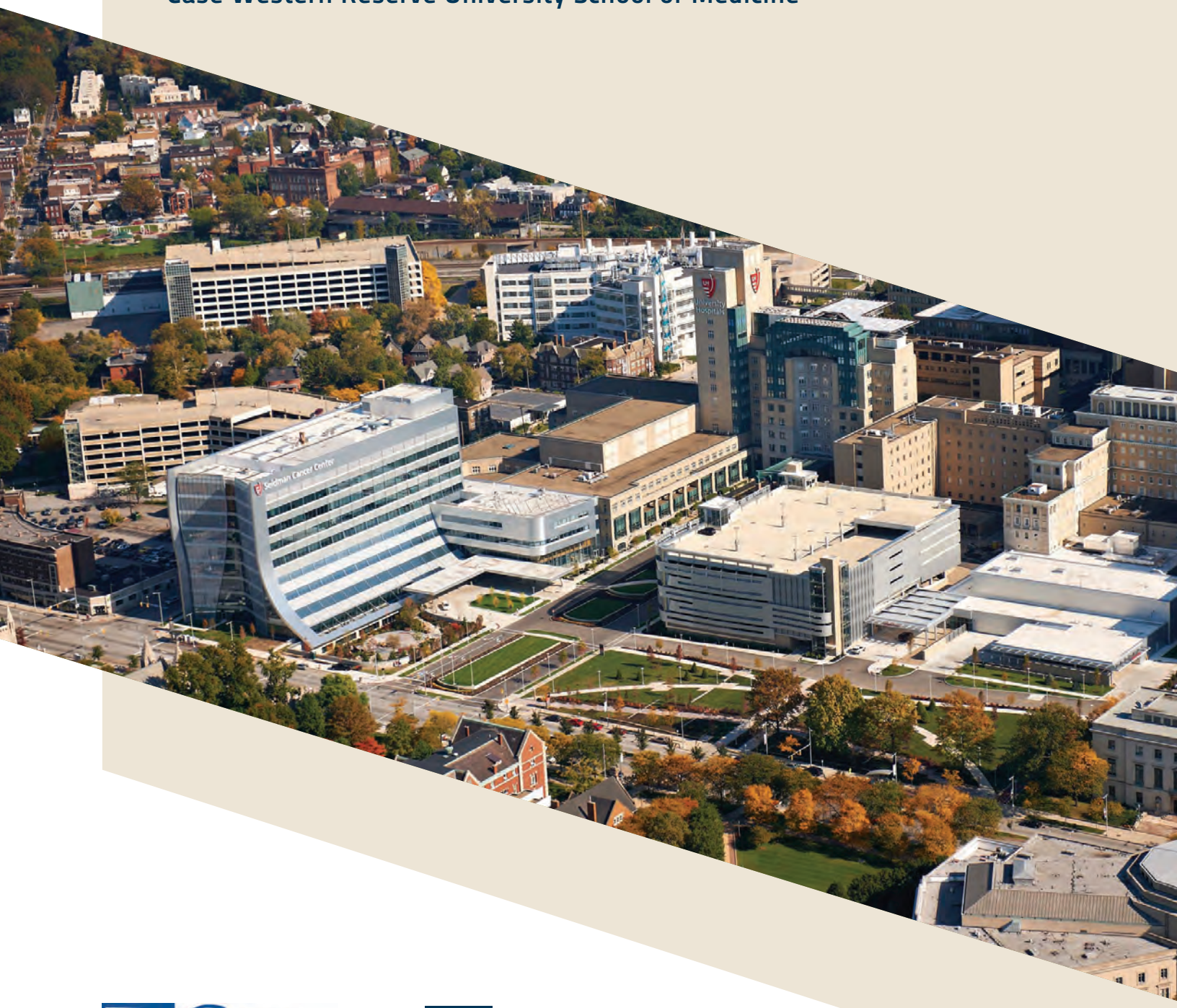
Department of Surgery

Case Western Reserve University School of Medicine



CASE Surgery

SCHOOL OF MEDICINE
CASE WESTERN RESERVE UNIVERSITY

Department of Surgery

Case Western Reserve University School of Medicine

CHAIR'S OFFICE

Jeffrey L. Ponsky, MD

Oliver H. Payne Professor and Chairman

Department of Surgery
Case Western Reserve University
School of Medicine

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University Hospitals Case Medical Center

University Hospitals
Case Medical Center
Department of Surgery
11100 Euclid Avenue
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MetroHealth

MetroHealth Medical Center
Department of Surgery
2500 MetroHealth Drive
Cleveland, OH 44109

Louis B. Stokes Cleveland
VA Medical Center
Surgical Services 112
10701 East Boulevard
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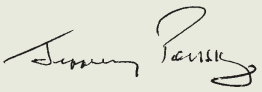
CHAIRMAN'S REMARKS

Jeffrey L. Ponsky, MD

The Department of Surgery at Case Western Reserve University continues to provide high quality patient care, integrated with clinical and basic science research and intensive teaching at all levels. We enjoy distinguished clinical leaders in all the surgical specialties, who provide our patients with the latest advances in surgical care. Our residents remain an integral part of the Department, and add to the rich culture of academic inquiry. 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 the educational experience. The Department also has distinguished itself, both nationally and internationally, for its creative and innovative hands-on and web-based postgraduate educational courses.

The success of our residents is extremely gratifying, as they ascend themselves to esteemed academic positions.

Our residency graduates have best distinguished our program by their success after completion of our program.



Jeffrey L. Ponsky, MD
Oliver H. Payne Professor and Chairman
Department of Surgery
Case Western Reserve University
Surgeon-in-Chief
University Hospitals Case Medical Center

The Department of Surgery began with the creation of the medical school in 1834.

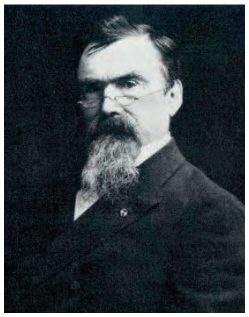
Our History

Dr. Horace A. Ackley

Dr. Ackley, the first Chairman and the Professor of General and Special Anatomy and Physiology, was a driving force among the original founders of the Willoughby Medical College within the Willoughby University of Lake Erie. Nine years later he and the other three founders moved to Cleveland to start the Cleveland Medical College which ultimately became the Medical Department of the Western Reserve College. Shortly thereafter, the original Medical Department in Willoughby was closed and moved to Columbus, Ohio where it eventually became the Starling Medical College at the Ohio State University.

In the mid 1800's, medical students first completed a 3-year preceptorship after which they were able to practice medicine in Ohio. However, to obtain a medical degree a student had to attend two sets of 16 week lectures at a medical college and then pass an examination by a committee composed of medical school faculty and County Medical Society physicians.

In 1845, the new medical school raised its first building in downtown Cleveland near the Marine Hospital that was under construction by the Federal Government. Dr. Ackley was appointed Staff Surgeon to the Marine Hospital in 1853. Dr. Ackley was a skilled anatomist, a formidable surgeon and a community activist. He was the first to use ether just 3 months after Morton's demonstration at the Massachusetts General Hospital (MGH).



Dr. Gustav Carl Erich Weber

Dr. Weber succeeded Dr. Ackley in 1856. Dr. Weber realized the importance of using inpatients for student teaching and he utilized the Marine Hospital for this purpose. He also was the Surgeon General for Ohio during the Civil War. Unfortunately, he was both young and overly forceful in his public opinions with the result that a new chairman, Dr. Proctor Thayer was appointed in 1863.

Dr. Proctor Thayer

Dr. Thayer originally was the Professor of Anatomy and Physiology. He also taught jurisprudence where his fiery disposition in the court room earned him the nickname of "the little giant" because of his short stature. His skill as a lecturer and later as an administrator led to a long period of growth for the Department. The former Chairman, Dr. Weber, was still quite active and had started an alternative medical school at the new St. Vincent's Charity Hospital. With time, Dr. Thayer brought the two schools together. Dr. Weber along with Dr. Thayer then persuaded a Cleveland merchant, Mr. John L. Woods, to donate funds for the construction of a new medical school building at E. 9th and St. Clair in

American Ambulance Service

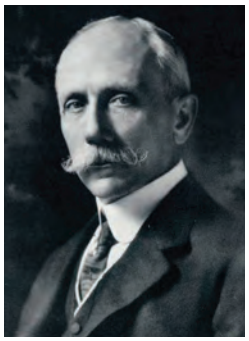
Lakeside residents, operating room nurses, and nurse anesthetist who accompanied Drs. Crile and Lower to France during World War I. Dr. William Lower is seated.

1887. In this environs, the medical school curriculum was lengthened and a new younger faculty introduced more scientific training such as the use of Lister's carbolic spray and topical antiseptics (soap) into the operating room along with new instruments such as the thermometer. This facility functioned until 1929 when the new University Circle campus was created.

During the late 1800's and early 1900's, major changes were also occurring among the hospitals and colleges in Cleveland. These new institutions resulted in the medical school and hospital systems of today. For example, it was after the Civil War in 1866 when the Cleveland City Hospital was established and then incorporated into the Marine Hospital in 1876. A new (Cleveland) City Infirmary was built on Scranton Road in 1889. The consequence was that the Marine Hospital became known as Lakeside Hospital (which eventually moved to University Circle), while the Scranton Road facility became the City Hospital which today is known as MetroHealth Medical Center—part of Case Department of Surgery since the 1970's. Our current academic campus—The Adelbert and Mather Colleges (for men and women respectively), The Western Reserve University, the Case Institute of Technology, and the Western Reserve University School of Medicine—eventually all united in University Circle due to the generosity of several Cleveland industrialists.

Dr. Charles Barnsdall Parker

In 1890, Dr. Parker became the fourth Chairman of the Department. The medical school curriculum was extended to 3 years of formal instruction which included the new laboratory subjects of chemistry, physiology, and histology—all reflecting the advancing general scientific disciplines of the day. However, educational financing from student fees and faculty support from private practice now proved insufficient. Although the first endowments were obtained, the fiscal tensions resulted in several resignations in 1893—including that of Dr. Parker.



Dr. Dudley Peter Allen

The "modern" era of surgical and medical education began with the tenure of Dr. Allen in 1893. Lakeside Hospital underwent a major expansion and the Cleveland Medical Library Association was founded in 1894. This association currently exists as the Allen Medical Library, which is the clinical library for Case School of Medicine. It was built with Dr. Allen's endowment of the marble building next to University Hospitals. Dr. Allen was a graduate of Oberlin College and Harvard Medical School. He trained at the Massachusetts General Hospital and took

A photo of Old Lakeside Hospital (1898-1931). The Hospital moved to University Circle in 1931.

Residents in the lab – noted heart surgeon, Dr. Claude Beck, is standing in the middle.

the requisite tours of European and Philadelphia hospitals. He then returned to Cleveland where he married Elizabeth Severance whose father donated the Severance Hall, home of the Cleveland Orchestra. Dr. Allen actively revised the medical school curriculum in 1908, prior to the Flexner report of 1909, which changed medical education in the United States. The new curriculum involved seven departments and 4,100 hours of instruction along with expanded entrance requirements. Dr. Allen had a distinguished national career becoming President of the American Surgical Association. He was a leader in surgical education—a tradition that continues in our department today.

Dr. George Washington Crile

Dr. Crile was perhaps our most colorful chairman. His tenure was from 1910 until 1924. Educated entirely in Ohio, he began practice as a trauma surgeon in Cleveland. His interest in shock from blood loss culminated in the first local transfusion of whole blood in 1906 and his interest in trauma spurred the use of the new Roentgen X-ray machines. In 1915, he went to France as part of the American Ambulance Service wherein academic hospitals sent a complete hospital staff as a unit—a pattern that was expanded into Base Hospitals when the United States entered into WWI and WWII. Dr. Crile was an enthusiastic and able leader who created great press. In the 1920's, Dr. Crile worked with Dr. Edward Cushing (brother of the famed Harvey Cushing) to create the new Lakeside Hospital in University Circle along with the Pathology Institute, Babies and Children Hospital and the MacDonald House Hospital for obstetrics and gynecology. When he reached the retirement age of 65, a policy he set in motion for his predecessor Dr. Allen, Dr. Crile did not retire fully but rather rejoined his former private practice partners from the old Lakeside so as to further their new adventure—the Cleveland Clinic.

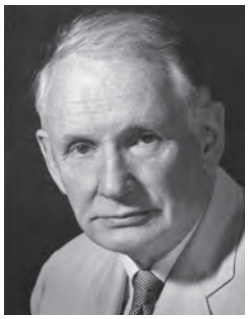
Dr. Elliott C. Cutler

Dr. Cutler was the seventh Chairman, from 1924 until 1932. Dr. Cutler excelled at Harvard College and Medical School after which he toured European medical centers. His surgical training was completed at the Peter Bent Brigham Hospital (PBBH) and the Massachusetts General Hospitals (MGH) in Boston. He served with the Harvard unit that relieved Dr. Crile's American Ambulance Service in Paris. Dr. Cutler began his academic career under the famed neurosurgeon at the PBBH, Harvey Cushing, who came from a family of physicians in Cleveland. Shortly thereafter, Dr. Cutler was appointed as chairman of our department. Dr. Cutler created a full-time teaching faculty and brought with him a commitment to surgical research for both the faculty and residents. He invented a transventricular valvulotome for mitral stenosis. It was not successful but this investigative work with Dr. Claude Beck of our department started Dr. Beck's lifelong series of achievements in cardiovascular surgery. Dr. Cutler

returned to the PBBH as Harvey Cushing's successor in 1934, and his list of surgical trainees from both institutions formed the core of surgical professors and leaders for the next 30 years.

Dr. Carl Henri Lenhart

Dr. Lenhart became chairman as the Great Depression of the 1930's took its toll on the country and this department. Dr. Lenhart received his college, medical school and residency training in Cleveland. He became the first recipient of the endowed Oliver H. Payne Chair of Surgery, however the depression era finances were such that he was the only one with a salary. All the full-time faculty were forced to revert to private practice. Although simple fiscal survival was the order of the day, Dr. Lenhart was able to work with Dr. David Marine who demonstrated the relationship between iodine deficiency and goiter as Cleveland was part of the "Goiter Belt." World War II further stressed the department as most members were called overseas with the Lakeside Unit (Base Hospital #4) going to Australia and then New Guinea.



Dr. William D. Holden

Dr. Holden assumed the chairmanship in 1950, a post he held until 1977. A graduate of Cornell College and Medical School, he trained in surgery at University Hospitals in Cleveland. Remarkably, he advanced one academic rank per year starting as an Instructor in 1946. He became a Senior Instructor in 1947, an Assistant Professor in 1948, an Associate Professor in 1949, and the Professor and Chairman in 1950. He was one of six departmental chairs appointed shortly after WWII by the new Dean, Dr. Joseph Wearn. All had long tenures and illustrious academic careers beginning with the new revolutionary Western Reserve School of Medicine curriculum in 1952. This brought together the basic science and clinical faculties into subject committees that vertically integrated the entire medical school content. Dr. Holden expanded the geographic full-time faculty whose base salaries allowed them to spend less time on private practice and more on teaching and research. Early metabolic surgical research was supported with a metabolic clinical unit within Lakeside, labs in the new Wearn research building attached to University Hospitals, and a new large animal research unit with labs and OR's within the new adjacent medical school complex. The surgical specialty services flourished and many became their own departments—Neurosurgery, Orthopedics, ENT and Urology. The part-time surgical faculty was integrated into the division of general surgery with the opening of the multidiscipline medical building at Green Road—the University Suburban Health Center (USHC). This resulted in the formation of an academic practice plan called University Surgeons Inc. which was absorbed by the hospital in 2004. Educationally, Dr. Holden combined the surgical residencies of University Hospitals, the Cleveland VA Hospital and Cleveland Metro General Hospital into the unified CASE general surgery residency program in 1970. He integrated some of the surgical specialties with general surgery so as to give joint credit for research years and to allow the specialty chief residency to count as the chief year in general surgery. This shortened the residency training years for those on an academic pathway, a concept that is being considered again today.

Dr. Jerry Mark Shuck

Dr. Shuck was appointed as chairman in 1980. Dr. Shuck received his medical and surgical training principally in Cincinnati after first becoming a pharmacist and secondly after a brief professional baseball career. His academic career began at the Surgical Research (Burn) Unit of the Brooke Army Medical Center and the University of Texas as San Antonio. Dr. Shuck next moved to the New Mexico Medical School in Albuquerque where he created a burn and trauma unit. Upon arrival at Case, Dr. Shuck brought a renewed commitment to excellence in teaching of residents and medical students along with further development of the academic faculty. The division of general surgery doubled in size and several areas of special expertise were developed—The Breast Center, Transplantation, Vascular, Bariatric and Minimally Invasive (Laparoscopic) Procedures. He, along with Dr. Ponsky, integrated the surgical residency program

at Mt. Sinai Hospital until that institution closed in the 1990's. Dr. Shuck oversaw the expansion of the clinical scope of the department into ambulatory surgery at the Green Road USHC and at University Hospitals and into the clinical offices at USHC, the Bolwell ambulatory building, MacDonald Breast Center, Westlake, Highland Heights and Richmond Heights. All of this activity reflected the increasing reliance upon clinical practice income and an increasing role of the hospitals in determining departmental priorities. Subsequently, Dr. Shuck returned to his original passion– the education of residents–when he became Director and Associate Dean of Graduate Medical Education for the entire University Hospitals system in 2001.

Dr. James A. Schulak

Dr. Schulak served as Chairman from 2001 until 2004. He is a transplantation surgeon who had been recruited from The University of Iowa by Dr. Shuck in 1985. Dr. Schulak is a graduate of the University of Chicago School of Medicine where he also completed both general surgery and transplant training. Abdominal organ transplantation and pancreatic surgery are the clinical areas of special interest for him. In this department, he dramatically increased the number of kidney transplantations, and established liver and pancreas transplant programs while establishing a national reputation in transplant immunology and reperfusion injury research. As chairman, he stabilized the practice patterns within the divisions and restructured medical student and resident education. During his tenure as chairman, he began the process which has led many of the Department faculty to join forces with University Hospitals Health System by becoming full-time employees.

Dr. Jeffrey L. Ponsky

In 2005, Dr. Ponsky became the Oliver H. Payne Professor and Chairman, Department of Surgery at CWRU. Prior to this appointment, Dr. Ponsky was Professor of Surgery at the Cleveland Clinic Lerner College of Medicine and Director of Graduate Medical Education at the Cleveland Clinic Foundation. Dr. Ponsky is a graduate of CWRU School of Medicine (1971) and completed his surgical internship and residency at CWRU Integrated Surgical Residency Program (1971 to 1976).

His academic career began at University Hospitals in 1976, where he co-developed the popularization of the PEG procedure conceived by he and one of our pediatric surgeons — Dr. Michael Gauderer. Dr. Ponsky then became the Chief of Surgery at Mt. Sinai Hospital (also here within University Circle) for 18 years. The quality of his educational program was such that it was integrated into the Case surgical residency until Mt. Sinai, along with several Cleveland area hospitals, was closed in the 1990's.

In 1990, he received his MBA from CWRU Weatherhead School of Management. Dr. Ponsky has served as a Director of the American Board of Surgery (ABS) and is Chairman of the ABS. He has served as President of the following organizations: the American Society for Gastrointestinal Endoscopy (1996 to 1997), the Ohio Chapter of the American College of Surgeons (1994 to 1995), the Society of American Gastrointestinal Endoscopic Surgeons (1990 to 1992), Northeastern Ohio Society for Gastrointestinal Endoscopy (1982 to 1987), and Cleveland Surgical Society (1990 to 1991). Dr. Ponsky has received numerous awards including the prestigious Rudolf Schindler Award by the American Society for Gastrointestinal Endoscopy (2002) the highest recognition award for excellence in endoscopic research, teaching and service.

In 2005, he received the Pioneer in Endoscopy Award from the Society of American Gastrointestinal Endoscopic Surgeons. In 2009, he received the SAGES George Berci Lifetime Achievement Award. Dr. Ponsky has been listed in The Best Doctors in America® each year since its inception. He has published over 200 original articles and book chapters, authored or edited five textbooks and serves on the editorial board of eight journals. He is the originator of the percutaneous endoscopic gastrostomy which provided a minimally invasive substitute for operative placement of feeding tubes.

RESIDENCY PROGRAM

DIRECTORS
General Surgery Residency
PROGRAM DIRECTOR
Jeffrey Marks, MD

ASSOCIATE PROGRAM DIRECTORS
Jeremy Lipman, MD
Melanie Lynch, MD, PhD
Sharon L. Stein, MD

Oral and Maxillofacial Surgery Residency Program
PROGRAM DIRECTOR
Faisal A. Quereshy, MD, DDS

Surgery Clerkship Directors
PROGRAM DIRECTOR
Marjie Persons, MD

ASSOCIATE PROGRAM DIRECTORS
Jeremy Lipman, MD
Gilles Pinault, MD

UNIVERSITY HOSPITALS CASE MEDICAL CENTER

FACULTY LEADERSHIP
CHAIR
Jeffrey L. Ponsky, MD

DIVISION CHIEFS
Cardiac Surgery
Alan Markowitz, MD (Interim Chief)

Colorectal Surgery
Conor Delaney, MD, MCh, PhD

General and Gastrointestinal Surgery
Michael Rosen, MD

Oral and Maxillofacial Surgery
Dale Baur, DDS

Pediatric Surgery
Edward Barksdale, MD

Surgical Oncology
Julian Kim, MD

Transplant and Hepatobiliary Surgery
James Schulak, MD

Thoracic and Esophageal Surgery
Philip Linden, MD

Vascular Surgery and Endovascular Therapy
Vikram Kashyap, MD

METROHEALTH MEDICAL CENTER

FACULTY LEADERSHIP
DEPARTMENT CHAIR
Christopher P. Brandt, MD

DIVISION DIRECTORS
Cardiothoracic Surgery
Inderjit S. Gill, MD

General Surgery
Christopher McHenry, MD

Oral and Maxillofacial Surgery
Michael R. Zetz, DDS

Plastic Surgery
Roderick B. Jordan, MD

Surgical Oncology
Christopher McHenry, MD (Acting Director)

Trauma, Critical Care, Burns and Acute Care Surgery
Jeffrey A. Claridge, MD, MS

Vascular Surgery
J. Jeffrey Alexander, MD

LOUIS B. STOKES CLEVELAND VA MEDICAL CENTER

FACULTY LEADERSHIP
CHIEF, SURGICAL SERVICE
Brian Cmolik, MD (Acting Service Chief)

SECTION CHIEFS
Cardiothoracic Surgery
Brian Cmolik, MD

General Surgery
Melanie Lynch, MD, PhD

Plastic Surgery
Devra Becker, MD

Surgical Critical Care
Edward Noguera, MD

Vascular Surgery
Jessie Jean-Claude, MD

WELCOME MESSAGE FROM THE PROGRAM DIRECTOR

Jeffrey M. Marks, MD, FACS, FASGE

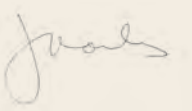
Thank you for your interest in the training programs in the Department of Surgery at Case Western Reserve University School of Medicine. Our mission is to provide the finest training available to individuals who are motivated, compassionate and willing to contribute to the excellence of the program for 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. Surgical training is divided among the following outstanding hospitals to provide a broad range of experience:

- 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 boasts state-of-the-art electronic health records.
- Rainbow Babies and Children's Hospital is traditionally recognized as the top children's hospital in the Midwest and top five in the country.
- University Hospitals Seidman Cancer Center is our NCI-designated cancer center and is the only free-standing cancer hospital in Northern Ohio.

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
Director of Surgical Endoscopy
Program Director, Surgical Residency Program
University Hospitals Case Medical Center

The Case surgical training program is steeped in tradition, but has an eye towards the future.

The postgraduate training program in general surgery consists of five years of clinical surgical education.

Chapter 1

2012 Department of Surgery

POST-GRADUATE YEAR 1

- Pre- and post-operative care
- Minor surgical procedures
- Assists at operations
- "See More, Do More" philosophy
- Increasing opportunities with increased exposure
- Medical student teaching
- Participation in teaching conferences
- Three weeks of vacation

Sample PGY 1 Rotation Schedule

- Three months of general surgery
- Two months of vascular surgery
- One month of trauma surgery
- One month of transplant surgery
- One month of burn unit
- One month of surgical ICU
- One month of CT surgery
- Two months of emergency surgery

POST-GRADUATE YEAR 2

- Greater responsibility for patient evaluation compared to PGY 1
- Greater opportunity to develop skills in the operating room compared to PGY 1
- This is a year of growth, and progressive responsibility
- Builds upon past experiences
- Emphasizes the workings of the surgical team
- Four weeks of vacation

Sample PGY 2 Rotation Schedule

- Three blocks of general surgery
- Two blocks of trauma surgery
- One block of colorectal surgery
- One block of surgical ICU
- One block of pediatric surgery
- One block of emergency surgery
- One block of thoracic surgery

POST-GRADUATE YEAR 3

- Coordinate teaching of junior residents and medical students
- Refinement of surgical skills
- Serve as "chief" resident at busy trauma SICU, renal transplant, and acute care surgery service
- Focused endoscopy experience rotating at all three institutions
- Four weeks of vacation

Sample PGY 3 Rotation Schedule

- Six months of general surgery / surgical oncology
- Two months of endoscopy
- Two months of surgical ICU night float chief
- Two month of transplant surgery

POST-GRADUATE YEAR 4

You are the chief resident on:

- Pediatric surgery
- Trauma surgery
- Emergency surgery
- General surgery
- Vascular surgery
- Colorectal surgery
- Four weeks of vacation

Sample PGY 4 Rotation Schedule

- Two months of general surgery
- Two months of emergency surgery
- Two months of colorectal surgery
- Two months of vascular surgery
- Two months of pediatric surgery
- Two months of trauma surgery

POST-GRADUATE YEAR 5

- Chief on all services
- Significant responsibilities for teaching in the clinical setting and in conferences
- Opportunity to serve as administrative chief resident
- Four weeks of vacation

Sample PGY 5 Rotation Schedule

- Eight months of general surgery
- Two months of vascular surgery
- Two months of hepatobiliary surgery

RESEARCH YEARS

Research at University Hospitals

- Includes animal research, basic science research and clinical research opportunities
- Extensive interaction with Case Western Reserve University researchers
- Biomedical engineering
- Case imaging center
- Department of Pathology and Microbiology
- Current research areas include:
  - Abdominal wall reconstruction
  - Endoscopy and NOTES
  - Minimally invasive surgery
  - Surgical oncology
  - Vascular surgery

Research at MetroHealth Medical Center

- Trauma and critical care based outcomes research
- Surgical infections

Offsite research

Our residents have found funded opportunities at places such as:

- The Cleveland Clinic – Colorectal Basic Science and Vascular Surgery
- Loyola University – Burn and Shock Trauma Institute
- M.D. Anderson, Houston, Texas – Surgical Oncology Research
- NIH, Washington, DC

Current Research Residents

- Matthew Allemang, MD, Vascular Surgery
- Aman Banerjee, MD, Trauma Research
- Iuliana Bobanga, MD, Pediatric Surgery
- Akhil Chawla, MD, Oncology
- Luke Rothermel, MD

CLINICAL TRAINING SITES

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.

University Hospitals Case Medical Center

Description

- Located just east of downtown
- Tertiary-care center with multiple satellite sites
- Six connected specialty hospitals
- Lerner Tower and Lakeside Hospital
- Mather Pavilion for Outpatient Surgery
- Rainbow Babies and Children's Hospital
- University McDonald Women's Hospital
- University Hospitals Seidman Cancer Center

Departmental Structure

- Division of Cardiac Surgery
- Division of Colorectal Surgery
- Division of General and Gastrointestinal Surgery:
- Division of Oral and Maxillofacial Surgery
- Division of Pediatric Surgery
- Division of Surgical Oncology
- Division of Thoracic and Esophageal Surgery
- Division of Transplant and Hepatobiliary Surgery
- Division of Vascular Surgery and Endovascular Therapy

UHCMC is home to many residencies and fellowships including surgical subspecialties in:

- Neurosurgery
- Orthopaedic Surgery
- Otolaryngology
- Urology
- Plastic Surgery
- Vascular Surgery

MetroHealth Medical Center

Description

- Located just southwest of downtown
- Tertiary care center for acutely ill patients
- ACS verified Level I Trauma Center for adults and children
- ACS verified Regional Burn Center

Departmental Structure

- General Surgery
- Minimally invasive
- Colorectal
- Endoscopy
- Endocrine
- Oncology
- Burns/Trauma/Critical Care/Acute Care Surgery
- Cardiothoracic Surgery
- Vascular Surgery
- Neurosurgery
- Plastic Surgery
- Pediatric surgery

Headquarters of Life Flight

- Four helicopters
- Active 24-hours a day, seven days a week
- Provides a steady stream of complex trauma patients

Louis B. Stokes Cleveland VA Medical Center

Description

- Major teaching hospital of the Case Western Reserve University School of Medicine
- Training site for residents in:
  - General Surgery
  - Orthopaedic Surgery
  - Otolaryngology
  - Urology
  - Cardiothoracic Surgery
  - Ophthalmology
  - Plastic Surgery
  - Neurosurgery
  - Internal Medicine
  - Psychiatry
  - Neurology

Regional Referral Center

- Cardiac surgery center for:
  - Ohio
  - Northern Kentucky
  - West Virginia
- Major vascular cases
- Bariatric cases
- Spinal cord injury
- Services Northeast United States

FACULTY

The Department is fully integrated in its educational programs at University Hospitals Case Medical Center, MetroHealth Medical Center, and the Louis B. Stokes Cleveland VA Medical Center. There are many full-time surgical faculty in our Department, plus additional PhDs, physician assistants and nurse practitioners.

University Hospitals Case Medical Center

CHAIRMAN

Jeffrey Ponsky, MD, Minimally Invasive Surgery, Endoscopy

VICE CHAIRMEN

Edward Barksdale, MD, Pediatric Surgery
Conor Delaney, MD, MCh, PhD, Colorectal Surgery, Surgical Skills Training

PROFESSORS

Edward Barksdale, MD, Pediatric Surgery
Adnan Cobanoglu, MD, Cardiac Surgery
Conor Delaney, MD, MCh, PhD, Colorectal, Surgical Skills Training
Jerry Goldstone, MD, Vascular and Endovascular Surgery
Vikram Kashyap, MD, Vascular and Endovascular Surgery
Julian Kim, MD, Surgical Oncology
Jeffrey Marks, MD, General and Gastrointestinal Surgery, Endoscopy
Raymond Onders, MD, Minimally Invasive Surgery, Anti-reflux Surgery
Jeffrey Ponsky, MD, Minimally Invasive Surgery, Endoscopy
James Schulak, MD, Transplant/Hepatobiliary and Pancreas Surgery
Jerry Shuck, MD, Surgical Oncology, General and Endocrine Surgery
Robert Zollinger, MD (Emeritus), General and Gastrointestinal Surgery

ASSOCIATE PROFESSORS

Mark Aeder, MD, Transplant/Hepatobiliary and Pancreas Surgery
Robert Boova, MD, Cardiac Surgery
Brad Champagne, MD, Colorectal Surgery
Jeffrey Hardacre, MD, Surgical Oncology
Leena Khaitan, MD, Minimally Invasive and Bariatric Surgery
Peter Kouretas, MD, Pediatric Cardiothoracic Surgery
Philip Linden, MD, Thoracic and Esophageal Surgery
Yuri Novitsky, MD, Minimally Invasive Surgery, Hernia Repair Surgery
Marjie Persons, MD, Surgical Oncology, General and Gastrointestinal Surgery, Breast Disease
Harry Reynolds, Jr., MD, Colorectal Surgery
Michael Rosen, MD, Minimally Invasive Surgery, General and Gastrointestinal Surgery
Edmund Sanchez, MD, Liver, Kidney, Pancreas Transplant Surgery
Robert Shenk, MD, Surgical Oncology, General and Gastrointestinal Surgery, Breast Disease
Christopher Siegel, MD, PhD, Transplant/Hepatobiliary and Pancreas Surgery
Scott Wilhelm, MD, Surgical Oncology, Endocrine Surgery, Minimally Invasive Surgery

ASSISTANT PROFESSORS

John Ammori, MD, Surgical Oncology
Henry Baele, MD, Vascular and Endovascular Surgery
Arie Blitz, MD, Cardiac Surgery
Scott Boulanger, MD, Pediatric Surgery
Teresa Carman, MD, Vascular Medicine
Anthony DeRoss, MD, Pediatric Trauma
Heidi Elliott, MD, General and Gastrointestinal Surgery
Carlos Garcia, MD, Cardiac Surgery
Rosemary Leeming, MD, Surgical Oncology, Breast Surgery, Breast Disease
Eric Marderstein, MD, Colorectal Surgery
Alan Markowitz, MD, Cardiac Surgery
Jason Robke, MD, Thoracic and Esophageal Surgery
Juan Sanabria, MD, Transplant/Hepatobiliary and Pancreas Surgery
Carsten Schroeder, MD, Thoracic Surgery
Sharon L. Stein, MD, Colorectal Surgery
John Wang, MD, Vascular and Endovascular Therapy
Virginia Wong, MD, Vascular and Endovascular Surgery
Kenneth Woodside, MD, Transplantation, Hepatobiliary and Pancreatic Surgery

MetroHealth Medical Center

CHAIRMAN

Christopher Brandt, MD, General Surgery, Minimally Invasive, Burns, Endoscopy

VICE CHAIRMAN

Christopher McHenry, MD, General Surgery, Endocrine, Head and Neck

PROFESSORS

Christopher Brandt, MD, General Surgery, Minimally Invasive, Burns, Endoscopy
Richard Fratianne (Emeritus), MD, Burn Surgery
Edward Mansour (Emeritus), MD, Surgical Oncology
Christopher McHenry, MD, General Surgery, Endocrine, Head and Neck
Charles Yowler, MD, Trauma/Critical Care, Burn Surgery

ASSOCIATE PROFESSORS

J. Jeffrey Alexander, MD, Vascular Surgery
Bruce Averbook, MD, Surgical Oncology
Jeff Claridge, MD, Trauma/Critical Care
John Como, MD, Trauma/Critical Care
Paul Priebe, MD, General Surgery, Endoscopic, Colorectal
Jean Stevenson, MD, Surgical Oncology / Breast Surgery

ASSISTANT PROFESSORS

Joseph G. Golob, MD, Trauma/Critical Care
Natalie Joseph, MD, Surgical Oncology
Jeremy Lipman, MD, Colorectal Surgery, Surgical Endoscopy, Minimally Invasive Surgery
Amy McDonald, MD, Trauma/Critical Care
Mireille Astrid Moise, MD, Vascular Surgery
Nimitt Patel, MD, Trauma/Critical Care
Rishad Shaikh, DMD, Oral and Maxillofacial
Christopher Smith, MD, Vascular Surgery/ Endovascular Surgery

Louis B. Stokes Cleveland VA Medical Center

INTERIM CHIEF

Brian Cmolik, MD, Cardiothoracic Surgery

ASSOCIATE PROFESSORS

Jessie Jean-Claude, MD, Vascular Surgery
Joel Peerless, MD, Surgical Critical Care

ASSISTANT PROFESSORS

Mujjahid Abbas, MD, General Surgery
Yakov Elgudin, MD, Cardiothoracic
Lleowell Garcia, MD, Vascular Surgery
Melanie Lynch, MD, Surgical Oncology, Breast Surgery
Gilles Pinault, MD, Vascular Surgery
Diana Whittlesey, MD, Cardiothoracic Surgery, Thoracic Oncology

CLINICAL INSTRUCTORS

Edward Noguera, MD, Anesthesiology, Critical Care

Chuck Sullivan, Academic Resident Program Coordinator

RESIDENTS

Our surgical residents are listed by year along with the medical school they attended.

CHIEF RESIDENTS

Karem Harth, SUNY Stony Brook University
Matthew Hubbard, University of Rochester
Jennifer Lee, University of Rochester
Kristin Majors, University of Louisville
Joseph Posluszny, University of North Carolina; University of Chicago
Jacquelenn Stuhldreher, Emory University

4TH YEAR RESIDENTS

Robert Armstrong, Wright State University
Jeffrey Blatnik, Case Western Reserve University
Amir Fathi, Tabriz University of Medical Sciences
Glenn Hall, Meharry Medical College
William Leukhardt, The Ohio State University Medical Center
Liming Yu, Shanghai Medical University

3RD YEAR RESIDENTS

James Gatherwright, Case Western Reserve University
Donald Harvey, Case Western Reserve University
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

2ND YEAR RESIDENTS

Christopher Bohac, University of Illinois
Lauren Chmielewski, Case Western Reserve University
Benjamin Crawshaw, University of Rochester
Vineeta Gahlawat, GSVM Medical College
Kristopher Katira, Louisiana State University
Daniel Kendrick, SUNY Upstate
Jeanne Pan, University of Texas
Clayton Petro, University of Cincinnati
SaAda Seidu, American University of Antigua
Charles Wojnarski, Jagiellonian University

1ST YEAR RESIDENTS

Matthew Bream, University of Iowa
Kevin Choong, Washington University
Ruth Gershon, University of Texas, San Antonio
Jonathan Glaab, University of Cincinnati
Gustavo Gomez, Case Western Reserve University
Jana Hambley, Tulane University
Jack He, University of Rochester
Emily Hrisomalos, Indiana University

Andrew Ibrahim, Case Western Reserve University
Ann Kim, Case Western Reserve University
Lamba Harveen, Case Western Reserve University
Shawn Li, University of Medicine & Dentistry of New Jersey
Kyle Lineberry, Michigan State University
Tobias Long, Penn State University
Tyman Loveless, Case Western Reserve University
Arnab Majumber, The Ohio State University
Vicki Nelson, Case Western Reserve University
Anand Patel, Medical College of Georgia
Steven Plato, Michigan State University
Victor Sandoval, University of Ecuador
Judah Slavkovsky, Harvard University
Emily Slopnick, Mt. Sinai, New York University
Hahn Soe-Lin, Georgetown University
Jason Thuener, Wright State University
Jonathan Williams, Case Western Reserve University

ALLEN SCHOLARS

Matthew Allemang, The Ohio State University
Aman Banerjee, Virginia Commonwealth University
Iuliana Bobanga, Wayne State University
Akhil Chawla, University of Cincinnati
Luke Rothermel, Wright State University

FELLOWS

Alexander Chang, Vascular Surgery
Nathaniel Liu, Vascular Surgery
Kshitj Kakar, Bariatric Surgery
Skandan Shanmugan, Colorectal Surgery
Yuhsin Victoria Wu, Laparoendoscopic Surgery

2012 GRADUATES

Manjunath Haridas, MD
Private Practice
Med Central Health System
Mansfield, Ohio

Nathaniel Liu, MD
Vascular Surgery Fellow
UH Case Medical Center
Cleveland, Ohio

Ronson Madathil, MD
Cardiac Surgery Fellow
UCLA
Los Angeles, California

Craig Messick, MD
Colon and Rectal Fellow
Cleveland Clinic Foundation
Cleveland, Ohio

Michael Rosenbaum, MD
Vascular Surgery Fellow
Cleveland Clinic Foundation
Cleveland, Ohio

Joseph Trunzo, MD
Colon and Rectal Fellow
Cleveland Clinic Foundation
Cleveland, Ohio

PAST GRADUATES

2011

Joseph Golob, MD
Critical Care Fellowship
MetroHealth Medical Center
Cleveland, Ohio

Judy Jin, MD
Endocrine Fellowship
Cleveland Clinic Foundation
Cleveland, Ohio

Shaher Khan, MD
Plastic Surgery Fellowship
Wayne State University
Detroit, Michigan

Iziokhai Obokhare, MD
Colorectal Research Fellowship
OSHER Institute
New Orleans, Louisiana

Krizysztof Wikiel, MD
Minimally Invasive Fellowship
University of Pittsburgh
Pittsburgh, Pennsylvania

Christina Williams, MD
Critical Care Fellowship
University of Cincinnati
Cincinnati, Ohio

2010

Pejman Babakhanlou, MD
Private Practice
Anaheim, California

Amy Coulter, MD
Vascular Fellowship
SUNY Buffalo Medical Center
Buffalo, New York

Rahul Gohil, MD
Facial Plastic Surgery Fellowship
University of Chicago
Chicago, Illinois

Michael McGee, MD
Colon and Rectal Fellowship
Cleveland Clinic
Cleveland, Ohio

Yagnik Pandya, MD
MIS Fellowship
Boston University
Boston, Massachusetts

Jessica Summers, MD
Surgical Critical Care Fellowship
MetroHealth Medical Center
Cleveland, Ohio

2009

Jeremy Lipman, MD
Colon and Rectal Fellowship
Cleveland Clinic Foundation
Cleveland, Ohio

Ronald Matteotti, MD
Surgical Oncology Fellowship
Fox Chase Cancer Center
Philadelphia, Pennsylvania

Dinesh Vyas, MD
Private Practice
St. John's Mercy Hospital
St. Louis, Missouri

Hiba Abdel Aziz, MD
Trauma and Critical Care Fellowship
MetroHealth Medical Center
Cleveland, Ohio

Frances Allocco, MD
Minimally Invasive Surgery Fellowship
Methodist Hospital
Houston, Texas

Steven Bibevski, MD
Thoracic Surgery Fellowship
University of Michigan Hospitals
Ann Arbor, Michigan

Sofia Naz, MD
Acute Care Fellowship
University of Pittsburgh Medical Center
Pittsburgh, Pennsylvania

Roy Phitayakorn, MD
Endocrine Surgery Fellowship
The Massachusetts General Hospital and Fellowship, Medical Simulation
Gilbert Program in Medical Simulation and Harvard Macy Institute
Harvard Medical School
Boston, Massachusetts

2008

Diya Alaedeen, MD
Minimally Invasive Surgery Fellowship
University of Miami
Miami, Florida

Chunjie Yang, MD
Staff at Chenango Memorial Hospital
Norwich, New York

Niranjan Shintre, MD
Private Practice
Coral Springs Medical Center
Coral Springs, Florida

2007

Anna B. Hatchett, MD
Private Practice
Greenville, Alabama

Meiying Kuo, MD
Hand Fellowship
Royal College of Physicians and Surgeons
Toronto, Ontario, Canada

Adam Martin, MD
Private Practice
Ashland, Ohio

Kerri Simo, MD
Transplant Fellowship
University of North Carolina Hospitals
Chapel Hill, North Carolina

Rajnish Tandon, MD
Private Practice
Hartford, Connecticut

Jenny Ziembicki, MD
SICU Fellowship
MetroHealth Medical Center
Cleveland, Ohio

2006

Faheem Akhtar, MD
Fellowship, Vascular Surgery
Loma Linda University

Hitesh Amin, MD
Private Practice

Teng Lee, MD
Fellowship, Endovascular Surgery
Lund University

Melanie Lynch, MD
Fellowship, Surgical Oncology
University Hospitals of Cleveland

Joseph Skitzki, MD
Fellowship, Surgical Oncology
Roswell Park Cancer Institute

Michael Wolfe, MD
Fellowship, Plastic Surgery
Albert Einstein Medical Center

2005

Rodrigo Sandoval, MD
Fellowship, Hepatobiliary and Multi-Organ Transplant Surgery
Columbia University

Rasa Zarnegar, MD
Fellowship, Endocrine Surgery
University of California at San Francisco

Khaled Abdelhady
Fellowship, Cardiothoracic Surgery
University of Illinois at Chicago

Nasim Hedayati, MD
Fellowship, Vascular Surgery
Baylor College of Medicine

Krishna Mannava, MD
Fellowship, Vascular Surgery
The Oschner Clinic

2004

Kian Mostafavi, MD
Fellowship, Vascular Surgery
Wake Forest University

Anastasios Polimenakos, MD
Fellowship, Cardiothoracic Surgery
Washington University, St. Louis

Melissa Times, MD
Fellowship, Colorectal Surgery
Henry Ford Hospital
Fellowship
Robert Woods Johnson Foundation

Vladimir Dubchuk, MD
Private Practice
Cleveland, Ohio

John Lee, MD
Fellowship, Critical Care
University of Pittsburgh

James Merlino, MD
Fellowship, Colorectal Surgery
Cleveland Clinic Foundation
Academic Practice
Case-MetroHealth Medical Center

2003

Joshua Gady, MD
United States Air Force

Anastasios Konstantakos, MD
Fellowship, Cardiothoracic Surgery
Beth Israel-Deaconess Medical Center

Ronald Tesoriero, MD
United States Navy

Joseph Ambrose, MD
Private Practice
Canton, Ohio

Christopher Compton, MD
Fellowship, Vascular Surgery
University of Pittsburgh

Michael Firstenberg, MD
Fellowship, Cardiothoracic Surgery
The Ohio State University

2002

J. Timothy Sherwood, MD
Fellowship, Cardiothoracic Surgery
University of Colorado
Academic Practice
Johns Hopkins

Scott Wilhelm, MD
Fellowship, Endocrine Surgery
Rush-Presbyterian St. Luke's Medical Center
Academic Practice
University Hospitals of Cleveland

Virginia Wong, MD
Fellowship, Vascular Surgery
University Hospitals of Cleveland
Academic Practice
University Hospitals of Cleveland

Jason Foster, MD
Fellowship, Surgical Oncology
Roswell Park Cancer Institute

David Kabithe, MD
Private Practice
Middletown, Ohio

Christopher Kwon, MD
Fellowship, Cardiothoracic Surgery
Yale University

Dvora Nelson, MD
Private Practice
Elyria, Ohio

2001

Amy McDonald, MD
Fellowship, Trauma/Critical Care
University of Cincinnati
Academic Practice
MetroHealth Medical Center

Elizabeth Mittendorf, MD
United States Air Force
Fellowship, Surgical Oncology
MD Anderson Cancer Center

John van Aalst, MD
Fellowship, Plastic Surgery
Indiana University
Academic Practice
University of North Carolina

Aviv Ben Meir, MD
Fellowship, Minimally Invasive Surgery
Oregon Health Sciences University
Private Practice
Cleveland, Ohio

Peter Hallowell, MD
Academic Practice
University Hospitals of Cleveland

John Jasper, MD
Academic Practice
University Hospitals of Cleveland / Cleveland VAMC

Howard Lederer, MD
Fellowship, Bariatric Surgery
University of Minnesota
Private Practice
Minnetonka, Minnesota

2000

David Harrison, MD
Private Practice
Newburgh, New York

Natalie Joseph, MD
Fellowship, Surgical Oncology
Fox Chase Cancer Center
Academic Practice
Fox Chase Cancer Center

Ashwani Rajput, MD
Fellowship, Surgical Oncology
Roswell Park Cancer Institute
Academic Practice
Roswell Park Cancer Institute

Lisa Weinstein, MD
Fellowship, Colorectal Surgery
Oschner Clinic
Private Practice
Denver, Colorado

George Dwyer, MD
Fellowship, Critical Care
Massachusetts General Hospital

Debora Gama Lima, MD
Fellowship, Minimally Invasive Surgery
Mayo Clinic, Scottsdale, Arizona

Claudia Goettler, MD
Fellowship, Trauma/Critical Care
University of Pennsylvania
Academic Practice
Eastern Carolina University

Eric Hahn, MD
Fellowship, Minimally Invasive Surgery
Private Practice
Fremont, California

1999

Steven Panaro, MD
Private Practice
Tilton, New Hampshire
Residency, Anesthesiology
Massachusetts General Hospital

Steven Rosenblatt, MD
Fellowship, Minimally Invasive Surgery
Cleveland Clinic Foundation
Academic Practice
Cleveland Clinic Foundation

Debra Tarantino, MD
Fellowship, Colorectal Surgery
St. Luke's-Roosevelt Hospital
Private Practice
Millburn, New Jersey

Kip Wells, MD
Cardiothoracic Surgery
University of Pittsburgh
Private Practice
Hobbs, New Mexico

Jeffrey Hazey, MD
Fellowship, Minimally Invasive Surgery
Cleveland Clinic Foundation
Academic Practice
The Ohio State University

Amy Kells, MD
Fellowship, Trauma/Critical Care
Maryland Shock Trauma
Private Practice
Brooklyn, New York

Kyung Kim, MD
Private Practice

Somchai Limsrichamrern, MD
Fellowship, Transplantation
University of Chicago
Academic Practice
Bangkok, Thailand

1998

Anthony Ripepi, MD
Private Practice
Pittsburgh, Pennsylvania

Bernardo Sandoval, MD
Fellowship, Cardiothoracic Surgery
University of Texas Southwest, Dallas
Academic Practice
Quito, Ecuador

Christopher Smith, MD
Fellowship, Vascular Surgery
Private Practice
Philadelphia, Pennsylvania

Rebecca Yang, MD
Fellowship, Breast Surgery
University Hospitals of Cleveland
Academic Practice
Lahey Clinic

Donald Keenan, MD
Academic Practice
University of Pittsburgh

Steven Kelly, MD
United States Army
Private Practice
Canton, Ohio

James Madura, MD
Academic Practice
Cook County-Rush University

Gilles Pinault, MD
Fellowship, Vascular Surgery
Fellowship, Critical Care
University Hospitals of Cleveland
Academic Practice
Cleveland VAMC

NEED TO KNOW FACTS

- Open door policy with easy access to meet with the Chairman and Program Director as well as with all other faculty.
- Monthly evaluation of residents with constructive feedback.
- Free participation in the scheduled evening meetings of the Cleveland Surgical Society.
- Insurance coverage (Health/Dental, Malpractice, Disability and additional family coverage available).
- Expense reimbursement for presentation of scholarly work at national meetings.
- Departmental residency retreats dedicated to a critical evaluation of the residency and to improving the educational environment and experience.
- Resident participation on the Residency Committee and with applicant recruitment.
- House staff hospital libraries and access to medical school libraries (Allen Memorial Library and Health Sciences Library).
- Paid maternity/paternity leave is six weeks including any accrued vacation for the year (based on American Board of Surgery Regulations).
- Uniforms and scrubs are supplied and laundered by the hospital.
- Vacation is three weeks per year for interns and four weeks per year for other residents.
- No more than on-call every fourth night.
- Departmental internet site for communication, teaching, and recording case logs.
- 2012 stipends received for each year after graduating from medical school:
  - 1st year: $49,750
  - 2nd year: $51,525
  - 3rd year: $52,980
  - 4th year: $54,830
  - 5th year: $56,945
  - 6th year: $59,060
  - 7th year: $60,830
- Meal tickets are provided for all on-call periods.
- Optional two years of research.

DEPARTMENTAL CONFERENCES

Educational Conference
Mondays
7:00-8:15 AM at UHCMC
Thursdays
7:00-8:00 AM at MetroHealth Medical Center

Journal Club
Monthly
Off-campus at local restaurant

UNIVERSITY HOSPITALS CASE MEDICAL CENTER
Department Wide Conferences

Morbidity and Mortality Conference
Every Wednesday (except 4th Wednesday)
7:00-8:00 AM

Grand Rounds
Every Wednesday
8:00-9:00 AM
(4th Wednesday, 7:00 – 8:00 AM)

Service Specific Conferences

Multidisciplinary GI Tumor Board
Every Wednesday
Radiation Oncology Conference Room, Lerner Tower, B151

Transplant Journal Club
3rd Thursday of the month
Lerner Tower 2060

Interdisciplinary Breast Conference
Thursdays
Bolwell XRT Conference Room

Vascular Surgery Conference
3rd Monday, 5-6pm
4th Wednesday, 7-8am
Vascular Library

Colorectal Conference
Thursdays
Lakeside Conference Room
5:00-6:00 PM

Combined General Surgery / GI conference
Tuesdays
5:00-6:00 PM

METROHEALTH MEDICAL CENTER
Department Wide Conference

Quality Assurance
Tuesdays
Rammelkamp, R170

Service Specific Conferences

Trauma Chairman Rounds
Thursdays
SICU

Blue Surgery Conference
Tuesdays
H936

Breast Surgery Conference
Tuesdays
Radiology Conference Room

General Surgery Conference
Thursdays
Rammelkamp 170

Burn Surgery Conference
Thursdays
BICU

Vascular Surgery Conference
Fridays
Radiology Conference Room RG30

Green Surgery Conference
Fridays
H936

LOUIS B. STOKES CLEVELAND VA MEDICAL CENTER
Department Wide Conferences

MONDAYS
Breast Cancer Case Conference
8:00-9:00 AM
Dept. of Radiology Conference Room

GI Multidisciplinary Tumor Board Conference
12:00-1:00 PM
Lincoln Conference Room

TUESDAYS
Vascular Section Walk Rounds
7:30-9:00 AM
Ward 5A

Multidisciplinary Vascular Conference
9:00-10:00 AM
SICU Conference Room

THURSDAYS
Morbidity and Mortality Conference
(General and Vascular Surgery Sections)
7:00-8:00 AM
Conference Room K-119

Tumor Board Conference
8:00-9:00 AM
Conference Room K-119

General Surgery Indications Conference
9:00-10:00 AM
SICU Conference Room

Critical Care Walk Rounds
10:00-11:00 AM
SICU

Pathology Gross and Microscope Conference
11:00 AM-12:00 PM (monthly only)
Dept. of Pathology Morgue Conference Room

FRIDAYS
CV Surgery/Cardiology Multi-disciplinary Catheterization Conference
7:00-8:00 AM
Cardiac Catheterization Lab Conference Room

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.

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. Rita Rys is the Clerkship Coordinator who works in conjunction with Dr. Marjie Persons, the Clerkship Director.

Director
Mark Aeder, MD

Center Staff

Andrea Bryner, Administrative Director
Andrew Gross, Medical Simulation Manager
Casey Schroeder
Jamie Janos
Howard Gregory
DeBorah Hamilton-Levy

Chapter 2

Front Row, L to R:

Andrew Gross;
Mark Aeder, MD;
DeBorah Hamilton-Levy

Back Row:

Howard Gregory;
Andrea Bryner;
Jamie Janos;
Casey Schroeder

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. It is an American College of Surgeons Level 1 Comprehensive Accredited Education Institute receiving reaccreditation in 2012.

The mission of the CWRU CSS is to be a uniting force for the advancement of health care education. CWRU CSS strives 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.

Mt. Sinai Skills and Simulation Center at Case Western Reserve University School of Medicine (MSSSC)

The MSSSC provides the availability and expertise in all 5 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, testing and research. The MSSSC provides state-of-the-art simulation, both at its 8,500 square foot facility and at various locations, utilizing its in situ equipment 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 Accreditation Council for Graduate Medical Education (ACGME) and the Certifying Boards. The MSSSC has provided educational programs for a diverse learner population including undergraduate students, medical, nursing and dental students, health care providers and professionals from all disciplines, practicing physicians and nurses, first responders, military personnel and community members. With the appointment of Dr. Mark Aeder as the Medical Director in 2010, the MSSSC has seen a marked increase in the potential programming opportunities and an increased presence at national and international meetings. With an expansion of the potential learner base, the Center is pioneering new techniques in corporate and professional education. The MSSSC is a consulting partner for the new

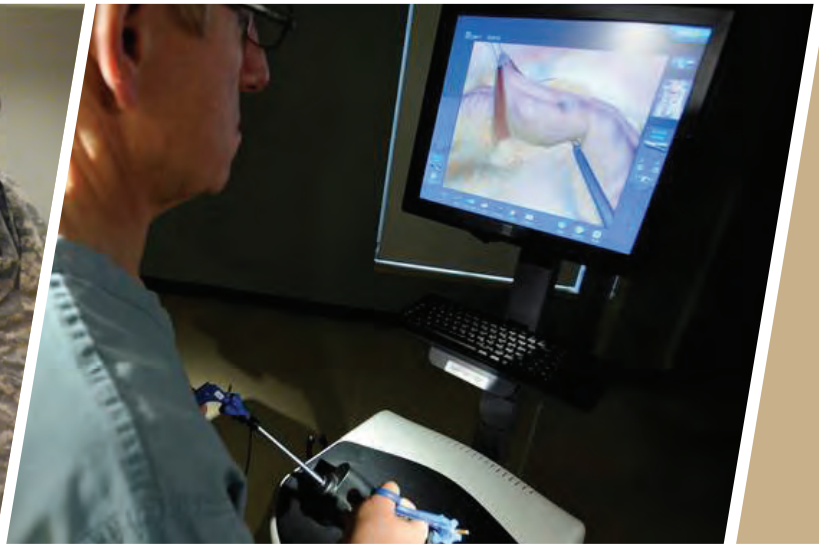
Global Center for Health Innovation at the downtown Cleveland Convention Center and will operate and staff the educational facility at the site.

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 interprofessional 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 past year has been a successful one for the MSSSC as it transitions to maximizing its resource offerings. In addition to the growth in the number of programs offered and the integration of the interdisciplinary focus, the Center staff has been advancing their personal educational opportunities. This has translated into more robust scenario development and programming. A new Administrative Director and Department Assistant have joined the team to further facilitate the user needs and to enhance the education experience. Many of these enhancements, including the list of course offerings and schedule, can be seen through the newly updated MSSSC website at http://casemed.case.edu/simcenter.

Dr. Aeder 2012 Presentations

- Military Preparedness Training in a Civilian Simulation Center, International Meeting for Simulation in Healthcare, San Diego, January 2012.
- Using Civilian Simulation Training Centers for Military Preparedness Training, Military Health Systems Research Symposium, Fort Lauderdale, August 2012.
- Simulation Education for Training and Certification, Industry Advisory Council, CMMCC, Cleveland, November 2012.
- Basic Life Skills for a Successful Career, Surgical Grand Rounds, Cleveland, November 2012.



Chapter 3

Many post-graduate training opportunities are offered throughout the year.

Part of the mission of 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–regionally, nationally and internationally. Post-graduate education is a goal of the Department of Surgery. Training opportunities are offered throughout the year, including web symposiums and on-site courses.

