best non-surgical treatment modalities, and analyze the outcomes of most common surgical approaches
• Present most common reoperative approaches, technical pitfalls of reoperative surgery, and discuss how to identify and manage most frequent complications

EDUCATIONAL NEEDS ASSESSMENT AND GAP ANALYSIS

• New innovations in laparoscopic surgery to provide up to date current techniques and recommendations that will help to improve outcomes and quality of care.
• Fluorescent imaging techniques allow surgeons to identify vital structures while operating. The latter will result in faster and safer surgery avoiding unnecessary injuries. In addition by coupling the fluorescent dye to antibodies surgeons might recognize tumors.
• Understanding and management of foregut procedures
• Physicians lack awareness on how to diagnose and treat GERD.
• Recognize the need to perform gastric qualifying studies.
• Experience with different types of bariatric surgical procedures that will help morbidly obese patients resolve their comorbidities
• Bariatric procedures constantly evolve with wide variations of techniques and modifications. There is no consensus over some common preventive measures, for example: no common agreement on over-sawing staple line in sleeve gastrectomy and no consensus on closing mesenteric defects in gastric bypass.
The scope of laparoscopic surgery is expanding everyday. Laparoscopy went from strictly a gynecological procedure to include the vast majority of foregut surgery. In the recent developments the world of laparoscopy has been invading surgery of the pancreas and complex biliary procedures. Currently laparoscopic pancreatic resection can safely duplicate all of the open pancreatic resection techniques.

The laparoscopic approach to distal pancreatectomy has become the gold standard over the last few years, it faces 2 problems: first, sparing the spleen with or without ligation of the splenic vessels, and second controlling leak from the pancreatic remnant and pancreatic fistula. Laparoscopic pancreaticoduodenectomy was first described by Gagner and Pomp in 1994. Worldwide experience with the totally laparoscopic approach to pancreaticoduodenectomy has grown and the procedure is being increasingly considered feasible and safe. Postoperative morbidity rate of laparoscopic pancreatic surgery are comparable to those reported after open surgery. Postoperative pancreatic fistula remains the most frequent specific major complication after pancreatic resection, however in review of literature no significant difference exists between laparoscopic and open pancreatic surgery.

Current literature review indicates that the laparoscopic approach to distal pancreatectomy should be considered the gold standard approach for benign and low-grade malignant disease in experienced hands. In properly selected patients with periampullary malignancies, laparoscopic pancreaticoduodenectomy is feasible and safe, though its potential advantages remain to be demonstrated. Surgeons need to understand which pancreatic procedures/lesions are suitable to laparoscopic resection, laparoscopic technique, and the correct work-up.


The correct indentificaion of extrahepatic biliary ducts is a matter of concern for both the hepato-biliary and general surgeons around the world. The rate of biliary ducts injuries during laparoscopic cholecystectomy (LC) is described in as high as 0.4%. Intra-operative cholangiography (IOC) is used to aid the visualization and identification of anatomical structures during laparoscopic cholecystectomies. However, the increase of operative time, the cost, and the exposure to radiation of the patient and surgical staff limit the routine application of IOC. IOC has to be demonstrated to allow earlier recognition of the injury, but it does not decrease their incidence. Fluorescent cholangiography and imaging techniques seem to be promising techniques that can be applied to different areas of general surgery.

Paraesophageal hernias are difficult surgical problems that often need repair. Meticulous work-up and surgical technique are required for optimal results. The underlying surgical principles for successful repair include reduction of hernia contents, removal of the hernia sac, closure of the hiatal defect, and an antireflux procedure. Debate remains whether a transthoracic, transabdominal, or laparoscopic approach is best with good surgical outcomes being reported with all three techniques. Placement of mesh to buttress the hiatal closure is reported to reduce hernia recurrence and if combined with the use of biologic mesh, provides relief of symptoms and a durable repair. Recent evidence supports the use of prosthetic reinforcement material during laparoscopic hiatal hernia repair; however, the search for appropriate prosthetic materials is still under investigation.


