



THE OHIO STATE UNIVERSITY WEXNER MEDICAL CENTER

# Department of Surgery

YEAR IN REVIEW | FY2018



**THE OHIO STATE UNIVERSITY**

WEXNER MEDICAL CENTER



**The world is changing.  
 Medicine is changing.  
 We're leading the way.**



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## The world is changing. Medicine is changing. And the Ohio State Department of Surgery is *leading the way.*



It's an exciting time in medicine, and our department is focused on developing the kind of breakthrough healthcare treatments that can transform lives. Our ongoing technology upgrades will help us create life-changing results for our patients, and the tremendous new talent joining our existing team of experts will drive even more advances and clinical accomplishments in the coming year. Within this brochure, you will find many examples of how we have pioneered new innovations and taken a leadership role in groundbreaking procedures, research and treatment.

With each individual patient's goals in mind, we always strive to develop personalized care plans based on empathy and respect. This is the approach used in all nine surgical divisions and nine clinical centers within our department. It drives our approach to collaboration with other experts at Ohio State as well. Overall, our medical center has more than 1,400 patient beds, performs 44,888 surgeries per year, and has more than 1.81 million annual outpatient visits. Collectively, the Department of Surgery performs more than 17,000 cases annually and was ranked 18th according to the Blue Ridge rankings for National Institutes of Health funding among surgery departments nationally.

We appreciate the opportunity to share more detail about each of our surgical divisions in this brochure, including accomplishments from the previous year, as well as noteworthy procedures and referral details. Please keep this brochure for reference – we hope to work with you in the near future, in any way you find helpful.

Timothy M. Pawlik, MD, MPH, MTS, PhD, FACS, FRACS (Hon.)  
 Professor and chair, Department of Surgery,  
 The Ohio State University Wexner Medical Center  
 The Urban Meyer III and Shelley Meyer Chair for Cancer Research  
 Professor of Surgery, Oncology, and Health Services Management and Policy  
 Surgeon in chief, The Ohio State University Wexner Medical Center

To learn more about Ohio State and the Department of Surgery, visit [wexnermedical.osu.edu/surgery](http://wexnermedical.osu.edu/surgery).

## Teaching, Discovering and *Leading the Way*

As an academic healthcare center, the Ohio State Wexner Medical Center is leading the way. By training the next generation, conducting groundbreaking research and searching for breakthrough healthcare solutions, we can improve patient lives and literally transform medicine. We believe it is our responsibility to educate, comfort, support and encourage every person who partners with and entrusts their health to Ohio State. Each patient relationship is a privilege, and we strive to embody our mission daily. We're passionate because we know the future of medicine starts here.

### Our Mission

The mission of The Ohio State University Wexner Medical Center Department of Surgery is to deliver high-quality, safe patient care; contribute to innovations in medicine through basic and translational research and clinical outcomes studies; and educate medical students and postgraduate trainees.

The Department of Surgery has a long and respected tradition of excellence in clinical care, research and education. The department is composed of nine surgical specialty divisions:

- Cardiac Surgery
- Colon and Rectal Surgery
- General and Gastrointestinal Surgery
- Pediatric Surgery
- Surgical Oncology
- Thoracic Surgery
- Transplantation Surgery
- Trauma, Critical Care and Burn
- Vascular Diseases and Surgery

In addition to these divisions, the department also includes several multidisciplinary centers:

- Burn Center
- Center for Bariatric Surgery
- Center for Minimally Invasive Surgery
- Center for Research, Education and Advancement of Transdisciplinary Exploration (CREATE)
- Center for Surgical Health, Assessment, Research and Policy (SHARP)
- Comprehensive Hernia Center
- Comprehensive Wound Center
- COPPER Laboratory
- Trauma Center

## New Faculty

The quality of our people is what ultimately sets Ohio State apart. We are pleased to announce the addition of these exceptional medical experts who deliver cutting-edge care with a personalized touch.



**Nahush Mokadam, MD, FACC, FACS**

*Director, Division of Cardiac Surgery*

An international leader in heart failure specializing in heart transplants and ventricular assist devices. Dr. Mokadam's clinical, technical and research expertise will help expand the novel and innovative cardiac treatment options offered at Ohio State.



**Timur Sarac, MD**

*Director, Division of Vascular Diseases and Surgery*

An acclaimed surgeon and international leader in vascular surgery. Founding director of Ohio State's Aortic Center. A minimally invasive innovator, Dr. Sarac has completed more than 11,000 operations, written more than 120 publications and holds more than 25 national and international patents in novel stent technology.



**Benjamin Poulouse, MD, MPH**

*Director, Division of General and Gastrointestinal Surgery*

A skilled surgeon specializing in abdominal wall core reconstruction. A clinical leader in minimally invasive hernia repair, thought leader in quality and safety, and regular research partner with the Food and Drug Administration.



**Allan Tsung, MD**

*Director, Division of Surgical Oncology  
(Joining January 2019)*

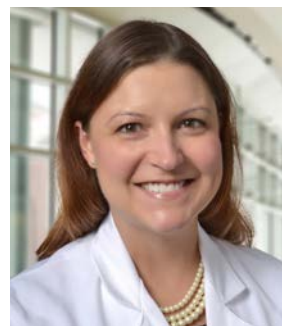
A nationally respected surgeon and scientist, Dr. Tsung's work has generated more than 170 published, peer-reviewed manuscripts in leading scientific journals and has culminated in two current principal investigator R01 grants from the National Institutes of Health (NIH), multiple co-investigator R01s and a number of society and institutional grants.



**Amalia Cochran, MD, FACS, FCCM**

*Vice chair of Education, Department of Surgery; medical director, Burn Services at The Ohio State Comprehensive Burn Center; professor, Division of Trauma Critical Care and Burn*

Director of the division's ACGME accreditation and residency training program. Oversees fellowship and residency physicians and program directors. Responsible for cultivating trainee research opportunities and leading the Department of Surgery Education Council.



**Alessandra Gasior, DO**

*Director, Colorectal Transitional Care; assistant professor, Division of Colon and Rectal Surgery*

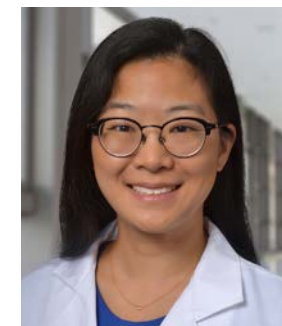
The world's only physician to complete both adult and pediatric colorectal fellowships. Will lead the collaborative program that transitions patients to the adult colon and rectal care at Ohio State from the pediatric care program at Nationwide Children's Hospital.



**Courtney Collins, MD**

*Assistant professor, Division of General and Gastrointestinal Surgery*

An assistant professor following completion of a minimally invasive surgery fellowship. Launched a database to track hernia patient recovery and will continue researching surgical outcomes in elderly patients.



**Emily Huang, MD, MA Ed**

*Assistant professor, Division of Colon and Rectal Surgery*

As an assistant professor and core member of the surgical education team following completion of her colon rectal fellowship, Dr. Huang will also conduct research in the area of surgical education.



## New Faculty, Continued



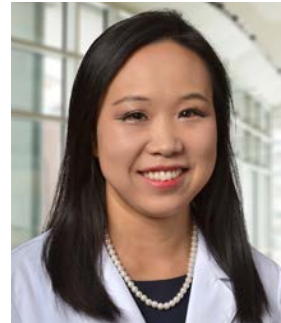
**Aslam Ejaz, MD, MPH**

*Assistant professor, Division of Surgical Oncology*  
Assistant professor with a fellowship in complex general surgical oncology. Primary clinical interest in robotic minimally invasive surgery, particularly for complex hepato-pancreatico-biliary disease.



**Austin Schenk, MD, PhD**

*Assistant professor, Division of Transplantation Surgery*  
With an abdominal transplant surgery fellowship and a continuing research interest in immunology, Dr. Schenk will instruct medical students and provide clinical care for abdominal transplant patients.



