

EDUCATION

RESEARCH



2014-15 ANNUAL REPORT



# CHAIR'S OFFICE Conor Delaney, MD, MCh, PhD Interim Chair The Jeffrey L. Ponsky Professor of Surgical Education

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## PATIENT CARE

# EDUCATION





RESEARCH

As the Department of Surgery at Case Western Reserve University, we are proud to provide high quality patient care, integrated with clinical and basic science research, in an environment that is known for the high quality of education it provides. We are fortunate to have leaders in every surgical discipline who provide such high quality care, and have individually contributed to the high level of esteem in which our Department is held.

Our residency and fellowship programs continue to be an integral part of the Department, whilst adding to the rich culture of education and research. Our teaching hospitals include University Hospitals Case Medical Center, MetroHealth Medical Center, and the Louis B. Stokes Cleveland VA Medical Center. Each has a dedicated and unique faculty with special expertise that enriches patient care, and each adds a different perspective to the educational experience. Our faculty continue to present and publish some of the best international clinical outcomes, based on their skill at optimizing the care they provide daily to their patients. The Department also continues to distinguish itself, both nationally and internationally, for its creative and innovative hands-on and web-based postgraduate educational courses.

On a personal note, it has been a great honor to lead the Department over the last eighteen months. At Case Medical Center and throughout the UH system, many changes have occurred in addition to our new compensation plan. By August 2015, 25 surgeon had been recruited at main campus, and in the UH regional hospitals. Dr Scott Steele now leads the Division of Colorectal Surgery, as I move on to lead the Digestive Health Institute. Dr Keith Clancy has joined us to start a new Division of Acute Care and Trauma Surgery, and will be launching our Level I Trauma Center later this year. I wish everyone continued success for 2016.

This latest edition of the Annual Report changes the format used in prior editions. In this edition you will find a summary of the state of each Department, Division and Hospital, as well as a brief listing of some of the accomplishments of our team.

Conor Delaney, MD, MCh, PhD Interim Chair, Department of Surgery Surgical Director, Digestive Health Institute

The Jeffrey L. Ponsky Professor of Surgical Education Case Western Reserve University University Hospitals Case Medical Center



Conor Delaney, MD, MCh, PhD

"Our residency and fellowship programs continue to be an integral part of the Department, whilst adding to the rich culture of education and research."



### **DIVISION FACULTY**



Soon J. Park, MD, Professor

Salil Deo, MD, Assistant Professor Yakov L. Elgudin, MD, PhD, Assistant Professor Peter C. Kouretas, MD, PhD, Assistant Professor Jai H. Lee, MD, Clinical Assistant Professor Alan H. Markowitz, MD, Assistant Clinical Professor Benjamin Medalion, MD, Associate Professor Basar Sareyyupoglu, MD, Associate Professor Daniel van Heeckeren, MD, Emeritus Professor

Steve Schomisch, PhD **Director,** Surgical Research and Animate Skills Lab The Division of Cardiac Surgery, comprising eight world-renowned cardiac surgeons, provides the highest-quality patient-centric care at University Hospitals, serving both community-based and tertiary levels of care. The Division is responsible for performing all cardiac surgical procedures at UH Case Medical Center, UH Ahuja Medical Center, UH Elyria Medical Center, UH Parma Medical Center, Southwest General Health Center and UH Rainbow Babies & Children's Hospital.

The faculty members are committed to providing the most comprehensive, up-to-date, patient-centered personalized care with the highest-quality cardiac surgery services and outcomes while making the advanced expertise and leading-edge technologies available to all our patients, the communities and hospitals affiliated with the system.

Several of the comprehensive programs within the Division include:

Comprehensive End-Stage Heart and Lung Disease Care: including high risk revascularization, myectomy, acute and chronic mechanical circulatory support, and heart-andlung transplant.

Structural Heart Valve Program: including mitral valve repair/replacement, aortic valve sparing/ repair/replacement, TAVR (transcatheter aortic valve replacement), MitraClip and tricuspid valve repair/replacement.

Comprehensive Aortic Aneurysm Program: aortic valve-sparing replacement, aortic aneurysm replacement, aortic dissection repair and hybrid procedures including collaboration with vascular surgeons for complex aortic aneurysms/ dissections that include both open and endovascular procedures.

The Section of Pediatric Cardiothoracic Surgery, under the direction of Dr. Peter Kouretas at UH Rainbow Babies & Children's Hospital, provides state-of-the-art, family-centered and comprehensive care for patients of all ages with congenital heart, lung or vascular disease. Clinical care is provided at Rainbow with the following services: a dedicated pediatric cardiothoracic surgery operating room and specialized pediatric cardiopulmonary bypass and support equipment, a dedicated 6-bed Cardiac Intensive Care Unit within the confines of the Pediatric Intensive Care Unit, along with access to the Neonatal Intensive Care Unit and regular and step-down care units. The Section provides 24/7 comprehensive perioperative care and is supported by a multidisciplinary team including pediatric cardiologists, neonatologists, intensivists, anesthesiologists, and other subspecialists as patient care needs dictate. In addition, a full range of professional support services is available that includes child life specialists, respiratory therapists, critical care and step-down cardiac nurses, social workers and other services as patient family needs dictate. Our multispecialty team approach ensures optimal, individualized care with our primary focus being excellent outcomes, the highest quality and superb patient/family satisfaction.

#### DIVISION RESEARCH

The Fred Lennon Research Laboratory at Case Western Reserve University School of Medicine was originally endowed by the founder of the Swagelok Corporation. Now under the auspices and support of the Department of Surgery, the laboratory is a facility open to cardiothoracic faculty and residents who wish to pursue research in cardiothoracic surgery.

Many animal studies have been conducted. Full anesthetic and operating room capabilities are present in the lab. Cardiac monitoring function includes conducting catheter and sonomicrometric crystal techniques. Computerized real time physiological data collection and analysis are available. Two Langdendorff columns are used for in-vitro studies.

#### Clinical Research Projects

Study Name: CoreValve Multicenter Clinical Trial: SurTAVI

Co-PI: Alan H. Markowitz, MD

Synopsis: Percutaneous implantation of the CoreValve

in high risk or non-candidates with aortic

stenosis

Sponsor: Medtronic Corporation

#### DIVISION GOALS

The main accomplishments for the 2014-2015 academic year include:

- Recruited five world-renowned cardiac surgeons
- Expanded cardiac surgery services into community at UH system and affiliated hospitals
- Re-activated the heart-and-lung transplant programs
- Maintained quality outcomes during a year of great transition and growth

Goals for the 2015-2016 academic year include:

- Expansion and enhancements of scope of practice at UH Case Medical Center and system and affiliated hospitals
- Expansion of quality-improvement initiatives
- Development of new programs
- Enhancement of education and research programs
- Initiation of residency program

### 2014-15 DIVISION HIGHLIGHTS

- The Division saw many transitions in 2014-15, with the addition of five surgeons and resignation of two surgeons. The Division began operating and managing the cardiac surgery programs at UH Elyria Medical Center, UH Parma Medical Center and Southwest General Health Center. This expansion of services brought world-renowned cardiac surgeons to community anchor programs with a tertiary link to UH Case Medical Center.
- Soon J. Park, MD was awarded the endowed Jay L. Ankeney, MD Chair, Professorship of Cardiothoracic Surgery in fall of 2014. He is also on the editorial boards of General Cardiac Surgery, the Journal of Thoracic and Cardiovascular Surgery, and Clinical Transplantation.
- Salil Deo, MD joined the Division in 2014. Dr. Deo completed an advanced clinical fellowship in cardiovascular surgery and a fellowship in mechanical circulatory support and cardiac transplantation at the Mayo Clinic. His clinical expertise is in ventricular assist device and congenital heart surgery.
- Benjamin Medalion, MD joined the Division in October 2014. Dr. Medalion completed a fellowship in cardiothoracic surgery at the Cleveland Clinic Foundation with a focus on heart transplantation and VAD implantation. Prior to joining UHCMC, he was Director of Transplantation and Heart Failure Surgery at Rabin Medical Center and Lecturer at Tel Aviv University Medical School.
- Basar Sareyyupoglu, MD joined the Division in February 2015. Prior to joining UHCMC, Dr. Sareyyupoglu was Director of Thoracic Transplantation and Mechanical Circulatory Support and the Surgical Director of the Lung Transplant Program at Scott & White Clinic in Temple, Texas and Assistant Professor of Surgery at Texas A&M University Health Science Center.
- Jai Lee, MD joined the Division in November 2014. Dr. Lee is the Medical Director and Chief of cardiothoracic surgery at Southwest General Medical Center and St. John Medical Center.
- Yakov Elgudin, MD joined the Division in 2014. Dr. Elgudin is also the Section Chief and the Director of Mechanical Circulatory Support Program for the Division of Cardiothoracic Surgery at the Louis B. Stokes Cleveland VA Medical Center.

### **DIVISION FACULTY**



#### **Division Chief**

Scott R. Steele, MD, Professor

Raul M. Bosio, MD, Assistant Professor **Bradley J. Champagne, MD,** Associate Professor Conor P. Delaney, MD, MCh, PhD, Professor Jeremy Lipman, MD, Assistant Professor Eric Marderstein, MD, MPH, Assistant Professor Harry L. Reynolds, Jr., MD, Associate Professor Anthony Senagore, MD, Professor Sharon L. Stein, MD, Associate Professor Melissa A. Times, MD, Assistant Professor Joseph A. Trunzo, MD, Assistant Professor

Karen Brady, NP Pat Cigetich, NP Mary Kasavich, NP Melissa Snow, APN Donya Woconish, NP Nellie Rhenko, RN

W. Conan Mustain, MD (2014-2015) Avinash S. Bhakta, MD (2015-2016)

The mission of the Division of Colorectal Surgery is to ensure and provide the highest-quality medical and surgical care for the prevention and management of diseases of the colon, rectum, and anus, while leading the way in worldwide educational and research endeavors, and fostering an environment of camaraderie and teamwork. The research being performed allows the Division to continue to develop the quality of care offered to patients and to allow us to maintain outcomes data with the goal of establishing the Division as a national leader in its area of expertise.

The **overall vision** is to be the recognized national and international authority on diseases of the colon, rectum and anus through the establishment of an integrated network of colorectal specialists with the primary aim of providing excellence in patient care, while providing world-class training and groundbreaking research.

The **clinical vision** is that every decision we make as a Division regarding patient care is based upon what is best for our patients and their families. By placing this focus as our first priority, we will not only ensure top-notch health care delivery, but also lead by example to all other Divisions—raising the level of care for all of UH.

The **educational vision** is that we continue the Division of Colon and Rectal Surgery's rich history of innovation and education of physicians at all levels and stages of their career, both nationally and internationally.



#### DIVISION OF COLORECTAL SURGERY

The **research vision** is that we cultivate and grow our existing collaborative research efforts and expand upon our long tradition of excellence in clinical research, along with providing a new focus on basic science and grantsmanship.

The **vision for community service** is that we maximize our efforts to engage the localregional community to improve overall health and establish the UH brand as the leader in care for colorectal disease.

The Division's commitment to education is evident in the highly-sought after ACGMEaccredited Colorectal Fellowship Program. The Program recently completed its fifth year, and

is hoping to expand to two fellowship slots in 2016-2017. In addition, Dr. Champagne, who is Program Director for the Fellowship Program, and Dr. Sharon Stein, have expanded the Case Colorectal Residents Career Course that encompasses a wide variety of topics regarding career advice for colorectal fellows from all over the U.S. The inaugural course took place in the fall of 2010, and has since grown to include the majority of colorectal fellows in the country. Drs. Champagne, Reynolds, Steele, and Stein all participate in quarterly laparoscopic training courses, and the Division continues to host numerous national and international visitors to observe laparoscopic and open surgery.

### 2014-15 DIVISION HIGHLIGHTS

- Dr. Scott Steele joined UHCMC in July 2015 as Chief of the Division of Colorectal Surgery. Dr. Steele is a graduate of the United States Military Academy in West Point, New York, and recently left the military after 25 years, serving most recently as the Chief of Colon and Rectal Surgery at Madigan Army Medical Center at Fort Lewis, Washington. He has previously served four combat deployments to Iraq and Afghanistan, being awarded the Legion of Merit, Bronze Star and Combat Medical Badge, amongst numerous other awards.
- Dr. Raul Bosio joined the Division of Colorectal Surgery in July 2014, after completing a Colorectal Surgery Fellowship at the University of California, Irvine.
- Dr. Anthony J. Senagore joined the Division in July 2014. Prior to joining UHCMC, Dr. Senagore served as the inaugural Chair of Surgery at the Central Michigan University College of Medicine. Dr. Senagore is the current Chair of the American Board of Surgery and the incoming Chair of the Colorectal Surgery Residency Review Committee for the ACGME. He is listed in Castle Connolly's Best Doctors in Colorectal and Cancer Surgery.

- Dr. William Conan Mustain is the recent outgoing colorectal surgery fellow, having successfully completed the fellowship in June 2015. Dr. Mustain is currently an Assistant Professor of Surgery in the Division of Colon and Rectal Surgery at the University of Arkansas for Medical Science in Little Rock, Arkansas.
- Dr. Benjamin Crawshaw recently completed two years of clinical research as the Jeffrey L. Ponsky Research Fellow at UHCMC, and will now continue to pursue his general surgery residency in the UHCMC Department of Surgery. Dr. Crawshaw recently won the Piedmont Society of Colon and Rectal Surgeons Award for the top Clinical/Podium Presentation at the 2015 ASCRS Annual Meeting, for his work on education and training of laparoscopic colectomy.
- Dr. Sadaf Khan, Director of Surgical Skills Training at the Institute for Surgery and Innovation (ISI) since 2011, has returned home to Pakistan, to continue her practice and spend time with family.
- **Dr. Conor Delaney** is the 2014-15 President-elect for the Midwestern Surgical Association, and the 2015-17 Recorder for the ACS-Accredited Educational Institutes Consortium Meeting.



- Dr. Bradley Champagne continues to be named to Best Doctors; Who's Who of Physicians; America's Top Surgeon; and Cleveland Magazine Best Doctors. Dr. Champagne also won the Piedmont Society Award at the ASCRS Annual Meeting for best presentation, "Failing to Prepare is Preparing to Fail."
- Dr. Harry Reynolds continues to be named to Top Docs Cleveland Magazine; Best Doctors; and America's Top Doctors. Dr. Reynolds was recently elected to the Board of the Academy of Medicine of Cleveland.
- Dr. Sharon Stein currently has a leadership role on the Council of the Association of Women Surgeons, and is Chair of the Ohio District #1 Committee on Applicants for the American College of Surgeons. Dr. Stein recently won the ASCRS Traveling Fellow Award.
- **Dr. Scott Steele** is the co-editor of the upcoming 3rd edition of the ASCRS Textbook of Colon and Rectal Surgery.
- **Dr. Joseph Trunzo** was recently awarded the 2015 University Hospitals Patient Satisfaction Award.

### **DIVISION RESEARCH**

#### Research Fellows

- Justin Brady, MD Jeffrey L. Ponsky Research Fellow
- Eslam Dosokey, MD
- Dongjin Choi, MD

#### Bradley Champagne, MD

- Educational Grant for the development of the ASCRS Assessment Tool (EVALV Project). ASCRS Executive Council, \$25,000.
- Hemorrhoid Energy Treatment Trial. Role: Principal Investigator. Total amount: \$13,000 (Start Up) \$2,821 (Per Patient).

#### Conor Delaney, MD, MCh, PhD

- HARM score evaluation as a quality metric for surgery. Role: Pl. SAGES Foundation, \$25,000, April 2014-15.
- Modelling colorectal cancer surveillance: A Norwegian-US perspective. Role: Scientific Advisory Board. Norwegian Government, NOK 2.4M (\$400,000), 2013-15.
- "Headset with laser pointer". US 9039224, Issue date 5/26/2015.
- "Subcutaneous hydration system, method and device". US Provisional Application Serial No. 14/211,006, Filing date Mar 14, 2014.
- Modifications to HARM score and application to different datasets.

#### Sharon Stein, MD

- A Phase II, Double-Blind, Placebo-Controlled, Dose Finding Study to Evaluate the Safety and Efficacy of Ipamorelin Compared to Placebo for the Recovery of Gastrointestinal Function in Patients Following Small or Large Bowel Resection with Primary Anastomosis Recovery of Gastrointestinal Function in Patients Following Small or Large Bowel Resection with Primary Anastomosis. Role: Primary Site Investigator. Helsinn Therapeutics, \$154,040 in site funding, 2014.
- Ligation of the Intersphincteric Fistula with Tissue Graft Placement for Treatment of Persistent Trans-sphincteric Anal Fistula (10-012-01). Role: Co-investigator. Sponsor Cook Biotech Incorporated, \$24,440 in site funding, 2014.
- Evaluating Safety and Feasibility of the Radial Reload Stapler with Tri-Staple™ Technology During Laparoscopic Low Anterior Resection for Rectal Cancer: A Prospective Multicenter Case Series. Role: Co-investigator. Covidien, \$36,225 in site funding, 2014.

### DIVISION OF GENERAL AND GASTROINTESTINAL SURGERY

### **DIVISION FACULTY**



Raymond Onders, MD, Professor Margaret G. and Walter K. Remen Chair in Surgical Innovation

Mujjahid Abbas MD, Assistant Professor Heidi Elliott, MD, Assistant Professor Leena Khaitan, MD, MPH, Associate Professor Jeffrey M. Marks, MD, Professor Yuri Novitsky, MD, Professor Ajita Prabhu, MD, Assistant Professor

Amitabh Goel, MD John Jasper, MD Jeffrey Parks, MD Tomasz Rogula, MD The Division of General and Gastrointestinal Surgery has maintained a continued high level of academic and clinical productivity, particularly in the field of minimally invasive surgical treatments of gastrointestinal diseases. Our Division strives to provide cutting edge treatment modalities to all aspects of gastrointestinal diseases. With clinical trials in endoscopic treatments of morbid obesity, endoscopic approaches to achalasia, diaphragm pacing, and complex abdominal wall reconstructions, patients are offered the most up-to-date therapies for these and other gastrointestinal diseases.

During the past year, the Division of General and Gastrointestinal Surgery has continued its strong commitment to providing cutting-edge therapies for all aspects of minimally invasive gastrointestinal surgery. Dr. Jeffrey Marks is an internationally recognized pioneer in the transoral approach to performing a Heller myotomy entirely endoscopically. The procedure is termed POEM: Per Oral Endoscopic Myotomy. This revolutionary approach to Achalasia has eliminated surgical incisions and dramatically improved patients' recovery with almost no discomfort. Dr. Marks has amassed one of the largest series of POEM procedures in the nation, and is recognized as an international leader in the field of POEM education, as he has trained surgeons from around the world in this innovative approach.







#### DIVISION OF GENERAL AND GASTROINTESTINAL SURGERY

Dr. Onders continues to offer hope to many spinal cord injury patients and those with Amyotrophic Lateral Sclerosis with his groundbreaking research on Diaphragm Pacing (DP). DP was developed at University Hospitals Case Medical Center (UHCMC) in Cleveland. To date, UHCMC has the world's largest experience with DP in ALS as well as other orphan patient populations. Dr. Onders has trained surgeons from around the world, and DP has now been implanted in patients in over 25 countries worldwide. Ventilator dependence in our intensive care units is a major cost and morbidity. Dr. Onders has now completed an FDA early feasibility study of the temporary use of a new diaphragm pacing electrode to try to solve this clinical problem. Dr. Onders continues to lead in innovation with several additional patents in the last academic year.

The Case Comprehensive Hernia Center, under the direction of Dr. Yuri Novitsky and Dr. Ajita Prahbu, has revolutionized the care of the hernia patient, offering both minimally invasive repairs for routine hernia repair, to reconstructing some of the most complex abdominal wall defects. The multidisciplinary nature of our Center allows close interactions with plastic surgeons and general surgeons to offer the full spectrum of surgical reconstructive options for our patients. Redefining the concept of a functional dynamic abdominal wall reconstruction has resulted in a host of funded research grants, national awards, and direct patient benefits with these unique approaches. Dr. Prahbu has also taken a leading role in surgical education and skills training for residents.

The Comprehensive Metabolic and Bariatric Treatment Center, led by Dr. Leena Khaitan, continues to offer state-of-the-art therapy for those patients suffering from obesity. In the 2014-2015 academic year, the bariatric program was pleased to welcome two new members, Dr. Mujjahid Abbas at UHCMC and Dr. Tomasz Rogula at UH Geauga Medical Center. They are both fellowship trained in bariatrics. With the addition of the new staff, we have been able to increase our volume and expand our services to an additional site on the west side of Cleveland to cover all of Northeastern Ohio. During this academic year, the bariatric program initiated a partnership with the heart failure team to help patients become candidates for heart transplant. Over the year multiple patients received weight loss surgery in order to become candidates for heart transplant.

Dr. Khaitan also functions as the Director of the Center for Esophageal and Swallowing Disorders. This Center, within the Digestive Health Institute, encompasses many disciplines including gastroenterology, minimally invasive surgery, thoracic surgery, radiology and oncology. Dr. Khaitan has spearheaded the effort to provide cutting edge diagnostic capabilities for esophageal and swallowing disorders, including high resolution manometry and impedance technology. The Center provides state of the art treatments and implements strategies for expeditious multidisciplinary evaluation of benign and malignant esophageal diseases.

#### DIVISION RESEARCH

Members of the Division are involved in several areas of research, including clinical trials in endoscopic treatments of morbid obesity, endoscopic approaches to achalasia, diaphragm pacing, and complex abdominal wall reconstructions.

- Dr. Onders research efforts are focused on ways to help people with spinal cord injuries and patients with Amyotrophic Lateral Sclerosis (ALS, also known as Lou Gehrig's disease) breath naturally using their own diaphragm; one of his first research subjects was the late Christopher Reeve, of Superman fame. He also recently completed a FDA early feasibility study of the temporary use of a new diaphragm pacing electrode in patients with ventilator dependence.
- Dr. Abbas research interests include understanding the pathophysiology of morbid obesity and its effects on health.
- Dr. Khaitan is active in research regarding weight loss surgery and swallowing disorders.
- Dr. Novitsky's laboratory work is focused on testing and improving prosthetic and biologic materials used in hernia repair procedures; he was recently awarded a prestigious SAGES grant for his evaluation of genetic therapies for gastroesophageal reflux disease.
- Dr. Marks is currently collaborating with Dr. Steve Schomisch on research investigating a novel surgical therapy for treating GI lesions and cancer of the esophagus.

#### DIVISION GOALS

Within the expanding University Hospitals Practice Groups, the groundwork has been laid for true system-wide patient care. Many of the community hospitals are being served by the academic-based general surgeons, in conjunction with the regional surgeons, to provide high quality surgical services. In particular, Dr. Amitabh Goel has provided tremendous leadership to the community-based surgeons while being an active member in the Division of General and Gastrointestinal Surgery at UHCMC. As this collaborative effort grows, the potential for incorporating these dynamic surgeons into the clinical rotations and residency teaching program are being examined. We look forward to the exciting role that the Division of General and Gastrointestinal Surgery will play to further the care of those patients in all of Northeastern Ohio.

#### 2014-15 DIVISION HIGHLIGHTS

- Dr. Mujjahid Abbas joined the Division in 2014. Prior to joining UHCMC, Dr. Abbas was on staff at the Cleveland VA Medical Center as Director of the Hernia Repair Center. Dr. Abbas's clinical interests include primary and revisional bariatric surgery and minimally invasive general surgery.
- In the 2014-15 academic year, the Bariatric Program initiated a partnership with the Heart Failure Team to help patients become candidates for heart transplant by receiving weight loss surgery.
- Dr. Ajita Prabhu took over the role of Surgical Skills Trainer, providing leadership in the surgical education and skills training for the residents.
- **Dr. Ray Onders** was recently named the Vice Chair of Surgical Innovation for the UHCMC Department of Surgery.
- Dr. Ray Onders recently received the Distinguished Alumni Award from the Northeastern Ohio Universities College of Medicine for his work in advancing medicine.
- **Dr. Jeffrey Parks** joined the Division in 2014 as community-based faculty at UH Ahuja, UH Richmond, and UH Bedford Medical Centers. His practice scope includes general and advanced laparoscopic surgery.
- **Dr. Tomasz Rogula** joined the Division Bariatric Program in 2015, working primarily at UH Geauga Medical Center. Prior to joining UH Geauga, Dr. Rogula was on staff at the Cleveland Clinic.
- In 2015, **Dr. Jeffrey Marks** was selected to the SAGES Executive Council as Secretary. Dr. Marks is also the SAGES representative to the American Board of Surgery SCORE Advisory Council.
- Dr. Ray Onders became president of the Midwest Surgical Association in 2014.
- In 2014-15, **Dr. Ajita Prabhu** received the CCRT Surgical Innovation Award. Dr. Prabhu also received the UHCMC Faculty Teaching Award, selected by General Surgery Residents for her excellence and commitment to surgical resident education.

### DIVISION OF HEPATOBILIARY AND TRANSPLANT SURGERY

### **DIVISION FACULTY**



Christopher T. Siegel, MD, PhD, Associate Professor

Mark Aeder, MD, Associate Professor **John Ammori, MD,** Assistant Professor Scott Boulanger, MD, PhD, Assistant Professor Jeffrey Hardacre, MD, Associate Professor Vanessa Humphreville, MD, Assistant Professor **Edmund Sanchez, MD,** Associate Professor Kelly Siegel, CNP Charles Winans, MD, Associate Professor

The Division of Hepatobiliary and Transplant Surgery has responsibility for performing all abdominal organ (kidney, liver, and pancreas) transplants at the University Hospitals Case Medical Center (UHCMC), including Rainbow Babies & Children's Hospital. The Division members also perform the majority of hepatobiliary operations including hepatic resections and tumor ablations, using both open and laparoscopic techniques.

The Transplant Program, which was started in 1969 with renal transplantation, was expanded to include liver and pancreas transplantation in the late 1980s. Since its inception, the program has performed over 3,500 abdominal organ transplants with kidney transplants comprising the majority. Currently, the Division performs between 120-140 transplants each year. Live donor kidney transplantation is routinely performed for both adults and children and all donor nephrectomies are performed laparoscopically by Division surgeons. In addition, Division surgeons perform over 250 hepatobiliary and pancreatic operations each year. The members of the Division of Hepatobiliary and Transplant Surgery participate regularly in local, regional, and national organizations involved with transplantation and hepatobiliary surgery, including OPTN/UNOS, Society for Surgery of the Alimentary Tract, LifeBanc, ASTS, and OSOTC.

The Division does not have a transplant surgery fellowship program; consequently, its primary educational effort is in the training of general surgery and urology residents at UHCMC. In addition, residents from several regional general surgery programs rotate through the service in order to obtain their transplantation experience. The Transplant and Hepatobiliary Service serves as the primary exposure of the resident staff





#### DIVISION OF HEPATOBILIARY AND TRANSPLANT SURGERY

#### 2014-15 DIVISION HIGHLIGHTS

- Dr. Charles Winans joined the Division in February 2015. Previously, Dr. Winans practiced at the Cleveland Clinic Foundation, where he was active in pancreas and liver transplantation.
- Under the direction of **Dr. Christopher Siegel**, 2014 was a rebuilding year for the Division, with the joining of Hepatobiliary Surgery and Transplant Surgery.
- The Division performed the first ALPPS (Associating Liver Partition and Portal Vein Ligation for Staged Hepatectomy) procedure in Ohio, only the 4th recorded case in the US.
- The total volume of organ transplants performed at UHCMC surpassed the 3,500 mark in 2014.
- Both Dr. Charles Winans and Dr. Vanessa Humphreville are on the Medical Advisor Board for LifeBanc.
- Dr. Edmund Sanchez serves on the Board of Directors for both OSOTC and LifeBanc, and currently serves on the UNOS Pancreas Committee.
- Dr. Christopher Siegel serves on the Medical Advisory Committee of the Ohio Chapter of the American Liver Foundation.
- Dr. Mark Aeder is currently Vice Chair of the OPTN/UNOS Kidney Committee and Chair of the Kidney Paired Donation Workgroup.
- Dr. John Ammori is a recent inductee into the American College of Surgeons.