INTERNATIONAL WEB SYMPOSIUMS

We continue to offer these cost-effective interactive CME courses which are broadcast from our state-of-the-art onsite studio. Web symposiums provide a way for surgeons and other specialists to collaborate with others around the globe for a fraction of the cost of traditional meetings. Learners participate in the comfort of their office or home, secure their necessary CME credits, and benefit from the expertise of major opinion leaders across the globe. Debates, panel discussions, difficult case studies, and interactive polls are all part of the on-line experience. Since 2009, 3,500+ professionals have participated in our webinars, representing over 30 countries. Past topics include:

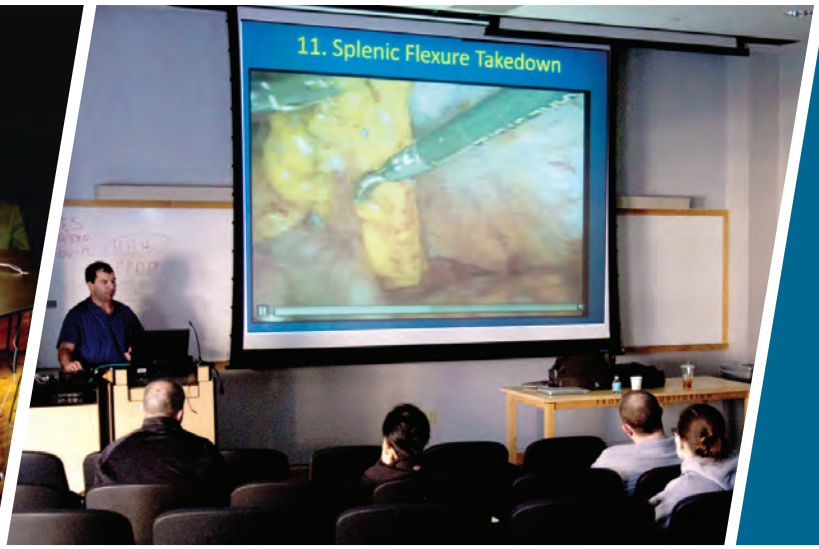
- Surgery Update
- Tricks of the Trade in General Surgery
- VATS Lobectomy and Segmentectomy
- Radiosurgery for Surgeons
- Neurocritical Care Conference
- Tricks of the Trade in Colorectal Surgery
- Gynecology
- Hernias
- Pediatric Ophthalmology series
- SAGES Resident Training

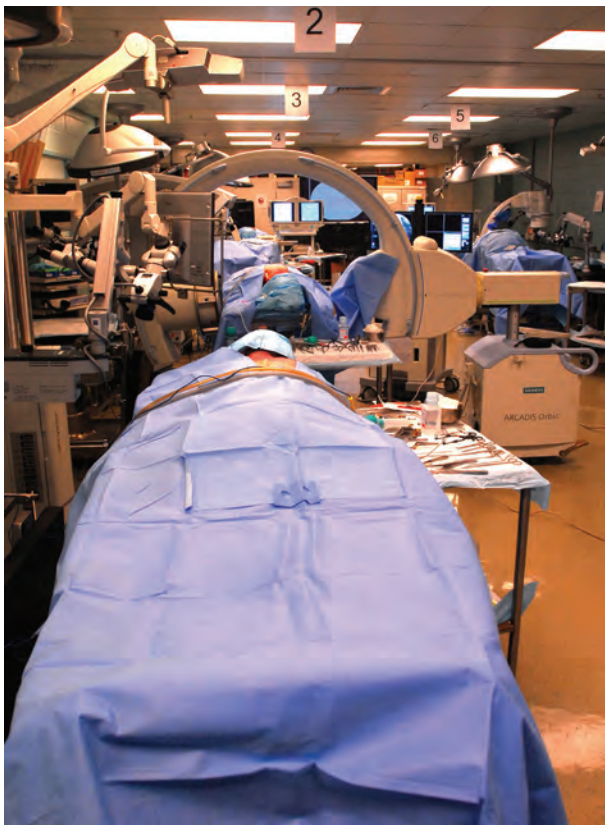
ONSITE COURSES

We provide onsite training courses, that include CME, as well as corporate-sponsored offerings such as:

- **Laparoscopic Colorectal, Advanced Laparoscopic Hernia and Bariatric Surgery mini-fellowships:** These national multi-day, corporate-sponsored programs include didactics, live surgical case observations, and hands-on sessions in the laboratory.

- **Animate Skills Lab programs:** Hands-on training on various disciplines for surgeons and other specialists, fellows and residents, including surgical treatment of craniocervical junction, surgical treatment of migraine headaches, OB/GYN and orthopedic abnormalities.



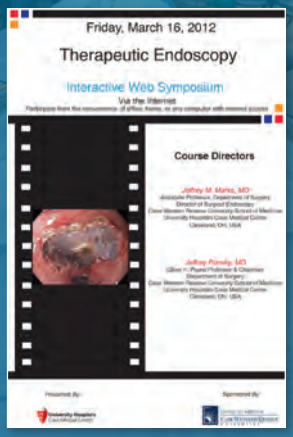


- **Abdominal Wall Reconstruction Summit:** Annual multi-day offering which exposes participants to all aspects of abdominal wall reconstructions, including complex abdominal wall reconstruction techniques, minimally invasive hernia repairs, parastomal hernia repairs, post traumatic abdominal wall defects, and managing congenital neonatal defects.

- **Colorectal Residents Career Course:** Annual fellows career development course, offering topics such as building a CV, coding, malpractice, publishing, financial planning, and learning from mistakes. This two-day course also provides a laparoscopic workshop which includes virtual simulation and hands-on laboratory session.

- **Advances in Minimally Invasive Surgery:** Annual multi-day program in conjunction with Ohio State University School of Medicine. This course offers a comprehensive look at new techniques and technologies related to the most recent advances in minimally invasive surgery.

BELOW IS A SAMPLE OF THE VARIOUS COURSES OFFERED:



2012 NAMED LECTURESHIPS

The Inaugural Murdough Lecture - March 7, 2012
"Imaging Assessment of Rectal Cancer"
Gina Brown, MD
Radiology Department of Diagnostic Imaging
Royal Marsden Hospital

26th Annual William D. Holden, MD Lecture - March 17, 2012
"Who Would Have Thought That Surgery Would Be the Most Effective Treatment of Type 2 Diabetes"
Walter J. Pories, MD
Professor of Surgery, Biochemistry, Sports and Exercise Medicine
Brody School of Medicine
East Carolina University

Dudley P. Allen, MD Memorial Lecture - March 28, 2012
"Redefining General Surgery Training: The SCORE and Milestones Projects"
Stanley W. Ashley, MD
Chief Medical Officer & Senior Vice President for Medical Affairs
Brigham and Women's Hospital
Frank Sawyer Professor of Surgery
Harvard Medical School

The 25th Annual Claude S. Beck Lectureship in Cardiac Surgery - May 19, 2012
"The Affordable Care Act: Will It Really Make Healthcare Affordable?"
Jeffrey B. Rich, MD
President, The Society of Thoracic Surgeons
Former Director of the Center for Medicare Management
Department of Health and Human Services

Mendelsohn Memorial Lecture - May 23, 2012
"Interventions for Emphysema: Beyond Best Medical Care"
Malcolm M. DeCamp, Jr., MD
Fowler McCormick Professor of Surgery
Northwestern University Feinberg School of Medicine
Chief, Division of Thoracic Surgery
Northwestern Memorial Hospital

Debra J. Graham, MD Endowed Lectureship in Surgical Education - October 17, 2012
"Challenges for Surgical Education in the 21st Century"
Karen Horvath, MD, FACS
Professor of Surgery
Director, Residency Program
Associated Chair for Education
University of Washington

The 6th Annual Robert J. Izant, Jr., MD Memorial Lecture - November 14, 2012
"Optimal Resources for Children's Surgical Care in the United States"
Keith Oldham, MD
Professor and Chief, Division of Pediatric Surgery
Vice Chairman, Department of Surgery
Medical College of Wisconsin

8th Annual Edward G. Mansour, MD Lectureship in Surgical Oncology - November 17, 2012
"Rethinking Breast Surgery in the Multidisciplinary Era"
Monica Morrow, MD
Chief, Breast Service
Department of Surgery
Memorial Sloan-Kettering Cancer Center

Chapter 4

Our faculty's mission is "to heal, to teach and to discover."

Cardiac Surgery

Alan Markowitz, MD
Interim Division Chief, Cardiac Surgery
Adult Cardiothoracic Surgery, Minimally Invasive Valve Repair and Replacement (Mini-Sternotomy and Heartport), Stentless Valves and Homografts, Off-Pump CABG

Medical School: Albany Medical College
Residency: University Hospitals of Cleveland

Ari Blitz, MD
Cardiac Surgery
Pediatric Cardiac and Cardiothoracic Surgery

Medical School: Albert Einstein College of Medicine
Residency: Montefiore Medical Center
Fellowship: UCLA Ochsner Clinic

Robert Boova, MD
Cardiac Surgery

Medical School: Jefferson Medical College – Doctorate Medicine
Residency: Thomas Jefferson University Hospital
M.S., Health Care Management: Harvard University

Adnan Cobanoglu, MD
Cardiac Surgery
Cardiothoracic Surgery, Complex Coronary and Valvular Heart Surgery, Congenital Heart Surgery, Lung and Heart Transplantation

Medical School: Ankara University, Ankara, Turkey
Residency: Episcopal Hospital, Philadelphia; Thomas Jefferson University Hospital, Philadelphia
Fellowship: Oregon Health Sciences Center

Carlos Garcia, MD
Cardiac Surgery
Valve Repair, Off-Pump Surgery

Medical School: University of Utah
Residency: Oregon Health Sciences University
Fellowship: Oregon Health Sciences University

Daniel van Heeckeren, MD
Cardiothoracic Surgery
Adult Cardiac Surgery, Homografts and Autograft Valve Replacement

Medical School: Harvard Medical School
Residency: New Haven Hospital, Yale
Fellowship: Karolinska Institute, Sweden

Pediatric Cardiothoracic Surgery

Peter C. Kouretas, MD, PhD
Chief, Pediatric Cardiothoracic Surgery
Complex Neonatal Cardiac Surgery, Adult Congenital Heart Surgery, Mechanical Circulatory Support, Cardiac Transplantation

Medical School: Georgetown University
Residency in General Surgery: University of Virginia
Residency in Cardiothoracic Surgery: University of Pennsylvania
Fellowship in Congenital and Pediatric Cardiothoracic Surgery, Transplantation: Stanford University
PhD in Circulatory Physiology: Georgetown University

Colorectal Surgery

Conor Delaney, MD, MCh, PhD
Vice Chairman, Department of Surgery
Division Chief, Colorectal Surgery
Minimally Invasive Colorectal Surgery, Diverticulitis, Colonoscopy, Inflammatory Bowel Disease, Colorectal Cancer, and Rectal Pathology

Medical School: University College of Dublin; Royal College of Surgeons in Ireland
Residency: Mater Hospital; St. Vincent Hospital
Fellowship: University of Pittsburgh Medical Center; Cleveland Clinic Foundation

Brad Champagne, MD, FACS
Colorectal Surgery
Colorectal Residency Program Director
Minimally Invasive Colorectal Surgery, Colorectal Cancer, Diverticulitis, Inflammatory Bowel Disease, Colonoscopy, Pelvic Floor Disease

Medical School: Upstate Medical University at Syracuse
Residency: Albany Medical Center, Albany
Fellowship: Georgia Colorectal Clinic

Eric Marderstein, MD, MPH
Colorectal Surgery
Minimally Invasive Colorectal Surgery, Ulcerative Colitis, Crohn's Disease, Complex Reoperative Abdominal Surgery, Colon and Rectal Cancer, Diverticular Disease, Anorectal Disease

Medical School: University of Virginia School of Medicine
Residency: University of Pittsburgh Medical Center
Fellowship: Colorectal Surgery, Cleveland Clinic; Surgical Research, University of Pittsburgh Medical Center; Patient Safety, University of Pittsburgh Medical Center

Harry Reynolds, Jr., MD
Colorectal Surgery
Inflammatory Bowel Disease, Colorectal Cancer, Rectal Pathology

Medical School: Case Western Reserve University School of Medicine
Residency: University Hospitals of Cleveland
Fellowship: Cleveland Clinic Foundation

Sharon L. Stein, MD
Colorectal Surgery
Minimally Invasive Colorectal Surgery, Inflammatory Bowel Disease, Crohn's Disease, Ulcerative Colitis and Preservation of fertility following pelvic surgery

Medical School: University of Colorado
Residency: Massachusetts General Hospital
Fellowship: New York-Presbyterian Hospital of Cornell and Columbia

General and Gastrointestinal Surgery

Michael Rosen, MD
Division Chief, General and Gastrointestinal Surgery
Director, Case Comprehensive Hernia Center
General Surgery
Gastrointestinal Surgery, Hernia Repair and Minimally Invasive Surgery

Medical School: University of Southern California
Residency: Massachusetts General Hospital
Fellowship: Cleveland Clinic Foundation; Carolinas Medical Center

Mark Aeder, MD
Quality Officer, Department of Surgery
Quality Assessment and Process Improvement

Medical School: Washington University
Residency: University Hospitals of Cleveland; University of Minnesota
Fellowship: The Ohio State University

Vladimir Dubchuk, MD
General Surgery
Surgical Pathology of the GI Tract, Minimally Invasive Surgery, Colorectal Surgery, Endoscopy, Thyroid, Parathyroid Surgery

Medical School: Lviv State Medical University
Residency: University Hospitals of Cleveland

Seth Eisengart, MD
General Surgery
General Surgery and Surgery of the Hand

Medical School: Finch University Medical School
Residency: Bronx Municipal Hospital Center

Heidi Elliott, MD
Director, Acute Care Surgery
General Surgery
General Surgery, Minimally Invasive Surgery, Hernia, Anti-Reflux

Medical School: University of Connecticut School of Medicine
Residency: University of Connecticut
Fellowship: Advanced Laparoscopic Surgery and Surgical Endoscopy, Dartmouth Hitchcock Medical Center; Laparoscopic and Bariatric Surgery, Brigham and Women's Hospital

Amitabh Goel, MD

General Surgery
General Surgery, Minimally Invasive Surgery, Critical Care

Medical School: Queen's University
Residency: Western Pennsylvania University
Fellowship: University of Pittsburgh

Cathy Graham, MD

General Surgery
General Surgery, Breast Surgery, Trauma, Gastrointestinal Surgery, Emergency Medicine

Medical School: Duke University School of Medicine
Residency: University Hospitals of Cleveland
Fellowship: University Hospitals of Cleveland

John Jasper, MD

General Surgery
General Surgery, Minimally Invasive Surgery and Breast Surgery

Medical School: University of Minnesota
Residency: University Hospitals Case Medical School

Leena Khaitan, MD, MPH

General Surgery
Director, Bariatric Surgery
Minimally Invasive and Bariatric Surgery

Medical School: Case Western Reserve University School of Medicine
Residency: Lankenau Hospital, PA
Fellowship: Vanderbilt University Medical Center

Jeffrey Marks, MD

Director, Surgical Endoscopy
Program Director, General Surgery Residency Program
General Surgery
Gastrointestinal Surgery, Endoscopy, and Minimally Invasive Surgery

Medical School: Tufts University School of Medicine
Residency: Mt. Sinai Medical Center, Cleveland
Fellowship: Mt. Sinai Medical Center, Cleveland

Yuri Novitsky, MD

Co-director, Case Comprehensive Hernia Center
Director, Surgical Research
General Surgery
Hernia Repair, Minimally Invasive Surgery, Gastroesophageal Disorders

Medical School: Albany Medical College
Residency: Mt. Sinai Medical Center and University of Massachusetts Medical Center
Fellowship: Minimally Invasive Surgery, Carolinas Medical Center

Raymond Onders, MD
Director, Minimally Invasive Surgery
General Surgery
Minimally Invasive Surgery, Anti-Reflux Surgery, and Diaphragm Pacing

Medical School: Northeastern Ohio College of Medicine
Residency: University Hospitals of Cleveland

Jeffrey Ponsky, MD
Chairman, Department of Surgery
General Surgery
Gastrointestinal Surgery, Endoscopy and Minimally Invasive Surgery

Medical School: Case Western Reserve University School of Medicine
Residency: University Hospitals of Cleveland

Lisa Rock, MD
General Surgery
General Surgery, Vascular Surgery

Medical School: Medical College of Pennsylvania
Residency: University Hospitals of Cleveland

Juan Sanabria, MD
General Surgery
General and Gastrointestinal Surgery, Hepatobiliary Surgery

Medical School: College Mayor de Nuestro, Senora del Rosario
Residency: Toronto General Hospital; University of Toronto Hospital
Fellowship: Toronto General Hospital; University of Toronto Hospital

Oral and Maxillofacial Surgery

Dale A. Baur, DDS
Division Chief, Oral and Maxillofacial Surgery
Chairman, Department of Oral and Maxillofacial Surgery
Case School of Dental Medicine
Oral Cancer, Salivary Gland Tumors, Obstructive Sleep Apnea, Facial Plastic Surgery and Reconstruction

Dental School: Case Western Reserve University
Residency: William Beaumont Army Medical Center, El Paso, Texas
Fellowship: University of Michigan Medical Center, Ann Arbor, Michigan

David Ash, DDS
Oral and Maxillofacial Surgery
Dental Implants, Oral Diseases, Jaw Surgery

Dental School: Case Western Reserve University School of Dental Medicine
Residency: Medical College of Virginia

Charles Babbush, DDS, MS
Oral and Maxillofacial Surgery
Dental Implants

Dental School: University of Detroit School of Dentistry/Boston University (Masters of Dental Science)
Residency: Mount Sinai Hospital in Cleveland

Paul Bertin, DDS
Oral and Maxillofacial Surgery
ABOMS Examiner

Dental School: Case Western Reserve University School of Dental Medicine
Residency: MetroHealth Medical Center

John Blakemore, DDS
Oral and Maxillofacial Surgery
Orthognathic Surgery/Implantology

Dental School: Case Western Reserve University School of Dental Medicine
Residency: University Hospitals of Cleveland

William Blood, DDS, MD
Oral and Maxillofacial Surgery
Orthognathic Surgery/Implantology

Dental School: Case Western Reserve University School of Dental Medicine
Medical School: Case Western Reserve University School of Medicine
Residency: University Hospitals of Cleveland

Michael Hauser, DMD, MD
Oral and Maxillofacial Surgery
Temporomandibular Joint Surgery (TMJ); Orthognathic Jaw Surgery

Dental School: Boston University, Henry M. Goldman School of Graduate Dentistry, Boston, Massachusetts
Medical School: University of Massachusetts Medical School, Worchester, MA
Residency: General Practice Residency in Dentistry, Albert Einstein College of Medicine; Bronx Municipal Hospital Center, Bronx, New York
Internship: Oral and Maxillofacial Surgery, Massachusetts General Hospital/Harvard School of Dental Medicine, Boston, Massachusetts; Assistant Resident, Chief Resident
Fellowship: Clinical Fellowship Harvard University, Boston, Massachusetts

Robert D. Heckel, DMD
Oral and Maxillofacial Surgery

Dental School: Case Western Reserve University
Surgical Residency: Louisiana State University
Anesthesia Residency: University Hospitals of Cleveland

James Julian, DDS
Oral and Maxillofacial Surgery

Dental School: University of Nebraska at Lincoln
Residency: Case Western Reserve University School of Dental Medicine; University Hospitals of Cleveland

Frank Karfes, DDS
Oral and Maxillofacial Surgery

Dental School: University of Pittsburgh
Residency: New York Hospital Cornell Medical Center, New York City
Fellowship: University of Pennsylvania, Graduate School of Medicine and Oral Surgery

Don P. Lewis, DDS
Oral and Maxillofacial Surgery

Dental School: Case Western Reserve University School of Dental Medicine
Residency: University Hospitals of Cleveland
Fellowship: Post Graduate, Charlotte Memorial, Charlotte, NC

John P. Neary, DDS, MD
Oral and Maxillofacial Surgery
Facial Plastic Surgery

Dental School: Ohio State University Dental School
Medical School: Louisiana State University School of Medicine
Residency: Louisiana State University Medical Center
Fellowship: American Academy of Cosmetic Surgeons/American College of Surgeons

Faisal A. Quereshy, MD, DDS, FACS
Assistant Professor, Residency Program Director
Oral and Maxillofacial Surgery

Medical School: Case Western Reserve University
Residency: University Hospitals
Fellowship: Institute of Facial Surgery, Utah

Marion Wazney, DDS
Oral and Maxillofacial Surgery

Dental School: Case Western Reserve University School of Dental Medicine
Residency: Mt. Sinai Hospital in Cleveland
Fellowship: St. Luke's Medical Center

Michael Zetz, DDS
Oral and Maxillofacial Surgery
Director, Division of Oral and Maxillofacial Surgery, MetroHealth Medical Center
Dental Implants, Oral Diseases, Jaw Surgery

Dental School: Ohio State University Dental School
Residency: Medical University of South Carolina

Pediatric Surgery

Edward Barksdale, MD
Vice Chairman, Department of Surgery
Division Chief, Pediatric Surgery
In-Utero Malformations, Short Bowel Syndrome

Medical School: Harvard Medical School
Residency: Massachusetts General Hospital
Fellowship: Children's Hospital Medical Center, Cincinnati, OH

Scott Boulanger, MD
Pediatric Surgery
Minimally Invasive Surgery, Oncology

Medical School: Ohio State University
Residency: State University of New York at Buffalo
Fellowship: Children's Hospital of Buffalo; State University of New York at Buffalo

Anthony L. DeRoss, MD
Pediatric Surgery
Assistant Professor of Surgery
Director of Pediatric Trauma
Pediatric General Surgery, Neonatal Surgery, Pediatric Thoracic Surgery, Pediatric Minimally Invasive Surgery, Trauma and Injury Prevention

Medical School: University of Pittsburgh School of Medicine, Pittsburgh, PA
Residency: University of Vermont, Fletcher Allen Health Care, Burlington, VT
Fellowship: St. Christopher's Hospital for Children, Philadelphia, PA

Surgical Oncology

Julian Kim, MD
Division Chief, Surgical Oncology
Melanoma, Sarcoma, Breast, GI Cancers

Medical School: Medical College of Ohio
Residency: University of Maryland
Fellowship: The Ohio State University

John Ammori, MD
Surgical Oncology, General Surgery
Upper GI and Hepatobiliary Surgery, Sarcoma, Melanoma, Breast

Medical School: University of Michigan
Residency: University of Michigan
Fellowship: Memorial Sloan-Kettering Cancer Center

Jeffrey Hardacre, MD
Surgical Oncology, General Surgery
Head, Section of Pancreatic Surgery
Gastrointestinal Surgery, Endoscopy, Pancreatic Surgery and Biliary Surgery

Medical School: Duke University School of Medicine
Residency: The Johns Hopkins Hospital
Fellowship: The Johns Hopkins Hospital; The Cleveland Clinic Foundation

Rosemary Leeming, MD
Director of Regional Breast Center
Surgical Oncology, General Surgery
Breast Surgery and Diseases of the Breast

Medical School: Hahnemann School of Medicine
Residency: University Hospitals of Cleveland; Mount Sinai Medical Center
Fellowship: Shadyside Hospital

Marjie Persons, MD
Surgical Oncology, General Surgery
Surgical Oncology and Diseases of the Breast

Medical School: SUNY
Residency: University Hospitals of Cleveland

Robert Shenk, MD
Director of Breast Center UHCMC
Surgical Oncology, Breast, Melanoma, Pancreas, and Colon Metastases

Medical School: Case Western Reserve University School of Medicine
Residency: University Hospitals of Cleveland, National Cancer Institute, University Hospitals of Cleveland, MD Anderson Cancer Center

Jerry Shuck, MD
Surgical Oncology, General Surgery
Endocrine Surgery (Thyroid and Parathyroid Surgery)

Medical School: University of Cincinnati
Residency: Cincinnati General Hospital
Military Service: U.S. Army Surgical Research Unit

Scott Wilhelm, MD
Surgical Oncology, General Surgery
Endocrine Surgery (Thyroid, Parathyroid, Adrenal, Pancreatic and Carcinoid) and Minimally Invasive Surgery

Medical School: University of Cincinnati
Residency: University Hospitals of Cleveland
Fellowship: Rush-Presbyterian St. Luke's Medical Center

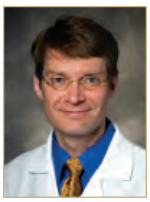
Thoracic and Esophageal Surgery

Philip Linden, MD
Division Chief, Thoracic and Esophageal Surgery
Minimally Invasive (VATS) Lung and Esophageal Surgery, Thoracic Oncology, High Risk Chest Surgery, Lung Cancer in the Emphysema Patient

Medical School: University of Pennsylvania School of Medicine
Residency: Brigham and Women's Hospital
Fellowship: Brigham and Women's Hospital

Jason Robke, MD
Thoracic and Esophageal Surgery
Thoracic Oncology, Esophageal Surgery, Minimally Invasive (VATS) Surgery, Airway and Esophageal Stenting, GERD, Paraesophageal Hernia Surgery, and YAG Laser Therapy

Medical School: Medical College of Ohio at Toledo
Residency: Allegheny Hospital
Fellowship: Allegheny General Hospital



Carsten Schroeder, MD, PhD

Thoracic Surgery

Minimally Invasive Surgery (VATS), Lung Cancer and Esophageal Surgery, Airway and Esophageal Stenting, Navigation Bronchoscopy, Cyberknife Radiosurgery, Lung Transplant Reperfusion Injury/ Rejection

Medical School: School of Medicine, Johannes Gutenberg University , Mainz, Germany
Residency: General Surgery Residency, Hannover University Hospitals, Germany
Fellowship: Thoracic Surgery: Cleveland Clinic and University Hospitals, Cleveland
Research Fellowship: Vanderbilt University, Nashville, TN, University of Maryland, Baltimore, MD,
PhD: University of Erlangen, Germany

Transplant and Hepatobiliary Surgery

James A. Schulak, MD

Division Chief, Transplant and Hepatobiliary Surgery

Adult and Pediatric Renal, Hepatic and Pancreas Transplantations, Vascular Access Surgery, Hepatobiliary, Pancreatic, Endocrine and General Surgery

Medical School: University of Chicago Medical School
Residency: University of Chicago Hospital
Fellowship: University of Chicago Hospital

Edmund Sanchez, MD

Liver, Kidney, and Pancreas Transplantation, Hepatobiliary and General Surgery, Immunosuppression Management/Research

Medical School: Wayne State University School of Medicine, Detroit, Michigan
Residency: Wayne State University School of Medicine, Detroit, Michigan
Fellowship: Abdominal Transplant Fellow Baylor University Medical Center, Dallas, Texas

Christopher T. Siegel, MD, PhD

Adult and Pediatric Kidney, Liver and Pancreas Transplantation, Vascular Access Surgery, Hepatobiliary and General Surgery

Medical School: Jefferson Medical College of Thomas Jefferson University
Residency: University of Chicago Medical Center
Fellowship: University of Chicago Medical Center

Kenneth Woodside, MD

Liver, Kidney, and Pancreas Transplantation, Vascular Access Surgery, Hepatobiliary and General Surgery

Medical School: Doctor of Medicine with Distinction in Research University of Michigan Medical School, Ann Arbor, Michigan
Residency: University of Texas Medical Branch at Galveston, Galveston, Texas
Fellowship: Department of Surgery University of Michigan, Ann Arbor, Michigan

Vascular Surgery and Endovascular Therapy

Vikram S. Kashyap, MD, FACS

Division Chief, Vascular Surgery and Endovascular Therapy
Co-Director, Harrington Heart & Vascular Institute
Vascular Surgery, Endovascular Therapy

Medical School: Jefferson Medical College
Residency: Massachusetts General Hospital
Fellowship: UCLA

Jerry Goldstone, MD, FACS, FRCSE (hon.)

Emeritus Chief, Vascular Surgery and Endovascular Therapy
Carotid Diseases, Aortic Aneurysms and Peripheral Vascular Disease

Medical School: Oregon Health Sciences University School of Medicine
Residency: University of California, San Francisco
Fellowship: Peter Bent Brigham Hospital

Henry Baele, MD, FACS

Vascular Surgery and Endovascular Therapy
Aortic Aneurysm, Aortic, Peripheral and Renal Reconstruction, Carotid Endarterectomy and Endovascular Surgery

Medical School: Indiana University School of Medicine
Residency: University Hospitals of Cleveland; Henry Ford Hospital

Teresa Carman, MD

Vascular Medicine
Medical Management of Arterial Vascular Disease, Venous Thromboembolism, Clinical Thrombophilia, Wound Care

Medical School: The Ohio State University School of Medicine
Residency: Internal Medicine, Cleveland Clinic Florida
Fellowship: Cleveland Clinic Florida; Cleveland Clinic, Cleveland, OH

Howard Darvin, MD

Vascular Surgery
Coronary Artery Disease, Aneurysms, Carotid Artery Disease, Peripheral Vascular Disease and Cardiovascular Medicine

Medical School: Howard University College of Medicine
Residency: Mount Sinai Medical Center, Cleveland
Fellowship: St. Anthony Medical Center, UCLA Medical Center

James Persky, MD

Vascular Surgery
Coronary Artery Disease, Cardiovascular Medicine, Carotid Artery Disease, Venous Disease

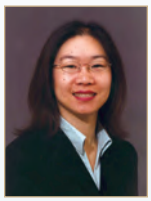
Medical School: Case Western Reserve University
Residency: University Hospitals of Cleveland
Fellowship: University of Cincinnati

John Wang, MD

Vascular and Endovascular Therapy

Open and Endovascular Surgery for Carotid, Aortic, Visceral and Periheral Vascular Disease; Reconstructive surgery for thoracic, infrarenal and infrainguinal aneurysmal disease; Open and endovascular venous surgery for insufficiency

Medical School: MB, BCh, BAO, LRCP and SI; The Royal College of Surgeons in Ireland
Residency: Department of Surgery, Temple University Hospital, Philadelphia
Fellowship: Department of Surgery, Division of Vascular Surgery, Temple University Hospital, Philadelphia



Virginia Wong, MD

Vascular Surgery and Endovascular Therapy

Peripheral Arterial Occlusive Disease, Aneurysm, Extra-Cranial Cerebrovascular Disease, Venous Disease and Endovascular Surgery

Medical School: SUNY at Brooklyn College of Medicine
Residency: University Hospitals of Cleveland
Fellowship: University Hospitals of Cleveland; Eastern Virginia Medical School

Interim Division Chief

Alan Markowitz, MD

Surgical Staff

Arie Blitz, MD
Robert S. Boova, MD
Adnan Cobanoglu, MD
Carlos E. Garcia, MD, MHA
Peter C. Kouretas, MD, PhD
Daniel W. van Heeckeren, MD

Section of Pediatric Cardiothoracic Surgery Chief

Peter C. Kouretas, MD, PhD

Chapter 5

DIVISION OF CARDIAC SURGERY

Front row, left to right:
Adnan Cobanoglu, MD;
Alan Markowitz, MD

2nd row:
Robert Boova, MD;
Daniel van Heeckeren, MD

3rd row:
Peter Kouretas, MD, PhD;
Carlos Garcia, MD

Not Pictured:
Arie Blitz, MD

The Division of Cardiac Surgery is responsible for performing all cardiac surgical procedures, including heart and lung transplantation at University Hospitals Case Medical Center (UHCMC) (formerly University Hospitals of Cleveland), and Rainbow Babies & Children's Hospital (RB&C). The Division has a long history of performing cardiac surgery, dating back to the late 1920's. Originally formed as two separate Divisions, the Division of Cardiovascular Surgery, formed in 1950 under the directorship of Dr. Claude S. Beck, and the Division of Thoracic Surgery, formed in 1955 under the leadership of Dr. Harvey Mendelsohn, combined in 1965 to form the Division of Thoracic Surgery. Dr. Jay L. Ankeney, who is responsible for successfully developing the open heart and thoracic surgery residency programs at UHCMC, joined the Division in 1955. Dr. Ankeney assumed the directorship of the Division in 1972. The Division was renamed the Division of Cardiothoracic Surgery in 1985. With the arrival of Dr. Philip Linden, again two separate divisions have been formed. In 2012, the Division of Cardiac Surgery consisted of seven full-time academic surgeons; six adult and one pediatric surgeon who provided adult and pediatric cardiac surgery at UHCMC and also at RB&C's Section of Pediatric Cardiothoracic Surgery. In the past, the Division has also provided cardiothoracic surgical services to Southwest General Health Center and currently continues services to the West side of Cleveland at St. John Medical Center.

The faculty members of the Division are active members of numerous local, regional, national and international organizations. Dr. Adnan Cobanoglu and Dr. Daniel van Heeckeren, now an Emeritus Professor, are members of the American Association for Thoracic Surgery (AATS). The AATS is a prestigious organization whose members are evaluated on specific qualifications, including their accomplishments in clinical performance, professional stature, professional conduct, leadership advancing the discipline, and contributions to surgical literature in English language, peer reviewed journals. In 2008, Dr. Cobanoglu started working on the Workforce on International Relationships of the Society of Thoracic Surgeons and was a featured speaker at the STS International Symposium in January 2009, 2010, and again in 2012. In 2009, Dr. Cobanoglu was also appointed as a member of the STS/AATS Joint Workforce on Health Policy, Reform and Advocacy, which he maintains to date and which has been quite active in Washington, D.C. at a time when substantial changes are taking place with the current healthcare reform. Dr. van Heeckeren has served as

past president of the Academy of Medicine, Cleveland Chapter. Dr. Arie Blitz was active in a two-year post as the President of the Cleveland Chapter of the American Heart Association.

In January 2011, Dr. Robert S. Boova was recruited as a full-time cardiac surgeon to join the Division. Dr. Boova's main responsibilities are at St. John Medical Center in West Cleveland, where he is running and helping restructure the cardiac surgery program.

STAFF/FACULTY

Arie Blitz, MD

Dr. Blitz joined the medical staff in November 2005 as the Director of Heart Transplantation and Assist Device Surgery. Dr. Blitz received his medical degree from the Albert Einstein College of Medicine in Bronx, New York. He completed his training in thoracic surgery at UCLA Medical Center followed by fellowship training in Congenital Heart Surgery at UCLA Medical Center and an advanced fellowship in Cardiac Transplantation and Mechanical Assist Devices at the Ochsner Clinic Foundation in New Orleans, Louisiana. Dr. Blitz's focus at University Hospitals is on the rejuvenation of the Cardiac Transplant and Mechanical Assist and Device Program, including clinical research trials surrounding the latest innovations in the treatment of heart failure. He is currently past President of the American Heart Association, Cleveland Chapter. Dr. Blitz holds the rank of Assistant Professor of Surgery at Case Western Reserve University School of Medicine.

Robert S. Boova, MD

Dr. Boova, Clinical Associate Professor of Surgery, joined the Division of Cardiac Surgery in January 2011. A graduate of Jefferson Medical College in Philadelphia, Dr. Boova completed residencies in Surgery and Thoracic Surgery at Thomas Jefferson University Hospital in Philadelphia. With an active cardiac surgery practice in the Philadelphia area just prior to joining the Division, he was System Chief of Cardiac Surgery for the Jefferson Main Line Health Hospitals and Chief of Cardiac Surgery at Bryn Mawr Hospital in Pennsylvania. Dr. Boova is expanding the Division's cardiac surgery practice at St. John Medical Center in West Cleveland.

Adnan Cobanoglu, MD

Dr. Cobanoglu joined the medical staff in January 2006 as the Chief of Cardiac Surgery. Dr. Cobanoglu received his medical degree from Ankara University School of Medicine in Ankara, Turkey. He completed his training in cardiothoracic surgery at Episcopal Hospital/Temple University and Thomas Jefferson University Hospitals in Philadelphia, Pennsylvania followed by a pediatric cardiac fellowship at The Oregon Health Sciences University in Portland, Oregon. Dr. Cobanoglu was appointed as Chief of Cardiothoracic Surgery at the Oregon Health Sciences University in 1989, following Dr. Albert Starr's tenure. He served in that position for 12 years. Just prior to his appointment to the medical staff at UHCMC in early 2006, Dr. Cobanoglu was the Director and Surgeon-in-Chief at Turkish Advanced Specialization Hospital in Ankara that housed the largest Cardiovascular Center in Turkey, with close to 4,000 major cardiac and vascular procedures each year. Dr. Cobanoglu's focus at University Hospitals Case Medical Center has been to help enhance the growth of the cardiac program which also includes heart and lung transplantation. Dr. Cobanoglu holds the rank of Professor of Surgery at Case Western Reserve University School of Medicine, and is the Jay L. Ankeney Professor of Cardiothoracic Surgery.

Carlos Garcia MD, MHA

Dr. Garcia joined the Division of Cardiac Surgery in August of 2007. Dr. Garcia graduated from the University of Utah School Of Medicine in Salt Lake City and completed his residencies in General Surgery and Cardiothoracic Surgery at Oregon Health Sciences Center in Portland, Oregon. He earned a Masters of Healthcare Administration at the University of Washington in Seattle, Washington. In addition to his practice at UHCMC, he performs Cardiac and Thoracic surgery at Southwest General Hospital. Dr. Garcia's clinical interests are off-pump coronary surgery, mitral valve repair and minimally invasive surgical techniques, TAVR. He participates in the Heart and Lung Transplant Programs at University Hospitals. His administrative interests are Medical Staff Governance, Clinical Program Development and Quality Assurance. Dr. Garcia is an Assistant Professor of Surgery at Case Western Reserve University School of Medicine and Southwest General Hospital.

Peter C. Kouretas, MD, PhD

Dr. Kouretas joined the Division in September 2010 to continue cardiac surgical services to children at Rainbow Babies and Children's Hospital. He received his medical degree from Georgetown University School of Medicine followed by a doctor of philosophy degree in Cardiovascular Physiology at Georgetown University Graduate School. His residency in Surgery was at Georgetown University Medical Center and the University of Virginia at Charlottesville. He finished his thoracic residency at the University of Pennsylvania in 2002 and spent additional years in pediatric cardiothoracic surgery, cardiothoracic transplant and mechanical circulatory support in 2002-2004. Prior to his arrival in Cleveland, Dr. Kouretas was an Assistant Professor of Surgery at University of Utah School of Medicine in Salt Lake City.

Alan Markowitz, MD

Dr. Markowitz joined the medical staff in 1997 as the Director of Clinical Operations for the Division of Cardiothoracic Surgery. Prior to his appointment to the medical staff at UHCMC, Dr. Markowitz was the Chief of the Division of Cardiothoracic Surgery at Mt. Sinai Medical Center. Currently, Dr. Markowitz holds the position of Chief Surgical Officer for the Heart and Vascular Institute and Clinical Co-Chief of the Division of Cardiothoracic Surgery, responsible for the clinical aspects of cardiac surgery. His clinical interests include adult cardiothoracic surgery, minimally invasive valve repair and replacement (mini-sternotomy and Heartport), stentless valves and homografts, and off-pump coronary bypass surgery. Dr. Markowitz holds the rank of Assistant Professor of Surgery at Case Western Reserve University School of Medicine, and is currently the interim chief of the Division.

Daniel van Heeckeren, MD

Dr. van Heeckeren has been a member of the medical staff since 1971 and is one of the founding members of the Division of Cardiothoracic Surgery at UHCMC. Dr. van Heeckeren received his medical degree from Harvard Medical School and completed his training in thoracic surgery at Yale New Haven Hospital in New Haven, Connecticut followed by a fellowship in thoracic surgery at Karolinska Institute in Stockholm, Sweden. In 2010, Dr. van Heeckeren received Emeritus Professor position in the Division and continues to support the Division Chief in the administrative affairs of the Division.

RESEARCH STAFF/FACULTY

Steve Schomisch, PhD
Director, Surgical Research and Animate Skills Lab

Dr. Schomisch was recruited from the Center for Anesthesia Research at the Cleveland Clinic in 1998. He received his undergraduate degree from John Carroll University and earned his PhD in regulatory biology at Cleveland State University.

Dr. Schomisch is responsible for all operations of the Surgical Research and Animate Skills lab, including: supervision and training of technical support staff, surgical residents and students; use of space and equipment; documentation of laboratory budget; assisting investigators with experimental design, feasibility of techniques and planning of technical aspects of projects; conducting experimental studies; preparing and managing IACUC protocols; and coordinating training courses. He has authored or co-authored 30 publications in various journals, including the Annals of Thoracic Surgery and The Journal Thoracic and Cardiovascular Surgery.

DIVISION EDUCATIONAL PROGRAM

The Division of Cardiac Surgery has been involved in the training and education of residents, fellows and nurses since the early 1960's. Many outstanding residents and fellows have graduated from this program over the last 45 years. The Division is dedicated to providing a sound, educational environment that will foster the development of residents and fellows as proficient, well-rounded surgeons.

Currently the Division offers one- and two-year clinical fellowships. The individuals entering this program must have completed the American Board of Surgery requirements or their equivalent abroad. Individuals who have already completed a residency in cardiothoracic surgery in the United States or abroad are also accepted into the program. This educational and training opportunity allows individuals to hone their skills or gain additional experience and training in these positions.

There is ample exposure to all facets of cardiac surgery in adult and pediatric patients, which provides the fellows with extensive training. The faculty closely supervises the fellows during the pre, intra, and postoperative care of the patient. As the fellows progress in the program, they are given increased responsibility based on progress in technical areas, as well as patient management and evaluation. The fellow's progress is discussed at weekly conference by the faculty. Thus, the faculty is apprised of the progress even when the fellow is not on their clinical service. Educational development involves one-

THE 25TH ANNUAL CLAUDE S. BECK LECTURESHIP IN CARDIAC SURGERY

May 19, 2012

"The Affordable Care Act: Will It Really Make Healthcare Affordable?"

Jeffrey B. Rich, MD

- President, The Society of Thoracic Surgeons
- Former Director of the Center for Medicare Management
- Department of Health and Human Services

on-one instruction in the operating room, patient floors or clinic, as well as formal educational presentations given by the faculty, housestaff, or invited speakers. Conferences within the Division are weekly and are mandatory for both faculty and housestaff. Interaction between housestaff and faculty in other disciplines, especially Cardiology, Pulmonary and Critical Care Medicine, Radiology, Anesthesiology and Critical Care Medicine, and their subspecialties occurs regularly on a patient-to-patient basis and during the didactic series. Lectures and conferences from associated disciplines are included in the fellow's educational program.

Other educational activities of the Division of Cardiac Surgery include participation in the Master Affiliation Agreement between Cuyahoga Community College (Tri-C) and University Hospitals. In January 2005, the Division began accepting students enrolled in Tri-C's Physician Assistant Program. Students in their second year of training complete their clinical rotations under the supervision of the cardiothoracic surgery RN First Assistants. Additionally, in June 2005, UHCMC and Christ Hospital School of Perfusion Science entered into an Affiliation Agreement. Students in their final year of training complete their clinical rotations under the supervision of the Perfusion Services Department at UH.

The Division faculty, Advanced Clinical Nurses and Perfusionists give CME presentations throughout the year at UH and community hospitals within the health system.

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.

Animal studies have involved calves, dogs, pigs, rats and rabbits. 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.

Throughout 2007, 2008, and early 2009, members of the Division were productive with the clinical start of the Heart and Lung Transplant Programs. The large animal laboratory has been utilized to train and educate nurses, perfusionists, technicians, physicians and surgeons in ventricular assist devices and transplantation procedures in large animal models. Investigation of techniques in utilizing novel percutaneous warming/cooling catheters have been carried out in this laboratory with successful application in patients.

CLINICAL RESEARCH PROJECTS

Study Name: JARVIK HEART
PI: Arie Blitz, MD
AI: Adnan Cobanoglu, MD
Synopsis: Jarvik 2000 Heart Assist System being investigated in bridge to transplant
Sponsor: Jarvik Heart

Study Name: FSRegistry
PI: Alan Markowitz, MD
Synopsis: This is a registry of patients with Freestyle valves. There is a retrospective as well as prospective arm to this trial

Study Name: Intermacs
PI: Arie Blitz, MD
Synopsis: Registry for destination therapy/bridge to transplant
Sponsor: NHLBI

Study Name: ABLATE Trial
Co-I's: Alan Markowitz, MD, Adnan Cobanoglu, MD
Synopsis: AtriCure Synergy Bipolar RF Energy Lesions for Permanent Atrial Fibrillation Treatment during Concomitant On-Pump Endo/Epicardial Cardiac Surgery
Sponsor: AtriCure, Inc.

Study Name: The Use of a Novel Rewarming Catheter as a Protection Against Hypothermia
PI: Arie Blitz, MD
Sponsor: Alsius Corporation

Study Name: Fast Fourier Transform analysis
PI: Arie Blitz, MD
Synopsis: Fast Fourier Transform analysis of body surface electrograms and epicardial atrial electrograms of postoperative atrial fibrillation

Study Name: CoreValve Multicenter Clinical Trial
Co-PI: Alan H. Markowitz, MD, Robert S. Boova, MD
Synopsis: Percutaneous implantation of the CoreValve in high risk or non-candidates with aortic stenosis
Sponsor: Medtronic Corporation

Study Name: The BRIDGE trial
Co-Investigator: Adnan Cobanoglu, MD
Synopsis: Maintenance of platelet inhibition with Cangrelor after discontinuation of thienopyridines in patients undergoing surgery
Sponsor: The Medicines Company

Study Name: EXCEL trial
Co-PI: Adnan Cobanoglu, MD
Synopsis: Left Main Coronary Artery Revascularization, PCI vs. Surgery
Sponsor: Abbott Vascular, Inc.

Study Name: Improving Oxygen Delivery During Extra-Corporeal Membrane Oxygenation
PI: Peter C. Kouretas, MD, PhD
Sponsor: Rainbow Surgical Specialists Grant

LABORATORY RESEARCH

Dr. Blitz

- Mechanisms of Infection of Artificial Surfaces (NIH grant)
- Use of a rewarming catheter for complex cardiac surgery
- Use of the Impella VAD as a right ventricular assist device
- The Effect of NM 4095 in pigs undergoing cardiopulmonary bypass and myocardial infarction

PUBLICATIONS

Dr. Blitz

- Kamouh A, Osman MN, Rosenthal N, Blitz A: "Erosion of an Amplatzer Septal Occluder Device into the Aortic Root." Annals of Thoracic Surgery, 2011, 91:1608-10.
- Tran AH, Kiamenesh F, Maga JM, Blitz A, Salgado CJ: "Use of an Intravascular Warming Catheter to Maintain Normothermia during Flap Reconstruction of the Sternum." J Clin Anesthesia, 2012, In Press.

Dr. Cobanoglu

- Mungan U, Cicekcioglu F, Parlar AI, Babaroglu S, Yay K, Tutun U, Ulus AT, Aksoyek A, Katircioglu SF, Cobanoglu A: Conventional versus Beating Heart Valve Surgery Technique in Reoperations, Submitted to Journal of Thoracic and Cardiovascular Surgery.
- Garcia CE, Graber R, Fitzmaurice M, Cobanoglu A: Lipomatous Hamartoma of the Aortic Valve, Tex Heart Inst J, in press.
- Bardakci H, Kervan U, Akdogan M, Kucuker A, Arka K, Birincioglu L, Cobanoglu A: Utilization of the Gott Shunt in the Treatment of Descending Thoracic Aortic Aneurysm in a Patient with Chronic Active Hepatitis, in press.

Dr. Kouretas

- Flores S, Strainic J, Ashwath R, Kouretas PC: "Fetal Diagnosis of Superior Vena Cava Aneurysm," Pediatric Cardiology, In Preparation, 2012.
- Kouretas PC, Pandya K, Ashwath R, Strainic J, Al-Khatib Y: "Repair of Coronary Sinus Ostial Atresia and Total Anomalous Pulmonary Venous Connection" World Journal for Pediatric & Congenital Heart Surgery, In Preparation 2012.

Dr. Markowitz

- Liu, N, Gilkeson R, Markowitz A, Schröeder C.Thoracoscopic removal of a suture needle from the posterior pericardium after coronary artery bypass grafting. Interactive CardioVascular Thoracic Surgery 2011;13:341-343.
- Schröeder C, Leukhardt W, Hsiao E, Farah M, Markowitz A. Trans-aortic video assisted resection of a recurrent left ventricular myxoma. Annals of Thoracic Surgery 2012, in press.

PRESENTATIONS

Dr. Blitz

- Current Status of Mechanical Circulatory Support. 30th Annual Update in Anesthesiology, Surgery, and Perioperative Medicine. Puerto Rico. January 2012. http://www.clinicalupdateinanesthesiology.org/brochure.pdf International audience of surgeons, anesthesiologists.
- Mechanical Circulatory Support: Welcome to the Machine. 3rd Annual Chest Pain & University Hospitals Harrington Heart & Vascular Institute Cardiovascular Symposium, Cleveland, OH. March 2012.
- The Management of Type A Aortic Dissection: Go Directly to the OR; Do Not Pass Go; Do Not Collect $200. 10th Annual Advanced Practice Nursing Conference. University Hospitals Case Medical Center, Cleveland, OH March 2012.

Invited Lectures:

- Antegrade vs. Retrograde Cerebral Perfusion. Practices in Cardiac Surgery. New Orleans, June 2012. http://www.theneworleansconference.com/confnola09/index.php\ (international audience)
- How Cardiac Surgery Will be Affected by Health Care Reform. Practices in Cardiac Surgery. New Orleans, June 2012. http://www.theneworleansconference.com/confnola09/index.php\ (international audience)
- Should Every Cardiac Surgery Program Have a VAD? Practices in Cardiac Surgery. New Orleans, June 2012. http://www.theneworleansconference.com/confnola09/index.php\ (international audience)
- Proof of Concept: Excellent Destination Therapy Survival Can Be Achieved in a Low Volume Program. 22nd Congress of the World Society of Cardiothoracic Surgeons. Vancouver, CA, September 2012. (international audience)

Dr. Cobanoglu

- Management of the Small Aortic Root. Society of Thoracic Surgeons International Symposium on Management of Adult Patients with Congenital Heart Disease. The Society of Thoracic Surgeons 48th Annual Meeting, The Convention Center, Room 220, Fort Lauderdale, Florida, January 28-February 1, 2012.

Dr. Garcia

- Geauga Oncology Seminar: Imaging Techniques
- Grand Rounds: Aortic Dissection; Hyper Hydrosis
- Mended Hearts presentation: Cardiac Rehabilitation at Chagrin Highlands

Dr. Kouretas

- "Management of Aortic Aneurysm in Congenital Heart Disease," Pediatric Grand Rounds Rainbow Babies & Children's Hospital, February 23, 2012.
- "Congenital Cardiac Anatomy," Surgical Anatomy Course, Case Western Reserve School of Medicine, March 22, 2012.

Dr. Markowitz

- Schröeder C, Leukhardt W, Hsiao E, Farah M, Markowitz A. Novel Trans-Aortic Video Assisted Resection of a Recurrent Left Ventricular Myxoma. The Society of Thoracic Surgeons 48th Annual Meeting, Fort Lauderdale, Florida, February, 2012.
- Rothermel L, Leukhardt W, Gilkeskon R, Markowitz A, Schröeder C. Thoracoscopic resection of a giant teratoma compressing the right heart. International Society for Minimally Invasive Cardiothoracic Surgery Annual Meeting, Los Angeles, CA, June, 2012.

PATIENT CARE WITHIN THE DIVISION

Surgical services provided by the Division of Cardiac Surgery include routine and advanced cardiac surgical procedures, including primary and re-operative cardiac revascularization, valve replacement and repair, maze procedure, thoracic aortic and great vessel surgery, adult and pediatric congenital heart operations, heart failure surgery with assist devices, minimally invasive procedures, and lung and heart transplantation procedures.

During the Intensive Care Unit phase, the Division continues to work as a team in collaboration with the Critical Care team, which is a division of the Department of Anesthesiology. During the day, the Critical Care team, attending and residents, assisted by a nurse practitioner, oversee the daily management of the patient while keeping the attending surgeon informed and involved. During the evenings, bedside management is the responsibility of the resident or fellow, under the supervision of the attending surgeon and intensive care anesthesiologist.

The attending surgeon, fellow and nurse practitioner conduct rounds every morning to establish a plan of care for the patients on the cardiothoracic service. The nurse practitioners work collaboratively with the cardiothoracic surgeons to facilitate movement of their patients through the University Hospitals system. They serve as liaisons between physicians, hospital personnel and patients to provide continuity of care through an interdisciplinary approach. They help educate the patients about their surgery pre- and post-operatively, as well as assist in the outpatient clinic.

Continuous Quality Improvement and Morbidity/Mortality meetings are held weekly to review surgical complications and unique or significant cases are discussed in an educational atmosphere. Formal presentations are made. In the last few years, the Division has consistently attained a 3-star (highest) rating by the Society of Thoracic Surgeons Registry for its clinical services and outcomes.

DIVISION GOALS

The last three years were exciting with the development and growth of the Heart and Vascular Institute, reinitiation of the lung and heart transplant programs, and a gradual increase in the number of patients seen and treated within the Division. In 2012, the Division continued these efforts and worked collectively to enhance marketing efforts to increase the referral base with community physicians and other outside sources.

The goals of the Division are multifaceted, involving all areas of clinical service, education, research and community service. The recruitment of additional full-time cardiology faculty and cardiac surgeons over the past years helped serve as an extension of both cardiac and surgical services to the community in a more comprehensive manner. In environments of intense competition and declining surgical caseloads, the Division's workload has held steady and actually has increased compared to earlier years in 2008 and 2009. This increase has had a beneficial effect on clinical research and the educational programs. In 2006 through 2009, the Division showed a strong presence in Cardiac and Thoracic Surgery at Southwest General Health Center and in early 2010 moved its West Cleveland operations to St. John Medical Center, where efforts to expand that program continue. In early 2011, UH Ahuja Medical Center, a new hospital in the University Health System, started operations. The Division of Cardiac Surgery maintains offices there with an increasing number of cardiothoracic procedures. The future plans are to help maintain and strengthen all these programs and initiate new ones, based on the University Health System's strategic plans in other affiliates and new facilities in the coming years.

The faculty members of the Division strive to provide the highest quality cardiac surgery services and patient-centered, personalized care while making the advanced expertise and cutting-edge technologies available to all our patients, the communities and hospitals affiliated with the system.

SECTION OF PEDIATRIC CARDIOTHORACIC SURGERY

The Pediatric Heart Center at University Hospitals Rainbow Babies & Children's Hospital (RB&C) is consistently ranked as one of America's Best Children's Hospitals in cardiac surgery and cardiology. Our multidisciplinary team includes pediatric specialists in cardiothoracic surgery, interventional cardiology, cardiac intensive care and cardiac anesthesiology. Our multispecialty team approach ensures optimal, individualized care with our primary focus being excellent outcomes, highest quality, and superb patient/family satisfaction.

The comprehensive care available at the Pediatric Heart Center at Rainbow Babies & Children's includes pediatric and congenital cardiothoracic surgery, interventional cardiology including hybrid procedures, fetal echocardiography, and comprehensive arrhythmia management. We are in the process of building a state-of-the art pediatric hybrid operating room and cardiac catheterization suite, the only pediatric hybrid suite in northeast Ohio. Innovative techniques such as hybrid approaches to congenital heart disease, ablation procedures, and percutaneous valve replacement are all less invasive procedures with decreased hospital stay and quicker recovery time.

Working in close collaboration with our high-risk obstetricians and the maternal-fetal medicine team at UH MacDonald Women's Hospital, allows us the advantage of providing continual care and immediate access to our neonatal intensivists and cardiac interventionalists. All of our cardiac specialists at RB&C are located at the same UH facility, providing integrated care without the need to travel.

The Section of Pediatric Cardiothoracic Surgery, under the direction of Dr. Peter C. Kouretas, is responsible for performing and/or coordinating all cardiac surgical procedures on patients with congenital heart disease. This includes all pediatric patients being operated on at RB&C and adults with congenital heart disease receiving surgery at University Hospitals Case Medical Center (UHCMC).

FACULTY

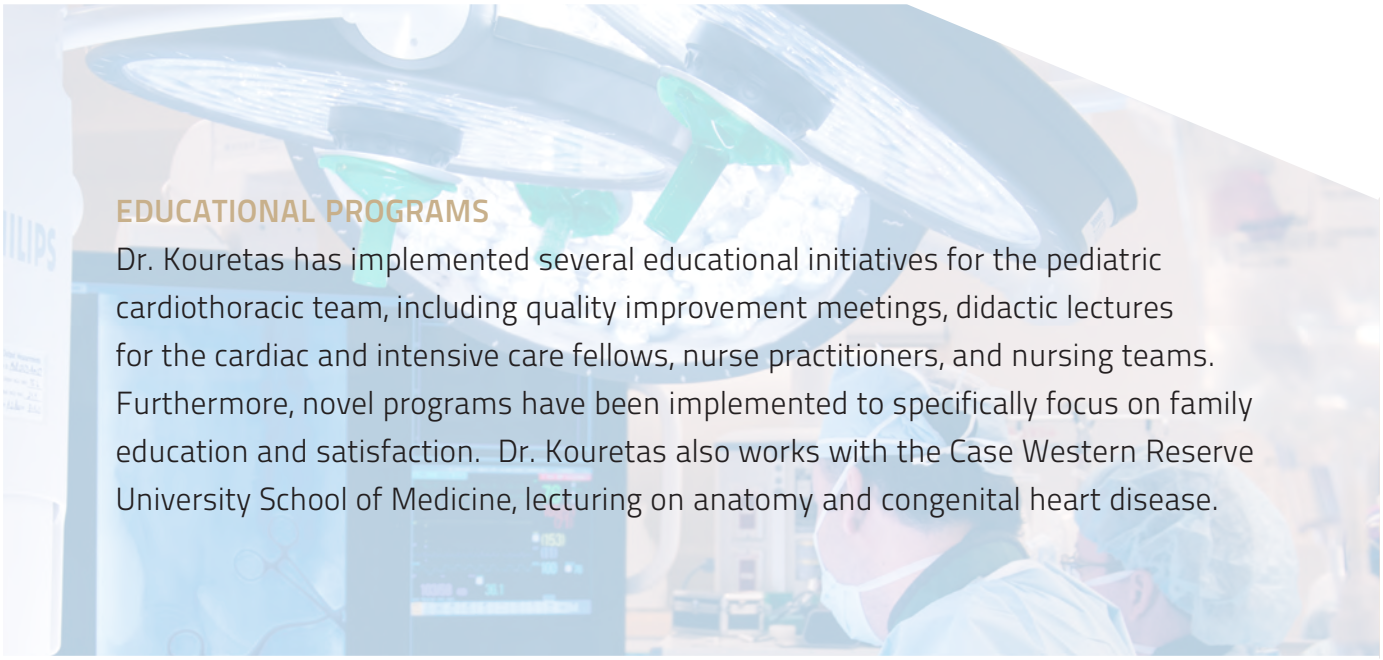
Peter C. Kouretas, MD, PhD

Dr. Kouretas was recruited in 2010 from Primary Children's Medical Center at The University of Utah, where he served as Director of Pediatric Mechanical Circulatory Support and Assistant Professor of Surgery. Dr. Kouretas completed his general surgery residency at the University of Virginia in 2000. He completed his thoracic training at The University of Pennsylvania in 2002. His training in pediatric cardiac and congenital surgery, as well as cardiopulmonary transplantation, was completed at Stanford University in 2004. He is board certified in both surgery and thoracic surgery. Dr. Kouretas received his PhD in circulatory physiology from Georgetown University in 1997. He is a member of The Society of Thoracic Surgeons, The Western Thoracic Surgical Association, The Southern Thoracic Surgical Association and The International Society of Heart and Lung Transplantation. Dr. Kouretas' clinical interests include complex neonatal cardiac surgery and adult congenital heart surgery, as well as mechanical circulatory support and cardiac transplantation. He is well recognized for his leadership and professionalism in the field of cardiac surgery. Since arriving at Rainbow Babies and Children's Hospital, Dr. Kouretas has created a collaborative multidisciplinary team approach to congenital heart disease that has included pediatric intensive care, cardiology, perfusion, cardiac anesthesiology and nursing. Overall surgical outcomes have been outstanding for a highly complex group of patients, and the entire team has achieved measurable resonance as a high performing team.