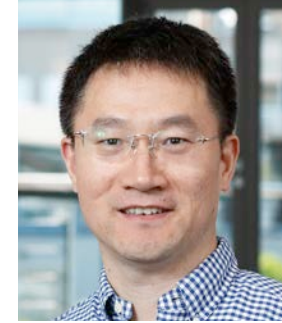
**Ko Un "Clara" Park, MD**

*Assistant professor, Division of Surgical Oncology*  
After completion of a breast surgical oncology fellowship, Dr. Park will serve as an assistant professor and specialize in multidisciplinary care of breast cancer patients and oncoplastic operations, including nipple-sparing mastectomies.



**Phoenix Chen, PhD**

*Research assistant professor and surgical educator, Department of Surgery*  
With more than a decade of work in medical education and research, Dr. Chen will help design, implement and oversee educational programs within the Department of Surgery. She will also assist in developing an Office of Surgery Education.



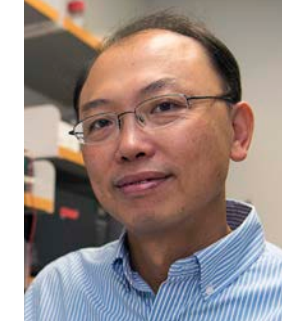
**Chuanxi Cai, PhD**

*Associate professor, Division of Cardiac Surgery*  
Dr. Cai's research mainly focuses on enhancing the effectiveness of cardiac stem cell therapy for ischemic heart disease via genetic modification of protein coding or non-coding genes, or pharmaceutical administration with small molecules. His lab also investigates the role of long noncoding RNAs (lncRNAs) in the cardioprotection.



**Scott Strassels, PharmD, PhD**

*Assistant professor, Division of Trauma, Critical Care and Burn; scientific director, Center for Surgical Health Assessment, Research and Policy (SHARP)*  
Dr. Strassels will help design, supervise and organize research in the field of surgical health services research, as well as oversee SHARP's initiatives, contribute to research projects and train students and residents.



**James Ko, PhD**

*Associate professor, Division of Cardiac Surgery*  
Dr. Ko's laboratory focuses on the application of genetic engineering and computational approaches in the design of biopharmaceuticals to manipulate their structures and functions. Dr. Ko's current interests are tailoring and investigating a drug-candidate MG53 protein for the treatment of tissue injury and an anti-cancer peptide, ATAP (amphipathic tail-anchoring peptide).



**Bowen Wang, PhD**

*Research assistant professor, Division of Vascular Diseases and Surgery*  
Dr. Wang's research interest is in understanding the molecular basis of phenotypic switching in vascular diseases and translating them into novel therapeutics via bioinspired nanoplateforms. He is also dedicated to utilizing an interdisciplinary approach to understand the etiologies of vascular lesions and develop prototypes of effective therapeutics that can lead to future application in vascular patients.



# Ohio State Surgery *by the Numbers FY2018*

Research Funding:  
**\$17.8 million**

Total Faculty: 100

- 86 clinical faculty;  
14 research faculty

Admissions: **8,058\***

Number of Residents: **46**

- 51% male; 49% female
- 32% underrepresented minorities in medicine
- 97% provided positive reviews of Ohio State Surgical Residency in 2018 ACGME survey

wRVUs:  
**562,333**

Number of OR Cases:  
**17,775**

Number  
of Fellows: **26**

\*Ohio State Wexner Medical Center Patient Statistics



# Surgery Divisions

by the Numbers FY2018

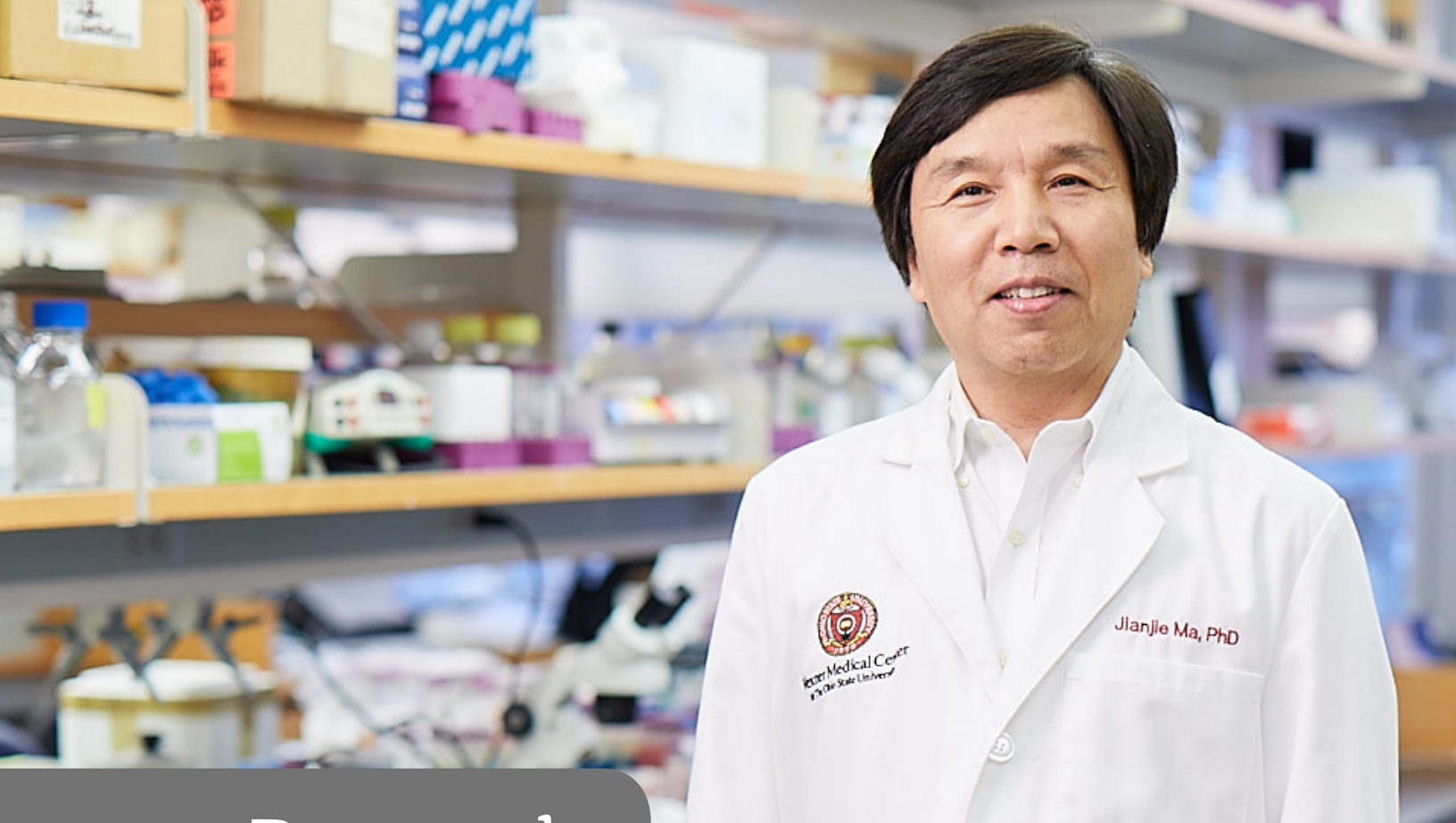
## OR Cases

<b>Cardiac Surgery</b> 1,168	<b>Pediatric</b> 4,394	<b>Transplantation</b> 1,002
<b>Colon and Rectal</b> 1,274	<b>Surgical Oncology</b> 2,343	<b>Trauma, Critical Care and Burn</b> 2,138
<b>General and GI</b> 3,072	<b>Thoracic</b> 1,142	<b>Vascular</b> 1,242

## wRVUs

<b>Cardiac Surgery</b> 64,021	<b>Pediatric</b> 87,617	<b>Transplantation</b> 66,661
<b>Colon and Rectal</b> 29,958	<b>Surgical Oncology</b> 88,018	<b>Trauma, Critical Care and Burn</b> 77,159
<b>General and GI</b> 77,002	<b>Thoracic</b> 25,312	<b>Vascular</b> 46,585





# Research

The focus of Dr. Jianjie Ma’s research group is to understand the biology behind the repair of injured tissues of vital organs and translate their basic findings into treatment of human diseases. MG53 is a key component of the cell membrane repair machinery — research and development efforts support the therapeutic potential for MG53 in treatment of degenerative diseases. Dr. Ma presented at WexMed Live 2018; watch the video at [go.osu.edu/ma-wexmedlive](http://go.osu.edu/ma-wexmedlive).