### DIVISION GOALS

The Division of Hepatobiliary and Transplant Surgery continues to strive for the best outcomes achievable in abdominal organ transplantation and in hepatobiliary surgery. Growth in transplant volume is of paramount importance to the Division and strategies to achieve this goal are being developed through strategic planning efforts with UHCMC administration for each organ. In concert with our colleagues in the Department of Medicine, Division surgeons continue to develop clinical studies in kidney, liver, and pancreas transplantation. Improvement in outcomes for hepatobiliary and pancreatic malignancies continues to be a goal for the Division and is being achieved through the use of multidisciplinary teams in the treatment of these devastating cancers.

to patients with chronic end-stage kidney and liver disease, thereby allowing them to become familiar with the strategies of renal replacement therapy and the management of patients with liver failure and hepatic malignancies. The Division members also participate in the didactic educational programs for the first and third year students and serve as mentors for fourth year students performing assistant internships in the field of transplant and hepatobiliary surgery.

The Transplant and Hepatobiliary Service at UHCMC is a very unique service in that it is attended by both the surgeons from the Division of Transplant and Hepatobiliary Surgery and the transplant nephrologists and hepatologists from their respective divisions in the Department of Medicine. The primary resident staff are from the programs in general surgery and urology who are variably assisted by fellows from nephrology and gastroenterology in the Department of Medicine. The service has a full-time nurse coordinator whose responsibility is to assist the resident staff with transplant-related management issues and to serve as a liaison between the inpatient service and outpatient management teams. Three Nurse Practitioners work with the surgeons managing non-transplant hepatobiliary and pancreas patients and surgical and medical patients on the transplant service. The pre-transplant and post-transplant efforts are managed by a team of nurse coordinators, and a dedicated team to handle the administrative aspects of the transplant program, including data management, social work, outreach, and patient financials.

#### DIVISION RESEARCH

#### Members of the Division are involved in both laboratory and clinical research:

- Dr. Aeder has ongoing clinical research into the processes and improvements of national kidney allocation and the barriers to national paired kidney donation. He is working on algorithms for the national redistricting of kidney allocation units and the metrics for determining the best utilization of en bloc/double kidney transplants. He is also working on a national financial model for kidney paired donation and new algorithms for determining how to transplant the hard to match recipients.
- Dr. Ammori is involved in research activities evaluating the immunomodulatory effects of VEGF on human lymph node antigen-presenting and lymphoid cells. In addition, he has recently published on the use of hepatic artery infusion pumps in the treatment of patients with unresectable metastatic colon cancer to the liver.
- Dr. Hardacre is involved in a national multicenter trial evaluating the use of immune stimulants in the adjuvant treatment of resectable pancreatic adenocarcinoma.
- Dr. Sanchez has an ongoing interest in studying renal function in liver transplant patients as well as the use of continuous glucose monitoring in pancreas transplant recipients.
- All members of the Division participate in the Transplant Program's numerous industry-sponsored, multi-center trials in the area of immunosuppression therapeutics and in the management of liver diseases.

#### **Industry Sponsored Research Projects**

- "A Prospective Observational Trial to Evaluate the Correlation of T-Spot response to CMV Infection and T cell mediated Acute Graft Response." The PROTECT Study. (Oxford Immunotec).
- "Eculizumab for the prevention of delayed graft function in deceased donor kidney transplantation" (Alexion).
- "A 24-month, multicenter, randomized, open label safety and efficacy study of concentration controlled everolimus with reduced calcineurin inhibitor vs mycophenolate with standard calcineurin inhibitor in de novo renal transplantation" (TRANSFORM Study – Novartis).
- "Pilot Study of EGFR Inhibition with Erlotinib in Cirrhosis to Inhibit Fibrogenesis and Prevent Hepatocellular Carcinoma" (Astrellas).
- "Phase 2, randomized, open-label, parallel group, multicenter study to assess the safety and efficacy of Alefacept in de novo kidney transplant recipients" (Astellas).

- "Phase 3, open-label, multi-center, prospective, randomized study of the efficacy and safety of conversion from Prograf® capsules twice daily to LCP-Tacro tablets once daily for the prevention of acute allograft rejection in stable kidney transplant patients" (LifeCycle).
- "A facilitated access program to provide everolimus (RAD) for maintenance for patients completing therapy (RAD) trials in solid organ transplantation" (Novartis).
- "Planned transition to sirolimus-based therapy versus continued tacrolimus-based therapy in renal allograft recipients" (Wyeth).
- "Phase 3, double-blind, double-dummy, multi-center, prospective, randomized study of the efficacy and safety of LCP-Tacro™ tablets, once daily, compared to Prograf® capsules, twice daily, in combination with Mycophenolate Mofetil for the prevention of acute allograft rejection in De Novo adult kidney transplant recipients" (Veloxis Pharamceuticals).
- "Advanced liver analysis in computed tomography for liver segmentation and volumetry" (Phillips).
- "A partially blinded, prospective, randomized multicenter study evaluating efficacy, safety and tolerability of oral sotrastaurin plus standard or reduced exposure tacrolimus vs myfortic plus tacrolimus in de novo renal transplant recipients" (Novartis).
- "A phase III randomized, double blind, placebo controlled study of sorafenib as adjuvant treatment for hepatocellular carcinoma after surgical resection or local ablation (STORM)" (Bayer Healthcare).
- "Global investigation of therapeutic decision in hepatocellular carcinoma and of its treatment (GIDEON)" (Bayer Healthcare).
- "A phase 2b randomized single blinded trial of JX-594 (Vaccina GM-CSF/TK deactivated virus) plus best supportive care vs placebo plus best supportive care in patients with advanced hepatocellular carcinoma who have failed sorafenib treatment" (Jennerex Biotherapeutics).
- "The role of social support in liver transplant outcomes" (Ohio Solid Organ Transplantation Consortium).

#### NIH and HRSA Research Grants

- Randomized Controlled Trial of Infliximab Induction Therapy for Deceased Donor Kidney Transplant Recipients (CTOT -19).
- Noninvasive monitoring to predict outcome in De Novo kidney transplant recipients (CTOT-01, NIH).
- Immune monitoring and CNI withdrawal in low risk recipients of kidney transplants (CTOT-09, NIH).
- Enhancing DCD Utilization with Thrombolytic Therapy (HRSA).

### **DIVISION FACULTY**



Dale A. Baur DDS, Associate Professor and Chair

Faisal A. Quereshy, MD, DDS, FACS, Associate Professor and Program Director

#### Faculty/Staff

Jerold S. Goldberg, DDS, Professor

**Stanley Hirsch, DDS, Professor (Oral Pathology)** 

Fady Faddoul, DDS, Professor (General Dentistry and Program Director AEGD)

Andres Pinto, DMD, MPH, Associate Professor (Oral Medicine)

Robert Heckel, DDS, Associate Clinical Professor

Michael Hauser, DMD, MD, Associate Clinical Professor

Aurelio Alonso DDS, PhD, Assistant Professor (Oral Medicine)

Keith Schneider DMD, Assistant Clinical Professor

William Blood, DDS, MD, Assistant Clinical Professor

John Blakemore, DDS, Assistant Clinical Professor

Raymond Plona DMD, MD, Assistant Clinical Professor

Marion Wazney, DDS, Assistant Clinical Professor

The Division of Oral and Maxillofacial Surgery provides a broad range of services to our patient population. As defined by the American Association of Oral and Maxillofacial Surgeons, Oral and Maxillofacial Surgery is the specialty of Medicine/Dentistry that includes the diagnosis, surgical and related treatment of diseases, injuries and defects involving both the functional and esthetic aspects of the hard and soft tissues of the head, face, mouth, teeth, gums, jaws and neck. Oral and maxillofacial surgeons are specialists who treat conditions, defects, injuries, and esthetic aspects of the mouth, teeth, jaws, and face.

Oral and maxillofacial surgeons care for patients who experience such conditions as problematic or impacted wisdom teeth, facial pain, and misaligned jaws. They treat accident victims suffering facial injuries, offer reconstructive and dental implant surgery, and care for patients with tumors and cysts of the jaws and functional and esthetic conditions of the maxillofacial areas. With our advanced training in pain control and anesthesia, we are able to provide our patients with maximum comfort and safety.

The training of our surgical residents includes a four-year graduate degree in dentistry and the completion of a five-year hospital-based surgical residency program which includes attending medical school to obtain a medical degree, and one year of general surgery training.





#### 2014-15 DIVISION HIGHLIGHTS

### National and regional leadership positions held by faculty: Dale Baur, DDS

#### Ohio Society of Oral and Maxillofacial Surgeons:

- President July 2013-July 2014
- Immediate Past President July 2014-July 2015
- Hospital affairs committee, 2007-2015

#### American Association of Oral and Maxillofacial Surgeons:

• Committee on Continuing Education and Professional Development, 2009-2015

#### Chalmers J. Lyons Academy or Oral and Maxillofacial Surgery:

Vice-president

### Strasbourg Osteosynthesis Research Group, North

Appointed to board of directors 2013-2016

#### Faisal A. Quereshy, MD, DDS, FACD

American Association of Oral and Maxillofacial Surgery: Continuing Education Committee member

Chairman: Clinical Interest Group CIG: Facial Cosmetic Surgery (2014-2015)

Program Chair: 2014 AAOMS Annual Meeting (Hawaii)

**Program Chair:** 2015 Preconference Session Cosmetic Surgery (Washington, DC)

Committee on Residency Education and Training (CRET) (2014 - 2016)

Journal Oral & Maxillofacial Surgery (JOMS) scientific article reviewer for publications (2009-present)

JOMS editorial board (2015-present)

Ohio Society of Oral & Maxillofacial Surgeon (OSOMS) alternate delegate Ohio (2014)

Board examiner ABOMS (April 2010-present)

Section II Chairman (OCE) responsible for fabrication of Oral Board Examination (OCE) (2014–2016)

Greater Cleveland Dental Society (GCDS) President ELECT (2015-2016)

#### American Board of Facial Cosmetic Surgery (ABFCS)

Founding Member (Jan 2015-present) Executive committee member (VP)

OKU (Omicron Kappa Upsilon) President Elect (2014-2015)

American Dental Educators Association (ADEA) CHAIRMAN committee on Oral & Maxillofacial Surgery (2013-present)

#### Keith Schneider, DMD

Vice-president, Northeast Ohio Dental Society

### **DIVISION GOALS**

Our primary goal is to establish the Division/Department as a national center of excellence in modern oral and maxillofacial surgery, by increasing surgical volume and diversifying the experiences for our residents. We also wish to cultivate future academic leaders of our specialty. We strive to continue to provide state-of-theart care to our patients. As a means to this end, we will continue to recruit strong residents to our training program. As part of our outcome measures, we expect all of our residents to complete the certification process and become diplomates of the American Board of Oral and Maxillofacial Surgery. Additionally, we encourage our graduates to seek subspecialty fellowship training.

#### DIVISION RESEARCH

**Project Title:** TMJ Articular Disc Repair by Anisotropically Aligned Collagen Biotextiles Infused wih Human MSCs on Pigs

Principal Investigator: Dale Baur, DDS

**Project Title:** Efficacy of Ketorolac in Postoperative Pain Relief Following Third Molar Extraction

Principal Investigators: Dale Baur, DDS, Faisal Quereshy, MD, DDS

Project Title: IV Acetaminophen in Postoperative Pain Management After Third Molar Extractions. A Clinical Trial

Principal Investigators: Dale Baur, DDS, Faisal Quereshy, MD, DDS

Project Title: Antibiotic Usage Among Oral and Maxillofacial Surgeons in Ohio

Principal Investigators: Dale Baur, DDS, Keith Schneider, DMD

Project Title: Antibiotic Usage Among Oral and Maxillofacial Surgeons among the United States and Canada

Principal Investigators: Dale Baur, DDS, Keith Schneider, DMD

Project Title: Perioperative Fluid Replacement in Third

Molar Surgery. A Clinical Trial

Principal Investigator: Dale Baur, DDS

**Project Title:** Treatment Outcomes of Keratocystic

Odontogenic Tumor: Review of 50 cases

Principal Investigators: Dale Baur, DDS, Faisal Quereshy,

MD, DDS

**Project Title:** Comparison of post-surgical complications in bilateral split osteotomy with use of miniplates and monocortical screws or bicortical screws

Principal Investigators: Dale Baur, DDS, Faisal Quereshy, MD, DDS

Project Title: Incidence of Patients with Undiagnosed Diabetes Dental Implants and Their Perception of the Quality of Health Care

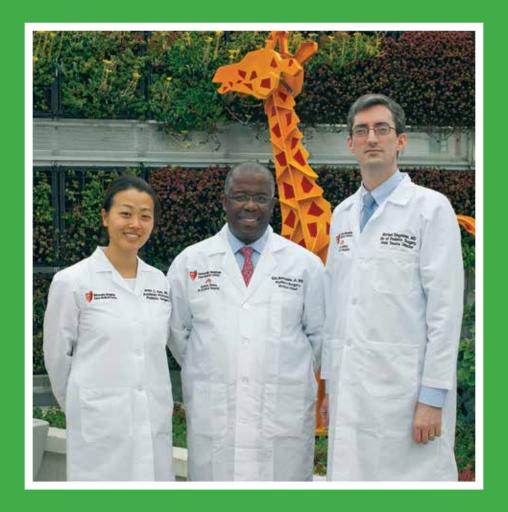
Principal Investigators: Dale Baur, DDS

**Project Title:** Patient-Centered Quality of Life (QOL) Measures after Temporomandibular Total Joint Replacement Surgery

Principal Investigators: Dale Baur, DDS, Faisal Quereshy, MD, DDS



### **DIVISION FACULTY**



Edward M. Barksdale, Jr., MD, Professor Vice Chairman of Surgery, UHCMC

Scott C. Boulanger, MD, Assistant Professor Michael Dingeldein, MD, Assistant Professor Anne Kim, MD, Assistant Professor

The Division of Pediatric Surgery currently comprises four, fulltime academic faculty and provides complete consultative and surgical services for all child/adolescent populations at Rainbow Babies and Children's Hospital (RB&C). In addition, we partner with two seasoned and talented community physicians to help supplement 24/7 coverage of all pediatric surgical/trauma needs. These services include, but are not limited to, all general and thoracic surgical conditions: congenital anomalies, pediatric solid tumors, complex gastrointestinal problems (esophageal disorders, biliary track diseases, inflammatory bowel disease, Hirschsprung's disease/bowel motility disorders, etc.) and chest wall deformities. A major percentage of these procedures are being approached using advanced minimally invasive surgical technologies.

The Division also provides all comprehensive services and coverage for the only ACS-certified Level 1 Pediatric Trauma Center in Northeast Ohio. Dr. Michael Dingeldein is currently the Director of RB&C Trauma Center. The annual volume of trauma admissions for 2014 was 1,052, a significant increase over previous years, which averaged around 425 admissions since the Center's inception in 1998. In April 2015, the RB&C Pediatric Trauma Program was re-verified by the American College of Surgeons Committee on Trauma and maintained its certification as a Level 1 Pediatric Trauma Center. RB&C is one of only three such pediatric trauma centers in Ohio. The trauma program is now also providing ATLS (Advanced Trauma







#### DIVISION OF PEDIATRIC SURGERY

Life Support), a trauma course for physicians in and outside of the system.

The faculty provides office hours and performs outpatient surgery throughout the Northeast Ohio area. Current sites span main campus RB&C, Landerbrook, Westlake, Twinsburg, Parma and Mentor. Ambulatory surgery in appropriate patients is conducted off the main campus at UH Ahuja Medical Center, UH Westlake Surgery Center and the UH Mentor Surgery Center. We also offer same-day patient access at RB&C Monday-Friday for any needs that occur outside of regularly scheduled clinic hours.

The Division partners with several pediatric surgery nurse practitioners to provide continuity of care for both inpatient and outpatient. We have begun implementation of the Pediatric Certified Nurse Practitioner Physician Extension Model of Care to improve the quality and experience of services provided to our patients and their families. In addition to direct patient care, the team is responsible for defining the Division's practices related to quality, safety, outcomes, education, primary and referring physician communication, and long-term followup care. The Nurse Practitioners are also in the process of developing programs in wound and stoma care and a clinic in chest wall deformities.

The Division (and Hospital) remains actively engaged in diverse community service endeavors to further the mission of improving health and health care for children in Northeast Ohio, through the development of strategic relationships with a variety of community partners. The burgeoning epidemic of urban violence that so tightly grips Cleveland and Northeast Ohio has led to a unique partnership between RB&C and UHCMC, the mayor's office and local law enforcement. Project FOCUS is a multidimensional endeavor to thwart gang-related urban violence by offering employment and educational alternatives to stiff law enforcement efforts. There is also a collaboration between Case Western Reserve University School of Public Health, family practitioners and nurses at UH Geauga Medical Center, Elders in the Amish community and the schools to develop culturally sensitive injury prevention programs for Amish children, to both decrease the disparities in injury and outcomes.

#### 2014-15 DIVISION HIGHLIGHTS

- The RB&C Pediatric Trauma Program was re-verified in April 2015 by the American College of Surgeons Committee on Trauma and maintained its certification as a Level 1 Pediatric Trauma Center, one of only three pediatric trauma centers in Ohio.
- Dr. Michael Dingeldein joined the Pediatric Surgery faculty in 2014 as the Director of the RB&C Trauma Center. Dr. Dingledein brings with him specialty knowledge and expertise in pediatric trauma.
- Dr. Edward M. Barksdale received the Avery Award of Excellence for Pediatric Surgery from Avery's Angels Gastroschisis Foundation.

- In 2014, **Dr. Edward Barksdale** was included in Cleveland Magazine Best Docs, Cleveland Super Docs, and Best Doctors in America.
- **Dr. Edward Barksdale** received a Rainbow Foundation award of \$156,000 for quality and educational development in pediatric trauma.

### DIVISION RESEARCH

#### Anne Kim, MD

Evaluating the Cost-Effectiveness of Superficial Soft Tissue Abscess Drainage in Sedation Unit vs. Operating Room Abscess, Cost-Effectiveness, Sedation.

#### DIVISION GOALS

#### **Expansion of Clinical Services**

The UH system has invested significantly in acquiring independent hospitals in Northeast Ohio. The addition of UH Elyria and UH Parma will provide an incremental opportunity to serve more patients in the western population of Northeast Ohio. The addition of Dr. Dingeldein has broadened our clinical outreach within the Metropolitan Cleveland area and Northeast Ohio. We will continue to provide office hours at the UH Westlake, Twinsburg, Mentor and Parma. Efforts to more efficiently and strategically deploy faculty to other locations within the region are planned according to both community demand and institutional goals. The Division projects continued surgical volume growth at RB&C and the UH affiliates.

### Refinement of Established Multidisciplinary **Programs**

Established multidisciplinary clinical programs, such as Trauma and emerging programs in Minimally Invasive Surgery, Maternal-Fetal Diagnosis and Treatment and Inflammatory Bowel Disease, continue to be areas of great clinical distinction for our Division. Funding from The Cleveland Foundation has provided critical support to build and mature a clinical center of excellence in Pediatric Minimally Invasive Surgery to programmatically coordinate advances in general and thoracic pediatric surgery with neurosurgery, orthopedics and other pediatric surgical subspecialties. The construction of a stateof-the-art Neonatal Intensive Care Unit at RB&C and the recently recruitment of a new Division Chief of Perinatology at McDonald's Women's Hospital has facilitated the development of an interdisciplinary fetal diagnosis and treatment center. These efforts have increased our regional referrals of infants with complex congenital anomalies and serve to help us establish our institution as a destination point in the region for the care of these mothers, infants and their families.

Rainbow Babies & Children's Hospital's Trauma Center at UH Case Medical Center has been verified as a Level 1 Trauma Center by the Verification Review Committee (VRC), an ad hoc committee of the Committee on Trauma (COT) of the American College of Surgeons (ACS). The Committee on Trauma's certificate of verification has been awarded for an additional two years (April 22, 2015

to April 22, 2017). This achievement recognizes the trauma center's dedication to providing optimal care for injured patients. RB&C's Trauma Center has met the essential criteria that ensure trauma care capability and institutional performance (as outlined by the American College of Surgeons Revised 5/20/2009) by demonstrating our commitment to providing the highest quality trauma care for all injured patients.

### Establish New Investigative Programs in Pediatric Surgery

The addition of new faculty has now created a critical mass of individuals who can pursue areas of academic interest in concert with their clinical activities. The recent establishment of the Minimally Invasive Program and development of the Pediatric Surgery Database have converged to provide critical infrastructure for the emergence of the clinical research program for the Division. The Pediatric Surgery Database will allow the Division to prospectively record cases and follow outcomes. This data may be repurposed for multiple other uses within both research and quality assurance. Consequently, there has been a remarkable increase in the number of publications from the group. The group will pursue corporate objectives toward continued development of clinical research objectives in minimally invasive surgery, injury prevention and nutrition in the critically ill neonate and child, with a concerted focus on increasing publication productivity, increasing faculty presence at national meetings, and pursuit of extramural support.

#### Commitment to Undergraduate and **Graduate Medical Education**

Education is an important component of the Divisional activities and mission, and the Division is widely recognized for its commitment to the education at all levels of undergraduate, graduate and post-graduate medical education. We remain committed to sustaining the efforts needed to improve medical student and resident education. One of the students mentored by the group was recently featured in an upcoming special on the syndicated TV show "The Doctors". Several investigational studies and projects by students and residents have been proctored and successfully published or presented at national meetings. Furthermore, we endeavor to codify interests and efforts in graduate medical education in pediatric surgery.

### **DIVISION FACULTY**



Julian Kim, MD, Professor

John Ammori, MD, Assistant Professor Jill Dietz, MD, Associate Professor Mary Freyvogel, DO, Clinical Assistant Professor Jeffrey Hardacre, MD, Associate Professor Marjie Persons, MD, Associate Professor Lisa Rock, MD, Clinical Instructor Robert Shenk, MD, Associate Professor Scott M Wilhelm, MD, Associate Professor

The Division of Surgical Oncology continues to make significant contributions to the mission of the Department of Surgery. The Division performed at a high level from a financial perspective by balancing revenue and costs. Over the past academic year, the Division has grown with the addition of Dr. Jill Dietz, a renowned breast surgeon who has national visibility within the American Society of Breast Surgeons. She brings expertise in oncoplastic surgery and is the Director of Breast Center Operations for the entire system.

In addition, Dr. Mary Freyvogel was recruited after completing a fellowship in Breast Surgery, to grow breast surgery market share in the Western Region; and Dr. Lisa Rock, an experienced and established surgeon, has been added to the Division to grow breast surgery market share in the Eastern Region. These additions to the existing faculty will ensure progressive volume growth as the UH system continues to expand and extend services into the northern Ohio region.

All of the members of the Division spend significant time teaching residents and medical students on the Lenhart Surgical Oncology service, the Shuck Hepatobiliary and Endocrine service and in the outpatient clinics. Several of the faculty have been recognized by the residents for excellence in teaching, and the Lenhart and Shuck services ranked high in popularity among the residents at the annual retreat. Several faculty members serve on the Case Surgery Residency Committee and subcommittees involved with resident evaluation and teaching. Dr. Marjie Persons continues a long history of oversight of the







#### 2014-15 DIVISION HIGHLIGHTS

- Dr. Jill Dietz joined the Division in September 2014. Dr. Dietz has national visibility within the American Society of Breast Surgeons, and brings expertise in oncoplastic surgery. She is the Director of Breast Center Operations for the entire system.
- Dr. Mary Freyvogel joined the Division in August 2014, after completing a fellowship in Breast Surgery.
- Dr. Scott Wilhelm was promoted to Society Treasurer for the Ohio American College of Surgeons for 2014-15.
- Dr. Jeffrey Hardacre was a 2014 award recipient to participate in the Leadership Program in Health Policy and Management at Brandeis University, sponsored by the American College of Surgeons and the Society for the Surgery of the Alimentary Tract. Dr. Hardacre was chosen to attend a week-long, intensive course in health policy and management.
- Dr. Jeffrey Hardacre became a member of the Ohio Governor's Office of Health Transformation Clinical Advisory Group on Cholecystectomy and Appendectomy, a group of physicians asked to provide input on how to transition to episode-based care for cholecystectomy and appendectomy.
- Dr. Kim was appointed Vice Chair of Faculty Development for the UHCMC Department of Surgery, as well as the Chair of the Department's Academic Promotions and Tenure Committee.

#### **DIVISION GOALS**

In the upcoming year, the Division will continue to evaluate opportunities to expand clinical services and develop new services across the UH system. Strategic recruitment of new physicians to fill roles in both at the academic medical center and in the region will be a key part of the growth initiative. Excellence in teaching and research will continue to expand in order to support the mission of "To Heal, To Teach and To Discover".

medical student teaching for the core Surgery rotation at UH in collaboration with the Case Western Reserve University School of Medicine.

Several faculty members have made significant contributions to the academic mission of the Department. Dr. Robert Shenk was part of a group of investigators who presented a novel method of wire localization of cancerous axillary lymph nodes following neoadjuvant chemotherapy at the Annual Meeting of the Society of Surgical Oncology. Dr. Jeffrey Hardacre continues to work with industry partners on the development and FDA approval of a novel pancreatic cancer vaccine and is also the Program Committee Chair for the Annual Meeting of the Central Surgical Association. Dr. Jill Dietz was Program Chair for the Annual Meeting of the American Society of Breast Surgeons. Dr. Scott Wilhelm served on Program Committees of the American Association of Endocrine Surgeons, Midwest Surgical Society and Central Surgical Association and is past president of the Cleveland Surgical Society. Finally, from a translational research perspective, Dr. John Ammori finished his NIH K12 award studying the development of adoptive T cell therapy from draining lymph nodes from pancreatic cancer patients, and Dr. Julian Kim opened a novel Phase I trial of adoptive T cell therapy in patients with advanced melanoma. Several residents and students have benefitted from spending time in the Division's translational research lab as well.

#### DIVISION RESEARCH

John Ammori, MD

Funding Source: NIH/NCI (K12 CA076917-15)

Project Role: Paul Calabresi Scholar (Gerson, PI) Clinical Oncology Career Development Project Title:

Program

July 2012 – June 2015 Project Period:

Mentored research experience with a 2-year didactic curriculum designed to provide basic background and highly individualized advanced training in clinical and methodological components of translational cancer

research.

#### Julian Kim, MD

#### IRB-approved clinical trials

CASE IRB 3612: Phase I study using autologous Ex Vivo Activated (X-ACT) lymph node lymphocytes as adoptive immunotherapy in advanced malignant melanoma patients. (Kim, PI). IND application filed with FDA #15959

CASE IRB 3610: Molecular Studies of T cell clones for adoptive therapy. (Kim, PI) Sponsor-NIH

**Funding** 

Funding source: Early Phase Clinical Research Support

(NCI P30-CA043703)

Project Role: Principal Investigator

Clinical Development of T cell Adoptive Project Title:

Immunotherapy of Cancer

Project Period: 6/1/2014-5/31/2015 Award Amount: \$85,000 (approximate)

The overall goal of this project is to support protocol nurse, data management and regulatory personnel for a Phase I clinical trial of adoptive immunotherapy in patients with advanced melanoma.

Funding source: University Hospitals Center for Clinical

Research and Technology

Project Role: Principal Investigator

Project Title: Phase I Clinical Trial of Adoptive

Immunotherapy in patients with

advanced melanoma

Project Period: 4/1/2014-3/30/2015

Award Amount: \$50,000

The overall goal of this project is to support personnel and expenses related to a Phase I Clinical Trial of Adoptive Immunotherapy in patients with advanced melanoma.

Funding source: University Hospitals Immunogene

Therapy Fund

Project Role: Principal Investigator

Project Title: Preclinical and Clinical Development of T

cell Adoptive Immunotherapy of Cancer

Project Period: 7/1/2012- 7/1/2016

Award Amount: \$2,000,000+

The overall goal of this fund is to support preclinical and clinical development of immune-based therapies for patients with cancer. All of the dollars to support the fund

were raised through philanthropy.