Dr. Kouretas has a specific focus and interest in complex neonatal repairs including hypoplastic left heart syndrome and the Norwood procedure, transposition of the great arteries, and complex valve repair techniques including valve-sparing aortic root replacement procedures in patients with Marfan's syndrome. Our congenital patients are also followed into adulthood by our multidisciplinary team and cardiovascular interventions are provided at our integrated UH campus.

OVERVIEW

The Section of Pediatric Cardiothoracic Surgery 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 RB&C 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 that includes pediatric cardiologists, neonatologists, intensivists, anesthesiologists, and other sub-specialists 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. The Section has active ongoing research efforts, including studies investigating the effect of neonatal cardiopulmonary bypass on endothelial function, specifically focusing on the effect of blood priming on nitric oxide biology and its effect on circulatory physiology.



EDUCATIONAL PROGRAMS

Dr. Kouretas has implemented several educational initiatives for the pediatric cardiothoracic team, including quality improvement meetings, didactic lectures for the cardiac and intensive care fellows, nurse practitioners, and nursing teams. Furthermore, novel programs have been implemented to specifically focus on family education and satisfaction. Dr. Kouretas also works with the Case Western Reserve University School of Medicine, lecturing on anatomy and congenital heart disease.

Chapter 6

Division Chief
Conor P. Delaney, MD, MCh, PhD

Colorectal Surgical Staff
Bradley J. Champagne, MD
Sadaf Khan, MD
Jeremy Lipman, MD
Eric Marderstein, MD, MPH
Harry L. Reynolds, Jr., MD
Sharon L. Stein, MD
Joseph A. Trunzo, MD

Colorectal Residency Program Director
Brad Champagne, MD

Colorectal Residents
Skandan Shanmugan, MD
Andrew Russ, MD

Research Fellows
Knut Magne Augestad, MD
Benjamin Crawshaw, MD
Deborah Keller, MD
Zhamak Korghami, MD

Surgical Skills Trainer
Sadaf Khan, MD

Nurse Practitioners
Karen Brady, NP
Pat Cigetich, NP
Mary Kasavich, NP
Melissa Snow, APN
Donya Woconish, NP

STAFF/FACULTY

Conor Delaney, MD, MCh, PhD

Dr. Delaney gained his medical degree in University College Dublin, Ireland, and earned his Master of Surgery and Doctor of Philosophy in Surgery degrees from the University of Pittsburgh School of Medicine and University College Dublin Medical School. He completed surgical training with the Royal College of Surgeons in Ireland, and a post-accreditation training position in the Department of Colorectal Surgery at the Cleveland Clinic. He serves as Chief of the Division of Colorectal Surgery, Vice-Chair of the Department of Surgery, and Professor of Surgery at Case Western Reserve University School of Medicine. He also holds the position of Director of the Institute for Surgery and Innovation and is the Jeffrey L. Ponsky, MD Professor of Surgical Education. He is a past President of the International Society for Laparoscopic Colorectal Surgery. Dr. Delaney is on the editorial boards of Diseases of the Colon and Rectum, World Journal of Gastroenterology, World Journal of Surgery, Colorectal Disease and the Polish Journal of Surgery, and serves as a reviewer for many journals. He travels to teach colorectal surgery nationally and internationally. He has written and edited four books, published more than 270 chapters and papers, and has given more than 250 invited lectures. His primary clinical interests include laparoscopic colorectal surgery, colorectal cancer, inflammatory bowel disease, diverticular disease, colonoscopy and re-operative abdominal surgery. Dr. Delaney serves on Council of the American Society of Colorectal Surgeons, and was recently appointed as Chair of a new program to teach rectal cancer surgery nationally within the U.S. Dr. Delaney recently founded Socrates Analytics, a healthcare IT company which helps hospitals link and risk adjust disparate administrative databases in order to measure the clinical and financial outcomes of healthcare provision.

Bradley J. Champagne, MD, FACS, FASCRS

Dr. Champagne obtained his Bachelors in Science from the University of Scranton, and his medical degree from Upstate Medical College at Syracuse, New York. He undertook his General Surgery Residency at Albany Medical College, and then completed a Colorectal Residency at the Georgia Colon and Rectal Surgery Clinic in Atlanta, Georgia. He received certification by the American Board of Surgery and American Board of Colon and Rectal Surgery, and was appointed to this Division in August 2006. Dr. Champagne was promoted to Associate Professor in 2010. He is a fellow of both the American College of Surgeons and the American Society of Colon and Rectal Surgeons. He also serves as the Program Director of the ACGME-accredited Colorectal Residency at UH Case Medical Center. This past year, Dr. Champagne was appointed as the ASCRS young surgeon representative to the ACS Advisory Council and the ASCRS representative to ASSET (Association of Surgeons for Simulation, Education and Training). Furthermore, he was appointed by the President-Elect of ASCRS to the position of Program Chair for the 2014 national meeting. He has been the Course Chair for multiple SAGES and ASCRS laparoscopic colectomy national and regional programs. Dr. Champagne is the Co-Director of the Annual Career Development Course for ACGME colorectal residents. He has a keen interest in teaching and his research focus is on training methods for laparoscopic colectomy and outcomes. He is the principal investigator on several projects in the Division and has written numerous articles and chapters in peer reviewed journals. He is a reviewer for Diseases of the Colon and Rectum, Annals of Surgery and multiple other journals. He is the Surgical Director of the Community Gastroenterology and Quality Center for the Digestive Health Institute. Dr. Champagne has given several invited lectures nationally and internationally. His clinical interests include laparoscopic colorectal surgery, colorectal cancer, inflammatory bowel disease, diverticular disease and benign anorectal disease.

Sadaf Khan, MD, BS

Dr. Khan received her medical degree from the Aga Khan University, Pakistan. She completed her General Surgery residency and Colon and Rectal Surgery fellowship at Henry Ford Hospital, Detroit, Michigan. She is certified by the American Board of Surgery and American Board of Colon and Rectal Surgery. She joined Henry Ford as senior staff before joining the Aga Khan University as an Assistant

Left to right:
Front row: Harry Reynolds, Jr., MD;
Conor Delaney, MD, MCh, PhD

2nd row: Deborah Keller, MD;
Eric Marderstein, MD, MPH;
Skandan Shanmugan, MD

3rd row: Donya Woconish, NP;
Mary Kasavich, NP

4th row: Karen Brady, NP;
Sharon L. Stein, MD;
Bradley Champagne, MD;
Zhamak Korghami, MD

Not pictured: Sadaf Khan, MD;
Jeremy Lipman, MD; Joseph Trunzo, MD;
Andrew Russ, MD; Benjamin Crawshaw, MD;
Knut Magne Augestad, MD;
Pat Cigetich, NP; Melissa Snow, APN

Professor of Surgery. While there, she obtained a Diploma in Health Professions Education, and was involved in curricular development, with specific interest in techniques and implementation of assessment strategies. She is currently a Visiting Faculty at the Aga Khan University. She joined the Division in March 2011 as Director of Surgical Skills Training at the Institute for Surgery and Innovation. Dr. Khan's areas of interest include education and education research, especially assessment, and curriculum development. Her primary clinical interests include colorectal cancer, re-operative surgery, colonoscopy and benign anorectal disease. She will be practicing as a colorectal surgeon at Mercy Hospital in Lorain.

Jeremy Lipman, MD

Dr. Lipman earned his Bachelor of Arts degree from Boston College and his medical degree from Drexel University College of Medicine in Philadelphia, Pennsylvania. He completed his General Surgery Residency at Case Western Reserve University and did a Colorectal fellowship at the Cleveland Clinic Foundation, where he received the outstanding clinical fellow award. He is board certified by the American Board of Surgery. Dr. Lipman joined the staff of MetroHealth Medical Center in July, 2010 and is an Assistant Professor of Surgery at Case Western Reserve University School of Medicine. He oversees the educational program of general surgery residents at MetroHealth Medical Center. He has published many peer-reviewed articles and presented his work at several national meetings. Dr. Lipman serves as a reviewer for Annals of Surgery. His clinical interests include laparoscopic colorectal surgery, colorectal cancer, inflammatory bowel disease, diverticular disease, colonoscopy, re-operative abdominal surgery and benign anorectal disease.

Eric Marderstein, MD, MPH

Dr. Marderstein obtained his basic science degree in Biophysics with Honors from Brown University in Providence, Rhode Island and his medical degree from University of Virginia School of Medicine in Charlottesville, Virginia. He undertook General Surgery Residency at the University of Pittsburgh Medical Center in Pittsburgh, Pennsylvania. During his general surgery residency, Dr.

Marderstein was granted a Master's Degree in Public Health from the University of Pittsburgh. He then completed a Colorectal fellowship at the Cleveland Clinic in Cleveland, Ohio. Dr. Marderstein is certified by both the American Board of Surgery and the American Board of Colon and Rectal Surgery. He was appointed Assistant Professor of Surgery within the Division in July 2007. His clinical interests include laparoscopic approaches to colorectal disease, colorectal cancer, inflammatory bowel disease and complex reoperative abdominal surgery. His research interests include the new and growing field of Patient Safety. In May 2010, Dr. Marderstein was appointed Director of Colorectal Surgery Services at the Louis B. Stokes Cleveland VA Medical Center.

Harry Reynolds, Jr., MD

Dr. Reynolds graduated with a degree in Bioengineering from Syracuse University as a University Scholar. He subsequently completed medical school at Case Western Reserve University, with a scholarship from the United States Air Force, and finished his residency in General Surgery at University Hospitals of Cleveland. He then served as the Chief of Surgical Services and as a Flight Surgeon at the 22nd Medical Group, McConnell Air Force Base, Kansas. He completed his Colorectal Fellowship training in 1996 at the Cleveland Clinic Foundation. He was appointed as an Assistant Professor of Surgery at Case Western Reserve University in 1997 and subsequently served as the Director of Colorectal Surgery at University Hospitals through June of 2005. He continues his service in the Air Force as the Chief of Aerospace Medicine at the 180th Medical Group, Toledo, Ohio. He has served in support of Operation Enduring Freedom and Iraqi Freedom and received the Humanitarian Service Medal for his participation in the Hurricane Katrina relief effort. In 2007, Dr. Reynolds worked as a Surgeon and Flight Surgeon at the 332nd Air Expeditionary Medical Group, Balad Air Base, Iraq. He served in support of Operation Iraqi Freedom, and provided Space Shuttle Mission Support at Moron Air Base Spain this past spring. He was deployed to Kyrgyzstan and Afghanistan in support of Operation Enduring Freedom in October and November 2009. Dr. Reynolds has given multiple invited presentations and authored or coauthored numerous abstracts and papers. His special interests include the multidisciplinary management of colon and rectal cancer, surgical treatment of inflammatory bowel disease, anorectal diseases, and laparoscopic approaches to colorectal pathology. He now serves as the Director of Colorectal Cancer Surgery at University Hospitals Case Medical Center.

Sharon L. Stein, MD, FACS

Dr. Stein obtained a Bachelors of Arts with distinction from the University of Michigan in Ann Arbor, Michigan and a medical degree at University of Colorado Health Science Center in Denver, Colorado. She completed her General Surgery Residency at Massachusetts General Hospital in Boston, Massachusetts and her Colon and Rectal Surgery fellowship at New York Presbyterian Hospitals of Cornell and Columbia. After completing her fellowship, Dr. Stein worked as a surgeon for Doctors without Borders (Medecins sans Frontiers) in Southern Sudan, and more recently, in Haiti following the earthquake in 2010. She is board certified by the American Board of Surgery and the American Board of Colon and Rectal Surgery. She joined the faculty at University Hospitals in August 2009. Dr. Stein has special interests in complex Crohn's disease, enterocutaneous fistulas and re-operative surgery, and serves as the Director of the Case Acute Intestinal Failure Unit and Surgical Director of the Inflammatory Bowel Disease Center. She is currently researching the causes of infertility following pelvic surgery for patients with ulcerative colitis. She is the principle investigator for several departmental studies. Dr. Stein is a member of multiple national committees, including Society of American Gastroenterologic Surgeons Humanitarian Committee, Abstract Review Committee for Society of Surgery of the Alimentary Tract and chairperson for the Young Surgeons Committee of the American Society of Colon and Rectal Surgery. She currently serves as Associate Program Director for Case Surgery Residency Program and Co-Director of the Annual Colorectal Residents Career Course.

2012 Colorectal Fellows
Career Course Faculty

Joseph A. Trunzo, MD

Dr. Trunzo earned a Bachelor of Science from Eastern Michigan University and his medical degree from Wright State University School of Medicine in Dayton, OH. He completed General Surgery Residency at Case Western Reserve University and did a Colorectal Surgery Fellowship at the Cleveland Clinic Foundation. He is board certified in surgery by the American Board of Surgery. Dr. Trunzo will be joining University Hospitals regional partners at St. John Medical Center and Southwest General Medical Center. He has published many peer-reviewed articles and presented his work at several national meetings. His clinical interests include laparoscopic colorectal surgery, colorectal cancer, inflammatory bowel disease, diverticular disease, colonoscopy, re-operative abdominal surgery and benign anorectal disease.

COLORECTAL RESIDENCY

Skandan Shanmugan, MD

Dr. Shanmugan obtained his Bachelor of Arts in History and International Relations from Swarthmore College and a Post-baccalaureate degree in Special Sciences from the University of Pennsylvania. He then obtained his medical degree from Temple University School of Medicine, where he continued his General Surgery Residency and was elected as the Administrative Chief Resident. Dr. Shanmugan is now a certified member of the American Board of Surgery. He will complete his Fellowship in Colon and Rectal Surgery at UH Case Medical Center in July 2013. His clinical and research interests include laparoscopic colorectal surgery, re-operative colorectal surgery and rectal cancer. He has published several peer-reviewed articles and chapters and has recently presented at the Society of Surgical Oncology, American College of Surgeons, and the American Society of Colon and Rectal Surgery. Upon completion of his fellowship, Dr. Shanmugan will join the faculty in the Department of Colon and Rectal Surgery at the University of Pennsylvania in Philadelphia.

Andrew J. Russ MD

Dr. Russ obtained his Bachelor of Arts in Zoology, with a Thematic Sequence in Chemistry at Miami University in Ohio. He then went on to obtain his medical degree at Wright State University Boonshoft School of Medicine in Dayton, Ohio. He matched at the University of Wisconsin in Madison to complete 5 years of General Surgery Residency, as well as a 2-year fellowship in Tumor Immunology. He will pursue a Colorectal Fellowship at UH Case Medical Center in July of 2013. His clinical interests include minimally invasive colorectal surgery and research interests include resident education and operative and non-operative simulation. Dr. Russ has published several peer-reviewed articles, as well as several presentations at the Society of Surgical Oncology, and the Association for Academic Surgery at the Academic Surgical Congress.

RESEARCH STAFF

Deborah Keller, MD

Dr. Keller obtained a Bachelors of Science and Arts degree in Fine Art and Biological Sciences, and a Master's Degree in Healthcare Policy and Management from Carnegie Mellon University in Pittsburgh, Pennsylvania. Following graduate school, she worked as a business analyst for American Management Systems, specializing in Healthcare Management consulting. She returned to school, earning a medical degree at UMDNJ-New Jersey Medical School in Newark, New Jersey. She completed her General Surgery Residency at Temple University Hospital in Philadelphia, Pennsylvania. Following residency, Dr. Keller joined the University Hospitals Case Medical Center Division of Colorectal Surgery as a research fellow. Her projects focused on surgical outcomes and quality improvement in benign and malignant colorectal disease. Dr. Keller's work has been presented at several national conferences and peer-reviewed journals. After her research year, Dr. Keller will complete a clinical Colorectal Residency at the Penn State Milton S. Hershey Medical Center.

Knut Magne Augestad, MD

Dr. Augestad is a practicing surgeon and research leader working at the University of Hospital North Norway and Norwegian National Centre for Integrative Care and Telemedicine. His research focuses on surgical decision making, with emphasis on patients with colorectal cancer. He and his team have assessed complex surgical patient pathways and decision making by use of new technology (telemedicine) and development of clinical decision support tools integrated in the electronic medical record. During his 2010 U.S. fellowship at the Division of Colorectal Surgery, University Hospitals Case Medical Center, Dr. Augestad was introduced to research on surgical simulators. In August 2013, he will return as a postdoctoral research fellow at the Division of Colorectal Surgery, focusing on decision analytic modeling, telemedicine and predictive analytics.

Benjamin Crawshaw, MD

Dr. Crawshaw received his Bachelor of Arts in biology, magna cum laude, from Brown University in Providence, Rhode Island and his medical degree from the University of Rochester School of Medicine and Dentistry in Rochester, New York. He is currently pursuing his general surgery residency at Case Western Reserve University in Cleveland, Ohio. In July 2013, he will begin two years of clinical research with the Division of Colorectal Surgery at University Hospitals Case Medical Center as the Jeffrey L. Ponsky Research Fellow. Dr. Crawshaw has an interest in surgical education and plans to pursue a career in academic colorectal surgery.

Zhamak Khorgami, MD

Dr. Khorgami received his medical degree from Tehran University of Medical Sciences, Iran. He did his internship and surgical residency at that university. After being board-certified, Dr. Khorgami began to serve as a full-time staff surgeon at Tehran University of Medical Sciences. He is currently a research fellow in the Division of Colorectal Surgery at University Hospitals Case Medical Center. Dr. Khorgami has interests in clinical research, surgical education, and minimally invasive surgery and plans to continue his career in academic surgery.

DIVISION EDUCATION

The Division has an ACGME-accredited Colorectal Fellowship Program which is in its third year, and is expanding to two fellowship slots in 2014. The program matched Dr. Andrew Russ, MD. Dr. Champagne, who is Program Director for the program, and Dr. Sharon Stein, have expanded this educational venture and have organized a novel course for career advice for colorectal fellows from all over the U.S. The inaugural course took place in Fall, 2010, and the attendance has increased as recognition has grown. The majority of colorectal fellows in the country were in attendance at the 2012 course.

LAPAROSCOPIC TRAINING PROGRAMS

The Division continues to host numerous national and international visitors to observe laparoscopic and open surgery. The Division helped to support the 7th International Congress of Laparoscopic Colorectal Surgery which was held in Hong Kong, China, in November 2012, and for which Dr. Delaney was Program Director. Drs. Champagne, Reynolds and Stein all participate in quarterly laparoscopic training courses.

PATIENT CARE WITHIN DIVISION

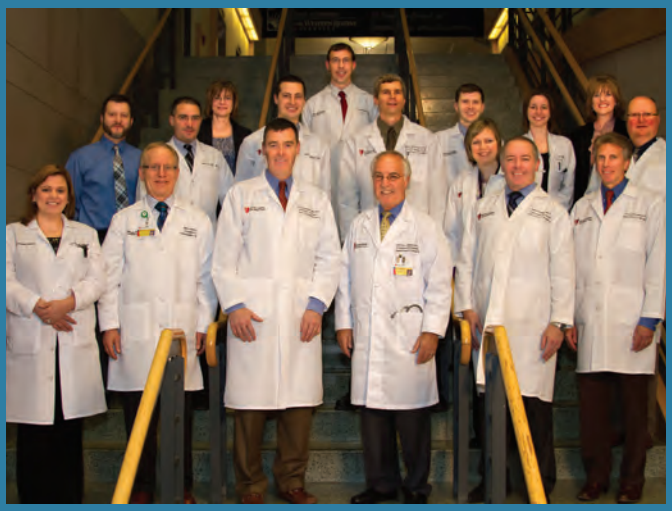
The Division continues to provide specialized care for patients with conditions affecting the colon, rectum and anus. The research being performed allows us to continue to develop the quality of care offered to patients and to allow us to maintain outcomes data with the goal of establishing the Division as a national leader in its area of expertise. The procedure rooms in Bolwell and Seidman clinics offer 3-D imaging with ultrasound, as well as flexible endoscopy for patients at their initial presentation to the physician. The in-patient area is now well settled on the 5th floor of the UH Seidman Cancer Center.

Patients are seen at main campus, as well as at facilities in Westlake, Green Road, Chagrin Highlands, Landerhaven and Twinsburg. Surgical procedures are primarily performed at main campus; however, cases are also being performed at St. John West Shore Hospital, at UH Ahuja Medical Center, and will be performed at Mercy Hospital in Lorain.

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 training 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 courses are held monthly, and waiting lists for these courses are approximately nine months. Courses in many other specialty areas are also held, all of which are helping raise the level of awareness of the Institution both regionally and nationally. More than 3,000 surgeons and physicians have been through the ISI in the last three years. In 2012, the Institute was re-accredited by the American College of Surgeons as a Level I Training Center. ISI is now joined with the Mount Sinai Skills and Simulation Center, and both are termed the Case Center for Skills and Simulation.

Dr Sadaf Khan continues as the Skills Trainer, and will continue to hold this post and direct skills training for the residents, as well as starting a part-time clinical practice. In 2012, several abstracts have been submitted based on educational research being performed at ISI.

DIVISION GOALS

- To continue clinical growth regionally and nationally
- To become increasingly recognized as leaders in colorectal surgical education
- To continue to develop the research program
- Establishment of a joint Inflammatory Bowel Center with Gastroenterology, a joint Colorectal Cancer Clinic with Oncology and Radiotherapy and a Pelvic Floor Center
- Build clinical volume by marketing laparoscopic colorectal surgery, anal surgery and pelvic floor surgery, and a rectal cancer center with facilities for intraoperative radiation, transanal surgery and laparoscopic surgery

PRIZES, HONORS AND AWARDS

Conor Delaney, MD, MCh, PhD

- Editorial Board for: Diseases of the Colon and Rectum, World Journal of Surgery, Colorectal Disease, World Journal of Gastroenterology, Polish Journal of Surgery, American Journal of Surgery
- Elected to membership, American Surgical Association
- Council, Midwest Surgical Association
- Council, American Society of Colorectal Surgeons
- Best Doctors In America, since 2005
- America's Top Doctors, since 2006
- America's Top Doctors for Cancer, since 2006
- Cleveland Magazine Top Doctors, since 2006
- Northern Ohio Live Top Doctors, since 2007
- 2012, Inaugural UH Leadership Academy
- 2012, Mexican Society of Rectum and Colon Surgeons and Mexican College of Specialists in Coloproctology, Honorary International Fellowship; presented by Dr Quintin Gonzalez, President, San Jose del Cabo, July 15th, 2012
- 2012, Midwest Surgical Association Best Paper Award for best oral presentation, "Extraction site incision and incisional hernias after laparoscopic colorectal surgery: Should we be avoiding the midline?"

Brad Champagne, MD

- Best Doctors, 2011-2013
- Who's Who of Physicians, 2011-2013
- America's Top Surgeons, 2010-2013
- Cleveland Magazine Best Doctors, 2011-2013
- Honorary Professor of Surgery: University of Lima, 2012

Harry Reynolds, Jr., MD

- Best Doctors Northern Ohio Live since 2005
- Top Docs Cleveland Magazine since 2005
- Best Doctors since 2004

Sharon Stein, MD

- Chair, American Society of Colon and Rectal Surgeon's Young Surgeon's Committee

Andrew Russ, MD

- University of Wisconsin Department of Surgery Chief Administrative Resident (2012)
- University of Wisconsin Department of Emergency Medicine Trauma Resuscitation Award (2012)

GRANTS

Conor Delaney, MD, MCh, PhD

Funding source: Norwegian Government
Role: Scientific Advisory Board
Project title: Modeling Colorectal Cancer Surveillance: Norwegian-US perspective
Total amount: NOK 2.4M ($400,000)
Period: submitted

Funding source: Great Lakes Innovation & Development Enterprise
Role: Founder and PI
Project title: Socrates Analytics
Total amount: $100,000
Period: 2013

Funding source: Norwegian Government
Role: International Collaborator
Project Title: M# Mobile Mentor
Total amount: NOK 2.4M ($400,000)
Period: 2011-2013

Bradley Champagne, MD

Role: Principal Investigator
Project Title: Ligation of Intersphincteric Fistula
Total amount: $5,000 (Start Up) $2,095 (Per Patient)

Role: Principal Investigator
Project title: Hemorrhoid Energy Treatment Trial
Total amount: $13,000 (Start Up) $2,821 (Per Patient)

Sharon L. Stein, MD

Funding source: Helsinn Therapeutics(U.S), Inc.
Role: Primary Site Investigator
Project title: 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 (Protocol No. HT-IPAM-202)
Total amount: $154,040 in site funding
Period: 2012-Present

Funding source: Ventrus Biosciences and INC Research (USA)
Role: Primary Site Investigator
Project title: A Phase 3 Randomized, Double-Blind, Placebo Controlled, Parallel Treatment Group, Multicenter Efficacy and Safety Study of Topical Diltiazem Hydrochloride 2% Cream I Subjects with Anal Fissure (Protocol No. VEN307-AF-001)
Total amount: $35,000 in site funding
Period: 2012-present

Role: Primary Site Investigator
Project title: The Optimal Treatment Of Fulminant Clostridium Difficile Colitis: Diverting Loop Ileostomy and Colonic Lavage versus Total Abdominal Colectomy
Total amount: $10,000 in site funding
Period: 2012-present

Role: Co-Investigator
Project title: A Prospective Study of Methylated Vimentin DNA in Blood as a Novel Biomarker in Colorectal Cancer (Protocol No. 1201) – GI SPORE pilot project
Period: 2013-present

INVITED NAMED LECTURES

Conor Delaney, MD, MCh, PhD

- Incorporation of Barbers Lecture. Royal College of Physicians and Surgeons of Glasgow, Glasgow, UK, "The State versus laparoscopic colorectal cancer surgery – guilty, innocent or not proven!" March 2012.
- "Laparoscopic Colorectal Surgery and Perioperative Care: Bringing Industrial Standards to Colorectal Surgery", McEwen Lecture, Department of Surgery, University of Kansas School of Medicine, Wichita, KS, May 2012.
- "Extraction site incision and incisional hernias after laparoscopic colorectal surgery: Should we be avoiding the midline?" Midwest Surgical Association Best Paper Award for best oral presentation, 2012.

HONORARY APPOINTMENTS & INVITED INTERNATIONAL SURGERIES

Conor Delaney, MD, MCh, PhD

- Hong Kong Medical Council and Queen Mary Hospital, Hong Kong, China, 2012.
- Queen Mary Hospital, The University of Hong Kong, Hong Kong, November 2012.

PUBLICATIONS

Books

- "Netter's Surgical Anatomy and Approaches". Editor: Conor P Delaney. Elsevier, Philadelphia, PA. October 2013.
- "Operative Techniques in Laparoscopic Colorectal Surgery". 2nd Edition. Authors: Delaney CP, Senagore AJ. Lippincott Williams & Wilkins, Philadelphia, PA. October 2013.
- "Pelvic Cancer Surgery: Modern Breakthroughs and Future Approaches". Authors: Patel H, Delaney CP. Springer Publishing Company, New York, NY. In press.
- "Single-Incision Laparoscopic and Transanal Colorectal Surgery". Authors: Law WL, Delaney CP. Springer Publishing Company, New York, NY. Under contract.

Book Chapters and Reviews

- Laparoscopic ileocecectomy, small bowel resection and strictureplasty for Crohn's disease. Favuzza J, Delaney CP. SAGES Fundamentals Manual, 2012.
- Techniques /Tips of Lower Endoscopy. Favuzza J, Delaney CP. Principles of Flexible Endoscopy for Surgeons. Eds Marks and Dunkin. Springer, 2013.
- Laparoscopy for rectal cancer. Lawrence J, Delaney CP. Colorectal Cancer (2nd Edition). Eds Vaccaro CCA, Lastiri JM, Rossi G, Varela E, Vaccarezza H. In press.
- Clinical and Educational Benefits of Surgical Telementoring. Augestad K, Chomutare T, Belliak JG, Lindsetmo RO, Delaney CP, Mobile Medical Mentor (M3) Project. Simulation Training in Laparoscopy and Robotic Surgery. Eds: Patel H, Joseph J. Springer Verlang, London. In press.

- Laparoscopic extended right hemicolectomy. Shanmugan S, Delaney CP. Lower Gastrointestinal Tract Surgery. Eds: Hohenberger W, Parker M. Springer Verlang, London. In press.
- Current state of the art of laparoscopic colorectal surgery for cancer: Update on the four multicenter international trials. Lee JK, Lipman J, Delaney CP. Ann Sur Innov Res, 2012; 6(1):5.
- Simulation and its role in training. Samia H, Khan S, Delaney CP. Clin Colorect Surg, In press.
- The Socrates story – integrating hospital administrative data to improve health care efficiency and outcomes. Lawrence J, Delaney CP. Clin Colorect Surg, 2013; 26: 1-9.
- Improving surgical standards: using industrial practices and technology to improve surgical practice. Manwaring M, Delaney CP. Semin Col Rect Surg, 2013; 26: 1-7.
- Fast Track Protocols in the Era of Minimally Invasive Surgery. Keller D, Delaney CP. Semin Col Rect Surg. 2013. 24: 7-13.
- Surgical Telementoring in Knowledge Translation - Clinical Outcomes and Educational Benefits: a Comprehensive Review. Augestad K, Bellika JG, Budrionis A, Chomutare T, Lindsetmo RO, Patel H, Delaney CP, and the Mobile Medical Mentor (M3) Project. Surgical Innovation, 2012 Oct 30; epub ahead of print.
- Facilitating Return of Bowel Function After Colorectal Surgery: Alvimopan and Gum Chewing. Keller D, Stein SL. Semin Col Rect Surg, In press.
- Minimally Invasive Laparoscopic Colorectal Surgery. Keller D, Delaney CP. An Evidence-Based Approach to Minimally Invasive Surgery. Eds: Muryama K, Chand B, Mikami D, Nagle A, Kothari S. Wright-Saunders, Philadelphia. In Press.
- The Future is Now: SILS, Robotics, and CLER. Keller D, Obias V, Delaney CP. Complexities in Colorectal Surgery: Decision-Making and Management. Eds: Champagne BJ, Maykel JA, Steele SR. In Press.
- Trunzo JA and Marderstein EL. Bowel Stapling Techniques. Hinman's Atlas of Urologic Surgery, 3rd Edition, Chapter 6. Smith JA, Howards SS, Preminger GM, and McGuire EJ editors. Elsevier, (July 2012).
- SILS Total Abdominal Colectomy and Total Proctocolectomy with Ileoanal Anastomosis. Keller DS, Delaney CP. In "Single-Incision Laparoscopic and Transanal Colorectal Surgery". Authors: Law WL, Delaney CP. Springer Publishing Company, New York, NY.
- Edwards T. Champagne B. Netter's Surgical Anatomy and technical Approaches. "Approaches to Left Colectomy" December 2013.
- Champagne BJ Surg Clin N Amer. Considerations and complications in patients undergoing ileal pouch anal anastomosis. Surg 2013 Feb;93(1):107-43 Review.
- Champagne BJ Operative Techniques in Laparoscopic Colorectal Surgery, 2nd Edition Lippincott Williams and Wilkins, Philadelphia, PA. Editors Delaney et al. "Hand-Assisted Right Colectomy".
- Champagne BJ Clinics in Colorectal Surgery: "Prevention and Management of Deep Vein Thrombosis after Colorectal Surgery" November 2012.
- Scott R. Steele, M.D., FACS, FASCRS, Justin A. Maykel, M.D., FACS, FASCRS, Bradley J. Champagne, M.D., FACS, FASCRS, and Guy R. Orangio, M.D., FACS, FASCRS, Editors. Complexities in Colorectal Surgery: Decision-Making and Management, Springer Business Media 2013.
- Champagne BJ, Macrae H Complexities in Colorectal Surgery: Decision-Making and Management, Springer Business Media. "Teaching and Training for Laparoscopic Colorectal Resection" April 2013.
- Shanmugan S. Champagne BJ Single-Incision Laparoscopic and Trans-anal Colorectal Surgery, "Platforms for Single Incision Colectomy"April 2013.
- Champagne BJ Clinics in Colorectal Surgery, "Effective Teaching Strategies in the OR and Beyond" May 2013.
- Stein SL "Right Colectomy", Netter's Atlas for Surgical Residents. Delaney CP, ed. Elsevier. In Press.
- Stein SL; Section editor, Lower Gastrointestinal Disease. Netter's Atlas for Surgical Residents. Delaney CP, ed. Elsevier. In Press.
- Shanmugan S, Stein SL "Lower Gastrointestinal Bleeding", Current Surgical Therapy. 10th Ed. Cameron AM, Cameron JP eds. Elesevier. In Press.
- Stein SL, Delaney CP "Postoperative Management", American Society of Colon and Rectal Surgery Manual 2nd Ed. Beck D, Wexner S, Hull T, Roberts P, Saclarides T, Stamos M, Steele S, Senagore A, eds. Springer Verlag New York, NY 2013.

JOURNAL ARTICLES AND ABSTRACTS

- Single incision vs. standard multiport laparoscopic colectomy: a multi-center, case-controlled comparison. Champagne BJ, Papaconstinou H, Parmar S, Nagle DA, Young-Fadok TM, Lee EC, Delaney CP. Ann Surg, 2012; 255: 66-9.
- Effect of local anesthetics on postoperative pain and opioid consumption in laparoscopic colorectal surgery. Stuldreher JM, Adamina M, Konopacka A, Brady K, Delaney CP. Surg Endosc, 2012; 26: 1617-23.
- Towards optimizing perioperative colorectal care: outcomes for 1000 consecutive laparoscopic colorectal procedures using enhanced recovery pathways. Delaney CP, Brady K, Woconish D, Parmar SP, Champagne BJ. Am J Surg, 2012; 203: 353-6.
- Laparoscopic versus open surgery for colon cancer in an older population. Cummings LC, Delaney CP, Cooper GS. World J Surg Oncol, 2012; 10(1): 31.
- Evaluation of Clinical Outcomes with Alvimopan in Clinical Practice: a National Matched Cohort Study in Patients Undergoing Bowel Resection. Delaney CP, Craver C, Maggard Gibbons, M, Rachfal AW, VandePol CJ, Cook SF, Poston S, Calloway M, Techner L. Ann Surg, 2012; 255: 731-8.
- Identification of consensus-based quality endpoints for colorectal surgery. Manwaring ML, Ko CY, Fleshman JW, Beck DE, Schoetz DJ, Temple LK, Morris AM, Delaney CP. Dis Colon Rectum, 2012; 55: 294-301.
- Canadian Association of General Surgeons, the American College of Surgeons, the Canadian Society of Colorectal Surgery and the American Society of Colorectal Surgeons evidence based reviews in surgery – colorectal surgery. Morris AM, Delaney CP, Pahlman LA, Phang PT. Dis Colon Rectum, 2012; 55: 1096-8.
- Laparoscopic complete mesocolic excision for right colon cancer. Adamina M, Manwaring ML, Park KJ, Delaney CP. Surg Endosc, 2012; 26: 2976-80.
- Surgical quality surrogates do not predict colon cancer survival in the setting of technical credentialing: A report from the prospective COST trial. Mathis KL, Green EM, Sargent D, Delaney CP, Simmang CL, Nelson H. Ann Surg, 2013; 257(1): 102-7.
- Pricing of surgery for colon cancer: patient severity and market factors. Dor A, Koroukian SM, Fang X, Stulberg JJ, Delaney CP, Cooper G. Cancer, 2012; 118(23): 5741-8.
- System-based factors impacting intraoperative decision-making in rectal cancer by surgeons. An international assessment. Augestad K, Lindsetmo RO, Stulberg J, Reynolds H, Champagne B, Senagore AJ, Delaney CP. Colorectal Disease, 2012; 14(10): 679-88.
- Laparoscopic low anterior resection in a patient with Lynch syndrome and a previous open right colectomy. Keller DS, Lawrence JK, Delaney CP. Dis Colon Rectum, 2013; 56: 263.
- Laparoscopic guided transversus abdominis plane block for colorectal surgery. Favuzza J, Delaney CP. Dis Colon Rectum, 2013; 56: 389-91.

- Construct validation of a novel postoperative quality of life metric. McGee MF, Cheruvu VK, Debanne S, O'Brien B, Laughinghouse M, Champagne BJ, Reynolds H, Marderstein E, Delaney CP. Surgery, In press.
- Transversus abdominus plane blocks and enhanced recovery pathways: Making 23 hour stay a realistic goal after laparoscopic colorectal surgery. Favuzza J, Brady K, Delaney CP. Surg Endosc, 2013; Jan 26.
- Safety and effectiveness of an endoscopic suturing device in a human colonic treat-and-resect model. Pauli EM, Delaney CP, Champagne B, Stein S, Marks JM. Surg Innov, 2103 Feb 26. Epub ahead of print.
- Extraction site location and incisional hernias after laparoscopic colorectal surgery: should we be avoiding the midline? Samia H, Lawrence J, Nobel T, Stein S, Champagne BJ, Delaney CP. Am J Surg, 2013; Jan epub.
- A comparison of virtual reality and augmented reality simulators for laparoscopic colorectal skills acquisition. Leblanc F, Ellis CN, Senagore A, Champagne BJ, Delaney CP. Surg Endosc, submitted.
- Evaluating the Effects of Patient Demographics on Length of Stay in Colorectal Surgery Patients. Stein SL, Rose J, Champagne BJ, Reynolds H, Marderstein E, Delaney CP. Dis Colon Rectum, submitted.
- Laparoscopic sigmoid colectomy on a virtual reality simulator: validation of metrics. Leblanc F, Champagne BJ, Augestad KM, Zeinali F, Ellis CN, Gross AJ, Senagore AJ, Lynch M, Delaney CP. J Surg Education, submitted.
- Laparoscopic colectomy in the obese, morbidly obese, and super obese: when does weight matter? Zafar N, Franklin M, Champagne B, Delaney CP, Russek K, Sherwell S. Dis Colon Rectum, submitted.
- Laparoscopic proctectomy in rectal cancer: Oncologic considerations. Lawrence J, Delaney CP. Surg Lap Endosc Perc Tech, submitted.
- An objective Stepwise Assessment Tool of Operative Skills (SATOS) for evaluating junior surgical trainees in abdominal wall opening and closure. Kelly KB, Zeinali F, Schomisch S, Samia H, Khan S, Ponsky J, Delaney CP. Dis Colon Rect, submitted.
- Integration of open and laparoscopic approaches for rectal cancer resection: oncologic and short term outcome. Park KJ, Keller D, Augestad K, Delaney CP. Surgery, submitted.
- Tailored rectal cancer treatment – a time for implementing contemporary prognostic factors? Wibe A, Law WL, Delaney CP. Colorectal Disease, submitted.
- Laparoscopic colectomy in the obese, morbidly obese, and super morbidly obese: When does weight matter? Zafar N, Franklin M, Delaney CP, Russek K, Herwell S, Champagne B. Surg Endosc, submitted.
- Bioabsorbable Staple Line Reinforced in Colorectal Anastomoses: Analysis of a Prospective Randomized Study. Anthony Senagore, MD1; Frederick R. Lane, MD; Edward Lee, MD; Steven Wexner, MD; Nadav Dujovny, MD; Bradford Sklow, MD; Paul Rider, MD; Julius Bonello, MD, and the members of CBSG Study Group. Dis Colon Rectum, submitted.
- The new surgery – better surgery at lower cost. Griffin RB, Hashemi L, Delaney CP, Fendrick M. Health Affairs, submitted.
- Consensus statement on the multi-disciplinary management of patients with primary rectal cancer beyond total rectal excision planes and recurrent rectal cancer. Bhangu A, Beynon J, Brown G, Chang G, Das P, Frizelle F, and the Beyond TME Collaborative. In development.
- Outcome of discharge after elective laparoscopic colorectal surgery with transversus abdominis plane block. Favuzza J, Delaney CP. JACS, Submitted.
- Comparative effectiveness of laparoscopic vs robot-assisted colorectal resection. Keller D, Senagore, AJ, Lawrence JK, Hashemi L, Champagne BJ, Delaney CP. Surg Endosc. Submitted.
- Laparoscopic Low Anterior Resection with En-bloc Small Bowel Resection and a Difficult Splenic Flexure. Keller D, Lawrence JK, Delaney CP. Surg Endosc. Submitted.
- Pilot Study Evaluating the Efficacy of AlloMEM™ in Prevention of Intraperitoneal Adhesions and Peritoneal Regeneration after Loop Ileostomy. Keller D, Champagne BJ, Stein SL, Ermlich, B, Delaney CP. Surg Endosc. Submitted.
- Construct Validation and Comparison of a Novel Colorectal Postoperative Quality of Life Metric and the Short Form 36 in Colorectal Surgery Patients. Keller D, McGee MF, Cheruvu VK, Goyal S, Nobel T, Ermlich B, Delaney CP. Surgery. Submitted.
- Evaluation of Inflammatory Markers as Predictors of Hospital Stay and Unplanned Readmission after Colorectal Surgery, Krpata DM, Keller D, Samia H, Lawrence JK, Obokhare I, Marderstein EM, Delaney CP. Polish J Surg, Accepted.
- Statistical Process Control in Surgery: Using Industrial Methodology to Evaluate Resource Utilization for Peri-operative Colorectal Care. Keller D, Stulberg JJ, Lawrence JK, Samia H, Rose J, Jung B, Brady K, Delaney CP. J Am Coll Surg. For submission.

- Optimizing Cost and Outcomes for Elderly Patients in Colorectal Surgery. Keller D, Lawrence JK, Hall G. Nobel T, Delaney CP. Surg Endosc. For submission.
- Process Improvement In Colorectal Surgery: Modifications To An Established Enhanced Recovery Protocol. Keller D, Lawrence JK, Nobel T, Delaney CP. Dis Colon Rectum. For submission.
- Cost-Effectiveness Of Laparoscopy In Rectal Cancer. Keller D, Stein SL, Delaney CP. Dis Colon Rectum. For submission.
- C-Reactive Protein As A Predictor Of Length Of Stay After Colorectal Surgery. Keller D, Bankwitz B, Krpata DM, Lawrence JK, Brady KM, Delaney CP, Dis Colon Rectum. For submission.
- Using The Frailty Score To Predict Failure Of Early Discharge After Laparoscopic Colorectal Surgery With An Enhanced Recovery Pathway. Keller D, Bankwitz B, Nobel T, Delaney CP. Dis Colon Rectum. For submission.
- Application Of A Novel Postoperative Quality Of Life Metric In Rectal Cancer. Dis Colon Rectum. For submission.
- Process Improvement in Colorectal Surgery: Evaluating Changes to an Enhanced Recovery Protocol. Keller D, Lawrence JK, Favuzza J, Delaney CP. Dis Colon Rectum. For submission.
- Application Of A Novel Postoperative Quality Of Life Metric In Rectal Cancer. Keller D, Nobel T, Ermlich BO, Delaney CP. Dis Colon Rectum. For submission.
- Predicting The Unpredictable: Comparing Readmitted Versus Non-Readmitted Colorectal Surgery Patients. Keller D, Swendseid B, Stein SL, Champagne BJ, Reynolds HL, Delaney CP. Amer J Surg. For submission.
- Short-term Outcomes for Robotic Colorectal Surgery by Provider Volume. Keller D, Hashemi L, Lu M, Delaney CP. J Am Coll Surg. Submitted.
- Stein S, Stulberg J, Champagne BJ. Learning Laparoscopic Colectomy during Colorectal Residency: What does it take and how are we doing? Surg Endosc, Surg Endosc 2012; 26(2): 488-92, PMID 21938581.
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- Champagne BJ, Stein S, Haridas M, Favuzza J, Hoffman L, Steele S, Johnson E; Novel Operating Anoscope for Ferguson Hemorrhoidectomy: A Feasibility Study and Comparative Cohort Analysis. Colorectal Dis, Submitted.
- Trunzo JA, Stein SL, LeBlanc F, Augestad K, Champagne BJ. An Intraoperative Algorithm for Conversion of Straight Laparoscopic Colectomy to Hand Assisted Colectomy: The Best of Both Worlds. Dis Colon Rect, Submitted.
- Krpata DM, Stein SL, Eston M, Blatnik JA, Novitsky YW, Rosen MJ. Outcomes of simultaneous large complex abdominal wall reconstruction and enterocutaneous fistula takedown. Am J Surg, submitted.
- Ensuring a Valid and Reliable Bank of Multiple Choice Questions (MCQs). Shazia Sadaf, Sadaf Khan and Syeda Kauser Ali. Accepted to Education for Health.

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- Russ AJ, Cho CS. Review of Tumor Induced Immune Suppression. (manuscript in preparation).
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- Champagne BJ. Papconstaniou H. Nagle D. Lee E. Young Faddok T. Delaney CP. Single-incision vs. Standard Multi-port Laparoscopic Colectomy: A Multicenter Case-Controlled Comparison Annals of Surgery Jan 2012.
- Delaney CP, Champagne BJ. Towards Optimizing Perioperative Colorectal Care: Outcomes For 1000 Consecutive Laparoscopic Colon Procedures Using Enhanced Recovery Pathways. American Journal of Surgery March 2012.
- Steele SR, Stein SL, Johnson E, Herzig D, Champagne BJ. The impact of practice environment on laparoscopic colectomy utilization following colorectal residency: A survey of the ASCRS young surgeons. Colorectal Disease March 2012.
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- Augestad KM, Lindsetmo RO, Champagne B, Senagore AJ, Delaney CP. System-based factors influencing intraoperative decision-making in rectal cancer by surgeons. Colorectal Disease 2012 Oct; 14(10) 679-688.
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- Johnson EK, Champagne BJ. Diverticular Disease and the obese patient. Clin Colon Rectal Surg 2012. Dec 24(4): 253-258.
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- Pauli EM, Delaney CP, Champagne B, Stein S, Marks JM. Safety and Effectiveness of an Endoscopic Suturing Device in a Human Colonic Treat-and-Resect Model. Surg Innov. 2013 Feb.
- Causey M, Champagne BJ, Steele SR. et al. The Impact of MELD-Na in Predicting Morbidity and Mortality Following Elective Colon Cancer Surgery Irrespective of Underlying Liver Disease. Gastroenterology Report March 2013.

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- Champagne BJ, Trunzo J, Reynolds HR, Stein SL. "An intra-operative algorithm for conversion of straight laparsocopic colectomy to hand assisted colectomy: the best of both worlds." Submitted. American Journal of Surgery April 2013.
- Champagne, B Stein, SL Haridas, M Ermlich, B Hoffman, L Steele, S Johnson, E. Novel Operative Anoscope for Ferguson Hemorrhoidectomy: A Feasibility Study and Comparative Cohort Analysis. Submitted American Journal of Surgery April 2013.
- Manwaring M. Lee E, Makhija R. Delaney CP. Stein SL. Reynolds H. Valerian B, Champagne B. "Modified Hanley with Cutting Setons for DPAS Fistulous-Abscess: Back to the Basics" Submitted Dis Colon Rectum May 2013.
- Champagne BJ, Leblanc F, Delaney CP. "Lap Mentor Laparoscopic Sigmoid Model: What metrics have construct validity" Submitted DCR April 2012.
- Keller D. Senagore T. Champagne BJ. Delaney CP. Comparative Effectiveness of Laparoscopic Vs. Robot-Assisted Colorectal Resection. Submitted Surgical Endoscopy March 2013.
- Causey M, Nelson D, Champagne BJ, Steele SR An NSQIP evaluation of practice patterns and outcomes following surgery for anorectal abscess and fistula in patients with and without Crohn's disease. Submitted to Amer J of Surgery April 2013.
- Hatch Q, Johnson EK, Davis B, Maykel JA, Champagne BJ, Bleier J, Francone T, Steele SR. Crohn's Disease and Pregnancy: The Impact of Perianal Disease on Delivery Methods and Complications. Submitted (DC&R) March 2013.
- Nelson D, Rivadeneiera DE, Ross H, Davis B, Champagne B, Johnson EJ, Maykel JA, Steele SR. Antibiotic Prophylaxis in Hemorrhoid Surgery—A Multicenter Experience. Submitted DCR May 2013.

VIDEOS/ MULTIMEDIA

- Crawshaw, BP, Lipman, JM. "Laparoscopic Small Bowel Resection", multimedia module for the American Board of Surgery SCORE curriculum. Accepted.
- Laparoscopic Low Anterior Resection in a Patient with Lynch Syndrome and Previous Right Hemi-Colectomy. Keller D, Lawrence JK, Delaney CP. Dis Colon Rectum. 2013 Feb;56(2):263.
- Laparoscopic Low Anterior Resection with En-bloc Small Bowel Resection and a Difficult Splenic Flexure. Keller D, Lawrence JK, Delaney CP. SAGES Annual Meeting 2013.
- Laparoscopic Cylindrical Abdominoperinal Resection in High Lithotomy Position. Keller D, Lawrence JK, Delaney CP. American Society of Colon and Rectal Surgeons Annual Meeting, Phoenix 2013.

INVITED LECTURES/GRAND ROUNDS/COURSES

Conor Delaney, MD, MCh, PhD

Grand Rounds

- "Laparoscopic colorectal surgery: optimizing perioperative care" Department of Surgery, Ferguson Clinic, Spectrum Health Care, Grand Rapids, MI, Feb 2012.
- "Operational Efficiency in Colectomy from an Institutional Perspective" Department of Surgery, University of South California, Los Angeles, CA, Feb 2012.
- "Laparoscopic colorectal surgery: optimizing perioperative care". Department of Surgery, University of Arkansas, AR, Jan 2013.

Lectures

- "Laparoscopic rectal cancer surgery: Where are we now?" Southern California Colorectal Society, LA, Feb 2012.
- "Colorectal resection: Can we bring surgical care up to industrial standards?" MSQC, Detroit, April 2012.
- "Laparoscopic Total Mesorectal Excision and rectal transection"
- "Surgery Case Logs"

- "Extended submucosal resection"
- "Measuring and improving the quality of surgical outcomes in colorectal surgery: what needs to be done to measure?"
- "Cost containment measures and quality initiatives: In the hospital"ASCRS, San Antonio, TX, 2012.
- "Surgery in complicated Crohn's disease"
- "Managing anastomotic leak"
- "Managing complications of ileal pouch-anal anastomosis"
- "Abdomino-perineal resection, a failing operation?"
- "Defining indications for surgery for diverticulitis, and managing intraoperative complexity" 1st International Congress of Coloproctology, by the Mexican College of Coloproctology and Mexican Society of Colorectal surgeons, Los Cabos, Mexico, July 2012.
- "Fast-track and laparoscopy: the road to outpatient surgery"
- "The case for straight laparoscopy"
- "APR: cylindrical, conventional, prone, supine"
- "Laparoscopic TME – How I do it" 14th International Colorectal Surgery Course, Buenos Aires, Argentina, 2012.
- "Single-port colectomy"
- "Polypectomy." Advanced Colonoscopy; Polypectomy and Beyond Course, ACS, Oct 2012.
- "Situation in the U.S. after the COST trial"
- "Advances in Management of Post-operative Ileus"
- "New advances in rectal transection"
- "Advanced SILS procedures: IBD and rectal surgery"
- "Laparoscopic Single Port ileosigmoid fistula" 7th International Society of Laparoscopic Colorectal Surgery, Hong Kong, Nov 2012.
- "CPT coding for the new surgeon: Hands-on session" Colorectal Residents 3rd Annual Career Course, Nov 2012.
- "What's new in anal fistula surgery?"
- "Robotic colorectal surgery: why do it and why not?" Kaiser Permanente National Meeting, San Francisco, April 2013.
- "NOTES in Colorectal Surgery" Evidence Based Therapy in Colorectal Surgery, SSAT, May 2013.
- "Dealing with difficult situations in Colorectal Surgery" Michigan Chapter ACS, May 2013.
- "Complex inflammatory fistula – staying laparoscopic" Nuts and Bolts Symposium ASCRS, Phoenix, AZ, 2013.

Brad Champagne, MD

Course Faculty

- Case Medical Center Laparoscopic Colectomy Course: 2012-2013 (8 sessions), Course Director.
- ASCRS Meeting 2013: Annual Laparoscopic Colectomy Course (Lectures and Lab) Phoenix, Arizona, Course Chairman.
- 3rd Annual Colorectal Residents Career Course, Cleveland , Ohio 2012, Course Director.
- SAGES Meeting 2012: SILS/TAMIS Instructional Course. San Diego, California, Faculty.
- ASCRS Meeting 2012: Laparoscopic Colectomy Course and Cadaver Workshop. San Antonio, Texas 2012, Faculty.
- National Meeting of Peruvian Society of Colorectal Surgery. Lima, Peru October 2012. Live surgery and Lectures, Course Director.

Grand Rounds

- "The Future of Surgical Education," Madigan Army Hospital, Grand Rounds, June 2012.
- "Modern Management of Ano-rectal Disease," University Hospitals Case Medical Center Surgery Grand Rounds, January 2013.

Conferences

- SAGES National Meeting. SanDiego, CA 2012. Laparoscopic Colorectal Course. "Straight Laparoscopic IMA and Splenic Flexure Dissection".

- SAGES National Meeting. SanDiego, CA 2012. Pitfalls in Surgery. "Ureter Injury and Splenic Bleeding during Laparoscopic Colorectal Resection".
- SAGES National Meeting. SanDiego, CA 2012. SILS Post-Graduate Course. "Equipment and Instruments for SILS and TAMIS".
- ASCRS National Meeting. San Antonio, Texas, 2012. "Laparoscopic Colectomy for Complicated Diverticulitis".
- ASCRS National Meeting. San Antonio, Texas, 2012. "The many uses of mesh." Session Moderator.
- ACS, Chicago, Illinois 2012. " Single Incision Laparoscopic Colectomy".
- ACS, Chicago, Illinois, 2012. "Complications in Colorectal Surgery".
- International Congress of Peruvian Society of Colorectal Surgery: "Laparoscopic Approaches for Rectal Cancer". Lima, Peru, October, 2012.
- International Congress of Peruvian Society of Colorectal Surgery: "Why Laparoscopic Colon Surgery?". Lima, Peru October, 2012.
- International Congress of Peruvian Society of Colorectal Surgery: "The future of minimially invasive colon surgery. Single incision and combined laparoendoscopic techniques". Lima, Peru October, 2012.
- International Congress of Peruvian Society of Colorectal Surgery: "Modern Management of Laparoscopic Surgery". Lima, Peru October, 2012.
- ASCRS 2013 Meeting. "Utilization of Energy in the Endoscopy Suite: How, when and shy?" Phoenix, Arizona.
- Annual Argentinian Colorectal Meeting. School of Medicine of the Universidad Nacional del Nordeste. "Laparoscopic Approaches to Rectal Cancer" Corrientes, Argentina, September, 2013.
- American College of Surgeons 2013 Annual Congress: Anastomotic Leak, Prevention and Management: Washington, DC 2013.
- "Simulation for Laparoscopic Sigmoid Colectomy: What metrics have construct validity" Champagne BJ et al. Podium Presentation. ASCRS 2013. Phoenix, Arizona.
- "Laparoscopic Rectopexy without resection: Mesh or No-Mesh" Shanmugan S, Champagne BJ et al. Poster Presentation. ASCRS 2013. Phoenix, Arizona.
- "Pilot Study Evaluating the Efficacy of AlloMEM™ in Prevention of Intraperitoneal Adhesions and Peritoneal Regeneration after Loop Ileostomy". Keller D, Champagne BJ, Stein SL, Ermlich, B, Delaney CP. SAGES Annual Meeting 2013. Accepted, Poster Presentation.
- "Predicting Who Will Fail Early Discharge After Laparoscopic Colorectal Surgery with an Established Recovery Pathway". Keller D, Lawrence JK, Woconosh D, Nobel T, Stein SL, Reynolds HL, Champagne BJ, Delaney CP. SAGES Annual Meeting 2013. Accepted, Oral Presentation.
- "Cost Effectiveness of Laparoscopic Rectal Resection". Keller D, Champagne BJ, Stein SL, Reynolds HL, Delaney CP. ASCRS Annual Meeting 2013, Accepted, Poster Presentation.
- "Predicting The Unpredictable: Comparing Readmitted Versus Non-Readmitted Colorectal Surgery Patients". Keller D, Swendseid B, Stein SL, Champagne BJ, Reynolds HL, Delaney CP. The Midwest Surgical Association 2013 Annual Conference.
- "Crohn's Disease and Pregnancy: The Impact of Perianal Disease on Delivery Methods and Complications". Poster Presentation at the 2013 ASCRS Meeting, Phoenix, Miller, Maykel Jm Champagne BJ, Steele SR.
- Antibiotic Prophylaxis in Hemorrhoid Surgery—A Multicenter Experience. Poster Presentation at the 2013 ASCRS Meeting, Phoenix, AZ, April 2013.Steele SR, Champagne BJ.