Department of Surgery  
FY2018 Research

Total number of active grants: **112**



Total funding: **\$17.8 million**

Blue Ridge ranking for  
NIH funding: **18th**

Number of principal investigators: **45**

Ohio State believes in the power of research to drive innovation, and we’ve grown into one of the largest research powerhouses in the nation, with more health sciences colleges on a single campus than any other American university. The Ohio State Wexner Medical Center is one of only 59 members of a National Institutes of Health consortium, and our success in obtaining NIH and other grants has advanced the development of our extensive laboratory and clinical infrastructure. In each surgery division profiled in this brochure, you will see the number of active grants as well as the sizeable investments entrusted to our researchers.

The department has extraordinary research productivity in basic and translational sciences, specifically in the areas of tissue injury and repair, inflammation, immunology, transplantation, cancer and regenerative medicine. The vast majority of current extramural federal funding is directed toward such research. Current federal funding primarily originates from the National Institutes of Health and the Department of Defense.

- Publication profile and citation data of department faculty may be viewed in Google Scholar using the keyword OSUSURGERY at the following link: [go.osu.edu/google-scholars](http://go.osu.edu/google-scholars)

The rich research environment of the department is leveraged to mentor surgical scientists toward their K and R awards. The department is currently ranked 18th (up from 25th in 2015) out of 76 departments of surgery by the Blue Ridge Institute (2017 data) based on NIH funding.

- Current publications from the department may be reviewed at: [go.osu.edu/current-pubs](http://go.osu.edu/current-pubs)

To learn more, visit [wexnermedical.osu.edu/departments/surgresearch](http://wexnermedical.osu.edu/departments/surgresearch).

## Health Services Research

The Center for Surgical Health Assessment, Research and Policy (**SHARP**) provides an intellectual home and material resources for faculty to pursue high-impact health services research.

Core SHARP faculty participate in private consultations, brainstorming sessions and investigator development seminars, and can access physical space with high-performance computing capacity, as well as staff support for project coordination, data management and statistical analysis.

**Heena Santry, MD, MS**, is the Director of SHARP. She established the leadership team including administrative director **Judy Opalek, PhD**, and scientific director **Scott Strassels, PharmD, PhD**.







# Education

Ohio State has deliberately recruited new faculty to maintain a scholarly emphasis on education science, including evaluation and expansion of our existing programs. To directly influence the quality of our resident and fellow training programs, our primary areas of focus in education science include greater resident entrustment, faculty intraoperative teaching and improved communication. We are also identifying perceived barriers to careers in academic surgery and working to eliminate them.

## Trainees

by the numbers **46** residents; **26** fellows

Number of ACGME-Accredited Surgical Residencies: **1**

Number of ACGME-Accredited Specialty Fellowships: **5**

### Residency

Ohio State offers a general surgery residency as well as subspecialty residencies in colorectal surgery and pediatric surgery. General surgery rotations occur at the Ohio State Wexner Medical Center University Hospital OSUCCC – James, Ross Heart Hospital and University Hospital East, as well as Nationwide Children’s Hospital.

### Research

To support their research initiatives, all general surgery resident trainees apply for extramural funding. Sources may include Institutional T32 training grants, the Ohio State University Pelotonia Fellowship Program for cancer research, individual postdoctoral F32 grants, Mentor/PI-funded R01s or diversity supplement awards, medical society awards or the University Fellowship Award.

Upon completion of their second or third year of clinical training, general surgery residents interested in pursuing a career in research dedicate one to two years, without clinical responsibilities, toward research education and training. The core curriculum is augmented with individualized electives and seminars as well as a mentored research program. Based on prior clinical training, interests and professional goals, degree options are the Master of Medical Science, MPH, MBA or an alternative MS degree (such as the MS in Anatomy).

### Fellowships

Subspecialty surgical fellowships at Ohio State include advanced therapeutic endoscopy and gastrointestinal surgery, cardiothoracic, colorectal, critical care, pediatrics, abdominal transplant, pediatric critical care, oncology, vascular, minimally invasive surgery and bariatrics.



### Global Surgery

Ohio State is championing safe surgical care worldwide through its global surgery program. With an emphasis on underserved populations in America and beyond, the program provides students, residents and faculty an opportunity to explore different healthcare systems. In high-income countries such as Australia, participants learn how similar communities may provide different care. In low-middle income countries such as Ethiopia, surgeons are exposed to diseases that are less common in the United States, and they also learn to provide care with different resources.



To learn more, visit [wexnermedical.osu.edu/departments/surgeryed](http://wexnermedical.osu.edu/departments/surgeryed).



## Division of Cardiac Surgery

The Ohio State Wexner Medical Center is ranked 24th overall by *U.S. News & World Report*, with “high-performing” status in heart failure, aortic valve, surgery and heart bypass surgery. This past year, our surgeons performed the largest number of heart and lung transplants in our institution’s history, including our **500th heart transplant at the Ross Heart Hospital**, and our outcomes for heart transplant, bypass surgery and valve surgery were better than the national average.

We welcome our new division director, Nahush Mokadam, MD, to lead our clinical, research and educational programs. Ohio State is continuing to expand programs of distinction, including an even larger research footprint and introduction of an integrated six-year residency program in cardiac surgery.

*Peter Lee, MD, PhD, MPH, pictured on the left, led the 500th heart transplant surgery, assisted by Nahush Mokadam, MD, pictured in the center.*



The newest clinical programs introduced at Ohio State include:

- **Ex Vivo Lung Perfusion Program**—Our Comprehensive Transplant Center is the first in Ohio to offer this new process, which uses a mechanical system to respire, warm, nourish and repair donor lungs outside the body, thus improving the odds that they can be used for transplant.
- **Mechanical Circulatory Support**—We have the largest and longest-running VAD program in central Ohio, and our surgeons perform the implant procedure through two small chest incisions and “off-pump,” which avoids the need for cardiopulmonary bypass, reduces potential for transfusions and shortens recovery times. Also, Ohio State is the fourth medical center in the nation certified to implant the SynCardia temporary Total Artificial Heart® (TAH-t). Further, the cardiogenic shock program has an ever-expanding extracorporeal membrane oxygenation (ECMO) utilization.
- **Transcatheter Aortic and Mitral Valve Replacement**—In collaboration with our Interventional Cardiology colleagues, this minimally invasive procedure for traditional open heart surgery, transcatheter aortic valve replacement (TAVR), improves recovery time and is often an excellent option for patients who are not open heart surgery candidates due to advanced age or other limiting health factors. Ohio State also participates in groundbreaking clinical trials, such as the APOLLO trial examining the latest generation of transcatheter mitral valves.
- **Thoracoscopic Atrial Fibrillation Ablation**—We have another entire floor at our Ross Heart Hospital dedicated to caring for patients with arrhythmia. We are the only central Ohio hospital to perform the thoracoscopic maze procedure, the most advanced surgical intervention for atrial fibrillation available today. This procedure, performed in combination by surgeons and electrophysiologists, uses a combined epicardial and endocardial approach to increase the ablation success rate.
- **Aortic Arch Debranching Procedures**—Ohio State’s surgeons are also pioneering this less invasive option that combines bypass of the arch vessels and stenting for the treatment of aortic arch aneurysms, ultimately reducing patient risk and time needed in the hospital.

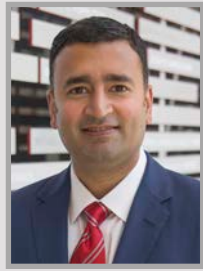


### *Giving Patients More Time for Successful Treatment*

To improve long-term patient outcomes through the use of extracorporeal life support, the Division of Cardiac Surgery actively collaborates with other Ohio State divisions and consults with other medical centers that may not have the same resources or specialization. As access to these innovative treatment options increases, patients receive the gift of more time so that they can be resuscitated and prepare for the next steps of their recovery.