Gastroesophageal reflux disease is by far the most prevalent disorder of the foregut. For a long time during the twentieth century, surgical therapy was the mainstay of treatment and the only chance for cure for patients with severe symptoms. Later, after introduction of proton pump inhibitor therapy in the early 1990s, surgical therapy was considered widely a second choice option due to its potential morbidity and side effects. More recently, however, there is growing evidence that long-term antisecretory therapy might be associated to a number of adverse effects such as osteoporosis and increased risk of cardiovascular events. This is the rationale why interventional and surgical options are coming back into focus. Today, there are several modalities to treat gastroesophageal reflux disease (GERD) (medications, endoscopic therapies, surgery) and such therapies can be used either singly, or in
tandem, or in combination with the others, aiming at "normalization" of the patient's GERD-related quality of life and, if possible, esophageal acid exposure. Several intermediate end points or clinically significant outcomes have not been reached by some therapeutic modalities and no single modality is or can be perfect. Esophageal acid exposure time and the prevalence of heartburn are higher after Laparoscopic Anterior Fundoplication compared with Laparoscopic Posterior Fundoplication. In the short-term this is counterbalanced by less severe dysphagia. However, dysphagia scores become similar in the long-term, with a persistent substantial increase in prevalence of heartburn and PPI use after LAF. The reoperation rate is twice as high after LAF as well, mainly due to reinterventions for recurrent GERD. The prevalence of gas-related symptoms is similar. These results lend level 1a support for the use of LPF as the surgical treatment of choice for GERD. At long-term follow-up the laparoscopic Nissen fundoplication has a similar long-term subjective symptomatic outcome as the open procedure but laparoscopic Nissen fundoplication is associated with a significantly lower incidence of incisional hernias and defective fundic wraps at endoscopy, defining laparoscopic Nissen fundoplication as the procedure of choice in surgical management of gastro-oesophageal reflux disease. Statistically significant improvements in these intermediate end points have been shown in "some" but not all studies. Although healing of esophagitis can be accomplished with either medical or surgical therapy, there is inadequate data with endotherapies, because most patients treated with endotherapies have had prior trials of proton pump inhibitors (PPIs) and hence healed their esophagitis. Effective prevention of complications, such as esophageal adenocarcinoma, remains challenging for all modalities. Patients who have not normalized their GERD-related quality of life with once or twice daily PPI therapy should undergo functional esophageal evaluation with pH testing and esophageal motility study and they should be evaluated by both an endoscopist and a surgeon. The decision on how to proceed should be made on the basis of the criteria for endotherapy and surgery, availability of local endoscopic and surgical expertise and patients' preference. Such multimodality therapy model is in many ways similar to the long-term management of coronary artery disease where pharmacotherapy, angioplasty, and bypass surgery are frequently used in tandem or in combination. Multimodality therapy aiming at normalization of GERD-related quality of life is an option today, and should be available to all patients in need of therapy. The target population for GERD endotherapy currently consists of PPI-dependent GERD patients, who have a small (<2-cm-long) or no sliding hiatal hernia, and without severe esophagitis or Barrett esophagus. Thus far, only Stretta and the NDO plicator have been studied in sham-controlled trials. Registries of complications suggest that these techniques are relatively safe, but serious morbidity, including rare mortality have been reported. All can be performed on an outpatient basis, under intravenous sedation and local pharyngeal anesthesia. Sphincter augmentation with the LINX® Reflux Management System is a surgical option for patients with chronic gastroesophageal disease (GERD) and an inadequate response to proton pump inhibitors (PPIs). Future comparative studies with predetermined clinically significant end points, validated outcome measures, prolonged follow-up, and complete complication registries will eventually determine the precise role of endoscopic procedures for the patients with GERD.

Zenker's diverticulum (ZD) is the most common type of diverticulum in the upper gastrointestinal tract with a reported prevalence of 0.01% to 0.11% in the general population. Most patients are elderly and present with symptoms of dysphagia. Serious complications include aspiration and malnutrition. A variety of open and endoscopic surgical approaches for the treatment of Zenker's diverticulum have been described. The most common treatments are open surgical diverticulectomy with or without cricopharyngeal myotomy and rigid endoscopic myotomy. In recent years, growing evidence has shown that the endoscopic techniques are superior to the open approaches in many aspects. Among the endoscopic techniques, endoscopically stapled diverticulostomy (ESD) appears to have better efficacy and safety than the other endoscopic techniques. Recently, cricopharyngeal myotomy using flexible endoscopes has been described as a treatment option for symptomatic ZD. Endoscopic treatment consists of the division of the septum between the diverticulum and the esophagus, within which the cricopharyngeal muscle is contained. Diathermic monopolar current, argon plasma coagulation, and laser have been used to incise the muscular septum with satisfactory results. The main limitation of endoscopic treatment is the occurrence of complications. Perforation and hemorrhage are reported in as many as 23% and 10% of patients, respectively.


As a result of the current, largely ineffective, non-surgical options for treating obesity, the past decade has witnessed an exponential increase in the number of bariatric procedures performed. As a consequence, an increasing number of patients are presenting to non-specialist units with complications following bariatric procedures. The three most common procedures performed are the gastric band, vertical sleeve gastrectomy, and the Roux-en-Y gastric bypass. Immediate complications such as anastomotic leak, bleeding, and pulmonary embolism are usually dealt with by the operating team. Recognition of these complications is important, but may be challenging owing to difficulty in examining these patients. Tachycardia and a raised C-reactive protein level may be the only objective sign. Adjustable gastric band is popular due to its low rates of morbidity short term. Late complications are not infrequent and the reoperation rate is 10-20 percent. The two main complications are band slippage and erosion. Band slippage occurring in up to 15-20 percent of patients, most frequently occurs distally, although proximal migration may occur. Band erosion occurs in up to 4 percent of patients with a gastric band and is typically a late complication caused by ischemia due to pressure on the gastric wall. Providers must understand the procedure and its complications to be able to treat long-term complications.

Rapid weight loss is associated with the formation of cholesterol gallstones; some 13-16 percent of patients develop gallstones within 6 months of the operation. Patients with suspected cholelithiasis require specialist input. After a previous gastric bypass the performance of standard ERCP is technically difficult and novel endoscopic techniques have been reported. In the absence of experience of any of these novel techniques, the only remaining viable alternative is to remove the CBD stones during surgery, using either the transcystic approach or by formal CBD exploration.
The overall incidence of obstruction was found to be 4.4 percent, with a mean time to presentation of 313 days after gastric bypass. One of the biggest diagnostic dilemmas is obstruction of the biliopancreatic limb. Patients typically present with little or no vomiting or abdominal distention. This however is a surgical emergency and it is important to always keep this in mind. Laparoscopy is an acceptable first option in patients with an obstruction but often a formal laparotomy is indicated.


