Gastrointestinal Outcomes
Dear Colleague:

We are proud to present Thomas Jefferson University Hospitals’ Gastrointestinal Outcomes. This special publication emphasizes our comprehensive and multidisciplinary approach to the medical, endoscopic and surgical diagnosis and management of gastrointestinal diseases. Jefferson’s patient-centered philosophy offers the most advanced, safe and proven treatments delivered in the most efficient and convenient form. **We achieve excellent outcomes in many complex conditions through the integrated care approach of the healthcare professionals within our programs.**

During the past year, Jefferson opened Philadelphia’s first adult Celiac Disease Center to improve the diagnosis and management of this disease through a multidisciplinary approach. We also started the Jefferson Liver Tumor Center to offer leading-edge treatment for liver tumors, both benign and malignant. We recently conducted our first living donor liver transplant and initiated SmartPill technology for the evaluation of gastroparesis and constipation.

Jefferson is one of the largest providers of gastrointestinal care on the East Coast. Our physicians are voted “top doctors” in Philadelphia magazine and South Jersey Magazine and Jefferson is consistently ranked one of the nation’s most outstanding gastrointestinal programs by U.S. News & World Report.

The members of our integrated team of healthcare experts draw on one another’s strengths and experience, and are committed to shaping the future of gastrointestinal care through exciting leading-edge research, technology and outstanding medical education programs.

We hope you find this in-depth look at our achievements useful in your everyday practice. Please do not hesitate to visit our website, www.JeffersonHospital.org or contact us at 1-800-JEFF-NOW, to ask any questions you may have or to request further information on how we can help you care for your patients.

Anthony J. DiMarino, Jr., MD, FACP, FACG, AGAF

William Rorer Professor of Medicine
Director, Division of Gastroenterology and Hepatology
Barrett’s Esophagus and Esophageal Disorders

The gastrointestinal specialists within Jefferson’s Esophageal Disorders Program assess and treat more than 1,000 patients every year. Many of the patients suffer from achalasia and other esophageal motility disorders. In addition, patients with complicated gastroesophageal reflux disease (GERD), Barrett’s esophagus and esophageal cancer are treated with state-of-the-art endoscopic and minimally invasive surgical techniques.

BARRETT’S ESOPHAGUS – Jefferson is a leader in advanced endoscopic and surgical therapies for Barrett’s esophagus. Early on, our physicians offered photodynamic therapy for patients with high-grade dysplasia. In 2006 we were designated as a center for radiofrequency ablation (RFA) therapy and participated in one of the initial national trials. Since that year, we have performed over 300 ablations on patients with high-grade dysplasia and Barrett’s esophagus. Complete Barrett’s epithelial ablation with return to normal esophageal mucosa was achieved in 90 percent of these cases. We perform endoscopic mucosal resection (EMR) independently and with RFA to remove visible nodules and focal areas of Barrett’s epithelium. Patients not amenable to endoscopic therapy are treated by our minimally invasive surgical team, which provides state-of-the-art laparoscopic and robotic options. Essential to our successful Barrett’s esophagus program are our dedicated pathologists, who are experts in histological confirmation and identification of dysplasia and carcinoma.

OUR ESOPHAGEAL FUNCTION CENTER offers esophageal manometry to evaluate noncardiac chest pain, esophageal spasm, achalasia and other motility disorders. Esophageal 24-hour pH monitoring is the gold standard of gastroesophageal reflux assessment for both medical and surgical management. We employ advanced pH monitoring technology, which includes the acid-sensing disposable BRAVO™ capsule, which is endoscopically placed in the esophagus and transmits data to a pager-sized computer worn on the patient’s belt. It offers comfort, convenience and improved accuracy over the catheter-based pH monitor inserted through the nose. Esophageal impedance, which measures non-acid reflux, is available for patients who have normal results from the 24-hour pH probe; it assesses whether gas or liquids reflux into the esophagus.

*Top: Barrett’s epithelium before RFA
Bottom: Normal esophageal re-epithelialization after RFA*
Colon and Rectal Cancer

Jefferson’s Colon and Rectal Cancer Center, where a high volume of colonoscopies are performed annually, offers patients the latest technological advancements, including chromoendoscopy, autofluorescence endoscopy (narrow band imaging), confocal laser endomicroscopy and the Third Eye® Retroscope® to improve detection of precancerous lesions.