## Faculty



Nahush Mokadam, MD  
Director, Division of  
Cardiac Surgery

### Clinical Faculty

#### Adult Cardiac Surgery

Peter Lee, MD, PhD, MPH  
Gregory Rushing, MD  
Bassam Shukrallah, MD  
Bryan Whitson, MD, PhD

#### Pediatric and Congenital Cardiac Surgery

Mark Galantowicz, MD  
Patrick McConnell, MD  
Toshiharu Shinoka, MD

### Research Faculty

Chuanxi Cai, PhD  
Renzhi Han, PhD  
James Ko, PhD  
Haichang Li, DVM, PhD  
Pei-Hui Lin, PhD  
Jianjie Ma, PhD  
Hua Zhu, PhD

## Education

- Summer Scholars Program offering seven-week summer immersion in cardiac, thoracic and congenital surgery; includes one American Association for Thoracic Surgery Scholar (if awarded) and up to three summer scholars. For SU2018, Mackenzie Banks, Christian Blough and Corey Gatewood were awarded the scholarships.
- Medical student CT Surgery Interest Group with 10 monthly educational sessions, two wet labs, two suture clinics and a transplant pager for 35 medical students
- Thoracic Surgery Fellowship Program with implementation of TSDA online curriculum, 10 simulation programs and monthly wet lab and journal club

## Publications and Research

- 45 peer-reviewed manuscripts
- Six book chapters
- Grant funding
  - Whitson, Bryan, Co-PI: R01-HL143000 - Preservation and rescue of the lung donor allograft for transplantation
  - Zhu, Han, PI: R01-HL124122 - Oxidized low-density lipoprotein impairs bone marrow stem cell survival
  - Lee, Peter, PI: K08-GM126315 - Tissue-engineered skeletal muscle delivering rhMG53 to treat volumetric muscle loss
  - Lee, Peter, PI: Eli Pinney in Space: An elementary school project to fly an experiment into space, funded by The Ohio Space Grant Consortium; March 2, 2018-March 1, 2019
  - Ma, Jianjie, PI: Hydrogel encapsulation of a tissue repair protein to treat chronic wounds, funded by National Institute on Aging; Sept. 1, 2017-May 31, 2022
  - Whitson, Bryan, Co-PI: Transcatheter mitral valve replacement with the Medtronic Intrepid™ TMVR System in patients with severe symptomatic mitral regurgitation – APOLLO trial, funded by Medtronic Inc.; Dec. 8, 2017-Sept. 30, 2024

- Whitson, Bryan, PI: Long-term follow-up for participants of: Evaluation of outcomes following mitral valve repair/ replacement in severe chronic ischemic mitral regurgitation (SMR) and surgical interventions for moderate ischemic mitral regurgitation (MMR) trials, funded by Icahn School of Medicine at Mount Sinai; July 31, 2017-March 31, 2019

## Awards and Recognition

- **Dr. Bryan Whitson**
  - Press Ganey National Top 10% of providers for Patient Satisfaction
  - 2018 Ignite Pulse of Columbus Award by American Heart Association
  - Elected into American Association of Thoracic Surgery
  - Awarded a National Institutes of Health RO1 grant to fund the study “Preservation and rescue of the lung donor allograft for transplantation”
- **Dr. Peter Lee**—Awarded a National Institutes of Health KO8 grant to fund the study “Tissue-engineered skeletal muscle delivering rhMG53 to treat volumetric muscle loss”
- **Dr. Mark Galantowicz**—2018 Castle Connolly Top Doctor



## Referral Information

The Division of Cardiac Surgery specializes in the treatment of the most complex cardiac surgery patients through:

- Complex reoperations
- Coronary artery bypass surgery
- Heart valve surgery
- Aortic surgery
- Mitral valve surgery
- Surgery for hypertrophic obstructive cardiomyopathy
- Minimally invasive surgery
- Endovascular procedures
- Transcatheter valve replacement and repair procedures
- Heart and lung transplantation
- Mechanical circulatory support
- Extracorporeal membrane oxygenation (ECMO)

To refer, please call the Division of Cardiac Surgery at 614-293-5502, or fill out the one-page Ohio State Wexner Medical Center referral form available at [wexnermedical.osu.edu/ReferralForm](http://wexnermedical.osu.edu/ReferralForm) and fax your referral to 614-293-1456.



## Division of Colon and Rectal Surgery

The Division of Colon and Rectal Surgery at The Ohio State University Wexner Medical Center believes the highest-quality care results from a combination of focused knowledge and a wide breadth of treatment options.

Every surgeon within the division is board certified and dedicated to practicing only within his or her specific area of expertise. This intense dedication has yielded a high volume of cases and increased our experience levels with even the most unusual and complex surgical cases within our specialties.

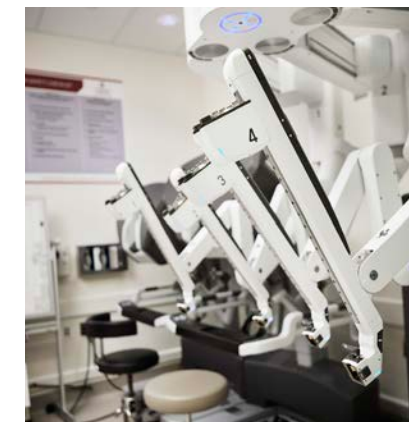
Our newest clinical programs at Ohio State include:

- **Pelvic Floor Disorders**—This program began in July 2015 and is now offered two days per month at our convenient Outpatient Care Upper Arlington location. The clinic provides comprehensive testing, evaluation and a range of treatment options for men and women diagnosed with a variety of pelvic floor disorders.
- **Minimally Invasive and Robotic Surgery**—This fast-growing program in our division provides options for treatment of diseases of the colon and rectum. The treatment affords patients the advantages of a shorter hospital stay, less blood loss, reduced pain and quicker recovery. In the Division of Colon and Rectal Surgery, we have leveraged the expertise of Syed Husain, MBBS, and Amber Traugott, MD, in particular, to expand our robotic volume for colectomy and lower anterior resection (LAR).
- **Center for Colorectal Transitional Care**—Under the leadership of Dr. Alessandra Gasior, the Center for Colorectal Transitional Care is a new collaborative effort to transition adult patients from the Center for Colorectal and Pelvic Reconstruction at Nationwide Children's Hospital to the Colon and Rectal Surgery program at the Ohio State Wexner Medical Center.



### *Colon and Rectal Robotic Surgery*

Ohio State's Division of Colon and Rectal Surgery continues to expand the use of robotic surgery for greater precision and improved patient recovery. Ohio State surgeons routinely use robotics for procedures such as colectomies, when all or part of the colon is removed, or lower anterior resections (LAR), which involves removal of part or all of the rectum. Using the da Vinci System for these types of abdominal procedures not only yields excellent visualization and control for our surgeons, but the tiny incisions required yield less patient blood loss, quicker return to bowel function and shorter hospital stays.



## Faculty



Mark Arnold, MD

Director, Division of  
Colon and Rectal Surgery

### Clinical Faculty

Alessandra Gasior, DO

Alan Harzman, MD

Emily Huang, MD, MEd

Syed Husain, MBBS

Amber Traugott, MD

## Education

- ACGME accredited one-year Colon and Rectal Surgery Fellowship
- Colon and Rectal Surgery Residency was awarded continued accreditation through April 1, 2028
- Interdisciplinary Conferences
  - Monthly multidisciplinary IBD conference
  - Citywide Colorectal Journal Club
  - Weekly Tumor Board conference

## Publications and Research

- 12 papers published
- One grant funded
- Two ongoing grants
  - Laparoscopic versus robotic training: Comparing learning curves and skill transference between the two modalities in general surgery residents. Funded by SAGES (\$50,000)
  - Human enteric glia: A novel target for motility and postoperative ileus. Co-investigator on R01-funded project (\$320,345)

## Awards and Recognition

- **Dr. Mark Arnold**—USMLE Chronic Care Committee, Senior Examiner American Board of Colon and Rectal Surgery
- **Dr. Alan Harzman**—SAGES Development Committee
- **Dr. Syed Husain**—SAGES Educational Resources Committee
- **Dr. Amber Traugott**—SSAT Fellow Education Committee
- **Drs. Mark Arnold and Alan Harzman**—2018 Castle Connolly Top Doctors

## Referral Information

The Ohio State Wexner Medical Center offers comprehensive surgical programs for the treatment of a wide range of colon and rectal conditions, such as:

- Colon and rectal cancer, including primary, recurrent and metastatic cancers
- Inflammatory bowel disease
- Pelvic floor disorders
- Anorectal disease
- Benign colonic disease

To refer, please call the Division of Colon and Rectal Surgery at 614-293-3230, or fill out the one-page medical center referral form available at [wexnermedical.osu.edu/ReferralForm](http://wexnermedical.osu.edu/ReferralForm) and fax your referral to 614-293-1456.