According to the American Society of Metabolic and Bariatric Surgery, the number of bariatric procedure steadily and rapidly increased in the last decade, peaking up to over 150,000 annually. Safety and quality of the surgery improved, mainly through introducing laparoscopy, resulting in decreased in-hospital mortality to 0.10%. Despite trends toward declining surgery-related deaths, the safety of bariatric surgery is uneven from hospital to hospital and from procedure to procedure, concerning payers, insurance firms, malpractice lawyers and patients advocacy group. Overall, up to 10% percent of bariatric surgery patients experienced perioperative complications, from which about 3% are serious complications. As overall number of bariatric procedures increases, there is an urging necessity of comprehensive education on prevention and management of complications. This multidisciplinary symposium will serve as a comprehensive discussion and will allow attendees to stay up to date with new and current techniques and recommendations that will help to improve outcomes and quality of care.

Medical Guidelines:
- https://asmbs.org/resources
Faculty

Program Directors

Raul J. Rosenthal, MD
Chief of Staff
Chairman, Department of General Surgery
Director, Bariatric and Metabolic Institute
Cleveland Clinic
Professor of Surgery, Herbert Wertheim College of Medicine at FIU
Weston, Florida

Matthew Walsh, MD
Professor of Surgery
Rich Family Distinguished Chair of Digestive Diseases
Chairman, Department of General Surgery, Digestive Disease Institute
Chairman, Academic Department of Surgery, Education Institute
Cleveland Clinic
Cleveland, Ohio

Guest Faculty
Juan Santiago Azagra, MD
Michael Bouvet, MD, FACS
Racquel S. Bueno, MD, FACS
Benjamin Cadiere, MD
Guy-Bernard Cadiere, MD, PhD
Avram Cooperman, MD, FACS
Bernard D’Allemagne, MD
Eric DeMaria, MD, FACS, FASMBS
Alberto Raul Ferreres, MD, FACS (Hon)
Michel Gagner, MD, FACS, FRCSC., FASMBS
Kelvin Higa, MD, FACS, FASMBS
Jacques Himpens, MD, PhD
Keith Lillemoe, MD
John M. Morton, MD
Thien K. Nguyen, MD
M. Ohrringer, MD
Doug Pleskow, MD
Walter Pories, MD
Almino Cardosa Ramos, MD, FASMBS
Diego C. Reino, MD
Eben Rosenthal, MD
Michael Rosenthal, DM
Gabriel Schnickel, MD
Scott Shikora, MD
Tyler Stevens, MD
Alan Wittgrove, MD
Natan Zundel, MD, FACS, FASMBS

Cleveland Clinic Faculty
Kareem Abu-Elmagd, MD
Sricharan Chalikonda, MD, MHA, FACS
Tolga Erim, DO
John Fung, MD, PhD
Emanuele Lo Menzo, MD, PhD, FACS, FASMBS
Charles Miller, MD
Luis Lara, MD
Ronnie Pimentel, MD
Jeffrey Ponsky, MD
Michael Rosen, MD
Phillip Schauer, MD
Alison Schneider, MD
Conrad Simpfendorfer, MD, FACS
Samuel Szomstein, MD, FACS, FASMBS
Andres Tzakis, MD, PhD
Andrew Ukleja, MD
Melissa Watson, MD
Steven Wexner, MD
James Young, MD
15th Anniversary  
Surgery of the Foregut Symposium

LIVE SURGERY DAY  
Wednesday, February 3  
OPTIONAL PROGRAM  Registration and additional fee required  
LOCATION: Boca Raton Resort | Mizner Center | Mizner Room

7:30am-3:00pm  
7:30am  Registration (South Registration Desk)  
8:00am  Introduction and Welcome Remarks  
Raul Rosenthal

LIVE SURGERY  
Re-operative Foregut and Bariatric Surgery  
Raul Rosenthal (Florida)  
Paraesophageal Hernia Repair  
Raul Rosenthal (Florida)  
Fluorescent Image Guided Surgery/Cholangiogram  
Raul Rosenthal (Florida)  
Pancreatic and Robotic Surgery  
Matthew Walsh/Sricharan Chalikonda (Ohio)

3:30-7:30pm  
Exhibitor Hall Grand Opening and Reception

Thursday, February 4  
OPTIONAL PROGRAM  Registration and additional fee required  
LOCATION: Boca Raton Resort | Mizner Center | Grand Ballroom

6:45am  Registration and Continental Breakfast  
7:30am  Welcome and Introduction  
Raul Rosenthal and Norihiro Kokudo

7:40–8:40am  FIGS BASIC PRINCIPLES (Animal Studies)  
Moderators: Jason Warram and Fernando Dip  
7:40am  Why should we Use Near Infrared Guided surgery?  
Michelle Diana  
7:50am  Fluorescence Image-Guided Surgery: Principles and Current Status  
Sylvain Gioux  
8:00am  The Present and Future of Image-Guided Surgery in Nano Oncology  
Michelle Bradbury  
8:10am  Defining Cutting Edge: use of molecular imaging to define tumor margins  
Jim Basilon  
8:20am  Q&A/Discussion