Funding source: Susan Komen Foundation

Project Role: Mentor (Nicole Steinmetz, Ph.D trainee) Project Title: A nanoparticle-based HER2 breast

cancer vaccine

Project period: 7/1/2014-6/30/2017

Award Amount: \$450,000

The overall goal of this program is to support the translational research career development of young

investigators.

Funding source: NIH K12

Project Role: Mentor (John Ammori, M.D. trainee) Project Title: Adoptive T cell immunotherapy of

pancreatic cancer

Project period: 7/1/2012-6/30/2015

Award Amount: \$315,000

The overall goal of this program is to support the translational research career development of young

investigators.

#### Scott Wilhelm, MD

Evaluation of Incidentally Discovered Thyroid Nodules-How Does Mechanism of Detection After Risk of Thyroid Cancer. Ongoing project.

Evaluation of PET Scan Positive and Negative Thyroid Nodules- Risk of Thyroid Cancer. Ongoing study.

### DIVISION OF THORACIC AND ESOPHAGEAL SURGERY

### **DIVISION FACULTY**



**Philip Linden, MD,** Associate Professor in Thoracic & Esophageal Surgery

Yaron Perry, MD, Clinical Associate Professor

Jason Robke, MD, Assistant Professor

Christopher Towe, MD, Assistant Professor

The Division of Thoracic and Esophageal Surgery focuses on the minimally invasive treatment of disorders of the lung, mediastinum, pleura, chest wall, and esophagus including lung cancer, gastroesophageal reflux, paraesophageal hernia, esophageal cancer, pleural disease, hyperhidrosis, thoracic outlet syndrome, and tracheal tumors. Minimally invasive procedures commonly performed include VATS lobectomy, VATS pericardial window, laparoscopic hernia repair, laparoscopic Heller myotomy, VATS thymectomy, and stenting of the airway and esophagus. Ablative therapies, including Cyberknife stereotactic radiosurgery and radiofrequency ablation, are available for high risk and prohibitive risk patients.

### **DIVISION GOALS**

- Continued increase in esophageal surgery volume
- Expansion of division to Parma, Elyria and Geauga Hospitals
- Publication of esophageal cancer experience and minimally invasive lung cancer experience







#### DIVISION OF THORACIC AND ESOPHAGEAL SURGERY

#### DIVISION RESEARCH

**Project Title:** Computer-Extracted CT Features for Distinguishing Suspicious Lung Lesions with No, Minimal, and Significant Invasion

Co-Principal Investigator: Philip Linden, MD

Funding: Department of Defense, \$534,000 over 2 years

Project Title: Comparison of Endoscopic Submucosal Dissection versus Mucosal Resection for Neoplasia of the Esophagus, Stomach, Colon, and Rectum

Principal Investigator: John Dumot, DO Sub Investigator: Philip Linden, MD

**Project Title:** Near Infra-Red Spectrophotometry (NIRS)-Based Cerebral Oximetry Monitoring in Elderly Thoracic Surgical Patients Undergoing Single Lung Ventilation Procedures: A Single Center, Prospective, Randomized Controlled Pilot Study Assessing the Clinical Impact of NIRS-Guided Intervention

Co-Principal Investigator: Philip Linden, MD

Project Title: Novel Application of Three Dimensional Brachytherapy Esophageal Stents for Treatment of Esophageal Cancer

Principal Investigator: Yaron Perry, MD

Project Title: Socrates Economic Analysis of Esophagectomy

Investigators: Christopher Towe, MD, Philip Linden, MD

Project Title: 'Able to Rescue': Analysis 8 years of

mortality free esophagectomy

Investigators: Philip Linden, MD, Christopher

Towe, MD, Yaron Perry, MD

### 2014-15 DIVISION HIGHLIGHTS

#### New appointments:

• Dr. Christopher Towe and Dr. Luis Argote Greene hired.

#### Awards:

- Dr. Linden earned the Richard E. Clark Award for best paper using the Society of Thoracic Surgery Database, Annual STS meeting, 2014
- Dr. Linden appointed Editor, thoracic surgery section, Scientific American (formerly American College of Surgeons) Surgery Textbook
- Dr. Linden named Top Doctor, Thoracic Surgery
- Dr. Linden named to Leadership Academy, University Hospitals

#### Clinical Expansion:

- New suburban clinics opened in Parma, Elyria, Mentor and Geauga
- Inpatient services opened at Elyria Medical Center, Parma Medical Center, and Geauga Medical Center



### DIVISION OF TRAUMA, SURGICAL CRITICAL CARE AND ACUTE CARE SURGERY

The Division of Trauma, Surgical Critical Care and Acute Care Surgery is expanding as we prepare to become a Level I Trauma Center. In addition to providing coverage of the Acute Care Surgery service, the Division members are developing the trauma program and surgical critical care components. We anticipate the trauma program to be up and running by the Fall 2015.

### DIVISION RESEARCH

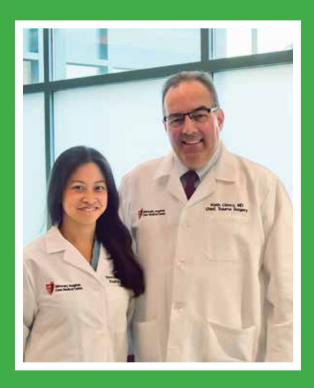
Principal Investigator, University Hospitals Case Medical Center Acute Care Surgery Service Patient Database, IRB Number 05-15-09

Co-investigator, Cancer-and end-of-life care in older individuals diagnosed with metastatic cancer, IRB Number CC00184; CTSC Pilot Grant application submitted under this IRB entitled "Morbidity and Mortality as a Function of Preexisting Multimorbidity Following Emergency Surgery in Geriatric Cancer Patients"

### DIVISION GOALS

- The Trauma Division began the process of becoming a verified trauma center by the American College of Surgeons. This is a two-step process. The first step, the Consultative Visit by the ACS, occurred at the end of April 2015.
- · As part of the preparation for trauma center accreditation, the Division was actively recruiting surgeons. Dr. Vanessa Ho, joined the Division in November 2014. Additional fellowship-trained trauma surgeons have been recruited and will be joining the Division in the 2015-2016 academic year.
- In conjunction with the Rainbow Trauma Program, we have increased the number of Advanced Trauma Life Support (ATLS) courses provided on campus.

### DIVISION FACULTY



Keith Clancy, MD, MBA Associate Professor of Surgery

Vanessa Ho, MD, MPH Assistant Professor of Surgery

### **DIVISION FACULTY**



Vikram Kashyap, MD, FACS, Professor of Surgery

Henry Baele, MD, FACS, Assistant Professor of Surgery Teresa Carman, MD, Assistant Professor of Vascular Medicine Jerry Goldstone, MD, FACS, FRCSE (hon), Professor of Surgery Emeritus Virginia Wong, MD, FACS, Assistant Professor of Surgery

The mission of the Division of Vascular Surgery and Endovascular Therapy is to provide comprehensive care for patients with diseases of the vascular system to reduce morbidity and mortality from these diseases and improve quality of life for our patients. We do this through education, research and scientificallybased, compassionately delivered clinical care employing the latest advanced techniques and technology.

As one of the Divisions within the Department of Surgery, we participate fully in its academic and educational programs. The Division is also an integral component of the Harrington Heart and Vascular Institute of University Hospitals Case Medical Center (UHCMC), working closely with colleagues from cardiovascular medicine, cardiac surgery, and radiology to create system-wide integration and improvements in cardiovascular care.

### 2014-15 DIVISION HIGHLIGHTS

The Division supports highly successful and competitive ACGME-approved training programs. The Fellowship in Vascular Surgery is a 2-year program and is approved for one fellow per year leading to certification in Vascular Surgery by the American Board of Surgery. Recently, the Division was approved for a novel Vascular Surgery Residency (0-5 Program, 5 years); our inaugural resident began in 2012. In addition, we actively participate in the education of general surgery residents and medical students from Case Western Reserve University School of Medicine.

#### New appointments:

- Norman Kumins, MD, Clinical Assistant Professor of Surgery
- Alexis Powell, MD, Assistant Professor of Surgery
- Karem Harth, MD, Assistant Professor of Surgery

### DIVISION RESEARCH

The research efforts are grouped into three broad categories.

- Translational research involving understanding the mechanisms of arterial and venous endothelial dysfunction
- Prospective trials in vascular disease
- Clinical reviews of patients with vascular problems and treatments

### **DIVISION GOALS**

- Continue the growth in clinical volume and complexity
- Increase faculty and incorporate vascular staff into one team across Northeast Ohio
- Enhance research activities in both clinical trials and clinical series









### PROGRAM DIRECTOR'S INTRODUCTION

Thank you for your interest in the training programs in the Department of Surgery at Case Western Reserve University School of Medicine. Our mission is to provide the finest training available to individuals who are motivated, compassionate and willing to contribute to the excellence of the program for the benefit of all participants.

Please visit the Case Surgical Residency Program website (www. casesurgery.com) to learn more about specific surgical rotations, faculty biosketches, current residents, recent graduates and the educational conferences. As a part of our ongoing effort to improve the educational experience, conferences and yearly rotations may be modified based upon resident feedback at our yearly retreat.

Graduates from our program continually achieve top fellowship positions and move on to make significant contributions in both clinical and academic surgery. The core curriculum follows the SCORE outline, and educational conferences are focused on case-based questions which help the residents achieve proficiency in decision making.

Our mission is "to heal, to teach and to discover." Our surgical training program is dynamic and steeped in tradition but has an eye towards the future. We look forward to continuing our tradition of excellence in teaching and sharing our vision of surgical education in the new millennium.

Jeffrey M. Marks, MD, FACS, FASGE Professor of Surgery Program Director, Surgical Residency Program Vice Chair of Education Director of Surgical Endoscopy University Hospitals Case Medical Center



Jeffrey M. Marks, MD, FACS, FASGE

"Graduates from our program make significant contributions in both clinical and academic surgery."

### UNIVERSITY HOSPITALS CASE MEDICAL CENTER EDUCATION

### SURGICAL RESIDENCY PROGRAM

Faculty of the Case Western Reserve University School of Medicine are responsible for all training at the clinical facilities of University Hospitals Case Medical Center, MetroHealth Medical Center, and the Louis B. Stokes Cleveland VA Medical Center, and the Department is fully integrated in its educational programs at these three facilities. Surgical training is divided among these outstanding hospitals to provide a broad range of experience. There are many fulltime surgical faculty in our Department, in addition to PhDs, physician assistants and nurse practitioners.

- University Hospitals Case Medical Center is the primary hospital affiliate with Case Western Reserve University School of Medicine. Case Surgery is a recognized leader in minimally invasive surgery, abdominal wall reconstruction, cutting edge surgical oncologic interventions, and advanced novel endoscopic therapies, including Per-Oral Endoscopic Myotomy (POEM).
- MetroHealth Medical Center is the regional Level I Trauma and Burn Center and is nationally recognized for contributions in the area of emergency surgery, critical care and endocrine surgery.
- Louis B. Stokes Cleveland VA Medical Center is one of the Veterans' Health Administration's top spinal cord injury centers, as well as a "Center of Excellence" in Cardiothoracic Surgery.

### 2014-15 Residents (with Medical School attended)

**Chief Residents** 

Katherine Kelly, University of Chicago Andrea King, University of New Mexico David Krpata, University of Arizona Jonathan Kwong, University of Medicine and Dentistry of New Jersey

Jonah Stulberg, Case Western Reserve University Anthony Visioni, SUNY Downstate Medical Center

### 4th Year Residents

Matthew Allemang, The Ohio State University Aman Banarjee, Virginia Commonwealth Christopher Bohac, University of Illinois Vineeta Gahlawat, GSVM Medical College Kristopher Katira, Louisiana State University SaAda Seidu, American University of Antigua

#### **3rd Year Residents**

Iuliana Bobanga, Wayne State University Akhil Chawla, University of Cincinnati Jana Hambley, Tulane University Kyle Lineberry, Michigan State University **Tobias Long, Penn State University** Clayton Petro, University of Cincinnati Steven Plato, Michigan State University Luke Rothermel, Wright State University Hahn Soe-Lin, Georgetown University











### 2nd Year Residents

Gener Augustin, University of Rochester Justin Brady, University of Toledo **Cory Criss,** Ross University **Andrew Ibrahim,** Case Western Reserve University Nikita Machado, Kasturba Medical College Navid Pourtaheri, Duke University Mazen Roshdy, University of Cincinnati Victor Sandoval, Universidad de Ecuador Ji Son, Stanford University Hannah Zhou, Case Western Reserve University **Brenda Zosa,** Case Western Reserve University

#### 1st Year Residents

Konstantinos Alfaras-Melainis, University of Crete Colby Brown, Case Western Reserve University Melody Chen, Boston University Gabriel Crowl, University of Vermont Mark Gelpi, Wright State University Ian Greenwalt, Drexel University Jared Hooks, Ross University Kathryn Hoppe, Medical College of Wisconsin Terence Jackson, Madras Medical College Helmi Khadra, American University of Antigua Albert Kim, Virginia Commonwealth **Vladimir Kiselev,** Military Medical Academy **David Kurlander,** Case Western Reserve University Husayn Ladhani, University of Texas, Galveston

Janet Li, Case Western Reserve University Guillermo Lopez-Gonzalez, Texas A&M Charles Lugo, University of Wisconsin Chenai Netty, Meharry Medical College **Sean Pack,** Case Western Reserve University **Sarah Posillico,** Case Western Reserve University Zhina Sadeghi, Tehran University **Daniel Schwartz,** Case Western Reserve University Zachary Senders, Jefferson Medical College Akina Tamaki, University of Maryland **Brock Vanderbush, Ross University** Yuewei Wu-Fienbergs

#### Research Scholars

Kevin Choong, Washington University Benjamin Crawshaw, University of Rochester Jack He, University of Rochester Daniel Kendrick, SUNY Upstate **Ann Kim, Case Western Reserve University Arnab Majumber,** The Ohio State University Charles Wojnarski, Jagiellonian University

#### **Fellows**

Karem Harth, Vascular Surgery Hannah Kim, Vascular Surgery Jeffrey Blatnik, Laparoendoscopic Surgery William Conan Mustain, Colorectal Surgery **Abel Bello, Bariatric Surgery** 

### UNIVERSITY HOSPITALS CASE MEDICAL CENTER EDUCATION

### **Beyond Residency**

### 2015 Graduates

### Katherine Kelly, MD

Surgical Critical Care Fellowship MetroHealth Medical Center Cleveland, Ohio

### Andrea King, MD

Surgical Critical Care Fellowship MetroHealth Medical Center Cleveland, Ohio

### David Krpata, MD

Laparoendoscopic Surgery Fellowship Cleveland Clinic Foundation Cleveland, Ohio

### Jonathan Kwong, MD

Vascular Surgery Fellowship University Hospitals Case Medical Center Cleveland, Ohio

#### Jonah Stulberg, MD

Assistant Professor Northwestern University Chicago, Illinois

### Anthony Visioni, MD

Surgical Oncology Fellowship Roswell Park Cancer Institute Buffalo, New York

#### 2014 Graduates

### Robert Armstrong, MD

Private Practice West Seneca, New York

### Jeffrey Blatnik, MD

Minimally Invasive Surgery Fellowship University Hospitals Case Medical Center Cleveland, Ohio

#### Amir Fathi, MD

Hepatobiliary Fellowship Medical College of Wisconsin Milwaukee, Wisconsin

#### Glenn Hall, MD

Colorectal Fellowship University of Pennsylvania Philadelphia, Pennsylvania

#### William Leukhardt, MD

Surgical Critical Care Fellowship MetroHealth Medical Center Cleveland, Ohio

### Liming Yu, MD

Minimally Invasive Surgery Fellowship Shawnee Mission Health Medical Center Kansas City, Kansas







### MEDICAL STUDENTS

Third year students from the Case Western Reserve University School of Medicine rotate through the Department of Surgery in small groups for eight weeks at a time as a part of their curriculum. While the students are in the clerkship, they are assigned to a team of attending surgeons and residents to shadow in the OR, clinics and at Departmental education conferences. The students also attend a series of 36 student-geared lectures, prepared and presented by the Department's faculty members. Dr. Marjie Persons is the Clerkship Director.

### FELLOWSHIP TRAINING

While our residency programs offer experience in all required areas, the trend towards specialized training has accelerated in recent years. The Department of Surgery has established several fellowships to keep up with the demand for specialized training.

The Department currently has the following fellowships:

- Bariatric Surgery
- Colorectal Surgery
- MIS/Laparoendoscopic Surgery
- Vascular Surgery

These fellowships are highly selective and nationally recognized programs.









### UNIVERSITY HOSPITALS CASE MEDICAL CENTER EDUCATION

### POST-GRADUATE EDUCATION PROGRAMS

Part of the mission for the Department of Surgery at Case Western Reserve University School of Medicine is to advance research and education in surgical science across all disciplines and specialties. Post-graduate education is a goal of the Department of Surgery. We have an abundant amount of training opportunities offered throughout the year.

Our Post-Graduate Education Programs consist of the following:

### CME and Non-CME Educational Courses

We offer year-round opportunities to obtain CME Credits, eligible for MOC Part II credit, through our educational offerings, including onsite courses and webinars, Morbidity and Mortality and Grand Rounds conferences, as well as online Grand Rounds education.

The onsite course offerings in 2014-15 included:

- Advanced GI Fellows Course
- Americas Hernia Society Post-Graduate Course
- Abdominal Wall Reconstruction Summit
- Colorectal Residents Career Course
- POEM/ESD Course (offered twice)

#### **Animate Skills Lab Offerings**

The Animate Skills Lab provides opportunities to learn through hands-on training within our eight fully-equipped surgical stations. The Animate Skills Lab provides the following:

- Live and Cadaveric Models
- Fundamental and Minimally Invasive Procedures
- Eight Fully-Equipped Surgical Stations
- Integrated Audio/Visual System and Conference Room
- Non-GLP, Industry Sponsored Research, Prototype Development and Device Evaluation
- Human Factors Usability Engineering Studies







### Web Symposiums

Our webinars provide a unique, easy way for surgeons and vendors from around the globe to interact with one another in order to train, teach, debate, discuss and learn new techniques in their fields. Webinars eliminate the need to travel; one can watch and listen from the convenience of their home or office, and are a fraction of the cost of traditional meetings. The following webinar series were offered in 2014-15:

Pediatric Ophthalmology Webinar Series – topics included:

- PEDIG
- Genetics
- Strabismus

SAGES Residents Webinar Series – topics included:

- Career Development
- Endoscopic Management of Post-Bariatric Surgery
- Role of Endoscopy and MIS for the Acute Care Surgeon
- Robotic Gastrointestinal Surgery

#### Mini-Fellowships

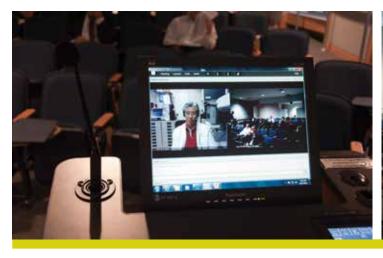
The mini-fellowship program is a comprehensive educational program that focuses on training surgeons in a specified surgical procedure. It is an educational opportunity for the surgeon to understand and learn procedural specifics and patient management strategies from leaders in their respective fields of study. Mini-fellowships typically are 1-2 days in length and include didactics, experiential instruction in teaching techniques in our skills laboratory and live cases from the operating room. The following mini-fellowships were sponsored in 2014-15:

- Bard Hernia Mini-Fellowship (offered four times)
- Covidien Colorectal Surgery Mini-Fellowship (offered twice)

### Preceptorship/Reentry Program (PREP)

These exclusive programs are offered to provide surgeons hands-on experience including clinical work and opportunities to scrub in the operating room. They are designed to address clinical areas where surgeons want to increase skill level in a particular clinical area or practice skills after a period of time out of practice.

For more information on the Post-Graduate Education Programs at Case Surgery, visit our website at casesurgery.com.





### UNIVERSITY HOSPITALS CASE MEDICAL CENTER EDUCATION

## INSTITUTE FOR SURGERY AND INNOVATION

Dr. Delaney is Director and co-founder of the Institute for Surgery and Innovation (ISI). The ISI is a training institute which has three primary goals:

- To provide skills training, which combines education for medical students and residents, as well as for surgeons in practice in advanced laparoscopic techniques;
- To foster a multi-center research group which will perform clinical trials in various surgical disciplines; and
- To harbor an Innovation Center which interacts with industry to create and test new technical products.

The teaching component has developed the fastest, and there are now between two and four courses each month held in the animate laboratory. Laparoscopic colorectal and hernia mini-fellowships are held on a regular basis. Courses in many other specialty areas are also held, all of which are helping raise the level of awareness of the Institute both regionally and nationally; many surgeons and physicians have been through the ISI in the last several years. The Institute is accredited by the American College of Surgeons as a Level I Training Center. ISI is joined with the Mount Sinai Skills and Simulation Center, as the Case Center for Skills and Simulation.

In July 2015, Dr. Ajita Prabhu took over as the Skills Trainer. Dr. Prabhu will direct skills training for the residents, as well as continue her increasingly busy clinical practice. In 2014-15, several abstracts have been submitted based on educational research being performed at ISI.

### FLS/FFS/FUSE TRAINING CENTER

University Hospitals Case Medical Center is a designated Test Center for the following SAGESsponsored programs:

### Fundamentals of Laparoscopic Surgery (FLS):

The FLS program is a comprehensive web-based education module that includes a hands-on skills training component and assessment tool designed to teach the physiology, fundamental knowledge, and technical skills required in basic laparoscopic surgery. FLS was designed for surgical residents, fellows and practicing physicians to learn and practice laparoscopic skills, and then have the opportunity to definitively measure and document those skills. The FLS program content is a joint educational offering of SAGES and the American College of Surgeons (ACS), and FLS certification is a requirement for board certification by the American Board of Surgery (ABS).

#### Fundamentals of Endoscopic Surgery (FES): The

FES program is a comprehensive educational and assessment tool designed to teach and evaluate the fundamental knowledge, clinical judgment and technical skills required in the performance of basic gastrointestinal (GI) endoscopic surgery. FES was designed for medical and surgical residents, fellows, practicing general surgeons, gastroenterologists, and other physicians to learn and test basic endoscopic skills required to form a foundation in the practice of flexible endoscopy. FES is now required by the American Board of Surgery as part of the ABS Flexible Endoscopy Curriculum. Surgeons graduating residency in the 2017-2018 academic year and thereafter must complete the ABS Flexible Endoscopy Curriculum and be FES certified in order to be eligible for board certification in general surgery.

Fundamental Use of Surgical Energy (FUSE): The FUSE program was developed to meet the need for increased education and training in the principles and properties of operating electrosurgical instruments safely. The Program is designed to determine whether a candidate has the knowledge fundamental to the safe use of surgical energy-based devices in the operating room, endoscopy suite and other procedural areas. The FUSE assessment is an online exam testing cognitive knowledge of the components of the program. The Program was designed for those interested in learning more about electrosurgery - physicians, nurses, residents, fellows, OR techs, and industry personnel.

### CENTER FOR SKILLS AND **SIMULATION**

The Case Western Reserve University Center for Skills and Simulation (CWRU CSS) offers national and international resources in a wide spectrum of learning modalities with the ultimate goal of improving health care quality and efficiency. The CWRU CSS provides the opportunity for clinical and non-clinical educational excellence.

Since its inception, CWRU CSS has embraced the multi-disciplinary approach to meet the needs of many trainees within the context of state-of-the-art facilities and high quality educational programs. The Center is an American College of Surgeons Level 1 Comprehensive Accredited Education Institute.

The Mt Sinai Skills and Simulation Center (MSSSC) provides the availability and expertise in all five areas of simulation training (standardized patients, task training, simulation scenarios, virtual reality, and hybrid simulation) for the learners at all levels. These modalities are incorporated into programs for learner assessment, training, certification, testing and research. The MSSSC provides stateof-the-art simulation, both at its 8,500 square foot facility and at various locations (utilizing its in situ equipment) by creating realistic training scenario modules and video debriefing. The expert staff facilitates the teaching and evaluation of clinical and nonclinical skills such as those required by the American Association of Medical Colleges (AAMC), the Accreditation Council for Graduate Medical Education (ACGME) and the various Certifying Boards. Under the leadership of Dr. Mark Aeder as the Medical Director, the MSSSC has seen a marked increase in the potential programming opportunities and an increased presence at national and international meetings. The expansion of the potential learner base has allowed the Center to pioneer new techniques in corporate and professional education. The MSSSC is a consulting partner for the Global Center for Health Innovation at the Cleveland Convention Center.







### UNIVERSITY HOSPITALS CASE MEDICAL CENTER EDUCATION

### 2014-15 HIGHLIGHTS

The past year has been a successful one for the MSSSC as it transitions to maximizing its resource offerings. The MSSSC had a 25% growth in the number of simulation/training hours commiserate with the increased number of programs offered. There has been further integration of the interdisciplinary focus as the Center staff has been working to advance these educational opportunities. This has translated into more robust scenario development and programming. The MSSSC has been able to further facilitate the user needs and to enhance the educational experience through new task based education and focus on specific end user gaps. The learner population has included students from all CWRU health schools, residency programs from 3 systems, community and regional professional/physician education and community groups and organizations. Many of these advancements and improvements are noted in the list of course offerings and schedule, and can be viewed on the updated MSSSC website at http://casemed.case.edu/simcenter. The web site also offers a newly updated library of available simulation trainers and devices for utilization in on or in situ courses.

The MSSSC offers an outcomes-driven curriculum which focuses on improving patient-provider communication and reducing medical errors and health care costs. In addition to being able to customize any simulation experience, the Center has a vast library of realistic multidisciplinary and inter-professional scenarios which can incorporate all forms of simulation, including standardized patients, basic and complex task trainers, high fidelity manikins, virtual reality trainers and second life programs. The past year has seen an expansion of these programs to provide the learner groups enhanced opportunities for clinical and nonclinical development. A major focus in this initiative is skill enhancement in the areas of critical thinking, problem-solving and teamwork.

#### The mission of the MSSSC is to:

- Provide assessment, training, and evaluation for multiple levels of learners, to achieve patient safety through leadership, research, and innovative learner-centered experiences;
- Be a uniting force bringing all of the region's health care institutions together in collaboration and cooperation;
- Provide unparalleled educational facilities both on site and in situ:
- Be an invaluable local, national and international resource for continuing education for health care providers;
- Be a dynamic industrial partner in testing, development, manufacturing, and marketing simulation technology; and
- Be a Center of Excellence in research and leadership development.

Moving forward, the MSSSC will continue to expand its course options to reach an ever expanding health professional population. As the needs for educational opportunities increase and the real time clinical situations become more saturated, the MSSSC will provide teaching and learning in a safe state-of-theart facility. Further expansion into other associated professions will offer unique educational opportunities for an even wider range of trainees.

### SURGERY GRAND ROUNDS

### 2014-15 Visiting Professor Lectures



September 18, 2014 Dr. Jerry Goldstone Vascular Surgery Endowed Lectureship (Harrington Heart & Vascular Institute) "How Can Randomized Controlled Trials Even In Leading Journals Be So Misleading?" Frank Veith, MD William J. von Liebig Chair in Vascular Surgery The Cleveland Clinic Professor of Surgery, New York University Medical Center



October 8, 2014 The Beck Lecture in Thoracic Surgery "Evolution of Thoracoscopic Lobectomy" Thomas D'Amico, MD Gary Hock Endowed Professor of Surgery Program Director, Thoracic Surgery Duke University Medical Center



March 4, 2015 The Murdough Lecture in Colorectal Surgery "Surgery: How Will We Teach the Next Generation?" Patricia Roberts, MD Chair, Division of Surgery Lahey Hospital and Medical Center Professor of Surgery, Tufts University School of Medicine



April 22, 2015 The Beck Lecture in Vascular Surgery "Carotid Atherosclerosis: Revisionist History is Usually Wrong" Richard Cambria, MD Chief, Division of Vascular and Endovascular Surgery Massachusetts General Hospital Vascular Center



### SURGICAL RESEARCH

The Department of General Surgery's Research Section is comprised of two registered nurses, Bridget Ermlich, RN, MSN, CCRP and Christina "Tina" Seafler, RN, CCRP. In addition to the full management and coordination of clinical trials, the Research Section assists and mentors residents, students and other staff investigators in the development of protocols, consent forms, grant and IRB submissions such as departmental databases and other low risk research projects.