Colonoscopy performance and colon cancer and colon polyp detection rates are dependent upon a complete and well-visualized exam along the entire length of the colon. Research led by Jefferson physicians has produced new FDA-approved commercial preps and other innovations such as: a liberalized diet to allow patients to eat the day prior; split dosing and new “same-day prep” to make colonoscopy a one-day procedure. We study the safety of commonly used over-the-counter preparations and new formulations to improve the proportion of excellent preps. These endeavors have led to improved clinical outcomes and greater patient satisfaction. We are a founding member of the ASGE/AGA national endoscopy program, dedicated to setting and monitoring performance guidelines for safe and effective colon cancer screening.

Our Center offers open-access colonoscopy for low-risk patients and can manage patients whose colonoscopies present unique challenges. Some of the treatments available for these special cases include:

- Endoscopic mucosal resection (EMR) combined with laser ablation, which permits the removal of large, flat, sessile or pedunculated polyps, often in one session
- Minimally invasive surgical techniques, for pathology not amenable to endoscopic management
- Double-balloon colonoscopy, for patients with altered anatomy who have failed complete colonoscopy elsewhere

Patients with high risk for colon cancer are treated with a multidisciplinary team approach. This group includes patients with chronic inflammatory bowel disease being screened for dysplasia, a family history of colorectal cancer and inherited colon cancer syndromes such as familial adenomatous polyposis (FAP), hereditary nonpolyposis colon cancer (HNPCC) and Peutz-Jeghers syndrome. These patients need intensive screening for multiple neoplasms in addition to colorectal cancer.
Minimally Invasive Surgery

Jefferson’s volume of laparoscopic, or minimally invasive, surgeries (MIS) to treat advanced gastrointestinal conditions has steadily increased over the last decade. Our surgeons have particular expertise in solid organ surgery, including resections of the adrenal glands, pancreas and spleen. We routinely perform complex laparoscopic and robotic esophagectomies, gastrectomies and small and large bowel resections in our new, state-of-the-art MIS-dedicated operating suites.

For the appropriate candidate, MIS has many well-known advantages over traditional “open” surgery, including a shorter hospital stay, quicker return to normal activities, fewer complications, less pain and less scarring, with only a few tiny incisions providing access for the surgical instruments rather than one large incision.

Thomas Jefferson University Hospital was the first hospital in Philadelphia to offer robotic esophageal resection surgery employing the next generation of surgical robots to treat esophageal cancer. Guiding highly sophisticated articulated robotic “arms” with tiny cameras from a remote console, our surgeons are able to completely dissect the thoracic esophagus and separate it from the pericardium, the airway, the aorta and the thoracic duct in a two-hour procedure.

To train gastrointestinal surgeons who wish to advance their skills in all areas of MIS, including robotics, we have offered a ONE-YEAR FELLOWSHIP for the past three years.
CLINICAL CARE In the five years since its establishment, our Pancreatic, Biliary Tract and Related Cancer Center has become the highest-volume center in the tri-state area for the diagnosis and treatment of patients with challenging pancreatic, biliary and hepatic cancers. The Center also diagnoses and treats patients with acute and chronic pancreatitis, pancreatic cysts, and those predisposed to the development of pancreatic cancer. Our reputation draws patients from all over the world. In 2010, our physicians performed over 2,000 pancreaticobiliary (PB) procedures, including 960 endoscopic retrograde cholangiopancreatographies (ERCPs) and 1,010 endoscopic ultrasounds (EUSs) – an 8 percent increase in volume over the previous year. The skill and experience of our team of respected physicians, which includes gastroenterologists, surgeons, radiologists, pathologists, radiation and medical oncologists, pharmacologists and specialists in pain management and palliative care, can be matched by only a few academic centers in the country.

To accommodate our increased patient activity, we have four new high-end procedure suites. With the aid of the leading-edge diagnostic and therapeutic instrumentation in these suites, our physicians are able to safely and effectively treat patients using endoscopic ultrasound, enteral stent placement, endoscopic mucosal resection, laser therapy, photodynamic therapy, cholangioscopy and pancreatoscopy.