Sharon Stein, MD

- SL Stein, 2012 Outcomes of Laparoscopic Colorectal Cancer, Ohio State University/Case Western Reserve University Advances in Minimally Invasive Surgery, Marco Island, FL.
- SL Stein, 2012 Laparoscopy for Benign Disease, Ohio State University/Case Western Reserve University Advances in Minimally Invasive Surgery, Marco Island, FL.
- SL Stein, 2012 Surgery in the Humanitarian Arena, Case AMSA Global Health, Cleveland, OH.
- SL Stein, 2012 Surgery in Crohn's Disease. Meet the Experts Northeastern Ohio Educational Program Crohn's and Colitis Foundation of America.

- SL Stein, 2012 Hemorrhoids: When to Cut and When to Staple, Harvard Medical School/MGH Postgraduate Course in General Surgery "Advances in Colorectal Surgery-Benign Disorders," Boston, MA.
- SL Stein, 2012 Does Saving Small Bowel Length in Patients with Crohn's Disease Increase Surgical Complications? Strictureplasty: Tips and Tricks, Harvard Medical School/MGH Postgraduate Course in General Surgery "Advances in Colorectal Surgery-Benign Disorders," Boston, MA.
- SL Stein, 2012 Fecal Incontinence; Gastroenterology Series Grand Rounds, Fairview Hospital, Cleveland Clinic Foundation, Westlake, OH.
- SL Stein, 2012 Laparoscopic Treatment of Small Bowel Obstruction, Laparoscopic Nuts and Bolts, American Society of Colorectal Surgeons Annual Convention, San Antonio, TX.
- SL Stein, 2012 Fecal Incontinence: Diagnosis, Evaluation and Management. Gastroenterology Department, University Hospitals, Case Medical Center, Cleveland, OH.
- SL Stein, 2012 CBS Health Watch: Colon Cancer Prevention and Treatment Webinar, Los Angeles, CA.
- SL Stein, 2012 Laparoscopic Colorectal Surgery, SAGES Advanced Resident Course, Cleveland, OH.
- SL Stein, 2012 Surgical Update Course, Updates on Colorectal Surgery, Cleveland, OH.
- SL Stein, 2012 Laparoscopic Treatment of Small Bowel Obstruction, IX Congreso International de Cirugia Endoscopica, Lima, Peru.
- SL Stein, 2012 Patient Selection and Learning Curve, IX Congreso International de Cirugia Endoscopica, Laparoscopic Colorectal Surgery Course, Lima, Peru.
- SL Stein, 2012 Right Colectomy: Step by Step, IX Congreso International de Cirugia Endoscopica, Laparoscopic Colorectal Surgery Course, Lima, Peru.
- SL Stein, 2012 Rectal Cancer: Patient Selection and Set up, IX Congreso International de Cirugia Endoscopica, Laparoscopic Colorectal Surgery Course, Lima, Peru.
- SL Stein, 2012 Managing Laparoscopic Complications, IX Congreso International de Cirugia Endoscopica, Laparoscopic Colorectal Surgery Course, Lima, Peru.
- SL Stein, 2012 Why Laparoscopic Colorectal Surgery, IX Congreso International de Cirugia Endoscopica, Lima, Peru.
- SL Stein, 2012 Laparoscopic Treatment of Rectal Prolapse, IX Congreso International de Cirugia Endoscopica, Lima, Peru.
- SL Stein, 2013 New Technologies in Colorectal Surgery, Ohio State University/Case Western Reserve University Advances in Minimally Invasive Surgery, Naples, FL.
- SL Stein, 2013 Laparoscopic Colorectal Surgery, Ohio State University/Case Western Reserve University Advances in Minimally Invasive Surgery, Naples, FL.
- SL Stein, 2013 Complications, SAGES Colorectal Course, Baltimore, MD.
- SL Stein, 2013 Crohn's disease, American Society of Colorectal Surgeons Annual Convention, Colorectal Course, Phoenix, Arizona.
- SL Stein, 2013 Ahuja Grand Rounds, Beachwood, OH.
- SL Stein, 2013 Surgical Management of Colitis: Surgical Resident Forum, University Hospitals Case Medical Center.
- SL Stein, 2013 Stapled Hemorrhoidectomy, Harvard Medical School/MGH: Technical Tips and Tricks in Colorectal Surgery: 7th Annual Update for the Practicing Surgeon Boston, MA.
- SL Stein, 2013 How to Recognize and Drain an Intersphincteric Abscess, Harvard Medical School/MGH: Technical Tips and Tricks in Colorectal Surgery: 7th Annual Update for the Practicing Surgeon Boston, MA.
- SL Stein, 2013 APPEAR Technique for Very Low Lying Rectal Tumors: Is it Worth the Risk? Harvard Medical School/MGH: Technical Tips and Tricks in Colorectal Surgery: 7th Annual Update for the Practicing Surgeon Boston, MA.
- SL Stein, 2013 Perineal Approaches to Rectal Prolapse, Harvard Medical School/MGH: Technical Tips and Tricks in Colorectal Surgery: 7th Annual Update for the Practicing Surgeon Boston, MA.

Division Chief

Michael J. Rosen, MD

Faculty/Staff

Heidi Elliott, MD
Leena Khaitan, MD, MPH
Jeffrey M. Marks, MD
Yuri Novitsky, MD
Raymond P. Onders, MD
Jeffrey L. Ponsky, MD

Regional Faculty

Vladimir Dubchuk, MD
Seth Eisengart, MD
Amitabh Goel, MD
Cathy Graham, MD
John Jasper, MD
Lisa Rock, MD
Juan Sanabria, MD

Chapter 7

DIVISION OF GENERAL AND GASTROINTESTINAL SURGERY

Left to right:
Michael Rosen, MD;
Jeffrey Marks, MD;
Heidi Elliott, MD;
Jeffrey Ponsky, MD;
Yuri Novitsky, MD

Not pictured: Leena Khaitan, MD;
Juan Sanabria, 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 Ponsky and Dr. Jeffrey Marks are internationally recognized pioneers in a novel transoral approach to performing a Heller myotomy entirely endoscopically, termed P.O.E.M.: Per Oral Endoscopic Myotomy. This revolutionary new approach to Achalasia has eliminated surgical incisions and dramatically improved patients recovery with almost no discomfort. Dr. Ponsky and Dr. Marks have amassed one of the largest series of P.O.E.M.'s in the nation. They have also been recognized as leaders in the field of education as they have given multiple courses to teach surgeons from around the world this innovative approach. Dr. Yuri Novitsky has recently joined the bariatric surgery team, and has spearheaded the laparoscopic gastric sleeve program. Dr. Novitsky also is the Director of Surgical Research for the Department of Surgery and holds several important grants, with funding from the National Institutes of Health and SAGES.

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. His team has also begun implanting these devices in children with spinal cord injuries and has successfully maintained them off the ventilator. Dr. Onders has received countless accolades for his efforts and is recognized as the leading international expert in this field. He has trained surgeons across four continents to perform this life-altering procedure.

The Case Comprehensive Hernia Center 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. Under the direction of Dr. Michael Rosen, our Center is participating in several ground breaking multi-center

studies to evaluate the most cost effective methods for dealing with contaminated abdominal wall defects. Dr. Rosen is the Principal Investigator of a FDA-monitored, IDE study that is a prospective randomized single blinded study evaluating biologic versus synthetic mesh for the repair of contaminated abdominal wall defects. Dr. Rosen received a prestigious American Hernia Society grant for this work.

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. Working closely with Dr. Yuri Novitsky, the Center now offers a full spectrum of care. Under the direction of Dr. Leena Khaitan, the program has successfully expanded to two campuses so that bariatric surgery is now offered at two sites. University Hospitals is the only health system in the region with two Centers achieving bariatric accreditation.

Dr. Khaitan also functions as the Director of the Center for Esophageal and Swallowing Disorders. Dr. John Dumot, from the Department of Gastroenterology, is the Co-Director of the Center. 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 directors work together to implement strategies for expeditious multidisciplinary evaluation of benign and malignant esophageal diseases. The Center will provide state-of-the-art treatments for these challenging disorders.

Under the leadership of Dr. Heidi Elliott as the new Director of Acute Care Surgery, UHCMC has addressed the increasing need for inpatient surgical care. The Acute Care Surgery Service has recently been developed to provide rapid access to surgical consultation. Dr. Elliott has spearheaded this effort and has successfully implemented strategies for all surgical consults to be seen within one hour, and improved throughput to the operating room for those in need of urgent surgical exploration. In addition, a special clinic has been developed to provide outpatient surgical follow up for many patients triaged through the growing emergency department. We have seen significant growth of this service after opening the new emergency department at UHCMC, and look forward to the continuing expansion of this important opportunity.

Recognizing the growing number of complex patients being referred to the Department of Surgery at UHCMC, Dr. Michael Rosen and Dr. Sharon Stein, from the Division of Colorectal Surgery, have collaborated to create the Case Acute Intestinal Failure Unit. This Unit is the first of its kind in the United States. It consists of a multi-disciplinary team that involves GI surgeons, reconstructive surgeons, enterostomal nurses, nutritionists, and critical care specialists. This team is specifically designed to address those patients with acute intestinal failure from abdominal catastrophes, gastrointestinal fistulas, complex inflammatory bowel disease, and major abdominal reconstructions. Since its introduction, this Unit has already received national and international referrals, and looks to be a major area of growth for our Department of Surgery.

With the incorporation of University Hospitals Practice Groups, the groundwork has been laid for true system-wide patient care. 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 may be examined. As the new hospital systems of UH Ahuja Medical Center and the UH Seidman Cancer Center are introduced, we look forward to the exciting role that the Division of General and Gastrointestinal Surgery will play to further the care of those patients.

Dr. Jeffrey Marks has assumed the role of Program Director of our residency program from Dr. Julian Kim, who was in that position since 2007. Dr. Marks is a Professor of Surgery and directs the surgical endoscopy program and fellowship at UHCMC. Dr. Marks is nationally renowned for his contributions to surgical education and is one of the founders of the Fundamentals of Endoscopic Surgery.

STAFF/FACULTY

Jeffrey L. Ponsky, MD

In 2005, Dr. Ponsky became the Oliver H. Payne Professor and Chairman, Department of Surgery at Case Western Reserve University (CWRU). Prior to this appointment, Dr. Ponsky held the position of Professor of Surgery at the Cleveland Clinic Lerner College of Medicine and Director of Graduate Medical Education at the Cleveland Clinic Foundation. Dr. Ponsky is a graduate of CWRU School of Medicine (1971) and completed his surgical internship and residency at CWRU Integrated Surgical Residency Program (1971-1976). In 1990, he received his MBA from CWRU Weatherhead School of Management. Dr. Ponsky has served as a Director of the American Board of Surgery (ABS) and is past Chairman of the ABS. He has served as President of the following organizations: the American Society for Gastrointestinal Endoscopy (1996-1997); the Ohio Chapter of the American College of Surgeons (1994-1995); the Society of American Gastrointestinal Endoscopic Surgeons (1990-1992); Northeastern Ohio Society for Gastrointestinal Endoscopy (1982-1987); and the Cleveland Surgical Society (1990-1991). Dr. Ponsky has received numerous awards including the prestigious Rudolf Schindler Award presented by the American Society for Gastrointestinal Endoscopy (2002). He has published over 230 manuscripts, book chapters and books. Dr. Ponsky's area of expertise is in surgical endoscopy and minimally invasive surgery. The Jeffrey Ponsky Chair in Surgical Education was established at Case School of Medicine in 2008.

In the Fall of 2012, Dr. Ponsky was appointed to the newly created role of Associate Dean of Alumni Affairs for the Case Western Reserve University School of Medicine. As an alumnus of the School of Medicine, Dr. Ponsky will serve to strengthen relationships with fellow alumni, capitalize on alumni momentum, and engage Case's global alumni network as advocates and partners, all of which are critical to the School's future success. This new post acknowledges and will broaden Dr. Ponsky's already active role forging connections with alumni and donors.

Michael J. Rosen, MD

Dr. Rosen joined the Department after completion of a Fellowship in Minimally Invasive Surgery at Carolinas Laparoscopic and Advanced Surgery Program, Carolinas Medical Center, Charlotte, North Carolina (2004-2005). Dr. Rosen received his medical degree from University of Southern California (1993-1997) and his surgical residency training at the Massachusetts General Hospital, Harvard Medical School (1997-2004). He completed a Research Fellowship in Minimally Invasive Surgery at the Cleveland Clinic (2000-2002) during his surgical residency. Dr. Rosen has been prolific with the publication of over 150 manuscripts and book chapters. Dr. Rosen has recently completed his third surgical textbook, and recently published the Atlas of Abdominal Wall Reconstruction. He has given multiple presentations in his area of expertise, which is advanced laparoscopy and complex abdominal reconstruction. Dr. Rosen has been a perennial recipient of the Department of Surgery Best Teacher Award. In 2009, Dr. Rosen received the SAGES Young Investigator Award. He has received multiple grants for his work in abdominal wall reconstruction and recently was awarded an NIH grant as a Co-Investigator for his work in developing an antibiotic impregnated prosthetic mesh. Dr. Rosen has recently been promoted to Professor of Surgery.

Raymond P. Onders, MD

Dr. Onders joined the Division and the Department of Surgery as an Assistant Professor of Surgery in 1997 after completing his commitment to the U.S. Air Force. Dr. Onders received his medical degree in 1988 from Northeastern Ohio Universities College of Medicine. He completed his surgical residency training at CWRU Integrated Surgical Residency Program (1988-1993). Dr. Onders achieved expertise in advanced laparoscopy during his military assignments at Grand Forks Air Force Base, North Dakota and North Dakota School of Medicine (1993-1996) and Wright-Patterson Air Force Base, Ohio and Wright State University School of Medicine (1996-1997). He was promoted to Associate Professor of Surgery at CWRU in June 2004. Dr. Onders was President of the Cleveland Surgical Society (2005-2006). He has received numerous awards for his work in diaphragm pacing, holds multiple U.S. patents for this technology

and has received several privately funded grants for this work. He has published over 40 manuscripts and book chapters. Dr. Onders has been a frequent recipient of Cleveland Magazine's Best Doctor recognition.

Jeffrey M. Marks, MD

Dr. Marks joined the Department of Surgery in 2006 and was promoted to the rank of Associate Professor in 2007. He received his medical degree from Tufts University School of Medicine (1987) and completed his surgical residency training at the Mt. Sinai Medical Center in Cleveland (1987-1992). Following residency training, he undertook a Fellowship in Surgical Endoscopy at the same institution (7/1992-12/1992). Dr. Marks was previously president of the Cleveland Surgical Society (2004-2005). He has been recognized for his teaching efforts. He serves on the editorial boards of Surgical Endoscopy (2002 - present), Laparoendoscopic and Advanced Surgical Techniques (2004-present) and Surgical Innovations (2005-present). Dr. Marks is actively involved in the teaching of surgical endoscopy, his area of expertise.

Leena Khaitan, MD, MPH

Dr. Khaitan joined the Department of Surgery in 2007 as an Associate Professor. Previously, she was Assistant Professor of Surgery at Emory University and Director of the GI Physiology Laboratory at Emory University Hospital. She completed a two-year fellowship in Minimally Invasive Surgery, as well as receiving her Masters in Public Health at Vanderbilt University Medical Center (2000-2002). In 2006, Dr. Khaitan was awarded the Young Investigator's Award by SAGES. Her area of interest and expertise is in esophageal swallowing disorders, minimally invasive surgery and bariatric surgery. Dr. Khaitan is now a Board member of SAGES. Dr. Khaitan presented a poster on esophageal disorders at SAGES this year and is active in research regarding weight loss surgery and swallowing disorders.

Yuri Novitsky, MD

Dr. Novitsky joined the Department of Surgery at University Hospitals Case Medical Center in 2011. He is Co-Director of the Case Comprehensive Hernia Center, and Director of Surgical Research. He is also an Associate Professor of Surgery with Case Western Reserve University. Dr. Novitsky comes to UHCMC from the University of Connecticut Health Center, where he was Chief of Laparoscopic Surgery and the Director of the Connecticut Comprehensive Center for Hernia Repair. Dr. Novitsky has extensive expertise in the repair of groin, ventral, and hiatal hernias. His laboratory work is focused on testing and improving prosthetic and biologic materials used in hernia repair procedures. Dr. Novitsky has authored and co-authored more than 60 scientific papers and book chapters on the topic of prosthetic materials and hernia repair. He has also successfully developed and applied a variety of innovative techniques in both laparoscopic hernia repairs and major abdominal wall reconstructions. Dr. Novitsky was trained in general surgery at the Mount Sinai Medical Center in New York, New York and the University of Massachusetts Medical Center, and then completed his research and clinical fellowships in minimally invasive surgery at the Carolinas Medical Center in Charlotte, North Carolina. Dr. Novitsky recently was awarded a prestigious SAGES grant for his evaluation of genetic therapies for gastroesophageal reflux disease.

Heidi Elliott, MD

Dr. Elliott joined the Department of Surgery in August 2012 as an Assistant Professor. She is currently the Director of Acute Care Surgery at UHCMC, which encompasses all aspects of surgical emergencies. Dr. Elliott received both her medical degree (1999-2003) and residency training (2003-2008) at the University of Connecticut. She continued her training with a fellowship in Minimally Invasive Surgery (MIS) and Bariatric Surgery at Harvard's Brigham and Women's Hospital (2008-2009), and completed a second fellowship in Advanced MIS and Surgical Endoscopy at Dartmouth Hitchcock Medical Center (2009-2010). Dr. Elliott's areas of interest include MIS, anti-reflux surgery, and complex abdominal would care.

REGIONAL FACULTY

Vladimir Dubchuk, MD

Dr. Dubchuk attended Lviv State Medical University and did his general surgery residency at University Hospitals Case Medical Center. His specialties are general surgery including surgical pathology of the gastrointestinal tract, minimally invasive surgery, colorectal surgery, endoscopy, thyroid and parathyroid surgery.

Seth Eisengart, MD
Dr. Eisengart attended medical school at Finch University and did his general surgery residency at Bronx Municipal Hospital Center. His specialties include general surgery and surgery of the hand.

Amitabh Goel, MD
Dr. Goel attended Queen's University Medical School and did his general surgery residency at Western Pennsylvania University. He completed a fellowship at the University of Pittsburgh. Dr. Goel's specialties include general surgery, minimally invasive surgery and critical care.

Cathy Graham, MD
Dr. Graham attended Duke University School of Medicine and did her general surgery residency at UHCMC. Her specialties include general surgery, breast surgery, trauma, gastrointestinal surgery and emergency medicine.

John Jasper, MD
Dr. Jasper received his medical degree in 1996 from the University of Minnesota. He completed his surgical training at CWRU Integrated Surgical Residency Program (1996-2001). Since that time, he has been on the staff at University Hospitals Case Medical Center, the Louis B. Stokes Cleveland VA Medical Center and University Hospitals Regional Institutions. Dr. Jasper's areas of surgical interest include general, bariatric, breast and advanced laparoscopic surgery.

Lisa Rock, MD
Dr. Rock attended medical school at the Medical College of Pennsylvania and completed her general surgery residency at CWRU Integrated Surgical Residency Program. Her specialties include general surgery and vascular surgery.

Juan R. Sanabria, MD
Dr. Sanabria has been a member of the Department of Surgery at UHCMC since 2004. He was recruited from The Medical College of Ohio where he was the Director of Liver and Pancreas Transplantation. Dr. Sanabria is a graduate of the Colegio Mayor de Ntra Sra del Rosario Faculty of Medicine in Bogotá, Colombia (1985). He received his general surgery, hepatobiliary, and transplant training at the University of Toronto where he also received a Master of Science degree. Dr. Sanabria holds the rank of Assistant Professor in the Case Western Reserve University School of Medicine. Dr. Sanabria was the previous Director of Pancreas Transplantation at UHCMC. Dr. Sanabria is a member of the Department of Surgery Acute Surgery Service.

GRANTS AND PROTOCOLS

Jeffrey Ponsky, MD
- "Evaluation of a Novel Endoscopic Treatment for Achalasia: Per-oral Endoscopic Esophagomyotomy (POEM)", PI.

Jeffrey Marks, MD
- "Anti-scarring Therapy to Prevent Stricturing Following Endoscopic Esophageal Mucosectomy". SAGES 2012 Research Grant Award -$30,000 (PI) Funding Period: 2012-13.
- "Evaluation of a Biologic Mesh Covering for Prevention of ESD-induced Strictures". Acell. $10,000.00 (PI) 2011-2012.
- "Evaluation of a Novel Temporary Ileostomy Device in a Porcine Model". WL Gore. $14,349. (PI) 2012.

Michael Rosen, MD
- "Prospective trial of BioA reinforcement of complicated abdominal wall reconstruction", Project Role: PI. Award: $65,000, W.L. Gore.
- "Prospective randomized trial evaluating outcomes of biologic mesh versus synthetic mesh in clean contaminated and contaminated ventral hernia repair", Project Role: PI. Award: $25,000, American Hernia Society Research Grant.
- "Prospective randomized trial evaluating outcomes of biologic mesh versus synthetic mesh in clean contaminated and contaminated ventral hernia repair", Project Role: PI. Award: $150,000, Clinical Translational Science Grant: University Hospitals of Cleveland.

LEADERSHIP ACTIVITIES (NATIONAL AND REGIONAL)

Jeffrey L. Ponsky, MD

- Appointed in 2012 - Associate Dean for Alumni Affairs, CWRU School of Medicine
- Member, Surgical Management Committee for Ahuja Medical Center – 2011 – Present
- Member, American Surgical Association (ASA) Ad Hoc Lifetime Achievement Award Committee – 2011 – Present
- Chair, AOA (Alpha Omega Alpha) Medical Honor Society Chapter of CWRU, 2008-Present
- Vice President, American Surgical Association (ASA), 2010-2011
- Vice President, The Society for Surgery of the Alimentary Tract (SSAT), 2010-2011
- Member, UHMG Finance/Operations Committee, 2010-2011
- Member, Executive Steering Committee Advanced Platform Technology (APT) Center VA and CWRU, 2010-2011
- Chairperson, Surgical Endoscopy Committee – World Organization of Digestive Endoscopy – 2009-2013
- Member, Editorial Board, "Digestive Endoscopy" – 2011- present
- Member, Board of Directors, Mt. Sinai Foundation
- Medworks volunteer physician services for annual local clinics

Raymond Onders, MD

- Midwest Surgical Association 1996-present
  - President Elect 2012-1013
  - Secretary 2009-2012

Michael J. Rosen, MD

- Board of Governors, American Hernia Society

PUBLICATIONS

- Ponsky, J.L., Marks, J.M., Pauli, E.M: How I Do It: Per-Oral Endoscopic Myotomy (POEM). Journal of GI Surgery 16(6):1251-1255, June 2012.
- Pauli, E.M; Schomisch, S.J., Furlan, J.P, Marks, A.S., Chak, A., Lash, R.H., Ponsky, J.L., Marks, J.M.: Biodegradable Esophageal Stent Placement Does Not Prevent High-Grade Stricture Formation after Circumferential Mucosal Resection in a Porcine Model. Sur Endoscopy 26(12);3500-3508, December 2012.
- Obokhare, I., Santoso, S., Coughlan, D., Ponsky, J.L: Image of the Month: Fundic Gland Polyps. Arch Surg 147(6);575-576, June 2012.

Case Comprehensive Hernia Center

- Pauli EM, Schomisch SJ, Furlan JP, Marks AS, Chak A, Lash RH, Ponsky JL, Marks JM Biodegradable esophageal stent placement does not prevent high-grade stricture formation after circumferential mucosal resection in a porcine model. Surg Endosc. 2012 Jun 9.
- McElrath L, Pauli EM, Marks JM. Hernia formation and persistent fistula after percutaneous endoscopy gastrostomy: unusual complications of a common procedure.Am Surg. 2012 Apr;78(4):E200-1.
- Ponsky JL, Marks JM, Pauli EM. How I Do It: Per-oral Endoscopic Myotomy (POEM). J Gastrointest Surg. 2012 Jun;16(6):1251-5. Epub 2012 Mar 27.
- Itani KM, Rosen M, Vargo D, Awad SS, Denoto G 3rd, Butler CE; RICH Study Group.Prospective study of single-stage repair of contaminated hernias using a biologic porcine tissue matrix: The RICH Study.Surgery. 2012 Jul 2.
- Blatnik JA, Krpata DM, Pesa NL, Will P, Harth KC, Novitsky YW, Rowbottom JR, Rosen MJ. Predicting Severe Postoperative Respiratory Complications Following Abdominal Wall Reconstruction. Plast Reconstr Surg. 2012 Jun 8.
- Novitsky YW, Elliott HL, Orenstein SB, Rosen MJ. Transversus abdominis muscle release: a novel approach to posterior component separation during complex abdominal wall reconstruction. Am J Surg. 2012 May 16.
- Krpata DM, Blatnik JA, Harth KC, Phillips MS, Novitsky YW, Rosen MJ. Evaluation of fibrin sealant for biologic mesh fixation at the hiatus in a porcine model. Surg Endosc. 2012 Apr 27.
- Phillips MS, Krpata DM, Blatnik JA, Rosen MJ. Retromuscular preperitoneal repair of flank hernias. J Gastrointest Surg. 2012 Aug;16(8):1548-53.
- Rosen MJ, Denoto G, Itani KM, Butler C, Vargo D, Smiell J, Rutan R. Evaluation of surgical outcomes of retro-rectus versus intraperitoneal reinforcement with bio-prosthetic mesh in the repair of contaminated ventral hernias. Hernia. 2012 Mar 14.
- Blatnik JA, Krpata DM, Novitsky YW, Rosen MJ. Does a history of wound infection predict postoperative surgical site infection after ventral hernia repair? Am J Surg. 2012 Mar;203(3):370-4; discussion 374.
- Krpata DM, Blatnik JA, Novitsky YW, Rosen MJ. Posterior and open anterior components separations: a comparative analysis. Am J Surg. 2012 Mar;203(3):318-22; discussion 322.
- Krpata DM, Schmotzer BJ, Flocke S, Jin J, Blatnik JA, Ermlich B, Novitsky YW, Rosen MJ Design and Initial Implementation of HerQLes: A Hernia-Related Quality-of-Life Survey to Assess Abdominal Wall Function. J Am Coll Surg. 2012 Nov;215(5):635-42.
- Krpata DM, Blatnik JA, Novitsky YW, Rosen MJ. Evaluation of high-risk, comorbid patients undergoing open ventral hernia repair with synthetic mesh. Surgery. 2013 Jan;153(1):120-5.
- Hicks CW, Krpata DM, Blatnik JA, Novitsky YW, Rosen MJ. Long-term effect on donor sites after components separation: a radiographic analysis. Plast Reconstr Surg. 2012 Aug;130(2):354-9.

- Blatnik JA, Krpata DM, Jacobs MR, Gao Y, Novitsky YW, Rosen MJ. In Vivo Analysis of the Morphologic Characteristics of Synthetic Mesh to Resist MRSA Adherence. J Gastrointest Surg. 2012 Nov;16(11):2139-44.
- Kanters AE, Krpata DM, Blatnik JA, Novitsky YM, Rosen MJ. Modified Hernia Grading Scale to Stratify Surgical Site Occurrence after Open Ventral Hernia Repairs. J Am Coll Surg. 2012 Dec;215(6):787-93.
- Novitsky YW, Rosen MJ. The biology of biologics: basic science and clinical concepts. Plast Reconstr Surg. 2012 Nov;130(5 Suppl 2):9S-17S.
- Sadava EE, Krpata DM, Gao Y, Novitsky YW, Rosen MJ. Does Presoaking Synthetic Mesh in Antibiotic Solution Reduce Mesh Infections? An Experimental Study. J Gastrointest Surg. 2012 Dec 1.
- Harth KC, Blatnik JA, Anderson JM, Jacobs MR, Zeinali F, Rosen MJ. Effect of surgical wound classification on biologic graft performance in complex hernia repair: An experimental study. Surgery. 2012 Dec 4.
- Harth KC, Krpata DM, Chawla A, Blatnik JA, Halaweish I, Rosen MJ. Biologic mesh use practice patterns in abdominal wall reconstruction: a lack of consensus among surgeons. Hernia. 2012 Dec 27.
- Krpata DM, Stein SL, Eston M, Ermlich B, Blatnik JA, Novitsky YW, Rosen MJ. Outcomes of simultaneous large complex abdominal wall reconstruction and enterocutaneous fistula takedown. Am J Surg. 2013 Jan 30. [Epub ahead of print].
- Gao Y, Qiao Y, Kreutzer DL, Novitsky YW. Decreased expression of hepatic signaling phosphoproteins after laparoscopic and hand-assisted surgery in a porcine model. J Surg Res 2012;176:608-13.
- Modeste K, Novitsky YW. Laparoscopic diagnosis and management of a novel inguino-pelvic hernia. Hernia 2012.
- Orenstein SB, Saberski ER, Kreutzer DL, Novitsky YW. Comparative analysis of histopathologic effects of synthetic meshes based on material, weight, and pore size in mice. J Surg Res 2012;176:423-9.
- Saberski E, Novitsky YW. Laparoscopic diagnosis and management of an acute jejunal diverticulitis. Surg Laparosc Endosc Percutan Tech 2012;22:e18-20.
- Phillips MS, Marks JM, Roberts K, Tchhino R, Onders R, Denoto G, Rivas H, Islam A, Soper N, Gecelter G, Rubach E, Paraskeva P, Shah S. Intermediate Results of a prospective randomized controlled trial of traditional four-port laparoscopic cholecystectomy versus single-incision laparoscopic cholecystectomy. Surg Endosco 2012;26:1296-303 Nov 15 Epub ahead of print PMID: 22083331.

BOOK CHAPTERS

- Ponsky, J.L., Pearl, J.P: Mastery of Surgery Upper and Lower Gastrointestinal Endoscopy Josef Fischer (Editor) Liippincott Williams & Wilkins, Philadelphia, PA, pp.205-213, 2012.
- Ponsky, J.L., Chukwumah, C.V: Diagnostic and Therapeutic Endoscopy of the Stomach and Small Bowel Surgery of the Alimentary Tract C.J. Yeo (Editor) Elsevier Saunders Publishers, Philadelphia, PA, pp 648-663, 2012.
- Ponsky, J.L., Sabnis, A.: Management of Splenic Abscess Surgery of the Alimentary Tract C.J. Yeo (Editor) Elsevier Saunders Publishers, Philadelphia, PA, pp 1655-1658, 2012.
- Ponsky, J.L., Phillips, M.S: Gastrostomy: Endoscopic, Laparoscopic, and Open Master Techniques in Surgery: Gastric Surgery M. Nussbaum (Editor) Lippincott Williams & Wilkins Philadelphia, PA, pp 365-374, 2012.
- Rosen MJ. Complex abdominal wall reconstruction. Editor, Clinical Scenarios in General Surgery. Publisher Wolters Kluwer Health. 2012.
- Rosen MJ. Endoscopic Component Separation. Atlas of Abdominal Wall Reconstruction. Editor: Michael Rosen. Publisher Elsevier Sciences. 2011.
- Phillips M. Rosen MJ. Open flank hernia repair. Atlas of Abdominal Wall Reconstruction. Editor: Michael Rosen. Publisher Elsevier Sciences. 2011.
- Rosen MJ. Laparoscopic repair of Ventral Hernias. The SAGES Manual. Editor Nathaniel J. Soper, Carol E>H. Scott-Conner. Springer. 2012. Pages 431-432.
- Rosen MJ. Minimally invasive ventral hernia repair with endoscopic separation of components. Video Atlas of advanced minimally invasive surgery. Editor Constantine Frantzides and Mark Carlson. Elsevier. 2012. Pages 249-256. V
- Novitsky YW. Transversus Abdominis Release (TAR) for Posterior Component Separation and Retromuscular Repair. In: Advances in Abdominal Wall Reconstruction. Losken A, Janis JE eds, Quality Medial Publishing, 2012. Chapter 11, pages 215-232.

- Novitsky YW. Bridging Versus Closing the Defect during Laparoscopic Ventrl Hernia Repair. In: The SAGES Manual of Hernia Repair, Jacob BP, Ramshaw B, eds. Springer 2012. Chapter 39, pages 439-444.
- Onders RP. Gastric Dysmotility. In Murayama KM, Chand B editors. An Evidence-based Approach to Minimally Invasive Surgery. Woodbury, CT: Cine-Med Publishing, Inc., 2012, 93-96.

PRESENTATIONS AND LECTURES

Jeffrey Ponsky, MD

- February, 2012 – Cleveland, OH – University Hospitals Case Medical Center "Per-Oral Endoscopic Myotomy (POEM): A Hands On Course" Course Co-Director "POEM: Overview & History".
- February, 2012 – Marco Island, Florida – Advances in Minimally Invasive Surgery – Course Co-Director.
- February, 2012 – Marco Island, Florida – Advances in Minimally Invasive Surgery – "Peroral Endoscopic Myotomy for Achalasia"; and "Maintanence of Certification Revisited".
- April, 2012 – Mobile, Alabama – University of South Alabama – Emmett Frazer/Milton Leigh Memorial lecturer "NOTES: Accomplishments to Date"; andGrand Rounds "Impact of Surgical Endoscopy on General Surgery Training".
- April, 2012 – Puerto Vallerta, Mexico – World Congress of Endoscopy ""Needlescopic Surgery: Is it making a Comeback?", and "Endoscopic Management of Barrett's".
- May, 2012 – Nashville, Tennessee – Vanderbilt University Medical Center - Grand Rounds "Impact of Therapeutic Endoscopy in General Surgery Training".
- May, 2012 – Baltimore, Maryland – Mercy Medical Center – Grand Rounds "POEM".
- June, 2012 – Fairfax, Virginia – Inova Fairfax Hospital – "Advances in Therapeutic Endoscopy: Implications for Training Physicians" – Visiting Professor.
- June, 2012 – Lexington, Kentucky – University of Kentucky Medical Center – "The Impact of Therapeutic Endoscopy in General Surgery Training" – Grand Rounds.
- August, 2012 – Cleveland, Ohio – University Hospitals and CWRU – Per-Oral Endoscopy Myotomy Course (POEM) – Course Director.
- August, 2012 – Cleveland, Ohio – University Hospitals and CWRU – POEM Course – "POEM: Overview and History"; Panel Discussion on Tricks of the Trade.
- August, 2012 – Cleveland, Ohio – University Hospitals and SAGES – SAGES Advanced Laparoscopy Resident Course – "Starting Your Career".
- October, 2012 – Chicago, Illinois – American College of Surgeons Annual Meeting – "Flexible Endoscopy for Surgeons" lecture and skills instructor; "Surgical Management of Difficult Duodenal Emergencies"; "Laparoscopic Repair of Paraesophageal Hernia with Anterior Gastropexy" Video.
- October, 2012 – Cooperstown, New York – Basset Medical Center – "Advances in Therapeutic Endoscopy: Implications for Training Physicians" Grand Rounds.
- October, 2012 – Strasbourg, France – IRCAD Endoflip Symposium – "Other Potential Applications for Endoflip" Key Note Speaker.
- October, 2012 – Strasbourg, France – IRCAD Flexible Endoscopyand Hybrid EndoLaparoscopic Surgery – "Endoscopic Sphincterotomy: Pre, Itra, or Post-cholecystectomy?"; "Management of Complex Biliary Tract Injuries".
- November, 2012 – Cleveland, Ohio – University Hospitals CWRU – Surgery Update Course Web Symposium – Course Director.
- November, 2012 – Cleveland, Ohio – Colorectal Residents Career Cousre – "Academic Surgery for Street Fighters".
- November, 2012 – Cleveland, Ohio – North Coast SGNA Education Course – "ERCP: Past, Present & Future".
- November, 2012 – Cancun, Mexico – International Congress of Mexican Association of General Surgery – "Current Approaches to Choledocholithiasis"; "Pancreatic Pseudocyst: Laparoscopic versus Endoscopic Treatment"; "NOTES"; "NOTES: Past, Present, and Future".
- December, 2012 – Barcelona, Spain – International NOTES Conference – "Modern Strategies for Bile Duct Stones"; "POEM for Achalasia".

Case Acute Intestinal Failure Unit

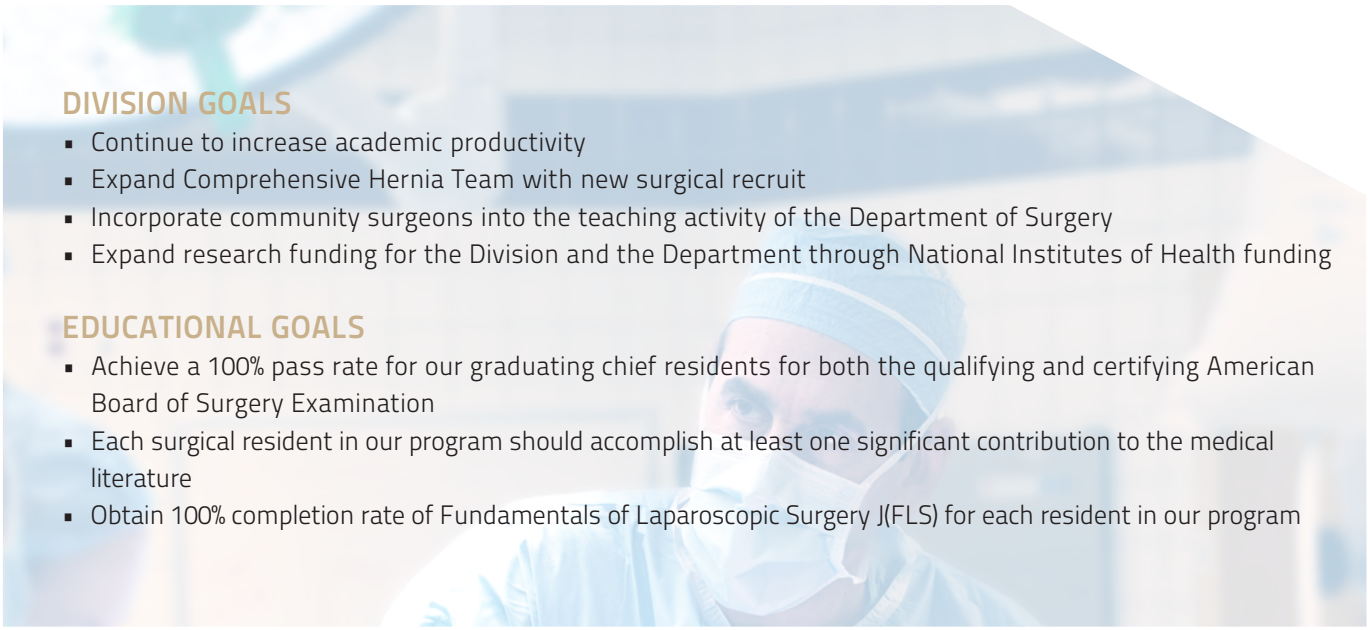
Yuri Novitsky, MD

- Modern Techniques in Ventral Hernia Repair. Department of Surgery, University of Pittsburgh Medical Center, Pittsburgh, PA, 11/20/2012.
- Mesh Complications After Inguinal Hernia Repair: Diagnosis and Treatment. Annual Meeting of the Society of American Endoscopic and Gastrointestinal Surgeons, San Diego, CA, March 2012.
- Difficult Scenarios in AWR: Muscle Loss, Stomas, Failed Component Separation. Annual Meeting of the American Hernia Society, New York, NY, March 2012.
- Posterior Component Separation. 4th Annual Current Concepts in Abdominal Wall Reconstruction Symposium, UT Southwestern Medical Center. Dallas, TX, February 2012.
- Complications of Abdominal Wall Reconstructions. 4th Annual Current Concepts in Abdominal Wall Reconstruction Symposium, UT Southwestern Medical Center. Dallas, TX, February 2012.

Raymond Onders, MD

- "Getting an Idea from Paper to Patient: What do you need to know about the FDA, CMS, etc" SAGES Innovation in the Era of Conflict of Interest and Transparency, San Diego, March 10, 2012.
- "Current technique of laparoscopic diaphragm pacemaker insertion". Pauli EM, Elmo M, Onders RP. Society of American Gastrointestinal Endoscopic Surgeons, San Antonio TX, March 7-10, 2012.
- "Prospective, multicenter trial comparing pain and cosmetic outcomes in three port and four port laparoscopic cholecystectomy" Pauli EM, Krpata DM, Phillips MS, Marks JM, Onders RP. Society of American Gastrointestinal Endoscopic Surgeons, San Antonio TX, March 7-10, 2012.
- "Worldwide Status and Applications of Diaphragm Pacing" Platform Presentation at the 13th International Conference on Home Mechanical Ventilation and 4th European Respiratory Care Association Congress, Barcelona, March 17th, 2012.
- "Current and Practical Utilization of Diaphragm Pacing in ALS/MND: From Pilot Trial experience to FDA approval" Oral communication and poster presentation at the 13th International Conference on Home Mechanical Ventilation and 4th European Respiratory Care Association Congress, Barcelona, March 16th, 2012.
- "Diaphragm Pacing for Acute Ventilator Weaning" Oral communication and poster presentation at the 13th International Conference on Home Mechanical Ventilation and 4th European Respiratory Care Association Congress, Barcelona, March 16th, 2012.
- "Diaphragm Pacing in ALS" Respiratory Grand Rounds at Oschner Clinic, New Orleans, April 24th, 2012.
- "Diaphragm Pacing: The Evidence For" Presentation at the 64th American Academy of Neurology annual meeting in the Controversies in Neuroscience Forum, New Orleans, April 25th, 2012.

- "Diaphragm Pacing in ALS: The clinical results and identifying the right patient at the right time". Presentation at the Hospital for Special Care Neuromuscular Spring Conference: Amyotrophic Lateral Sclerosis: Trials, Treatments and Tribulations", Hartford, CT, May 4, 2012.
- "Re-thinking Ventilation: Using your own diaphragm" Presentation at Evolutionary Medicine Conference at Stanford University, May 8th, 2012.
- "Intramuscular Diaphragm Pacing for Respiratory Support in Tetraplegics: Current Worldwide Status in 2012. Why isn't available technology utilized?" Presented at the Interdependence Global SCI Conference, Vancouver, Canada, May 17th, 2012.
- "Worldwide Status of Intramuscular Diaphragm Pacing for Respiratory Support in Tetraplegics in 2012: Continued low utilization of technology". Presentation at the 51st Annual Scientific Meeting of the International Spinal Cord Society. London, September 3-5, 2012.
- "Current Technique of Laparoscopic Diaphragm Pacemaker Insertion" Video presentation at the 98th Annual Clinical Conference, Chicago October 2, 2012.
- "Entrepreneurship with Integrity" Presented at the Center for Innovation & Growth and Baldwin Wallace University, Cleveland, October 9, 2012.
- "2012 Living with ALS Fall Symposium Diaphragm Pacing for ALS" Presented at the ALS Association Western Pennsylvania Chapter, Pittsburgh, Oct 13, 2012.
- "Update in Diaphragmatic Pacing" Neuro-rehabilitation Summit, Mayo Clinic, Rochester MN, Oct 25, 2012
- "An Evening Debate: Diaphragmatic Pacing in ALS" Neuro- rehabilitation Summit, Mayo Clinic, Rochester MN, Oct 25, 2012.
- "An Update on Pediatric Diaphragm Pacing: What we learned and how diaphragm pacing is an excellent option in Pediatric spinal cord injured patients" Presentation at Howard H. Steel Conference on Pediatric Spinal Cord Injuries and Dysfunction, Orlando, November 30th 2012.
- "Hypercarbia in ALS/MND Patients: Under-recognized and Under Diagnosed- Yet assessing Can Change Treatment Algorithms and Improve Quality of Life" Poster Presentation at the 23rd International Symposium on ALS/MD, Chicago, December 5th to 7th, 2012.
- "Should radiolgoci evaluation of the chest and diaphragm be routine practice in ALS/MND patients?" Podium oral communication at the 23rd International Symposium on ALS/MD, Chicago, December 5th to 7th, 2012.



DIVISION GOALS

- Continue to increase academic productivity
- Expand Comprehensive Hernia Team with new surgical recruit
- Incorporate community surgeons into the teaching activity of the Department of Surgery
- Expand research funding for the Division and the Department through National Institutes of Health funding

EDUCATIONAL GOALS

- Achieve a 100% pass rate for our graduating chief residents for both the qualifying and certifying American Board of Surgery Examination
- Each surgical resident in our program should accomplish at least one significant contribution to the medical literature
- Obtain 100% completion rate of Fundamentals of Laparoscopic Surgery J(FLS) for each resident in our program

Division Chief

Dale A. Baur, DDS

Residency Program Director

Faisal A. Quereshy, MD, DDS, FACS

Faculty/Staff

Jerold S. Goldberg, DDS
Robert Heckel, DDS
Michael Zetz, DDS
Marc A. Zechel, DDS, MD
Michael P. Horan DDS, MD, PhD
Keith Schneider DMD
Michael Hauser, DMD, MD
William Blood, DDS, MD
John Blakemore, DDS
Paul Bertin, DDS
Joseph Krajekian DMD, MD
Alan Martinez DDS
Rishad Shaikh DMD
Marion Wazney, DDS
Scott Alperin, DDS
David Ash, DDS
Luc Cestelyn DDS, MD
Charles Babbush, DDS, MS
Andrew N. Berman, DDS
Eric S. Fried, DDS
Frank Karfes, DDS
James Julian, DDS
John P. Neary, DDS, MD

Chapter 8

2012 Division of Oral and Maxillofacial Surgery

At the beginning of the 2012-2013 academic year, the Division of Oral and Maxillofacial Surgery opened a new chapter with the completion of an educational affiliation with MetroHealth Medical Center. With this new training site, the Academic Department increased its first year residency enrollment from two to four residents. When fully implemented, the Department will have a total of twenty residents that will obtain surgical experience at all of our affiliated hospitals.

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. 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 a year of general surgery training.

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.

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 experiences for our residents. We also wish to cultivate future academic leaders of our specialty. We strive to continue to provide state-of-the-art 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.

GENERAL RESIDENCY INFORMATION

PGY 1

10 months: Internship Oral and Maxillofacial Surgery
University Hospitals Case Medical Center
Metrohealth Medical Center,
Louis B. Stokes VA Medical Center

2 months: Anesthesia rotation; Department of Anesthesia
University Hospitals Case Medical Center

PGY II

12 months: Case School of Medicine

PGY III

4 months: Anesthesia
University Hospitals Case Medical Center

6 months: Oral and Maxillofacial Surgery
University Hospitals Case Medical Center
Metrohealth Medical Center
Cleveland Clinic Hospital

2 months: Case School of Medicine
Awarded degree Doctor of Medicine (MD)

PGY IV

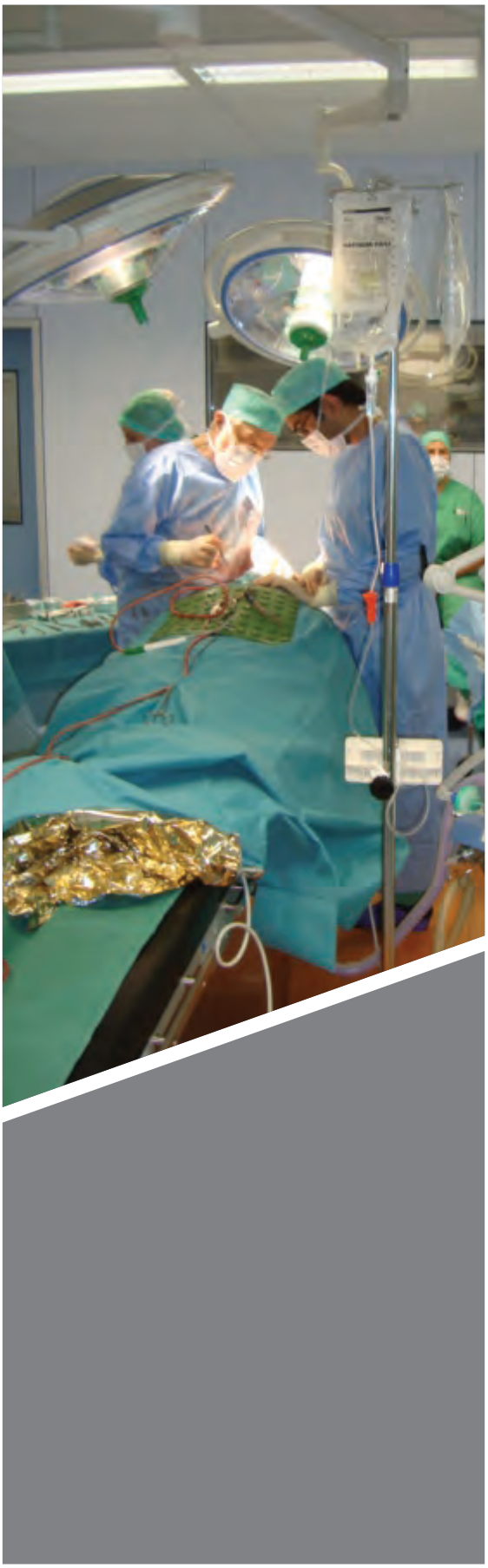
12 months: General Surgery (internship)
University Hospitals Case Medical Center

PGY V

12 months: Oral and Maxillofacial Surgery (Chief Resident)
University Hospitals Case Medical Center
Metrohealth Medical Center

Resident Education

Tuesday AM: Basics in OMS (Quereshy)
Wednesday AM: Orthognathic / Orthodontic Conference (Quereshy / Valiathan Orthodontics)
Literature Review (Quereshy)
Wednesday PM: Craniofacial Center, Rainbow Babies and Children's Hospital
Thursday AM: Clinical Case Presentation Conference (Hauser)
Thursday PM: Anesthesia Conference (Bertin)
Friday AM: Oral Pathology Conference (Fitzpatrick)



PUBLICATIONS

Dale A. Baur, DDS

- Quereshy FA, Barnum G, Baur DA, et al: Use of Cone Beam Computed Tomography to Volumetrically Assess Alveolar Cleft Defects—Preliminary Results. J Oral Maxillofac Surg, 70(1), 188-91, 2012.
- Elimairi I, Elhassan AM, Suliman AM, Baur DA, Teppa J: Sublingual Soft Tissue Mass. J Oral Maxillofacial Surg, 70(1), e23-e27, 2012.
- Shehab M, Baur DA, et al: A Novel design of a Computer Generated Splint for Vertical Repositioning of the Maxilla After Le Fort I Osteotomy: Oral Surgery, Oral Medicine, Oral Pathology, 115(2), e16-e25, 2013.
- Baur DA, Collette DC, Weber J, et al: Osteonecrosis of the Jaws Unrelated to Bisphosphonate Use: A Series of Four Cases. J Oral Maxillofacial Surg, 70(12), 2802-2808, 2012.
- Baur DA, Teppa J: Dental Implants and Mini-implants. Medscape (Emedicine) February 2012.
- Baur DA, Jannuzzi JR, Mercan U, Quereshy FA: Treatment of Long Term Anterior Dislocation of the TMJ. Int J OMS, 10-2012.
- Baur DA, Bushey A, Lyu D: Patient evaluation and history taking. Manual of Minor Oral Surgery for the General Dentist, 2nd edition. Editors Mehra P, D'Innocenzo R. Elsevier, in press 2013.
- Baur DA, Loveless T: Management of the Branchial Cleft Cyst, Atlas of Oral and Maxillofacial Surgery. Editors Tiwanna P,Kademani D. Elsevier, in press 2013.
- Baur DA, Collette D: The Submental island Flap, Atlas of Oral and Maxillofacial Surgery. Editors Tiwanna P,Kademani D. Elsevier, in press 2013.

Faisal A. Quereshy, MD, DDS, FACS

- Fattahi, T, Quereshy FA. Septoplasty: Thoughts and considerations. J Oral Maxfac Surg 69:12, 528-532, December 2011.
- Quereshy FA, Barnum G, Jannuzzi J, Demko C, Horan M, Palomo JM. Utilization of Cone Beam CT Imaging to Volumetrically Assess Alveolar Cleft Defects. J Oral Maxfac Surg Volume 70, Issue 1, Pages 188-191, January 2012.
- Baur DA, Weber JM, Collette DC, Dhaliwal H, Quereshy F. Osteonecrosis of the Jaws Unrelated to Bisphosphonate Exposure: A Series of Four Cases J Oral Maxfac Surg (12) 2012.
- Baur DA, Jannuzzi JR, Mercan U, Quereshy FA. Treatment of Long Term Anterior Dislocation of the TMJ. Int J OMS, 10-2012.

PRESENTATIONS

Dale A. Baur, DDS

- William Beaumont Army Medical Center OMFS residency consultant visit. Topics BRONJ, Complications, Oral Cancer, Local and Regional Flaps, Parotid Gland Surgery, Case Discussions. 12-13 January 2012, El Paso Texas.
- The Pectoralis Major Flap, cadaver dissection. Metrohealth Medical Center OMFS Department, 31 January 2012, Cleveland, OH.
- ABOMS Scientific Seminar. The Karapandzic Flap. 6 February 2012, Dallas, TX.
- Oral Cancer lecture. Metrohealth Medical Center OMFS Department, 20 March 2012 Cleveland, OH.
- Effect of Novalgin Ibuprofen and Therapeutic Jaw Exercises on Patients with Facial Arthromyalgia. Elimairi I, Baur DA, Minisadram A. Poster presentation, American Academy of Oral Medicine, Charleston, SC 17-20 April 2012.
- Cancerous lesions, lecture as part of "Oral Cancer and the Discovery of a Novel Diagnostic Biomarker" Case School of Dental Medicine CE event, 30 May 2012.
- The Philip J. Boyne and Peter Geistlich Professorship Endowed Lecture, Loma Linda University. Topics: Flap reconstruction of the head and neck, Local Flaps, and Management of Parotid Gland Neoplasms. Loma Linda, CA 15 August 2012.

- AAOMS annual meeting: Surgically assisted orthodontics, Moderator. September 15, 2012. San Diego CA.
- Distance Between Articular Eminence and Foramen Spinosum, an Anatomic Study on Dry Skulls. Beushausen M, Leech B, Baur DA. Poster presentation, AAOMS annual meeting, San Diego, CA, September 2012.
- Bone Quality Assessment in grafted versus Non-grafted Socket Sites: A CBCT Study.
- Loveless T, Kilinc Y, Teppa J, Baur DA, Quereshy FA. Poster presentation, AAOMS annual meeting, San Diego, CA, September 2012.
- Oral Cancer Update, Medina County Dental Society, Medina OH, 24 September 2012.
- TMJ alloplastic replacement, Department of OMFS Grand Rounds, 6 December 2012.
- UH/CMC Department of Plastic surgery lecture on Orthognathic Surgery, 11 March 2013.
- Pennsylvania Dental Association lecture on Sedation and General Anesthesia (six hours), 15 March 2013 Greensburg, PA.

Faisal A. Quereshy, MD, DDS, FACS

- AAOMS 94th Annual Meeting, San Diego, CA: Assessing the bone quality of grafted vs. non-grafted extraction sites with Cone Beam Computer Tomography Imaging. PI: Faisal A. Quereshy, MD, DDS, FACS; Co-Investigator: Tyman Loveless, 09-18-12.
- Case Western Reserve University: Alumni Weekend 2012; "About Face: A Look at Cosmetic Surgery." Cleveland, Ohio, 09-28-12.
- AAOMS 94th Annual Meeting & Scientfic Sessions: Moderator "Botox & Fillers" San Diego, CA, 09-15-12.
- University of Cincinnati: "A Crash Course of Facial Aesthetic Surgery – Nasal Anatomy and Rhinoplasty" (Quereshy) Cincinnati, OH 1.5 hours, 08-04-12.
- APPNA Convention 2012: "Orthognathic Surgery Update of Latest Procedures & Technologies" (Quereshy, FA) National Harbor, MD, CDE 2 hours, 07-07-12.
- American College of Oral & Maxillofacial Surgeons – Rhinoplasty Workshop "Columellar Deformities" New Orleans, LA. 1.5 hours, 02-26-12.
- American College of Oral & Maxillofacial Surgeons – Rhinoplasty Workshop "Tip Plasty" New Orleans, LA. 1.5 hours, 02-25-12.
- American Board of Oral & Maxillofacial Surgery – Scientific Sessions: "Upper facial Rejuvenation – Facial Cosmetic Surgery" Dallas, TX. 1 hour, 02-06-12.
- "Oral Maxillofacial Surgery Update on BRONJ" Annual Tri-State Dental Medical Conference, Boyne Highlands, Michigan, 01-17-12.
- "Maxillofacial Surgical Management of Sleep Apnea" Annual Tri-State Dental Medical Conference, Boyne Highlands, Michigan, 01-16-12.

RESEARCH

Dale A. Baur, DDS

- Pathway of the Marginal Mandibular Branch of the Facial Nerve in Relationship to the Mandible: A Cadaver Study.
- Distance Between Articular Eminence and Foramen Spinosum, Foramen Spinosum and Petrotympanic Fissure; An Anatomic Landmark Study on Dry Skulls.

Faisal A. Quereshy, MD, DDS, FACS

- Feb 2012 – 2013:
  IRB Protocol #: 20120112
  Title: The Use of Cone Beam Computer Tomography to Volumetrically Assess Buccal Bone Defects
  PI: Faisal A. Quereshy, MD, DDS, FACS; Co-Investigator: Yeliz Kilinc

- Feb 2012 – 2013:
  IRB Protocol #: 20120111
  Title: Assessing the bone quality of grafted vs. non-grafted extraction sites with Cone Beam Computer Tomography Imaging
  PI: Faisal A. Quereshy, MD, DDS, FACS Co-Investigator: Tyman Loveless

AWARDS/HONORS

Dale A. Baur, DDS

- 2011-2012: outstanding residency educator of the year award.