Both Bridget and Tina are Certified Clinical Research Professionals (CCRPs) through the Society for Clinical Research Associates (SoCRA). SoCRA established the Certification Program for Clinical Research Professionals in order to create an internationally accepted level of knowledge, education, and experience by which clinical research professionals will be recognized by the medical research community.

### SURGICAL ONCOLOGY RESEARCH

Research activities within the Division of Surgical Oncology span clinical, translational and basic and are funded from a variety of sources including the National Institutes of Health (NIH), institutional awards, and industry.

#### IRB-approved clinical trials

• CASE IRB 3612: Phase I study using autologous Ex Vivo Activated (X-ACT) lymph node lymphocytes as adoptive immunotherapy in advanced malignant melanoma patients. (Kim, PI). IND application filed with FDA #15959

 CASE IRB 3610: Molecular Studies of T cell clones for adoptive therapy. (Kim, PI) Sponsor- NIH

Funding

Funding source: Early Phase Clinical Research

Support (NCI P30-CA043703)

Project Role: Principal Investigator

Project Title: Clinical Development of T cell

Adoptive Immunotherapy of

Cancer

Project Period: 6/1/2014-5/31/2015 Award Amount: \$85,000 (approximate)

Funding source: University Hospitals Center for

Clinical Research and Technology

Project Role: Principal Investigator

Project Title: Phase I Clinical Trial of Adoptive

Immunotherapy in patients with

advanced melanoma 4/1/2014-3/30/2015

Project Period: Award Amount: \$50,000

Funding source: University Hospitals

Immunogene Therapy Fund

Project Role: Principal Investigator Preclinical and Clinical Project Title:

Development of T cell Adoptive Immunotherapy of Cancer

Project Period: 7/1/2012-7/1/2016

Award Amount: \$2,000,000+

Funding source: Susan Komen Foundation Project Role:

Mentor (Nicole Steinmetz, Ph.D

trainee)

Project Title: A nanoparticle-based HER2

> breast cancer vaccine 7/1/2014-6/30/2017

Award Amount: \$450,000

Funding source: NIH K12

Project Role:

Project Title:

Project period:

Mentor (John Ammori, M.D. trainee)

> Adoptive T cell immunotherapy of pancreatic cancer

7/1/2012-6/30/2015 Project period:

Award Amount: \$315,000

### DIAPHRAGM PACING RESEARCH

There have now been nearly 1,600 Diaphragm Pacing Systems (DPS) implanted worldwide for various indications since the first implant over 15 years ago. Diaphragm Pacing (DP) was initially approved for Spinal Cord Injury (SCI) in June 2008. Since that time, we have implanted many SCI patients from around the country at University Hospitals Case Medical Center (UHCMC). DPS has freed over 400 SCI persons from mechanical ventilation.



Diaphragm Pacing changes the lives of its users. It stimulates physiologic breathing and decreases pneumonias. It enables people to speak more normally, improves the sense of smell, increases mobility, and sense of independence.

Diaphragm Pacing received FDA approval as a HDE in 2011 for Amyotrophic Lateral Sclerosis (ALS), also called Lou Gehrig's disease. This disease is a progressive neurodegenerative disease of unknown cause that has devastating effects on the muscle of the respiratory system. The multi-center clinical trial data showed DP significantly improved survival in this population. We are currently enrolling in ALS Post Approval Study.

We have implanted a series of pediatric spinal cord injured children with the youngest being two years old. We completed a review of all diaphragm dysfunction patients implanted which included the first patient with Spinal Muscle Atrophy 2 (SMA2). Diaphragm Pacing in the diaphragm dysfunction group showed strong beneficial results ranging from liberating patients from tracheostomy mechanical ventilation to alleviation of symptoms.

Several presentations were done in 2014, including: the 25th International ALSMND Symposium; the 53nd Annual International Spinal Cord Society (ISCOS) Annual Meeting; and the 19th Annual Cure SMA Research Meeting.

The most exciting highlight from 2014-15 is the completion of the Trans Loc Electrode Feasibility Study. This research is the first step in providing diaphragm pacing in the ICU.

### VASCULAR SURGERY RESEARCH

The research efforts in the Division of Vascular Surgery are grouped into three broad categories:

- Translational research involving understanding the mechanisms of arterial and venous endothelial dysfunction
- Prospective trials in vascular disease
- Clinical reviews of patients with vascular problems and treatments.
- The current Resident Research Scholar for Vascular Surgery is Ann Kim, MD. Dan Kendrick, MD was a Research Scholar from 2013-2015.

### ANIMATE SKILLS LAB

The Animate Skills Lab is a surgical research and skills training center serving the Department of Surgery at University Hospitals Case Medical Center. The directive of the Lab is to enhance the training and academic achievements of our surgeons and those from other health care institutes. The laboratory uses a range of animate models; live animal, tissue explants and human cadavers to conduct research in the field of minimally invasive surgical procedures and to coordinate animate training sessions to allow "hands on" training for the medical students, surgical residents, fellows and attending surgeons in a wide array of surgical specialties. In addition to research and training, the lab serves to facilitate the third directive of the Institute for Surgery and Innovation by using its resources to enable development and evaluation of innovative medical devices in a simulated surgical environment.

The Animate Skills Lab operates under the leadership of Dr. Steve Schomisch, Assistant Professor at Case Western Reserve University and Director of the Lab. Dr. Schomisch is responsible for all operations of the Animate Skills Laboratory. Cassandra Cipriano, RVT is the Lab Technician. Ms. Cipriano's responsibilities include assisting in preparation and implementation of experiments and research endeavors, and management of the animals pre-, intra-, and post-operatively.

In 2014-15, the Animate Skills Lab was used for over 140 research, training or innovative sessions. Suture Workshops were held several times throughout the year, providing medical students with an opportunity to learn basics in the use of surgical instruments, suture materials, stitching and knot tying. Surgical residents were recruited to assist in the instruction, thereby gaining experience in communicating these skills. The School of Medicine Department of Anatomy also used the Lab resources to conduct two annual courses – Anatomy of the Trunk and Anatomy of the Head and Neck, making use of the surgical equipment available to them in the Lab using human

cadaver models. Each year in July, new interns in general surgery are welcomed to the Lab with a workshop to introduce basic knowledge of surgical instruments and general surgical principles, and have



the opportunity to work on tissue models to practice techniques. Additionally, throughout the year, surgical residents had the opportunity to hone their surgical skills on anesthetized porcine models, with instruction and evaluation from the surgical trainer. With over 70 sessions conducted in 2014, each resident was given the opportunity to attend several sessions.

In addition to the intra-institutional training sessions, attending surgeons from all over the world participated in numerous training courses offered. Multi-day "mini-fellowship" courses were conducted, geared to educate surgeons in hernia repair and demonstrating laparoscopic colectomy, utilizing the anesthetized porcine model to gain hands-on experience. Courses instructing the techniques of Per Oral Endoscopy Myotomy (POEM) using tissue explants were conducted to expose surgeons and gastroenterologist to this novel, minimally invasive approach to treating esophageal achalasia. Due to demand, this course was offered multiple times in 2014-15.

Dr. Schomisch also coordinated many training courses with other departments. These included:

- Plastic Surgery used the Lab for instruction in procedures to treat migraine headaches using human cadavers;
- Orthopedics used the Lab to educate their residents and fellows on arthroscopic joint repair using cadaveric shoulders, knees and hips;
- Neurosurgery conducted courses on procedures common to the Craniovertebral Junction and spine, using human cadaver models;

### UNIVERSITY HOSPITALS CASE MEDICAL CENTER RESEARCH

- Gastroenterology utilized the Lab services for a GI Fellows training course, featuring skills of EUS and ERCP, and for the minimally invasive technique of Percutaneous Endoscopic Gastrotomy (PEG) tube placement; and
- Vascular surgery used the Lab several times during the year, enabling surgical residents to practice the highly specialized skill of vascular anastomosis using human cadaveric vascular tissues.

From an innovative perspective, several companies utilized the Lab services and expertise to facilitate non-GLP development and evaluation of their medical devices. These included:

- U.S. Endoscopy conducted several sessions with our staff to refine endoscopic devices such as snares, biopsy forceps and foreign body retrieval systems;
- Apollo Endosurgery demonstrated their endoluminal suturing device, the Overstitch, to several of our surgeons and gastroenterologists;
- A group of our own researchers, including Dr. Schomisch, are working with industry in developing a device to treat enterocutaneous fistulas.

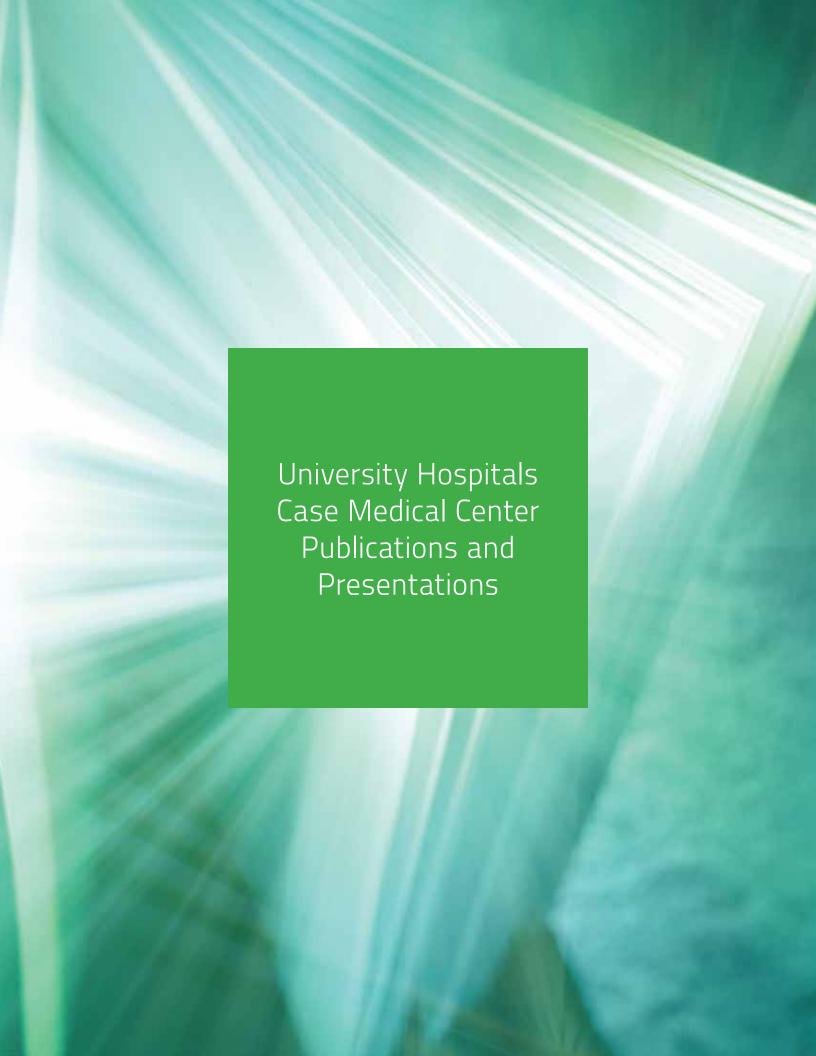
Additionally, Dr. Schomisch attends the annual Clinical Congress meeting sponsored by ACS, assisting in several of the hands-on flexible endoscopy courses offered by the College.

### Basic Science Research Update

- Dr. Schomisch, in collaboration with Peritec sponsorship, is investigating a novel peripheral vascular stent lined with bovine peritoneum. The device has been implanted in a group of animals to test the long-term resistance to thrombosis and
- Dr. Schomisch collaborates with Cardiology in investigating a novel, non-invasive technique utilizing CT imaging to detect coronary stenosis.
- Basic science conducted in the Lab also includes investigations of improved methods for performing the SEAL technique for inguinal hernia repair in children.
- The Lab has developed a model of esophageal atresia which has been used to investigate the potential of magnetic anastomosis for repairing these congenital disorders.
- Dr. Schomisch conducts basic research aimed toward the development of novel minimally invasive surgical techniques, therapies and treatments. He currently collaborates with Jeffrey Marks, MD and Horst von Recum PhD on research to investigate a novel surgical therapy for treating GI lesions and cancer of the esophagus. He is investigating a less invasive technique for endoscopic esophageal mucosectomy, the remodeling that occurs following this procedure and therapies to reduce or prevent stricture formation.







### CARDIAC SURGERY

- Park, S. Invited speaker at Gordon Research Conference.
- Presentations by Drs. Markowitz, Sareyyupoglu and Deo at NY Valve Symposium and HFSA.
- · Course director in Freestyle aortic valve implantation, Edwards TAVR course.
- Abstracts were submitted for ISHLT.

### COLORECTAL SURGERY

### **PUBLICATIONS**

- Crawshaw BP, Steele SR, Lee CR, Delaney CP, Mustain WC, Russ AJ, Shanmugan S, Champagne BJ. Failing to Prepare is Preparing to Fail: A Single-Blinded Randomized Controlled Trial to Determine the Impact of a Preoperative Instructional Video on Residents' Ability to Perform Laparoscopic Right Colectomy. Dis Colon Rectum. In Press.
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- Araujo SE, Crawshaw B, Mendes CR, Delaney CP. Trans-anal endoscopic proctectomy: review of the experimental and clinical evidence. Tech Coloproctol. 2015; 19: 69-82.
- Keller DS, Bankwitz B, Nobel T, Delaney CP. Predicting Who Will Fail Early Discharge After Laparoscopic Colorectal Surgery with an Established Recovery Pathway. Surg Endosc, 2014; 28: 74-9.
- Keller DS, Senagore AJ, Lawrence JK, Hashemi L, Delaney CP. Comparative effectiveness of laparoscopic vs robot-assisted colorectal resection. Surg Endosc, 2014; 28: 212-21.
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#### **BOOK CHAPTERS/TEXTBOOK EDITOR**

- Stein S, Bosio RM. Laparoscopic right colectomy with intracorporeal anastomosis. Book chapter. Editor Sharon Stein - in
- Bosio RM. Pigazzi A. Chapter: Robotic Colon and Rectal Surgery. Topic: Emerging and Evolving Technology in Colon and Rectal Surgery. Clinics in Colon and Rectal Surgery. Editors: Dr. Cataldo and Dr. Nagle. Springer - in press, 2015.
- Bosio RM. Delaney CP. Chapter: Surgical Treatment of Diverticulitis and its Complications. Book: Current Therapy in Colon and Rectal Surgery. 3rd. Editors: Fazio VW, Church JM, Delaney CP. Elsevier, Mosby Inc, Philadelphia, PA. In press, 2014.
- Bosio RM. Pigazzi A. Chapter: Hybrid Laparoscopic-Robotic Low Anterior Resection. Book: Surgery for Cancers of the Gastrointestinal Tract: A Step-by-Step Approach. Editors: J. Kim MD & J. Garcia-Aguilar MD. Springer – in press, 2014.
- Bosio RM. Pigazzi A. Chapter: Essentials and Future Directions of Rectal Surgery. Book: Essentials of Robotic Surgery. Editors: M. Kroh and S. Chalikonda. Springer - in press, 2014.
- Feldmann TF. Bosio RM. Pigazzi A. Chapter: Hybrid Robotic Technique for Rectal Cancer (Low Anterior Resection and Abdominoperineal Resection). Book: Robotic Surgery: Current Applications and New Trends. Editor: G. Spinoglio. Springer in press, 2014.
- Champagne BJ, McRae H. "Surgical Education." In ASCRS Textbook of Colon and Rectal Surgery 3ed. (Eds Steele, Hull, Read, Saclarides, Senagore, Whitlow) Springer Publishing. In
- Russ A, Champagne BJ. "Preparing the Colon and Rectal Resident for Real World Practice; What Should the Graduate in 2015 be Prepared for?" Seminars in Colon and Rectal Surgery. Published online: April 14 2015.
- Champagne BJ. "Laparoscopic APR". In Chassin Atlas in Colorectal Surgery. In Press.
- Champagne BJ. "Laparoscopic Surgery in the Era of Robotics." In Robotic Approaches to Colorectal Surgery. (Eds. Ross, Champagne, Rivadeneira, Lee).

- Champagne BJ. "Radiation Enteritis." In Cameron's Current (Eds Cameron, Cameron). Elsevier Publ. In Press.
- Champagne BJ. "Laparoscopic Low Anterior Resection" in Advanced Minimally Invasive Pelvic Surgery. (Eds Pigazzi) In
- "Complexities in Colorectal Surgery." Decision-Making and Management (Eds. Steele, Maykel, Champagne, Orangio). Springer Publishing. ISBN 978-1-4614-9022-7.
- Robotic Approaches to Colorectal Surgery. (Eds. Ross, Champagne, Rivadeneira, Lee) Springer Publishing. In Press.
- "Pelvic Cancer Surgery: Modern Breakthroughs and Future Approaches" Authors: Patel HR, Mould T, Joseph JV, Delaney CP. 2015. Springer Publishing Company, New York, NY.
- "SAGES/ERAS Society Manual. Enhanced Recovery Pathways for Gastrointestinal Surgery". Editors: Feldman LS, Delaney CP, Ljungqvist O, Carli F. Springer Publishing Company, New York, NY. 2015.
- Reynolds HL, Delaney C. Laparoscopic right hemicolectomy. In Operative Surgery of the Colon, Rectum and Anus, Sixth Edition, Edited by Ronan O'Connell, Robert Madoff and Michael Solomon, in press 2015.
- Reynolds HL, Keller D. HALS sigmoid colectomy. In Operative Techniques in Laparoscopic Colon and Rectal Surgery. 2nd ed. Edited by Conor Delaney, In press 2014.
- Marks J, Reynolds HL. Local treatment of rectal ca: TEMS v TAMIS v Transanal in Complexities of Colorectal Surgery: Decision Making and Management. Edited by Scott Steele et al., 2014.
- Senagore AJ. Goal Directed Fluid Management. Annual Update in Intensive Care and Emergency Medicine 2014 book edited by Pr JL Vincent and published by Springer Heidelberg New York Dordrecht London.
- Operative Techniques in Laparoscopic Colorectal Surgery. 2nd Edition: Editors: Delaney CP, Neary PC, Heriot AG, Senagore AJ. Lippincott Williams & Wilkins. Philadelphia, PA. 2014.

- Bosio, R. Reorganizing care to optimize outcomes: how to start an enhanced recovery after surgery program at your hospital. Enhanced Recovery after Surgery Course. American College of Surgeons. October 26-30, 2014.
- Bosio RM, Plasencia AN, Whealon M, Mills SD, Pigazzi A, Stamos MJ, Carmichael JC. Laparoscopic Right Colectomy with Intracorporeal Anastomosis. Video and podium presentation. ASCRS' 2014 Laparoscopic Colectomy Course. ASCRS Annual Meeting. May 2014.
- Young MT, Bosio RM, Bui TT, Mills SD, Carmichael JC, Stamos MJ, Pigazzi A. An Intraoperative Endoscopic Grading System to Predict Increased Risk of Anastomotic Leak in Colorectal Surgery. Western Surgical Association. Annual Meeting. November 2014.
- Ghole SA, Nguyen A, Bosio RM, Jafari MD, Mills SD, Carmichael JC, Stamos MJ, Pigazzi A. Validation of a Colonoscopic Grading System for the Intraoperative Evaluation of Rectal Anastomoses. University of California, Irvine. SAGES Annual Meeting April 2014.
- Champagne, B. SAGES, Salt Lake City, Utah, 2014. Enhanced Recovery Pathways- Is post-operative ileus preventable? And Teaching Residents Laparoscopic Colectomy.

- Champagne, B. DDW 2014, Chicago, Illinois. Training, Education and Simulation for Laparoscopic Colectomy.
- Champagne, B. ASCRS 2014. Program Chair: "The Year In
- Champagne, B. Brazilian Colorectal Congress, San Paulo, Brazil. Laparoscopic Proctectomy without Robotics!
- Champagne, B. World Colorectal Congress and International Society of Laparoscopic Colorectal Surgeons, Paris, France 2014. Laparoscopic Surgery for Ileal Crohn's Disease.
- Crawshaw B, Champagne BJ et al. ASCRS Annual Meeting, Hollywood. FL. "HRA vs Expectant Management for AIN 3".
- Russ, D. Stein SL, Champagne BJ et al. ASCRS Annual Meeting, Hollywood. FL. "Delayed GI Diet with Enhanced Care Pathway-Is POI preventable?
- Russ, D. Champagne BJ. ASCRS Annual Meeting, Hollywood. FL. "Complications in Laparoscopic Colorectal Surgery- video vignettes".
- Delaney, C. "Laparoscopic Colorectal Surgery and Perioperative care: Bringing Industrial standards to colorectal surgery" L.D. MacLean Lecture, McGill University, Montreal, Canada, 2014.
- Delaney, C. "Enhanced Recovery Pathways". Keynote Address. Southeastern Surgical Congress. Chattanooga, TN, Feb 2015.
- Delaney, C. "Laparoscopic TME" Take me to your OR session. ASCRS, 2014.
- Delaney, C. "En bloc management of T4 disease, what can and can't be done via MIS?" 14th World Congress of Endoscopic Surgery, with the 9th International Congress for Laparoscopic Colorectal Surgery and the 22nd International Congress of the European Association for Endoscopic Surgery (EAES). Paris, France, June 2014.
- Delaney, C. "Non bariatric minimally invasive surgery in metabolic or superobese patients: Tips and Tricks". 9th ISLCRS / EAES meeting, Paris, France, June 2014.
- Delaney, C. "Rectal Cancer Surgery Updates" Aultman Cancer Center, 14th Annual Conference, Sept 2014.
- "Prediction of risk and classification of anastomotic leaks" Innovative Approaches for Anastomotic Leaks after Bowel Resection: Dealing with Disaster. "My ERP for Colorectal Surgery" Implementing an ERP in your hospital". "Laparoscopic Proctectomy". ACS, Oct 2014, San Francisco, CA.
- Delaney, C. "Clinical analytic systems to improve outcomes and efficiency in colorectal surgery". "Staple line reinforcement: Hope or Hype?". European Colorectal Congress, Munich, Germany, Dec 2014.
- Delaney, C. "Reducing the Length and Severity of Postoperative Ileus: Fast track in practice". "Challenging Colorectal Resection Strategy (SAGES)". "Prevention of readmission after early discharge". SAGES meeting, Nashville, TN, April 2015.
- Delaney, C. "Laparoscopic approaches for proctectomy and colo-anal anastomosis". 3rd World Rectal Conf. - Organ Preserving Perspectives, Montreal, Canada, May 2015.
- Delaney, C. "ERP protocol" Enhanced Perioperative Care and Pain management Session. "Laparoscopy in the super obese - tips to get it done" Technical pearls - how it's really done. "Enhanced Recovery Pathways: beyond the basics". Improving Outcomes - Identifying and Managing the Complex Surgical Patient. ASCRS, Boston, May 2015.
- "Bowel prep: yes or no?" SSAT, Washington, May 2015.

- Reynolds H. Invited discussant for Fry DE, Pine M, Lock D, Pine G. Prediction models of medicare 90 day post-discharge deaths, readmissions, and costs in bowel resections. Presented at the 57<sup>th</sup> annual meeting of the Midwest Surgical Association, Mackinac Island, Michigan, 5 August 2014.
- Crawshaw B, Augestad KM, Keller DS, Swendseid B, Noble T, Champagne B, Stein SL, Delaney CP, Reynolds HL. Multivisceral resection for advanced rectal cancer: Outcomes and experience at a single institution. Presented at the 57th annual meeting of the Midwest Surgical Association, Mackinac Island, Michigan, 5 August 2014.
- Reynolds H. Battlefield medicine: A guard surgeon's experience. Presented at the Sherwin -Williams Veterans Day celebration event. Cleveland, Ohio, 11 November 2014.
- Reynolds H. Prevention, management, and reoperative surgical options for anastomotic complications. Presented at The Society for Surgery of the Alimentary Tract Annual Meeting at Digestive Disease Week, Washington DC, 18 May 2015.
- Reynolds, H. Coordinated session on Complication prevention and management, The annual meeting of the American Society of Colon and Rectal Surgeons meeting, Boston, Massachusetts, 31 May 15.
- Crawshaw B, Nguyen N, Krishnamurthi S, Paspulati R, Delaney P, Reynolds H. Hybrid PET/MRI v. PET/CT in the staging and restaging of colorectal cancer: initial clinical experience. Poster presentation at the American Society of Colon and Rectal Surgeons annual meeting. Boston, Massachusetts, Jun 2015.
- Senagore, A. "ERAS- What Really Matters 2014" Beth Israel-Deaconess Medical Center Grand Rounds, 9/8/14.
- Senagore, A. "ERAS in Colorectal Surgery" Loyola University School of Medicine Grand Rounds, 10-8-14.
- Senagore, A. Current management of Hemorrhoids; Crohns Disease Management in the Era of Monoclonals; Rectal Cancer Management 2014; ERAS: What works?; Molecular Genetics in Colorectal Cancer. Argentinean Society of Coloproctology Annual Meeting. Buenos Aires, Argentina. 11/3/14-
- Senagore, A. Canadian Society of Enhanced Recovery/SAGES ERAS Course. Montreal, Canada 11/22/14.
- Senagore, A. "Management of Rectal Cancer 2015" Rush University Medical Center, Grand Rounds 3/12/15.
- Stein, S. Alternatives to Colonoscopy for Colorectal Screening, Tripartite Colorectal Meeting, Birmingham UK, 2014.
- Stein, S. Debate: Laparoscopic is Best Treatment for Rectal Cancer, University of Minnesota Colon and Rectal Surgery Principles Course, Minneapolis, MN, 2014.
- Stein, S. Fast-track Protocols: Secrets to Success. University of Minnesota Colon and Rectal Surgery Principles Course, Minneapolis, MN, 2014.
- Stein, S. Parastomal Hernia: Should we be using Prophylactic Mesh. University of Minnesota Colon and Rectal Surgery Principles Course, Minneapolis, MN, 2014.
- Stein, S. Enhanced Recovery Protocols, Surgical Grand Rounds. Baylor University, Dallas, 2014.
- Stein, S. Operating from the Other Side of the Table, University Hospitals/Case Medical Center Colorectal Residents 5th Annual Career Course, Cleveland OH, 2014.
- Stein, S. Bringing up the Difficult Colostomy, Advances and Controversies in Colorectal Surgery, 9th Annual Update, Massachusetts General Hospital, Boston MA, 2015.

- Stein, S. Anal Dysplasia, Advances and Controversies in Colorectal Surgery, 9th Annual Update, Massachusetts General Hospital, Boston MA, 2015.
- Stein, S. Hemorrhoidectomy Complication and their Management, Advances and Controversies in Colorectal Surgery, 9th Annual Update, Massachusetts General Hospital, Boston MA, 2015.
- Stein, S. Laparoscopic Colectomy: Pitfalls and Solutions. Advances and Controversies in Colorectal Surgery, 9th Annual Update, Massachusetts General Hospital, Boston MA, 2015.
- Stein, S. Directed Networking, Weaving the Web- Social Media. 6th Annual Women in Surgery Career Symposium, Orlando FL,
- Stein, S. Fecal incontinence and Perianal Disease, Gastroenterology Fellows Lecture, University Hospitals Case Medical Center, Cleveland, OH, 2015.
- Stein, S. High-Resolution Anoscopy or Expectant Management for Anal Intraepithelial Neoplasia for the Prevention of Anal Cancer: Is there Really a Difference, Digestive Disorders Federation, London, England, 2015.
- Stein, S. Difficult Crohn's Cases: Anglo-American Differences. St Mary's Hospital/Imperial College of London, England, 2015.
- Stein, S. Advances in Surgical Treatment of Inflammatory Bowel Disease 70th General Meeting of the Japanese Society of Gastroenterological Surgery, Hamamatsu University School of Medicine, Shizuoka, Japan, 2015.
- Stein, S. Empowering Women Surgeons, Showa University Society, Japanese Society of Women Surgeons, Showa University, Hatanodai, Shinagawa-ku, Tokyo, Japan, 2015.
- Times, M. "Let-7 represses carcinogenesis and a stem cell phenotype in the intestine via regulation of Hmga2". 2015 ASCRS Research Forum Invited Discussant.