8:40–10:00am  FLUORESCENT GUIDED IMAGING IN CANCER (Preclinical work)  
Moderators: Michael Bouvet and Raul Rosenthal  
8:40am  Antibody based imaging of head and neck cancer  
Eben L. Rosenthal  
8:50am  Ureteral imaging: old and new dyes  
Laurents P.S. Stassen
9:00am Targeted and non-targeted agents for fluorescent guided HPB surgery
Alex Vahrmeijer
9:10am Fluorophore-Conjugated Antibodies for Detection and Resection
of GI Cancers
Michael Bouvet
9:20am Use of pH sensitive nano probes for cancer imaging
Baran Sumer
9:30am Molecular Fluorescence Image-Guided Cancer Resection: From Bench
to Bedside
Samuel Achilefu
9:40am Q&A/Discussion

10:00am Break and Exhibits

10:30-11:40am FLUORESCENT GUIDED LYMPHATIC MAPPING
Moderators: Takeaki Ishizawa and Fernando Dip
10:30am Fluorescence imaging in colorectal anastomoses
Steven Wexner
10:40am Fluorescence guided lymphadenectomy in laparoscopic colorectal resection
Luigi Buoni
10:50am Intraoperative control of colorectal anastomoses – routine use of ICG fluorescence angiograph
Thomas Carus
11:00am Impact of Fluorescence in robotic colorectal surgery
Giuseppe Spinoglio
11:10am ICG to prevent anastomotic leakage in upper and lower GI tract surgery
Martin K. Walz
11:20am Q&A/Discussion

11:40am-12:40pm SELECTED TOPICS IN FIGS AND LAPAROSCOPY
Moderators: Eben L. Rosenthal and Norihiro Kokudo
11:40am Intra-operative fluorescent cholangiography versus X-ray cholangiography during laparoscopic cholecystectomy for complicated gallstone disease
Lars M.L. Lehrskov
11:50am Utility of ICG fluorescence imaging in endocrine surgery
Eren Berber
12:00pm Needle based confocal laser endomicroscopy for diagnosis of pancreatic cystic lesions
Somashekar Krishna
12:10pm Understanding Fluorescent Cholangiography
Luis Sarotto
12:20pm Q&A/Discussion
12:40pm Lunch and Exhibits

1:40-2:50pm SELECTED TOPICS IN FIGS AND LAPAROSCOPY
Moderators: Raul Rosenthal and Fernando Dip
1:40pm 100 consecutive gastric sleeve resections with intraoperative ICG Fluorescence angiography – safer or unnecessary?
Thomas Carus
1:50pm Use of Fluorescence in a teaching program
Fernando Dip
2:00pm The role of fluorescent imaging in Robotic Surgery
Enrique Fernando Elli
2:10pm The use of near infrared fluorescent cholangiography in acute cholecystitis
Dany Scherwinter
2:20pm Comparative study to detail accuracy of ICG vs. IOC during
3:20–4:40pm FIGS AND HPB SURGERY

Moderators: Conrad Simpfendorfer and Andreas Tzakis

3:20 pm Impact of Fluorescence in (robotic) HPB surgery Giuseppe Spinoglio
3:30 pm Fluorescence Image-Guided Surgery: From Open to Lap, Lap to Open Takeaki Ishizawa
3:40 pm Anatomic liver resection and liver transplantation guided by indocyanine green-fluorescence imaging Norihiro Kokudo
3:50 pm Usefulness of indocyanine green-fluorescence imaging during laparoscopic liver resection Yoshikuni Kawaguchi
4:00 pm Utility of ICG Camera in liver transplantation Eric Vibert
4:10 pm Utilizing Fluorescent imaging devices pancreatic cysts Somashekar Krishna
4:20 pm Q&A/Discussion

4:40–6:20pm FLUORESCENT GUIDED SURGERY IN CANCER – CLINICAL STUDIES

Moderators: Eben L. Rosenthal and Michael Bouvet

4:40 pm Rapid intraoperative imaging of tiny tumors by newly developed fluorogenic probes for aminopeptidases and glycosidases. Yasuteru Urano
4:55 pm Intraoperative Pulmonary Neoplasm Identification using Near-Infrared Fluorescence Imaging Hyun Koo Kim
5:05 pm Photo immunotherapy for diagnosis and treatment of cancer Esther de Boer
5:15 pm Use of NIR guided surgery During Thyroid and Parathyroidectomy Jorge Falco
5:25 pm Fluorescent imaging of bladder cancer Joseph C. Liao
5:35 pm Clinical Uses of ICG Fluorescence Angiography in Surgical Oncology and Endocrine Surgery Michael Bouvet
5:45 pm Fluorescence Image-Guided Surgery: Recent Advances in Devices and Methods Sylvain Gioux
5:55 pm Alternative routes of fluorophores administration for FIGS Michelle Diana
6:05 pm Image-Directed Surgery Using Targeted Ultra small Fluorescent Silica Nanoparticles: Images are more than Pictures Michelle Bradbury
6:15 pm Q&A/Discussion

6:30 pm Adjourn

6:30 pm DDI Week 2016 Cocktail Reception
**Symposium**

**GENERAL SESSION**

**Friday, February 5 – Sunday, February 7**

**OPTIONAL PROGRAM**  Registration and additional fee required

**LOCATION:** Boca Raton Resort | Mizner Center | Grand Ballroom

**Friday, February 5**

Abdominal Wall, Esophageal, Diaphragmatic and Gastric Surgery

7:30- 9:15am  **THE ABDOMINAL WALL PART 1**

**Inguinal Hernias**

**Chair:** Michael Rosen  **Co-Chair:** Samuel Szomstein

10-minute Case Presentation:  A 60 y/o male with a history of CAD on Plavix status post metallic stent placement presents with a medium size recurrent incarcerated but asymptomatic right inguinal hernia. What procedure would you recommend?