LEADERSHIP ACTIVITIES (NATIONAL AND REGIONAL)

Dale A. Baur, DDS

- American Board of Oral and Maxillofacial Surgeons
- Examination Committee, Pathology and Reconstruction Section III. 2008-2013
- Appointed Co-chair of Section III, term 2011-2013
- Ohio Society OMS
  - Vice-president, July 2011-July 2012
  - President-elect July 2012-2013
  - President 2013-2014
  - Hospital affairs committee, 2007-2013
  - 2013 annual meeting chairman
- American Association of Oral and Maxillofacial Surgeons
  - Committee on Continuing Education and Professional Development, 2009-2013
  - Committee on Continuing Education and Professional Development, Subcommittee for American Council of Continuing Medical Education accreditation site visit, February 2012
- Chalmers J. Lyons Academy of Oral Surgery
  - Vice-president 2013
  - Spring Meeting Chairman 2013
  - Reviewer
  - Saudi Dental Journal, 2012
  - Journal of Oral and Maxillofacial Surgery, 2013
  - International Journal of Medical Robotics and Computer Assisted Surgery, 2012
  - Oral Oncology Journal, 2012-2013
- Clinical Dentistry and Research, Advisory Board, 2013
- Commission on Dental Accreditation
  - OMFS residency program site visitor, 2010-present

Faisal A. Quereshy, MD, DDS, FACS

- American College of Surgeons (ACS) Professional Association, Fellow Member, Oct. 2003 – present
- Committee Oral & Maxillofacial Surgery
- American Association of Oral and Maxillofacial Surgery
  - Faculty Fellow
- 2010 – 2012: Continuing Education Committee member
  Co-Chairman - Clinical Interest Group : Facial Cosmetic Surgery
  2012 – 2013: Chairman: CIG: Facial Cosmetic Surgery
- American Board of Oral and Maxillofacial Surgery
  - Board examiner ABOMS (accepted 4-2010) (6-year term)
  - 2012 – 2014: Section II Editor (qualifying examination)
  - Ohio Society of Oral & Maxillofacial Surgeon (OSOMS)
  - 2012: Expanded Scope (committee)
  - 2013: alternate delegate OHIO
- American Academy of Cosmetic Surgery
  - Committee 2012, Annual Meeting Scientific Sessions
- American Journal of Cosmetic Surgery (AJCS)
  - Literature review editor (2-09 – present)
- American Board of Cosmetic Surgery (ABCS)
  - Executive Board of Director
  - Secretary (2009-2012)
  - Board of Trustee (11-2007 – present)
  - Chairman of Oral Board Examinations (2010 – 2014)
  - Fellowship Review Committee (Chairman – 2009 - present)
  - Credentialing Committee
- Ohio Dental Association (ODA) (State – member)
  - Dental Education and Licensure Committee (2009-2011)
- Greater Cleveland Dental Society (GCDS)
  - Board of Trustee (officer) 2012 - 2015
  - Finance committee member (2010 – 2013)
- OKU (Omicron Kappa Upsilon)
  - Dental honor society
  - Assistant secretary

Chapter 9

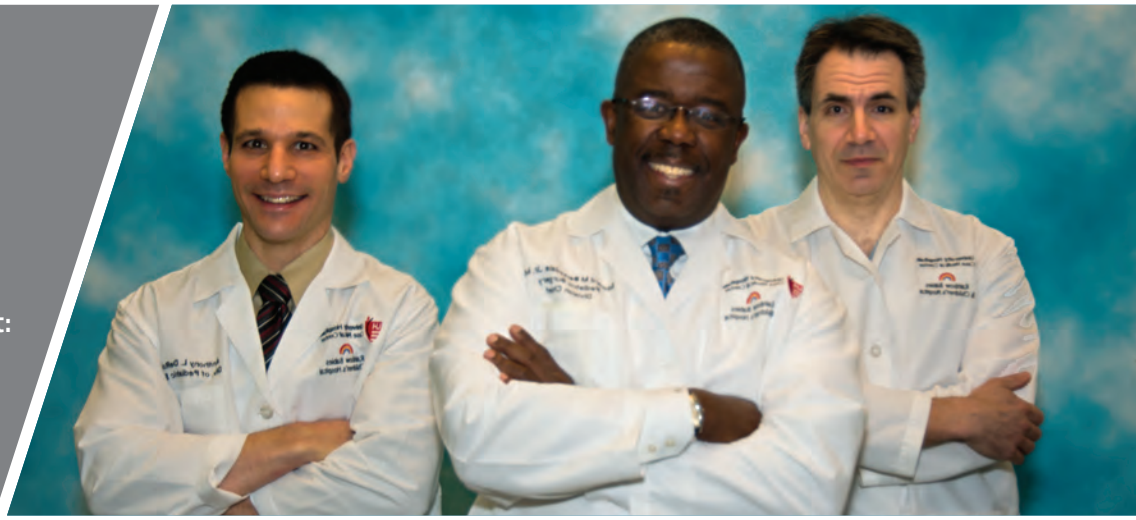
Division Chief

Edward M. Barksdale, Jr., MD

Faculty/Staff

Scott C. Boulanger, MD

Anthony L. DeRoss, MD



Left to right:
Anthony DeRoss, MD;
Edward Barksdale, Jr., MD;
Scott Boulanger, MD

The Division of Pediatric Surgery currently comprises three, full-time academic faculty and provides complete consultative and surgical services for all children at Rainbow Babies and Children's Hospital (RB&C). These services include all general and thoracic surgical conditions: congenital anomalies, pediatric solid tumors, complex gastrointestinal problems (esophageal disorders, biliary tract 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 faculty sees office consults and performs outpatient surgery in a variety of easily accessible community venues. Office hours are conducted weekly at the UHHS Landerbrook, Westlake, Twinsburg and Mentor facilities and bimonthly at the south side Medina location. Ambulatory surgery in appropriate patients is conducted off the main campus at the UH Zeeba Ambulatory Surgery Center, UH Ahuja Medical Center, UH Westlake facility, and Southwest General Hospital.

The Division also provides comprehensive services and coverage for the only ACS-certified Level One Pediatric Trauma Center in northeast Ohio. Dr. Anthony DeRoss serves as the Director of Rainbow's Trauma Center. The annual volume of trauma admissions has averaged approximately 425 per year since the Center's inception in 1998. In February 2012, 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 I Pediatric Trauma Center. RB&C is one of only three such pediatric trauma centers in Ohio.

In summary, the Division provides comprehensive inpatient and outpatient services for all neonatal and pediatric general and thoracic surgical patients at Rainbow Babies and Children's Hospital. The Division also provides 24-7 coverage for the institution's emergency department and Trauma Program. The Division performed about 1,455 cases in 2012 at RB&C. In pursuit of growth, several initiatives in the Division are ongoing. These initiatives, which are outlined below, include the academic and community service development of full-time faculty, creation of opportunities for remote post-graduate continuing medical education, the cultivation of several new clinical programs, and the establishment of a Pediatric Surgery Fellowship Program.

STAFF/FACULTY

Edward M. Barksdale, Jr., MD

Robert J. Izant, Jr., MD Professor of Surgery and Pediatrics, Surgeon in Chief, Chief of the Division of Pediatric Surgery, Rainbow Babies and Children's Hospital, Vice Chairman of Surgery, UH Case Medical Center

Scott C. Boulanger, MD

Assistant Professor of Surgery and Pediatrics, Director of the Minimally Invasive Surgery Program, Rainbow Babies and Children's Hospital

DIVISION RESEARCH

- Optimal Caloric Repletion During Acute Metabolic Stress in Infants
- Large Animal Laboratory for Development of Novel Minimally Invasive Surgery Techniques
- The Neonatal Effects of Gestational Obesity
- Trauma and Injury Prevention

Anthony L. DeRoss, MD

Assistant Professor of Surgery and Pediatrics, Chief of Pediatric Trauma, Rainbow Babies & Children's Hospital

Secondary Appointments

All three faculty members have secondary appointments in the Department of Pediatrics at Rainbow Babies and Children's Hospital.

DIVISION EDUCATION

Education is an important component of the Divisional activities and mission, beginning with daily attending-led rounds at 6:00 am. Informal teaching is based on the current in-patient combined with one-on-one technical training in the operating room. A more formal power point presentation is given by an individual on a topic from our core curriculum during our weekly conference (Friday). In addition to resident education, the faculty also delivers a three-hour survey lecture to third-year medical students once every six weeks. Annually, a member of the group gives an applied embryology lecture to first-year medical students. Formal teaching within the Division takes place primarily through a weekly series of didactic activities on Wednesdays. Patient Quality and Outcome Conference (Mortality and Morbidity Rounds) alternating with a Patient Management Conference occurs every Wednesday morning. On Wednesday afternoon, the main Divisional conferences occur, including Surgery/Radiology/Pathology conferences, Pediatric Surgery Grand Rounds and the Multidisciplinary (with either Gastroenterology, Neonatology or Pulmonology) Conferences. This is a formal Case Medical School conference and offers Category 1 CME credit.

In addition to general pediatric surgery education, Dr. DeRoss is an Advanced Trauma Life Support-certified instructor and course director. He participates in two annual regional ATLS courses each year. One is administered through the Rainbow Trauma Program and is held on the UHCMC campus. The other is given at MetroHealth through their Level One Adult Trauma Program. Through these programs, the majority of categorical Case Surgery residents receive their ATLS certification.

PATIENT CARE WITHIN THE DIVISION

The manner in which in-patient care is delivered within the Division has been modified in an effort to provide greater continuity, access and service. The Division has fully implemented a "Surgeon of the Week" system in which one individual will be responsible for all of the in-patient care from 6:00 am until 5:00 pm. This attending for the week will round with residents on the floor and NICU/ICU, be available to speak with parents, see consults on a timely basis and make dynamic decisions with the consulting primary services. He will also be available for all daytime emergencies and add-on cases and perform all urgent outpatient consults. The responsibility of the Surgeon of the Week or primary attending surgeon is to work in concert with the resident team, three Certified Pediatric Nurse Practitioners, and a variety of related pediatric and surgical subspecialties (e.g. neonatology, pediatric critical care, gastroenterology, etc.) to provide coordinated family-centered care. This system has been well received by staff and faculty. Nurse practitioners provide extended coverage of the service for 16 hours a day, Monday through Friday (6am -10 pm), and for 24-hour on-call coverage on Saturday and Sunday.

HOSPITAL SERVICE

The Division has been energetic in its efforts to improve quality of care at Rainbow Babies and Children's Hospital and University Hospitals. 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. The identification and recruitment of 3 more PCNP team members has been carried out. Orientation and training of the new members of the team will be completed in the first quarter of 2013. In addition to direct patient care, the team will develop and refine the Division's practices related to quality, safety, outcomes, education, primary and referring physician communication, and long-term follow-up care. In addition, the service will develop programs in wound and stoma care and a clinic in chest wall deformities. New team members are: Kerry Doyle, PCNP; Julia Young, PCNP; and Cristen Brearey, PCNP.

COMMUNITY SERVICE

The Division (and hospital) remains actively engaged in diverse community service endeavors through the development of strategic relationships with a variety of community partners, including members of the public school system, city government, law enforcement and emergency medical services, to further the mission of improving health and health care for children in Northeast Ohio. 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. Dr. Barksdale, along with Cleveland Mayor Frank Jackson and Cleveland Chief of Police Michael McGrath, have collaborated as the three Co-Chairmen to form Project FOCUS. This publicly supported effort is a multidimensional endeavor to thwart gang-related urban violence by offering social service (employment and educational opportunities) alternatives to stiff law enforcement efforts.

Collaborations have also been developed with Case Western Reserve University School of Public Health to study injury patterns in Amish children and young adults in Northeast Ohio. These efforts have resulted in the cultivation of a partnership with family practitioners and nurses at Geauga Hospital, Elders in the Amish community and the schools to develop culturally sensitive injury prevention programs, to both decrease the disparities in injury and outcomes. Drs. Boulanger and DeRoss are actively involved in mentoring programs in various public schools in the area.

DIVISION GOALS

Expansion of Clinical Services

The addition of new faculty has facilitated plans for broad clinical outreach within the Metropolitan Cleveland area and Northeast Ohio. In addition to new outpatient satellite office hours at Medina, the frequency of office hours has increased at the Westlake, Twinsburg and Mentor offices. New agreements between University Hospitals and the Sisters of Mercy have resulted in St. John West Shore Hospital joining the UH System and there is immense anticipation of the development of further expansion of pediatric

surgical services in the western suburbs. 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. In addition, the opening of UH Ahuja Medical Center in 2011 has allowed another access point for pediatric outpatient surgical care. This will be another site of further practice expansion for the group.

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, were areas of greater development and refinement in 2012. 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 strategic faculty recruitment of Dr. Anthony DeRoss in 2010, who has a special interest in Pediatric Trauma and Injury Prevention, in conjunction with the skills of existing faculty, have facilitated the development of this program. Finally, the construction of a new state-of-the-art Neonatal Intensive Care Unit at RB&C in the Spring of 2009 and the recently completed recruitment of a new Division Chief of Perinatology at McDonald's Women's Hospital will facilitate the development of an interdisciplinary fetal diagnosis and treatment center. This will likely increase 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 under the leadership of Dr. Anthony DeRoss 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, 2013 to April 22, 2015). This achievement recognizes the trauma center's dedication to providing optimal care for injured patients.

Established by the American College of Surgeons in 1987, the COT's Consultation/Verification Program for Hospitals promotes the development of trauma centers in which participants provide not only the hospital resources necessary for trauma care, but also the entire spectrum of care to address the needs of all injured patients. This spectrum encompasses the pre-hospital phase through the rehabilitation process. 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

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.

Constructive Community Engagement

Ongoing vigorous efforts will continue to refine and extend the activities by all Division members in various community service endeavors throughout Northeast Ohio.

GRANTS

Title of Project: Nutrition in Pediatric Surgical Critical Care & Trauma
Principal Investigator: Edward M. Barksdale, Jr., MD
Sponsor: S.K. Wellman Foundation
Funding Amount: $15,000

BOOK CHAPTERS

- DeRoss, AL. Surgical Diseases of the Stomach and Duodenum in Infants and Children. In, Shackelford's Surgery of the Alimentary Tract. 7th edition. Elsevier. 2013, 66: 807-820.

PUBLICATIONS

- Falcone RA Jr, Haas I, King E, Moody S, Crow J, Moss A, Gaines B, McKenna C, Gourlay DM, Werner C, Meagher DP Jr, Schwing L, Garcia N, Brown D, Groner JI, Haley K, DeRoss A, Cizmar L. Armola R. A multicenter prospective analysis of pediatric trauma activation criteria routinely used in addition to the six criteria of the American College of Surgeons. J Trauma Acute Care Surg. 2012 Aug; 73(2): 377-384.
- Gabarain G, Garcia-Naveiro R, Ponsky TA, Boulanger SC, Parry RL. Ulcerative colitis of the neovagina as a postsurgical complication of persistent cloaca. J Pediatr Surg. 2012 Jan;47(1):e19-22.

VISITING PROFESSORSHIPS/INVITED LECTURES

Edward M. Barksdale, Jr., MD

- "Moans and Groans: Acute Abdominal Conditions of Childhood". Invited Speaker, Medical Student Lecture, Cleveland, OH. January 25, 2012.
- "Moans and Groans: Acute Abdominal Conditions of Childhood". Invited Speaker, Medical Student Lecture, Cleveland, OH. April 4, 2012.
- Pneumothorax Review, Invited Speaker, Pediatric Pulmonary Fellows, Rainbow Babies & Children's Hospital, Cleveland, OH. June 19, 2012.
- "Moans and Groans: Acute Abdominal Conditions of Childhood". Invited Speaker, Medical Student Lecture, Cleveland, OH. August 8, 2012.
- Hirschsprung's Disease, Invited Speaker, Division of Gastroenterology & Nutrition, Rainbow Babies & Children's Hospital Cleveland, OH. August 16, 2012.
- Pediatric Surgical Forum II (Moderator). American College of Surgery Clinical Congress 2012, Mediator, McCormick Place, Chicargo, IL, October 3, 2012.
- "Impact of Health Care Reform for Physicians: A Pediatric Surgeons Perspective". Invited Speaker, Pre Election Round Table: Focus on Issues Affecting Children, Pediatric Grand Rounds, Rainbow Babies & Children's Hospital, Cleveland, OH. October 4, 2012.
- "Short Bowel Syndrome: Nutrition Intervention". Invited Speaker, 6th Upstate Pediatric Gastroenterology Conference, Champion Hills Country Club, Victor, NY. October 5, 2012.
- "The Pediatric Surgical Abdomen: From Neonates to Adolescents". Invited Speaker, Pediatric Grand Rounds, Firelands Regional Medical Center, Sandusky, OH. October 10, 2012.
- "Pediatric Intestinal Failure: Historical Perspectives & New Horizons". Visiting Professor, Orvar Swenson Lecture, Lurie Children's Hospital, Chicago, IL. December 3, 2012.

Anthony DeRoss, MD

- CORS Didactic Lecture Series, The Cleveland Clinic Foundation, Cleveland, OH. Pediatric Colorectal Surgery. June, 2012.
- St. John Medical Center Presents The Golden Hour – 4th Annual Emergency Care Symposium, Holiday Inn, Westlake, OH. Updates In Pediatric Trauma. October, 2012.
- House Calls Presentation, University Pediatrics of Lorain, Lorain, OH. Pediatric Trauma. November, 2012.

AWARDS AND RECOGNITION

Edward Barksdale, Jr., MD

- Kaiser-Permanente Clinical Teaching Award, "Excellence in Teaching"
- Case Western Reserve University School of Medicine, Diploma and Hooding Ceremony, Cleveland, Ohio, 2012
- Cleveland Super Doctors, 2012
- Best Doctors in America® (Elected by peers for inclusion in Best Doctors in America®), 2013
- Cleveland Magazine Best Docs, 2012
- Top Doctor (Selected by Castle Connolly), 2012
- Patients' Choice Award, 2012

Division Chief

Julian Kim, MD, MS

Faculty

John Ammori, MD
Jeffrey Hardacre, MD
Rosemary Leeming, MD
Marjie Persons, MD
Robert R. Shenk, MD
Jerry M. Shuck, MD, D.Sc.
Scott M. Wilhelm, MD

Chapter 10

DIVISION OF SURGICAL ONCOLOGY

The Division of Surgical Oncology continues to expand services and to contribute to the academic mission of the Department of Surgery at UHCMC. Dr. Julian Kim serves as Chief Medical Officer of the UH Seidman Cancer Center. Dr. Jerry Shuck continues to serve as the Designated Institutional Official for the Graduate Medical Education programs at University Hospitals, and Dr. Marjie Persons manages the medical student educational initiatives for the Department of Surgery. Dr. Robert Shenk is the medical director of breast services at UHHS. Dr. Rosemary Leeming was named Chief Medical Officer of the UH Richmond Medical Center. Dr. Jeffrey Hardacre is the Chair of the Surgical Oncology Quality Assurance Committee. Dr. Scott Wilhelm is current President of the Cleveland Surgical Society. Finally, Dr. John Ammori has been awarded a Paul Calabrese NIH K12 career development award.

The genesis of the Division of Surgical Oncology was an institutional initiative which aimed to formalize and expand Surgical Oncology services in anticipation of the construction of a free-standing, state-of-the-art cancer hospital. The UH Seidman Cancer Center opened in June 2011 and represents one of only two NCI-designated comprehensive cancer centers in Ohio and the only in Northern Ohio. The Division of Surgical Oncology is comprised of surgeons who have focused their clinical and research activities primarily in areas relating to cancer or endocrine neoplasia. The members of the Division of Surgical Oncology all serve as staff surgeons on the Lenhart teaching service at UHCMC, which facilitates group interactions with respect to patient care, research and teaching. All members of the Division are mentioned in Castle and Conolly's Top Doctors either as leaders on the regional or national level.

DIVISION PATIENT CARE

The clinical activities of Surgical Oncology within the Department of Surgery and UH Seidman Cancer Center demonstrated excellent growth over the past year. The Division currently has the most clinical FTEs and has the largest revenue stream in the Department of Surgery. Dr. Robert Shenk, Dr. Rosemary Leeming and Dr. Marjie Persons have been instrumental in growing the Breast Program into one of the leading multidisciplinary groups within the UH Seidman Cancer Center. Dr. Scott Wilhelm has developed comprehensive programs in endocrine surgery, including minimally invasive approaches to tumors of the parathyroid, adrenal and pancreas. Dr. Jeffrey Hardacre leads malignant biliary and pancreatic surgery. Finally, Dr. Julian Kim brings expertise in the areas of gastrointestinal and retroperitoneal malignancies, as well as melanoma. Dr. John Ammori is adding programmatic development in the areas of pancreatic and hepatobiliary malignancies, as well as intraperitoneal hyperthermic perfusion with chemotherapy. The broad range of expertise in a variety of disease types makes the Division of Surgical Oncology a strong partner to members of the Department of Surgery, as well as the UH Seidman Cancer Center, in establishing standards for the multidisciplinary care of patients with cancer.

DIVISION EDUCATION

The Division of Surgical Oncology also plays an important role in the education and training of medical students and surgical residents. The Lenhart service was recognized as one of the most popular clinical services among surgery residents, and in 2013 will be expanding into two services in collaboration with Chris Siegel, MD, who is a specialist in hepatobiliary surgery. Students and residents are required to attend multidisciplinary tumor board conferences, as well as a new lecture series based upon case presentations, in order to compliment the education in the outpatient clinics, hospital inpatient floors and operating rooms. Dr. Marjie Persons is the Medical Student Clerkship Coordinator for the Department of Surgery at UHCMC. She directs the student rotations, coordinates lectures and serves as the physician liaison to the School of Medicine in issues regarding curriculum. Dr. Jerry Shuck is past chairman of the CWRU Department of Surgery and is the current Director of Graduate Medical Education at UHCMC. In this capacity, Dr. Shuck oversees all graduate medical programs and is the primary liaison to the ACGME.

DIVISION 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), cooperative oncology groups such as NSABP, and industry. Extramural grant support within the Division ranks as one of the highest within the Department of Surgery. Dr. Julian Kim is the principal investigator of an NIH award which aims to develop novel methods of adoptive immunotherapy of cancer using T cell receptor molecular signatures. The data from this NIH study is currently being used to develop a Phase I study of adoptive immunotherapy of patients with metastatic melanoma. Preclinical mouse studies are also being conducted within the Kim lab on regulation of macrophages as a cancer therapy using the development of nanoparticles to target tumor-associated macrophages for therapy and imaging. Dr. Jeffrey Hardacre is principal investigator on a Phase II study evaluating a novel hyperacute pancreatic cancer vaccine in patients with resected pancreatic cancer, and he will serve as the national principal investigator in the planned Phase III pivotal FDA registration trial. Dr. Robert Shenk is a co-investigator on an NIH grant in collaboration with the Department of Human Genetics and has teamed with Dr. Janice Lyons in the Department of Radiation Oncology to develop methods of partial breast irradiation. Dr. Rosemary Leeming is the institutional principal investigator and oversees all NSABP studies in patients with breast and colorectal cancers, which constitutes a significant proportion of all clinical trial activity within the UH Seidman Cancer Center. Finally, Dr. John Ammori has competed for and received an institutional NIH K12 career development award for work examining T cells responses in draining lymph nodes in patients with pancreatic cancer.

STAFF/FACULTY

PROFESSOR

Jerry M. Shuck, MD, D.Sc.

Dr. Shuck is a Professor of Surgery and has been a member of the UHCMC staff since 1980, when he was recruited from the University of New Mexico to serve as Chairman of the Department of Surgery, a position he held until 2000. He is a graduate of the University of Cincinnati College of Medicine where he also completed a Doctoral Thesis to attain the D.Sc. degree. He completed a General Rotating Internship at the University of Colorado Medical Center and a General and Thoracic Surgery Residency at the University of Cincinnati. Previously he served on the Residency Review Committee for Surgery (1994-2000) as well as Vice Chairman of the RRC for Surgery (1997-2000). He was a Director of the American Board of Surgery (1986-1994) and Chairman of the ABS (1993-1994). Dr. Shuck is a member of numerous professional organizations; in addition to a myriad of committee assignments, he has also been President of the Cleveland Surgical Society (1988-1989) and President of the

Left to right:
Scott Wilhelm, MD; John Ammori, MD; Rosemary Leeming, MD; Robert Shenk, MD; Jeffrey Hardacre, MD; Marjie Persons, MD; Julian Kim, MD

Central Surgical Association (1996-1997). He currently continues his clinical practice in General and Endocrine Surgery as well as serving as Associate Dean of Graduate Medical Education for CWRU and Director of UHCMC Graduate Medical Education. He has published over 130 manuscripts and book chapters.

Julian Kim, MD

Dr. Kim is the Charles A. Hubay Professor of Surgery and Chief, Division of Surgical Oncology. He is currently Chief Medical Officer of the UH Seidman Cancer Center. He has served as Program Director of Surgery, Case Integrated Hospitals for the past three years. Dr. Kim received his training in General Surgery at the University of Maryland Hospitals in Baltimore, Maryland and completed an SSO-approved fellowship at the Arthur G. James Cancer Hospital at The Ohio State University in 1994. He was Assistant Professor of Surgery within the Division of Surgical Oncology at Ohio State until 1999 and was recruited to the Cleveland Clinic Foundation where he served as Associate Professor and Director of the Melanoma Program until 2006. Dr. Kim has a national reputation in minimally invasive procedures of the breast including mammary ductoscopy and nipple-sparing mastectomy, and has served as invited speaker and moderator for national meetings of the American Society of Breast Surgeons. He has extensive research experience which includes working in the laboratories of Dr. Pierre Triozzi, Dr. Suyu Shu and Dr. Ernest Borden and has served as principal investigator on over $3 million of research funding from NIH, Susan G. Komen Foundation and industry sources. He has published over 60 manuscripts and book chapters and holds two U.S. patents on adoptive immunotherapy of cancer.

ASSOCIATE PROFESSOR

Robert R. Shenk, MD

Dr. Shenk is an Associate Professor of Surgery and Director of the Section of Breast Surgery. Dr. Shenk received his medical degree from CWRU in 1978. From 1978-1980 he was a resident at CWRU Integrated Surgical Residency Program followed by two years as Clinical Fellow at the Immunology Branch, National Cancer Institute (1980-1982). He returned to CWRU to complete his surgical residency training (1982-1985). Post residency, he was a Fellow in Surgical Oncology at MD Anderson Hospital and Tumor Institute, Houston Texas. Dr. Shenk joined the staff of University Hospitals and faculty of CWRU after completing his Surgical Oncology fellowship in 1987. He has been the American College of Surgeons Cancer Liaison Physician for UHCMC since 1993. He has published over 30 manuscripts and book chapters. Dr. Shenk's area of expertise is in surgical oncology with a special emphasis on breast cancer, melanoma and sarcoma.

Marjie Persons, MD

Dr. Persons has been a member of the Department of Surgery since 1985. She received her medical

degree from SUNY at Syracuse in 1980 after which she completed her surgical residency training at CWRU Integrated Surgery Residency Program (1980-1985). Dr. Persons was promoted to Associate Professor of Surgery in 1997. She has been the Surgical Clerkship Director since 1988. In addition to serving on numerous departmental, hospital and medical school committees, Dr. Persons has served as Health Frontiers Volunteer Surgical Consultant in Lao Peoples Democratic Republic (1996, 1997). She has been a lecturer and consulting surgeon to the National Cancer Institute, Hanoi, Vietnam (2002). Her area of expertise is in diseases of the breast.

Scott M. Wilhelm, MD

Dr. Wilhelm is an Associate Professor and Director of the Section of Endocrine Surgery. He received his medical degree from University of Cincinnati College of Medicine (1995). He completed his surgical residency training at CWRU Integrated Surgical Residency Program (1995-2002) where he was also awarded a position as Dudley P. Allen Surgical Research Scholar (1997-1999) working in the laboratory of Dr. James Schulak. Following completion of his residency, he undertook a Fellowship in Advanced Endocrine Surgery at Rush-Presbyterian, St. Luke's Medical Center under the tutelage of Dr. Richard A. Prinz. Dr. Wilhelm has received numerous awards including the Chicago Surgical Society 2003 Resident/Fellow Award for Surgical Research, the 1998 American Society of Transplant Surgery Young Investigator Award, the Cleveland Surgical Society First Place Basic Science Award (1998), the Ohio Chapter American College of Surgeons (ACS) Best Trauma Paper Award for the Resident Essay Contest (1999), the Ohio Chapter ACS First Place Basic Science Award for the Resident Essay Contest (1999) and the Cleveland Surgical Society Second Place Basic Science Research Award (1999). He has published over 15 manuscripts and book chapters. He currently serves as Clerkship Director for the Clinical Transaction pathway for third year medical students, an NIH sponsored grant being conducted at CWRU School of Medicine. His area of expertise is endocrine surgery, including minimally invasive surgery of the parathyroid, pancreas and adrenal.

Jeffrey Hardacre, MD

Dr. Hardacre is an Associate Professor of Surgery and the Director of the Section of Pancreatic Surgery. He joined the Division and Department of Surgery in 2004 after completing a Flexible Surgical Endoscopy Fellowship at the Cleveland Clinic (2003-2004). Dr. Hardacre received his medical degree from Duke University School of Medicine (1996) and his surgical residency training at The Johns Hopkins Hospital. He received additional training as a Postdoctoral Research Fellow in the Department of Surgery at The Johns Hopkins Hospital (1998-1999), as a Visiting Specialist Registrar in the Department of Surgery at The John Radcliffe Hospital, Oxford, England (7/1/2000-12/31/2000), and Advanced Specialty Training Program in Gastrointestinal Surgery under the direction of Dr. John Cameron at The Johns Hopkins Hospital (2002-2003). His area of expertise is in upper gastrointestinal surgery with special emphasis on pancreatic disease. Dr. Hardacre served as institutional principal investigator on the clinical trial entitled "A Phase II study of hyperacute pancreatic cancer vaccine in subjects with surgically resected pancreatic cancer" and was the leading physician to accrue patients to this trial nationally. He is the lead author on the abstract highlighting the results of the Phase II study and will serve as national principal investigator on the Phase III FDA registration trial. He has added an additional administrative role as Chair of the Surgical Oncology Quality Assurance Committee.

ASSISTANT PROFESSOR

Rosemary Leeming, MD

Dr. Leeming is an Assistant Professor of Surgery and the Medical Director of the Chagrin Highlands Breast Center and Chief Medical Officer of University Hospitals Richmond Medical Center. She received her medical degree from Hahnemann Medical College in 1983. After one year of Pathology residency at University Hospitals of Cleveland (1983-1984), she entered and completed the surgical residency program at Mt. Sinai Medical Center, Cleveland, Ohio (1984-1989). She complemented her residency training with a fellowship in Diseases of the Breast at NSABP Headquarters, University of Pittsburgh and Shadyside Hospital,

Pittsburgh, Pennsylvania under the mentoring of Bernard and Edwin Fisher. She joined the Division and the Department (2001), where she is Medical Director of the Breast Center at University Hospitals Health Systems at Chagrin Highlands. She is the principal investigator for the NSABP Treatment and Prevention Trials. In 2012, Dr. Leeming received her MS in Health Care Management from the Harvard School of Public Health. Dr. Leeming's area of expertise is diseases of the breast and she lectures frequently in the area of the use of gene profiling to personalize adjuvant systemic therapy in patients with breast cancer.

John Ammori, MD

Dr. Ammori is Assistant Professor of Surgery and joined the Division in July 2011. He performed both his medical school training and surgical residency training at the University of Michigan. During his surgery residency, he took two years as a research fellow in the laboratory of Dr. Michael Mulholland and was extremely productive in the area of regulation of gastrointestinal motility. Dr. Ammori was awarded best teaching resident during his Chief year and then earned a two-year fellowship in Surgical Oncology at Memorial Sloan Kettering Cancer Center in 2009. He joined Case Surgery immediately after his fellowship and has started to develop a clinical practice in pancreatic and hepatobiliary malignancies as well as intraperitoneal hyperthermic chemoperfusion. He competed for and received an institutional NIH K12 career development award for work examining T cells responses in draining lymph nodes in patients with pancreatic cancer which commenced in July 2012. Dr. Ammori has lead the Divisional clinical effort in development of heated intraperitoneal chemoperfusion, and also has taken the lead in advancing minimally invasive pancreaticoduodenectomy, gastrectomy and inguinal lymph node dissection.

RESEARCH GRANTS AND AWARDS

Julian Kim, MD, MS

Funding Source: NIH/NCI
Role on Project: Principal investigator
Project Title: Molecular Analysis of T Cell Clones for Adoptive Therapy
Project Period: 9/30/06-9/30/12
Award Amount (total): $672,300

Funding Source: Case Western Reserve University Clinical and Translational Science Collaborative
Role of Project: Co-Principal Investigator (Mei Zhang, PhD)
Project Title: Adoptive Immunotherapy using melanoma draining lymph nodes
Project Period: 7/1/2012- 6/30/2013
Award Amount (total): $75,000

Funding Source: Case Comprehensive Cancer Center
Role of Project: Co-Principal Investigator (Mei Zhang, PhD)
Project Title: Development of Injectable Novel CNT/Fe3O4 nanoparticle complexes for TAM-specific targeting, imaging and elimination in the treatment of breast cancer
Project Period: 7/1/2012- 6/30/2013
Award Amount (total): $75,000

John Ammori, MD

Funding Source: NIH/NCI Clinical Oncology Career Development Program
Role of Project: Paul Calabresi Scholar (Gerson, PI)
Project Title: 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
Project Period: 2012-2014

Rosemary Leeming, MD

Funding Source: National Surgical Adjuvant Breast and Bowel Project
Role on Project: Principal Investigator
Project Title: NSABP studies

Jeffrey Hardacre, MD

Funding Source: NewLink Genetics Corp
Role on Project: Principal Investigator
Project Title: A Phase 3 Study of Chemotherapy and Chemoradiotherapy with or without HyperAcute®-Pancreatic Cancer Vaccine in Subjects with Surgically Resected Pancreatic Cancer

Scott Wilhelm, MD

Funding Source: NIH/NCI R01 (pending)
Role on Project: Co-investigator (Dean Nakamoto, PI)
Project Title: Modeling Via MRI for Detecting Thyroid Cancer

Robert Shenk, MD

Funding Source: NIH/NCI R21
Role on Project: Co-Investigator (Louise Acheson, PI)
Project Title: Evaluation of Genetic Risk Easy Assessment Tool

Funding Source: Case 1104
Role on Project: Co-Investigator (Maryann Fitzmaurice, PI)
Project Title: Laser Spectroscopy of Breast Tissue

Funding Source: NIH/NCI R18 (pending)
Role on Project: Co-investigator (Jason Sohn, PI)
Project Title: Use of Biometric Patient Identification System Prior to Medical Procedures

IRB-APPROVED CLINICAL TRIALS

- "Molecular Analysis of T Cell Clones for Adoptive Therapy" (Kim, PI). Sponsor-NIH/NCI.
- "A Phase 3, Prospective, Open-Label, Multicenter Comparison Study of Lymphoseek and Vital Blue Dye as Lymphoid Tissue Targeting Agents in Patients With Known Melanoma or Breast Cancer Who Are Undergoing Lymph Node Mapping" (Kim, PI). Sponsor-Neoprobe Corporation.
- "A Phase III Clinical Trial to Evaluate the Safety and Efficacy of Treatment with 2 mg Intralesional Allovectin-7 Compared to Dacarbazine (DTIC) or Temozolomide (TMZ) in Subjects with Recurrent Metastatic Melanoma" (Kim, PI). Sponsor-Vical Corporation.

- "A Phase II study of hyperacute pancreatic cancer vaccine in subjects with surgically resected pancreatic cancer" (Hardacre, PI). Sponsor-NewLink Genetics Corporation.
- "A Prospective, Randomized Comparison of Pancreatic Stump Closure Techniques Utilizing an Autologous Falciform Patch and Fibrin Glue Compared to Standard Closure Following Distal Pancreatectomy with or without Splenectomy" (Hardacre, PI).
- "A Phase 3 Study of Chemotherapy and Chemoradiotherapy with or without HyperAcute®-Pancreatic Cancer Vaccine in Subjects with Surgically Resected Pancreatic Cancer." (Hardacre PI) Sponsor-New Link Genetics.
- NSABP B-37 "A Randomized Clinical Trial of Adjuvant Chemotherapy for Radically Resected Loco-Regional Relapse of Breast Cancer" (Leeming, PI).
- NSABP B-39 "A Randomized Phase III Study of Conventional Whole Breast Irradiation versus Partial Breast Irradiation for Women with Stage 0-II Breast Cancer" (Leeming, PI).
- NSAPB B-40 "A Randomized Phase III Trial of Neoadjuvant Therapy in Patients with Palpable and Operable Breast Cancer Evaluating the Effect on Pathologic Complete Response (pCR) of Adding Capecitabine or Gemcitabine to Docetaxel when Administered Before AC with or without Bevacizumab and Correlative Science Studies Attempting to Identify Predictors of High Likelihood for pCR with Each of the Regimens" (Leeming, PI).
- NSABP B-41 "A Randomized Phase III Trial of Neoadjuvant Therapy for Patients with Palpable and Operable HER2-Positive Breast Cancer Comparing the Combination of Trastuzumab and Lapatinib to Trastuzumab and to Lapatinib Administered with Weekly Pacliztaxel Following AC Accompanied by Correlative Science Studies to Identify Predictors of Pathologic Complete Response" (Leeming, PI).
- NSABP B-42 "A Clinical Trial to Determine the Efficacy of Five Years of Letrozole Compared to Placebo in Patients Completing Five Years of Hormonal Therapy Consisting of an Aromatase Inhibitor or Tamoxifen Followed by an AI in Prolonging Disease – Free Survival in Post-Menopausal Women with Hormone Receptor Positive Breast Cancer" (Leeming, PI).
- NSABP FB-5 "A Phase II Clinical Trial of Epirubicin Plus Cyclophosphamide Followed by Docetaxel Plus Trastuzumab and Bevacizumab Given as Neoadjuvant Therapy for HER2-Positive Locally Advanced Breast Cancer or Given as Adjuvant Therapy for HER2-Positive Pathologic Stage III Breast Cancer" (Leeming, PI).
- NSAPB B-43 "A Phase III Clinical Trial Comparing Trastuzumab Given Concurrently with Radiation Therapy and Radiation Therapy Alone for Women with HER2-Positive Ductal Carcinoma In Situ Resected by Lumpectomy" (Leeming, PI).

- NSABP B-44l "A Multicenter Phase III Randomized Trial of Adjuvant Therapy for Patients with HER2-Positive Node-Positive or High Risk Node-Negative Breast Cancer Comparing Chemotherapy Plus Trastuzumab with Chemotherapy plus Trastuzumab plus Bevacizumab" (Leeming, PI).
- ICC5102 Expression of Estrogen Regulation Genes. PI: M. Montano, PhD.
- CWRU 11107 Partial Breast Re-Irradiation for Patients with Ipsilateral Breast Tumor Recurrence, After First Being Treated with Breast Conservation for Early Stage Breast Cancer: An Efficacy Trial Comparing Mammosite and Intraoperative Radiation. PI: J. Lyons, MD.
- CWRU Feasibility and Efficacy of Breast Conserving Surgery in Patients with MRI Detected Multicentric Breast Cancer. PI: J. Lyons, MD.
- UHCMC IRB 10-10-12 "Blood and Mucosal HIV-Specific CD8+ T-Cell Responses in High-Risk Seronegatives." Jeffrey Hardacre, Co-investigator.

IACUC APPROVED ANIMAL PROTOCOLS

- CASE 2012-0019: Adoptive immunotherapy using ex vivo activated melanoma-draining lymph node (MDLN) T cells against human melanoma xenografts.
- CASE 2010-0127: Modulation of mammary tumor growth, metastasis and tumor-induced immune suppression.
- CASE 2010-0152: Effects of KLF4 knock-out macrophages on B16 melanoma murine model.

PUBLICATIONS

- Zhang, M and Kim J. Effect of molecular size and modification pattern on the internalization of water soluble (1-3)-(1-4) glucan by primary murine macrophages. Int J Biochem Cell Biol. 44 (2012) 914-927.
- Visioni A, Zhang M, Graor H, Kim J. Expansion of melanoma-specific T cells from lymph nodes of patients in stage III: Implications for adoptive immunotherapy in treating cancer. Surgery. 2012 Oct;152(4):557-66.
- Sondak VK, King DW, Zager JS, Schneebaum S, Kim J, Leong SP, Faries MB, Averbook BJ, Martinez SR, Puleo CA, Messina JL, Christman L, Wallace AM. Combined Analysis of Phase III Trials Evaluating [(99m)Tc]Tilmanocept and Vital Blue Dye for Identification of Sentinel Lymph Nodes in Clinically Node-Negative Cutaneous Melanoma. Ann Surg Oncol. 2012 Oct 3.
- Choi AH, Barnholtz-Sloan JS, Kim JA. Effect of radiation therapy on survival in surgically resected retroperitoneal sarcoma: a propensity score-adjusted SEER analysis. Ann Oncol. 2012 Sep;23(9):2449-57.
- Nikfarjam M, Frias-Kletecka C, Hardacre J. Duodenal Tumour and Cutaneous Skin Lesions. J Gastroenterol Hepatol 2012 Feb;27(2):414.
- Goyal K, Einstein D, Ibarra RA, Yao M, Kunos C, Ellis R, Brindle J, Singh D, Hardacre J, Zhang Y, Fabians J, Funkhouser G, Machtay M, Sanabria J. Stereotactic Body Radiation Therapy for Nonresectable Tumors of the Pancreas. J Surg Res 2012;174:319-25.
- Hepatic artery infusional chemotherapy in patients with unresectable colorectal liver metastases and extrahepatic disease. Ammori JB, D'Angelica MI, Fong Y, Cercek A, Dematteo RP, Allen PJ, Kingham TP, Paty PB, Jarnagin WR, Kemeny NE. J Surg Oncol. 2012 Dec;106(8):953-8.
- Chen W, Kim J, Kim E, Silverman P, Overmoyer B, Cooper B, Anthony S, Shenk R, Leeming R, Hanks S, Lyons J. A Phase II Study of Radiotherapy and Concurrent Paclitaxel Chemotherapy in Breast Conserving Treatment for Node-Positive Breast Cancer. International Journal of Radiation Oncology, Biology, Physics. 2012;82:14-20.
- V Vanfossen, S Wilhelm, J Eaton, and C McHenry: Association of Thyroid, Breast and Renal Cell Cancer: A Population-based Study of the Prevalence of Second Malignancies. Ann Surg Onc. Accepted for publication Sept. 2012.
- Ammori JB, DeMatteo RP. Gastrointestinal Stromal Tumor. In: Dimick JB, Upchurch GR, and Sonnenday CJ (Eds.), Clinical Scenarios in General Surgery. Philadelphia, PA: Lippincott Williams & Wilkins.

ABSTRACTS

- American Association of Endocrine Surgery (Iowa City, Iowa)- Association of Thyroid, Breast and Renal Cell Cancer: A Population-based Study of the Prevalence of Second Malignancies- V Vanfossen,S Wilhelm, J Eaton, and C McHenry. April 2012.
- Midwest Surgical Association (Mackinac Island, MI)- Can completion thyroidectomy be performed as outpatient surgery? T Shah, SM Wilhelm. Poster presentation, August 2012.
- Comparison of Different Radiation Techniques to Achieve Normal Tissue Soparing and Target Volume Coverage in the Treatment of Left Sided Early Stage Breast Cancer. M. Mislmani, C. Weller, S. Anthony, G. Severino, P. Silverman, R. Shenk, R. Leeming, B. Hoit, C. Thompson, J. Lyons. Annual Meeting of the American Society of Radiation Oncology, October 2012, Boston, MA.
- Hardacre JM, Mulcahy MF, Talamonti M, Obel JC, Rocha Lima CMS, Safran H, Lenz HJ, Chiorean N, Vahanian NN, Link CJ. Addition of Algenpantucel-L Immunotherapy to Standard of Care Adjuvant Therapy for Pancreatic Cancer. Presented at the American Society of Clinical Oncology, 2012, Chicago, IL.
- Hardacre JM, Mulcahy MF, Small W, Talamonti M, Obel JC, Krishnamurthi S, Rocha-Lima CMS, Safran H, Lenz HJ, Chiorean EG. Addition of Algenpantucel-L Immunotherapy to Standard Adjuvant Therapy for Pancreatic Cancer: A Phase 2 Study. Presented at the annual meeting of the Society for Surgery of the Alimentary Tract, 2012, San Diego, CA.

INVITED PRESENTATIONS

Jeffrey Hardacre, MD

- Hardacre JM. A History of Pancreatic Surgery. Grand Rounds, Department of Surgery, Case Western Reserve University. February 15, 2012.
- Hardacre, JM. Approach to the Patient with a New Diagnosis of Pancreatic Cancer. The Gathering Place, Cleveland, OH. April 25, 2012.
- Hardacre JM, Mulcahy MF, Small W, Talamonti M, Obel JC, Krishnamurthi S, Rocha-Lima CMS, Safran H, Lenz HJ, Chiorean EG. Addition of Algenpantucel-L Immunotherapy to Standard Adjuvant Therapy for Pancreatic Cancer: A Phase 2 Study. Presented at the New York Academy of Sciences symposium: Pancreatic Cancer – Translation of New Ideas. October 12, 2012.
- Hardacre JM. A History of Pancreatic Surgery. Grand Rounds, Department of Surgery, Case Western Reserve University. February 15, 2012.
- Hardacre, JM. Approach to the Patient with a New Diagnosis of Pancreatic Cancer. The Gathering Place, Cleveland, OH. April 25, 2012.

John Ammori, MD

- Case Presentations (Retroperitoneal Sarcoma and Colorectal Carcinomatosis), Tumor Board, Tri-Point Medical Center, Concord, OH. July 10, 2012. Audience - Oncology care providers (medical, surgery, radiation, nursing) at Tri-Point Medical Center.
- Surgery Resident Education Conference. Gastric Cancer. University Hospitals Case Medical Center. Cleveland, OH. August 13, 2012. Audience - Case Western Reserve University Surgical Residents.
- Surgery Resident Education Conference. Liver Resection. University Hospitals Case Medical Center. Cleveland, OH. October 29, 2012. Audience - Case Western Reserve University Surgical Residents.

ADMINISTRATIVE

Julian Kim, MD

- Chief Medical Officer, UH Seidman Cancer Center
- Medical Executive Committee, UH Seidman Cancer Center
- Publications Committee, American Society of Breast Surgeons
- Program Committee, International Society of Biologic Therapy

Jerry M. Shuck, MD, D.Sc.

- Admissions Committee, Case Western Reserve University School of Medicine
- Director, Graduate Medical Education UHCMC
- Clinical Council UHCMC, ex officio
- Appeal Board member, ACGME
- Editorial Board, American Journal of Surgery
- Editorial Board, Academic Surgery

Rosemary Leeming, MD

- UHRMC:
  - Chief Medical Officer, UHRMC
  - UHRMC Quality Management Committee
  - UHRMC Utilization Review Committee

- UH Regional Hospitals:
  - Quality Affairs and Professional Advisory Committee
  - UH Regional Hospitals Board of Directors
  - Credentials Committee
  - Medical Executive Committee
  - PIPS: Performance Improvement

- UHCMC:
  - Case Comprehensive Cancer Center Breast Cancer Disease Committee
  - UH Breast Cancer Task Force and Medical Management Group
  - UH Breast Cancer Clinical Trials Group
  - UHCMC Board of Directors
  - CMC BOD Quality Committee

- UHHS:
  - UH Transformation Excess Days Committee
  - CMO EMR Advisory Council

Scott M. Wilhelm, MD

- Director, Section of Endocrine Surgery, Division of Surgical Oncology

- UHCMC:
  - Surgical Grand Rounds Director (July 2012- present)
  - Surgical Representative to University/Case Medical Center Institutional Review Board (7/2006-3/2012)
  - Surgical representative on the hospital CME committee (7/2005-present)
  - Surgical Research Review Committee (7/2007-present) - intradepartmental IRB protocol review and research planning- monthly meeting
  - Faculty Supervisor and Participant in Annual Resident Retreat (Dept. of Surgery), April 28, 2012
  - Mock Orals Examiner June 2012 (Surgical residents)
  - Resident and Faculty Interviewer for annual match and new hires
  - UH Wellness Committee

- Regional/Local:
  - Ohio American College of Surgeons- Communications Chairman, 2009-June 2012
  - Named Northeastern Regional Councilor July 2012- present
  - Central Surgical Association- Membership Committee 2010-2012
  - Cleveland Surgical- President June, 2011-July, 2012
  - Council member, outgoing President July 2012-present
  - Midwest Surgical Association - Named Program Committee Member Dec. 2012

- National:
  - American College of Surgeons- Ohio District #1 Committee on Applicants of the American College of Surgeons member 2011- present
  - Institutional Representative for the Association of Academic Surgery for dispersement of info, membership recruitment etc.
  - American Association of Endocrine Surgeons (AAES) - Membership committee member - Named Program Commitee Member July, 2012

Jeffrey Hardacre, MD

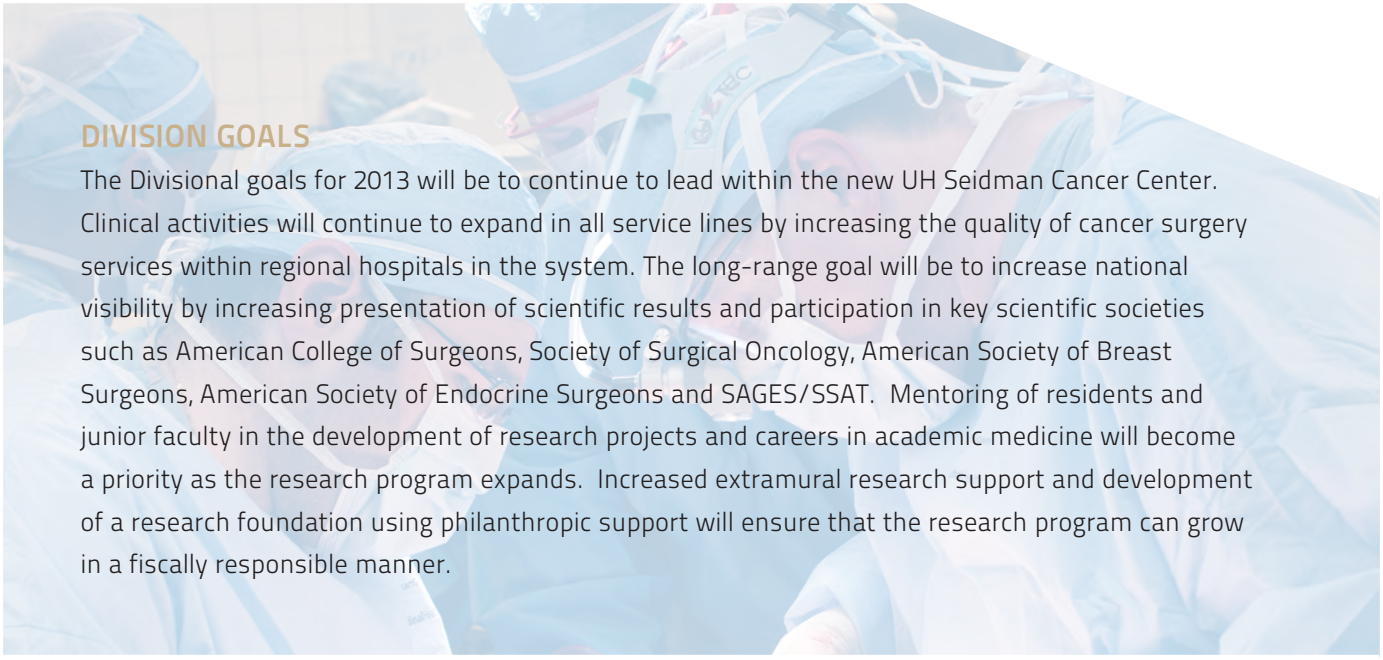
- Director, Section of Pancreatic Surgery, Division of Surgical Oncology
- Chair, Surgical Oncology Quality Assurance Committee
- CWRU Department of Surgery Residency Committee
- Mentor, CWRU Summer Medical Dental Education Program
- "Life after the Whipple" Support Group at UHCMC
- Ad hoc Reviewer for Surgery, Annals of Surgery, JACS, American Journal of Surgery
- Program Sub-committee (Pancreas) Member SSAT Annual Meeting
- Membership Committee for Midwest Surgical Association (2012-15)

Robert R. Shenk, MD

- Director, Section of Breast Surgery, Division of Surgical Oncology
- UHCMC Credentialing Committee
- UHCMC Department of Surgery Promotions and Tenure Committee
- Ireland Cancer Center CME Committee
- UHCMC Cancer Hospital Task Force
- UHCMC Breast Cancer Task Force
- UHCMC Cancer Liaison Physician
- ACS Local Committee on Applicants

Marjie Persons, MD

- Convener, CWRU city-wide Block I Core Discipline Leaders
- Block I Core Discipline Leader, CWRU
- Curriculum Committee, Association for Surgical Education
- Clinical Curriculum Council
- AOA Selection Committee



DIVISION GOALS

The Divisional goals for 2013 will be to continue to lead within the new UH Seidman Cancer Center. Clinical activities will continue to expand in all service lines by increasing the quality of cancer surgery services within regional hospitals in the system. The long-range goal will be to increase national visibility by increasing presentation of scientific results and participation in key scientific societies such as American College of Surgeons, Society of Surgical Oncology, American Society of Breast Surgeons, American Society of Endocrine Surgeons and SAGES/SSAT. Mentoring of residents and junior faculty in the development of research projects and careers in academic medicine will become a priority as the research program expands. Increased extramural research support and development of a research foundation using philanthropic support will ensure that the research program can grow in a fiscally responsible manner.

Chapter 11

Division Chief

Philip Linden, MD

Faculty

Jason Robke, MD

Carsten Schroeder, MD, PhD

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.

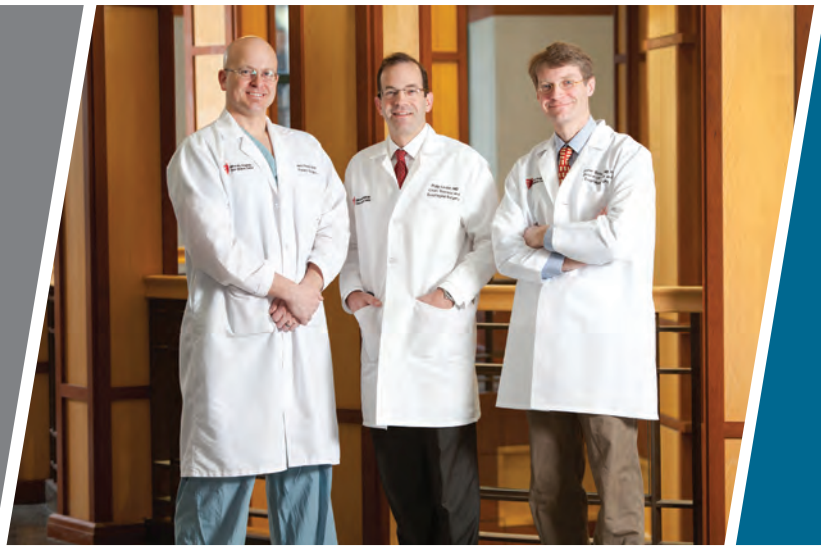
STAFF/FACULTY

Philip Linden, MD

Dr. Linden began at University Hospitals Case Medical Center (UHCMC) in August 2007. He is an associate professor of surgery at Case Western Reserve University School of Medicine. He received his medical degree from the University of Pennsylvania in 1992. He completed his training in general surgery at the Brigham and Women's Hospital and Harvard Medical School in Boston, Massachusetts in 1999. During this time, he spent two years as the Garrett B. Smith Fellow in Angiogenesis Research under Dr. Judah Folkman at Children's Hospital. Dr. Linden completed his training in cardiac and thoracic surgery at the Brigham and Women's Hospital and Children's Hospital in Boston in 2001. After completing his training, he was on staff in the Division of Thoracic Surgery at Brigham and Women's Hospital. During this time, he was Section Head of Thoracic Surgery at the Boston VA Hospital and developed a thoracic surgery program at MetroWest Medical Center in Framingham, Massachusetts. He was an assistant professor of surgery at Harvard Medical School. Dr. Linden's areas of interest include esophageal surgery, minimally invasive thoracic surgery, bronchoalveolar carcinoma, and the surgical treatment of lung cancer in the high risk patient, including ablative therapies.

Jason Robke, MD

Dr. Robke was recruited in July 2004. He received his medical degree from the Medical College of Ohio and completed his training in thoracic surgery at Allegheny Medical Center in Pittsburgh, Pennsylvania. Dr. Robke received extensive training in the area of minimally invasive surgical techniques



Left to right:
Jason Robke, MD;
Philip Linden, MD;
Carsten Schroeder, MD, PhD

(VATS), surgical treatment of esophageal diseases, hyperhidrosis, chest wall tumors, and endoscopic treatment of airway and esophageal strictures under the tutelage of Dr. Rodney Landreneau. Dr. Robke is an assistant professor of surgery at Case Western Reserve University School of Medicine. He is on staff at the Louis B. Stokes Cleveland VA Medical Center, as well as at UHCMC.

Carsten Schroeder, MD, PhD

Dr. Schroeder became staff in the Division of Thoracic and Esophageal Surgery at UHCMC in January 2009. He received his medical degree from the University of Mainz (Germany) in 1996. He completed his training in general surgery at the University Hospital in Hannover (MHH, Germany) in 2005. During this time, he spent 2-1/2 years as a Research Fellow in Cardiac and Pulmonary Transplant Research under Dr. Richard Pierson at Vanderbilt University in Nashville and University of Maryland in Baltimore, funded by a grant from the German Research Foundation (DFG). Dr. Schroeder completed his training in Thoracic Surgery at the Cleveland Clinic in 2006 and in 2007-2008 at UHCMC. His areas of interest include minimally invasive thoracic surgery, esophageal surgery and interventional endobronchial and endoesophageal management.