## GENERAL AND GASTROINTESTINAL SURGERY

#### **PUBLICATIONS**

- Podolsky D1, Scott Melvin W, Camacho D, Qureshi A, Abbas M. The incidence of gastrointestinal stromal tumors is increased in obese individuals. Am Surg. 2015 May;81(5):E198-200.
- Abbas M, Cumella L, Zhang Y, Choi J, Vemulapalli P, Melvin WS, Camacho D Outcomes of Laparoscopic Sleeve Gastrectomy and Roux-en-Y Gastric Bypass in Patients Older than 60. Obes Surg. 2015 May 22. [Epub ahead of print].
- Fried GM, Marks JM, Mellinger JD, Trus TL, Vassiliou MC, Dunkin BJ. ASGE's assessment of competency in endoscopy evaluation tools for colonoscopy and EGD.Gastrointest Endosc. 2014 Aug;80(2):366-7. doi: 10.1016/j.gie.2014.03.019. PMID:25034851[PubMed - in process].
- Orenstein S, Ponsky JL, Marks JM. Peroral endoscopic myotomy (POEM) leads to similar results in patients with and without prior endoscopic or surgical therapy. Surg Endosc. Epub 10.1007/s00464-014-3782-5.
- Marks JM, King AJ. Current status of management of malignant disease: what are the options for premalignant lesions of the esophagus and stomach? J Gastrointest Surg. 2015 Mar;19(3):575-8. doi: 10.1007/s11605-014-2677-z. Epub
- Fayezizadeh M, Petro CC, Rosen MJ, Novitsky YW. Enhanced recovery after surgery pathway for abdominal wall reconstruction: pilot study and preliminary outcomes. Plast Reconstr Surg. 2014 Oct;134(4 Suppl 2):151S-9S.

- Raigani S, De Silva GS, Criss CN, Novitsky YW, Rosen MJ. The impact of developing a comprehensive hernia center on the referral patterns and complexity of hernia care. Hernia. 2014 Oct;18(5):625-30.
- Raigani S, Criss CN, Petro CC, Prabhu AS, Novitsky YW, Rosen MJ. Single-center experience with parastomal hernia repair using retromuscular mesh placement. J Gastrointest Surg. 2014 Sep;18(9):1673-7.
- Criss CN, Petro CC, Krpata DM, Seafler CM, Lai N, Fiutem J, Novitsky YW, Rosen MJ. Functional abdominal wall reconstruction improves core physiology and quality-of-life. Surgery. 2014 Jul;156(1):176-82.
- Saberski E, Orenstein SB, Novitsky YW. Real-time cadaveric laparoscopy and laparoscopic video demonstrations in gross anatomy: an observation of impact on learning and career choice. The American Surgeon. 2015 Jan;81(1):96-100.
- Petro C, Criss CN, Novitsky YW, Rosen MJ. Central failures of lightweight monofilament polyester mesh causing hernia recurrence: a cautionary note. Hernia. 2015 Feb;19(1):155-9.
- Posielski NM, Yee ST, Majumder A, Orenstein SB, Prabhu AS, Novitsky YW. Repair of massive ventral hernias with "quilted" mesh. Hernia. 2015 Jun;19(3):465-72.
- Petro CC, Como JJ, Yee S, Prabhu AS, Novitsky YW, Rosen MJ. Posterior component separation and transversus muscle release for complex incisional hernia repair in patients with a history of open abdomen. J Trauma Acute Care Surgery. 2015
- Pauli EM, Wang J, Petro CC, Juza RM, Novitsky YW, Rosen MJ. Posterior component separation with transversus abdominis muscle release successfully addressed recurrent ventral hernias following anterior component separation. Hernia. 2015 Apr;19(2):285-91.
- Onders R, Elmo M, Kaplan C, Katirji B, Schilz R. Final Analysis of the Pilot Trial of Diaphragm Pacing in Amyotrophic Lateral Sclerosis with Long Term Follow-up: Diaphragm Pacing Positively Affects Diaphragm Respiration. Am J Surgery 2014;207:393-397.
- Posluszny JA, Onders R, Kerwin AJ, Weinstein MS, Stein DM, Knight J, Lottenberg L, Cheatham ML, Khansarinia S, Dayal S, Byeno PM. Multicenter Review of Diaphragm Pacing in Spinal Cord Injury: Successful not only in weaning from ventilators but also in bridging to independent respiration. J Trauma Acute Care Surg 2014;76:303-310.
- Onders R, Elmo MJ, Kaplan C, Katirji B, Schilz R. Extended Use of Diaphragm Pacing in Patients with Unilateral of Bilateral Diaphragm Dysfunction: A New Therapeutic Option. Surgery 2014;156:772-86.
- Onders R, Elmo MJ, Kaplan C, Katirji B, Schilz R. Identification of Unexpected Respiratory Abnormalities in Patients with Amyotrophic Lateral Sclerosis through Electromyographic Analysis Using Intramuscular Electrodes Implanted for Therapeutic Diaphragmatic Pacing. Am J Surg 2015;209(3):451-6. PMID: 25648901.
- Onders R. The Diaphragm How it affect my life and my career. The search for stability when the problem is instability. Am J Surg 2015;209(3):431-5. doi: 10.1016/j. amjsurg.2014.12.003. Epub 2014 Dec 18. PMID: 25637310.
- Petro CC, O'Rourke CP, Posielski NM, Criss CN, Raigani S, Prabhu AS, Rosen MJ. Designing a ventral hernia staging system. Hernia. 2015 Sep 5. [Epub ahead of print].

- Petro CC, Raigani S, Fayezizadeh M, Rowbottom JR, Klick JC, Prabhu AS, Novitsky YW, Rosen MJ. Permissive Intra-Abdominal Hypertension Following Complex Abdominal Wall Reconstruction. Plast Reconstr Surg. 2015 Jun 15. [Epub ahead of print].
- Posielski NM, Yee ST, Majumder A, Orenstein SB, Prabhu AS, Novitsky YW. Repair of massive ventral hernias with "quilted" mesh.Hernia. 2015 Jun;19(3):465-72. doi: 10.1007/s10029-015-1375-4. Epub 2015 Apr 9.
- Petro CC, Como JJ, Yee S, Prabhu AS, Novitsky YW, Rosen MJ. Posterior component separation and transversus abdominis muscle release for complex incisional hernia repair in patients with a history of an open abdomen. J Trauma Acute Care Surg. 2015 Feb;78(2):422-9.
- Rosen MJ, Aydogdu K, Grafmiller K, Petro CC, Faiman GH, Prabhu A. A Multidisciplinary Approach to Medical Weight Loss Prior to Complex Abdominal Wall Reconstruction: Is it Feasible? J Gastrointest Surg. 2015 Aug;19(8):1399-406. doi: 10.1007/s11605-015-2856-6. Epub 2015 May 23.

#### BOOK CHAPTERS/TEXTBOOK EDITOR

• Onders RP. Getting an Idea from Paper to Patient. In Stain, Prior, Shadduck. The SAGES Manual: Ethics of Surgical Innovation. Springer, 2015.

- Elliott, H. SAGES 2015: Hernias in Women of Childbearing Age. April 2015.
- Elliott, H. Enhanced Recovery Pathways after Abdominal Wall Reconstruction and Hernia Repair in Women of Childbearing Age: Should We Tailor? 6th Annual Abdominal Wall Reconstruction Summit Feb 2015.
- Elliott, H. VIII Curso Internacional de Cirugia. Mexico City, Mexico. Hernias in Women of Childbearing Age: What are the challenges? February 2015.
- Khaitan, L. SAGES presentation 2015: Endoluminal Anatomy of the Gastric Sleeve: Are we all created equal?.
- Khaitan, L. SAGES presentation 2015: Timed Barium Esophagogram versus Esophageal Function Testing in the diagnosis of Achalasia.
- Marks, J. "Lateral Spreading Colon Polyps: Surgical Perspective". ASGE Endofest. Las Vegas, Nevada, September, 2014.
- Marks, J. "POEM-Technical Tricks and Steps". Case Medical Center POEM/ESD course. Cleveland, Ohio, October, 2014.
- Marks, J. "Peroral Endoscopic Myotomy-Update". NorthShore Hospital Surgical Grand Rounds. Youngstown, Ohio, October, 2014.
- Marks, J. "Update on Stents for GI Disease", ACS Flexible Endsocopy Skills Course. "Endoscopic Management of Anastomotic Dehiscence". ACS Colonoscopy Course. ACS Annual Meeting. San Francisco, CA, October, 2014.
- Marks, J. "Endoscopic Management of GERD and Achalasia", "Update on Endsocopic Tools for GI disease". SAGES Basic Resident Education Course. Cincinnati, Ohio, October, 2014.
- Marks, J. "Peroral Endoscopic Myotomy: A Clinical Application of NOTES". International Society of MIS. Sao Paulo, Brazil, December, 2014.
- Marks, J. "Surgical Perspectives of Opportunities and Unmet Needs in GI and Metabolic Diseases", AGA Technology Summit. San Francisco, CA, March, 2015.

- Marks, J. "POEM-Technical Tricks and Steps". Case Medical Center POEM/ESD course. Cleveland, Ohio, March, 2015.
- Marks, J. "Enterocutaneous Fistula Management", "FES: Toward Assuring Competency". SAGES Annual Meeting. Nashville, TN, April, 2015.
- Marks, J. "Peroral Endoscopic Myotomy", University of Pittsburgh Annual Update Meeting. Pittsburgh, PA, May,
- Marks, J. "Management of Complex Enterocutaneous Fistulae" ASCRS Annual Meeting. Boston, MA, May, 2015.
- Novitsky, Y. Assessing the safety of Vicryl mesh as an adjunct to closure of the posterior fascial sheath/peritoneum during retromuscular mesh placement of synthetic mesh. 1st World Conference on Abdominal Wall Hernia Surgery, Milan, Italy, April 2015.
- Novitsky, Y. Outcomes of complex abdominal wall reconstructions with transversus abdominis release (TAR) with retromuscular porcine biologic mesh. 1st World Conference on Abdominal Wall Hernia Surgery, Milan, Italy, April 2015.
- Novitsky, Y. Efficacy of transversus abdominis plane (TAP) block with liposomal bupivacaine during open abdominal wall reconstructions. 1st World Conference on Abdominal Wall Hernia Surgery, Milan, Italy, April 2015.
- Novitsky, Y. Large Traumatic Flank Hernia Repair Utilizing a Transversus Abdominis Muscle Release. American College of Surgeons, San Francisco, CA, October 2014.
- Novitsky, Y. Bilateral Parastomal Hernia Repair with Mesh Sublay. American College of Surgeons, San Francisco, CA, October 2014.
- Novitsky, Y. Laparoscopic Repair of Subxiphoid hernia utilizing superior preperitoneal space. American College of Surgeons, San Francisco, CA, October 2014.
- Novitsky, Y. Ileal Conduit and Colostomy Revision with Two Parastomal Hernia Repairs Using Synthetic Mesh. American College of Surgeons, San Francisco, CA, October 2014.
- Novitsky, Y. Excision of Abdominal Wall Desmoid with Immediate Reconstruction. American College of Surgeons, San Francisco, CA, October 2014.
- Novitsky, Y. Radical Resection of Abdominal Wall Desmoid Tumor with Reconstruction Using Posterior Component Separation and Mesh Implantation. Society of Surgical Oncology, Houston, TX, March 2015.
- Novitsky, Y. Transversus abdominis release for repair of a complex flank hernia in a kidney transplant recipient. 1st World Conference on Abdominal Wall Hernia Surgery, Milan, Italy, April 2015.
- Novitsky, Y. Parastomal hernia repair with transversus abdominis release and novel stapled trans-abdominal ostomy reinforcement with mesh (STORM). 1st World Conference on Abdominal Wall Hernia Surgery, Milan, Italy, April 2015.
- Onders, R. "Optimizing Management of Ventilator Dependent Spinal Cord Injured Patients" Presentation at the International Spinal Cord Society (ISCOS), Masstricht, The Netherlands, September 2nd-4th, 2014.
- Onders, R. "Diaphragm Pacing: Early Utilization to decrease ventilators and improve recovery of respiration" Invited presentation at the 16th Spinal Research Network Meeting of the International Spinal Research Trust, London, England, September 5th, 2014.

- Onders, R. "Future of Diaphragm Pacing in Korea". Presentation to University Neurology and Rehabilitation Groups, Seoul, Korea, October 2nd, 2014.
- Onders, R. "Practical Applications of Diaphragm Pacing" Presentation at Chungnam National University Hospital, Daejeon, Korea, Oct. 3rd, 2014.
- Onders, R. "Assessing Diaphragm Function in ALS: Could a standard inspiration chest x-ray with an additional relaxation view provide the answer?" Poster Presentation at the 25t International ALS/MND Symposium, Brussels, Belgium, December, 2014.
- Onders, R. "The Immediate Low Profile Button Gastrostomy: Patients Prefer It and We Should Provide It" Poster Presentation at the 25t International ALS/MND Symposium, Brussels, Belgium, December, 2014.
- Onders, R. "Long Term Survival of ALS/MND Patients with Diaphragm Pacing Implantation with Low Forced Vital Capacity below 45% Predicted." Poster Presentation at the 25t International ALS/MND Symposium, Brussels, Belgium, December, 2014.
- Onders, R. "Update on Diaphragm Pacing: What the Thoracic Surgeon needs to know" Presentation at the STS/AASTS Tech Con 2015, San Diego, CA January 25, 2015.
- Onders, R. "The Surgical Innovator" Presentation during Innovation in the US-The future of Surgical Innovation" at the Surgical Spring Week SAGES 2015, Nashville, TN, April 15th,
- Onders, R. "Laparoscopic Ultrasound in Clinical Practice" Presentation at the Ohio Chapter of American College of Surgeons, Dayton, OH May 9th, 2015.
- Onders, R. "Development and Commercialization of the Networked Neuroprosthesis: Is the Future the Implantable Intranet over the Exoskeleton" Oral Presentation at the 4th International Spinal Cord Society (IsCoS) and American Spinal Cord Association (ASIA) meeting, Montreal, Canada May 15th,
- Onders, R. "Diaphragm Pacing in SMA: Identifying Abnormalities of Respiratory Control and Successful Removal of Positive Pressure Tracheostomy Mechanical Ventilation". Presentation at the 19th Annual SMA Researcher Meeting, Kansas City, June 18th, 2015.
- Prabhu, A. Frequency of short and long term stoma complication after expert colon surgery, 1st World Conference on Abdominal Wall Hernia Surgery, Milan, Italy, April 27, 2015.
- Prabhu, A. Advances in Minimally Invasive Hernia Repair, Statewide Campus System Lecture Series, Howell, Michigan, April 22, 2015.
- Prabhu, A. Groin Pain after Inguinal Hernia Repair, What Do I Do Now?, Abdominal Wall Reconstruction Summit, Vail, Colorado, February 27, 2015.
- Prabhu, A. Approaches to Ventral Hernia Repair in Morbidly Obese Patients, Abdominal Wall Reconstruction Summit, Vail, Colorado, February 28, 2015.
- Prabhu, A. Laparoscopic Ventral or Retromuscular Repair: What Approach for Which Patient? 2014 American College of Surgeons Clinical Congress, Ventral Hernia Repair: Challenges and Solutions Session, San Francisco, CA, October 2014.

### HEPATOBILIARY AND TRANSPLANT **SURGERY**

#### **PUBLICATIONS**

- Woodside KJ, Sanchez EQ, Schulak JA. "Organ transplantation," in Netter's Surgical Anatomy and Approaches, Delaney CP (ed). Elsevier Saunders, Philadephia,
- Jackson T, Siegel KA, Siegel CT. Intraoperative conversion to ALPPS during synchronous resection of rectal cancer and liver metastasis. Case Rep Surg. Nov 2014.
- Fathi AH, Uhm S, Hardacre JM. Organ sparing pancreatectomy for synchronous pancreatic intraductal papillary mucinous neoplasms. Am Surg, Dec 2014; 80(12): E339-41.
- Orenstein SB, Marks JM, Hardacre JM. Technical aspects of bile duct evaluation and exploration. Surg Clinics of North America. April 2014; 94(2): 281-96.
- Ammori JB, Do RK, Brennan MF, D'Angelica MI, Dematteo RP, Fong Y, Jarnagin WR, Allen PJ. Uncinate duct dilation in intraductal papillary mucinous neoplasms of the pancreas: a radiographic finding with potentially increased malignant potential. Journal Gastointest Surg, May 2014; 18(5):911-6.

### **BOOK CHAPTERS**

- Siegel CT. Approach to Colorectal Liver Metastasis. Chapter in Indications and Outcomes in Colon and Rectal Surgery. Davis Beck (editor) (in press).
- Aeder, Mark Book Chapter "Psychomotor Tools Validation, Reliability and Learning Curves" in ACS Principles and Practice for Simulation and Surgical Education Research, R. Aggarwal, ed., American College of Surgeons. 2015.

#### PRESENTATIONS AND INVITED LECTURESHIPS

- The New Kidney Allocation System, National Podcast sponsored by OPTN/UNOS and HRSA, 2014. The American Society of Transplantation Kidney Allocation Webinar, sponsored by the American Society of Transplantation, nationally broadcast, 2014.
- The Kidney Allocation System Basics Webinar sponsored by OPTN/UNOS and HRSA, nationally broadcast, 2014.

## ORAL AND MAXILLOFACIAL SURGERY

#### **PUBLICATIONS**

- Altay MA, Lyu DJ, Collette D, Quereshy FA, Gonzalez AE, Teich S, Baur DA: Transcervical Migration of a Broken Dental Needle: A Case Report and Literature Review. Oral Surg Oral Med Oral Pathol Oral Radiol. 2014 Apr 18. pii: S2212-4403(14)00427-1. doi: 10.1016/j.0000.2014.04.001.
- Setty M, Montagnese T, Baur DA, Aminoshariae A, Mickel A: An Analysis of Moderate Sedation Protocols Used in Dental Specialty Programs: A Retrospective Observational Study. J Endod. 2014 Sep;40(9):1327-31. doi: 10.1016/j. joen.2014.05.015.
- Baur DA, Kaiser AC, Leech BN, et al: The Marginal Mandibular Nerve in Relation to the Inferior Border of the Mandible. J Oral Maxillofacial Surg, 72(6), 1125-9, 2014.

- Guglielmi M, Chochlidakis KM, Ercoli C, Quereshy FA, Baur DA: Modified Roll Palatal Flap Technique in Aesthetic Zone. Stability of Results After 5 years. Canadian Journal of Restorative Dentistry & Prosthodontics, 7(3), 30-38, 2014.
- Fitzpatrick SG, Hirsch SA, Listinsky CM, Lyu DJ, Baur DA: Ameloblastic Carcinoma with Features of Ghost Cell Odontogenic Carcinoma in a Patient with Suspected Gardner Syndrome. Oral Surg Oral Med Oral Pathol Oral Radiol. 119(4), e241-45, 2014.
- Baur DA, Altay MA, Oswald M, Teich S, Quereshy FA: Osteonecrosis of the Jaw in a Patient on Raloxifene - A Case Report. Quintessence International, 46(5), 423-28, 2015.
- Guglielmi M, Beushausen M, Feng C, Beech A, Baur DA: Halitosis as a Product of Hepatic Disease. South African Dental Journal. 69(8), 364-367, 2014.
- Baur DA, Altay MA, Flores A, Ort Y, Quereshy FA: Chronic Osteomyelitis of the Mandible: Diagnosis and Management - An Institution's Experience over 7 years. J Oral Maxillofacial Surg, 73 (4), 655-65, 2015.
- Altay MA, Elimairi I, Baur DA, Quereshy FA: Eagles Syndrome. Head and Neck Pathol, Dec 2014, epub ahead of print.
- Flores-Hidalgo A, Altay MA, Atencio IC, Manlove AE, Schneider KM, Baur DA: Management of Fractures of the Atrophic Mandible: A Case Series. Oral Surg Oral Med Oral Pathol Oral Radiol. DOI: http://dx.doi.org/10.1016/j.oooo.2015.01.016 2015 in press.
- Altay MA, Schneider KM, Quereshy FA. Atencio IC, Baur DA: Predictors of Blood Loss During Orthognathic Surgery: Outcomes from a Teaching Institution. Oral and Maxillofacial Surgery Journal, in press 2015.
- Jhamb T, Syed A, Baur DA: Recognizing Oral Manifestations of Multiple Myeloma. Journal of the Massachusetts Dental Society, in press 2015.
- Guglielmi M, Chochlikakis KM, Ercoli C, Quereshy FA, Baur DA. Modified Roll Palatal Flap Technique in Aesthetic Zone. Stability of Results After 4 years. Canadian Journal of Pros & Rest Dent 7(3) 30-38; 2014.
- Xena Alakailly, Raja Kummoona, Faisal A. Quereshy, Dale A. Baur, Ariadne E. González. The Use of Sodium Tetradecyl Sulphate for the Treatment of Venous Malformations of the Head and Neck of Maxillofacial and Oral Surgery: Volume 14, Issue 2 (2015), Page 332-338.
- Mehmet Ali Altay, DDS, PhD; Diana Jee-Hyun Lyu, DMD; Dale Baur, DDS, MD; David Collette, DMD, MD; Quereshy FA; Sorin Teich, DMD, MBA; Ariadne E Gonzalez, BS. Transcervical Migration of a Broken Dental Needle: A Case Report and Literature Review J 000, Ms. Ref. No.: TRIPLEO-D-14-00375
- Quereshy FA, Pack S, Fattahi T, Baur DA: Lower Eyelid Blepharoplasty: a Guide for Treatment Planning (PENDING: 7-2014 IJOMS).
- Mehmet Ali Altay, DDS, PhD; Meghan S Oswald, DMD; Quereshy FA. Osteonecrosis of the Jaw in a Patient on Raloxifene - A case report Quintessence International (doi: 10.3290/j.qi.a32918).
- Loveless T, Kilinc Y, Flores-Hidalgo A, Altay MA, Baur DA, Quereshy FA. "Hounsfield comparison of grafted versus non-grafted extraction sockets: A CBCT study". Journal of Oral Science - Decision on Manuscript ID JOS-15-0097.R2 (accepted 4-2015).

#### **BOOK CHAPTERS**

- Baur DA, Bushey A, Lyu D: Patient evaluation and history taking. Manual of Minor Oral Surgery for the General Dentist, 2<sup>nd</sup> edition. Editors Mehra P, D'Innocenzo R. Wiley-Blackwell
- Baur DA, Loveless T: Management of the Branchial Cleft Cyst, Atlas of Oral and Maxillofacial Surgery. Editors Tiwanna P,Kademani D. Elsevier, 2015.
- Baur DA, Collette D: The Submental island Flap, Atlas of Oral and Maxillofacial Surgery. Editors Tiwanna P, Kademani D. Elsevier, 2015.
- Baur DA, Williams J, AlaKailly X: The Platysma Myocutaneous Flap. Oral Maxillofacial Surg Clin N Am 26 (2014) 381-387.
- Manlove A, Quereshy FA. Kademani/Tiwana: Atlas of Oral and Maxillofacial Surgery: Otoplasty." Philadelphia, PA. 2014.
- Naghibi S, Quereshy FA. Facial Aesthetic Evaluation. "Oral and Maxillofacial Surgery Secrets, 3rd edition". In progress.
- Quereshy FA, Andrei Marecheck. Botox and Fillers Fonseca Oral & Maxillofacial Surgery 3e, Elsevier (in progress).
- Quereshy FA, Nijhawann S. Facial Alloplastic Implants Fonseca Oral & Maxillofacial Surgery 3e, Elsevier (in prog-
- Quereshy FA. Maxillofacial Surgery 3rd Edition. Section editor Esthetic Surgery Section. Elsevier, in progress. (10 chapters).

- Baur, D. Walter Reed National Military Medical Center Oral and Maxillofacial Surgery Residency Program; Lecture on Local and Regional Flaps in Head and Neck Reconstruction. Bethesda, MD, August 15, 2014.
- Baur, D. AAOMS annual meeting: Update on Resorbable fixation, Moderator. September 11, 2014. Honolulu, HA.
- Manlove AE, Flores-Hidalgo A, Horan MP, Schneider K, Quereshy FA, Baur D. Diagnosis in Treatment of Fractures of the Atrophic Mandible. A Case Series. Poster presentation, AAOMS annual meeting, Honolulu, HA. September 2014.
- Nijhawan S, Teppa J, Horan MP, Quereshy FA, Baur D. Comparison of Two Methods of Predicting Maxillofacial Volumetric Bony Defects: CBCT Used As A Valuable Preoperative Tool. Poster presentation, AAOMS annual meeting, Honolulu, HA. September 2014.
- Baur, D. Surgical Complications and MRONJ, lecture to Forest City Dental Society, Cleveland, OH, October 18, 2014.
- Baur, D. Local Flaps, Department of OMFS Grand Rounds, January 20, 2015.
- Jhamb T, Pack SE, Baur DA, Wasman J, Lavertu P, Razaee R. Osteosarcoma of the Mandible Arising in Polyostotic Fibrous Dysplasia. AAOMP annual meeting, April 2015, San Diego CA.
- Baur, D. Strasbourg Osteosynthesis Research Group, lecture on Management of Minor Salivary Gland Tumors and The Pectoralis Major Flap, 3 May 2015, Nashville, TN.
- Baur, D. AAOMS Research Summit, lecture on Contemporary Management of Benign Odontogenic Tumors, May 7, 2015,
- Andres Flores-Hidalgo DDS, Isabel Atencio DDS, Tyman Loveless DMD MD, Michael Horan DMD MD PHD, Dale Baur DDS, Faisal Quereshy MD DDS FACS. AAOMS 96TH Annual Meeting Hawaii: Diagnosis and Treatment of Fractures of the Atrophic Mandible. A Case Series.

- Nijhawan S, Quereshy FA, Baur DA. AAOMS 96th Annual Meeting Hawaii: "Comparison of Two Methods of Predicting Maxillofacial Volumetric Bony Defects: CBCT Used As A Valuable Pre-operative Tool" has been accepted as a Scientific poster, 09-11-2014.
- Quereshy, F. North Coast Dental Seminar: "Evaluation of the Maxillofacial Trauma Patient", 05-03-2015.
- Quereshy, F. North Coast Dental Seminar: "Hard Tissue Augmentation after Trauma". 05-03-2015.
- Quereshy, F. Comprehensive Care Seminar: School of Dental Medicine: "Bone Grafting Options for Oral & Maxillofacial Surgery Reconstruction". 04-06 and 04-07-14.
- Quereshy, F. SPEAR Masters in Mastery Course: "All on 4 Solutions". Scottsdale AZ, 12-1-2014.
- Quereshy, F. SPEAR Masters in Mastery Course: "Bone Grafting Options for Oral & Maxillofacial Surgery Reconstruction". Scottsdale, AZ, 12-2-2014.
- Quereshy, F. CASE OMS Grand Rounds: "Facial Augmentation: Osteotomies vs Implants". CWRU Cleveland, OH, 10-29-
- Quereshy, F. AAOMS 2014 Moderator "Obesity Symposium" Honolulu, HI, 09-14-2014.
- Quereshy, F. AAOMS 2014 Blepharoplasty Symposium "Transconjunctival Belpharoplasty". Honolulu, HI, 09-12-2014.
- Quereshy, F. AAOMS 2014 Cosmetic Facial Surgery "Facial Liposuction for Oral & Maxillofacial Surgery" Surgical Clinic 1 hour; Honolulu, HI, 09-12-2014.
- Quereshy, F. AAOMS 2014 Cosmetic Facial Surgery "Contemporary Rhinoplasty for the Oral & Maxillofacial Surgeon: Surgical Clinic 2 hours". Honolulu, HI, 09-12-2014.
- Quereshy, F. AAOMS 2014 Moderator "Minimally Invasive Cosmetic Facial Surgery". Honolulu, HI, 09-11-2014.
- Ouereshy, F. ABOMS Scientific Seminar "Let's Get Cheeky: Malar Augmentation". Dallas, TX, 02-04-2014.
- K. Schneider. CBCT for All Dental Providers: Unlocking the Potential. Northeast Ohio Dental Society Annual Meeting, Concord, OH, 2015.
- K. Schneider. Dental Therapy in the Emergency Department. Emergency Medical Physicians Meeting at Tripoint Medical Center, Concord, OH, 2014.
- A. Manlove, A. Flores-Hidalgo, M.P. Horan, K. Schneider, F.A. Quereshy, D. A. Baur. Diagnosis in Treatment of Fractures of the Atrophic Mandible. A Case Series. American Association of Oral and Maxillofacial Surgeons Annual Meeting, Honolulu,
- N. Kronenwetter, IC. Itencio, K. Schneider, D. Baur. Prescription Patterns among Ohio Oral and Maxillofacial Surgeons. Professional's Day, CWRU School of Dental Medicine, Cleveland, OH, 2014.