RESEARCH Our Center has an active research program focused on pancreaticobiliary diseases, with the particular aim of early identification, especially of cancers and precancers, with the goal of avoiding the morbidity associated with more advanced disease and more extensive surgical procedures. We are studying ways to improve the evaluation and treatment of patients with pancreaticobiliary diseases, and we recently participated in a randomized clinical trial of the newest generation of expandable metal stents to treat bile duct obstruction and injury.

EDUCATION To educate our colleagues in patient management, we offer practicing GI specialists a quarterly one-day didactic lecture and live case preceptorship on the latest technologies, and an annual hands-on workshop for physicians interested in enhancing their skills. To train future specialists, we offer a pancreaticobiliary/advanced endoscopy fellowship program — one of only 25 in the country.
Jefferson Pancreas, Biliary and Related Cancer Center

Jefferson surgeons perform more than 200 pancreas resections annually — more than any other institution in the tri-state region. High volume translates to experience, which results in superior outcomes: our complication rates are very low, and we are quick to recognize the rare patient’s “failure to thrive” and intervene appropriately.

Our modification of the Whipple operation, long the model for excising pancreas cancers, has helped us streamline recovery times so patients who undergo basic left-sided pancreatic resection usually go home in five days, while those undergoing the more complex right-sided resection are usually discharged in six or seven days. What we refer to as the mini-Whipple is a pylorus-preserving pancreaticoduodenectomy that is appropriate when the tumor is located in the head of the pancreas. It preserves the pylorus, the stomach and several centimeters of the upper duodenum. The mini-Whipple has proven to be just as effective from a survival standpoint.

RESEARCH We are committed to building on the knowledge base for these diseases, and as leading investigators of the molecular genetics and environmental and lifestyle links, we are working to improve early detection of pancreatic cancer with more effective screening procedures, and with leading-edge research into the molecular genetics of these tumors. On a voluntary basis, patients and family members can provide data on familial and environmental aspects of pancreatic cancer to the Jefferson Pancreas Tumor Registry (PTR); this valuable information aids our researchers in their search for common denominators in some types of pancreatic cancer.

Our staff contributes 25 or more peer-reviewed articles each year, presenting their promising findings. We are deeply engaged in research to identify subtypes of the cancers and create individualized therapies, from targeted chemotherapy, to vaccine therapy and futuristic nanoparticle therapy. Our Center participates in several clinical trials in which our patients may enroll.
Small Bowel Endoscopy and Gastrointestinal Bleeding Center

Over 3,000 capsule endoscopies have been performed at our Center. We are pioneers in this truly revolutionary noninvasive means of imaging the small bowel and are today one of the Philadelphia area’s leaders in this specialty.

The major indication for capsule endoscopy has been evaluation of patients with obscure gastrointestinal bleeding, which accounts for five percent of all cases of gastrointestinal bleeding. The major causes for bleeding from the small intestine include vascular ectasias, polyps, ulcers and tumors. Indications for capsule endoscopy have expanded to include evaluation of patients with known or suspected Crohn’s disease, celiac disease, familial polyposis syndromes, unexplained iron deficiency anemia, unexplained diarrhea and abdominal pain, and investigation of abnormal radiologic small bowel imaging.

In addition to the advanced imaging available through capsule endoscopy, our Center is able to treat a full range of conditions through total therapeutic small bowel endoscopy. In addition to standard push enteroscopy, we have expertise in single-balloon, double-balloon, spiral overtube and intraoperative enteroscopy. In the last five years we have performed over 500 enteroscopies employing these newer technologies, which allow us to further evaluate and treat findings seen on capsule endoscopy and with other diagnostic modalities.

The enteroscopes can be inserted orally or rectally, allowing for total endoscopic evaluation of the small intestine. Small bowel abnormalities not amenable to endoscopic treatment can be tagged to facilitate identification by our minimally invasive surgeons. CT and MRI enterography are available to further access small bowel abnormalities and complement our endoscopic and surgical services.

PUBLISHED JEFFERSON DATA on spiral enteroscopy shows a technical success rate of 94% and a DIAGNOSTIC YIELD of 62.5%.
Celiac Center

The Jefferson Celiac Center was established in response to the growing number of patients with this autoimmune disorder of the small intestine, which is triggered by consumption of gluten. Gluten is found chiefly in wheat, rye and barley grains. Once considered rare, celiac disease is now known to affect one percent of the U.S. population, more than four times the number 50 years ago. This may be attributed to a combination of increasing incidence and improved diagnosis.