DIVISION EDUCATIONAL PROGRAM

The thoracic service provides a second year general surgery resident rotation. Core competencies in thoracic surgery are taught. There are weekly teaching lectures on core subjects in thoracic surgery from the following topics: benign esophageal disease, malignant esophageal disease, benign and malignant lung and pleural disease, mediastinum, airway, chest wall and diaphragm.

The second year resident's patient care responsibilities include care of the thoracic surgery ICU patients, as well as the workup and care of in-hospital consultations.

PATIENT CARE WITHIN THE DIVISION

Patients are cared for on the Tower 3 Telemetry unit. Early ambulation is provided with the aid of specially designed upright walkers which allow for ambulation with chest tubes that require continuous suction. A core group of nurse practitioners and physician's assistants is responsible for patient care, while the second year resident is responsible for inpatient consultations and patients in the intensive care unit. Patients requiring ventilation or unstable patients are admitted to the cardiothoracic surgical intensive care unit, where they are cared for in collaboration with the surgical intensive care team.

Rounds are conducted every morning by the thoracic surgery attending, along with the thoracic surgery nurse practitioner or physician's assistant. A thoracic surgery fellow and a second year general surgery resident round out the thoracic surgery team. Weekly quality assurance meetings are conducted, reviewing every operation performed, as well as any complications.

PUBLICATIONS

Dr. Linden

Articles

- Babakoohi S, Fu P, Yang M, Linden PA, Dowlati A. Combined SCLC clinical and pathologic characteristics. Clin Lung Cancer 2013; 14(2):113-119.
- Hubbard MO, Fu P, Margevicius S, Dowlati A, Linden PA. Five-year survival does not equal cure in non-small cell lung cancer: A surveillance, epidemiology and end results based analysis of variables affecting 10 to 18 year survival. J Thorac Cardiovasc Surg. 2012 143(6):1307-1313.
- Morton ML, Bai X, Merry CR, Linden PA, Khalil AM, Leidner RS, Thompson CL. Analysis of the Bronchioloalveolar Carcinoma lung cancer progression model using Next-Generation RNA Sequencing from laser micro-dissected archival FFPE tissue specimens. Frontiers Genetics.

Chapters

- Suppiah S, Linden PA, Robke J, Schroeder, C, Yao M, Machtay M, Lo SS. Sublobar, wedge resection or stereotactic body radiation therapy for stage I marginally operable non-small cell lung cancer. Expert Rev Anticancer Ther. 2012.

DIVISION GOALS

- To become a regional and national center of excellence in minimally invasive thoracic surgery and in the care of the high risk thoracic surgery patient.
- To grow volume across the medical system. New practices will be started at St. John West Shore Hospital and UH Ahuja Medical Center.
- To develop a clinical and translational research program, supported by philanthropic, intramural and extramural research grants.

Dr. Schroeder

- Schröder C, Leukhardt W, Hsiao E, Farah M, Markowitz A. Trans-aortic video assisted resection of a recurrent left ventricular myxoma. Annals of Thoracic Surgery 2013;95:340-2.
- Suppiah S, Linden P, Robke J, Schröder C, Yao M, Machtay M, Lo S. Sublobar/ wedge resection or stereotactic body radiation therapy for stage I marginally operable non-small cell lung cancer. Expert Rev Anticancer Ther. 2012;12:1375-7.
- Rothermel L, Leukhardt W, Gilkeson R, Markowitz A, Schröder C. Thoracoscopic resection of a giant teratoma compressing the right heart. ICVTS, in press.

AWARDS

Dr. Linden

- Cleveland Magazine, Top Doctors, Thoracic Surgery
- Best Doctors in America

PRESENTATIONS

Dr. Linden

- ECOG-ACRIN Update: Annual General Thoracic Surgical Club Meeting, March 2012.

Dr. Schroeder

- STS 1/2012 presentation: Trans-aortic video assisted resection of a recurrent left ventricular myxoma. (Video/Oral).
- ISMICS 6/2012 presentation:

  1) TEE guided optimal epicardial left ventricular lead placement by video-assisted thoracoscopic surgery (VATS) in non responders to biventricular pacing and prior chest surgery. (poster)

  2) Thoracoscopic resection of a giant teratoma compressing the right heart (Video/Oral)

Teaching:

- General Surgery Grand Rounds UH: VATS update Thoracic Surgery, 5/30/2012.
- Speaker at Community Update on Afib, 9/8/12, UH Westlake.
- EP Grand rounds UH: VATS Atrial Clip placement, 9/28.
- Pulmonary Medicine Fellow Teaching Conference UH: Chest tube placement, 10/3/2012.
- Case Biomedical Engineering Students teaching, 11/5/12.
- ED Grand rounds Conference UH: Chest tube placement, 12/6/2012.

DIVISION RESEARCH

- ACASOG Z4099: Phase III Randomized Study of Sublobar Resection With or Without Brachytherapy vs. Stereotactic Body Radiotherapy in High-Risk Patients with Stage I Non-Small Cell Lung Cancer
  Site Principal Investigator: Philip Linden, MD

- CASE 3510: Genetic and Biological Markers of Lung Cancer
  Co-Investigators: Cheryl Thompson PhD, Philip Linden MD, Afshin Dowlati MD, Said Khayyata MD, Rom Leidner, MD

- CASE 1510: MicroRNA Expression in Bronchoalveolar Carcinoma
  Co-Investigators: Cheryl Thompson, PhD, Philip Linden MD, Said Khayyate MD, Afshin Dowlati MD

- Laser Capture Microdissection and Microarray Analysis of Invasive and Noninvasive Areas of Adenocarcinoma with Bronchoalveolar Carcinoma Features
  Principal Investigator: Philip Linden, MD

- 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- PI: Philip Linden, MD

- Orthotopic Mouse Lung Transplantation: A Method to Study Lung Transplant Biology
  Principal Investigator: Carsten Schroeder, MD, PhD

- Role of Bosentan in Lung Hyperacute Rejection
  Principal Investigator: Carsten Schroeder, MD, PhD
  Co-Investigators: Philip Linden, MD, Jeff Kern, MD, Robert Schilz, MD

- Characterization of Human and Mouse Cytokine Profiles in Xenogenic Lung Injury
  Principal Investigator: Carsten Schroeder, MD, PhD

- ACSOG Z4099 / RTOG 1021, A Randomized Phase III Study of Sublobar Resection versus Stereotactic Body Radiation Therapy in High Risk Patients with Stage I Non-Small Cell Lung Cancer (NSCLC)
  Co-Investigator: Carsten Schroeder, MD, PhD

- CTSC 2012 Annual Pilot grant proposal:
  Modulating tumor vascular permeability by deletion/inhibition of sphingosine kinase-1 (SPHK-1) to enhance the response to chemotherapy in lung cancer
  Co-Investigator: Carsten Schroeder, MD, PhD

Chapter 12

Division Chief

James A. Schulak, MD

Faculty

Edmund Sanchez, MD

Christopher T. Siegel, MD, PhD

Kenneth Woodside, MD

The Division of Transplant and Hepatobiliary Surgery has responsibility for performing all abdominal organ (kidney, liver, and pancreas) transplants at the University Hospitals Case Medical Center (UHCMC) which includes 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. In addition, Division surgeons perform hemodialysis access procedures for UHCMC patients.

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 approximately 150 hepatobiliary and pancreatic operations and over 300 vascular access cases each year.

The members of the Division of Transplant and Hepatobiliary Surgery participate regularly in local, regional, and national organizations involved with transplantation and hepatobiliary surgery. Dr. Schulak is a past president of the American Society of Transplant Surgeons (ASTS), has served on the Board of Directors of the national organ procurement and transplantation network, UNOS, and is a recent past Director on the American Board of Surgery. He has been a member of the Ohio Solid Organ Transplant Consortium (OSOTC) Board of Trustees since its inception in 1985 and has served several terms as the OSOTC Board President. Dr. Schulak also has served as Medical Director and President of the local organ procurement organization, Lifebanc.

Dr. Christopher Siegel has served on both the Informatics and the Vanguard committees of the ASTS and is a past Chairman of the OSOTC Liver Transplant Committee. He serves on the Medical Advisory Committee of the Ohio Chapter of the American Liver Foundation and on the Advisory Boards for two pharmaceutical companies.

Dr. Edmund Sanchez is currently serving on the UNOS Pancreas Committee and the ASTS Curriculum, and is a past member of the ASTS Fellowship Training Committee. Dr. Sanchez also serves on the Board of Director for both the OSOTC and Lifebanc.

Dr. Kenneth Woodside is a member of the ASTS Vanguard Committee and the Winiter Symposium Planning Committee. He is a member of the Medical Advisory Committee of the American Liver Foundation, Cleveland Metro Chapter. In addition, Dr. Woodside has served as Chair of the Lifebanc Renal Transplant Committee.

Front Row, L to R:
Christopher Siegel, MD, PhD; James Schulak, MD; Edmund Sanchez, MD

Middle Row:
Mark Aeder, MD; Kenneth Woodside, MD

Back Row:
Juan Sanabria, MD; Kelly Siegel, CNP

STAFF/FACULTY

James A. Schulak, MD

Dr. Schulak has been a member of the Department of Surgery at UHCMC staff since 1985 when he was recruited to be the Director of Transplantation. He is a graduate of the University of Chicago Pritzker School of Medicine (1974) and completed both his general surgery and transplantation training at that same institution. Prior to joining the faculty at the Case School of Medicine, he was on the faculty of the University of Iowa College of Medicine. Dr. Schulak holds the rank of Professor with tenure in the Case Western Reserve University School of Medicine and is the Clinical Director of the UHCMC Transplant Institute and the current Director of Kidney Transplant Surgery.

Chistopher T. Siegel, MD, PhD

Dr. Siegel has been a member of the Department of Surgery at UHCMC since 1999. He is a graduate of the Thomas Jefferson School of Medicine (1989). He completed his general surgery and transplant training at The University of Chicago Medical Center where he also earned a PhD in immunology. Dr. Siegel holds the rank of Associate Professor in the Case Western Reserve University School of Medicine. He is a past Director of both the Liver and Pancreas Transplantation and the current Director of Hepatobiliary Surgery at UHCMC. In addition, Dr. Siegel has recently been appointed as the Surgical Director of the Liver Center of Excellence in the Digestive Health Institute and as the Director of the Liver Cancer Disease Team in the UH Seidman Cancer Center.

Edmund Sanchez, MD

Dr. Sanchez joined the Department of Surgery at UHCMC in November of 2009. He was recruited from the Baylor University Medical Center in Dallas where he was the Director of both Kidney and Pancreas Transplantation, Program Director of the Transplant Surgery Fellowship, and Assistant Director of Transplant Services. Dr. Sanchez is a graduate of the Wayne State University School of Medicine (1994). He received his general surgery training at Wayne State University Medical Center and completed his transplant fellowship at the Baylor University Medical Center. Dr. Sanchez holds the rank of Associate Professor in the Case Western Reserve University School of Medicine. He is the Surgical Director of both Liver and Pancreas Transplantation Surgery at UHCMC.

Kenneth Woodside, MD

Dr. Woodside joined the Department of Surgery at UHCMC in August of 2009. He is a graduate of the University of Michigan Medical School (1999) where he also earned a Master's Degree in Immunology. He received his general surgery training at the University of Texas Medical Branch at Galveston where he also served on the faculty for one year prior to completing his transplant training at the University of Michigan Medical Center. Dr. Woodside was recently promoted to the rank of Associate Professor in the Case Western Reserve University School of Medicine. At UHCMC he is the Director of the Vascular Access Service and a member of the liver, kidney, and pancreas transplant

teams, where he is the Director of Live Donor Surgery and the Surgical Director in the new Program for Renal Transplantation in HIV Patients.

RESEARCH

Members of the Division are involved in both laboratory and clinical research. Dr. Schulak has conducted basic science research in the area of renal, hepatic, and pancreatic ischemia/reperfusion injury for the past two decades. His work has been intermittently funded by the National Kidney Foundation, the Kidney Foundation of Ohio, the American Diabetes Association, the Diabetes Association of Greater Cleveland, and the Rosenberg Renal Research Foundation. He has mentored seven surgical residents in the laboratory and has published numerous research papers relating to the pathophysiology and molecular biology of ischemia/reperfusion injury.

In the clinical arena, Dr. Schulak is a co-investigator (Donald Hricik, MD, is the PI from the Department of Medicine) on an NIH funded study entitled "Non-invasive markers and transplant outcomes in humans". He is also the UHCMC PI for a joint study with the Cleveland Clinic Department of Surgery of the use of TPA in the pre-transplant perfusion of organs recovered from Donors by Cardiac Death (DCD donors). This project, entitled "Enhancing DCD Utilization with Thrombolytic Therapy" is sponsored by the U.S. Health Resources and Services Administration (HRSA). Dr. Siegel continues to develop a comprehensive UHCMC hepatobiliary surgery database. Dr. Siegel, in conjunction with colleagues from medical and radiation oncology, has initiated a collaborative study of the use of Yttrium 90 microspheres as an ablative treatment for hepatic colorectal metastases. Dr. Siegel is also part of a team at UHCMC that is studying the use of imaging to measure liver volumes prior to liver resection. 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. Dr. Woodside is conducting outcomes research in renal transplantation utilizing the national SRTR database. Drs. Schulak and Siegel, in conjunction with Dr. Jeffrey Hardacre in the Division of Surgery Oncology, have performed several retrospective clinical studies using the UHCMC pancreatic surgery database. Finally, 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

- "Phase 2, randomized, open-label, parallel group, multi-center study to assess the safety and efficacy of Alefacept in de novo kidney transplant recipients" (Astellas).

The year 2012 was the last year for the existence of the Division of Transplant and Hepatobiliary Surgery at University Hospitals Case Medical Center. As of 2013, the Division will be split into two distinct Divisions. The Division of Transplant Surgery will be directed by Dr. James Schulak as its Division chief. A new Division of Hepatobiliary Surgery will be established to reflect the increasing volume of primary liver surgery being done at UHCMC. Dr. Christopher Siegel will be the new chief of this Division. Dr. Siegel already serves as the Director of Hepatobiliary Surgery for UHCMC and is the Surgical Director of the Liver Center in the Digestive Disease Institute at UHCMC.

In 2012, the total volume of organ transplants performed at University Hospitals Case Medical Center, since the inception of the program, has surpassed the 3,500 mark. Continued growth in our abdominal transplant programs will continue to be a major focus of the new Division of Transplant Surgery going forward.

- "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 multi-center 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

- 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 EDUCATION

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 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. Specific topics covered with the resident staff include: immunosuppression and transplant immunology; patient evaluation for liver, pancreas, and kidney transplantation; organ donation, procurement, and allocation; evaluation of patients for vascular access; and assessment of patients with hepatobiliary and pancreatic neoplasms. 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 Division periodically presents "Transplant Update" courses for community physicians. Finally, members of the Division give educational update lectures each year to various physicians' and nurses' groups both in the University Hospitals Health System and for other medical groups in Northeast Ohio.

PATIENT CARE WITHIN THE DIVISION

The Transplant and Heptobiliary Service at UHCMC is a very unique one 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 is from the programs in general surgery and urology (typically this includes a PGY5, PGY3, and two PGY1s) 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, and three nurse practitioners (NPs). One NP works primarily with the surgeons managing non-transplant hepatobiliary and pancreas patients. Two other NPs are assigned to the surgical and medical patients on the transplant service. The pre-transplant effort is managed by five nurse coordinators for kidney and pancreas transplantation and one for liver transplantation. The post-transplant effort is managed by three additional nurse coordinators for adult kidney and pancreas transplantation, one for pediatric kidney transplantation, and two for liver transplantation. In addition, the Transplant Program has a dedicated hospital administrator, data management and computer coordinator, two social workers, a business coordinator, two outreach coordinators, and two patient financial coordinators.

Whenever feasible, morning rounds are conducted jointly by the surgical and medical attending staff, and all major therapeutic and management decisions on transplant patients are made after consultation with each other. The program conducts weekly patient selection meetings and monthly quality improvement meetings for both the kidney/pancreas and liver programs. In addition, a monthly journal club is held where recent scientific articles are discussed or visiting professors in the field of transplantation are featured. Because of the large number of liver and pancreatic cancer patients managed by the Division members, they are regular participants in the multi-disciplinary tumor conferences for both GI (non-hepatic) and Hepatobiliary malignancies. The latter was initiated by Dr. Siegel who regularly chairs this program. In 2007, the UHCMC Transplant Institute was opened. This facility is home for all of the nurse coordinators for the abdominal and thoracic organ transplant programs, as well as all of the administrative and ancillary staff. In addition, the space houses all of the pre- and post-transplant clinics for both the surgical and medical faculty, thereby facilitating seamless care for the transplant patients. The Transplant Institute also operates an Education and Evaluation Clinic in Akron, Ohio to facilitate the initial assessment of patients from that region.

DIVISION GOALS

The Division of Transplant and Hepatobiliary 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.

HONORS AND AWARDS

- 2005 Cleveland MOTTEP Award of Achievement: Dr. James A. Schulak
- Dr. Schulak has been continually cited in "Best Doctors in America" since 1994
- Dr. Siegel has also been cited in "Best Doctors in America"
- Kidney Foundation of Ohio "Person of the Year for 2009": Dr. James Schulak
- Dr. Sanchez was awarded the Baylor University Medical Center Transplant Teaching award for 2009

PUBLICATIONS 2008 – 2012

- Messick C, Hardacre JM, McGee MF, Siegel CT, Stellato TA, Sanabria JR, Kinsella TJ, Schulak JA. Early experience with intraoperative radiotherapy in resected pancreatic adenocarcinoma. Am J Surg 195: 308-311, 2008.
- Kinsella TJ, Seo Y, Willis J, Stellato T, Siegel C, Harpp D, Willson JK, Brell J, Gibbons J, Sanabria J, Hardacre J, Schulak J. The impact of resection margin status and post-operative CA19-9 levels on survival and patterns of recurrence following post-operative high-dose radiotherapy with 5FU-based concurrent chemotherapy for respectable pancreatic cancer. Am J Clin Oncol 31(5): 446-453, 2008.
- Abbas R, Willis J, Kinsella T, Siegel C, Sanabria J. Primary squamous cell carcinoma of the main hepatic bile ducts: A case report and review of the current literature. Can J Surg: 51:4, 2008.
- Jones S, Chen WD, Parmigiani G, Diehl F, Beerenwinkel B, Antral T, Traulsen A, Nowak MA, Siegel C, et al. Comparative lesion sequencing provides insights into tumor evolution. PMID: 18337506 (PubMed).
- Trunzo JA, McHenry CR, Schulak JA, Wilhelm SM. Effect of parathyroidectomy on anemia in end-stage renal disease patients with hyperparathyroidism. Surgery 144: 915-919, 2008.
- Woodside KJ, Daller JA. Liver transplantation – the recipient immunology, in Living Donor Organ Transplantation, Gruessner R, Benedetti E (eds). McGraw-Hill, New York, 2008.
- Woodside KJ, Riall TS. Intraductal papillary mucinous neoplasms of the pancreas, in Current Surgical Therapy, Cameron JL (ed). Elsevier Mosby, Philadelphia, 2008.
- Hunter GC, Woodside KJ, Naoum JJ. Healing characteristics and complications of prosthetic and biological vascular grafts, in comprehensive Vascular and Endovascular Surgery, Hallett JW Jr., Mills JL, Earnshaw JJ, Reekers JA, Rooke TQ (eds). Elsevier Mosby, Philadelphia, 2009.
- Hardacre JM, Simo K, McGee MF, Stellato TA, Schulak JA. Pancreatic resection in Octogenarians. J Surg Res 156: 129-132, 2009.
- Murillo CA, Woodside KJ. Guo Q, et al. Integrin and matrix metalloproteinase expression in human carotid plaque. J Surg Res 155: 157-164, 2009.
- Barri YM, Sanchez EQ, Jennings LW, et al. Acute kidney injury following liver transplantation: Definition and outcome. Clin. Transplant. 24(6): 475-483, 2009.
- Sanchez EQ, Melton LB, Chinnakotla S, et al. Whole organ pancreas transplantation at Baylor Regional Transplant Institute: A chance to cure diabetes. Proc Baylor Univ Med Cen. 23: 3-6, 2010.
- Sanchez EQ, Melton LB, Chinnakotla S, et al. Predicting renal failure after liver transplantation from measured glomerular filtration rate: Review of up to 15 years follow-op. Transplantation 89(2): 232-5, 2010.
- Goyal KK, Einstein DB, Kunos C, Siegel C, Singh D, Brindle J, Zhang Y, Williams J, Stulber J, Sanabria JR. Cyberknife radiosurgery for unresectable tumors of the liver: Preliminary results. HPB Surgery 2010.
- Abbas R, Komby KS, Goyal KK, Brunengraber H, Sanabria JR. The dynamics of plasma ophthalmic acid and glutathione concentrations in the VX2 rabbit model of secondary liver tumors. J Surg Res (in press).
- Woodside KJ. Hemodialysis access procedures, in Atlas of General Surgery Techniques, Townsend CM Jr., Evers BM (eds). Elsevier Saunders, Philadelphia, 2010.
- Siegel CT. Approach to Colorectal Liver Metastasis. Chapter in Indications and Outcomes in Colon and Rectal Surgery. Davis Beck (editor) (in press).

- Woodside KJ. Autoresuscitation and organ donation: When is it safe to declare someone dead: Crit Care Med. 40: 329-330, 2012.
- Ibarra R, Rojas D, Snyder L, Yao M, Fabien J, Milano MT, Katz AW, Goodman K, Stephans K, El-Gazzaz G, Aucejo F, Miller C, Fung J, Lo SS, Machtay M, and Sanabria J. Multicenter results of stereotactic body radioTherapy (SBRT) for non-resectable primary liver tumors. Acta Oncologica, 2012.
- Wong R, Sanabria J. Hemmorrhage from a giant gastric arteriovascular malformation: Case report. Am J Gastroenterol, (in press).
- Woodside, KJ, Merion RM, Leichtman AB, et al. Utilization of kidneys with similar Kidney Donor Risk Index values from standard versus expanded criteria donors. Am J Transplant 12: 2106-2114, 2012.
- Augustine JJ, Woodside KJ, Padiyar A, Sanchez EQ, Bodziak KA, Hricik DE, Schulak JA. Independent of nephrectomy, weaning immunosuppression leads to late sensitization after kidney transplant failure. Transplantation 94: 738-743, 2012.
- Woodside, KJ. Donation after cardiac death and liver transplantation. J Surg Res (in press).
- Hricik DE, Poggio ED, Woodside KJ, Sarabu N, Sanchez EQ, Schulak JA, Padiyar A, Heegers PS, Augustine JJ. Transplantation (in press).
- Woodside KJ, Sanchez EQ, Schulak JA. Organ Transplantation in Netter's Surgical Anatomy and Approaches, DelaneyCP (ed). Elsevier Saunders, Philidelphia (in press).
- Woodside KJ. Laparoscopic hand-assisted donor nephrectomy in Operative Techniques in Surgery, Mulholland MW (ed). Lippincott Williams & Wilkins, Philidelphia (in press).

PRESENTATIONS

James A. Schulak, MD

- Indications for pancreatic surgery. Second Annual Case Department of Surgery General Surgery Review Course, Cleveland, 2007
- What's new in organ transplantation. Department of Surgery Grand Rounds, University of Iowa Hospitals. Iowa City, 2007
- Management of gall stone pancreatitis and management of pancreatic pseudocysts. 5th Annual Case Department of
- Surgery Update Course, Cleveland, 2009
- Organ Donation and Allocation in America. Department of Surgery Grand Rounds, Cleveland, 2010
- Organ Donation and Transplantation. Visiting Professor, Akron City Hospital, 2010
- Organ Allocation and Transplantation. Northeast Ohio University College of Medicine, 2010
- ABO Incompatible Kidney Transplantation. University Hospitals Transplant Institute Learning Series, Youngstown and North Canton, OH. 2012

Christopher T. Siegel, MD

- Advanced Surgical Anatomy: Liver resection and transplantation. Case Western Reserve University, Cleveland, 2008
- Approaches to Challenges in Hepatobiliary & Pancreatic Surgery. 4th Annual Case Department of Surgery Surgery Update Course, Cleveland, 2008
- Hepatocellular Carcinoma, Cleveland Clinic, 2009
- Management of gall stone pancreatitis and management of pancreatic pseudocysts. 5th Annual Case Department of Surgery Update Course, Cleveland, 2009
- Approaches to Challenges in Hepatobiliary & Pancreatic Surgery Cases. 6th Annual Case Department of Surgery Update Course, Cleveland, 2010
- Imaging Solutions in Cancer Management: A Case Based Conference, Cleveland, 2011
- Surgical Management of Primary Malignancies of the Liver and Pancreas. LakeHealth Annual Cancer Symposium, 2011

Edmund Q. Sanchez, MD

- Intraoperative fluorescence imaging in pancreas transplantation to determine vascular patency and allograft perfusion. American Transplant Congress, Toronto, 2008
- Advancing donor age does not predict increased length of stay in a multivariate analysis of complications after liver transplantation. American Transplant Congress, Toronto, 2008
- Renal failure after liver transplant is dependent on month 3 GFR, a long-term review of up to 15-year Glofil data. American Transplant Congress, Toronto, 2008
- Utilizing intraoperative fluorescence imaging inliver transplantation and hepatic arterial revisions to image vascular flow, allograft perfusion, and bile production. American Transplant Congress, Toronto, 2008
- The effect of immunosuppression on long-term FGR, a comparison of tacrolimus, cyclosporine, and sirolimus. American Transplant Congress, Toronto, 2008
- Intraoperative fluorescence imaging in renal transplantation to demonstrate vascular patency and allograft perfusion. American Transplant Congress, Toronto, 2008
- Transplantation options for patients with diabetes mellitus. Northeast Ohio Universities College of Medicine, 2010

Kenneth J. Woodside, MD

- Liver and kidney utilization from pediatric DCD donors. American Society of Transplant Surgeons Winter Meeting, Marco Island, 2009
- Laparoscopic nephrectomy in obese donors. American Transplant Congress, Boston, 2009
- Extended and standard criteria kidneys with similar KDRI scores have similar outcomes, American Society of Transplant Surgeons Winter Meeting, Hollywood, FL, 2011
- Ruptured liver mass, American Liver Foundation, Cleveland, 2011
- Kidney case studies, American Society of Transplant Surgeons Winter Meeting, Miami Beach, FL, 2012
- ECD kidney utilization, International Society for Organ Preservation Webinar Series, 2012
- Transplant Immunology. Grand Rounds, Department of Surgery UHCMC 2012
- Outcomes of transplant nephrectomy: A possible benefit of transplant nephrectomy early after allograft failure. American Transplant Congress, 2012
- Alphabet Soup: SCD, ECD, and DCD donors. University Hospitals Transplant Learning Series, Youngstown and North Canton, 2012
- Transplant Immunosuppression, Grand Rounds, Department of Surgery, Northside Hospital, Youngstown OH, 2012

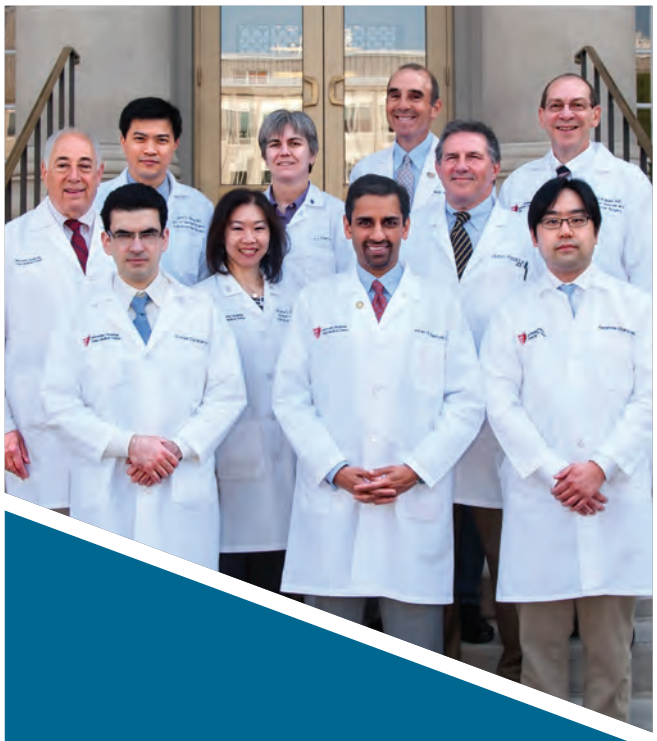
Division Chief
Vikram Kashyap, MD

Division Chief Emeritus and Program Director
Jerry Goldstone, MD

Faculty
Henry Baele, MD
Teresa Carman, MD
Howard Darvin, MD
James Persky, MD
John Wang, MD
Virginia Wong, MD

Chapter 13

DIVISION OF VASCULAR SURGERY AND ENDOVASCULAR THERAPY



Front Row, L to R:
Constantinos Constantinou, MD;
Vikram Kashyap, MD; Alexander Chang, MD

Middle Row:
Jerry Goldstone, MD; Virginia Wong, MD;
James Persky, MD

Back Row:
John Wang, MD; Teresa Carman, MD;
Howard Darvin, MD; Henry Baele, MD

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 scientifically-based, compassionately delivered clinical care employing the latest advanced techniques and technology. More than half of our procedures are now exclusively or partially catheter-based and minimally invasive. This has greatly broadened the scope of our clinical activities and is reflected in the name Division of Vascular Surgery and Endovascular Therapy. 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. Vascular medicine focuses on the non-surgical and non-interventional management of a wide variety of vascular disorders including wound care, lymphedema, arteriovascular risk factor modification and clinical thrombosis.

The Division is composed of eight full-time faculty. These faculty members provide inpatient services to the following University Hospitals Centers: Case, Ahuja, Bedford, Geauga, and Richmond Medical Centers. Outpatient clinical practice occurs at multiple suburban Cleveland locations including: University Suburban, Chagrin Highlands, Twinsburg, Concord, Westlake, and Mentor Health Centers. The Division has a full-time nurse, secretaries, and a billing and coding specialist to help provide expert and timely communication and care. As the Vascular Center of the Heart and Vascular Institute, we also are responsible for the Vascular Diagnostic Center, where more than 10,000 non-invasive vascular examinations are performed annually.

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), starting in 2012 with our inaugural resident. In addition, we actively participate in the education of general surgery residents and medical students from Case Western Reserve University School of Medicine.

STAFF/FACULTY

Henry Baele, MD, FACS

Assistant Professor of Surgery

Dr. Baele has been affiliated with UHCMC for over 20 years and serves as Director of the Vascular Laboratories. He has a busy clinical practice, focused primarily on complex aortic disease, and he plays an important role in the education of vascular fellows. He is certified by the American Board of Surgery in general surgery and vascular surgery.

Teresa Carman, MD

Assistant Professor of Vascular Medicine

Dr. Carman is a Diplomat of the American Board of Vascular Medicine. She serves as Director of the Vascular Medicine program, as well as the Center for Wound Care at UHCMC and the Anticoagulation Monitoring Service. Her clinical research interests include thrombophilia, therapies for venous thromboembolism and vascular laboratory assessment. She plays an active role in the vascular surgery educational and clinical programs.

Howard Darvin, MD, FACS

Clinical Assistant Professor of Surgery

Dr. Darvin completed his general surgery training at Mount Sinai Medical Center in Cleveland and a vascular fellowship at St. Anthony's Hospital in Columbus. He is the Director of Vascular Services at UH Geauga Medical Center where he maintains a busy clinical practice. He is board certified by the American Board of Surgery in general surgery.

Jerry Goldstone, MD, FACS, FRCSE (hon)

Professor of Surgery

Dr. Goldstone serves as Division Chief Emeritus, having led the Division for nine years, from 1999-2008, and again as interim chief in 2010. He has been a member of the UHCMC faculty since 1999. He has played a significant leadership role within the Department of Surgery, University Hospitals Case Medical Center, and Case Western Reserve University School of Medicine. He is certified by the American Board of Surgery in general surgery and vascular surgery.

Vikram Kashyap, MD, FACS

Professor of Surgery

Dr. Kashyap was recruited to lead the Division and assumed this role in February, 2011. His clinical expertise is in the areas of cerebrovascular disease, aortic pathologies, peripheral arterial disease, and venous problems. He has been awarded numerous NIH and Foundation grants to fund his research. The translational laboratory is devoted to the study of endothelial dysfunction. He is certified in both general surgery and vascular surgery.

James Persky, MD, FACS

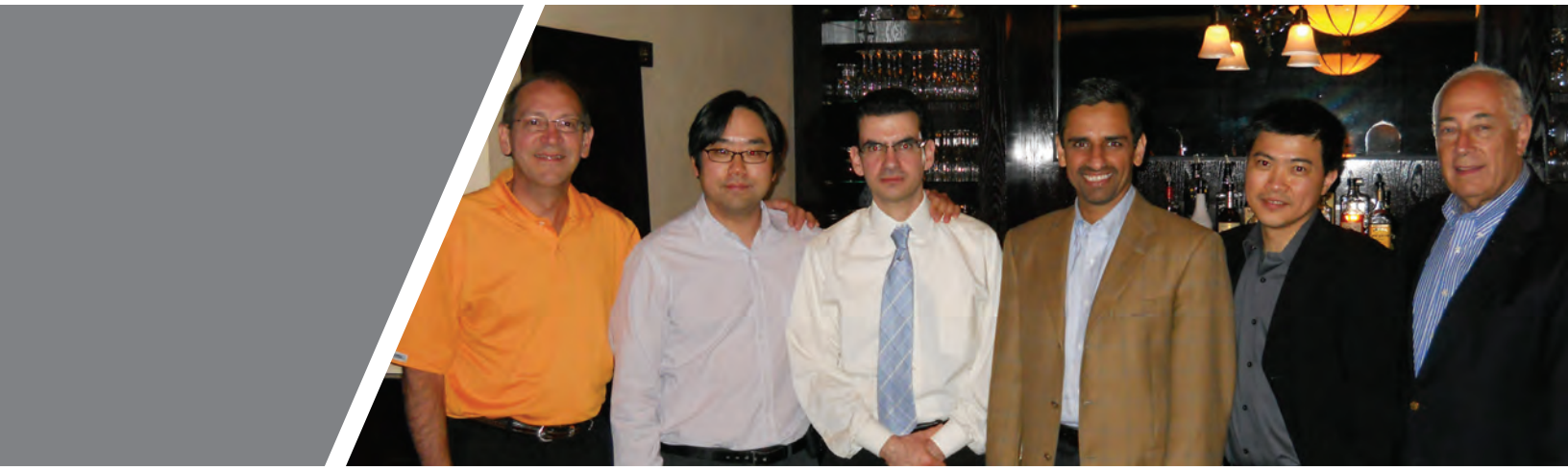
Clinical Assistant Professor of Surgery

A native Clevelander and graduate of the Case Western Reserve University School of Medicine, Dr. Persky received his general surgery training at Case Western Reserve University followed by a vascular surgery fellowship at the University of Cincinnati. He is the first-elected Chief of Surgery at UH Ahuja Medical Center. He is certified by the American Board of Surgery in both general and vascular surgery.

John Wang, MD, FACS

Assistant Professor of Surgery

Dr. Wang joined the faculty in 2009 following training in general and vascular surgery at Temple University in Philadelphia. He has quickly become a busy clinician with expertise in endovascular therapies and is now beginning to develop a research program. He is Associate Program Director of the Vascular Surgery Fellowship. He is certified by the American Board of Surgery in both general and vascular surgery.



Virginia Wong, MD, FACS

Assistant Professor of Surgery

Dr. Wong has been a member of the faculty since completing her general and vascular surgery training at UHCMC in 2006. She completed additional fellowship training in advanced endovascular techniques at Eastern Virginia Medical School (2005) and Baylor (2006). She has been a leader in the application of endovascular techniques to the treatment of vascular disease and has also become a leader in dialysis access program. She leads the Vascular Services at UH Richmond Medical Center. Dr. Wong is certified by the American Board of Surgery in both general surgery and vascular surgery.

PATIENT CARE

The Division's multidisciplinary team is composed of highly trained academic physicians, surgeons, nurses and technicians in multiple locations across Northeast Ohio. We are dedicated to the diagnosis and treatment of patients with vascular problems including cerebrovascular, aortic, peripheral occlusive and venous disease. All aspects of evaluation and treatment of vascular diseases, including advanced diagnostic imaging, medical therapies, endovascular treatment and surgery, are available for our patients. The Division's physicians are pioneers in a number of cutting-edge research studies and novel therapies. We have many innovative clinical and research resources for the most challenging and ill patients. Our patients have access to the latest technologies, including stem cell therapy for peripheral arterial disease, advanced cardiovascular imaging, novel endovascular devices and surgical techniques. In addition, the results of the Medical Center's patient satisfaction surveys show vascular surgery to be at or near the very top of the rankings in every category.

DIVISION EDUCATIONAL ACTIVITIES

We have responsibility for the education of 24 PGY-1 general surgery and surgery specialist residents providing care for patients with vascular disease. This is both a rewarding and stimulating activity. A major educational focus involves the training of our advanced vascular fellows in a two-year program that has completion of a general surgery residency as a necessary precursor. Similarly, we focus on training our integrated vascular surgery resident over a five-year span. The vascular trainees must become not only familiar with, but expert in, the diagnosis and management of diseases of the arterial and venous systems. One measure of the quality of such training programs is the success rate of the graduates in passing the vascular board examinations of the American Board of Surgery. Over the past 10 years, our fellows' record is nearly 100%. Faculty also participate in the education of medical students through the core surgery clerkships as well as advanced electives. In addition, faculty are involved in CME activities, lecturing and sharing their expertise to other practicing physicians in local, regional, national and international venues. The faculty give nearly 100 academic presentations locally, nationally, and internationally on a yearly basis.

DIVISION RESEARCH

Basic or Translational Research:

- Development of implantable flow sensors to monitor bypass graft function has been initiated and employs SmartGraft technology
- Endothelial Function in Human Peripheral Arteries
- Biomimetic Engineering of Vascular Prostheses, R01 HL087483
- Effects of Thrombosis on Venous Endothelium

Clinical Research:

- The Rheos Implantable Baroreceptor Stimulator for the Treatment of Resistant Hypertension
- MarrowStim PAD Kit for the Treatment of Critical Limb Ischemia in Subjects with Severe Peripheral Arterial Disease
- Carotid Revascularization with ev3 Arterial Technology Evolution Post Approval Study – Post Market Surveillance Arm (CREATE PAS)
- Post Approval Study Evaluating The Long Term Safety and Effectiveness Of the Endurant Stent Graft System (ENGAGE PAS)
- A Multicenter, Randomized, Double-blind, Placebo-controlled, Parallel Group Study to Evaluate the Efficacy, Safety, and Tolerability of Ixmyelocel-T in Subjects with Citical Limb Ischemia and No Options for Revascularization; Aastrom REVIVE CLI
- Acutely Medically Ill VTE Prevention with Extended Duration Betrixaban Study (APEX)

SELECTED PUBLICATIONS

- Rajani RR, Kashyap VS, Peripheral Vascular Surgery for Large Vessel Vasculitis, in Inflammatory Diseases of Blood Vessels, 2nd edition, edited by Hoffman GS, Weyand CM, Langford CA, Goronzy JJ. Wiley-Blackwell, Oxford, UK; 2012, pages 558-566.
- Constantinou C, Kashyap VS, Mesenteric Arterial Disease: Diagnosis and Treatment, in Comprehensive Review in Vascular and Endovascular Medicine, 2nd edition, edited by Slovut DP, Dean SM, Jaff MR, Schneider PA. Cardiotext Publishing, Minneapolis, MN; 2012, pages 107-119.
- Sarac TP, Gibbons C, Vargas L, Liu J, Srivastava S, Bena J, Mastracci T, Kashyap VS, Clair D, Success of Type 2 Endoleak Embolization for Abdominal Aortic Aneurysm (AAA) Sac Enlargement, Journal of Vascular Surgery 2012; 55:33-40, PMID: 22056249.
- Zahradnik V, Kashyap VS, Alternative Management of Iliac Vein Injury During Anterior Lumbar Spine Exposure, Annals of Vascular Surgery 2012; 26:277. e15-8, PMID 22079459.
- Carman TL, Fish III JH. Occupational and Environmental Vascular Disorders.
- Comprehensive Review in Vascular and Endovascular Medicine. Slovut, Dean, Jaff, Schneider (eds), Chapter 23, pp. 333-348, Cardiotext, 2012.
- Carman, TL. Edema. The Principles and Practice of Hospital Medicine. McKean, Ross, Dressler, Brotman, Ginsberg (eds), Chapter 84, pp. 590-599, McGraw-Hill, 2012.
- Losordo DW, Kibbe MR, Mendelsohn F, Marston W, Driver VR, Sharafuddin M, Teodorescu V, Wiechmann BN, Thompson C, Kraiss L, Carman T, Dohad S, Huang P, Junge CE, Story K, Weistroffer T, Thorne TM, Millay M, Runyon JP, Schainfeld R. For the Autologous CD34+ Cell Therapy for Critical Limb ischemia Investigators. A randomized, controlled pilot study of autologous CD34+ cell therapy for critical limb ischemia. Circ Cardiovasc Interv 2012;5(6):821-830.
- Ali FN, Carman TL. Medical management for chronic, atherosclerotic peripheral arterial disease. Drugs 2012;72(16):2073-85.
- Hileman CO, Longenecker CT, Carman TL, Labbato DE, Storer NJ, White CW, McComsey GA. Elevated D-dimer is independently associated with endothelial dysfunction in HIV-infected adults on antiretroviral therapy. Antivir Therap 2012;17(7):1345-1249.

ACCOMPLISHMENTS:

- Integration of UHMG-UHMP surgeons into one group
- Open surgical and endovascular growth of 18%
- Hybrid operating room—both hybrid and percutaneous cases
- Achieved ICAVL certification for UH Vascular Labs
- Continue to develop system Wound Center integration
- Expanded services at Twinsburg, Concord, Medina and Mentor
- Centralized scheduling using the HVI 844 3800 number for enhanced access
- Installation and use of 3D Phillips Portal
- Establishing a translational laboratory
- Recruitment of highly competitive vascular trainees

CLINICAL FIRSTS:

- Thrombolysis for arterial and venous occlusions
- Carotid artery stenting
- Thoracic endografting for aneurysms, and dissections
- Endoscopic vein harvest for lower extremity bypass
- New endografts for AAA
- Iliac recanalization, PTA/stenting
- Branding of Vascular Center
- Initiation of multiple new clinical trials

- Hileman CO, Longenecker CT, Carman TL, Milne GL, Labbato DE, Storer NJ, White CW, McComsey GA. Relationship between total bilirubin, endothelial function, inflammation, and oxidative stress in HIV-infected adults on stable antiretroviral therapy. HIV Med 2012;13(10):609-616.
- Longenecker CT, Hileman CO, Carman TL, Ross A, Seydafkan S, Brown T, Labbato DE, Storer N, Tangpricha V, McComsey GA. Vitamin D supplementation and endothelial function among vitamin D deficient HIV-infected persons: a randomized placebo-controlled trial. Antivir Ther 2012;17(4):613-621.
- Hileman CO, Carman TL, Storer NJ, Labbato DE, White CA, McComsey GA. Omega-3 fatty acids do not improve endothelial function in virologically-suppressed HIV-infected men: a randomized placebo-controlled trial. AIDS Res Hum Retroviruses 2012;28(7):649-655.

DIVISION GOALS

Our overall goal is to increase our ability to serve the patients of Northeast Ohio with the most innovative, comprehensive and personal care. In order to help achieve this goal, we plan to:

- Expand the number of clinical research projects.
- Expand clinical activities to include UH Ahuja Medical Center.
- Develop new clinical programs utilizing endovascular, minimally invasive therapies.
- Develop an inter-departmental center for the outpatient management of varicose veins.
- Develop a robust translational laboratory with additional NIH funding.

HONORS AND AWARDS

Henry Baele, MD

- "Best Doctors in Northeast Ohio"

Jerry Goldstone, MD

- "Best Doctors in Northeast Ohio"
- "Best Doctors in America"

Vikram S. Kashyap, MD

- American College of Surgeons Traveling Fellow to Australia and New Zealand, 2012
- President-Elect, Peripheral Vascular Surgery Society
- University Hospitals Leadership Academy, Weatherhead School of Business

We provide a unique, multi-specialty academic environment where ideas are exchanged and cooperative research programs are planned.

Chapter 14

General Surgery Research

Left to right:
Bridget O'Brien-Ermlich, RN, MSN;
Tina Seafler, RN

GENERAL SURGERY RESEARCH UPDATE

The Department of General Surgery's Research Section is comprised of two registered nurses. Under the direction of Bridget O'Brien-Ermlich, RN, MSN, CCRP, research has continued to grow over the past several years. 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, and IRB submissions such as departmental databases and other low risk research projects.

All members of the research team are Certified Clinical Research Professionals (CCRPs) by 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.

A Clinical Research Professional may serve as a clinical investigator, sub-investigator, clinical researcher, research nurse, administrator, coordinator, data manager, project manager, IRB coordinator, quality assurance specialist, regulatory affairs specialist, research pharmacist, consultant, or educator in clinical trials management. A Clinical Research Professional is involved in one or more aspects of clinical trials (GCP) research, including data collection, analysis, or monitoring; case management of protocol participants; recruitment and enrollment of human subjects; protection of subjects and subjects' rights through IRB relations; development of informed consent documents; preparation of adverse event experience reports; construction or monitoring of case report forms; maintenance of drug accountability records; grant and budget development; report preparation; education of other health-care professionals, patients or families regarding clinical trials, protocol development, program administration; and research program audit.

The past year was an excellent year for research productivity. Surgeons in the Department participated in over 24 clinical trials, and over 25 departmental and

chart review studies. Throughout 2012, approximately 130 subjects were enrolled in various studies within the Department of Surgery. A total of 10 clinical trials were completed. The Surgery Protocol Review Committee also reviewed a total of 21 continuing reviews and 12 new protocols.

Bridget O'Brien-Ermlich, RN, MSN
Senior Clinical Research Study Coordinator

Ms. O'Brien-Ermlich came to UHCMC from the Cleveland Clinic where she served as a research nurse for the Digestive Disease Center from 2001 to 2005. Prior to that, she worked as a Wound, Ostomy and Continence nurse for approximately seven years. While at CCF, she was responsible for managing an extensive database on Crohn's Disease with an average accrual of 400 patients per year. Ms. O'Brien-Ermlich continues to lead the research team in the Department of Surgery and is responsible for the budgets and administrative financial obligations for research. She has authored and co-authored articles for a variety of clinical journals and has presented at many clinical programs and symposia. Ms. O'Brien-Ermlich received her Bachelor's of Science in Nursing from College Misericordia in Dallas, Pennsylvania. In 2009, she received her Master's in Nursing from Kent State University. She serves as a member of the IRB Executive Committee, the Research Committee for Electronic Health Record Committee and the SOP Committee.

Publications

- Krpata DM, Schmotzer BJ, Flocke S, Jin J, Blatnik JA, Ermlich B, Novitsky YW, Rosen MJ. Design and initial implementation of HerQLes: a hernia-related quality-of-life survey to assess abdominal wall function. J Am Coll Surg. 2012 Nov;215(5):635-42.

Clinical Research Studies

Title: Efficacy of Bioabsorbable Staple Line Reinforcement in Colorectal and Coloanal Anastomoses: A Prospective Randomized Study
Principal Investigator: Conor Delaney, MD, PhD
Sponsor: W.L. Gore & Associates

Title: A Phase 3B, Randomized, Double-Blind Placebo Controlled, Parallel-Treatment Group, Multicenter Efficacy and Safety Study of Topical Diltiazem Hydrochrloride 2% Cream in Subjects with Anal Fissure
Principal Investigator: Sharon Stein, MD
Sponsor: Ventrus Biosciences

Title: Circular Anal Dilator for Transanal Hemorrhoidectomy
Principal Investigator: Brad Champagne, MD
Sponsor: Ethicon Endosurgery

Title: Establishment of a Longitudinal Database I Support of Simulation-Based Analysis of Colorectal Cancer Survivorship Data: Colorectal Cancer Surveillance Database
Principal Investigator: Johnie Rose, MD
Sponsor: CTSC Pilot Grant Program

Title: 25-OH-Vidamin D3 Therapy in Colorectal Cancer
Principal Investigator: Smitha Krishnamurthi, MD

Title: A Randomized, Double-Blind, Placebo-Controlled Study of the Efficacy and Safety of Metronidazole Ointment in Symptomatic Perianal Crohn's Disease
Principal Investigator: Brad Champagne, MD
Sponsor: Braintree Laboratories, Inc.

Title: A Multi-Center, Prospective Study of the Safety and Efficacy of the HET ™ Bipolar System for the Treatment of Grade I and Grade II Hemorrhoids
Principal Investigator: Brad Champagne, MD
HET Bipolar System Study
Sponsor: HET Systems, LLC

Title: Pilot Study Evaluating the Efficacy of AlloMEM™ in Prevention of Intraperitoneal & Peritoneal Regeneration after Loop Ileostomy (HPM Study)
Principal Investigator: Conor Delaney, MD, PhD
Sponsor: Proxy Biomedical Limited, Ireland, Community Tissue Services

Title: Evaluation of a TAP Block as Part of an Enhanced Recovery Pathway in Laparoscopic Colorectal Surgery: A Prospective, Randomized, Double-Blinded, Multi-Institution Trial
Principal Investigator: Conor Delaney, MD, PhD

Title: Ongoing Study of Pancreatic Disease (IRB# 12-04-08)
Principal Investigator: Jeffrey Hardacre, MD

Title: A Phase III Prospective Randomized Trial Comparing Laparoscopic-assisted Resection Versus Open Resection for Rectal Cancer
Principal Investigator: Conor Delaney, MD, PhD
Sponsor: NCI- sponsored cooperative group study (ACOSOG)

Title: A Multicenter, Randomized, Double-Blind, Placebo-Controlled Study to Evaluate the Efficacy and Safety of Intravenous (IV) Ulimorelin Administered Post-Operatively to Accelerate Recovery of Gastrointestinal (GI) Motility in Subjects Who Have Undergone Partial Bowel Resection (IRB# 2-11-05)
Principal Investigator: Sharon L. Stein, MD
Sponsor: Tranzyme, Inc.

Title: Evaluating the Feasibility of the Radial Reload Stapler with Tri-StapleTM Technology During Laparoscopic Low Anterior Resection for Rectal Cancer: A Prospective Multicenter Case Series
Principal Investigator: Conor Delaney, MD, PhD
Sponsor: Covidien

Title: The Immunological Response of Biologic Mesh in Ventral Hernia Repair – Drain Fluid
Principal Investigator: Michael Rosen, MD

Title: Permacol Vs. Strattice for Abdominal Wall Reconstruction in the Contaminated Field: A Comparative Study
Principal Investigator: Michael Rosen, MD

Title: Assessing Effectiveness of Laparoscopic Colorectal Surgical Skills
Principal Investigator: Conor Delaney, MD, PhD

Tina Seafler, RN
Research Nurse

Ms. Seafler has almost 30 years of clinical nursing experience. She started her nursing career working with post-op surgical patients and in cardiology. She then moved into the role of a Nurse Specialist working closely with patients in the office setting and performing nuclear stress testing. Ms. Seafler's interest in research developed when she was a clinical coordinator for a program looking at peripheral artery disease. She also worked in the community, screening and educating for wellness and prevention. She has assisted on research projects that focused on risk factors associated with diabetes and cardiovascular disease. Ms. Seafler currently coordinates clinical trials in the Department of Surgery on several PI-initiated and sponsored studies.

Coordinator for Studies

Title: Prospective Randomized Controlled Trial of Traditional Laparoscopic Cholecystectomy versus SILS™ Port Laparoscopic Cholecystectomy
Principal Investigator: Raymond Onders, MD
Sponsor: Covidien

Title: Hernia Repair Database for UHCMC Faculty
Principal Investigators: Michael Rosen, MD & Jeffrey Blatnik, MD

Title: 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
Principal Investigator: Sharon L. Stein, MD
Sponsor: Helsinn Therapeutics

Title: The Optimal Treatment Of Fulminant Clostridium Difficile Colitis: Diverting Loop Ileostomy and Colonic Lavage versus Total Abdominal Colectomy
Principal Investigator: Sharon L. Stein, MD

Title: Quality of Life Evaluations in Patients with Abdominal Wall Hernias (Hernia QOL)
Principal Investigator: Michael Rosen, MD

Title: Evaluation of a Novel Endoscopic Treatment for Achalasia: Per-Oral Endoscopic Esophagomyotomy (POEM)
Principal Investigator: Jeffrey Ponsky, MD

Title: Evaluation of Abdominal Muscle Function Following Ventral Hernia Repair
Principal Investigator: Michael Rosen, MD

Title: Ligation of the Intersphincteric Fistula with Tissue Graft Placement for Treatment of Persistent Trans-sphincteric Anal Fistula
Principal Investigator: Brad Champagne, MD
Sponsor: Cook Biotech Incorporated

Title: Development of an Assessment Tool to Measure Flexible Endoscopic Performance. (GAGES)
Principal Investigator: Jeffrey Marks, MD

Title: Prospective, Multicenter, Observational Study to Evaluate Single-Staged Complex Ventral Hernia Repair Using a Bioabsorable Material For Midline Fascial Closure Reinforcement (GORE® BIO-A® Tissue Reinforcement)
Principal Investigator: Michael Rosen, MD
Sponsor: W.L. Gore & Associates

Title: A Prospective Randomized Trial of Biologic Mesh Versus Synthetic Mesh for the Repair of Complex Ventral Hernias
Principal Investigator: Michael Rosen, MD
Sponsor: Center for Clinical Research and Technology and American Hernia Society Grant

Title: Randomized Control Trial of Biologic Mesh (XenMATRIXTM) vs. Component Separation Alone in Contaminated Ventral Hernia Repair: A Pilot Study
Principal Investigator: Michael Rosen, MD
Sponsor: Davol

Title: Evaluation of Postoperative Pain Following Laparoscopic Hernia Repair: A Prospective, Randomized Comparison to Evaluate the Incidence of Postoperative Pain Associated with Absorbable Fixation (AbsorbaTack) vs. Conventional Fixation (ProTack) Following Laparoscopic Hernia Repair
Principal Investigator: Jeffrey Ponsky, MD
Sponsor: Covidien

Title: The Pillar II Multicenter Study
Principal Investigator: Conor Delaney, MD, PhD
Sponsor: Novadaq, Inc

Other Studies:

Title: Health Care Disparities: A Better Metric to Measure Qualify of Care in Colorectal Surgery
Principal Investigator: Sharon L. Stein, MD

Title: Socrates
Principal Investigator: Conor Delaney, MD, PhD

DIAPHRAGM PACING RESEARCH UPDATE

There have now been over 700 Diaphragm Pacing Systems (DPS) implanted worldwide for various indications since the first implant over 10 years ago. The first patient continues to utilize the device 24 hours a day. 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 300 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 this past year in Amyotrophic Lateral Sclerosis (ALS), also called Lou Gerhig'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.

A series of pediatric spinal cord patients have been implanted under a separate IRB protocol. A review of all pediatric DP patients was presented at the Howard H. Steele Pediatric Spinal Cord & Injuries Conference in December 2012.

Presentations were also made at the 23rd International ALSMND Symposium, 24th American Academy of Neurology, and the 13th International Conference on Home Mechanical Ventilation.

Diaphragm Pacing Research

Left to Right:
Mary Jo Elmo, ACNP;
Cindy Kaplan, MSN

Basic Science Research

Steve Schomisch, PhD;
Cassandra Cipriano, RVT

BASIC SCIENCE UPDATE

Steve Schomisch, PhD
Instructor, CWRU
Director of the Surgical Research and Skills Lab

Dr. Schomisch was recruited from the Center for Anesthesia Research at the Cleveland Clinic in 1998. He received his undergraduate degree from John Carroll University and his PhD in regulatory biology from Cleveland State University.

Dr. Schomisch is responsible for all operations of the Surgical Research and Animate Skills Lab, including: supervision and training of technical support staff, surgical residents and students; use of

space and equipment; documentation of laboratory budget; assisting investigators with experimental design, feasibility of techniques and planning of technical aspects of projects; conducting experimental studies; preparing and managing IACUC protocols; and coordinating training courses. He has authored or co-authored 30 publications in various journals, including the Annals of Thoracic Surgery and Surgical Endoscopy.

The focus of Dr. Schomisch's research is the development of novel minimally invasive surgical techniques, therapies and treatments. He currently collaborates 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.

BASIC RESEARCH GRANTS AND AWARDS

Steve Schomisch / Jeffrey Marks

Funding Source: SAGES
Role on Project: Co-investigator
Project Title: Anti-scarring Therapy to Prevent Stricturing Following Endoscopic Esophageal Mucosectomy
Project Period: 3/1/12-2/28/13
Award Amount (total): $30,000

Steve Schomisch

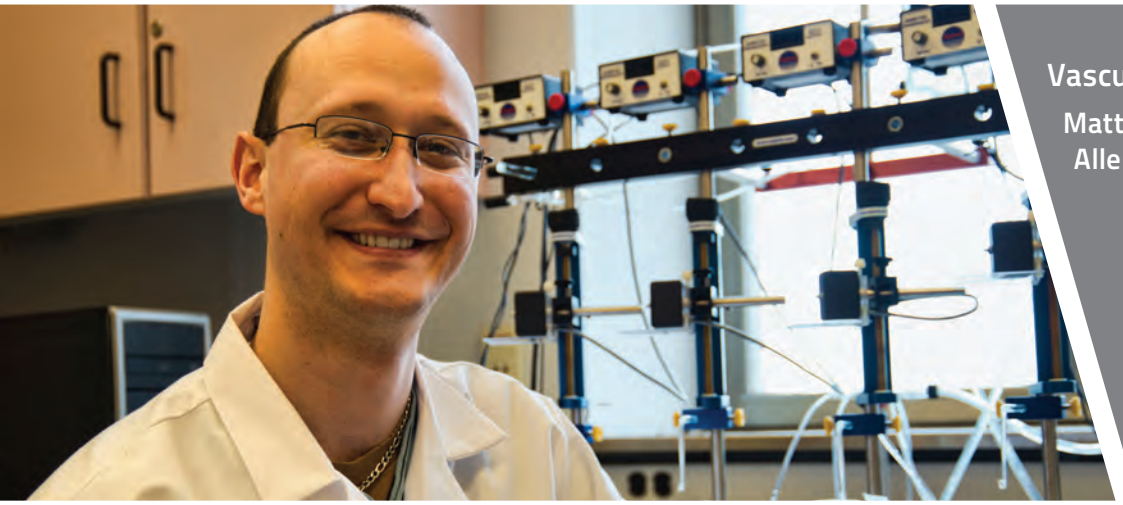
Funding Source: Boston Scientific
Role on Project: Principal Investigator
Project Title: Evaluation of Endoscopic Therapies to Prevent Stricture Formation Following Circumferential Endoscopic Esophageal Mucosectomy in a Swine Model
Project Period: 8/1/12-present
Award Amount (total): $40,225

Publications

- Jeffrey A. Blatnik, MD, Karem C. Harth, MD, MHS, David M. Krpata, MD, Katherine B. Kelly, MD, Steven J. Schomisch, PhD, and Todd A. Ponsky, MD. Stitch Versus Scar—Evaluation of Laparoscopic Pediatric Inguinal Hernia Repair: A Pilot Study in a Rabbit Model. Journal of Laparoendoscopic & Advanced Surgical Techniques Volume 22, Number 8, 2012.
- Pauli EM, Schomisch SJ, Furlan JP, Marks AS, Chak A, Lash RH, Ponsky JL, Marks JM. Biodegradable esophageal stent placement does not prevent high-grade stricture formation after circumferential mucosal resection in a porcine model. Surg Endosc. 2012 Jun 9.