### PEDIATRIC SURGERY

#### **PUBLICATIONS**

- Balakumar, V, DeRoss, AL, Kouretas PC, Boulanger SC, Barksdale Jr EM. Pyloric Exclusion for Treatment of Complicated Duodenal Atresia. Neonatology 105, 263-266,
- Yu L, Khalili AS, Boulanger S, Barksdale Jr EM, DeRoss AL. A rare case of Megaduodeum Associated with a duodenal trichobezoar. J Pediatric Gastroenterology Nutr 2014 Sep 29.

- Bobanga ID, Bai S, Swanson MA, Champagne BJ, Reynolds HJ, Delaney CP, Barksdale Jr EM, Stein SL. Factors influencing disease recurrence after ileocolic resection in adult and pediatric onset Crohn's disease. Am J Surg 208(4)591-6, 2014.
- Barksdale EM, Jr., Ponsky TA. Pyloric Stenosis. In Ziegler MM, Azizkhan RG, Allmen D, Weber TR. Eds. Operative Pediatric Surgery. Second Edition. New York, NY: McGraw-Hill; 2014.

#### PRESENTATIONS AND INVITED LECTURESHIPS

- Barksdale, E. "Guidelines for Pediatric Malnutrition". Invited Speaker, Pediatric Grand Rounds, Rainbow Babies & Children's Hospital Cleveland, Ohio, February 27, 2015.
- Barksdale, E. "Moans and Groans: Acute Abdominal Conditions of Childhood". Invited Speaker, Medical Student Lecture Cleveland, Ohio, November 12, 2014.
- Barksdale, E. "Youth Violence: The Ultimate Health Disparity". Invited Speaker, Pediatric Grand Rounds Rainbow Babies & Children's Hospital Cleveland, Ohio, October 23, 2014.
- Barksdale, E. "Youth Violence: The Ultimate Health Disparity". Invited Speaker, Visiting Professor, Children's Hospital Los Angeles, California, February 14, 2014.

### SURGICAL ONCOLOGY

#### **PUBLICATIONS**

- Yan L, Gao Y, Pierce R, Dai L, KIM JA, Zhang M. Development of Y-shaped peptide for constructing nanoparticle systems targeting tumor-associated macrophages in vitro and in vivo. Material Research Express. 2014 1 Volume 1 025007.
- Tacastacas JD, Bray J, Cohen YK, Arbesman J, KIM J, Koon HB, Honda K, Cooper KD, Gerstenblith MR. Update on primary mucosal melanoma. J Am Acad Dermatol. 2014 Aug;71(2):366-
- Zhang M, Gao Y, Caja K, Zhao B, and KIM JA. Non-viral nanoparticle delivers small interfering RNA to macrophages in vitro and in vivo. PLOS One. 2015 10(3).
- Ammori J, Hamzeh K, Graor H and KIM JA. Requirement of innate immunity in tumor-bearing mice cured by Adoptive Immunotherapy using tumor-draining lymph nodes. J. Immunol. Res. 2015. doi:10.1155/2015/170852.
- Zhang M, Graor H, Visioni A, Strohl M, Yan L, Caja K and KIM JA. T cells derived from human melanoma draining lymph nodes mediate melanoma-specific anti-tumor responses in vitro and in vivo in human melanoma xenograft model. J. Immunotherapy 2015. In press. July-Aug: 38(6):229-38.
- Strohl M, Raigani S, Ammori J, Hardacre J and KIM JA. Surgery for localized pancreatic cancer- the trend is not improving. Pancreas. 2015 (in press).
- Ammori JB, Do RKG, Brennan MF, D'Angelica MI, Dematteo RP, Fong Y, Jarnagin WR, Allen PJ. Uncinate Duct Dilation in Intraductal Papillary Mucinous Neoplasms of the Pancreas: A Radiographic Finding with Potentially Increased Malignant Potential. J Gastrointest Surg. 2014. May;18(5):911-6.
- Shive CL, Mudd JC, Funderburg NT, Sieg SF, Kyi B, Bazdar DA, Mangioni D, Gori A, Jacobson JM, Brooks AD, Hardacre J, Ammori J, Estes JD, Schacker TW, Rodriguez B, Lederman MM. Inflammatory Cytokines Drive CD4 T cell Cycling and Impaired Responsiveness to Interleukin-7: Implications for Immune Failure in HIV Disease. J Infect Dis. 2014 Aug 15;210(4):619-29.

- Choong KC, Ammori JB. Hemosuccus Pancreaticus With Superior Mesenteric Artery Branch Pseudoaneurysm. J Gastrointest Dig Syst 2014, 4:5.
- Choong KC, Ammori JB. Surgical Management of Colorectal Liver Metastases. OA Cancer 2014 Mar 10;2(1):6.
- Xuguang Chen, PhD: Jennifer R. Eads, MD: John B. Ammori. MD; Aryavarta M. Kumar, MD, PhD; Tithi Biswas, MD; and Jennifer A. Dorth, MD. Adjuvant and Neoadjuvant Options in Resectable Gastric Cancer: Is There an Optimal Treatment Approach? Curr Oncol Rep. 2015 Apr;17(4):442.
- Ammori IB, Hamzeh K, Graor H, Kim I, Requirement of Innate Immunity in Tumor-Bearing Mice Cured by Adoptive Immunotherapy Using Tumor-Draining Lymph Nodes. Journal of Immunology Research, vol. 2015, Article ID 170852, 8 pages, 2015. doi:10.1155/2015/170852.
- Orenstein S, Marks J, Hardacre JM. Technical Aspects of Bile Duct Evaluation and Exploration. Surgical Clinics of North America 2014; 94:281-96.
- Fathi AH, Uhm S, Hardacre JM. Organ-sparing Pancreatectomy for Synchronous Intraductal Papillary Mucinous Neoplasms. American Surgeon 2014;80:339-41.
- Wilhelm SM. Evaluation of the Thyroid Incidentaloma. Surg Clin N Am. 94, 2014, pp. 485-497.
- SM Wilhelm. Multinodular Goiter. Surgical Endcocrinopathies. Springer International Publishing, Switzerland, 2015.

#### **BOOK CHAPTERS**

- Visioni, A., Kim, J. Duct Excision, In: Netter's Surgical Anatomy and Approaches, 1st Ed, Conor Delaney ed. Elsevier, 547-552,
- Visioni, A., Kim, J. Sentinel Lymph Node Biopsy, In: Netter's Surgical Anatomy and Approaches, 1st Ed, Conor Delaney ed. Elsevier, 553-560, 2014.
- · Visioni, A., Kim, J. Axillary and Inguinal Lymphadenectomy, In: Netter's Surgical Anatomy and Approaches, 1st Ed, Conor Delaney ed. Elsevier, 561-568, 2014.
- Visioni, A., Kim, J. Retroperitoneal Sarcoma, In: Netter's Surgical Anatomy and Approaches, 1st Ed, Conor Delaney ed. Elsevier, 569-574, 2014.
- Lyu HG and Hardacre JM (2014) Appendix. In: Makary MA and Cooper MA (eds) Surgery Review, 3rd ed., Wolters Kluwer,
- SM Wilhelm. Laparoscopic Adrenalectomy. Netter's Surgical Anatomy and Approaches. Elsevier, Saunders. Philadelphia, PA 2014.

- Strohl M, Graor H, Zhang M, Visioni A, Ammori J, Rivers-McCue I, and Kim J. Expansion of peptide-specific T cells from human melanoma-draining lymph nodes. 2014 ASCO Annual Meeting, Chicago, IL, May 30-June 3 2014.
- Strohl M, Raigani S, Ammori J, Hardacre J, Kim J. Surgery as an underutilized treatment modality in patients with localized pancreatic cancer – a national analysis of trends and outcomes. Pancreas Club Annual Meeting, Chicago, IL, May 2-4 2014.
- Strohl M, Graor H, Zhang M, Visioni A, Ammori J, Rivers-McCue I, Kim J. Immunomodulatory effects of VEGF on human lymph node antigen-presenting and lymphoid cells. Poster accepted for presentation at American Association of Cancer Research Annual Conference, San Diego, CA, April 5-9 2014.

- Strohl M, Raigani S, Ammori J, Hardacre J, Kim J. Factors associated with failure to operate for localized pancreatic adenocarcinoma. Poster presented at Society of Surgical Oncology Cancer Symposium, Phoenix, AZ, March 12-15 2014.
- Case Western School of Medicine Cancer Care Elective. Course faculty for first/second year medical school course. Lecture – "Introduction to Surgical Oncology". Winter/Spring 2013, Winter/Spring 2014, Fall 2014, Winter/Spring 2015.
- Park PJ, Cote DR, Yeh V, Schulak JA, Sanchez EQ, Sarabu N, Augustine JJ, Ammori JB, Woodside KJ. Screening colonoscopy should be required for kidney transplant listing. Presented as a poster at the American Society of Transplant Surgeons Winter Symposium, 2014.
- Cote DR, Park PJ, Yeh V, Schulak JA, Sanchez EQ, Sarabu N, Augustine JJ, Ammori JB, Woodside KJ. Mammography for women 40 to 50 during pre-kidney transplant evaluation. Presented as a poster at the American Society of Transplant Surgeons Winter Symposium, 2014.
- Park PJ, Cote DR, Yeh V, Schulak JA, Sanchez EQ, Sarabu N, Augustine JJ, Ammori JB, Woodside KJ. Screening colonoscopy should be required prior to kidney transplant. Poster at World Transplant Congress, San Francisco, CA, 2014.
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- Stoecker BJ, Cote DR, Augustine JJ, Sarabu N, Schulak JA, Sanchez EQ, Humphreville VR, Ammori JB, Woodside KJ. Breast cancer risk factors for patients evaluated for kidney transplantation. Poster at American Society of Transplant Surgeons Winter Meeting, Miami Beach, FL, 2014.
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- Chawla, A, Ammori JB. Laparoscopic Total Gastrectomy. Video presentation at Society of Surgical Oncology's 68th Annual Cancer Symposium, 2015, Houston, Texas.
- · Choong K, Novitsky N, Ammori JB. Radical Resection of Abdominal Wall Desmoid Tumor with Reconstruction using Posterior Component Separation and Mesh Implantation. Video presentation during the Top Rated Videos Session at Society of Surgical Oncology's 68th Annual Cancer Symposium, 2015, Houston, Texas.
- Hardacre JM, Raigani S, Dumot J. Starting a High-Quality Pancreatic Surgery Program at a Community Hospital. Poster Presented at the Annual Meeting of the Pancreas Club, 2015, Washington, D.C.
- Posillico SE, Wilhelm SM, McHenry CR. 2014 Midwest Surgical Association (Mackinac Island, MI). The utility of frozen section examination for patients with a thyroid nodule and atypia/ follicular lesion of undetermined significance. August 2014.
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- Wilhelm, SM. Panel Director for "Ultrasound for the Surgeon" talk and course at the 2015 Ohio American College of Surgery meeting (Dayton, OH).

#### **ABSTRACTS**

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### SURGICAL RESEARCH

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- Perry, Y. Innovations in Lung Cancer surgery to Pulmonary division in UH, January 17, 2014.
- Perry, Y. Advances in the treatment of Lung cancer St. Vincent Charity Hospital, February 26, 2014.
- Perry, Y. October 18, 2014 Blast Injuries 2014 Fall EMS symposium Quail Hollow Resort, Concord, OH.
- J Stulberg, A Coble, Y Perry Laparoscopic Repair of a Perforated Epiphrenic Diverticulum – SAGES, Nashville, TN. April 2015.
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- Linden, PA. Moderator: Video Session, April, 2014. American Association of Thoracic Surgery Annual Meeting.
- Linden, PA. Discussant, Cardiothoracic Session II, American College of Surgeons Conference, San Francisco, CA October 2014.
- Linden, PA. Esophagectomy in the Era of Endoscopic Therapy and Chemoradiation, Medical and Surgical Aspects of Esophageal and Foregut Disorders, Maui, Hl.
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### TRAUMA, SURGICAL CRITICAL CARE AND ACUTE CARE SURGERY

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#### PRESENTATIONS AND INVITED LECTURESHIPS

- Clancy, K. Rural Trauma, Society of Trauma Nurses Annual Meeting, March 2015, Jacksonville, FL.
- Tom R, Tiu SP, Klein TR, Mylan MJ, Schubl SD, Ho VP. Risky motorcycle behavior correlates with small motorcycle engine size. Poster Presentation, American Association for the Surgery of Trauma. Philadelphia, PA. September 2014.
- KJ Wilkins, Tiu SP, Tom RJ, Klein TR, Melnic GM, Schubl SD, Ho VP. Cervical Spine immobilization after penetrating injury to the head. Poster Presentation, 2014 Medical Student Program of the American College of Surgeons. San Francisco, CA. October 2014.
- Tiu SP, Tom RJ, Melnic GM, Klein TR, Ho VP, Schubl SD. Percutaneous endoscopic gastrostomy (PEG) complications: are patients with thinner abdominal walls at increased risk? Poster Presentation, 2014, Medical Student Program of the American College of Surgeons. San Francisco, CA. October 2014.

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- Aorto Iliac Occlusive Disease, International webinar in conjunction with 3rd Indovasc Symposium, Bangalore, India, March 2014.
- Thrombolysis and Mechanical Thrombectomy for Arterial and Graft Occlusions, 32nd Annual UCLA Symposium: A Comprehensive Review and Update of What's New in Vascular and Endovascular Surgery, Beverly Hills, CA, September 2014.
- Assessing the Embolization Potential of Carotid Plaque, 56th Annual World Congress, International College of Angiology, Columbus, OH, September 2014.

- Value and Limitations of Optical Coherence Tomography For Use in Lower Extremity Vascular Assessment and Treatments, 41st Annual VEITH Symposium, New York, NY, November 2014.
- Endovascular Procedures for Aortic Occlusive Disease: Are they durable?, International Aortic Summit, Aruba, February
- Clinical Challenges in PAD, UHCMC 13<sup>th</sup> Annual Advanced Practice Nurse Conference Warrensville Heights, OH March
- Bypass, Stent, or Stem Cells: Which one is the best, 6<sup>th</sup> Annual Update on Vascular Disease, Warrensville Heights, OH, April
- Fiscal Challenges: Which Benchmarks and How to Use Them, Vascular Annual Meeting, Chicago, IL, June 2015.
- Carman, T. Understanding Perioperative Anticoagulation with Emphasis on Novel Anticoagulants, Antiplatelet Agents, Drug Eluting Stents, and DVT, 2015.
- Carman, T. American Society for Colon and Rectal Surgeons Annual Scientific Meeting, Boston, MA (5/15).
- Carman, T. Under Pressure: Controlling Lymphedema, Wound Care Symposium 2015: Sealing the Healing with Advanced Techniques, Perrysburg, OH (5/15).
- Carman, T. Top Wound Therapies for Venous and Arterial Ulcers. 6th Annual Update on Vascular Disease UHCMC and NOVA, Warrensville Heights, OH (4/15).
- Carman, T. Does Idiopathic VTE require Indefinite Anticoagulation? Session Co-chair: Vascular Medicine & Thrombosis, American Venous Forum, 27th Annual Meeting, Palm Springs, CA (2/15).
- Carman, T. When One Limb is Swollen: Differential Diagnosis. NWOAPM 15th Annual Scientific Seminar on the Bay, Huron,
- Carman, T. The Swollen Limb. American College of Phlebology's 28th Annual Congress, Phoenix, AZ (11/14).
- Carman, T. Every Wound Tells a Story- Vascular Assessments. 11th Annual Cutting Edge Wound Care Symposium, Cleveland, OH (10/14).
- Carman, T. It's not PAD or Venous Disease The Other Vascular Wounds Impacting the Sequelae of Deep Vein Thrombosis. Symposium on Advanced Wound Care, Las Vegas, NV (10/2014).
- Carman, T. Carotid Duplex Ultrasound Diagnostic Criteria and Interpretation for ICA Stenosis.
- Upper Extremity Arterial Duplex and Physiological Testing -Key Diagnoses Not to Miss. The VEINS (Venous Endovascular Interventional Strategies), Chicago IL (10/14).
- Carman, T. Update on Hypertension Management and Implications for the Vascular Surgery Patient Society for Vascular Surgery, Chicago, IL (6/15).
- Carman, T. Thrombophilia Testing Does Not Assist with the Management of Venous Thromboembolic Disease; Venous and arterial ulcers including mixed venous/arterial ulcers; How to develop a multidisciplinary wound team; Case-based review of visceral arterial disease: Atherosclerosis and others.
- Society for Vascular Medicine, 26th Annual Scientific Session, Baltimore, MD (6/15).

# PHILANTHROPY

# Every gift makes a difference in the lives of our patients and their families.

### ENDOWED CHAIRS AND MASTER CLINICIANS

Endowed Chairs were created across University Hospitals as an outstanding way to recognize a leading physician's exemplary contributions to clinical excellence in his or her field. Chair holders consistently receive high patient satisfaction scores, maintain strong relationships with medical, nursing and allied professionals, and serve as a model for the next generation of physician-scientists.

Currently, new chair positions are only established at UH Rainbow Babies & Children's Hospital. In 2011, University Hospitals launched a new initiative – the Endowed Master Clinician – to recognize our leading physician-scientists. The Endowed Master Clinician honors our most talented experts and is one of the highest honors at UH for physician-scientists who have had a profound impact on the lives of our patients. To be eligible, a physician-scientist must have at least seven years of clinical experience and a reputation for advancing patient care and medical discovery.

### ENDOWED POSITIONS IN SURGERY



Charles A. Hubay, MD, Chair in the Department of

**Surgery** Funded by Mrs. Gladyce Hubay and friends Current Chair: Julian Kim, MD Established on February 20, 2001



Margaret G. and Walter K. Remen Chair in **Surgical Innovation** 

Funded by Margaret G. and Walter K. Remen Current Chair: Raymond P. Onders, MD Established on February 19, 2008



Murdough Master Clinician in Colorectal Surgery Funded by Joy and Thomas G. Murdough, Jr. Current Master Clinician: Conor Delaney, MD, PhD Established June 1, 2011



David P. Miller and Frances A. Cosentino Master Clinician in Thoracic & Esophageal Surgery Funded by David P. Miller and Frances A. Current Master Clinician: Philip Linden, MD



### GIFTS/DONATIONS

Gifts and donations are also received during the year on behalf of the different Divisions within the Department of Surgery. Many times these gifts are the result of the high quality and compassionate care that patients academic year 2014-15, the summary of gifts given to the Department of Surgery totaled over \$1.3 million dollars. The generosity of our donors providing these gifts helps to perpetuate the high quality of patient care, education, and research that our Department of Surgery is committed to.



MetroHealth Medical Center is the public hospital for Cuyahoga County, Ohio. MetroHealth serves as the American College of Surgeons Committee on Trauma and State of Ohio verified Level I Trauma Center and Level I Burn Center for the area. MetroHealth is also a Level II verified Pediatric Trauma Center. The Hospital functions as the tertiary care referral center for the west side of Cleveland and the surrounding counties, providing a rich and diverse mix of patients.

The Department of Surgery provides a full spectrum of clinical services, including Divisions of: General Surgery, with specialists in colorectal, endocrine, hepatobiliary, bariatric, endoscopy, and advanced laparoscopic procedures; Surgical Oncology, with emphasis in the care of breast cancer and melanoma; Trauma, Burns, and Surgical Critical Care; Vascular Surgery, including endovascular procedures; Pediatric Surgery; Plastic Surgery; Cardiothoracic Surgery; Ophthalmology; and Urology. The residency in Surgical Critical Care is based at MetroHealth and is approved to train two fellows each year.

MetroHealth is fully integrated with the surgical residency program and all faculty have full-time appointments at the Case Western Reserve University School of Medicine. In 2014, the Department had more than 5,000 surgical admissions, 2,200 trauma and 200 burn unit admissions. Our faculty performed 8,200 operations, and saw more than 89,000 surgical outpatient visits. The Medical Center has over 100,000 Emergency Department visits each year. The resources of the Institution and Department include 24 stateof-the-art surgical suites and 27 Surgical Intensive Care unit beds. There is a laparoscopic skills training facility for use by the Surgery residents, and a full Simulation Center has been opened on site.

The Department takes great pride in resident and medical student education and research. There are numerous educational conferences scheduled weekly. The faculty hold leadership positions within the Institution, the University, and in local, state, regional, and national professional organizations, including the American College of Surgeons, Association for Surgical Education and the American Board of Surgery. Faculty members have regularly received teaching awards from the Department and School of Medicine and are active in surgical education at a national level.

We are committed to the education and training of future surgeons in Surgery and its specialties. Our core value is that surgical care should be of high quality, patient-centered, humane, responsive, and readily accessible to all.

Christopher P. Brandt, MD **Professor,** Case Western Reserve University Chair, Department of Surgery, MetroHealth Medical Center



Christopher P. Brandt, MD

"Our core value is that surgical care should be of high quality, patientcentered, humane, responsive, and readily accessible to all."



#### **Director**

Christopher R. McHenry, MD, Professor

#### Staff/Faculty

Bruce J. Averbrook, MD, Professor Sergio J. Bardaro, MD, Assistant Professor Christopher P. Brandt, MD, Professor Jeffrey A. Claridge, MD, Associate Professor John J. Como, MD, Associate Professor Joseph F. Golob, Jr., MD, Assistant Professor Kevin L. J. Grimes, MD, Assistant Professor Tameka James, RN, FNPC Natalie E. Joseph, MD, Associate Professor Anjay E. Khandelwal, MD, Assistant Professor Laura Kreiner, MD, Assistant Professor

Benjamin Li, MD, Professor Jeremy M. Lipman, MD, Assistant Professor Suzanne Miller-Spalding, RN, MSN, FNCP Edward G. Mansour, MD, Professor Amy A. McDonald, MD, Assistant Professor Nimitt J. Patel, MD, Assistant Professor Paul P. Priebe, MD, Associate Professor Susan M. Sharpe, MD Melissa L. Times, MD, Assistant Professor Debra L. Valadez, RN, BSN Charles J. Yowler, MD, Professor

The Division of General Surgery consists of 19 full-time and 1 part-time faculty member, and is divided into two clinical services: a Green Surgery Service and a Blue Surgery Service. One attending from each service covers the outpatient General Surgery responsibilities for one week intervals. There is also an Acute Care Surgery service which handles all of the Emergency Department and inpatient General Surgery consultations.

One general surgeon covers the service for a one-week interval. The General Surgery attendings are responsible for training General Surgery residents and providing core training in General Surgery for third and fourth year medical students. There are several areas of specialized expertise in the Division of General Surgery, including bariatric surgery, colorectal surgery, endocrine surgery, flexible endoscopy, gastrointestinal surgery, hepatobiliary surgery, oncologic surgery, pancreatic surgery, advanced laparoscopy and per oral endoscopic surgery.

### 2014-15 DIVISION HIGHLIGHTS

- **Dr. Sergio Bardaro** joined MetroHealth in September 2014 as the Director of Bariatric Surgery and the Weight Loss Surgery and Weight Management Center. He and Dr. Jeffrey Claridge provide bariatric surgical services to morbidly obese patients; the majority performed using minimally invasive techniques. They work closely with their medical, mental health and nutritional colleagues to provide care in a multidisciplinary fashion.
- **Dr. Melissa Times** joined MetroHealth in June 2015 as a colorectal surgeon. Previously, she was a senior staff surgeon in Colon and Rectal Surgery at the Henry Ford Hospital in Detroit for 9 years.
- **Dr. Kevin Grimes** joined MetroHealth in August 2015 with clinical interests in gastrointestinal surgery, advanced laparoscopy, and advanced endoscopy, including ERCP. Dr. Grimes trained directly under Dr. Haruhiro Inoue, the creator of the Per-oral Endoscopic Myotomy (POEM) technique for the treatment of esophageal achalasia, and will be introducing POEM for achalasia to our clinical armamentarium.
- **Dr. Jeremy Lipman** is the section chair of the newly organized section of Colorectal Surgery. He and Dr. Melissa Times offer a wide range of colorectal disease treatments, including the comprehensive, multidisciplinary management of colorectal

- malignancies, the coordinated care of patients with inflammatory bowel disease, the diagnosis and treatment of complex pelvic floor disorders, and minimally invasive surgery for both benign and malignant colorectal conditions.
- Dr. Jeremy Lipman received a Scholarship in Teaching Award from Case Western Reserve University School of Medicine in 2014 and 2015, as well as the 2014 Kaiser Permanente Award for Excellence in Teaching.
- **Dr. Christopher McHenry** received the Excellence in Communication Award at the 2015 National Patient Experience Week at MetroHealth Medical Center.
- **Dr. Christopher McHenry** was appointed Chairman of the Finance and Stewardship Committee of the American Association of Endocrine Surgeons and currently serves on the Fellowship Accreditation Committee.
- Dr. Christopher McHenry was appointed to the Foundation Board of Directors as Treasurer, the Nominating Committee for 2015-2018 and Past President (2015-2016) of the Central Surgical Society.
- Tameka James, RN, MSN, FNP joined MetroHealth in December 2014 as a family nurse practitioner in General Surgery. Ms. James works in the Outpatient Surgery Clinic, evaluating colorectal patients, as well as assisting with and performing minor surgical procedures.









### Director

Roderick B. Jordan, MD, Assistant Professor

# Staff/Faculty

Kyle J. Chepla, MD, Assistant Professor Bram R. Kaufman, MD, Assistant Professor Daniel A. Medalie, MD, Assistant Professor Ali Totonchi, MD, Assistant Professor Andrea E. Gallup, CNP Sharon Clark, RN

The Division of Plastic Surgery has five full-time board certified/board eligible faculty members, an advanced practice nurse, and a registered nurse who provide a full spectrum of plastic surgical services. Patient care is delivered on campus at MetroHealth Medical Center, off-campus at the MetroHealth Ambulatory Surgery Center, and in five suburban outpatient offices. The Division performs in excess of 1,100 major surgical procedures and has over 7,800 outpatient visits yearly.

The Division is teamed with the Orthopedic Service to provide hand services for the community and northeastern Ohio. Other services include craniofacial trauma, bariatric reconstruction, pediatric plastic surgery, gender re-assignment surgery, aesthetic and reconstructive breast surgery, lower extremity reconstruction, and facial aesthetic surgery.

### 2014-15 DIVISION HIGHLIGHTS

- Dr. Kyle J. Chepla joined the Division of Plastic Surgery at MetroHealth in August 2014, after completing a Hand and Upper Extremity Fellowship at the University of Pittsburgh Medical Center in Pittsburgh, Pennsylvania. Dr. Chepla's special interests include surgery of the hand and wrist, peripheral nerve surgery, and aesthetic surgery of the face and breast.
- Sharon Clark, RN joined the Division of Plastic Surgery in 2014, but has worked at MetroHealth since 1999, providing care in the outpatient clinics in the areas of plastic surgery, orthopedic surgery, and dermatology services. Ms. Clark assists with pre- and post-operative care, patient education, and provides clinical support to our office staff.

### DIVISION RESEARCH

- Patterns of Management and Outcomes in the Complex Hand Injury, Bram R. Kaufman, MD, Principal Investigator, MetroHealth IRB14-00611.
- Insulin Resistance and Glucose and Lipid Metabolism in Pregnancy, Bram R. Kaufman, MD, Investigator, Primary Investigator: Patrick Catalano, MetroHealth IRB05-00544.