While classic symptoms of celiac disease are severe diarrhea, abdominal bloating, chronic fatigue, unexplained weight loss and anemia, research shows that there is a large cohort with “silent” celiac disease suffering from a variety of atypical symptoms. These conditions include premature or severe osteoporosis, type 1 diabetes, thyroid disease, rheumatoid arthritis, migraine headaches, neuropathies and fertility disorders including spontaneous abortions in women and poor sperm quality in men.

Undiagnosed and untreated, celiac disease is a serious medical condition. The blistering skin rash dermatitis herpetiformis is tied to untreated celiac disease in 80 percent of cases. Lymphomas are cancers of the immune system, and undiagnosed patients with celiac disease are much more likely to develop lymphomas of the small intestine. In many cases, however, adopting a gluten-free diet not only improves the symptoms of celiac disease, but can also be curative.

Jefferson’s patient care team includes expert clinicians in gastroenterology, endocrinology, rheumatology and oncology, and nutritionists and dieticians with advanced training in the condition. Because diet is key, we provide detailed information on our website at JeffersonHospitat.org/celiac, including listings of gluten-free packaged foods and restaurants that accommodate special dietary needs. Our clinicians and pathologists are also engaged in research; our Center has been among only a handful participating in the testing of promising new orally administered drugs, including medications to decrease or block the absorption of gluten. There is great promise of achieving a medication to moderate celiac disease at the cellular level.

CASE STUDY:

PATIENT: M.H., 31-year-old female
PHYSICIAN: Anthony J. DiMarino, Jr., MD
DX: Celiac disease
SOLUTION: Gluten-free diet

A 31-year-old female patient came to Jefferson with complaints of difficulty in getting pregnant after two and a half years. Previous treatment included in vitro fertilization without success. She had no gastrointestinal symptoms but she did have a borderline low hemoglobin. After the patient tested positive for celiac antibodies, endoscopic biopsy confirmed celiac disease. The patient was placed on a gluten-free diet and within seven months, her menstrual cycle returned to normal. Shortly thereafter, the patient became pregnant; she is now expecting her second child. The patient has remained true to her diet and has remained well.
Liver Disease

Jefferson’s Liver Program treats the full range of liver diseases, from viral and drug-induced hepatitis and cirrhosis, to portal hypertension and liver cancer. Our group of hepatologists, specially trained mid-level providers and nurse coordinators work in close collaboration with liver surgeons, diagnostic and interventional radiologists, liver pathologists, hepatic anesthesiologists and specialists of the Kimmel Cancer Center at Jefferson. The incidence of chronic liver disease and hepatocellular carcinoma in the United States is rising. This leads to an increasing need for subspecialty liver programs with the capability to provide a multidisciplinary approach and access to leading-edge research and therapeutic techniques.

Consultation and treatment are offered at various locations throughout the Delaware Valley and Southern New Jersey, in a patient-focused environment with immediate access to all subspecialties.

In 1984, Thomas Jefferson University Hospital became the first hospital in the Delaware Valley to perform liver transplantation. More than 700 patients have undergone liver transplantation at Jefferson. We also offer living donor liver transplantation.

Management strategies for hepatocellular cancer are evolving rapidly and include loco-regional, percutaneous, surgical and systemic treatments. The Liver Tumor Center offers these therapies in a coordinated fashion, allowing patients to obtain consultation and an individualized treatment plan in a single day. Patients meet with a hepatologist, oncologist, interventional radiologist, liver surgeon and palliative care provider in this multidisciplinary program. In collaboration with the Kimmel Cancer Center at Jefferson, our Liver Tumor Center offers many clinical trials for patients with liver cancer. These include trials with existing and new inhibitors of angiogenesis; such drugs represent an important mechanistic approach to battling liver cancer. Our program members are combining various modalities in the effort to improve response rates and facilitate liver transplantation or standard resectional techniques.
A strong focus of our Liver Center’s research is drug- and dietary supplement-induced liver injury. We are one of a few select centers in the United States supported by the National Institutes of Health to study patients with liver disease caused by prescribed medications or dietary supplements, which include over-the-counter herbal remedies, vitamin therapies, weight-loss and body-building supplements, and green tea extracts. Our researchers’ specific focus in this field are to better understand the scope of liver injury and to identify ingredients that may be the causes.