Cassandra Cipriano RVT
Surgical Technician I

Ms. Cipriano received her degree in Veterinary Technology from Stautzenberger College in 2012. Her responsibilities include assisting surgeons, residents and fellows in their research endeavors; assisting in preparation and implementation of experiments; and management of animals pre-, intra- and post-operatively. Additionally, Ms. Cipriano assists with the training courses conducted by the Institute for Surgery and Innovation, by preparing and monitoring animals, maintaining and operating laparoscopic and endoscopic equipment and facilitating the needs of the surgeons and instructors during the courses.



Vascular Surgery Research

Matthew Allemang, MD
Allen Research Scholar

VASCULAR SURGERY RESEARCH UPDATE

The Division of Vascular Surgery and Endovascular Therapy at University Hospitals Case Medical Center, an integral component of University Hospitals Harrington Heart & Vascular Institute, achieved exponential growth of its research programs in 2012. Our renowned surgeons continue to advance patient care through discovery, and share their progress with colleagues in national and international venues. Recent highlights include publications in both the Journal of Vascular Surgery and Annals of Vascular Surgery. In addition, Vikram S. Kashyap, MD, Chief, Division of Vascular Surgery and Endovascular Therapy, UH Case Medical Center; Co-Director, UH Harrington Heart & Vascular Institute; and Professor of Surgery, Case Western Reserve University School of Medicine, and Matthew Allemang, MD, Cardiovascular Medicine Fellow, UH Case Medical Center, presented at the Peripheral Vascular Surgery Society's winter and spring national meetings on topics of antiplatelet use after endovascular surgery and in vivo assessment of endothelial function in human lower extremity arteries.

Current research includes:

- In-vivo evaluation of endothelial cell specific biomimetic peptide fluorsurfactant polymer coating for expanded polytetrafluorethylene vascular grafts, in collaboration with Roger E. Marchant, PhD, Department of Biomedical Engineering, Case Western Reserve University.
- Exploring optimization of optical coherence tomography imaging in the superficial femoral artery, in collaboration with nationally recognized expert Hiram Bezerra, MD, PhD, Cardiovascular Core Imaging Laboratory, University Hospitals Harrington Heart & Vascular Institute.
- Testing endothelial function in human greater saphenous vein and diseased arteries harvested from amputated limbs.
- Dialysis access, including the use of heparin bonded ePTFE grafts, arteriovenous fistulas and grafts in limited life expectancy, and comparison of two-stage versus one-stage transposition for arteriovenous fistula creation.

The Division has focused on expanding leading-edge clinical research offerings to patients suffering from vascular disease. Clinicians working with patients and scientists focused on research are not two separate groups. The same physician-scientists who see patients are also the ones doing clinical research.

Clinical trials currently enrolling include those evaluating:

- Safety and effectiveness of devices to treat carotid stenosis, abdominal aortic aneurysm, and stenosis of femoropopliteal arteries.
- Drug therapy aimed at reducing the incidence of therothrombotic ischemic events.
- Treatment with autologous cBMA for patients with critical limb ischemia.
- Use of sympathetic renal denervation for patients with resistant hypertension.

DIVISION OF 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), cooperative oncology groups such as NSABP, and industry. Extramural grant support within the Division ranks as one of the highest within the Department of Surgery. Dr. Julian Kim is the principal investigator of an NIH award which aims to develop novel methods of adoptive immunotherapy of cancer using T cell receptor molecular signatures. The data from this NIH study is currently being used to develop a Phase I study of adoptive immunotherapy of patients with metastatic melanoma. Preclinical mouse studies are also being conducted within the Kim lab on regulation of macrophages as a cancer therapy using the development of nanoparticles to target tumor-associated macrophages for therapy and imaging. Dr. Jeffrey Hardacre is the principal investigator on a Phase II study evaluating a novel hyperacute pancreatic cancer vaccine in patients with resected pancreatic cancer, and he will serve as the national principal investigator in the planned Phase III pivotal FDA registration trial. Dr. Robert Shenk is a co-investigator on an NIH grant in collaboration with the Department of Human Genetics and has teamed with Dr. Janice Lyons in the Department of Radiation Oncology to develop methods of partial breast irradiation. Dr. Rosemary Leeming is the institutional principal investigator and oversees all NSABP studies in patients with breast and colorectal cancers, which constitutes a significant proportion of all clinical trial activity within the UH Seidman Cancer Center. Finally, Dr. John Ammori has competed for and received an institutional NIH K12 career development award for work examining T cells responses in draining lymph nodes in patients with pancreatic cancer.

Research Grants and Awards

Julian Kim, MD, MS

Funding Source: NIH/NCI
Role on Project: Principal investigator
Project Title: Molecular Analysis of T Cell Clones for Adoptive Therapy
Project Period: 9/30/06-9/30/12
Award Amount (total): $672,300

Funding Source: Case Western Reserve University Clinical and Translational Science Collaborative
Role of Project: Co-Principal Investigator (Mei Zhang, PhD)
Project Title: Adoptive Immunotherapy using melanoma draining lymph nodes
Project Period: 7/1/2012- 6/30/2013
Award Amount (total): $75,000

Funding Source: Case Comprehensive Cancer Center
Role of Project: Co-Principal Investigator (Mei Zhang, PhD)
Project Title: Development of Injectable Novel CNT/Fe3O4 nanoparticle complexes for TAM-specific targeting, imaging and elimination in the treatment of breast cancer
Project Period: 7/1/2012- 6/30/2013
Award Amount (total): $75,000

John Ammori, MD

Funding Source: NIH/NCI Clinical Oncology Career Development Program
Role of Project: Paul Calabresi Scholar (Gerson, PI)
Project Title: 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
Project Period: 2012-2014

Rosemary Leeming, MD

Funding Source: National Surgical Adjuvant Breast and Bowel Project
Role on Project: Principal Investigator
Project Title: NSABP studies

Jeffrey Hardacre, MD

Funding Source: NewLink Genetics Corp
Role on Project: Principal Investigator
Project Title: A Phase 3 Study of Chemotherapy and Chemoradiotherapy with or without HyperAcute®-Pancreatic Cancer Vaccine in Subjects with Surgically Resected Pancreatic Cancer

Scott Wilhelm, MD

Funding Source: NIH/NCI R01 (pending)
Role on Project: Co-investigator (Dean Nakamoto, PI)
Project Title: Modeling Via MRI for Detecting Thyroid Cancer

Robert Shenk, MD

Funding Source: NIH/NCI R21
Role on Project: Co-Investigator (Louise Acheson, PI)
Project Title: Evaluation of Genetic Risk Easy Assessment Tool

Funding Source: Case 1104
Role on Project: Co-Investigator (Maryann Fitzmaurice, PI)
Project Title: Laser Spectroscopy of Breast Tissue

Funding Source: NIH/NCI R18 (pending)
Role on Project: Co-investigator (Jason Sohn, PI)
Project Title: Use of Biometric Patient Identification System Prior to Medical Procedures

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IRB-Approved Clinical Trials

- "Molecular Analysis of T Cell Clones for Adoptive Therapy" (Kim, PI). Sponsor-NIH/NCI.
- "A Phase 3, Prospective, Open-Label, Multicenter Comparison Study of Lymphoseek and Vital Blue Dye as Lymphoid Tissue Targeting Agents in Patients With Known Melanoma or Breast Cancer Who Are Undergoing Lymph Node Mapping" (Kim, PI). Sponsor-Neoprobe Corporation.
- "A Phase III Clinical Trial to Evaluate the Safety and Efficacy of Treatment with 2 mg Intralesional Allovectin-7 Compared to Dacarbazine (DTIC) or Temozolomide (TMZ) in Subjects with Recurrent Metastatic Melanoma" (Kim, PI). Sponsor-Vical Corporation.
- "A Phase II study of hyperacute pancreatic cancer vaccine in subjects with surgically resected pancreatic cancer" (Hardacre, PI). Sponsor-NewLink Genetics Corporation.
- "A Prospective, Randomized Comparison of Pancreatic Stump Closure Techniques Utilizing an Autologous Falciform Patch and Fibrin Glue Compared to Standard Closure Following Distal Pancreatectomy with or without Splenectomy" (Hardacre, PI).
- "A Phase 3 Study of Chemotherapy and Chemoradiotherapy with or without HyperAcute®-Pancreatic Cancer Vaccine in Subjects with Surgically Resected Pancreatic Cancer." (Hardacre PI) Sponsor-New Link Genetics.

- NSABP B-37 "A Randomized Clinical Trial of Adjuvant Chemotherapy for Radically Resected Loco-Regional Relapse of Breast Cancer" (Leeming, PI).
- NSABP B-39 "A Randomized Phase III Study of Conventional Whole Breast Irradiation versus Partial Breast Irradiation for Women with Stage 0-II Breast Cancer" (Leeming, PI).
- NSAPB B-40 "A Randomized Phase III Trial of Neoadjuvant Therapy in Patients with Palpable and Operable Breast Cancer Evaluating the Effect on Pathologic Complete Response (pCR) of Adding Capecitabine or Gemcitabine to Docetaxel when Administered Before AC with or without Bevacizumab and Correlative Science Studies Attempting to Identify Predictors of High Likelihood for pCR with Each of the Regimens" (Leeming, PI).
- NSABP B-41 "A Randomized Phase III Trial of Neoadjuvant Therapy for Patients with Palpable and Operable HER2-Positive Breast Cancer Comparing the Combination of Trastuzumab and Lapatinib to Trastuzumab and to Lapatinib Administered with Weekly Pacliztaxel Following AC Accompanied by Correlative Science Studies to Identify Predictors of Pathologic Complete Response" (Leeming, PI).
- NSABP B-42 "A Clinical Trial to Determine the Efficacy of Five Years of Letrozole Compared to Placebo in Patients Completing Five Years of Hormonal Therapy Consisting of an Aromatase Inhibitor or Tamoxifen Followed by an AI in Prolonging Disease – Free Survival in Post-Menopausal Women with Hormone Receptor Positive Breast Cancer" (Leeming, PI).
- NSABP FB-5 "A Phase II Clinical Trial of Epirubicin Plus Cyclophosphamide Followed by Docetaxel Plus Trastuzumab and Bevacizumab Given as Neoadjuvant Therapy for HER2-Positive Locally Advanced Breast Cancer or Given as Adjuvant Therapy for HER2-Positive Pathologic Stage III Breast Cancer" (Leeming, PI).
- NSAPB B-43 "A Phase III Clinical Trial Comparing Trastuzumab Given Concurrently with Radiation Therapy and Radiation Therapy Alone for Women with HER2-Positive Ductal Carcinoma In Situ Resected by Lumpectomy" (Leeming, PI).
- NSABP B-44I "A Multicenter Phase III Randomized Trial of Adjuvant Therapy for Patients with HER2-Positive Node-Positive or High Risk Node-Negative Breast Cancer Comparing Chemotherapy Plus Trastuzumab with Chemotherapy plus Trastuzumab plus Bevacizumab" (Leeming, PI).
- ICC5102 Expression of Estrogen Regulation Genes. PI: M. Montano, PhD.
- CWRU 11107 Partial Breast Re-Irradiation for Patients with Ipsilateral Breast Tumor Recurrence, After First Being Treated with Breast Conservation for Early Stage Breast Cancer: An Efficacy Trial Comparing Mammosite and Intraoperative Radiation. PI: J. Lyons, MD.
- CWRU Feasibility and Efficacy of Breast Conserving Surgery in Patients with MRI Detected Multicentric Breast Cancer. PI: J. Lyons, MD.
- UHCMC IRB 10-10-12 "Blood and Mucosal HIV-Specific CD8+ T-Cell Responses in High-Risk Seronegatives." Jeffrey Hardacre, Co-investigator.

IACUC Approved Animal Protocols

- CASE 2012-0019: Adoptive immunotherapy using ex vivo activated melanoma-draining lymph node (MDLN) T cells against human melanoma xenografts.
- CASE 2010-0127: Modulation of mammary tumor growth, metastasis and tumor-induced immune suppression.
- CASE 2010-0152: Effects of KLF4 knock-out macrophages on B16 melanoma murine model.

Publications

- Zhang, M and Kim J. Effect of molecular size and modification pattern on the internalization of water soluble (1-3)-(1-4) glucan by primary murine macrophages. Int J Biochem Cell Biol. 44 (2012) 914-927.
- Visioni A, Zhang M, Graor H, Kim J. Expansion of melanoma-specific T cells from lymph nodes of patients in stage III: Implications for adoptive immunotherapy in treating cancer. Surgery. 2012 Oct;152(4):557-66.
- Sondak VK, King DW, Zager JS, Schneebaum S, Kim J, Leong SP, Faries MB, Averbook BJ, Martinez SR, Puleo CA, Messina JL, Christman L, Wallace AM. Combined Analysis of Phase III Trials Evaluating [(99m)Tc]Tilmanocept and Vital Blue Dye for Identification of Sentinel Lymph Nodes in Clinically Node-Negative Cutaneous Melanoma. Ann Surg Oncol. 2012 Oct 3.
- Choi AH, Barnholtz-Sloan JS, Kim JA. Effect of radiation therapy on survival in surgically resected retroperitoneal sarcoma: a propensity score-adjusted SEER analysis. Ann Oncol. 2012 Sep;23(9):2449-57.
- Nikfarjam M, Frias-Kletecka C, Hardacre J. Duodenal Tumour and Cutaneous Skin Lesions. J Gastroenterol Hepatol 2012 Feb;27(2):414.
- Goyal K, Einstein D, Ibarra RA, Yao M, Kunos C, Ellis R, Brindle J, Singh D, Hardacre J, Zhang Y, Fabians J, Funkhouser G, Machtay M, Sanabria J. Stereotactic Body Radiation Therapy for Nonresectable Tumors of the Pancreas. J Surg Res 2012;174:319-25.
- Hepatic artery infusional chemotherapy in patients with unresectable colorectal liver metastases and extrahepatic disease. Ammori JB, D'Angelica MI, Fong Y, Cercek A, Dematteo RP, Allen PJ, Kingham TP, Paty PB, Jarnagin WR, Kemeny NE. J Surg Oncol. 2012 Dec;106(8):953-8.
- Chen W, Kim J, Kim E, Silverman P, Overmoyer B, Cooper B, Anthony S, Shenk R, Leeming R, Hanks S, Lyons J. A Phase II Study of Radiotherapy and Concurrent Paclitaxel Chemotherapy in Breast Conserving Treatment for Node-Positive Breast Cancer. International Journal of Radiation Oncology, Biology, Physics. 2012;82:14-20.
- V Vanfossen, S Wilhelm, J Eaton, and C McHenry: Association of Thyroid, Breast and Renal Cell Cancer: A Population-based Study of the Prevalence of Second Malignancies. Ann Surg Onc. Accepted for publication Sept. 2012.
- Ammori JB, DeMatteo RP. Gastrointestinal Stromal Tumor. In: Dimick JB, Upchurch GR, and Sonnenday CJ (Eds.), Clinical Scenarios in General Surgery. Philadelphia, PA: Lippincott Williams & Wilkins.

Abstracts

- American Association of Endocrine Surgery (Iowa City, Iowa)- Association of Thyroid, Breast and Renal Cell Cancer: A Population-based Study of the Prevalence of Second Malignancies- V Vanfossen,S Wilhelm, J Eaton, and C McHenry. April 2012.
- Midwest Surgical Association (Mackinac Island, MI)- Can completion thyroidectomy be performed as outpatient surgery? T Shah, SM Wilhelm. Poster presentation, August 2012.
- Comparison of Different Radiation Techniques to Achieve Normal Tissue Soparing and Target Volume Coverage in the Treatment of Left Sided Early Stage Breast Cancer. M. Mislmani, C. Weller, S. Anthony, G. Severino, P. Silverman, R. Shenk, R. Leeming, B. Hoit, C. Thompson, J. Lyons. Annual Meeting of the American Society of Radiation Oncology, October 2012, Boston, MA.
- Hardacre JM, Mulcahy MF, Talamonti M, Obel JC, Rocha Lima CMS, Safran H, Lenz HJ, Chiorean N, Vahanian NN, Link CJ. Addition of Algenpantucel-L Immunotherapy to Standard of Care Adjuvant Therapy for Pancreatic Cancer. Presented at the American Society of Clinical Oncology, 2012, Chicago, IL.
- Hardacre JM, Mulcahy MF, Small W, Talamonti M, Obel JC, Krishnamurthi S, Rocha-Lima CMS, Safran H, Lenz HJ, Chiorean EG. Addition of Algenpantucel-L Immunotherapy to Standard Adjuvant Therapy for Pancreatic Cancer: A Phase 2 Study. Presented at the annual meeting of the Society for Surgery of the Alimentary Tract, 2012, San Diego, CA.

Invited Presentations

Jeffrey Hardacre, MD

- Hardacre JM. A History of Pancreatic Surgery. Grand Rounds, Department of Surgery, Case Western Reserve University. February 15, 2012.
- Hardacre, JM. Approach to the Patient with a New Diagnosis of Pancreatic Cancer. The Gathering Place, Cleveland, OH. April 25, 2012.
- Hardacre JM, Mulcahy MF, Small W, Talamonti M, Obel JC, Krishnamurthi S, Rocha-Lima CMS, Safran H, Lenz HJ, Chiorean EG. Addition of Algenpantucel-L Immunotherapy to Standard Adjuvant Therapy for Pancreatic Cancer: A Phase 2 Study. Presented at the New York Academy of Sciences symposium: Pancreatic Cancer – Translation of New Ideas. October 12, 2012.
- Hardacre JM. A History of Pancreatic Surgery. Grand Rounds, Department of Surgery, Case Western Reserve University. February 15, 2012.
- Hardacre, JM. Approach to the Patient with a New Diagnosis of Pancreatic Cancer. The Gathering Place, Cleveland, OH. April 25, 2012.

John Ammori, MD

- Case Presentations (Retroperitoneal Sarcoma and Colorectal Carcinomatosis), Tumor Board, Tri-Point Medical Center, Concord, OH. July 10, 2012. Audience - Oncology care providers (medical, surgery, radiation, nursing) at Tri-Point Medical Center.
- Surgery Resident Education Conference. Gastric Cancer. University Hospitals Case Medical Center. Cleveland, OH. August 13, 2012. Audience - Case Western Reserve University Surgical Residents.
- Surgery Resident Education Conference. Liver Resection. University Hospitals Case Medical Center. Cleveland, OH. October 29, 2012. Audience - Case Western Reserve University Surgical Residents.

MetroHealth Medical Center provides services to a rich and diverse mix of patients.

CHAIRMAN'S INTRODUCTION

Christopher P. Brandt, MD

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.

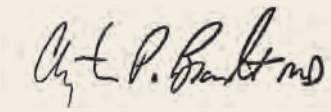
The Department of Surgery provides a full spectrum of clinical services, including Divisions of: General Surgery, with specialists in colorectal, endocrine, hepatobiliary, bariatric, endoscopy, and advanced laparoscopic procedures; Surgical Oncology, with emphasis in the care of breast cancer and melanoma; Trauma, Burns, and Surgical Critical Care; Vascular Surgery, including endovascular procedures; Pediatric Surgery; Plastic Surgery; Oral and Maxillofacial 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 2012, the Department had more than 4,800 surgical admissions, 2,400 trauma and 190 burn unit admissions. Our faculty performed 7,550 operations, and saw more than 79,000 surgical outpatient visits. The Medical Center has over 100,000 Emergency Department visits each year. The resources of the Institution and Department include 24 state-of-the-art surgical suites, and 27 Surgical Intensive Care unit beds. There is a laparoscopic skills training facility for use by the Surgery residents, with plans for opening a full Simulation Center later this year.

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 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.

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

Faculty have full-time appointments at Case Western Reserve University.

Chapter 15

Christopher P. Brandt, MD
Chair, Department of Surgery
Professor, Case Western Reserve University
General Surgery, Surgical Endoscopy, Laparoscopy, Burns

Medical School: Case Western Reserve University, Cleveland, Ohio
Residency: University Hospitals, Cleveland, Ohio

Cardiothoracic Surgery

Inderjit Gill, MD
Director, Division of Cardiothoracic Surgery
Cardiothoracic Surgery

Medical School: Christian Medical College, India
Residency: University of Ottawa, Canada; Christian Medical College, India; Colchester General Hospital, England; Hull Royal Infirmary, U.K.
Fellowship: University of Ottawa, Canada; Cleveland Clinic Foundation, Cleveland, Ohio

Rami Akhrass, MD
Cardiothoracic Surgery

Medical School: Damascus University, Syria
Residency: University Hospitals of Cleveland, Cleveland, Ohio
Fellowship: Cleveland Clinic Foundation, Cleveland, Ohio; University Hospitals of Cleveland, Cleveland, Ohio

R. Thomas Temes, MD
Thoracic Surgery

Medical School: Johns Hopkins University, Baltimore, Maryland
Residency: University of California-Davis Medical Center, Sacramento, California
Fellowship: Barnes-Jewish Hospital, St. Louis, Missouri

Joseph Lahorra, MD
Cardiothoracic Surgery

Medical School: Johns Hopkins University School of Medicine, Baltimore, Maryland
Residency: University Hospitals of Cleveland, Cleveland, Ohio
Fellowship: Massachusetts General Hospital, Boston, Massachusetts

General Surgery

Christopher R. McHenry, Jr., MD
Vice Chair, Department of Surgery
Director, Division of General Surgery
Professor, Case Western Reserve University
General Surgery, Endocrine Surgery, Head and Neck Surgery

Medical School: Northeastern Ohio Universities College of Medicine, Rootstown, Ohio
Residency: Loyola University Chicago, Maywood, Illinois
Fellowship: University of Toronto Mount Sinai Hospital, Canada

Christopher P. Brandt, MD
Chair, Department of Surgery
Professor, Case Western Reserve University
General Surgery, Surgical Endoscopy, Laparoscopy, Burns

Medical School: Case Western Reserve University, Cleveland, Ohio
Residency: Case Western Reserve University, University Hospitals, Cleveland, Ohio

Jeremy M. Lipman, MD
Assistant Professor, Case Western Reserve University School of Medicine
Director, Surgical Education; Associate Program Director, General Surgery Residency; Surgery Clerkship Director
Colorectal Surgery, Surgical Endoscopy, Minimally Invasive Surgery

Medical School: Drexel University College of Medicine
Residency: Case Western Reserve University; University Hospitals, Cleveland, Ohio
Fellowship: Cleveland Clinic, Cleveland, Ohio

Paul P. Priebe, MD
Associate Professor, Case Western Reserve University
General Surgery, Surgical Endoscopy

Medical School: Medical College of Wisconsin, Milwaukee, Wisconsin
Residency: University Hospitals of Cleveland, Cleveland, Ohio
Fellowship: University Hospitals of Cleveland, Cleveland, Ohio

Oral and Maxillofacial Surgery

Michael R. Zetz, DDS
Director, Division of Oral and Maxillofacial Surgery
Associate Professor, Oral and Maxillofacial Surgery, Case Western Reserve University

Medical School: Ohio State University College of Medicine & Public Health, Columbus, Ohio
Residency: Medical University of South Carolina, Charleston, South Carolina

Alan Y. Martinez, DDS
Assistant Professor, Oral and Maxillofacial Surgery
Oral and Maxillofacial Surgery

Dental School: Universidad Nacional Autonoma de Honduras
Residency: Peruvian Universtiy Cayetano Heredia

Rishad Shaikh, DMD
Assistant Professor, Oral and Maxillofacial Surgery (pending)
Oral and Maxillofacial Surgery

Dental School: Case Western Reserve University, Cleveland, Ohio
Residency: West Virginia University, Morgantown, West Virginia
Fellowship: St. John's Mercy Medical Center, St. Louis, Missouri

Plastic Surgery

Roderick B. Jordan, MD
Director, Division of Plastic Surgery
Assistant Professor, Case Western Reserve University
Plastic Surgery

Medical School: Case Western Reserve University, Cleveland, Ohio
Residency: University Hospitals of Cleveland, Cleveland, Ohio

Bram R. Kaufman, MD
Assistant Professor, Case Western Reserve University
Plastic Surgery

Medical School: Case Western Reserve University, Cleveland, Ohio
Residency: University Hospitals of Cleveland, Cleveland, Ohio
Fellowship: University of Pittsburgh Medical Center, Pittsburgh, Pennsylvania

Daniel A. Medalie, MD
Assistant Professor, Case Western Reserve University
Plastic Surgery

Medical School: Cornell University Medical College, New York, New York
Residency: University of Pittsburgh Medical Center, Pittsburgh, Pennsylvania

Ali Totonchi, MD
Assistant Professor, Case Western Reserve University
Plastic Surgery, Craniofacial and Facial Cosmetic Surgery

Medical School: Tabriz University of Medical Sciences
Residency: University Hospitals of Cleveland, Cleveland, Ohio
Fellowship: University Hospitals of Cleveland, Cleveland, Ohio

Surgical Oncology

Bruce A. Averbook, MD
Associate Professor, Case Western Reserve University
General Surgery, Surgical Oncology

Medical School: George Washington University, Washington, D.C.
Residency: University of California Irvine Medical Center, Orange, California; National Cancer Institute, Bethesda, Maryland

Natalie E. Joseph, MD
Assistant Professor, Case Western Reserve University
Surgical Oncology

Medical School: Temple University School of Medicine, Philadelphia, Pennsylvania
Residency: Case Western Reserve University, Cleveland, Ohio
Fellowship: Surgical Oncology, Fox Chase Cancer Center

Edward G. Mansour, MD
Professor Emeritus, Case Western Reserve University
Surgical Oncology, General Surgery

Medical School: American University of Beirut, Lebanon
Residency: MetroHealth Medical Center, Cleveland, Ohio

Jean T. Stevenson, MD
Associate Professor, Case Western Reserve University
Surgical Oncology, General Surgery

Medical School: Medical College of Virginia, Richmond, Virginia
Residency: University Hospitals of Cleveland, Cleveland, Ohio

Trauma, Critical Care, Burns and Acute Care Surgery

Jeffrey A. Claridge, MD
Director, Trauma, Critical Care, Burns and Acute Care Surgery
Assistant Professor, Case Western Reserve University
Interim Director, Section of Trauma
Surgery, Trauma and Critical Care, Bariatric Surgery

Medical School: University of Rochester, Rochester, New York
Residency: University of Virginia, Charlottesville, Virginia
Fellowship: University of Tennessee, Memphis, Tennessee

John J. Como, MD
Associate Professor, Case Western Reserve University
Associate Director, Section of Trauma
Trauma Surgery, General Surgery, Critical Care

Medical School: Robert Wood Johnson University Hospital, New Brunswick, New Jersey
Residency: Beth Israel Medical Center, New York, New York; North Shore University Hospital, Manhasset, New York
Fellowship: University of Maryland, Baltimore, Maryland

Richard B. Fratianne, MD
Director Emeritus, Comprehensive Burn Care Center
Professor Emeritus, Case Western Reserve University
Burns, Critical Care

Medical School: Case Western Reserve University, Cleveland, Ohio
Residency: MetroHealth Medical Center, Cleveland, Ohio

Joseph G. Golob, Jr., MD
Assistant Professor, Case Western Reserve University (pending)
Associate Director Medical Informatics - Surgery PCU
Trauma and Critical Care

Medical School: University of Pittsburgh, Pittsburgh, Pennsylvania
Residency: University Hospitals Case Medical Center, Cleveland, Ohio
Fellowship: MetroHealth Medical Center, Cleveland, Ohio

Amy Ann McDonald, MD
Assistant Professor, Case Western Reserve University
Trauma Surgery, General Surgery, Critical Care

Medical School: Indiana University, Indianapolis, Indiana
Residency: University Hospitals of Cleveland, Cleveland, Ohio
Fellowship: MetroHealth Medical Center, Cleveland, Ohio

Nimitt Patel, MD
Assistant Professor, Case Western Reserve University (pending)

Medical School: St. George's University, Grenada, West Indies
Residency: Seton Hall University, St. Francis Medical Center, Trenton, New Jersey
Fellowship: University of Pittsburgh, Pittsburgh, Pennsylvania

Charles J. Yowler, MD
Director, Comprehensive Burn Care Center
Professor, Case Western Reserve University
Trauma Surgery, Burns, Critical Care

Medical School: Creighton University, Omaha, Nebraska
Residency: Walter Reed Army Medical Center, Washington, D.C.
Fellowship: Walter Reed Army Medical Center, Washington, D.C.

Vascular Surgery

J. Jeffrey Alexander, MD
Director, Division of Vascular Surgery
Associate Professor, Case Western Reserve University

Medical School: University of Pittsburgh, Pittsburgh, Pennsylvania
Residency: University of Chicago, Chicago, Illinois
Fellowship: University of Chicago, Chicago, Illinois

Mireille Astrid Moise, MD
Assistant Professor, Case Western Reserve University
Vascular Surgery

Medical School: University of Pennsylvania School of Medicine, Philadelphia, Pennsylvania
Residency: Hospital of the University of Pennsylvania, Philadelphia, Pennsylvania
Fellowship: Cleveland Clinic Foundation, Cleveland, Ohio

Christopher J. Smith, MD
Director, Endovascular Surgery
Assistant Professor, Case Western Reserve University
Vascular Surgery/Endovascular Surgery

Medical School: Tufts University School of Medicine, Boston, Massachusetts
Residency: Case Western Reserve University, Cleveland, Ohio
Fellowship: University of Cincinnati, Cincinnati, Ohio

General surgery residents spend nearly half of their residency at MHMC.

Chapter 16

STAFF/FACULTY

Division of Cardiothoracic Surgery
Inderjit S. Gill, MD, Director
Rami Akhrass, MD
R. Thomas Temes, MD
Joseph Lahorra, MD

Division of General Surgery
Christopher R. McHenry, MD, Director
Bruce J. Averbook, MD
Christopher P. Brandt, MD
Natalie Joseph, MD
Jeremy Lipman, MD
Paul P. Priebe, MD
Jean T. Stevenson, MD

Division of Oral and Maxillofacial Surgery
Michael R. Zetz, DDS, Director
Alan Y. Martinez, DDS
Rishad Shaikh, DMD

Division of Plastic Surgery
Roderick B. Jordan, MD, Director
Bram R. Kaufman, MD
Daniel A. Medalie, MD
Ali Totonchi, MD

Division of Surgical Oncology
Christopher R. McHenry, MD, Acting Director
Bruce J. Averbook, MD
Natalie Joseph, MD
Edward G. Mansour, MD
Jean T. Stevenson, MD

Division of Trauma, Critical Care, Burns, and Acute Care Surgery
Jeffrey A. Claridge, MD, Director
Christopher P. Brandt, MD
John J. Como, MD
Richard B. Fratianne, MD
Joseph G. Golob, Jr., MD
Amy A. McDonald, MD
Nimitt Patel, MD
Charles J. Yowler, MD

Division of Vascular Surgery
J. Jeffrey Alexander, MD, Director
Mireille Astrid Moise, MD
Christopher J. Smith, MD

RESIDENCY PROGRAM

Jennifer Lastic
Surgical Education Coordinator

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.

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 recently been renovated to provide residents and students with offices.

The new Simulation Center has recently opened, providing additional opportunities for teaching and practice outside of the operating room.

HONORS, AWARDS, APPOINTMENTS, AND COMMITTEES

John Como MD

- American College of Surgeons/EAST Foundation Brandeis University Leadership Conference in Health Policy and Management Scholarship, 2012
- Journal of Trauma Most Productive Reviewers, 10/31/2011-11/1/2012

Jeremy Lipman, MD

- Department of Surgery Faculty Teaching Award, June, 2012
- Assumed the following roles in 2012: Director of Surgical Education, Associate Program Director for General Surgery Residency and Surgery Clerkship Director

Bram R. Kaufman, MD

- 2012 National Committees
  - Annual Meeting Program and Instructional Course Committee, American Society of Plastic Surgery
  - In-Service Examination Committee, American Society of Plastic Surgery
  - Membership Committee, American Society of Plastic Surgery
  - Patient Safety Committee, American Society of Plastic Surgery

Christopher R. McHenry, MD

- Director, American Board of Surgery
- President Elect Central Surgical Association: 2013-2014
- Board of Governors, American College of Surgeons
- Vice-Chairman, Board of Governors Committee on Surgical Practices
- Surgical Oncology Board for the American Board of Surgery
- Board of Directors, Academy of Medicine of Cleveland and Northern Ohio
- Executive Council, Ohio Chapter of American College of Surgeons
- Best Doctors in America 2012-2013
- Cleveland Magazine Top Doctors, March, 2013
- Editorial Board for:
  - American College of Surgeons Web Portal
  - American Journal of Surgery
  - American Surgeon
  - Board of Trustees, Brittingham Library

Daniel Medalie, MD

- Council for State Affairs Committee of the ASPS, as a recurring task

Ali S. Totonchi, MD

2012 Professional Appointments

- Plastic Surgery Residency Director, MetroHealth Medical Center
- Medical Director of Craniofacial Deformity (CFD) multidisciplinary clinic, MetroHealth Medical Center

2012 Committee Appointments

- Core Curriculum Committee for Plastic Surgery Residency, Case Western Reserve University
- Newspaper Committee, American Society of Maxillofacial Surgeons (ASMS), 2012
- Surgical Quality Committee, MetroHealth Medical Center
- Co-Chair, Aesthetic Subcommittee, Plastic Surgery Educational Network

2012 Editorial Appointments

- Assistant Editor, Pediatric Craniofacial Section of Plastic Surgery Educational Network
- Ad Hoc reviewer for Plastic and Reconstructive Journal
- Reviewer for World Journal of Plastic Surgery

2012 Professional Society Membership (New)

- Active member, American Society of Maxillofacial Surgeons
- Active member, Ohio Valley Society of Plastic Surgeons
- Active member, American Society of Plastic and Reconstructive Surgeons
- Active member, American Cleft Palate-Craniofacial Association

Charles J. Yowler, MD, FACS

- Governor, American College of Surgeons Examination Consultant for Surgical Critical Care, American Board of Surgery
- Burn Center Site Surveyor, American Burn Association
- Trauma Center Site Surveyor, American College of Surgeons

BOOK CHAPTERS

Aman Banerjee, MD

- Banerjee A, Claridge JA. Chapter 7: Immunologic. Geriatric Trauma and Emergency Care.
- Banerjee A, Claridge JA. Chapter 18: Infection and Antibiotic Management. Trauma Intensive Care (Pittsburgh Critical Care Medicine). Tisherman, SA, Forsythe, RM (Eds.). Oxford University Press, July 2, 2013 publication.

John Como, MD

- Como JJ, Smith CE, Grabinsky A. Trauma Epidemiology, Mechanisms of Injury, and Prehospital Care. In Varon AJ, Smith CE, editors: Essentials of Trauma Anesthesia, Cambridge, UK, 2012, Cambridge University Press.
- Associate guest editor – J Trauma Acute Care Surg 2012; 73:5 Supplement - EAST practice management guidelines.

Christopher R. McHenry, MD

- McHenry CR and Wilhelm SM. Management of Follicular and Hurthle cell cancer. In: Handbook of Endocrine Surgery. Sippel RS and Chen H. (eds). Hackensack, NJ: World Scientific, New Jersey, 2012:79-88.
- McHenry CR and Lo CY. The Surgical Management of Hyperthyroidism. In: Surgery of the Thyroid and Parathyroid Glands, Second Edition. Randolph GW (ed), Elsevier Science, Philadelphia, PA, 2013: 85-94.
- McHenry CR. Thyroidectomy and Parathyroidectomy. In: Netter's Surgical Anatomy and Approaches. Delaney CE (ed), Elsevier Science, Philadelphia, PA (in press).
- Jin J, Phitayakorn, R, Wilhelm SM, McHenry CR. Advances in Management of Thyroid Cancer: In Current Problems in Surgery, Mosby, St. Louis, MO, 2013 (in press).
- McHenry CR. Open neck exploration for hyperparathyroidism. In: Operative techniques in surgery; Lippincott Williams and Wilkins (in press).

Daniel Medalie, MD

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Charles J. Yowler, MD, FACS

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2012 Divisions of Surgery

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Aman Banerjee, MD

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John Como, MD

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Bram Kaufman, MD

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- Phitayakorn R, McHenry CR. Perioperative considerations in patients with adrenal tumors: Seminars in Surgical Oncology: Adrenal Carcinoma. Journal of Surgical Oncology 106(5):604-10, 2012.
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Ali S. Tontonchi, MD

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PRESENTATIONS AND INVITED LECTURESHIPS

Bram R. Kaufman, MD

Instructor for the Hand and Wrist Fracture Management Workshop / AO North America. January 12, 2013, Cleveland, Ohio.

Jeremy Lipman, MD

- Lipman, JM. "Successes and Saves: An Adjunct to Surgical Morbidity and Mortality Conference". Presented at Association for Surgical Education "Thinking Outside the Box Lunch". San Diego, CA, March 22-24, 2012.
- Colorectal Surgery Education Day, Cleveland Clinic Foundation, November 2, 2012.

Christopher R. McHenry, MD

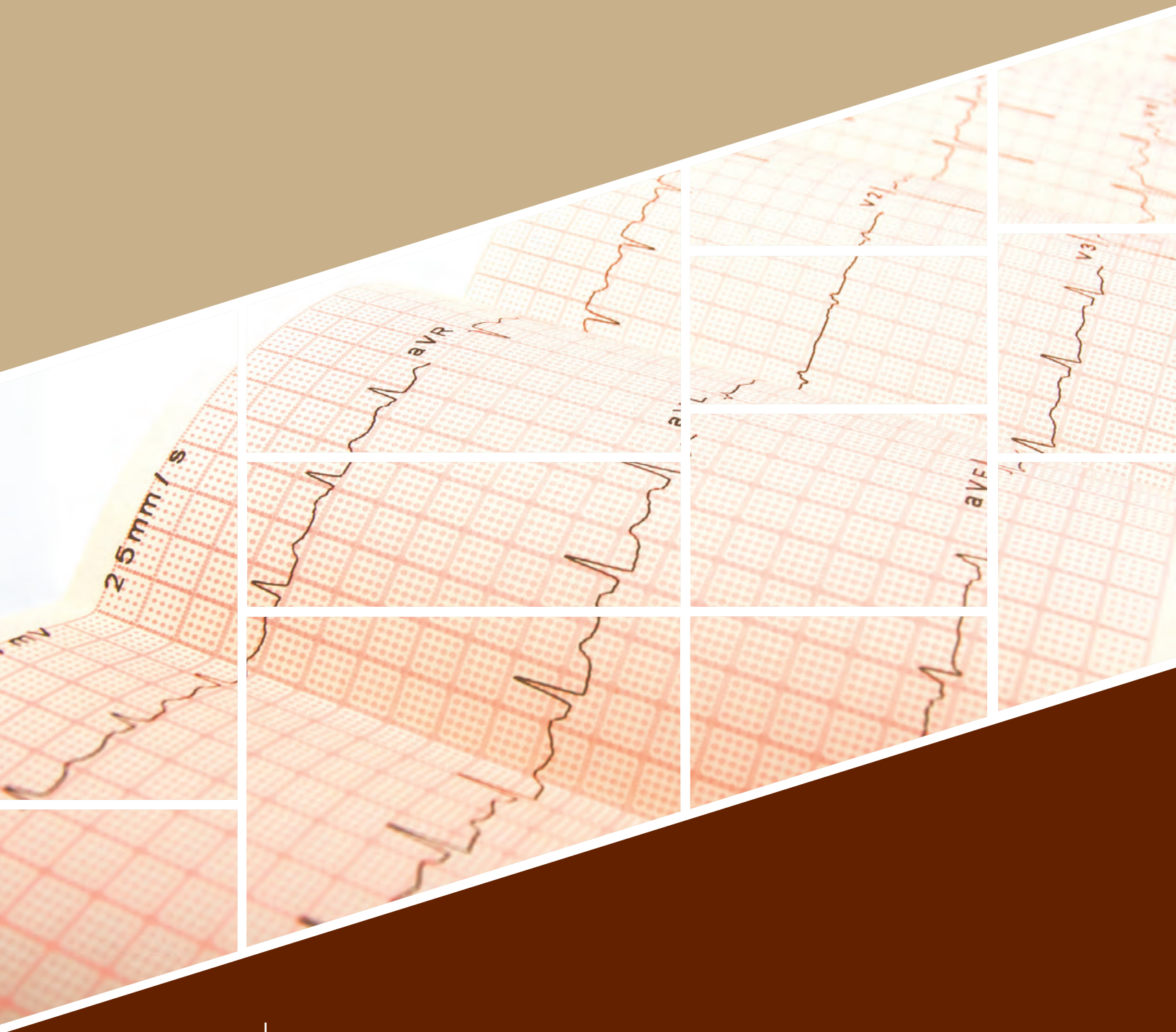
- Radiation – associated thyroid cancer: A historical perspective. Thyroid Expo 2012: A Multidisciplinary Symposium on Thyroid Disease and Thyroid Cancer. Cleveland Clinic Foundation, Cleveland, Ohio January 28, 2012.
- Contemporary Management of Thyroid Cancer. The Academy of Surgery of Detroit. March 8, 2012.
- Invited Discussant for the Society of Surgical Oncology National Video Conference: Topics in Endocrine Surgery. July 17, 2012.
- Endocrine Case Presentations, Surgery Update Web Symposium, Nov 16, 2012.
- Panel discussion: Parathyroidectomy for Asymptomatic Hyperparathyroidism. Annual Meeting of the Central Surgical Association, Amelia Island, Florida, March 14, 2013.
- Clinical features, genetics, risk assessment and surgical management of Multiple Endocrine Neoplasia Syndromes. Genetic counseling students and genetic fellows, Case Western Reserve University, March 25, 2013.
- Visiting Professor, Wright State University, Boonshoft School of Medicine, Dayton, Ohio. Contemporary Management of Thyroid Cancer. April 16 &17, 2013.

Daniel Medalie, MD

- "Plastic Surgery Options for Transgender patients", lecture at the First Boston National Transgender Conference, Boston, MA, January 2013.
- "Plastic Surgery Options for Transgender patients", lecture at the Columbus, Ohio Transgender Conference, May 2012.

Ali S. Totonchi, MD

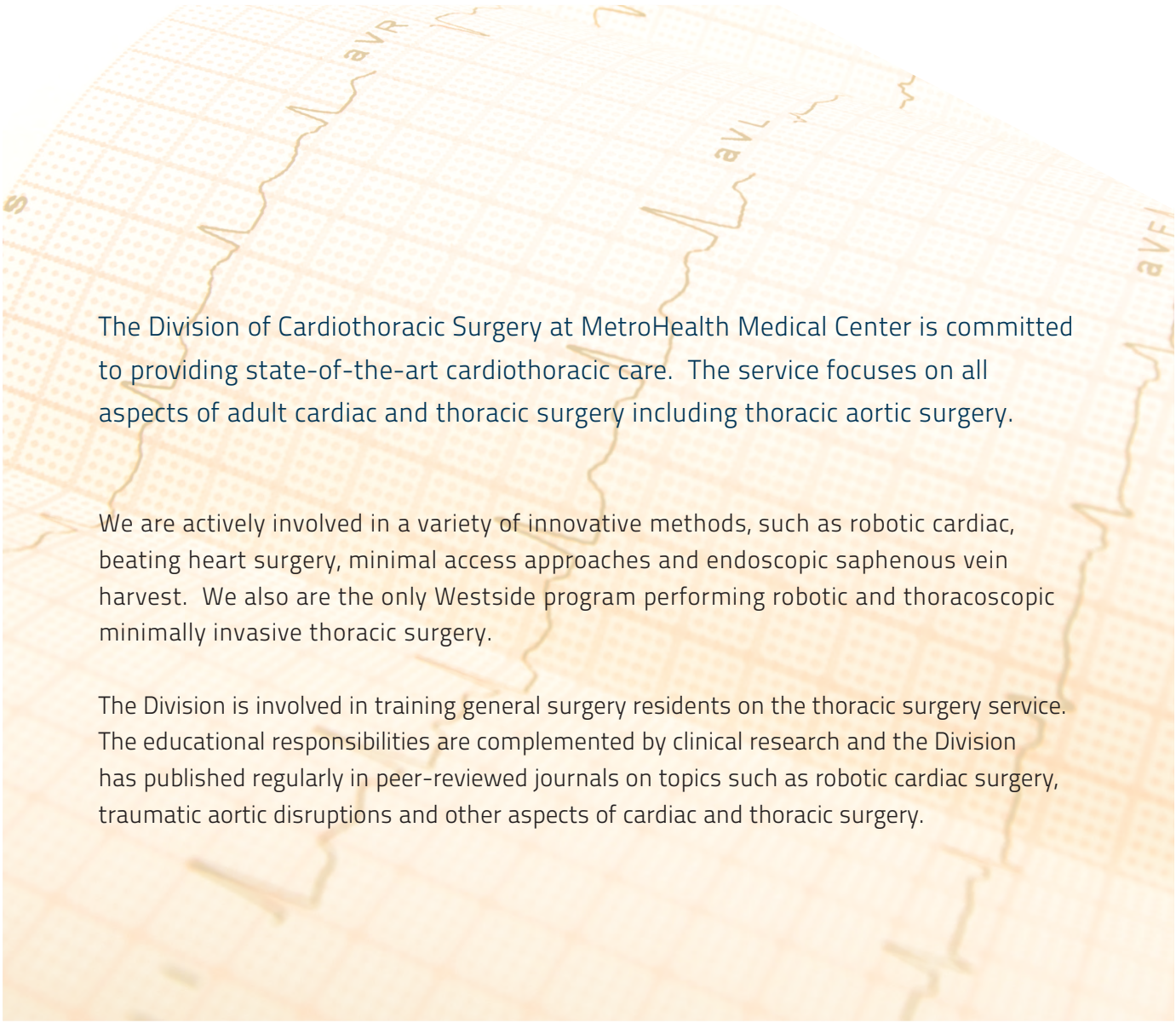
- Totonchi A. Anatomy of the zygomaticotemporal branch of Trigeminal Nerve. Sixth Annual Course for Surgical Treatment of Migraine Headaches. Cleveland, Ohio, 2012.



Chapter 17

Director
Inderjit S. Gill, MD

Faculty
Rami Akhrass, MD
R. Thomas Temes, MD, MBA
Joseph Lahorra, MD



The Division of Cardiothoracic Surgery at MetroHealth Medical Center is committed to providing state-of-the-art cardiothoracic care. The service focuses on all aspects of adult cardiac and thoracic surgery including thoracic aortic surgery.

We are actively involved in a variety of innovative methods, such as robotic cardiac, beating heart surgery, minimal access approaches and endoscopic saphenous vein harvest. We also are the only Westside program performing robotic and thoracoscopic minimally invasive thoracic surgery.

The Division is involved in training general surgery residents on the thoracic surgery service. The educational responsibilities are complemented by clinical research and the Division has published regularly in peer-reviewed journals on topics such as robotic cardiac surgery, traumatic aortic disruptions and other aspects of cardiac and thoracic surgery.

Chapter 18

Director
Christopher McHenry, MD

Staff/Faculty
Bruce J. Averbrook, MD
Christopher P. Brandt, MD
Jeffrey A. Claridge, MD
John J. Como, MD
Joseph F. Golob, Jr., MD
Natalie E. Joseph, MD
Jeremy M. Lipman, MD
Suzanne Miller-Spalding, RN, MSN, CNP
Edward G. Mansour, MD
Amy A. McDonald, MD
Nimitt J. Patel, MD
Paul P. Priebe, MD
Jean T. Stevenson, MD
Debra L. Valadez, RN, BSN
Charles J. Yowler, MD

The Division of General Surgery at MetroHealth Medical Center consists of 13 full-time and one part-time faculty member. Four surgeons have their principal appointment in the Division of General Surgery: Christopher P. Brandt, MD; Jeremy M. Lipman, MD; Christopher R.McHenry, MD; and Paul P. Priebe, MD. Ten surgeons have secondary appointments in the Division of General Surgery, six with their principal appointment in the Division of Trauma, Critical Care and Burns: Jeffrey A. Claridge, MD; John J. Como, MD; Joseph F. Golob, Jr., MD; Amy A. McDonald, MD; Nimitt J. Patel, MD; and Charles J. Yowler, MD. Four general surgeons have their principal appointments in the Division of Surgical Oncology: Bruce Averbook, MD; Natalie Joseph, MD; Edward Mansour, MD; and Jean Stevenson, MD. All are certified by the American Board of Surgery. Suzanne Miller-Spaulding, RN, MSN, CNP is the clinical nurse practitioner for the Division of General Surgery, and Deb Valadez, RN is the bariatric nurse coordinator for the Division.

The Division of General Surgery is divided into two clinical services: a Green Surgery Service and a Blue Surgery Service. The Green Surgery Service consists of Drs. Brandt, Claridge, Como, Golob, Lipman and McHenry. The Blue Surgery Service consists of Drs. Averbook, Joseph, McDonald, Patel, Priebe and Stevenson. One attending from each service covers the outpatient General Surgery responsibilities for a two-week interval. 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, and advanced laparoscopy. Dr. Jeffrey Claridge provides bariatric surgical services to morbidly obese patients. He works closely with their medical, mental health and nutritional colleagues in providing care in a multidisciplinary fashion. The majority

Front Row, L to R:
Suzanne Miller-Spalding, CNP;
Christopher McHenry, MD;
Christopher Brandt, MD

Second Row:
Nimitt Patel, MD; Jeffrey Claridge, MD;
Natalie Joseph, MD; John Como, MD

Third Row:
Joseph Golob Jr., MD; Jeremy Lipman, MD

of the procedures are performed using minimally invasive techniques. We are currently recruiting a second bariatric surgeon.

Dr. Jeremy Lipman offers 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. All patients treated for colorectal malignancies are managed by a team of care providers including physicians, nutritionists, nurses, geneticists, and others ensuring a comprehensive, patient-focused approach to cancer care. Patients with inflammatory bowel disease are cared for in coordination with a team of gastroenterologists, ensuring the multidisciplinary needs of these patients are fully addressed. Together with colleagues from gastroenterology and urogynecology, women with pelvic floor disorders, including urinary and fecal incontinence, are treated by a team of physicians with special interests in these areas. MetroHealth has a variety of physicians trained in minimally invasive surgery and are capable of offering laparoscopic and single incision colon resection for cancer and benign conditions.

Dr. Christopher McHenry has a focused interest in endocrine surgery and is involved with the treatment and follow-up of patients with endocrine tumors involving the thyroid, parathyroid and adrenal glands and the endocrine pancreas. Specialized endocrine evaluation and testing is performed in the outpatient surgery clinic. This includes fine needle aspiration biopsy of thyroid nodules, neck masses and cervical lymph node metastases; office-based ultrasound examination of the neck; vocal cord evaluation using flexible fiberoptic laryngoscopy; functional evaluation of adrenal and pancreatic tumors; and coordination of genetic testing for familial endocrinopathies. Modern, state-of-the-art surgical techniques are utilized for treatment of patients with endocrine tumors including: minimally invasive parathyroidectomy, and the use of the "quick PTH assay" for intraoperative parathyroid hormone monitoring and laparoscopic adrenalectomy.

Dr. Christopher Brandt has an interest in advanced laparoscopic techniques and has been a leader in this initiative for the Division of General Surgery. Minimally invasive procedures are presently performed at MetroHealth Medical Center for treatment of diseases of the adrenal gland, colon, small bowel, stomach, liver, and pancreas, as well as for the management of obesity, gastroesophageal reflux disease, achalasia and abdominal wall hernias. The use of laparoscopy in trauma and critical care patients has also been an active focus of clinical investigation.

Gastrointestinal surgery at MetroHealth Medical Center features expertise in gastroesophageal, pancreaticobiliary, liver and colorectal surgery. Expertise in open surgical techniques is now complemented by laparoscopic approaches to gastroesophageal reflux disease and diaphragmatic hernia, hepatobiliary disease and colorectal disease. Gastrointestinal endoscopy is provided by our surgeons, including therapeutic endoscopy for benign and malignant esophageal disease, peptic ulcer disease and endoscopic retrograde cholangiopancreatography for biliary and pancreatic disease, as well as therapeutic colonoscopy for benign and malignant colonic disease. Dr. Paul Priebe has led the Division's efforts in flexible endoscopy and has had a strong interest in remedial gastrointestinal surgery.

There is a long track record for outstanding surgical education provided by the faculty in the Division of General Surgery at MetroHealth Medical Center. Seven faculty members have been awarded the faculty teaching award in the Department of Surgery at Case Western Reserve University. This is an award that is given based on voting by the residents in General Surgery. The past recipients of this award include: Drs. Brandt, Lipman, Mansour, McDonald, McHenry, Priebe and Yowler. Dr. Joseph, recruited from the Fox Chase Cancer Center, has also received an "Excellence in Teaching" award.

The Division of General Surgery is responsible for six weekly educational conferences. There is a Blue Surgery Conference on Tuesday mornings and a Green Surgery Conference on Friday mornings in which residents and medical students are exposed to interactive case-based learning. Dr. Brandt leads the weekly Morbidity and Mortality Conference which occurs on Tuesday mornings. This is 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 on Thursday afternoons, 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 occurring at MetroHealth Medical Center on Monday mornings.

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. Dr. Lipman is the Associate Program Director for the General Surgery Residency Program at MetroHealth.

Christopher P. Brandt, MD

Dr. Brandt completed medical school and a residency in General Surgery at Case Western Reserve University. He joined the faculty at MetroHealth Medical Center and Case Western Reserve University School of Medicine in July, 1989. He is a Professor of Surgery at Case Western Reserve University School of Medicine. He was named Chair of the Department of Surgery in 2011 and also serves as the Co-Director of the Comprehensive Burn Care Center and the Director of the Outpatient Burn Clinic. He received the Department of Surgery Faculty Teaching Award in 1998 and 2004, Scholarship in Teaching Awards at Case Western Reserve University School of Medicine in 2004, 2005 and 2006, the Kaiser Permanente Award for Excellence in Teaching in 2009, and the Philip J. Wolfson Outstanding Teacher Award for the Association for Surgical Education in 2010. He has authored 41 papers in peer-reviewed journals and ten book chapters. He serves on the Editorial Committee for the Midwest Surgical Association and the Executive Committee for the Association for Surgical Education, for which he serves as Secretary. He is a past president of the Cleveland Surgical Society. Dr. Brandt's clinical interests are in general surgery with focused interests in gastrointestinal surgery, advanced laparoscopy and burns.

Jeremy M. Lipman, MD

Dr. Lipman earned his medical degree from Drexel University College of Medicine in Philadelphia, Pennsylvania. He completed his General Surgery Residency at Case Western Reserve University and did a Colorectal fellowship at the Cleveland Clinic Foundation, where he received the outstanding clinical fellow award. He is board certified by the American Board of Surgery and the American Board of Colon and Rectal Surgery. Dr. Lipman joined the staff of MetroHealth Medical Center in July 2010 and is an Assistant Professor of Surgery at Case Western Reserve University School of Medicine. He oversees the educational program of general surgery residents at MetroHealth Medical Center. He has published many peer-reviewed articles and presented his work at several national meetings. He serves as a reviewer for Annals of Surgery and The Surgeon. His clinical interests include laparoscopic and single incision colorectal surgery, colorectal cancer, inflammatory bowel disease, diverticular disease, colonoscopy, re-operative abdominal surgery and benign anorectal disease. In 2012, Dr. Lipman received the Department of Surgery Faculty Teaching Award.

Christopher R. McHenry, MD

Dr. McHenry is the Director of the Division of General Surgery. He is also the Vice-Chairman of the Department of Surgery and the Interim Director of the Division of Surgical Oncology. Dr. McHenry

graduated from a six-year combined BS/MD program at Northeastern Ohio Universities College of Medicine. He completed his General Surgery residency training at Loyola University Medical Center followed by a fellowship in Endocrine and Head and Neck Surgery at the University of Toronto. He joined the faculty at Case Western Reserve University and MetroHealth Medical Center in 1990. He is a tenured Professor of Surgery at Case Western Reserve University School of Medicine. In addition to broad-based General Surgery, Dr. McHenry has a focused interest in endocrine and neck surgery.