**Best approach based on evidence presented by speakers followed by panel discussion**

<table>
<thead>
<tr>
<th>Time</th>
<th>Presentation</th>
<th>Speaker</th>
</tr>
</thead>
<tbody>
<tr>
<td>7:30 am</td>
<td>Total Extraperitoneal Endoscopic Inguinal Hernia Repair Using Mini Instruments</td>
<td>Gabriel Carvalho</td>
</tr>
<tr>
<td>7:45am</td>
<td>Anterior approach: Technique and outcomes</td>
<td>Jerrold Young</td>
</tr>
<tr>
<td>8:00am</td>
<td>Laparoscopic approach: Technique and outcomes</td>
<td>Samuel Szomstein</td>
</tr>
<tr>
<td>8:15am</td>
<td>How to manage a recurrence after anterior approach</td>
<td>Michael Rosen</td>
</tr>
<tr>
<td>8:30am</td>
<td>Management of Neuralgias after inguinal hernia repair</td>
<td>Jerrold Young</td>
</tr>
<tr>
<td>9:00am</td>
<td>Q&amp;A/Discussion</td>
<td></td>
</tr>
</tbody>
</table>

**9:15-10:20 am  **  **THE ABDOMINAL WALL PART 2: VENTRAL HERNIAS**

**Chair:** Jerrold Young  **Co-Chair:** Emanuele Lo Menzo

10-minute Case Presentation:  A 40 y/o male with a history of subtotal colectomy with end ileostomy for trauma presents with a large symptomatic recurrent ventral and parastomal hernia.

**Present best treatment options based on evidence presented by faculty**

<table>
<thead>
<tr>
<th>Time</th>
<th>Presentation</th>
<th>Speaker</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:15am</td>
<td>Open Repair: Technique and Outcomes</td>
<td>Jerrold Young</td>
</tr>
<tr>
<td>9:25am</td>
<td>Laparoscopic Repair: Technique and outcomes</td>
<td>Samuel Szomstein</td>
</tr>
<tr>
<td>9:35am</td>
<td>Recurrent Ventral Hernia / Component Separation</td>
<td>Michael Rosen</td>
</tr>
<tr>
<td>9:45am</td>
<td>Parastomal Hernias</td>
<td>Emanuele Lo Menzo</td>
</tr>
<tr>
<td>9:55am</td>
<td>Q&amp;A/Discussion</td>
<td></td>
</tr>
</tbody>
</table>

10:15am  Break and **Exhibits**
### 10:35am-12:00pm  DIAPHRAGMATIC HERNIAS AND GERD

**Chair:** Jeffrey Ponsky  
**Co-Chair:** Raul Rosenthal

10-minute Case Presentation: A 75 y/o female with a large recurrent hiatal hernia, GERD and Barrett’s esophagus presents to our consultation with complaints of high-grade dysphagia. Show Ph and Manometry, Endoscopy, and CT Scan.

Present best treatment options based on evidence presented by faculty.

<table>
<thead>
<tr>
<th>Time</th>
<th>Topic</th>
<th>Presenter</th>
</tr>
</thead>
<tbody>
<tr>
<td>10:35</td>
<td>Understanding how to read Ph and Manometry</td>
<td>Alison Schneider</td>
</tr>
<tr>
<td>10:45</td>
<td>When to operate and when not to</td>
<td>Jeffery Ponsky</td>
</tr>
<tr>
<td>10:55</td>
<td>Best endoscopic treatment modalities</td>
<td>Tolga Erim</td>
</tr>
<tr>
<td>11:05</td>
<td>Laparoscopic hiatal hernia repair without mesh</td>
<td>Emanuele Lo Menzo</td>
</tr>
<tr>
<td>11:15</td>
<td>Recurrent Hiatal Hernia repair</td>
<td>Bernard D’Allemagne</td>
</tr>
<tr>
<td>11:25</td>
<td>Management of Complex GE Junction Catastrophes</td>
<td>Raul Rosenthal</td>
</tr>
<tr>
<td>11:35</td>
<td>Update on Barrett’s Esophagus</td>
<td>Jeffery Ponsky</td>
</tr>
<tr>
<td>11:45</td>
<td>Q&amp;A/Discussion</td>
<td></td>
</tr>
<tr>
<td>12:00</td>
<td>Lunch and Exhibits</td>
<td></td>
</tr>
</tbody>
</table>