## Division of General and Gastrointestinal Surgery

The Division of General and Gastrointestinal Surgery at the Ohio State Wexner Medical Center continues to show its strength as a nationally recognized leader in minimally invasive general surgery. As a high-volume clinical division, the group excels in providing expert, multidisciplinary care in foregut surgery, bariatric surgery, advanced therapeutic endoscopy, hepatobiliary surgery and hernia repair and complex abdominal wall reconstruction.

Highlights from this past year include:

- **Multidisciplinary Bariatric Program**—Ohio State is a Bariatric Surgery Center of Excellence, performing more than 400 primary and revisional operations last year. Ohio State was the first in central Ohio to develop a comprehensive program with experts in psychology, nutrition, exercise physiology, endocrinology and other specialties. Surgical weight-loss options include Roux-en-Y gastric bypass, sleeve gastrectomy, laparoscopic adjustable gastric banding, revisions for weight loss and/or complications from previous bariatric surgery, intragastric balloons placed endoscopically and, soon, single anastomotic duodenal switches.
- **Abdominal Core Health Program**—Ohio State provides state-of-the-art treatment with evidence-based protocols to optimize complex abdominal wall hernia treatment plans involving input from general, plastic, trauma and bariatric surgeons. Our robotic hernia program is the highest-volume academic general surgery program in the country using the da Vinci robotic platform. We accept referrals for all types of hernias, including inguinal, umbilical, ventral, incisional, flank and lumbar hernias.
- **Multidisciplinary Esophageal/Foregut Program**—We offer multiple operative options, innovative endoscopic approaches and clinical trials for disorders such as gastroesophageal reflux disease, Barrett's esophagus, primary and recurrent paraesophageal and diaphragmatic hernias, achalasia and other esophageal dysmotility disorders and esophageal and gastric cancers. Kyle Perry, MD, completed his 1,000th operation for GERD/hiatal hernia at The Ohio State University Wexner Medical Center.
- **Multidisciplinary HPB Surgery Program**—GI surgeons and surgical oncologists provide highly skilled, integrated care for patients with benign and malignant diseases of the liver, biliary system and pancreas.



### *Robotic Training for Residents*

Residents will find the most robust general surgery robotics training in the nation at Ohio State, with an opportunity to earn robotic certification. In December 2016, a new robotics system was installed at The Ohio State University Hospital East – the fifth in the medical center overall – and, by July 2018, general surgery residents had already performed more than 500 procedures. With available training time increased, general surgery chief residents can now perform 40-70 robotic surgeries during their rotation at University Hospital East.



## Faculty



Benjamin Poulouse, MD, MPH  
Director, Division of General and Gastrointestinal Surgery

### Clinical Faculty

Courtney Collins, MD  
Andrei Manilchuk, MD  
Michael Meara, MD, MBA  
Vimal Raaja Narula, MD  
Bradley Needleman, MD  
Sabrena Noria, MD, PhD  
Kyle Perry, MD  
David Renton, MD

### Research Faculty

Daniel Gallego-Perez, PhD

## Education

- As part of the Center for Minimally Invasive Surgery (CMIS), our division continues to offer some of the most desirable fellowships in the country accredited by the Fellowship Council:
  - Two fellowships in advanced minimally invasive and bariatric surgery
  - One fellowship in advanced therapeutic endoscopy and gastrointestinal surgery
- Five continuing medical education programs were hosted by the CMIS in the last year, including the care of bariatric surgery patients, innovative interventions in GI diseases, surgical innovation, Technology & Education Symposium (SITE) and women in surgery.

## Publications and Research

- 34 papers published
- Seven new grants
- 10 ongoing grants
- 20 ongoing clinical trials
  - Stomach Intestinal Pylorus Sparing (SIPS) as a Primary and Revisional Bariatric Surgery
  - Orbera Intragastic Balloon System Registry
  - A Multicenter, Randomized, Double-Blind, Sham-Controlled Clinical Investigation of the EndoStim Lower Esophageal Sphincter (LES) Stimulation System for the Treatment of Gastroesophageal Reflux Disease (GERD)
  - Peroral Endoscopic Myotomy (POEM) for the Treatment of Achalasia

## Awards and Recognition

- **Dr. E. Christopher Ellison**—President, American Surgical Association
- **Dr. Daniel Gallego-Perez**—Ohio State University Institute for Materials Research Innovation Award
- **Dr. Bradley Needleman**—Edwin H. and E. Christopher Ellison Endowed Professorship; 2018 Castle Connolly Top Doctor
- **Dr. Kyle Perry**—SAGES 2018 Brandeis Award winner
- **Dr. Sabrena Noria**—Upper Payment Limit (UPL) Advanced Care Patient Delivery Award

## Referral Information

The surgeons in the Ohio State Division of General and Gastrointestinal Surgery accept referrals for all patients with general surgical needs including:

- Bariatric surgery
- Esophageal/Foregut disease
- Hernia repair
- Gastrointestinal and hepatobiliary surgery

To refer, please call the Division of General and Gastrointestinal Surgery at 614-293-3230 or Bariatric Surgery at 614-366-6675, or fill out the one-page medical center referral form available at [wexnermedical.osu.edu/ReferralForm](http://wexnermedical.osu.edu/ReferralForm) and fax your referral to 614-293-1456.





## Division of Pediatric Surgery

The Division of Pediatric Surgery at The Ohio State University Wexner Medical Center is one of the largest and most diverse of its kind in the United States. The Division of Pediatric Surgery conducts its clinical, educational, research and academic programs at nearby Nationwide Children’s Hospital (NCH), which is the largest pediatric treatment center in the country and ranked 7th on the Best Children’s Hospitals Honor Roll by *U.S. News & World Report*.

Our nationally recognized team includes 15 board certified pediatric surgeons (five of whom are also certified in surgical critical care), one full-time PhD scientist and one hospitalist who is board certified in general surgery and specializes in burn and trauma care. Each faculty member brings special strengths and talents to the division and is recognized for individual expertise in clinical care, research and education.



Nationwide Children’s Hospital (NCH) ranks among the top 10 pediatric research institutes nationally and is the only hospital that is an American College of Surgeons-designated Level I pediatric trauma center, an American Burn Association-verified pediatric burn center and a Commission on Accreditation of Rehabilitation Facilities (CARF)-approved pediatric rehabilitation center.

- **NCH’s Center for Robotic Surgery**—has performed 650 robotically assisted operations, making it the busiest center of its kind in the U.S. Under the leadership of Marc Michalsky, MD, the center consists of 12 general and urologic surgeons spanning several key pediatric surgical service lines, including urology, general and thoracic surgery, adolescent bariatric surgery, surgical oncology and colorectal and pelvic reconstructive surgery.

In addition to ongoing expansion of the clinical program, the center has also partnered with industry experts to develop new indications for robotic surgical intervention. We are also developing a didactic curriculum for advanced pediatric robotic training.

- **Pediatric Surgery MIS Program**—one of the busiest in the country and includes complex neonatal cases
- **Pediatric Trauma and Burn Programs**—national leadership as partners with the Ohio State Burn Program



### *Changing Lives with Ovary-Sparing Surgery*

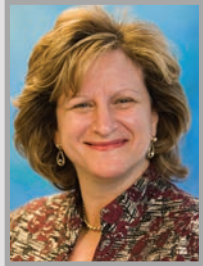
In adolescent girls with an ovarian mass, pediatric surgeons traditionally removed both the mass and the ovary. This minimizes long-term oncologic risk, but it increases chances of infertility and early menopause with its related long-term risks.