- A Clinical Trial for the Surgical Treatment of Distal Radius Fracture in the Elderly: Wrist and Radius Injury Surgical Trial (WRIST) - Bram R. Kaufman, MD, Roderick B. Jordan, MD, Ali Totonchi, MD, Investigators, Study Chairmen Kevin C. Chung, MD, MS and Charles B.G. de Nancrede Supported by: The National Institute on Aging The National Institute of Arthritis and Musculoskeletal and Skin Diseases 1R01AR062066-01A, MetroHealth IRB13-00358.
- The Utility of a Dermal Suspension Sling in Reduction Mammoplasty and Mastopexy, Prospective Analysis. Kaufman, B.R.
- Review of the Split Latissimus Muscle in Free Flap Reconstructions of the Upper and Lower Extremities. Kaufman, B.R.
- Review of the Stepped Transverse Incision Technique for the Harvest of the Rectus Abdominis Muscle, Kaufman,
- Effects of DDAVP in Post Rhinoplasty Ecchymosis Reduction. Brown M, Totonchi A., Guyuron B.
- Reassessment of the Separation of Craniopagus Twins: Minimizing the Morbidity. Harvey DJ, Totonchi A., Gosain A.
- Effects of Coumadin on Wound Healing. Tang K, Eshragi Y, Totonchi A., Guyuron B.
- Popescu Modification of Lefort-III Osteotomy, Changes on Cephalometric Measurements. Okada H, Totonchi A., Harvey DJ, Gosain A.
- Migraine Trigger Point Detection with Thermography. Totonchi A., Guyuron B.



### Director

Natalie E. Joseph, MD, FACS, Associate Professor

## Staff/Faculty

Bruce J. Averbook, MD, Professor Benjamin D. Li, MD, Professor Edward G. Mansour, MD, Professor Anna Purses, MSN, CNP

The Division of Surgical Oncology is a key component of the Comprehensive Cancer Care Center at MetroHealth Medical Center. Dr. Natalie Joseph was named as the Director of the Division of Surgical Oncology effective January 1, 2015. There are now three full-time faculty members in the Division: Bruce Averbook, MD, Natalie Joseph, MD, and Benjamin Li, MD who specialize in the surgical management of cancer with additional expertise in the areas of breast cancer, colorectal cancer, hepatobiliary cancers, gastric cancers, melanoma and soft tissue sarcomas. Edward Mansour, MD has retired from his full-time Surgical Oncology practice; however, he continues to see outpatients and provide teaching in the Breast Surgery Clinic.

The Surgical Oncology faculty provide surgical care for cancer patients as part of a multidisciplinary team. They are responsible for staffing an outpatient clinic for evaluation and management of patients with benign and malignant breast disease at main campus as well as the new comprehensive Breast Center located at the outpatient surgery center, under the leadership of Dr. Joseph. Dr. Averbook also contributes to the services at the Louis B. Stokes Cleveland VA Medical Center by providing care for military veteran patients with breast cancer, melanoma and soft tissue sarcomas. All of the faculty in the Division of Surgical Oncology have active and ongoing involvement in the education of medical students and residents in their field.

## 2014-15 DIVISION HIGHLIGHTS

- Dr. Benjamin Li joined the Division of Surgical Oncology in April 2015 as the Director of the Cancer Center. Prior to joining MetroHealth, Dr. Li was the John C. McDonald Professor and Chair of the Department of Surgery at Louisiana State University, where he established himself as an academic leader on an international level. In addition to his clinical practice, Dr. Li is charged with enhancing and expanding the clinical and academic mission of MetroHealth's Cancer Center, through strategic planning; improved research funding and clinical trial participation; and faculty recruitment.
- Anna Purses, MSN, CNP, joined the Division of Surgical Oncology in April 2015. Prior to joining MetroHealth, Ms. Purses was an oncology nurse at University Hospitals Seidman Cancer Center. She is certified by the Oncology Nursing Society and is a member of the American Association of Nurse Practitioners. Ms. Purses has a key role in coordinating services in the Breast Center as well as in assisting in evaluation and management of patients with breast disease and patient education.
- Dr. Natalie Joseph was promoted to Associate Professor of Surgery in 2014, and was appointed Director of the Division of Surgical Oncology in January 2015.
- Dr. Bruce Averbook was promoted to Professor of Surgery in July 2014.

- Dr. Averbook was re-nominated and confirmed for a 2nd term, ending in 2017, as a Member of the American College of Surgeons Commission on Cancer.
- The Division is active in a project entitled Bringing Education, Advocacy, and Support Together (BREAST), which provides free breast cancer screening services in community locations for uninsured minority women over 35 years of age. The program received funding from Komen of NE Ohio of grants for \$117,195 in 2014 and \$108,076 in 2015. BREAST is recognized as a leader in community outreach and best practices in Cleveland, and has received numerous awards. This year, prostate screening was added to the outreach effort in response to the community requests for further health offerings, and expansion into other underserved and minority communities is also planned.

## DIVISION RESEARCH

The Division of Surgical Oncology is actively involved in clinical trials through the Eastern Cooperative Oncology Group (ECOG). Dr. Bruce Averbook is the Co-Principal Investigator for the Case Western Reserve University ECOG program, and the Toxicity Monitor for the ECOG Melanoma Core Committee. The Division also maintains databases on all breast cancer and melanoma patients cared for at MetroHealth since 1975 and is involved in clinical research in these areas.



#### Director

Jeffrey Claridge, MD, MS, Associate Professor

### Staff/Faculty

John Como, MD, MPH, Associate Professor Joseph Golob, MD, Assistant Professor Anjay Khandelwal, MD, Assistant Professor Laura Kreiner, MD, Assistant Professor Amy McDonald, MD, Assistant Professor Nimitt Patel, MD, Assistant Professor Charles Yowler, MD, Professor Tammy Coffee, MSN, RN, ACNP-BC

MetroHealth Medical Center is the only American College of Surgeons verified Level I Trauma Center for more than two million people in the metropolitan Cleveland area. MetroHealth is also verified by the American College of Surgeons as a Level II Pediatric Trauma Center and by the American Burn Association as a Level I Burn Center. The faculty consists of eight surgeons with Board Certification in Surgical Critical Care. Upon arrival to MetroHealth, the trauma patient is evaluated and treated by a multidisciplinary team consisting of trauma surgeons, emergency physicians, and surgical subspecialists. Approximately 3,100 trauma patients are admitted annually, making this one of the busiest Trauma Centers in Ohio and in the U.S. We are also dedicated to the treatment of injured children with assistance from subspecialty teams of pediatric medical and surgical specialists.

The Division supervises three Intensive Care Units. A dedicated Trauma Intensive Care Unit has 12 beds and the Surgical Intensive Care Unit has 15 beds. Approximately 2,000 patients are admitted annually to the Intensive Care Unit, making this one of the busiest Intensive Care Units in the City. There is 14-bed Burn Intensive Care Unit at MetroHealth Medical Center, which is Ohio's only verified adult and pediatric Burn Center. We treat 1,700 burn patients annually and admit more than 200 patients with severe burns and burn-related injuries.

### 2014-15 DIVISION HIGHLIGHTS

- **Dr. Laura Kreiner** joined the Division in 2014 after completing a one-year surgical critical care fellowship at Oregon Health and Science University in Portland, Oregon, and has already received the MetroHealth STAR-IQ Respect Award.
- Dr. Jeffrey Claridge became the Chair of the Ohio Committee on Trauma in 2015.
- Dr. John Como became a Fellow of the American College of Critical Care Medicine (FCCM). He was inducted on January 19, 2015.
- **Dr. John Como** was reappointed as the Section Chair for the Guidelines Committee-Trauma Task Force of the Eastern Association for the Surgery of Trauma, for the term 2015-2018.
- **Dr. John Como** was appointed to the Fundamental Critical Care Support Program Committee for the Society of Critical Care Medicine, for the term 2015-2018.
- Dr. Joseph Golob received the MetroHealth STAR-IQ Quest for Excellence Award.

- Dr. Anjay Khandelwal recently launched a collaboration with the National Burns Center in India, and functions as the Medical Director for Camp Karma, India's only recreational camp for burned children. In 2015, Dr. Khandelwal received the Presidential Honor from the National Academy of Burns in India.
- Dr. Charles Yowler was recently appointed to the Board of Governors of the American College of Surgeons, and is also a consultant on Surgical Critical Care Examination for the American Board of Surgery.

### DIVISION RESEARCH

Divisional research is centered in the area of trauma outcomes, burn care, medical informatics, and surgical infection. Dr. Claridge has had continuous NIH funding for research in these areas. Approximately eight to twelve peer-reviewed articles are published annually by the attending staff. The group is very active nationally and presents at several nationally recognized general surgery, trauma, and critical care meetings throughout the year.



### Director

Rocco G. Ciocca, MD, Associate Professor

## Staff/Faculty

Mireille Astrid Moise, MD, Assistant Professor Amy Green, CNP

The Division of Vascular Surgery at MetroHealth Medical Center is committed to providing exceptional care for patients with arterial and venous disorders. To achieve this goal, it is linked with the Divisions of Cardiology, Cardiothoracic Surgery, and Vascular and Interventional Radiology to form the Heart and Vascular Center, whose overall goal is to provide broad-based screening and preventative programs, as well as to offer a comprehensive diagnostic and therapeutic plan utilizing a patient-centric and diseaseoriented approach. The surgical service focuses on the treatment of extracranial, aortic, visceral, and extremity arterial occlusive disease, arterial aneurysms, vascular trauma, venous disease, and comprehensive wound care.

In addition, the Division is active in providing and maintaining hemodialysis access. Diagnosis of these varied conditions is assisted through its ICAVL-accredited vascular laboratory, and by means of other advanced diagnostic modalities such as enhanced MRA, CTA, and standard or biplanar angiography. Treatments provided by the service include both conventional surgical approaches and newer endovascular options including angioplasty, stent placement, stent graft repair of abdominal and thoracic aneurysms, ultrasound guided treatment of pseudoaneurysms and thrombolytic therapy. The Division is also involved with more innovative approaches to enhance the treatment of arterial and venous disease catheter-based atherectomy, cryoplasty and endoluminal vein ablation.

#### 2014-15 DIVISION HIGHLIGHTS

Dr. Rocco Ciocca joined MetroHealth in July 2015 as Director of the Division of Vascular Surgery and Director of the Noninvasive Vascular Laboratory. Prior to joining MetroHealth, Dr. Ciocca was Chief of Vascular Surgery for the Swedish Medical Group and Executive Medical Director of Vascular Surgery for Swedish Medical Center in Seattle, Washington. His clinical interests include carotid surgery, AAA repair, dialysis access, lower extremity revascularization, the non-invasive vascular lab and comprehensive wound care.

#### DIVISION RESEARCH

The Division is involved in clinical research studies which have focused on such topics as arterial bypass in patients with renal failure, the use of vena caval filters, venous thrombosis in trauma patients, the outcome of ruptured aortic aneurysms and the natural history of carotid occlusive disease. Current projects are concerned with arterial reconstruction in the younger patient, the prevalence of aspirin resistance in patients with peripheral vascular disease, and the use of vagal stimulation for the treatment of congestive heart failure.



#### RESIDENT EDUCATION AT METROHEALTH

## General Surgery Residency Program

The Department of Surgery at MetroHealth Medical Center (MHMC) is a major affiliate hospital for the surgical residency programs of Case Western Reserve University. General surgery residents spend nearly half of their residency at MHMC and have educational rotations on the two General Surgery teams, Vascular Surgery, Thoracic Surgery, Burn Surgery, Pediatric Surgery, Trauma Surgery, Acute Care Surgery and Surgical Critical Care. Residents from a number of other residency programs in the region, including the Cleveland Clinic Foundation, Akron General Hospital, and the South Pointe Consortium, send residents to spend time in the intensive care units, and on the burn and trauma services. Residents from specialty programs, including Neurosurgery, Urology, Otolaryngology, and Plastic Surgery undertake a significant portion of their training at MHMC. Dr. Jeremy Lipman is the Associate Program Director for the General Surgery Residency Program at MetroHealth.

In addition to weekly Grand Rounds, Morbidity and Mortality Conference and system-wide resident education conference, each clinical rotation has its own dedicated weekly teaching conference. The educational space has been renovated to provide residents and students with offices. The Simulation Center provides additional opportunities for teaching and practice, 24 hours a day, outside of the operating room.

## Plastic Surgery Resident Education

Residents from the integrated Plastic Surgery residency based at University Hospitals rotate through the Division of Plastic Surgery at MetroHealth. The first and second year residents each spend two months and the PGY-6 residents from the program spend 6 months at MetroHealth. Additionally, residents from the South Pointe plastic surgery residency spend 5 months. The residents gain experience in all clinical areas with emphasis on the treatment of major traumatic defects and burn injuries.

## **Fellowships**

MetroHealth Medical Center offers two ACGME-accredited fellowships in Surgical Critical Care, as well as a Trauma Research Fellowship. The Division provides education in the areas of Trauma, Surgical Critical Care, and Burn Care to the residents of the Case Western Reserve University Surgical Program and the Cleveland Clinic.









#### MEDICAL STUDENTS

Dr. Jeremy Lipman is the Director for the Core Clerkship in Surgery for third year medical students at MetroHealth Medical Center. He is responsible for the organization of the clerkship and evaluation of the students. He coordinates the didactic teaching sessions for the medical students in which all of the general surgical faculty participate. He also facilitates the acting internship program for fourth year medical students. In addition, Dr. Lipman is the Associate Program Director for the General Surgery Residency Program at MetroHealth.

## **EDUCATION CONFERENCES**

## **General Surgery**

The Division of General Surgery is responsible for six weekly educational conferences. There is a Blue Surgery Conference and a Green Surgery Conference, in which residents and medical students are exposed to interactive case-based learning. Dr. Brandt leads the weekly Morbidity and Mortality Conference, a quality assurance and improvement conference in which all surgery patients who develop a complication or die as a result of their surgical disease are critically reviewed. There is a General Surgery Conference, organized and moderated by Dr. McHenry, in which a wide variety of topics are reviewed, with special emphasis on surgical pathology, hematology/oncology, management of critically ill General Surgery patients and case management controversies. Dr. Jeremy Lipman is responsible for the Resident Education series.

### Vascular Surgery

Educational activities of the Division of Vascular Surgery are diverse. Weekly didactic conferences are held with students, residents and interventional fellows to discuss the evaluation and treatment of vascular patients. Monthly conferences are also held in conjunction with the Division of Nephrology to review issues specific to hemodialysis access. In addition, regular lectures are given to medical students rotating on the surgical service. Rotating podiatry students take advantage of teaching within the busy outpatient clinics.

# 2014-15 METROHEALTH ENDOWED LECTURES



July 19, 2014 2nd Annual Richard B. Fratianne, MD Endowed Lectureship in Trauma "Novel Blood Transfusion Strategies" Martin A. Schreiber, MD Chief, Division of Trauma, Critical Care and Acute Care Surgery Oregon Health & Science University



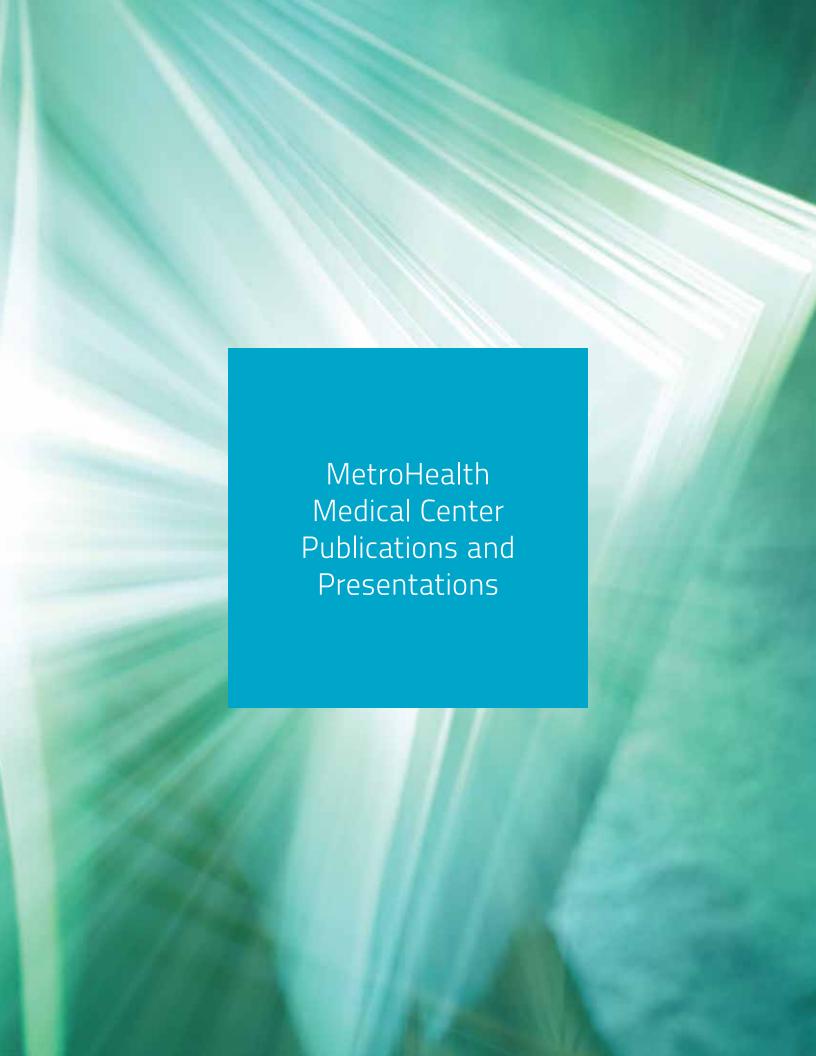
November 22, 2014 10th Annual Edward G. Mansour, MD Lectureship in Surgical Oncology "Defining Quality & Improving Outcomes for Patients with Pancreatic Cancer" Mark S. Talamonti, MD Chairman, Department of Surgery NorthShore University HealthSystem



March 21, 2015 29th Annual William D. Holden, MD Lecture "Improving the Quality of Surgical Training" Mark A. Malangoni, MD, FACS Associate Executive Director American Board of Surgery



May 30, 2015 3rd Annual Brown M. Dobyns, MD, PhD Endowed Lecture in Endocrine Surgery "Management of Asymptomatic Hyperparathyroidism" Janice Pasieka, MD, FRCSC, FACS Clinical Professor of Surgery & Oncology Faculty of Medicine University of Calgary



## GENERAL SURGERY

#### **PUBLICATIONS**

- Transition to Surgical Residency: A Multi-Institutional Study of Perceived Intern Preparedness and the Effect of a Formal Residency Preparatory Course in the Fourth Year of Medical
- Minter RM1, Amos KD, Bentz ML, Blair PG, Brandt C, D'Cunha J, Davis E, Delman KA, Deutsch ES, Divino C, Kingsley D, Klingensmith M, Meterissian S, Sachdeva AK, Terhune K, Termuhlen PM, Mullan PB., Acad. Med., Mar. 2015.
- Wagner E, Ganesan S, McHenry CR. Invasive tall cell variant of papillary cancer originating from the pyramidal lobe of the thyroid gland with extension to the base of the tongue. World Journal of Endocrine Surgery (in press).
- Kim JH, Somach S, McHenry CR. Image of the month. Arch Surg (in press).
- Chen J, Pace S C, Khiyami A, McHenry CR. Should atypia of undetermined significance be subclassified to better estimate risk of thyroid cancer? Am J Surg (in press).
- Khoncarly SM, Tamarkin SW, and McHenry CR. Can ultrasound be used to predict malignancy in patients with a thyroid nodule and indeterminate fine needle aspiration biopsy?
- McHenry CR. Preserving the Strength, Vitality and Relevance of the Central Surgical Association: Presidential Address. Surgery (in press).

#### **BOOK CHAPTERS**

- Lovich-Sapola J, Smith C, Brandt CP: Post-operative Pain Control, Surgical Clinics North Amer., Vol.95, pp 301-318,
- J. Lipman, "Abdominal Wall Anatomy and Ostomy Sites," in Netter's Surgical Anatomy and Approaches, C. Delaney, Ed. Elsevier, 2014, pp. 245-256.
- McHenry CR. Thyroidectomy and Parathyroidectomy. In: Netter's Surgical Anatomy and Approaches. Delaney CE (ed), Elsevier Science, Philadelphia, PA, 2014:21-36.
- McHenry CR. Open neck exploration for hyperparathyroidism. In: Operative techniques in surgery; Lippincott Williams and Wilkins (in press).
- McHenry CR and Richmond BK.Anatomy and Embryology of the Pancreas. In: Textbook of Endocrine Surgery. Clark OH, M.D. and Duh QY, M.D. (eds.) Jaypee Brothers Medical Publishers, Philadelphia, PA(in press).
- McHenry CR. Thyroidectomy In: Atlas of Endocrine Surgery. Carty S (ed). Jaypee Brothers Medical Publishers, Philadelphia,
- McHenry CR. and Stulberg J. Central compartment lymph node dissection for papillary thyroid cancer. Surg Clin N Amer (in press).
- Brown M, Coffee T, Yowler CJ. Outcomes of outpatient management of pediatric burns. J Burn Care Res. In Press.

### PRESENTATIONS AND INVITED LECTURESHIPS

- Brandt, C. Surgery at the Hiatus, GI Symposium, MetroHealth Medical Center, August, 2014.
- Brandt, C. Surgical Interest Groups, Medical Student Program, American College of Surgeons, October, 2014.

- Lipman, J. "Updates in Colorectal Surgery", MetroHealth Gastroenterology Symposium, August 29, 2014.
- "Ask the Experts Operative Management of Inflammatory Bowel Disease", Crohn's and Colitis Foundation of America, Northeast Ohio Chapter, March 21, 2015.
- Lipman, J. "Optimizing Faculty Time", Association for Surgical Education, Chicago, Illinois, April 22, 2015.
- Lipman, J. "A Surgical Residency Preparatory Course Leads to Earlier Independence in ACGME Competencies". Podium presentation: Association for Surgical Education Annual Meeting, Seattle, WA, April 23-25, 2015.
- Lipman, J. "Defining 'Honors' in the Surgery Clerkship". Podium presentation: Association for Surgical Education Annual Meeting, Seattle, WA, April 23-25, 2015.
- McHenry, C. Extent of Neck Dissection for Medullary Thyroid Cancer. Tumor Board: Thyroid Cancer Lunch Symposium. 5th World Congress of International Federation of Head and Neck Oncologic Societies. New York City, NY, July 29, 2014.
- McHenry, C. Surgical management of benign and malignant thyroid nodules and Surgical management of hyperparathyroidism. Mercy St. Anne Hospital and the Toledo Surgical Society. Toledo, Ohio, November 13, 2014.

#### ABSTRACTS

- Wunder T, Brandt C, MD, Kroh M, MD, Lipman J, MD The Impact of an Integrated Surgery and Emergency Medicine Clerkship on Student Performance and Satisfaction. ASE Annual Meeting, 2014.
- Wunder, J, Brandt, CP, Lipman, JM. "A Surgical Residency Preparatory Course Leads to Earlier Independence in ACGME Competencies". Accepted for podium presentation: Association for Surgical Education Annual Meeting, Seattle, WA, April 23-25, 2015.

## PLASTIC SURGERY

#### **PUBLICATIONS**

- Chepla KJ, Goitz RJ, Fowler JR. Anatomy of the flexor digitorum profundus insertion. J Hand Surg Am. 2015;40:240-244.
- Chepla KJ, Alleyne BJ, Gosain AK. Primary correction of nasal asymmetry in patients with unilateral coronal synostosis. Plast Reconstr Surg. 2014;134:294-300.
- Liu MT, Iglesias RA, Sekhon SS, Li Y, Larson K, Totonchi A. Guyuron B. Factors contributing to facial asymmetry in identical twins. Plast Reconstr Surg. 2014 Oct;134(4):638-46.
- Guyuron B, Gatherwright J, Totonchi A, Ahmadian R, Farajipour N. Cessation of hairline recession following open forehead rejuvenation. Plastic Reconstr Surg. 2014 Jan; 133(1):1e-6e.

#### **BOOK CHAPTERS**

- Arun Gosain, Ali Totonchi, Stephanie Polites, Craniofacial Anatomy and embryology, in Craniomaxillofacial Surgery Handbook By J Zins, 2014.
- Bahman Guyuron, Ali Totonchi, Raja Mohan, Facial Analysis, in Craniomaxillofacial Surgery Handbook by J Zins. 2014.
- Malone KJ, Jordan RB, Kaufman BR. Fingertip Burns. In Fingertip Injuries: Diagnosis, Management and Reconstruction, Rozmaryn L ed. Springer International, pp. 149-159, 2015.

## METROHEALTH PUBLICATIONS AND PRESENTATIONS

#### PRESENTATIONS AND INVITED LECTURESHIPS

- Chepla KJ, Goitz RJ, Fowler JR. Anatomy of the flexor digitorum profundus insertion. American Association for Hand Surgery. Nassau, Bahamas (2015).
- Jordan, R.B. Working in a Safety Net Hospital in Cleveland: Challenges and Solutions. Presented at the 58th Annual Meeting of the Ohio Valley Society of Plastic Surgeons, Cincinnati, Ohio, May 30, 2015.
- · Ali Totonchi, Hossein Ansari, Surgical deactivation of trigger points in migraine: A case series and the importance of the patient selection and surgical technique. Valencia, Spain, May,
- Surgical Treatment of Migraine Headache, Moderator: J. Janis, MD, B. Guyuron, MD; J.B. Moore, MD; D. Stepnick, MD; R. Hagan, MD; A. Totonchi, MD; B. Amirlak, MD, 8th Annual Symposium on the Surgical Treatment of Migraine Headaches, Nov 8-9, 2014, Case Western Reserve University School of Medicine, Cleveland Ohio.
- Patient and Trigger Site Selection, Moderator: D. Reed, MD, Panelists: J. Kriegler, MD; H. Ansari, MD; A. Totonchi MD; J. Janis, MD; B. Guyuron, MD, 8th Annual Symposium on the Surgical Treatment of Migraine Headaches, Nov 8-9, 2014, Case Western Reserve University School of Medicine, Cleveland Ohio.
- Totonchi A, Anatomy of the Zygomaticotemporal Branch of the Trigeminal Nerve (ZTBTN), 8th Annual Symposium on the Surgical Treatment of Migraine Headaches, Nov 8-9, 2014, Case Western Reserve University School of Medicine, Cleveland Ohio.
- Totonchi A, Late and secondary post traumatic orbital repairs, 3rd Annual Conjoint Oculoplastics and Reconstructive Surgery Symposium, Case Western Reserve University, Cleveland, OH, November 1, 2014.
- Kaufman, B.R. Congenital Hand Surgery, Department of Plastic Surgery Grand Rounds, University Hospitals/Case Medical Center, January 6, 2014.
- Totonchi A, Dallas Rhinoplasty, Endoscopic Forehead lift instructional cadaver station, March 2015.
- Totonchi A, Dallas Cosmetic Surgery Course, Lab instructor, March 2015.
- Totonchi A, Dallas Rhinoplasty Course, Lab instructor, March
- Totonchi A, St Barnabas Hospital New Jersey, Surgical Treatment of Migraine Headache, May 2014, Live Cadaveric surgery and demonstration.

#### OTHER

- Chepla KJ, Totonchi A. Blepharoplasty. Plastic Surgery Education Network: Resident Education Center (Aesthetic surgery). 2014-Present.
- Totonchi A., Long T., Revised Frontalis Sling for Traumatic Complete Upper Eyelid Ptosis, Plastic Surgery Educational Network(PSEN) Website, 2014.
- Matt Brown, Ali Totonchi, Bahman Guyuron, Face lift/ Cervicoplasty, Plastic Surgery Educational Network(PSEN) Website, 2014.
- Michelle Lee, Ali Totonchi, Skin Care, Plastic Surgery Educational Network(PSEN) Website, 2014.