### 1:00–2:00pm  ACHALASIA AND ESOPHAGEAL DIVERTICULAE

**Chair:** Raphael Bueno  
**Co-Chair:** Raul Rosenthal

<table>
<thead>
<tr>
<th>Time</th>
<th>Topic</th>
<th>Presenter</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:00</td>
<td>Manometry and Non-Surgical Treatment Options</td>
<td>Alison Schneider</td>
</tr>
<tr>
<td>1:10</td>
<td>POEM</td>
<td>Jeffery Ponsky</td>
</tr>
<tr>
<td>1:20</td>
<td>Redo Nissen Fundoplication</td>
<td>Raphael Bueno</td>
</tr>
<tr>
<td>1:30</td>
<td>Redo Heller’s for Recurrent Achalasia</td>
<td>Raul Rosenthal</td>
</tr>
<tr>
<td>1:40</td>
<td>Megaesophagus</td>
<td>Raphael Bueno</td>
</tr>
<tr>
<td>1:50</td>
<td>Esophageal Diverticula: When and what to do</td>
<td>Bernard D’Allemagne</td>
</tr>
<tr>
<td>2:00</td>
<td>Q&amp;A/Discussion</td>
<td></td>
</tr>
<tr>
<td>2:20</td>
<td>Break and Exhibits</td>
<td></td>
</tr>
</tbody>
</table>

### 2:50–4:00pm  ESOPHAGEAL CANCER

**Chair:** Raphael Bueno  
**Co-Chair:** Raul Rosenthal

10 mins. Case Presentation: A 55 y/o male with a history of heavy smoking, alcohol abuse, liver cirrhosis and GERD presents with newly diagnosed T1N0 Adenocarcinoma of the distal esophagus. Best treatment modalities based on evidence presented by the faculty.

<table>
<thead>
<tr>
<th>Time</th>
<th>Topic</th>
<th>Presenter</th>
</tr>
</thead>
<tbody>
<tr>
<td>2:50</td>
<td>Diagnostic algorithm</td>
<td>Ronnie Pimentel</td>
</tr>
<tr>
<td>3:00</td>
<td>Endoscopic treatment modalities</td>
<td>Jeffery Ponsky</td>
</tr>
<tr>
<td>3:10</td>
<td>Neoadjuvant or Adjuvant Chemotherapy</td>
<td>Timmy Nguyen</td>
</tr>
<tr>
<td>3:20</td>
<td>Minimally Invasive Approach</td>
<td>Raphael Bueno</td>
</tr>
<tr>
<td>3:30</td>
<td>Q&amp;A/Discussion</td>
<td></td>
</tr>
</tbody>
</table>
3:50–5:10pm  NUTS AND BOLTS IN FOREGUT SURGERY: HOW TO DO IT
The European School of Laparoscopic Surgery Presents

**Chair:** Guy Bernard Cadiere    **Co-Chair:** Raul Rosenthal

3:50pm  Esophagectomy: Prone Position    Guy Bernard Cadiere
4:10pm  Total Gastrectomy    Juan Santiago Azagra
4:30pm  Nissen Fundoplication    Bernard D’Allemagne
4:50 pm  Reoperative Bariatric Surgery    Benjamin Cadiere
5:10pm  Q&A/Discussion

5:30–6:45pm  UPDATE ON SURGICAL TREATMENT MODALITIES FOR GASTRIC NEOPLASMS

**Chair:** Juan Santiago Azagra    **Co-Chair:** Raul Rosenthal

5:30pm  Update on epidemiology of Gastric Neoplasms    Attila Csendes
5:45pm  Difficult case videos for GISTs: How to do it?    Sungsoo Park
6:00pm  Current Indications for the Csendes Procedure    Attila Csendes
6:15pm  Impact of Robots in Gastric surgery    Joong-Min Park
6:30pm  Q&A/Discussion
6:45pm  Adjourn

---

**Saturday, February 6**

Hepatobiliary, Pancreatic and Transplantation
Surgery of the Biliary Tree

7:30–8:45am  MANAGEMENT OF COMPLEX BILE DUCT STONES

**Chair:** Matthew Walsh    **Co-Chair:** Conrad Simpfendorfer

10 mins. Case Presentation: A 64 y/o female sp/gastric bypass and cholecystectomy presents with new onset of elevated amylase and LFT’s. CT Scan of the abdomen and MRCP are presented for discussion. Best treatment modality to be decided based on evidence presented by faculty.

7:30am  ERCP / MRCP for Biliary pancreatitis    Luis Lara
7:45am  Diagnostic algorithm and management of CBDS    Alberto Raul Ferreres
8:00am  Laparoscopic techniques of CBDE    Raul Rosenthal
8:15am  Pancreatic Pseudocysts: When and what to do    Conrad Simpfendorfer
8:30am  Discussion

---

8:45–10:00am  COMMON BILE DUCT INJURIES

**Chair:** John Fung    **Co-Chair:** Matthew Walsh

A 34 years old female undergoes a laparoscopic cholecystectomy for a 3mm gallbladder polyp. During surgery a Cholangiogram fails to demonstrate the upper radicals. The surgeon carries out the operation apparently without complications. Postoperatively the patient becomes jaundice and
February and is transferred to our institution. CT Scan of the abdomen and MRCP are presented for discussion. Best treatment modality to be decided based on evidence presented by faculty.