Other areas of active research in liver disease include clinical trials in viral hepatitis and non-alcoholic fatty liver disease, supported through various sponsors, including the National Institutes of Health and pharmaceutical companies.

CASE STUDY:

PATIENT: A.G., 48-year-old female

DX: Chronic hepatitis B and liver mass

PHYSICIAN: Victor Navarro, MD

SOLUTION: Chemoembolization followed by orthotopic liver transplant

The patient, a 48-year-old woman with chronic hepatitis B, was undergoing a routine surveillance ultrasound for hepatocellular cancer, when a liver mass was detected. The patient’s AFP was measured at 405.

An MRI identified a 4.6 cm lesion in the posterior right lobe, with characteristic features of hepatoma; early arterial enhancement and washout on portal phase. The characteristic appearance solidified the diagnosis of hepatoma.

The patient underwent chemoembolization. A one-month post-treatment MRI showed no residual viable tumor. A second MRI three months after the initial treatment showed a focus of arterial enhancement within the previously treated lesion, suggesting recurrence.

In parallel with the patient’s treatment for hepatoma, she was evaluated and listed for liver transplantation. Four months after listing, and after a second treatment with chemoembolization, the patient underwent successful orthotopic liver transplantation. Six years after liver transplantation, the patient remains free of cancer and recurrent hepatitis B.
Inflam m atory Bow el D isease (IBD)

Since the program was established in 1996, Jefferson has seen a steady increase in the number of patients with Crohn’s disease (CD), ulcerative colitis (UC) and microscopic colitis (lymphocytic and collagenous colitis). Patients with complex IBD are often referred to us after their condition has resisted standard treatment elsewhere.

While some patients come for a single consultation, our primary focus is providing a continuum of expert, individualized care. This requires collaboration among gastroenterologists, surgeons, radiologists, pathologists and registered dieticians, all of whom have a subspeciality focus in IBD diagnosis and management.

In addition to the more standard diagnostic tests such as colonoscopy and histology, as well as small bowel studies, CT and MRIs, we have available CT and MRI enterography and capsule endoscopy and enteroscopy to help diagnose IBD, monitor response to therapy and evaluate for disease complications. Therapy is individualized and based on several factors: subtype/anatomical location and extent of disease, severity of inflammation and response and/or reaction to previous treatments. Our physicians have extensive experience with the use of immunomodulators (IMMs) including 6-mercaptopurine (6-MP), azathioprine, methotrexate and cyclosporine as well as anti-tumor necrosis factor alpha (anti-TNFα) antibodies. We utilize these medications not only to induce and maintain remission, but also to minimize and, hopefully, completely eliminate the use of steroids.

We have also begun to incorporate the newest biologic approved for CD, natalizumab, into our medication armamentarium. Natalizumab is
an anti-alpha-4 integrin, which inhibits trafficking of leukocytes from the vascular space to the tissue. Our program is a frequent participant in clinical trials that may be offered to patients with refractory disease.

While significant advances in medical therapy have been achieved in the last decade, some patients with refractory disease or complications of IBD will, unfortunately, still require surgery. We work closely with our surgical colleagues who have a vast experience in colectomies and ileal-pouch anal anastomosis for UC as well as bowel resection, stricturoplasty and perianal surgery for CD. A laparoscopic approach is taken whenever appropriate.

CASE STUDY:

PATIENT: M.M., 39-year-old female

PHYSICIAN: Patricia Kozuch, MD

DX: Left-sided ulcerative colitis

SOLUTION: Medication therapy using immunosuppressive drugs

A patient had a ten-year history of UC and was referred to Jefferson for consultation regarding colectomy for medically refractory disease. Over the past three years, she had become steroid-dependent without responding to multiple oral and rectal 5-aminosalicylates, antibiotics or infliximab. A trial of 6-MP in the past had resulted in elevated liver tests without clear therapeutic benefit. 6-MP was reinstituted with metabolites, indeed showing a high 6-MMP level associated with mildly abnormal transaminases, in addition to a subtherapeutic 6-TGN, the active metabolite. In an effort to shift the metabolite patterns in the correct direction, her 6-MP dose was lowered to 25 mg and allopurinol 100 mg was added; this latter medication inhibits xanthine oxidase, an enzyme in the metabolic pathway of azathioprine and 6-MP. Judicious use of allopurinol combined with very small doses of these immunomodulators has been shown to raise the 6-TGN level and lower the 6-MMP level in patients who have metabolite patterns similar to that of patient M.M. More importantly, it has also been associated with improved clinical response and remission rates. Indeed, M.M.’s 6-TGN was raised from 121 to 367, and her 6-MMP was lowered from 11,542 to less than the lower limit of detection. Further, her transaminases normalized and she has maintained a clinical and endoscopic remission for over two years on this regimen. Histology shows quiescent colitis. She is thrilled to have avoided colectomy.

NB: Allopurinol should not be combined with 6-MP or azathioprine except by physicians very experienced in the use of this regimen.
Bariatric and Metabolic Surgery Program

Since our program was established in 2008, over 200 patients who underwent gastric bypass and gastric banding to treat morbid obesity have lost a total of over 13,000 pounds. Our outcomes, including weight loss and complication rates, are outstanding. We attribute our success to exacting care of patients before, during and after surgery and adherence to American Society of Bariatric Surgery Center of Excellence guidelines.

Candidates have a body mass index (BMI) of 40 or more (roughly 100 excess pounds in men, 80 pounds in women) or a BMI of 35 or above in association with weight-related comorbidities such as type 2 diabetes, hypertension, cardiac conditions, hyperlipidemia, asthma, obstetric complications or joint problems, especially of the lower extremities.

Patients are presented with the benefits and drawbacks of each treatment option and guided in their choice of gastric bypass or gastric banding. All patients undergo extensive evaluation by our multidisciplinary team to minimize risk. Both procedures are performed laparoscopically, yielding less postoperative discomfort, quicker recovery and lower complication rates when compared with the “open” surgical approach.

Gastric bypass involves dividing the upper stomach and connecting this small upper pouch of the stomach to the jejunum. Gastric banding involves implanting a ring-shaped balloon to form a pouch of the top of the stomach, giving the patient a sense of satiety after a very small meal. The band can be inflated or deflated with saline solution to adjust it to tailor each particular patient’s weight loss.

In the first six months post-surgery Jefferson gastric bypass patients lose an average of 56 percent of their excess weight, while Jefferson gastric band patients lose an average of 24 percent. Continuing weight loss occurs typically beyond one year for both procedures.

Whichever approach they choose, our patients are ambulatory hours after surgery and go home within one or two days. Intensive follow-up includes nutritional education and behavior modification training. Health improvements are often dramatic: most patients with type 2 diabetes leave the hospital no longer needing oral medications or injected insulin, and many other comorbidities are completely resolved.

Patients have lost a TOTAL OF MORE THAN 13,000 POUNDS after receiving **gastric bypass** or **gastric banding** at Jefferson.