Multiple studies at Nationwide Children’s Hospital have culminated in a funded, multi-institutional interventional study that fosters collaboration between pediatric surgeons like Katherine Deans, MD, and adolescent gynecologists to perform pre-operative risk stratifications on ovarian mass patients. As a result of this deliberate approach, Ohio State has successfully decreased the rate of adolescent oophorectomies locally from more than 75 percent in previous years to less than 10 percent in 2017.





## Faculty



Gail Besner, MD  
Director, Division of  
Pediatric Surgery

### Clinical Faculty

Jennifer Aldrink, MD  
Christopher Breuer, MD  
Katherine Deans, MD, MHSC  
Karen Diefenbach, MD  
Renata Fabia, MD, PhD  
Jonathan Groner, MD  
Brian Kenney, MD, MPH  
Denis King, MD  
Marc Levitt, MD  
Marc Michalsky, MD  
Peter Minneci, MD, MHSC  
Benedict Nwomeh, MD, MPH  
Rajan Thakkar, MD  
Richard Wood, MD

### Research Faculty

David Brigstock, PhD

## Education

- Fellowships include:
  - Pediatric surgery (RRC approved)
  - Surgical critical care (RRC approved)
  - Pediatric minimally invasive surgery
  - Pediatric bariatric surgery
  - Pediatric colorectal surgery
  - Pediatric surgical research fellowships
- Pediatric Surgery and Surgical Critical Care Programs received full continued accreditation from ACGME.
- Dr. Karen Diefenbach leads an effort to oversee the building of a \$98 million NCH Simulation/Conference Center.

## Publications and Research

- 97 peer-reviewed publications (PubMed)
- 69 presentations at national meetings
- 26 federally funded grants (~\$20 million)
  - External grants awarded in 2017 total over \$13 million
  - External grant funding increased 6.6-fold between 2012 and 2017
- NIH/federal funding places Nationwide Children's Hospital Pediatric Surgery as one of the top five programs in the country

## Awards and Recognition

- **Dr. Benedict Nwomeh**—elected as secretary/treasurer of the Association of Pediatric Surgery Training Program Directors (APSTPD)
- **Drs. Gail Besner, Christopher Breuer, Katherine Deans, Brian Kenney, Peter Minneci**—Mentors to trainees who won highly competitive national/international research awards and grants
- **Dr. Rajan Thakkar**—Golden Apple Teaching Award
- **Dr. Gail Besner**—American Pediatric Surgical Association Board of Governors and American Academy of Pediatrics Section on Surgery Executive Committee (president in 2020)
- **Drs. Gail Besner, Renata Fabia, Jonathan Groner, Brian Kenney, Denis King, Benedict Nwomeh**—2018 Castle Connolly Top Doctors

## Referral Information

Our surgeons perform robotic surgery, as well as advanced laparoscopic, endoscopic and thoracoscopic techniques in our Pediatric Surgery and Minimally Invasive Surgery (MIS) programs. Other specialties include active clinical programs focused on general pediatric surgery, surgical oncology, surgical endocrinology, trauma, burns, chest wall deformities, bariatric surgery, inflammatory bowel disease, hepatobiliary surgery, neuromodulation and pediatric colorectal surgery.

To refer, please call the Division of Pediatric Surgery at 614-722-3900.





## Division of Surgical Oncology

At The Ohio State University Comprehensive Cancer Center – James Cancer Hospital and Solove Research Institute (OSUCCC – James), our surgical oncology team—one of the largest and most experienced in the nation—contains world-renowned experts who reach across medical disciplines (medical oncologists, surgical oncologists, radiation oncologists, pathologists [including molecular pathologists], genetic scientists and others) to design the best treatments for targeting each patient’s specific disease. The OSUCCC – James is the only cancer program in the United States that features an NCI-designated comprehensive cancer center aligned with a nationally ranked academic medical center and a freestanding cancer hospital on the campus of one of the largest public universities. We also have been ranked by *U.S. News & World Report* as one of the top cancer hospitals in the country for the past 20 years.



Our goals in the Division of Surgical Oncology are to provide excellence in cancer care; to educate medical students, residents and fellows; and to conduct clinical and basic research devoted to evaluating and managing cancer. Realizing that no cancer is routine because each malignancy is biologically unique, our surgical specialists and subspecialists offer the latest, research-based surgical techniques—from complex open surgery to minimally invasive robotic procedures—to provide personalized care.

- **Hepato-Pancreatico-Biliary (HPB) Surgery**—Patients with benign and malignant diseases of the pancreas, liver, gallbladder and bile duct are treated by our HPB surgeons, leaders in advanced open and minimally invasive techniques, in collaboration with our multi-disciplinary team to ensure the best long-term outcomes.
- **Hyperthermic Intraperitoneal Chemotherapy (HIPEC) Program**—Our HIPEC program provides state-of-the-art intraperitoneal cancer therapy that involves a comprehensive approach for treating certain peritoneal and abdominal cancers.
- **Breast**—The Stefanie Spielman Comprehensive Breast Center (SSCBC) features surgical oncologists who subspecialize in breast cancer. The SSCBC is accredited by the National Accreditation Program for Breast Centers (American College of Surgeons), an honor granted only to centers that provide optimal care to patients with breast diseases. The SSCBC also has a Multidisciplinary High-Risk Breast Cancer Program in which surgical oncologists play a key role.
- **Melanoma**—A Cutaneous Oncology Clinic at Ohio State’s Comprehensive Cancer Center – James Cancer Hospital and Solove Research Institute (OSUCCC – James) offers newly diagnosed melanoma patients a same-day on-site evaluation and treatment-options review by experts in several disciplines, including surgical oncology.
- **Thyroid Cancer and Hyperthyroidism Surgery**—Among Ohio State’s innovative techniques is a more reliable way to locate parathyroid glands, which are very small and difficult to see. During thyroid cancer and hyperthyroidism surgery, physicians capitalize on the fact that parathyroid glands naturally “glow” in the near infrared region of light to guide their identification and removal.



### *A National Leader in Robotic Whipple Surgery*

The OSUCCC – James and the Department of Surgery recently launched a robotic pancreaticoduodenectomy, or “Whipple,” program. Under the leadership of Mary Dillhoff, MD, it has already become one of the nation’s highest-volume robotic programs, due in large part to extensive resources and team training. The robotic technique can reduce blood loss and perhaps accelerate recovery.



## Faculty



Allan Tsung, MD

Director, Division of  
Surgical Oncology

### Clinical Faculty

Sherif Abdel-Misih, MD

Doreen Agnese, MD

William Carson, MD

Jordan Cloyd, MD

Mary Dillhoff, MD

Aslam Ejaz, MD, MPH

William Farrar, MD

Valerie Grignol, MD

Ko Un “Clara” Park, MD

Timothy Pawlik, MD, PhD

John Phay, MD

Raphael Pollock, MD

Stephen Pivoski, MD

Lawrence “Drew” Shirley, MD

### Research Faculty

Zhiwei Hu, PhD

Anne Strohecker, PhD

## Education

- Complex general surgical oncology fellowship program (ACGME accredited)

## Publications and Research

- 200 publications
- 18 active funded grants in FY2018 (\$5.7 million)

### As principal investigator:

- Tumor Immunology. NIH/NCI T32 Training Grant
- Translational Training Grant in Experimental Therapeutics. NIH/NCI Institutional K12 Training Grant
- UM1 Supplement for Early Therapeutic Trials With Phase 2 Intent. NIH/NCI Phase 2 Clinical Trial Collaborative With University of Kentucky and Case/Cleveland Clinic
- Targeting Tissue Factor as a Novel Oncotarget for Immunotherapy of Triple-Negative Breast Cancer Using a Second-Generation ICON. Falk Medical Research Trust Research Grant
- The Ohio State University Comprehensive Cancer Center Support Grant. NIH/NCI Grant
- Impact of BRAF-Mutated Papillary Thyroid Cancers on Cancer-Associated Fibroblast Genotype and Phenotype. American Thyroid Association Research Grant
- Identification of Novel Mechanisms of Autophagy Regulation for Cancer. NIH/NCI K22 Career Grant

### As core director:

- Core A: The Ohio State University and MD Anderson Cancer Center Thyroid Cancer SPORE. NIH/NCI Spore Grant
- Genetic and Signaling Pathways in Epithelial Thyroid Cancer