# TRAUMA, CRITICAL CARE, BURNS, AND ACUTE CARE SURGERY

#### **PUBLICATIONS**

- Zosa BM, Como JJ, Kelly KB, He JC, Claridge JA. Planned ventral hernia following damage control laparotomy in trauma: an added year of recovery but equal long-term outcomes. Hernia 2015 Apr 16 [Epub ahead of print].
- Awad BI, Carmody MA, Lubelsky D, El Hawi M, Claridge JA, Como JJ, Mroz TE, Moore TA, Steinmetz MP. Adjacent level ligamentous injury associated with traumatic cervical spine fractures: indications for imaging and implications for treatment. World Neurosurg 2015; Mar 10. Pii: S1878-8750(15)00158-8. doi: 10/1016/j.wneu.2015.02.029 [Epub ahead of print].
- Vallier HA, Moore TA, Como JJ, Wilczewski PA, Steinmetz MP, Wagner KG, Smith CE, Wang X, Dolenc AJ. Complications are reduced with a protocol to standardize timing of fixation based on response to resuscitation. Injury – in press.
- Patel MB, Humble SS, Cullinane DC, Day MA, Jawa RS, Devin CJ, Delozier MS, Smith LM, Smith MA, Capella JM, Long AM, Cheng JS, Leath TC, Falck-Ytter Y, Haut ER, Como JJ. Cervical spine collar clearance in the obtunded adult blunt trauma patient: a systematic review and practice management guideline from the Eastern Association for the Surgery of Trauma. J Trauma Acute Care Surg 2015; 78: 430-441.
- Petro CC, Como JJ, Yee S, Prabhu AS, Novitsky YW, Rosen MJ. Posterior component separation and transversus abdominus muscle release for complex incisional hernia repair in patients with a history of an open abdomen. J Trauma Acute Care Surg 2015: 78: 422-429.
- Fox N, Schwartz D, Salazar JH, Haut ER, Dahm P, Black JH, Brakenridge SC, Como JJ, Hendershot K, King DR, Maung AA, Mooman ML, Nagy K, Petrey LB, Tesoriero R, Scalea TM, Fabian TC. Evaluation and management of blunt traumatic aortic injury: a practice management guideline from the Eastern Association for the Surgery of Trauma. J Trauma Acute Care Surg 2015; 78: 136-146.
- Sajankila N, Como JJ, Claridge JA. Upcoming rules and benchmarks concerning the monitoring of and the payment for surgical infections. Surg Clin North Am 2014; 94: 1219-1231.
- O'Connor JM, Helmer SD, Khandelwal A. Atrial fibrillation in elderly burn patients. Am Surg. 2014 Jun;80(6):623-4.
- Khandelwal A, Yelvington M, Tang X, Brown S. Ablative fractional photothermolysis for the treatment of hypertrophic burn scars in adult and pediatric patients: a single surgeon's experience. Journal Burn Care Research. 2014 Sep-Oct;35(5):455-63.
- Sawyer RG, Claridge JA, Nathens AB, Rotstein OD, Duane TM, Evans HL, Cook CH, O'Neill PJ, Mazuski JE, Askari R, Wilson MA, Napolitano LM, Namias N, Miller PR, Dellinger EP, Watson CM, Coimbra R, Dent DL, Lowry SF, Cocanour CS, West MA, Banton KL, Cheadle WG, Lipsett PA, Guidry CA, Popovsky KA. Trial of short course antimicrobial therapy for intra-abdominal infection. N Engl J Med. 2015;372:1996-2005.
- Zosa BM, Como JJ, Kelly KB, He JC, Claridge JA. Planned ventral hernia following damage control laparotomy in trauma: an added year of recovery but equal long-term outcome. Hernia. 2015 Apr 16. [Epub ahead of print]

- Kelly ML, Banerjee A, Nowak M, Steinmetz M, Claridge JA. Decreased mortality in traumatic brain injury following regionalization across hospital systems. J Trauma Acute Care Surg. 2015 Apr;78(4):715-20.
- Awad Bl, Carmody MA, Lubelski D, El Hawi M, Claridge JA, Como JJ, Mroz TE, Moore TA, Steinmetz MP. Adjacent level ligamenous injury associated with traumatic cervice spine fractures: indications for imaging and implications for treatment. World Neurosurg. 2015 Mar 10. [Epub ahead of
- Brown JB, Guyette FX, Neal MD, Claridge JA, Daley BJ, Harbrecht BG, Miller RS, Phelan HA, Adams PW, Early BJ, Peitzman AB, Billiar TR, Sperry JL. Take the blood bank to the field: The design and rationale of the prehospital air medical plasma (PAMPer) trial. Prehosp Emerg Care. 2015 Feb 6. [Epub ahead
- Sajankila N, Como JJ, Claridge JA. Upcoming rules and benchmarks concerning the monitoring of and the payment for surgical infections. Surg Clin North Am. 2014 Dec;94(6):1219-31. doi: 10.1016/j.suc.2014.08.012. Epub 2014 Oct 30. Review.
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- Pommerening MJ, DuBose JJ, Zielinski MD, Phelan HA, Scalea TM, Inaba K, Velmahos GC, Whelan JF, Wade CE, Holcomb JB, Cotton BA; AAST Open Abdomen Study Group. Time to first take-back operation predicts successful primary fascial closure in patients undergoing damage control laparotomy. Surgery. 2014 Aug;156(2):431-8. doi: 10.1016/j. surg.2014.04.019. Epub 2014 Jun 21.
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- Banerjee A, Kelly KB, Zhou HY, Dixon SD, Papana Dagiasis A, Quinn LM, Claridge JA. Diagnosis of injection after splenectomy for trauma should be based on lack of platelets rather than white blood cell count. Surg Infect (Larchmt). 2014 Jun;15(3):221-6. doi: 10.1089/sur.2012.176. Epub 2014 May 2.
- Warner PM, Coffee TL, Yowler CJ. Outpatient burn management. Surg Clin North Am. 2014 Aug;94(4):879-92.
- Brown M, Coffee T, Adenuga P, Yowler CJ. Outcomes of outpatient management of pediatric burns. J Burn Care Res. 2014 Sep-Oct;35(5):388-94.

#### **BOOK CHAPTERS/BOOK EDITOR**

• Golob JF Jr., Como JJ. Initial Management of the Trauma Patient: Mechanisms and Demographics. In Smith CE editor: Trauma Anesthesia, 2nd edition, Cambridge, UK, 2015, Cambridge University Press.

- Como JJ. Organization of Trauma Management: Trauma Systems, Triage, and Transfer. In: Smith CE editor: Trauma Anesthesia, 2nd edition, Cambridge, UK, 2015, Cambridge University Press.
- Claridge JA, Banerjee A. Immunologic (Chapter 6). Geriatric Trauma and Critical Care. Springer, 2014.
- Como, J. Associate editor Smith CE editor: Trauma Anesthesia, 2nd edition, Cambridge, UK, 2015, Cambridge University Press.

#### PRESENTATIONS AND INVITED LECTURESHIPS

- Como, J. High-Risk Perioperative Patient Populations: Avoiding Adverse Events – the Pregnant Patient. American College of Surgeons 2014 Clinical Congress, San Francisco, CA. October 29, 2014.
- Como, J. Trauma in Pregnancy. John Peter Smith Health Network 4th Annual Trauma Symposium, Fort Worth, TX. October 24, 2014.
- Como, J. Management of Complications in the Bariatric Patient by the Acute Care Surgeon. 73rd Annual Meeting of the American Association for the Surgery of Trauma and Clinical Congress of Acute Care Surgery, Philadelphia, PA. September 11, 2014.
- · Como, J. Abdominal Sepsis. MetroHealth Medical Center, Department of Medicine, Pulmonary Conference. June 15, 2015.
- Como, J. Trauma a Surgeon's Perspective. 32nd Annual Metro Life Flight Critical Care Symposium. May 29, 2015.
- Como, J. Trauma and Acute Care Surgery in the Pregnant Patient. General Surgery Conference, MetroHealth Medical Center. April 2, 2015.
- Como, J. Annual Trauma Case Review. Metro Life Flight Lecture Series. March 2, 2015.
- Como, J. Obesity in the Intensive Care Unit. MetroHealth Medical Center, Department of Medicine, Pulmonary Conference. December 22, 2014.
- Como, J. Initial Care of the Multiply-Injured Trauma Patient. Orthopaedic Surgery Grand Rounds, MetroHealth Medical Center. October 21, 2014.
- Como, J. Interesting Trauma Cases Panel Discussant. Northern Ohio Trauma System Symposium. October 13, 2014.
- Golob, J. TeamSTEPPS Regional Training Center Lecturer (December 10th 2014 and March 5th 2015).
- He JC, Golob JF, Clancy K, Schechman D, Claridge JA. Benefit of TeamSTEPPS Rounding Improvement Project (TRIP) on Infection Related Monitoring. Presented in Westlake Village, CA at the 35th annual meeting of the Surgical Infection Society (April 2015).
- Golob JF, He J, Koren J, Clancy K, Schechman D, Brajcich B, Claridge JA. Utilizing TeamSTEPPS Daily Rounding Intervention within a Surgical Intensive Care Unit to Initiate a Culture of Patient Safety. Presented in Alexandra, VA at the annual meeting of the American College of Medical Quality (March 2015).
- Golob, J. AHA National Webinar Presentation 5/18/15: TeamsSTEPPS Implementation: Fostering buy in from the front lines to the C-suite.
- Golob, J. National TeamSTEPPS Conference Lecturer: TeamsSTEPPS Implementation: It's more than just training. It's a culture change! Denver, CO 6/17/2015.
- Khandelwal, A. "All Systems Go: The Development of a Burn System" National Academy of Burns, India. 23rd Annual Conference, February 2015, Ludhiana, India.

## METROHEALTH PUBLICATIONS AND PRESENTATIONS

- Khandelwal, A. "The Hypermetabolic Burn Response" National Academy of Burns, India. 23rd Annual Conference, February 2015, Ludhiana, India.
- Khandelwal, A. "Hypermetabolic Response and Its Consequences" Annual Symposium on Burns, National Burns Centre, September 2014, Mumbai, India.
- "Khandelwal, A. "Winter's a Coming" Northern Ohio Trauma System, Annual Trauma Symposium, October 2014, Cleveland,
- Khandelwal, A. "Burn, Baby, Burn: Basics of Burn Care" Metro Life Flight Critical Care Symposium, June 2014, Cleveland, OH.
- Khandelwal, A. "The Good, the Bad and the Ugly: Advances in Complex Wound Management" Metro Life Flight Critical Care Symposium, June 2014, Cleveland, OH.
- Khandelwal, A. "Burn Basics" Cleveland EMS, March 2014, Cleveland, OH.
- Khandelwal, A. "What's Hot to Scar Not" Educational Symposium, American Burn Association Annual Meeting, April 2014, Boston,
- A. Khandelwal, S. Davis, V. Puri, N. Venkateshwaran. "Camp Karma: Challenges in Creating India's First Burn Camp." American Burn Association Annual Meeting, April 2015, Chicago, IL.
- Schechtman D, He JC, Allen D, Claridge JA. Trauma system regionalization improves mortality in patients requiring trauma laparotomy. Presentation at Cleveland Surgical Society Resident Research Forum in Cleveland, Ohio; May 12,
- Claridge JA, Weinberg J, Winkler A. Strategies to decrease blood transfusion in the anticoagulated emergency operative patient. Presentation at the Surgical Infection Society 35th Annual Meeting in Westlake, California; April 18, 2015.

- Claridge JA: Update Symposium II: What to Do with the Darned Sub-specialists: Common Practices in Surgical Infections. (Moderator)
- · Claridge JA. Ethical conflicts surrounding withdrawal of life sustaining therapy - You're not going to pull the plug on my mom! Presentation at the Eastern Association for the Surgery of Trauma 28th Annual Scientific Assembly; Lake Buena Vista, Florida; January 15, 2015. (Presenter and Moderator)
- Claridge JA. Navigating departmental, hospital and medical school administrations at the No Suit, No Problem session. Eastern Association for the Surgery of Trauma 28th Annual Scientific Assembly, Lake Buena Vista, Florida; January 15, 2015.
- Kelly ML, Roach M, Banerjee A, Steinmetz M, Claridge JA. Functional and long-term outcomes in severe traumatic brain injury following regionalization of a trauma system. Presentation at the Eastern Association for the Surgery of Trauma 28th Annual Scientific Assembly; Lake Buena Vista, Florida; January 14, 2015.
- Claridge JA. NIH/Research discussion table, ACS Medical Student Program. American College of Surgeons Clinical Congress 2014, San Francisco, California; October 26, 2014.
- Kelly ML, Banerjee A, Nowak M, Steinmetz M, Claridge JA. Decreased mortality in traumatic brain injury following regionalization across hospital systems. Presentation at the Eastern Association for the Surgery of Trauma 27th Annual Scientific Assembly; Scottsdale, Arizona; January 16, 2014.





Brian Cmolik, MD, FACS

The Louis B. Stokes Cleveland VA Medical Center is the flagship hospital for VISN 10 (Veterans' Integrated Service Network in Ohio). The Cleveland VA serves northeast Ohio and serves as the tertiary care referral center for all of Ohio and portions of western Pennsylvania and West Virginia. It is

one of the Veterans' Health Administration's top spinal cord injury centers, as well as a "Center of Excellence" in Cardiothoracic Surgery. It houses a major inpatient psychiatry service and a unique domiciliary. For many years, there were two campuses — the Wade Park facility and a facility in the south suburb of Brecksville. A major consolidation initiative was completed in 2011 which brought many Brecksville services to the Wade Park campus, to the recently completed and newly constructed C.A.R.E.S. Tower and other new facilities across East 105th Street. A new state-of-the-art, community-based outpatient clinic was also completed in the suburb of Parma. More than 2,600 new parking spaces have been added to the campus in the past couple of years. The makeover of the Cleveland VA Medical Center was made possible by a more than \$500 million investment by the federal government and partners in the City of Cleveland. A coordinated network of 13 community-based outpatient clinics (CBOC's) across northeast Ohio provide convenient access to care for the region's veteran population.

The Department of Surgery consists of 12 Sections (General Surgery, Vascular, Cardiothoracic, Plastics, Otorhinolaryngology and Head and Neck Surgery, Orthopedics, Ophthalmology, Urology, Optometry, Podiatry, Gynecology, and Surgical Intensive Care). General Surgery has two Divisions: Surgical Oncology and Colorectal Surgery. Over 6,700 operations a year are performed by our faculty at the inpatient facility and at

the newly opened Outpatient Surgery Center. We have ten surgical critical care beds and a dedicated surgical nursing floor. Construction is underway to completely renovate the surgical intensive care unit

The Department participates in a robust quality surveillance and management program, as well as VASQIP (Veterans Administration Surgical Quality Improvement Program) and SCIP (Surgical Care Improvement Program).

The Louis B. Stokes Cleveland VA Medical Center is fully integrated with the surgical residency programs of University Hospitals and our faculty have appointments at Case Western Reserve University School of Medicine. Our faculty is intimately involved in resident and medical student education and regular teaching conferences are conducted by surgical specialties and subspecialties.

Research opportunities for residents interested in longitudinal database projects and some funded opportunities are available in conjunction with our faculty with Merit and Young Investigator awards. An on-site Assistant Residency Program Director works closely with the Program Director to assure good communication with our faculty and compliance with the objectives of the Case Surgery educational program. A laparoscopic skills training facility is located across the street from the hospital on the VA campus, which is utilized on a regular basis by the residents during their rotation at the VA Medical Center, and protected time is provided for them to utilize the opportunity. Residents have access to a broad and complex case volume. Inpatient care is shared with physician extenders to maximize the educational experience of the resident, and to promote compliance with ACGME work hour requirements, while maintaining high quality patient care.

Our surgeons are extremely proud of their unique responsibilities, which is for the care of the men and women who have 'borne the battle' and sacrificed in war and peace for our freedoms.

Brian Cmolik, MD, FACS Service Chief, Department of Surgery Louis B. Stokes Cleveland VA Medical Center The Cardiothoracic Surgery section is comprised of three full-time and one part-time surgeons, as well as two physician assistants, a nurse practitioner, and a nurse scheduler. Two of our surgeons specialize in non-cardiac thoracic surgery and thoracic oncology. About 275 cardiac operations are performed yearly at the Cleveland VA, with patients referred from throughout the state of Ohio, as well as from Indiana, Kentucky, and West Virginia. More than half of the cardiac surgery cases are referred from more than 50 miles away.

## DIVISION FACULTY

#### **Section Chief**

Yakov Elgudin, MD, PhD, Assistant Professor

#### **Faculty**

Jason Robke, MD, Assistant Professor Diana Whittlesey, MD, Assistant Professor Brian Cmolik MD, Professor

## **DIVISION GOALS**

The Cardiac Surgery staff has pursued training in minimally invasive techniques and plans to participate in a clinical study comparing outcomes of coronary artery bypass grafting with angioplasty and stenting in diabetic patients.

The cardiac group led the VA in the use of off-pump cardiac bypass, and is actively involved in an ongoing study comparing outcomes of off-pump with on-pump bypass surgery. LVAD cardiac assist device surgery was added this year, and the Cleveland VA is the only stand-alone destination therapy center in the VA system nationally. Plans are underway to include transcatheter valve surgery. Surgical outcomes, as assessed by the VA Continuous Improvement in Cardiac Surgery Program, are excellent. Thoracic surgical procedures are performed using both open and minimally invasive techniques, and include a large number of lung and esophageal cancer cases.

Eric Marderstein, MD, MS, Assistant Professor, Colorectal and Anal Cancer, Inflammatory Bowel Disease, and Benign Colorectal Diseases

#### **Faculty**

Ray Wong, MD, Assistant Professor Suzanne Gozdanovic, MD, Assistant Professor

Christopher Siegel MD, Associate Professor Thomas Stellato, MD, Professor Alan Averbook, MD, Assistant Professor

## DIVISION GOALS

The General Surgery section plans to expand its educational program with a teaching series of core topics frequently encountered in the VA population. They will also expand their research activities.

The General Surgery Section is staffed by three full-time surgeons, four nurse practitioners, a physician's assistant, a scheduling nurse, and a wound care and ostomy nurse, providing expertise in surgical oncology, colorectal surgery, and general gastrointestinal and soft tissue surgery. Surgical oncology represents the largest component of the General Surgery Section, offering care of major tumors of the stomach, esophagus, pancreas, large bowel, bile duct, retroperitoneum, endocrine organs, breast, and malignant melanoma.

Three residents, at both junior and senior levels, are assigned to the Service. There are third-year medical students rotating for their core surgery rotations. The Section performed nearly 1,200 operations last fiscal year, affording the residents significant experience in management of a wide range of surgical problems. There is one half-day of general surgery clinic per week. The Section operates four days per week, running two rooms each day. There has been a significant increase in clinical activity at the Cleveland VA, which has been consistent and continues to grow.

# **PLASTIC SURGERY**

**Devra Becker, MD,** Plastic and Reconstructive Surgery

David Rowe, MD, MS, Plastic and Reconstructive Surgery

# **SURGICAL CRITICAL CARE**

Joel Peerless, MD, Associate Professor

Nakul Vakil, MD, Assistant Professor Cliff Perez, MD, Assistant Professor

#### **Section Chief**

Jessie Jean-Claude, MD, Associate Professor

Gilles Pinault, MD, Assistant Professor Preet Singh Kang, MD, Assistant Professor Lleowell Garcia, MD, Assistant Professor Michael Rosenbaum, MD, Assistant Professor

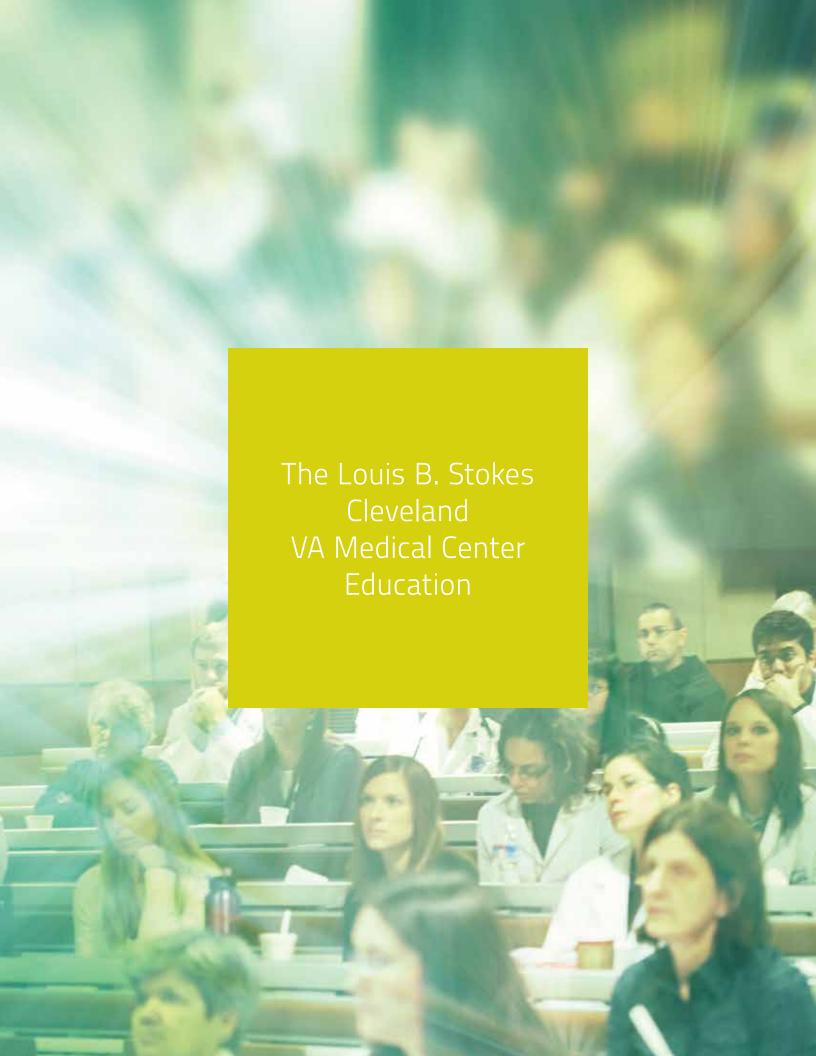
### DIVISION GOALS

The Vascular Surgery Section anticipates:

- Participating in a VA cooperative study of carotid stent outcomes
- A large study of catheter-based atherectomy outcomes will begin soon
- Expansion of research activities

Vascular Surgery is staffed by two full-time surgeons and one part-time surgeon, in addition to three nurse practitioners, and a research nurse. Trainees include a vascular surgery fellow, a PGY-4 as chief resident, and a PGY-1 rounding out the team. There are third-year medical students who rotate in 2-week blocks. A non-invasive vascular laboratory is staffed by four vascular technologists.

The Vascular Surgery group provides care for patients with aneurysmal and occlusive disease of the extremity, visceral, and extracranial vessels and the aorta. Our vascular surgeons have an active endovascular program and recently added fenestrated grafts to their surgical offerings. In conjunction with interventional radiology, we have established a minimally invasive Vascular Center of Excellence for our network. Our vascular surgeons work collaboratively with the interventional radiologists both in the operating rooms and radiology suite. Each case is presented and discussed in a multidisciplinary format where treatment planning is initiated. The Vascular Surgery section sees patients in the outpatient clinics one day per week and operates four days per week. The vascular laboratory serves not only the Wade Park division, but outlying clinics throughout northern Ohio.



The Louis B. Stokes Cleveland VA Medical Center is an integrated teaching site for the general surgical residency program at Case Western Reserve University. Residents rotate on general surgery, vascular surgery, cardiothoracic surgery, orthopedic surgery, ENT, plastic surgery, podiatry, urology, ophthalmology, critical care, and soon, neurosurgery. Residents are afforded significant responsibility for patient care in the operating rooms, on the wards, in the surgical intensive care unit, and in the outpatient clinics with attending supervision. In addition to teaching in the clinical setting, each of the VA rotations has a structured educational program. The general surgical experience includes weekly, half-day sessions dedicated to education with SICU teaching rounds, a general surgery conference with case-based teaching, and pathology conference where specimens from the previous week are reviewed with the pathology staff. The vascular surgical service also has a formal weekly half-day of teaching, including SICU teaching rounds, case-based teaching rounds, an angiography conference, and an Indications Conference. Residents on the cardiothoracic surgery service have one-on-one weekly teaching sessions with faculty, including technical teaching of bedside procedures. These residents also participate in a weekly tumor board with their faculty. Residents from all services participate in the weekly morbidity and mortality conference.

Residency programs in the surgical subspecialties, including plastic surgery, ophthalmology, orthopaedic surgery, otorhinolaryngology and urology, include the VA as a primary teaching site and share faculty with University Hospitals Case Medical Center. The Cleveland VA Medical Center also sponsors two VA-based residency programs; one in podiatry and podiatric surgery in conjunction with the Ohio College of Podiatric Medicine; and one in optometry in conjunction with The Ohio State University.

## On-Call Coverage at the Cleveland VA **Medical Center**

A surgical hospitalist covers the Surgical Service, along with junior residents, four of the seven nights of the week from 5 PM to 7 AM, providing senior in-house supervision, back-up, and teaching for the junior residents. The addition of two night nurse practitioners will soon limit junior night float coverage to just a few days a month. In addition, the surgical hospitalist takes all responsibility for patients in the Surgical Intensive Care Unit those four nights of the week. The chief resident is expected to cover one of the three weekend nights in the SICU as the only in-house responsibility, providing optimum opportunity for the chief resident to participate in operative cases throughout the week, to manage his/her service, and to prepare for teaching conferences and other administrative responsibilities.

## Teaching Conference Schedule

#### Mondays

GI Multidisciplinary Tumor Board Conference

#### Tuesdays

Vascular Section Walk Rounds Multidisciplinary Vascular Conference

#### Thursdays

Morbidity and Mortality Conference (General and Vascular Surgery Sections) Tumor Board Conference General Surgery Indications Conference Critical Care Walk Rounds Pathology Gross and Microscope Conference (monthly only)

#### **Fridays**

CV Surgery/Cardiology Multi-disciplinary Catheterization Conference



Surgical sections at the Cleveland VA are active participants in the VA cooperative studies program and have served as sites for a number of cooperative studies projects. Current cooperative studies include comparison of open and endovascular repair of aortic aneurysms and a comparison of outcomes in coronary artery bypass surgery performed versus offpump bypass. Several members of the Service are involved with the Cleveland Functional Electrical Stimulation (FES) program and have primary responsibility for projects within the FES center. There is ongoing clinical research in the areas of outcomes in carotid disease, atherectomy, hernia repair, colorectal cancer, and urologic surgical oncology. One surgical faculty member obtained a grant to study and initiate novel approaches to the multidisciplinary care of patients with breast cancer; the second phase began in 2014, expanded to include our large population of colorectal cancer patients.

A state-of-the-art, fully integrated electronic medical record system provides the opportunity to investigate a large volume of clinical data across the spectrum of each patient's care and across the VA population. Utilization of this capability can lead to some very interesting database clinical research projects. Residents and students are strongly encouraged to take advantage of these longitudinal research opportunities during their training.

### RESEARCH ACTIVITY

- VA Cooperative Studies Program, "Open versus Endovascular Repair of Aortic Aneurysms (OVER)." Jessie Jean-Claude, MD, Site PI.
- VA Cooperative Studies Program, "VA Coronary Artery Revascularization in Diabetes Study (VACARDS)." Brian Cmolik, MD, Site Pl.
- Clinical Trial of the ON-X Valve Using Low Dose Anticoagulation, Brian Cmolik, MD, Pl.
- VA Cooperative Studies Program, "Outcomes Following Cardiovascular Revascularization: On and Off Cardiopulmonary Bypass." Diana Whittlesey, MD, Site Pl.
- VA Cooperative Studies Program "REGROUP study" examining open versus endoscopic saphenous vein harvest for coronary artery bypass grafting. Brian Cmolik MD, Site Pl.
- VA Career Development Award, "Photoreceptors During Chromophore Deprivation and Supplementation." Johnny Tang, MD, Pl.
- Kresevic, RN, PhD, Pl.
- VA Center of Excellence Research Grant, "Multidisciplinary Breast Cancer Care".





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