8:45 am Endoscopic Management of Bile leaks and CBDI Ronnie Pimentel
9:00 am How to avoid CBDI Alberto Raul Ferreres
9:15 am Surgical approach to CBDI John Fung
9:30 am Liver Transplant for complex or complicated CBI Charles Miller
9:45 am Q&A/Discussion

10:00 am Break and visit Exhibits

10.15–11:30 am THE ROBERT E. HERMANN ANNUAL LECTURE
Chair: John Fung MD Co-Chair: Matthew Walsh MD
10:15 am Introduction Matthew Walsh and John Fung
10:30 am Controversies in Surgical Management of Pancreatic Cancer Keith Lillemoe
11:15 am Q&A/Discussion
11:30 am Lunch (Dessert and coffee served in Exhibit Hall)

12:30–1:30 pm UPDATE ON HIPEC
Chair: Shri Chalikonda Co-Chair: Conrad Simpfendorfer
10 mins. Case presentation. Shri or Conrad to describe best-case scenario.
12:30 pm Indications and Contraindications for HIPEC Conrad Simpfendorfer
12:50 pm Technique and Outcomes Sricharan Chalikonda
1:10 pm Q&A/Discussion

1:30–2:30 pm TECHNICAL PEARLS OF WHIPPLE PROCEDURES
Chair: Matthew Walsh Co-Chair: Conrad Simpfendorfer
1:30 pm Best approaches: Open, Laparoscopic or Robotic? Matthew Walsh
1:45 pm Best techniques for pancreatic duct anastomosis Keith Lillemoe
2:00 pm To preserve or not to preserve the pylorus: Does it matter? Avram Cooperman
2:15 pm How to safely resect the unresectable pancreatic neoplasm Jakob Izbicki
2:30 pm Q&A/Discussion
2:45 pm Break and Exhibits

3:00–4:45 pm UPDATE ON LIVER TRANSPLANTATION
Chair: Andreas Tzakis Co-Chair: Charles Miller
3:00 pm Choosing Donors and Harvesting techniques Diego Reino
3:15 pm Liver transplantation for neoplasms Gabriel Schnikel
3:30 pm Living related donor: Technique and outcomes Charles Miller
3:45 pm Liver transplantation in cirrhotic patients Melissa J. Watson
4:00pm  Diagnosis and management of complications after OLT  
Andreas Tzakis

4:15pm  Q&A/Discussion

4:30-5:15pm  SPECIAL LECTURE
Chair:  John Fung
4:30pm  Indication, techniques and outcomes of Small Bowel Transplantation: Prospective from a pioneer  
Kareem Abu-Elmagd
5:00pm  Q&A/Discussion

5:15-6:00pm  SURGERY OF THE SMALL BOWEL
Chair:  Kareem Abu-Elmagd  Co-Chair:  Raul Rosenthal
5:15pm  The role of laparoscopy in surgery of the small bowel  
Javed Raza
5:30pm  Update on Small Bowel Carcinoid  
Petachia Reissman
5:45pm  Q&A/Discussion
6:00pm  Adjourn

Sunday, February 7
Bariatric Surgery Day
7:30-8:30 am  NEW TRENDS IN BARIATRIC SURGERY
Chair:  Natan Zundel  Co-Chair:  Raul Rosenthal
7:30am  Medical Treatment: New and Approved Drugs for weight loss  
Eric DeMaria
7:45am  Endoscopic Balloons  
Natan Zundel
8:00am  V Bloc  
Scott Shikora
8:15am  Q&A/Discussion

8:30–9:45am  SELECTED TOPICS IN BARIATRIC SURGERY
Chair:  Scott Shikora  Co-Chair:  Eric De Maria
8:30am  Best treatment choices in BMI greater than 50  
Kelvin Higa
8:45am  Best treatment choices in BMI less than 40  
Alan Wittgrove
9:00am  Best treatment choices in Diabetics: How to make a decision  
Phillip Schauer
9:15am  Should we still be doing BPDDS? If yes, when and why?  
Michel Gagner
9:30am  Q&A/Discussion

9:45 am  Breaks and Exhibits

10:15–11:15am  WALTER PORIES ANNUAL LECTURE
Chair:  Walter Pories  Co-Chair:  Raul J. Rosenthal
10:15am  Introduction  
Raul Rosenthal
10:30am  How to measure quality in bariatric surgery  
John Morton
11:15am-12:30pm  MINI GASTRIC BYPASS, Plication, SADI AND ILEAL INTERPOSITION: FACT OR FICTION?

**Chair:** Phillip Schauer  
**Co-Chair:** S. Szomstein

<table>
<thead>
<tr>
<th>Time</th>
<th>Presenter/Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>11:15am</td>
<td>Mini Gastric Bypass</td>
</tr>
<tr>
<td>11:30am</td>
<td>Ileal Interposition</td>
</tr>
<tr>
<td>11:45am</td>
<td>SADI</td>
</tr>
<tr>
<td>12:00pm</td>
<td>Plication</td>
</tr>
<tr>
<td>12:15pm</td>
<td>Q&amp;A/Discussion</td>
</tr>
</tbody>
</table>

12:30pm  Lunch (Dessert and coffee served in Exhibit Hall)

1:30–2:30pm  SPECIAL LECTURE

**Chair:** Raul Rosenthal  
**Co-Chair:** Raul Rosenthal

<table>
<thead>
<tr>
<th>Time</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:30pm</td>
<td>Gut Failure and indications for autologous transplantation in patients with catastrophes after bariatric procedures</td>
</tr>
<tr>
<td>2:15pm</td>
<td>Q&amp;A/Discussion</td>
</tr>
</tbody>
</table>

2:30–3:45pm  GASTROPARESIS: DIAGNOSIS AND TREATMENT MODALITIES

**Chair:** Alison Schneider  
**Co-Chair:** Raul Rosenthal

10 minutes case presentation: A 35 y/o type 1 severely obese patient presents with signs and symptoms of severe gastroparesis. Medical history is remarkable for GERD, DM and subtotal colectomy for UC. Best treatment modality?