## Awards and Recognition

- **Dr. William Carson**—John B. and Jane T. McCoy Chair in Cancer Research
- **Dr. Mary Dillhoff**—AHPBA South American Travel Award
- **Dr. Jordan Cloyd**—Japan Surgical Society Travel Award, Davis-Bremer Pre-K Award
- **Dr. Charles Kimbrough, Complex General Surgical Oncology Fellow**—Finalist at 2018 Endocrine Grand Rounds for “The Impact of Carcinoid Syndrome on Gastroenteropancreatic Neuroendocrine Tumors that Undergo Surgical Resection”
- **Dr. Lorena Suarez-Kelly, Complex General Surgical Oncology Fellow**—Bronze Research Presentation Award. 2018 Columbus Surgical Society Presidential Symposium
- **Drs. Sherif Abdel-Misih, Doreen Agnese, William Carson, William Farrar, Timothy Pawlik, Raphael Pollock and Stephen Pivoski**—2018 Castle Connolly Top Doctors
- **Dr. Timothy Pawlik**—Americas Hepato-Pancreato-Biliary Association (AHPBA) Treasurer

## Referral Information

Surgical oncology physicians at Ohio State are trained in general surgery, have been certified by the American Board of Surgery, have additional training in surgical oncology and are active members of the Society of Surgical Oncology. Special areas of expertise include gastrointestinal cancer, breast cancer, melanoma, thyroid cancer, soft tissue sarcoma and head and neck cancer.

To refer, please call the Division of Surgical Oncology via The James Line at **614-293-5066**, or fill out the one-page medical center referral form available at [wexnermedical.osu.edu/ReferralForm](http://wexnermedical.osu.edu/ReferralForm) and fax your referral to 614-293-1456.





## Division of Thoracic Surgery

The Division of Thoracic Surgery at The Ohio State University Wexner Medical Center, ranked first in the state of Ohio, is the fastest-growing robotic surgery program in the country for general thoracic surgery. Division surgeons are able to perform complex pulmonary resections and esophageal surgery with the da Vinci Xi robot with excellent results. Our thoracic surgeons have performed 200 lobectomy procedures with minimal morbidity, low hospital stays and a zero mortality rate. Building on these successes, we look to further expand our robotic surgery volume and increase our use of the robot for esophagectomy procedures in patients with esophageal carcinoma.

The Division of Thoracic Surgery aims to improve patient care and outcome. Highlights from this past year include:

- **Robotic Surgery**—Within the last year, Robert Merritt, MD, and Desmond D’Souza, MD, performed 250 robotic-assisted operations.
- **Minimally Invasive Thymectomy for Myasthenia Gravis**—A multidisciplinary Myasthenia Gravis program was formed with Neurology.
- **Minimally Invasive Esophagectomy**—A partnership was established with MIS surgery, GI medicine and Oncology. From 2014 to 2018, 150 procedures have been completed, with a mortality rate of less than 1 percent.
- **Lung Volume Reduction Surgery Program**—The Ohio State Wexner Medical Center is the only hospital in central Ohio offering lung volume reduction surgery. It has performed more lung volume reduction surgeries than anyone in the country, with 18 cases performed in FY2018. In addition, the Lung Volume Reduction Surgery program is part of a multidisciplinary program with pulmonary medicine.
- **Thoracic Oncology**—In addition to their other areas of treatment, our surgeons also support programs in thoracic oncology, collaborating with the lung and gastrointestinal disease sites at The Ohio State University Comprehensive Cancer Center – James Cancer Hospital and Solove Research Institute. We share many clinical trials with medical oncology, as well as radiation oncology through Cancer and Leukemia Group B (CALGB), Radiation Therapy Oncology Group (RTOG) and American College of Surgeons Oncology Group (ACOSOG).



### *Expanding Recognition for Thoracic Robotic Surgery*

Ohio State’s Division of Thoracic Surgery has dramatically grown its robotic surgery volume. A short time ago, only a few cases were performed annually. Now, the program is ranked in the top 10 for volume nationally. This increase in robotic procedures has also supported the robotic curriculum for the thoracic surgery fellowship, making our program a destination for specialists. In fact, in each of the past two years (2017 and 2018), an Ohio State cardiothoracic resident has been awarded the prestigious American Association of Thoracic Surgery (AATS) Graham Thoracic Robotic Fellowship.



## Faculty



Robert Merritt, MD  
Director, Division of  
Thoracic Surgery  
Associate Program Director,  
Cardiothoracic Surgery

## Clinical Faculty

Desmond D'Souza, MD  
Peter Kneuert, MD  
Susan Moffatt-Bruce, MD, PhD,  
MBA

## Education

- ACGME cardiothoracic surgery fellowship; two accepted per year
- Cardiothoracic Surgery Summer Scholars Program, offering three to four medical students a rotation in the department every summer
- Robotic Surgery Skills Lab where thoracic faculty train fellows on basic operation of the robot and teach basic skills
- Early clinical exposure for medical students through Cardiothoracic Interest Group participation

## Publications and Research

- 25 peer-reviewed articles
- Four grants

### As principal investigator:

- Health Resources and Services Administration (HRSA) patient safety grant for \$4 million
- Private Sector Advisory Group (PSAG) to improve patient safety with a digital platform for implementation, adherence and outcomes for \$15,000

### As co-investigator:

- National Institute on Aging P01 grant for \$8 million
- HRSA patient care training and enhancement grant for \$2 million

## Awards and Recognition

- **Dr. Desmond D'Souza**—Outstanding Achievement in Patient Service 2017, Hospital Consumer Assessment of Healthcare Providers and Systems
- **Dr. Robert Merritt**—Outstanding Achievement in Patient Service 2017, Hospital Consumer Assessment of Healthcare Providers and Systems
- **Dr. Susan Moffatt-Bruce**—Chair, Essential Hospitals Institute Board of Directors, elected 2017 (2017-2018); elected to the American Surgical Society; executive director, University Hospital
- **Drs. Robert Merritt and Susan Moffatt-Bruce**—2018 Castle Connolly Top Doctors

## Referral Information

The surgeons in the Ohio State Division of Thoracic Surgery accept referrals for patients with an extensive range of conditions, including:

- Achalasia
- Barrett's esophagus
- Carcinoid tumor
- Esophageal cancer
- Gastroesophageal reflux disease (heartburn)
- Hiatal hernia
- Lung cancer
- Myasthenia gravis
- Thymoma

Our surgeons also offer an extensive range of services, including:

- Endobronchial ultrasound (EBUS)
- Endoscopy
- Lung volume reduction surgery (LVRS)
- Open lung biopsy
- Robotic surgery
- Thoracotomy
- Tracheal resection and reconstruction

To refer, please call the Division of Thoracic Surgery at 614-293-9059, or fill out the one-page medical center referral form available at [wexnermedical.osu.edu/Referral-Form](http://wexnermedical.osu.edu/Referral-Form) and fax your referral to 614-293-1456.





## Division of Transplantation Surgery

Ohio State's Comprehensive Transplant Center is among the top 15 transplant programs in the nation by volume, with our surgeons performing **441** organ transplants for FY2018 (18 heart, 50 lung, 108 liver, 242 kidney, three pancreas/islet and 20 pancreas/kidney). The most recent data released by the Scientific Registry of Transplant Recipients (SRTR) shows that Ohio State's one-year patient survival is best in Ohio for liver and heart transplantation and exceeds national outcomes for all transplanted organs. Those results and our ability to deliver exceptional patient care and outcomes continue to fuel our growth.

As the central Ohio region's only adult transplant center, we have performed more than 9,500 organ transplants since 1967. We have the second-highest volume of heart and lung transplants in the state and are the only regional location providing these services. Our lung program was the first in Ohio and among only a handful nationwide to test ex-vivo lung perfusion, which could potentially double the number of lungs available for transplantation.