Dr. McHenry is a Director of the American Board of Surgery, serving on the Advanced Surgical Education Committee, the Recertification Examination Committee and the Surgical Oncology Board. He is the President elect for the Central Surgical Association. He is a past President of the American Association of Endocrine Surgeons, the Midwest Surgical Association, the Cleveland Surgical Society, and the Ohio Chapter of the American College of Surgeons. He is on the Editorial Board for the American College of Surgeons Web Portal, the American Journal of Surgery, and the American Surgeon. Dr. McHenry has authored 132 papers in peer-reviewed journals and 42 book chapters. In 2012, he gave seven invited lectures including: a national videoconference for the Society of Surgical Oncology on Topics in Endocrine Surgery, a talk on the contemporary management of thyroid cancer to the Academy of Surgery of Detroit, a visiting professorship at Wright State University, Boonshoft School of Medicine and a panel discussion on the treatment of asymptomatic hyperparathyroidism at the annual meeting of the Central Surgical Association in Amelia Island. He is a previous recipient of the Kaiser Permanente Award for Excellence in Teaching Award at Case Western Reserve University School of Medicine and a Department of Surgery Faculty Teaching Award.

Paul P. Priebe, MD

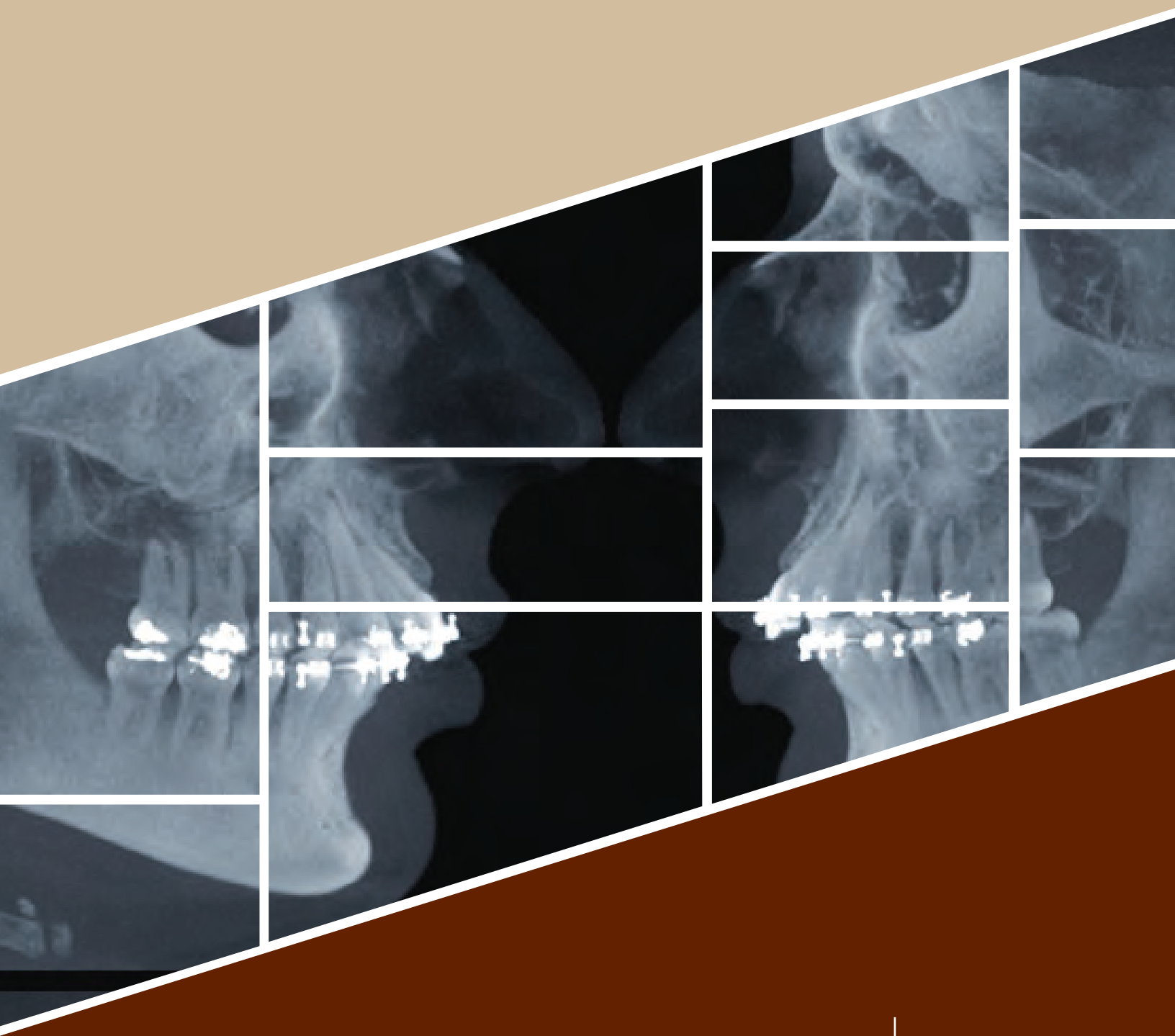
Dr. Priebe completed medical school at the Medical College of Wisconsin followed by a General Surgery residency at Case Western Reserve University School of Medicine. He joined the faculty at MetroHealth Medical Center in 1988. He is an Associate Professor of Surgery at Case Western Reserve University School of Medicine. He is the past President of the Cleveland Surgical Society and the Northeastern Ohio Society for Gastrointestinal Endoscopy. He received the Department of Surgery Teaching Award in 1995. In addition to his interest in broad based general surgery, Dr. Priebe has a focused interest in complex gastrointestinal surgery and endoscopy, including endoscopic retrograde cholangiopancreatography.

Suzanne Miller-Spalding, RN, MSN, CNP

Ms. Miller-Spalding is a clinical nurse practitioner for the Division of General Surgery. She completed a Bachelor of Science Degree from Bowling Green State University, later changing her focus and completing an Associate's Degree in Nursing from Owens Community College and her Master of Science Degree from the University of Toledo in Family Nurse Practitioner. Ms. Miller-Spalding is nationally certified through the Academy of Advanced Practice Nurses and is a member of the Midwest Nursing Research Society and the Ohio Association of Advanced Practice Nurses. Prior to joining the Division of General Surgery, she primarily worked in community health facilities including juvenile corrections, women's health, and child welfare. She has been in her current position since August 2012 working in the outpatient Surgery clinic, evaluating General Surgery patients, managing benign breast diseases, as well as assisting with and performing minor surgical procedures.

Debra L. Valadez RN, BSN

Ms. Valadez received her Bachelor's Degree from Bowling Green State University in consortium with the Medical College of Ohio School of Nursing (BSN, 1998). She came to MetroHealth in 2000 and worked in the Surgical Intensive Care Unit. Currently, Ms. Valadez has 15 years of professional experience which includes critical care nursing, coordination of NIH-sponsored research and pharmaceutical trials. She is currently the bariatric surgery nurse coordinator for the Department of Surgery. She is responsible for patient education, support group leadership, and facilitating the care of morbidly obese patients during their hospital stay.



Director
Michael R. Zetz, DDS

Faculty
Alan Y. Martinez, DDS
Rishad Shaikh, DMD

Chapter 19

DIVISION OF ORAL AND MAXILLOFACIAL SURGERY

The Division concentrates on facial trauma, pathology, implant placement, TMJ surgery, orthognathic surgery, dentoalveolar surgery and reconstruction cases. The Division sees approximately 4,000 patients per year in the ambulatory clinic. Multiple procedures are done by the faculty and residents in the clinic under local anesthesia, general anesthesia and intravenous sedation. In 2012, the MetroHealth Oral Surgery residency merged with Case Western Reserve University Oral Surgery program.

Alan Y. Martinez, DDS

Dr. Martinez is an Assistant Professor of Oral and Maxillofacial Surgery and full-time faculty at MetroHealth. Dr. Martinez is a 2005 graduate of the Roberto Beltran Neyra Universidad Peruana Cayetano Heredia, Lima, Peru. Dr. Martinez was also Auxiliary Professor of Oral and Maxillofacial Surgery, Department of Oral Medicine, Oral Pathology and Oral and Maxillofacial Surgery School of Stomatology at the same institution before moving to Cleveland.

Rishad Shaikh, DMD

Dr. Shaikh is an Assistant Professor of Oral and Maxillofacial Surgery and started as a full-time faculty at MetroHealth in September 2012. Dr. Shaikh graduated from Case Western Reserve University School of Dental Medicine. He completed his residency training at West Virginia University and his fellowship at Mercy Medical Center, St. Louis, Missouri. Dr. Shaikh's areas of interest include maxillofacial trauma, orthognathic surgery, TMJ surgery, reconstruction and facial cosmetics.

Michael R. Zetz, DDS

Dr. Zetz is the Division Director of Oral and Maxillofacial Surgery and is an Associate Professor of Oral and Maxillofacial Surgery. He graduated from The Ohio State University College of Dental Medicine. His internship was at Phoenix Medical Center. Dr. Zetz completed his residency at Medical University of South Carolina. In 2012, Dr. Zetz became full-time faculty and Division Director of Oral and Maxillofacial Surgery at MetroHealth. He spent the last 28 years in private practice in Akron and Canton. Dr. Zetz trained Case Oral Surgery residents in their last year of residency during a rotation to his private practice.

Front Row, L to R:
Rishad Shaikh, DMD;
Michael Zetz, DDS;
Alan Martinez, DDS

Director
Roderick B. Jordan, MD

Faculty
Bram R. Kaufman, MD
Daniel A. Medalie, MD
Ali Totonchi, MD
Andrea E. Gallup, CNP

Chapter 20

The Division of Plastic Surgery has four full-time board certified faculty members and a certified nurse practitioner 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 three suburban outpatient offices. The Division performs in excess of 900 major surgical procedures and has over 6,800 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.

Roderick B. Jordan, MD

Dr. Jordan received his medical degree in 1982 from Case Western Reserve University School of Medicine in Cleveland, Ohio. He then completed his training in General Surgery and Plastic Surgery at University Hospitals of Cleveland. A member of the faculty at MetroHealth Medical Center since 1988, Dr. Jordan is an Assistant Professor of Surgery at Case Western Reserve University and Director of the Division. He is a past-president of the Ohio Valley Society of Plastic Surgeons. Dr. Jordan's special practice interests include body contouring after massive weight loss, aesthetic breast surgery, and the treatment of maxillofacial trauma.

Bram R. Kaufman, MD

Dr. Kaufman received his medical degree in 1987 from Case Western Reserve University School of Medicine in Cleveland, Ohio. He completed his residency in General Surgery at University Hospitals of Cleveland. Dr. Kaufman completed fellowships in Plastic Surgery and Hand and Microsurgery at the University of Pittsburgh. He is an Assistant Professor of Surgery at Case Western Reserve University School of Medicine. Dr. Kaufman holds a Subspecialty Certificate in Surgery of the Hand (formerly CAQ Hand). Dr. Kaufman's practice interests include breast and body contouring, facial aesthetic surgery, trunk reconstruction, hand surgery, and microsurgery. He has a special interest in lower extremity reconstruction and works closely with leading orthopedic surgeons to facilitate bone transport for limb salvage cases.

Daniel A. Medalie, MD

Dr. Medalie attended Harvard University and then spent a year studying at the Parsons School of Design and Art Students League in New York City. He subsequently earned his medical degree from Cornell University School of Medicine. His General Surgery and Plastic Surgery residencies were completed at the University of Pittsburgh. He also completed a burn fellowship at Massachusetts General Hospital and Shriners Burns Institute in Boston. A full-time faculty member and an Assistant Professor of Surgery at Case Western Reserve University School of Medicine, Dr. Medalie's special interests include aesthetic breast and body contouring, reconstructive breast surgery, reconstructive microsurgery of the head, neck and extremities, gender re-assignment surgery, and facial aesthetic surgery.

Ali Totonchi, MD

Dr. Totonchi received his medical degree in 1996 from Tabriz University of Medical Sciences. He then completed his residency in Plastic Surgery at University Hospitals Case Medical Center at Cleveland, Ohio. Dr. Totonchi completed fellowships in Craniofacial/Pediatric Plastic Surgery at University Hospitals Rainbow Babies and Children's Hospital in Cleveland and Facial Cosmetic Surgery in University

Hospitals Case Medical Center. He joined MetroHealth Medical Center in 2010. Dr. Totonchi is an Assistant Professor of Surgery at Case Western Reserve University School of Medicine. His practice interests include pediatric plastic surgery, surgical treatment of migraine headaches, craniofacial surgery, cosmetic surgery and post-oncologic reconstruction. Dr. Totonchi received the 2011 American Society of Maxillofacial Surgeons National Fellowship Award.

Andrea E. Gallup, CNP

Ms. Gallup joined the Division of Plastic Surgery at MetroHealth in 2004. She received her BSN degree from the University of Pittsburgh in 1996. She earned her master's degree from and completed the Family Health Nurse Practitioner program at Gannon University in 2001. Ms. Gallup participates in all patient care activities including in-patient/out-patient care, patient education and perioperative services.

Currently, 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 at MetroHealth. The PGY-6 residents from the program spend 6 months at MetroHealth. Cleveland Clinic Plastic Surgery residents also complete rotations with the Division of Plastic Surgery at MetroHealth Medical Center. The residents gain experience in all clinical areas with emphasis on the treatment of major traumatic defects and burn injuries.

Current Division research includes post-bariatric reconstruction, reconstruction of the burn defects of the hand and upper extremity, fat metabolism, craniofacial surgery and treatment of facial trauma, migraine surgery, and facial aesthetics.

Chapter 21

Acting Director
Christopher R. McHenry, MD

Staff/Faculty
Bruce J. Averbook, MD
Natalie E. Joseph, MD
Edward G. Mansour, MD
Jean T. Stevenson, MD

The Division of Surgical Oncology is a key component of the Comprehensive Cancer Care Center at MetroHealth Medical Center. Dr. Christopher McHenry is the Acting Director of the Division of Surgical Oncology and serves on the Surgical Oncology Board of the American Board of Surgery. There are three full-time faculty members in the Division: Bruce Averbook, MD, Natalie Joseph, MD, and Jean Stevenson, MD, who specialize in the surgical management of cancer with additional expertise in the areas of breast cancer, colorectal cancer, and melanoma. 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. He also runs a "lump and bump" clinic performing minor procedures in the outpatient surgery clinic and sees patients in follow up for cancer.

The surgical oncologists are responsible for staffing a weekly outpatient clinic for evaluation of patients with complex breast disease and for coordinating a multidisciplinary conference to reach management decisions for these patients. In addition, the faculty provides surgical care for cancer patients, educates medical students and residents on surgical oncology, and participates in multidisciplinary Tumor Boards.

The Division of Surgical Oncology is actively involved in clinical trials through the Eastern Cooperative Oncology Group (ECOG) and the American College of Surgeons Oncology Group. Dr. Bruce Averbook is the Principal Investigator for the Case Western Reserve University ECOG program. In this capacity, he administers clinical trials at MetroHealth Medical Center, University Hospitals Case Medical Center and five affiliate institutions. 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.

Bruce J. Averbook, MD

Dr. Averbook completed medical school at the George Washington University, followed by a General Surgery residency at the University of California, Irvine. He completed a resident postdoctoral fellowship in Cancer Immunology at the University of California, Irvine in the Department of Molecular Biology and Biochemistry. Following his General Surgery residency, Dr. Averbook completed a Surgical Oncology fellowship at the Surgery Branch of the National Cancer Institute. He is an Associate Professor of Surgery and has a joint appointment in the Division of General Medical Sciences (Oncology) at Case Western Reserve University School of Medicine. He recently received a joint appointment as an Associate Professor in Dermatology at MetroHealth Medical Center. He has been an attending at MetroHealth Medical Center since 1993. He has a special interest in the management of melanoma, sarcoma and breast cancer and is the Toxicity Monitor for the Eastern Cooperative Oncology

L to R:
Edward Mansour, MD;
Jean Stevenson, MD;
Christopher McHenry, MD;
Natalie Joseph, MD;
Bruce Averbook, MD

Group (ECOG) Melanoma Core Committee. He is the Principal Investigator (PI) for the Case Western Reserve University Eastern Cooperative Oncology Group and the institutional PI for the American College of Surgeons Oncology Group (ACOSOG). He has funding from the NIH for $1.3 million after competitive renewal for the ECOG grant that is now entering its 38th consecutive year. He was the institutional PI for the Neoprobe/ Navidea Lymphoseek Trial and was a co-author on the manuscript that was recently published in the Annals of Surgical Oncology. He is currently Treasurer for the Ohio Chapter of the American College of Surgeons (OACS) and Chairman of the Audit Committee. He completed service as the Councilor for Northeast Ohio for the OACS. He was Program Chairman for the Annual Meeting in 2009. He completed service in October 2010 as the Alternate Governor Representative for the ACS Board of Governors for the Ohio Chapter. He represents the American College of Surgeons for The Commission on Cancer (CoC) and was nominated last year to be the liaison for the CoC to the College of American Pathologists. He has been on the Corporate Relations Committee for the Society of Surgical Oncology/James Ewing Society since 2008, raising money for the annual meeting and the fellow's institute. He is a member of the Case Western Reserve University Faculty Senate and just completed service on the Case School of Medicine Nominating Committee. He has presented recent work on an International Database on Pediatric Melanoma at the American Society for Clinical Oncology. Dr. Averbook has published 22 papers in peer-reviewed journals, five book chapters and numerous invited discussions. An invited editorial on melanoma staging appeared in the Journal of Clinical Oncology in 2011. His manuscript entitled "Pediatric Melanoma: Analysis of an International Registry" was recently accepted for publication in Cancer.

Natalie E. Joseph, MD

Dr. Joseph earned a Bachelor of Arts degree at the University of Pennsylvania where she majored in Biological Basis of Behavior. She obtained her medical degree from Temple University School of Medicine where she was also inducted into the Alpha Omega Alpha Honor Society. She completed her General Surgery residency training at Case Western Reserve University followed by a Fellowship in Surgical Oncology at the Fox Case Cancer Center. Prior to her being recruited to MetroHealth Medical Center, Dr. Joseph was an Attending Surgeon in the Department of Surgical Oncology at the Fox Chase Cancer Center and an Assistant Professor of Surgery at Temple University School of Medicine for five years. While at the Fox Chase Cancer Center, she was the Liaison Physician for the American College of Surgeons Commission on Cancer. She has previously earned an American Society of Clinical Oncologist Merit Award. She has distinguished herself as an educator and received an Excellence in Teaching Award. Dr. Joseph has a special interest in the management of breast cancer and colorectal cancer. She is the Director of the Breast Clinic at MetroHealth Medical Center.

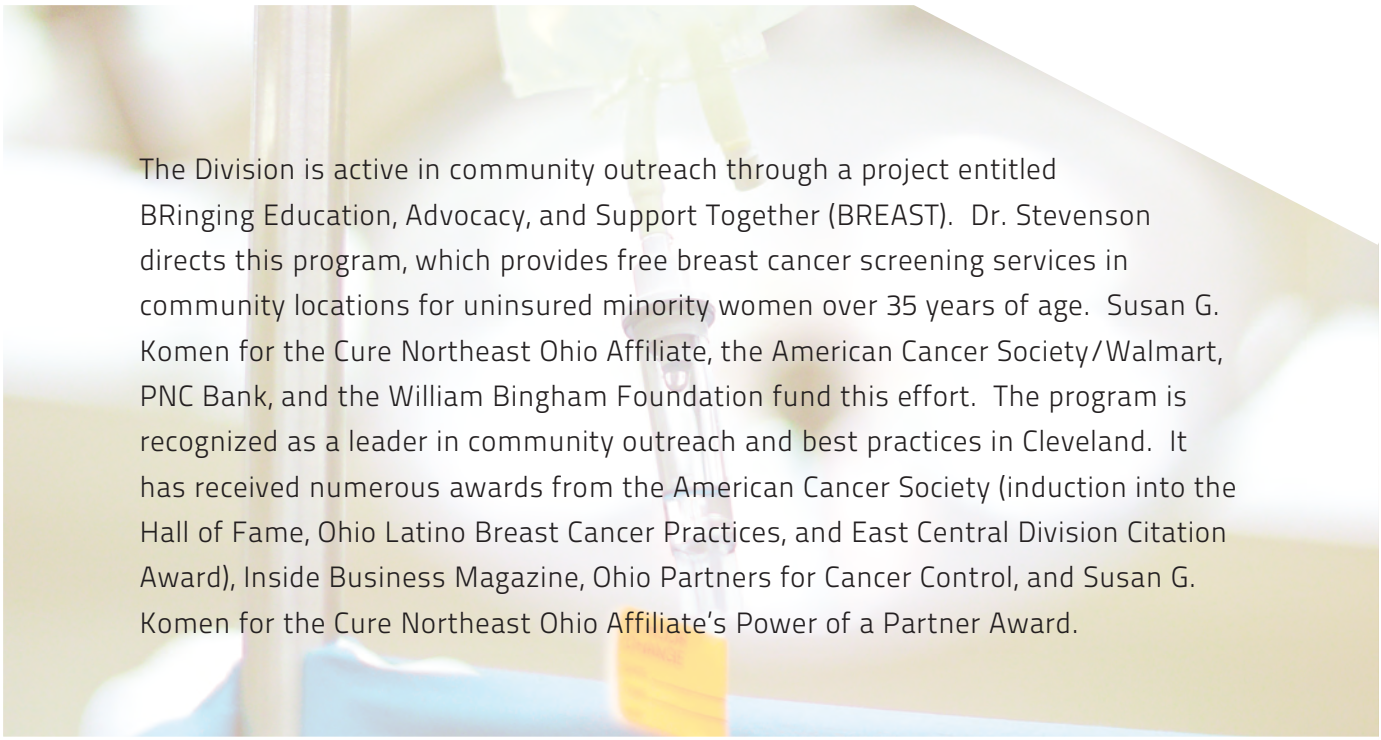
Edward G. Mansour, MD

Dr. Mansour completed medical school at the American University of Beirut followed by a General Surgery residency training at MetroHealth Medical Center. He is a Professor of Surgery and Oncology. He has been an attending surgeon at MetroHealth Medical Center for 36 years. He is the past Director of the Division of Surgical Oncology and the past Director of the Cancer Care Center at MetroHealth Medical Center. He was a Principal Investigator for the Eastern Cooperative Oncology Group, earning continuous funding from the National Cancer Institute for 30 years. He is internationally recognized for his expertise in Surgical Oncology, particularly in the areas of breast cancer and melanoma. Dr. Mansour is past President of the Ohio Division of the American Cancer Society and the Cleveland Surgical Society. He has authored 47 papers and 12 book chapters. He was the recipient of the Department of Surgery Faculty Teaching Award in 2001. He was inducted into the Cleveland Medical Hall of Fame in 2002, the American Cancer Society Cancer Hall of Fame in 2003 and the MetroHealth Hall of Honor in 2011.

Jean T. Stevenson, MD

Dr. Stevenson received a Bachelor of Arts degree from Cornell University in Biology. She then completed medical school at the Medical College of Virginia

followed by a General Surgery residency at Case Western Reserve University. She is an Associate Professor of Surgery and has been an attending at MetroHealth Medical Center since 1989. She has a special interest in breast surgery and is the Director of Breast Services at MetroHealth. Dr. Stevenson has been the Commission on Cancer's Cancer Liaison Physician for MetroHealth since 1994 as well as a past Co-Chair of the Ohio State Cancer Liaison Physician group. She is on the Board of Directors of the American Cancer Society (East Central Division), the Ohio State Quality of Life Program Team, the Ohio Department of Health Comprehensive Cancer Medical Advisory Committee, the Ohio Partners for Cancer Control, and is a past-President of the Cleveland Surgical Society. She has received numerous awards, including the Russell Weisman Scholar Award, Cancer Liaison Physician Outstanding Performance Award, Top Docs/ Best Doctors in America (Northern Ohio Live/Cleveland Magazines and U.S. News & World Report), Breast and Cervical Cancer Coalition Ninth Annual Janet Voinovich Service Award, the Ohio Partners for Cancer Control State Award, and the American College of Surgeons (Ohio Chapter) 2012 President's Volunteer Award. She was inducted into the American Cancer Society's Hall of Fame in 2006.



The Division is active in community outreach through a project entitled BRinging Education, Advocacy, and Support Together (BREAST). Dr. Stevenson directs this program, which provides free breast cancer screening services in community locations for uninsured minority women over 35 years of age. Susan G. Komen for the Cure Northeast Ohio Affiliate, the American Cancer Society/Walmart, PNC Bank, and the William Bingham Foundation fund this effort. The program is recognized as a leader in community outreach and best practices in Cleveland. It has received numerous awards from the American Cancer Society (induction into the Hall of Fame, Ohio Latino Breast Cancer Practices, and East Central Division Citation Award), Inside Business Magazine, Ohio Partners for Cancer Control, and Susan G. Komen for the Cure Northeast Ohio Affiliate's Power of a Partner Award.

Chapter 22

Director

Jeffrey Claridge, MD, MS

Staff/Faculty

John Como, MD, MPH
Joseph Golob, MD
Amy McDonald, MD
Nimitt Patel, MD
Charles Yowler, MD
Tammy Coffee, MSN, RN, ACNP-BC
Elizabeth Kempe, RN, CNP

Dr. Christopher Brandt, the Chair of the Department of Surgery, is also one of the Burn Surgeons within our Division.

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 six surgeons with Board Certification in Surgical Critical Care and an Anesthesiologist with Board Certification in Anesthesia 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 terms of pediatric medical and surgical specialists.

The Division supervises two Intensive Care Units. A dedicated Trauma Intensive Care Unit has 12 beds and the Surgical Intensive Care Unit has 15 beds. Almost 2,000 patients are admitted annually to the Intensive Care Unit, making this one of the busiest Intensive Care Units in the City. The 14-bed Burn Intensive Care Unit at MetroHealth Medical Center is the only adult and pediatric Burn Center for the metropolitan Cleveland area. We treat 1,700 burn patients annually with more than 100 patients having burns severe enough to be admitted.

Jeffrey Claridge, MD, MS

Dr. Claridge is an Associate Professor of Surgery and is the Division Director of Trauma, Critical Care, Burns, and Acute Care Surgery. He also serves as the Medical Director of Trauma at MetroHealth Medical Center. He has had continuous NIH-funded research in the areas of trauma outcomes, surgical infections, and medical informatics. He is also primarily responsible for the two-year resident research fellowship offered by the Division and supervises multiple studies and study coordinators. His clinical interests besides trauma are in the areas of Acute Care Surgery and Advanced Laparoscopic Surgery, including bariatric surgery. Dr. Claridge has been a Counselor for the Surgical Infection Society. Dr. Claridge has completed and received his Masters Degree in clinical outcomes research from Case Western Reserve University after coming to Cleveland in 2005. He is also the Medical Director for the Northern Ohio Trauma System (NOTS) which is a partnership of hospitals across northern Ohio. The mission of NOTS is to provide the highest quality of care to trauma patients across the region, by rigorously evaluating and improving outcomes, optimizing resources, and providing education across the region, utilizing a collaborative approach with hospitals, emergency medical services, and the public health services.

John Como, MD

Dr. Como is an Associate Professor of Surgery and serves as Associate Director for Trauma. Dr. Como is responsible for prevention activities and treatment guidelines used for our injured and critically ill patients. He has a broad background in guideline development and has a key leadership role in the Eastern Association

Front Row, L to R:
Joseph Golob, Jr., MD; Jeffrey Claridge, MD;
John Como, MD

Back Row: Nimitt Patel, MD;
Richard Fratianne, MD;
Tammy Coffee, ACNP-BC;
Charles Yowler, MD;
Christopher Brandt, MD

Not pictured:
Amy McDonald, MD;
Elizabeth Kempe, CNP

for the Surgery of Trauma Guidelines Committee. His clinical interest is in the area of Acute Care Surgery with emphasis on trauma and complex hernia repair. Dr. Como earned a Master's of Public Health degree at Case Western Reserve University, which he obtained while working full time as a trauma surgeon.

Joseph Golob, Jr., MD

Dr. Golob joins the Division this year after completing his Critical Care Fellowship at MetroHealth. Dr. Golob was a general surgery resident at Case Western Reserve University and did a two-year trauma research fellowship. The two fellowship years were very productive; Dr. Golob published 14 peer-reviewed articles as a result of his work during that time. Dr. Golob won the National Best Trauma paper from the American College of Surgeons Committee on Trauma in 2008. His interests are in critical care, medical informatics and improving quality. He will be having an increased leadership role in the Surgical Intensive Care Unit.

Amy McDonald, MD

Dr. McDonald is an Assistant Professor of Surgery and is the Director of the Trauma Intensive Care Unit. She is responsible for the education of surgical residents and medical students rotating through the Division. Her clinical interests besides care of the traumatically injured are in the areas of Acute Care Surgery and Surgical Infections. Dr. McDonald has received recognition for her outstanding teaching and has been invited for multiple international presentations.

Nimitt Patel, MD

Dr. Patel joins the Division after completing his two-year fellowship in trauma and acute care surgery from Pittsburgh. Dr. Patel covers Trauma, Critical Care, and Acute Surgery throughout the year. His research interests are in the areas of trauma resuscitation and trauma outcomes. Dr. Patel is a great addition to the Division and looks forward to an increasing leadership role in EMS outreach, resuscitation protocols, and acute care surgery.

Charles Yowler, MD

Dr. Yowler is a Professor of Surgery and is Director of the Comprehensive Burn Care Center and Program Director for the Surgical Critical Care Fellowship. His primary clinical interest is in trauma and burn injury. As Director of the Comprehensive Burn Care Center, he also treats a wide range of complex wound problems including necrotizing tissue infections. Dr. Yowler is the immediate past Chairman of the Ohio Committee on Trauma and serves nationally for the American College of Surgeons in the verification process of trauma and burn centers.

Tammy Coffee, MSN, RN, ACNP-BC

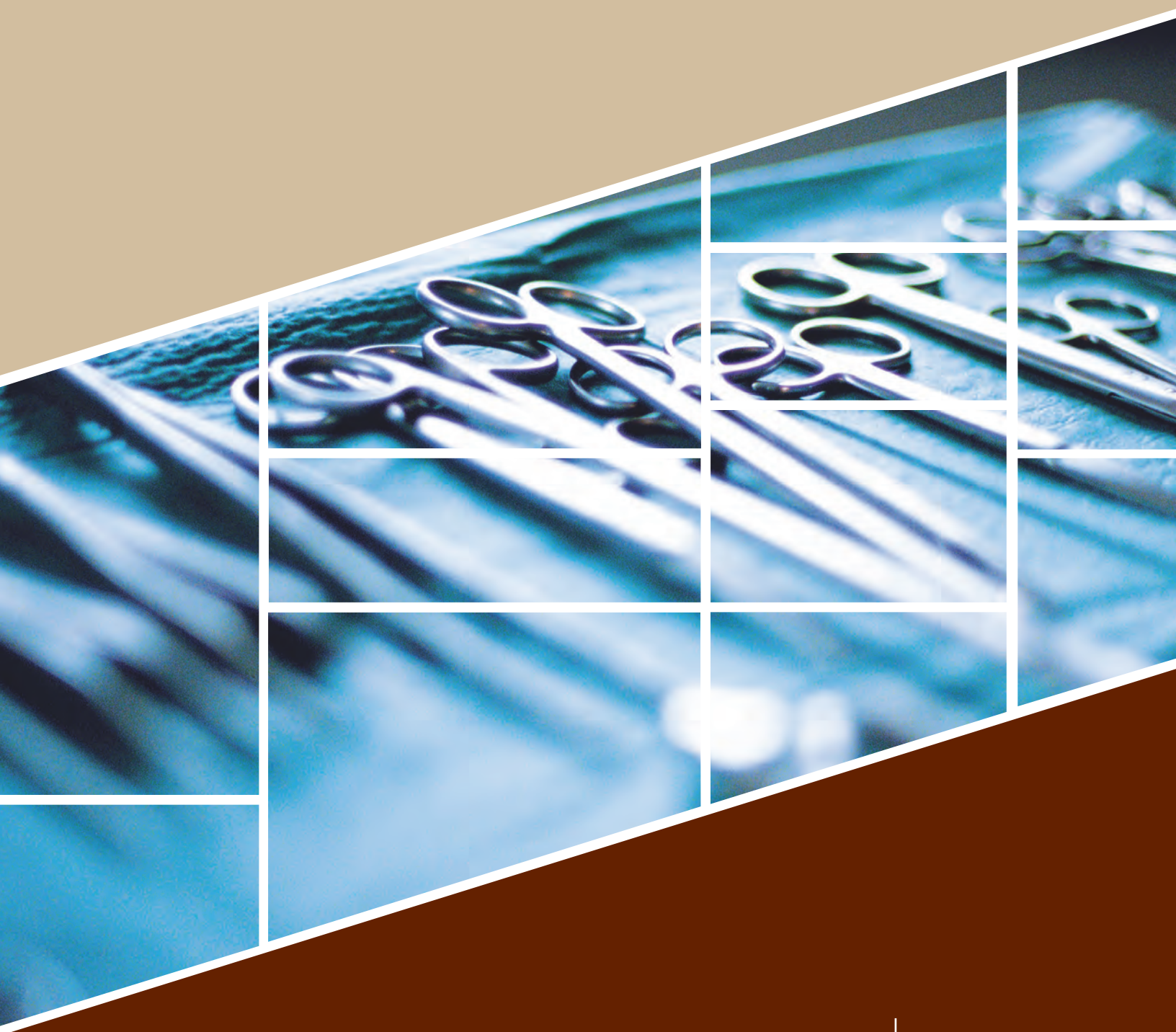
Ms. Coffee received her diploma from Akron General Medical Center School of Nursing in 1984 and her Bachelor's Degree in Nursing from the University of the State of New York in 1995. She went on to receive her Master's Degree in Nursing from Case Western Reserve University. She is board certified as an Acute Care Nurse Practitioner. For 25 years, Ms. Coffee has dedicated her career to caring for the burn victim and their families. She currently sits on the American Burn Association Board of Trustees and has presented at national meetings and published in journals and nursing books.

Elizabeth Kempe, RN, CNP

Ms. Kempe, aka "Libby", is a previous trauma nurse coordinator who now is on the trauma service as a Nurse Practitioner. She is a vibrant force that assists in caring for trauma patients. Ms. Kempe received her Master of Nursing from the Frances Payne Bolton School of Nursing in 2000.

The Division offers two ACGME-approved Fellowships in Surgical Critical Care and also offers 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.

Divisional research is centered in the area of trauma outcomes, burn care, medical informatics, and surgical infection. 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
J. Jeffrey Alexander, MD

Faculty
Amy Green, CNP

Mireille Astrid Moise, MD

Christopher J. Smith, MD

Chapter 23

DIVISION OF VASCULAR SURGERY

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 disease-oriented approach. The surgical service focuses on the treatment of extracranial, aortic, visceral, and extremity arterial occlusive disease, arterial aneurysms, vascular trauma, and venous disease. In addition, it 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.

Educational activities of the Division 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. These educational activities are complemented by 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.

J. Jeffrey Alexander, MD

Dr. Alexander is Director of the Division of Vascular Surgery and Director of the Noninvasive Vascular Laboratory at MetroHealth Medical Center. He graduated from the University of Pittsburgh School of Medicine and completed both his surgical residency and vascular surgical fellowship at the University of Chicago. He is a tenured Associate Professor of Surgery at Case Western Reserve University and is board-certified in general and vascular surgery. He is also a certified vascular technologist. His concentration has been on the operative treatment of carotid and peripheral vascular disease, aortic aneurysms and visceral arterial occlusive disease. He is also active in the treatment of vascular trauma and in arteriovenous access surgery. He has authored more than fifty articles in peer-reviewed journals and several book chapters. He is a member of many regional and national vascular societies. He has received the honor of Best Doctors in America.

Christopher J. Smith, MD

Dr. Smith graduated from Tufts University School of Medicine where he was distinguished with induction into the AOA Honor Society. He received his general surgical training at Case Western Reserve University and completed his vascular surgery fellowship at the University of Cincinnati. He has since held attending positions at Case Western Reserve University, Tufts University and Temple University. He currently holds the rank of Assistant Professor of Surgery at Case Western Reserve University. He is board certified in vascular and general surgery. Dr. Smith has a focused interest in advanced endovascular therapy and is the Director of Endovascular Surgery. He also has a wide interest in the surgical treatment of arterial and venous disease and is active in program development, vascular quality initiatives and vascular screening.

Mireille Astrid Moise, MD

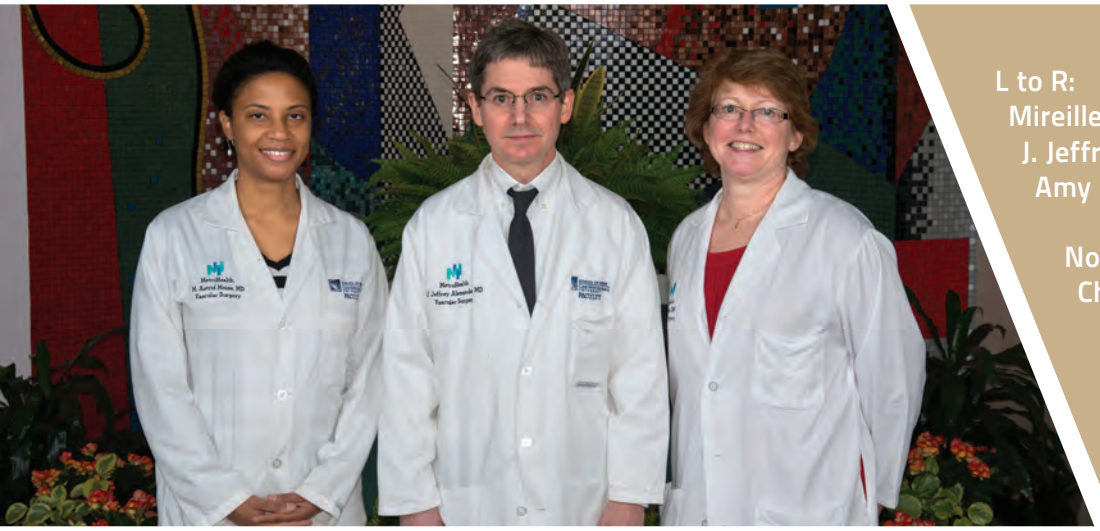
Dr. Moise graduated from the University of Pennsylvania School of Medicine, where she received awards for humanitarianism and academic achievement, and where she later served as a postdoctoral research fellow. She completed her vascular fellowship at the Cleveland Clinic Foundation and joined the Vascular Surgery Division at MetroHealth Medical Center as an Assistant Professor of Surgery at Case Western Reserve University. Dr. Moise has special expertise in the endovascular treatment of arterial disease and has an interest in open surgical treatment modalities as well.

Amy Green, CNP

Ms. Green received her BSN degree from Cleveland State University and her MSN degree from Case Western Reserve University. She has received specialized training in wound care and currently participates in out-patient evaluation and treatment of both arterial and venous disease, and in wound care.

RECENT ACTIVITIES

- Soo Hoo J, Lockhart MK, Waheed R, Mohamed A, Alexander J, Gandhi J. High Prevalence of Aspirin Resistance in Patients with Peripheral Artery Disease is Associated with Adverse Cardiovascular Outcomes. Poster session, SCAI, Las Vegas, NV, 2012.
- Alexander, J. Investigator. INOVATE-HF: Increase of Vagal Tone in Chronic Heart Failure.
- Smith, C. Cardiac and Great Vessel Trauma. Anesthesia in Trauma; in press.
- Smith, C. Lower Extremity Fasciotomy, Netter Surgery Atlas, in press.
- Moise, MA. "Update on the Clinical Management and Treatment of PAD." Medicine Grand Rounds, MetroHealth Medical Center, September, 2012.
- Moise, MA. "Newest Approaches to PAD" 2nd Annual Solutions for Cardiac Problems. MetroHealth Medical Center, October, 2012.



L to R:
Mireille Astrid Moise, MD;
J. Jeffrey Alexander, MD;
Amy Green, CNP

Not pictured:
Christopher Smith, MD

Our surgeons are committed to the care of men and women who have sacrificed in war and peace for our freedom.

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 have been 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, Ohio. More than 2,600 new parking spaces have been added to the campus in the past one-and-a-half 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 11 Sections (General Surgery, Vascular, Cardiothoracic, Plastics, Otorhinolaryngology and Head and Neck Surgery, Orthopedics, Ophthalmology, Urology, Optometry, Podiatry, and Surgical Intensive Care). General Surgery has two Divisions: Surgical Oncology and Colorectal Surgery. Over 500 operations a month are performed by our faculty in our eight surgical suites. We have ten surgical critical care beds and a dedicated surgical nursing floor. Construction is underway to completely renovate the operating theater and the surgical intensive care unit. There will be a net gain of two operating suites and two critical care beds.

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).

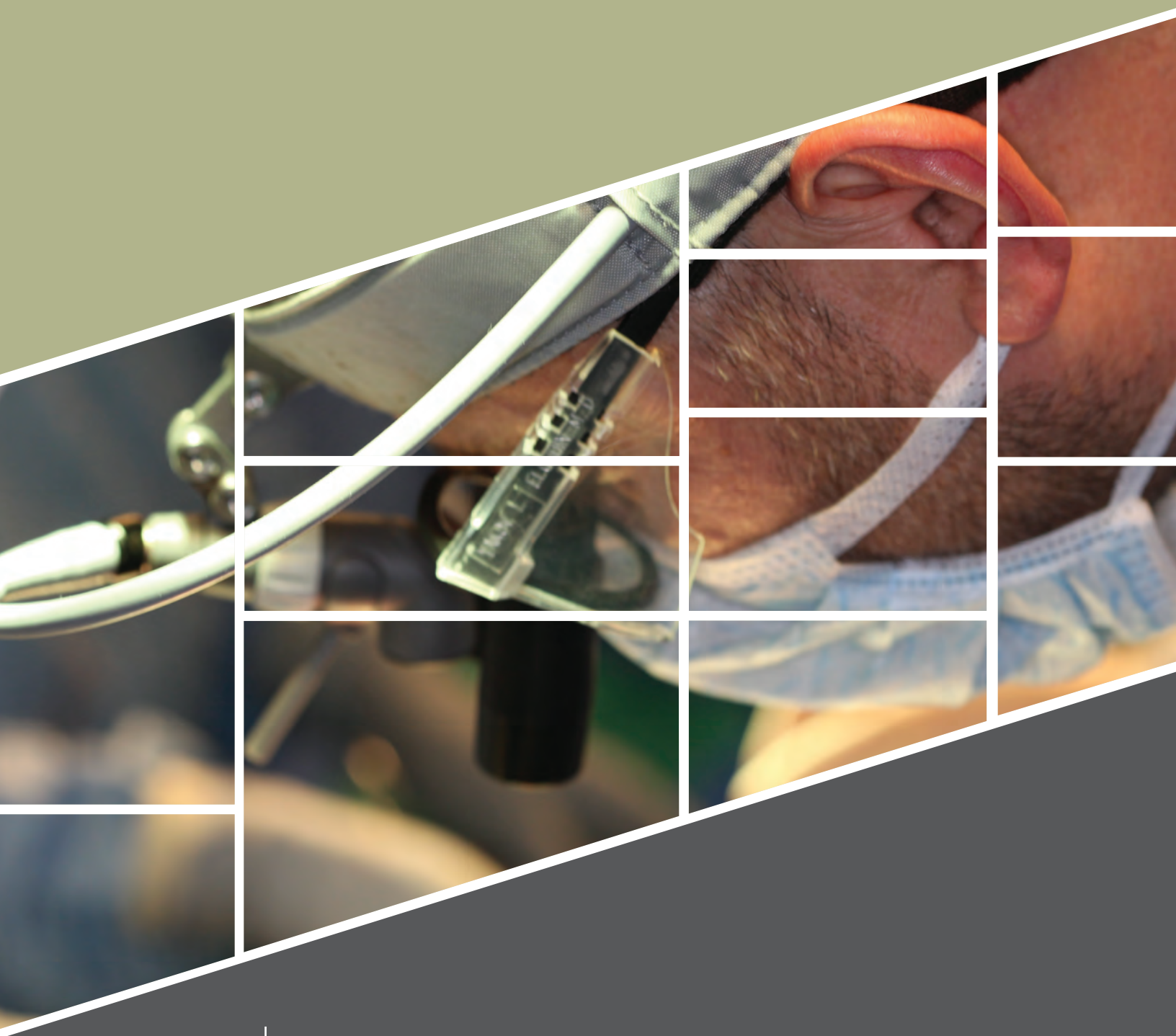
The Louis B. Stokes Cleveland VA Medical Center is fully integrated with the surgical residency programs of University Hospitals and our faculty have appointments at Case Western Reserve University School of Medicine. Our faculty is intimately involved in resident and medical student education and regular 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
Acting Service Chief, Department of Surgery
Louis B. Stokes Cleveland VA Medical Center

The Cleveland VA serves as the tertiary care referral center for all of Ohio and portions of western Pennsylvania and West Virginia.



Chapter 24

Our faculty is intimately involved in resident and medical student education.

Brian Cmolik, MD
Acting Chief, Surgical Service
Off-pump cardiac surgery, aortic root and great vessel surgery, Video Assisted Thoracic Surgery

Medical School: Northeastern Ohio Universities College of Medicine
Residency: Allegheny General Hospital
Fellowship: Allegheny General Hospital, Transplantation, Research

Cardiothoracic Surgery

Yakov Elgudin, MD, PhD
Cardiothoracic Surgery

Medical School: School of Medicine, Kemerovo, Russia
Residency: Exempla-Saint Joseph Hospital
Fellowship: UCLA

Jason Robke, MD
Thoracic and Esophageal Surgery
Thoracic Oncology, Esophageal Surgery, Minimally Invasive (VATS) Surgery, Airway and Esophageal Stenting, GERD, Paraesophageal Hernia Surgery, and YAG Laser Therapy

Medical School: Medical College of Ohio at Toledo
Residency: Allegheny Hospital
Fellowship: Allegheny General Hospital

Diana Whittlesey, MD
Cardiothoracic Surgery and Thoracic Oncology

Medical School: Johns Hopkins University
Residency: Johns Hopkins Hospital, Case Western Reserve University / University Hospitals of Cleveland
Fellowship: Case Western Reserve University / University Hospitals of Cleveland

General Surgery

Melanie Lynch, MD, PhD
Section Chief
Surgical Oncology, Endocrine Surgery, and General Surgery

Medical School: The Ohio State University School of Medicine and Public Health, Columbus, Ohio
Residency: General Surgery, University Hospitals of Cleveland, Ohio
Fellowship: Surgical Oncology, University Hospitals of Cleveland, Ohio

Eric Marderstein, MD, MS
Acting Section Chief, General Surgery
Director of Colorectal Surgery
Colorectal and Anal Cancer, Inflammatory Bowel Disease, and Benign Colorectal Diseases

Medical School: University of Virginia School of Medicine
Residency: University of Pittsburgh School of Medicine
Fellowship: Cleveland Clinic Foundation – Colorectal Surgery

Mujjahid Abbas, MD
General Surgery

Medical School: King Edward Medical College
Residency: Montefiore Medical Center/Albert Einstein College of Medicine, New York, New York

Plastic Surgery

Devra Becker, MD
Section Chief
Plastic and Reconstructive Surgery

Medical School: Washington University School of Medicine, St. Louis, Missouri
Residency: Washington University School of Medicine, St. Louis, Missouri
Fellowship: Paris, France (with Dr. Marchac/University of Case School of Medicine)

David Rowe, MD, MS
Plastic and Reconstructive Surgery

Medical School: Albany Medical College
Residency: Medical College of Wisconsin

Vascular Surgery

Jessie Jean-Claude, MD
Section Chief
Peripheral Vascular Surgery and Endovascular Surgery

Medical School: Columbia University College of Physicians and Surgeons, New York, New York
Residency: St. Luke's/Roosevelt Hospital Medical Center, New York, New York
Fellowship: University of California at San Francisco; University of Lund/Malmo, Sweden

Gilles Pinault, MD
Peripheral Vascular Surgery, Endovascular Surgery and Surgical Critical Care

Medical School: McGill University Faculty of Medicine, Quebec, Canada
Residency: Case Western Reserve University School of Medicine / University Hospitals of Cleveland
Fellowship: Peripheral Vascular Surgery, University Hospitals of Cleveland

Preet Singh Kang, MD
Section Chief, Interventional Vascular Radiology

Medical School: MMBS, Maulana Azad Medical College, New Delhi, India, University of Delhi
Residency: Radiology Residency, Hospital of Saint Raphael, Yale University, New Haven, Connecticut
Fellowship: Vascular and Interventional Radiology, Yale New-Haven Hospital, Yale University, New Haven, Connecticut

Lleowell Garcia, MD
Peripheral Vascular Surgery

Medical School: St. Louis University School Of Medicine
Residency: University of Florida, Jacksonville, Florida
Fellowship: Vascular Surgery, University of Virginia, Charlottesville, Virginia

Surgical Critical Care

Edward Noguera, MD
Director of Surgical Critical Care

Medical School: Universidad Nacional de Colombia
Residency: Anesthesiology, The Cleveland Clinic Foundation
Fellowship: Critical Care Medicine, The Cleveland Clinic Foundation

Joel Peerless, MD
Surgical Critical Care

Medical School: University of Cincinnati College of Medicine, Cincinnati, Ohio
Residency: Internal Medicine, Metropolitan General Hospital, Cleveland, Ohio; Anesthesiology, Northwestern University Hospital, Chicago, Illinois
Director: Surgical Intensive Care Unit, MetroHealth Medical Center, Cleveland, Ohio 1986-2009

Chapter 25

The VA Surgical Service provides a full range of surgical care to the nation's veterans.

Two of the new hospital operating rooms will be outfitted as hybrid suites for evolving minimally invasive peripheral vascular and cardiac operations. The new surgical intensive care unit facility will be updated to the latest standards for infection control, noise control, technology, and patient safety. The surgical patient care wards were completely renovated a few years ago, including updated patient care technology, resulting in improved patient privacy and satisfaction over previous years. A Tele-health Clinic was started remotely to the Wade Park facility from the Akron Community-Based Outpatient Clinic in early 2011. The Louis B. Stokes Cleveland VA Medical Center is the flagship tertiary care medical facility of Veteran's Integrated Service Network-10 (VISN 10) with a total of over 600 beds (approximately 275 acute care beds). It serves 13 Community-Based Outpatient Clinics located across northeast Ohio.

CARDIOTHORACIC SURGERY

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. 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. Plans are underway to include transcatheter valve surgery and destination therapy with cardiac assist devices to the surgical armamentarium. 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.

GENERAL SURGERY

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.

VASCULAR SURGERY

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. They work collaboratively with our 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. More than 450 vascular operations were performed at the Cleveland VA in fiscal year 2011. The vascular laboratory serves not only the Wade Park division, but outlying clinics throughout northern Ohio.

DIVISION EDUCATION

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, and cardiothoracic surgery. 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.

DIVISION RESEARCH

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 off-pump 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 has obtained a grant to study and initiate novel approaches to the multidisciplinary care of patients with breast cancer which will be expanded to include our large population of colorectal cancer patients in its second phase, anticipated to begin in 2014.

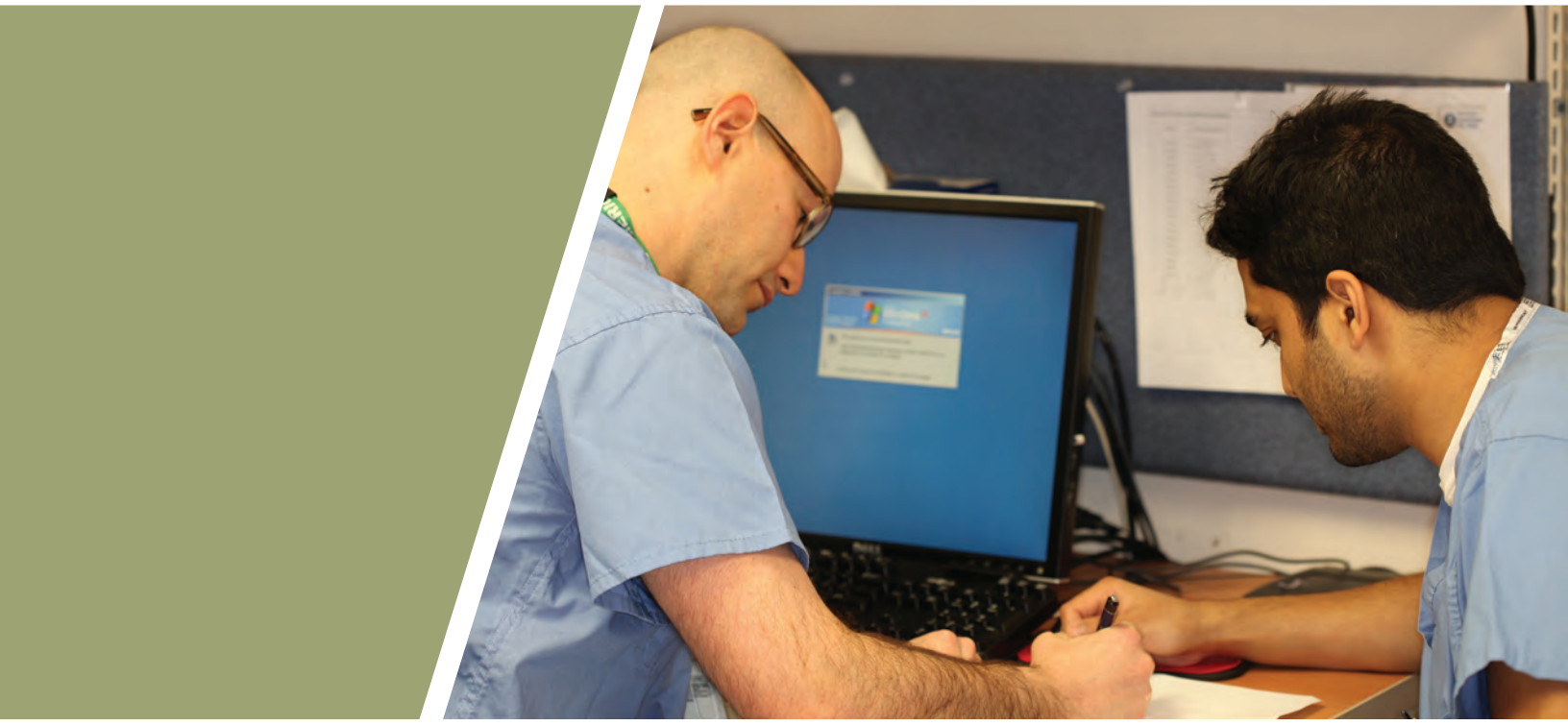
A state-of-the-art, fully integrated electronic medical record system provides the opportunity to investigate a large volume of clinical data across the spectrum of each patient's care and across the VA population. Utilization of this capability can lead to some very interesting database clinical research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

PATIENT CARE

The Surgical Service at the Cleveland VA Medical Center offers a wide range of surgical care. Patient care is provided by house staff under the supervision of full-time and part-time faculty and with the assistance of a number of nurse practitioners and physician assistants. Over 4,400 surgical procedures were performed in the operating rooms in 2011. Surgical outcomes at the Cleveland VA are quite good, with the Service achieving better than predicted outcomes in the Veterans Administration Surgical Quality Improvement Project (VASQIP) in 9 of the last 12 years and serving as a model for quality in the Veterans' Integrated Service Network in Ohio and in the Cleveland surgical community.

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 5:00 p.m. to 7:00 a.m., providing senior in-house supervision, back-up, and teaching for the junior residents. 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.



DEPARTMENT OF SURGERY 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 PI.
- Clinical Trial of the ON-X Valve Using Low Dose Anticoagulation, Brian Cmolik, MD, PI.
- VA Cooperative Studies Program, "Outcomes Following Cardiovascular Revascularization: On and Off Cardiopulmonary Bypass." Diana Whittlesey, MD, Site PI.
- VA Cooperative Studies Program "REGROUP study" examining open versus endoscopic saphenous vein harvest for coronary artery bypass grafting. Brian Cmolik MD, Site PI.
- VA Career Development Award, "Photoreceptors During Chromophore Deprivation and Supplementation." Johnny Tang, MD, PI.
- VA Merit Review, "Joint Replacement Utilization Disparity: The Role of Communication." Denise Kresevic, RN, PhD, PI.
- Cuff Electrodes in Functional Electrical Stimulation, Gilles Pinault, MD, PI.
- Quality Scholars Program Fellowship. Melanie Lynch, MD.
- VA Center of Excellence Research Grant, "Multidisciplinary Breast Cancer Care". Melanie Lynch, MD, PI.

DIVISION GOALS

Goals include expansion of services to meet ever increasing veteran patient demand. This will include the need to expand our operating rooms. New construction is underway. We also plan to expand our outpatient clinics to accommodate a significant increase in demand across the surgical sections and to reduce outpatient clinic waiting times. The General Surgery section plans to expand its educational program with a teaching series of core topics frequently encountered in the VA population. The Vascular Surgery Section will anticipate participating in a VA cooperative study of carotid stent outcomes. A large study of catheter-based atherectomy outcomes will begin soon.

In conjunction with interventional radiology, we have established a minimally invasive Vascular Center of Excellence for our network. 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. We have expanded our non-physician clinical staff to meet both patient care needs and resident duty hours restrictions. We are also working to expand our research activities in all sections.

TEACHING CONFERENCE SCHEDULE

MONDAYS

Breast Cancer Case Conference
8:00 – 9:00 a.m.
Dept. of Radiology Conference Room

GI Multidisciplinary Tumor Board Conference
12:00 – 1:00 p.m.
Lincoln Conference Room

TUESDAYS

Vascular Section Walk Rounds
7:30 – 9:00 a.m.
Ward 5A

Multidisciplinary Vascular Conference
9:00 – 10:00 a.m.
SICU Conference Room

THURSDAYS

Morbidity and Mortality Conference
(General and Vascular Surgery Sections)
7:00 – 8:00 a.m.
Conference Room K-119

Tumor Board Conference
8:00 – 9:00 a.m.
Conference Room K-119

General Surgery Indications Conference
9:00 – 10:00 a.m.
SICU Conference Room

Critical Care Walk Rounds
10:00 – 11:00 a.m.
SICU

Pathology Gross and Microscope Conference
11:00 a.m. – 12:00 p.m. (monthly only)
Dept. of Pathology Morgue Conference Room

FRIDAYS

CV Surgery/Cardiology Multi-disciplinary
Catheterization Conference
7:00 – 8:00 a.m.
Cardiac Catheterization Lab Conference Room