<table>
<thead>
<tr>
<th>Time</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>2:30pm</td>
<td>Diagnosis and Medical Treatment</td>
</tr>
<tr>
<td>2:45pm</td>
<td>External Electrostimulation: Technique and outcomes</td>
</tr>
<tr>
<td>3:00pm</td>
<td>Enterra: Technique and Outcomes</td>
</tr>
<tr>
<td>3:15pm</td>
<td>Surgical options: Pyloroplasty, gastric Sleeve and Bypass</td>
</tr>
<tr>
<td>3:30pm</td>
<td>Q&amp;A/Discussion</td>
</tr>
<tr>
<td>3:45pm</td>
<td>Break and Exhibits</td>
</tr>
</tbody>
</table>

4:00–4:40pm  SPECIAL LECTURE

**NEW PROSPECTIVES ON METABOLIC SURGERY**

**Chair:** Raul Rosenthal

<table>
<thead>
<tr>
<th>Time</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>4:00pm</td>
<td>Abdominal obesity, visceral fat and a new metabolic index for metabolic diseases</td>
</tr>
<tr>
<td>4:30pm</td>
<td>Q&amp;A/Discussion</td>
</tr>
</tbody>
</table>
4:40–6:20pm VIDEO BASED MINI-SYMPOSIUM ON TECHNICAL PEARLS IN REOPERATIVE SURGERY

**Chair:** Kelvin Higa  **Co-Chair:** John Morton

- **4:40pm** Classification and Preoperative considerations  Eric DeMaria
- **4:50pm** VBG to GBP  Alan Wittgrove
- **5:00pm** Gastric Banding to LSG or GBP  Kelvin Higa
- **5:10pm** Distalization for non-responders after GBP  Almino Cardoso Ramos
- **5:20pm** LSG to GBP or BPD  Michel Gagner
- **5:30pm** Strictures after LSG, Myotomy, Wedge or Bypass  Jacques Himpens
- **5:40pm** Internal Hernia / Mesenteric Defects: How and when to close  Scott Shikora
- **5:50pm** Small Bowel Complications  Samuel Szomstein
- **6:00pm** Proximal Gastrectomy for Chronic Leak after LSG  Raul Rosenthal
- **6:10pm** Q&A/Discussion
- **6:30pm** Adjourn

Measuring Educational Outcomes

The Cleveland Clinic Center for Continuing Education has established a process to measure outcomes from its CME activities to assess knowledge gains, competencies, and expected clinical practice changes (patient outcomes), as well as attendees’ participation and satisfaction with the activity. Using activity evaluations at the conclusion of the program allows Activity Directors, grantors, and CME stakeholders the opportunity to determine its success, areas of improvement, and future topics. In order to measure outcomes from CME activities, the Cleveland Clinic Center for Continuing Education distributes activity evaluations to all participants. Results are compiled, analyzed, and summarized using criteria from Moore’s levels of CME outcomes measurements, with an emphasis on data showing achievement of levels 3 (learning), 4 (competence), and 5 (performance). The process is designed to evaluate the impact of the activity on improving clinical practices and patient outcomes, especially its effect on closing the identified health care gaps. Results are also used to assess the efficacy of the teaching methods and activity format and identify areas of educational need for future educational activities.

Activity evaluations. For its standard outcomes assessment, the Center asks participants in CME activities to complete an activity evaluation before receiving their CME certificate. Among the factors tracked in this self-assessment are the following:

- Learning objectives met by the educational presentations;
- Attendees’ personal objectives met;
- Perception of bias in the presentations;
- Percentage of new content;
- Increased confidence to care for this patient population;
- Need for add’l. educational activities in the topic area;
Commitment to change clinical practice behaviors;
Impact of the expected changes on patient outcomes;
Extent of patient population affected

Research indicates self-assessments completed after the activity have validity regarding outcomes measures. Retrospective evaluations have been found to correlate closely with more objective ratings.\textsuperscript{2-3} Research also indicates that commitments to change can provide valid measures of competency gains and clinical practice behavior changes from a medical education program.\textsuperscript{4-7}

The Center’s standardized activity evaluation form thus provides results that can be used as subjective evidence of achieving Moore’s levels 3 (learning objectives) and 4 (confidence to treat) and as surrogate markers to meet level 5 (commitment to change), and level 6 (impact on patient outcomes and extent of changes).

Success in achieving outcomes. In evaluations from previous CME activities presented by the Cleveland Clinic, most respondents have indicated that the educational presentations met their learning objectives and those stated for the activity, the evidence was presented objectively, and the material was predominately new.

Importantly, CME educational activities have the potential to make substantial positive effects on clinical outcomes — 96% of respondents at 2009 and 2010 CME-Certified activities indicated that they were likely to change their practice behaviors as a result of information learned at the courses. This was supported by results showing that 98% rated the quality of the educational content as good or excellent and between 98% and 100% noted that each of the specific objectives were met.

Evaluation summaries with outcome results are provided to the activity director, grantors, and CME stakeholders.

References