### Selected Clinical Trials

<table>
<thead>
<tr>
<th>Title</th>
<th>PI</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Multicenter, Randomized, Double-Masked Placebo-Controlled Phase II Study to Assess the Safety and Efficacy of a Standardized Orally Administered Silymarin Preparation (Legalon) for the Treatment of Non-Cirrhotic Patients with Non-alcoholic Steatohepatitis</td>
<td>Navarro, Victor</td>
</tr>
<tr>
<td>A Phase 11b, Randomized, Double-Blind, Placebo-Controlled, Dose-Ranging, Multi-Center, Study to Determine the Safety, Tolerability and Efficacy of AT-1001 in Celiac Disease Subjects During a Gluten Challenge Alba Pharmaceuticals</td>
<td>DiMarino, Anthony J.</td>
</tr>
<tr>
<td>A Phase II Study to Determine the Surgical Conversion Rate in Patients Receiving Neoadjuvant mFOLFOX7 Plus Cetuximab for Unresectable Wild-Type K-RAS Colorectal Cancer with Metastases Confined to the Liver (NSABP FC-6)</td>
<td>Rosato, Ernest</td>
</tr>
<tr>
<td>A Phase II Trial of 5-Fluorouracil, Leucovorin, and Oxaliplatin (mFOLFOX6) Chemotherapy Plus Bevacizumab for Patients with Unresectable Stage IV Colon Cancer and a Synchronous Asymptomatic Primary Tumor</td>
<td>Berger, Adam</td>
</tr>
<tr>
<td>A Phase III Study of Chemotherapy and Chemoradiotherapy with or without HyperAcute® Pancreatic Cancer Vaccine in Subjects with Surgically Resected Pancreatic Cancer</td>
<td>Kennedy, Eugene</td>
</tr>
<tr>
<td>A Phase III Trial Evaluating Both Erlotinib and Chemoradiation as Adjuvant Treatment for Patients with Resected Head of Pancreas Adenocarcinoma (RTOG-0848)</td>
<td>Berger, Adam</td>
</tr>
<tr>
<td>A Prospective Randomized Comparison of Pancreatic Stump Closure Techniques Utilizing an Autologous Falciiform Patch and Fibrin Glue Compared to Standard Closure Following Distal Pancreatectomy with or without Splenectomy</td>
<td>Rosato, Ernest</td>
</tr>
<tr>
<td>A Randomized Study of the Efficacy and Safety of OncoGel™ Treatment as an Adjunctive Therapy to Systemic Chemotherapy and Concurrent External Beam Radiation Prior to Surgery in Subjects with Localized or Loco-Regional Esophageal Cancer</td>
<td>Loren, David</td>
</tr>
<tr>
<td>A Single-Arm Study to Provide Boceprevir Treatment in Subjects with Chronic Hepatitis C Genotype 1 Deemed Non-Responders to Peginterferon/Ribavirin in Previous Schering-Plough Boceprevir Studies (P05514)</td>
<td>Herrine, Steven K.</td>
</tr>
<tr>
<td>Ablation of Intestinal Metaplasia Containing Dysplasia (AIM Dysplasia Trial): A Multi-Center, Randomized, Sham-Controlled Trial</td>
<td>Infantolino, Anthony</td>
</tr>
<tr>
<td>Collection, Banking and Evaluation of Tissues, Blood, Pancreatic Juice and Bile from Patients with Pancreatic and Related Carcinomas Undergoing Surgical Resection</td>
<td>Yeo, Charles</td>
</tr>
<tr>
<td>Determining the Incremental Diagnostic Yield of Pancreatic Cyst Wall Sampling During Endoscopic Ultrasound Fine Needle Aspiration</td>
<td>Loren, David</td>
</tr>
<tr>
<td>Drug-Induced Liver Injury Network (DILIN) Idiosyncratic Liver Injury Associated with Drugs (ILIAD): A Retrospective Protocol</td>
<td>Navarro, Victor</td>
</tr>
<tr>
<td>Establishment and Analysis of a Post-Operative Critical Pathway in Colon and Rectal Surgery for Quality Assessment and Quality Improvement</td>
<td>Maxwell, Pinckney</td>
</tr>
<tr>
<td>Formation and Maintenance of a Database of Patients Undergoing Capsule Endoscopy for Suspected Small Bowel Pathology</td>
<td>Conn, Mitchell</td>
</tr>
<tr>
<td>Jefferson Pancreas Tumor Registry</td>
<td>Lavu, Harish</td>
</tr>
<tr>
<td>MORE (Mycophenolic Acid Observational Renal Transplant Program) A Phase IV, Multi-Center, Prospective, Observational Study of the Safety, Effectiveness and Tolerability of Immunosuppressant Regimens to Treat Renal Transplant Patients in Routine Clinical Practice</td>
<td>Doria, Cataldo</td>
</tr>
<tr>
<td>The Incidence of Hyponatremia with Two Commonly Prescribed Purgatives for Colonoscopy-Polyethylene Glycol 3350 with a Sports Drink (PEG-SD) Compared to Polyethylene Glycol 3350 with Electrolyte Solution (PEG-ELS)</td>
<td>Kastenberg, David</td>
</tr>
</tbody>
</table>
Thomas Jefferson University Hospitals

Center City, Philadelphia
111 South 11th Street
Philadelphia, PA 19107

1-800-JEFF-NOW – Appointments

1-800-JEFF-121 – The Jefferson Transfer Center

On the Cover:
Ernest L. Rosato, MD, FACS
Francis E. Rosato Professor of Surgery
Director, Division of General Surgery

and

Mitchell Conn, MD, MBA
Associate Professor of Medicine
Medical Director, GI/Transplant Service Line