- **Liver and Kidney Transplantation**—This June marked our 1,000th liver transplant since our first in 1984. In partnership with The Ohio State University Comprehensive Cancer Center – Arthur G. James Cancer Hospital and Richard J. Solove Research Institute, we are experts in treating hepatocellular carcinoma and in preparing these patients for liver transplantation. In June, we also completed our second six-way, single-institution living donor kidney transplant chain—our first was performed in 2011 and is still the largest to date in Ohio. Furthermore, Ohio State continues to be one of the busiest and most experienced kidney/pancreas centers in the U.S., ranking in the top 10 percent of kidney transplant programs by volume in the country.
- **Auto Islet Transplantation**—FY2018 also marked the beginning of Ohio State's Auto Islet Cell Transplantation program, led by Amer Rajab, MD, PhD, to treat end-stage pancreatitis using a patient's own islet cells. Ohio State is the only location in central Ohio, and one of a small number in the nation, with an FDA-approved isolation laboratory for pancreatic auto islet transplantation, which ensures that the process is done to the highest standards.
- **Transplant Biorepository**—At Ohio State, we are committed to finding better ways to treat diseases causing organ failure in order to improve patient outcomes after transplantation. To enhance our research and collaborative efforts, the Transplant Biorepository was established this year to provide high-quality, clinically annotated biological specimens from normal and diseased tissues for current and future Ohio State-affiliated research as well as research centers nationwide.



### *First Living Donor Liver Transplant at Ohio State*

On Sept. 10, 2018, our Comprehensive Transplant Center team performed the first living donor liver transplant surgery in central Ohio. Nationally, only about three percent of all liver transplants are from a living donor. At Ohio State, the goal is always to deliver breakthroughs to improve people's lives. The addition of living liver transplant services gives adults with end-stage liver disease a new option to improve their health and reduce their time on the transplant waitlist, which truly could be the difference between life and death.



## Faculty



Kenneth Washburn, MD

Director, Division of Transplantation Surgery

Executive Director, Comprehensive Transplant Center

## Clinical Faculty

Sylvester Black, MD, PhD

Ginny Bumgardner, MD, PhD, FACS

Ashraf El-Hinnawi, MBBS

Elmahdi Elkhammas, MD

Amer Rajab, MD, PhD

Austin Schenk, MD, PhD

## Education

- Two-year abdominal transplant fellowship; 16 applications received for 2019-2021
- Applying for liver transplant fellowship accreditation

## Publications and Research

- 21 published papers
- Three national speaking engagements
- 10 clinical trials:
  - BB3 to reduce the severity of delayed graft function in recipients of a deceased donor kidney
  - VC-02 combination product in subjects with type 1 diabetes mellitus and hypoglycemia unawareness
  - Cinryze (C1 esterase inhibitor [human]) for the treatment of acute antibody-mediated rejection in kidney transplant patients
  - Cellular immunotherapy with MDR-101 for living donor kidney transplants
  - VasQ external support for arteriovenous fistula
  - Sirolimus and Everolimus in combination with low-dose Cyclosporine in de novo kidney transplant patients
  - QPI-1002 for prevention of delayed graft function in recipients of a donation after brain death older donor kidney transplant
  - Cytokine gene polymorphisms, T-cell immune profiles and alloantibody levels and isotypes from peripheral blood in primary kidney transplant patients
  - Zortress® versus Rapamune® in combination with low dose Neoral® dosed by C2 monitoring
  - Anti-donor HLA antibodies (DSA) and the frequencies of donor-HLF specific B cells following treatment of a biopsy proven acute rejection episode

- Five grants
  - \$728,445 for Advanced Research Training in Immunology for Surgery Trainees (ARTIST) from National Institutes of Health (NIH, NIAID)
  - \$25,000 per year for two years for Hepatic Stellate Cellular Mediation of Ischemia Reperfusion in Liver Transplantation from The Ohio State University Department of Surgery Faculty Development Grant
  - Type I NKT Cell Mediated Enhance of CD8+ Cytolytic T cells
  - Novel Mechanisms Regulating Post-Transplant Alloantibody Productions
  - Demographic and Clinical Factors and Transplant Outcomes Associated with Hospital Readmissions within the First Year after Kidney Transplantation in Adult Recipients, OSU Comprehensive Transplant Center

## Awards and Recognition

- **Dr. Sylvester Black**—Faculty Development Award (\$25,000 for 2 years)
- **Dr. Latifa Sage-Silski, Transplant Surgery Fellow**—Arnold P. Gold Foundation Humanism and Excellence in Teaching Award

## Referral Information

The Division of Transplantation Surgery coordinates patient care with a team of transplant experts including organ specialists, infectious disease physicians, transplant coordinators, advanced practice providers, social workers, psychiatrists, dietitians and transplant pharmacists. As an academic medical center, we're able to access the latest treatments and clinical trials of new immunosuppressive drugs and antirejection therapies.

For more information or to refer a patient for a transplant consultation, visit [wexnermedical.osu.edu/transplant](http://wexnermedical.osu.edu/transplant).





## Division of Trauma, Critical Care and Burn

The Division of Trauma, Critical Care and Burn focuses its efforts on the clinical care, research and education pertaining to urgent and emergent surgical problems. These include multiple trauma, burns, urgent and emergent general surgery conditions and surgical critical care.

The division was formed in March 2006 to enhance the Department of Surgery's clinical care of critically ill surgical patients and patients with urgent and emergent surgical diseases, to develop excellent educational programs in those areas and to support discovery of new medical knowledge.

The mission of the division is to improve people's lives through innovation in research, education and patient care related to our patient population.

The Ohio State Division of Trauma, Critical Care and Burn provides the highest level of care for life-threatening emergencies. Standout elements of our program include:

- **Level I Trauma Center**—With this status, Ohio State University Hospital qualifies as a comprehensive regional resource capable of providing total care for every aspect of injury, from prevention through rehabilitation. We frequently accept patients in transfer from every other Level I trauma center in Ohio, and we have many advanced therapies available, including ECMO and hyperbaric oxygen therapy.
- **Emergency General Surgery**—Our acute care surgery services provide urgent and emergent general surgical care in a wide variety of surgical disease states, including necrotizing soft tissue infections, gastrointestinal bleeding, bowel perforation, appendicitis, acute pancreatitis and complications after cardiovascular and cancer surgery.
- **Burn Care**—Ohio State's Comprehensive Burn Center is the only adult burn center in central Ohio verified by the American College of Surgeons and the American Burn Association. We treat more than 700 patients each year with burns, ranging from mild to complex, and serious skin conditions. Our inpatient burn center rehabilitation at Dodd Hall has been ranked among the best in the country by *U.S. News & World Report*.
- **Surgical Critical Care**—We provide care on three surgical intensive care service units. We offer the most up-to-date treatment in hemodynamic management, advanced ventilator techniques, nutritional support, management of surgical infections and the management of other complications, in settings that stress the care of the whole patient.



### *Ohio State University Hospital East Named Level III Trauma Center*

Time saved can save lives. That's why Ohio State University Hospital East's new status as a Level III trauma center is so important for residents of the near east and southeast side of Columbus. The facility already received the Healthgrades™ Emergency Medicine Excellence award for three consecutive years and offers specialized care, including 24/7 access to a STEMI Alert system for heart attack patients, a comprehensive stroke treatment program and specially trained sexual assault nurse examiners. University Hospital East's new Level III trauma rating further strengthens Ohio State's network of care.





## Faculty



Steven Steinberg, MD

Director, Division of Trauma,  
Critical Care and Burn

### Clinical Faculty

John Bailey, MD

Amalia Cochran, MD

Daniel Eiferman, MD

Ihab Elhassan, MD

David Evans, MD

Larry Jones, MD

David Lindsey, MD

Amy Rushing, MD

Heena Santry, MD, MS

Michael Sutherland, MD, FACS

Daniel Vazquez, MD

Jonathan Wisler, MD

### Research Faculty

Scott Strassels, PharmD, PhD

## Education

- Five surgical critical care fellowships
- Acute care surgery fellowship
- Burn fellowship

## Publications and Research

- 35 manuscripts
- Seven grants
  - Bailey, John, PI: The economy of pain: A pilot study of the impact of an opioid buyback program, funded by American Foundation for Surgery of the Hand; Sept. 1, 2018 – Aug. 31, 2020
  - Evans, David, PI: A policy relevant U.S. trauma care system pragmatic trial for PTSD and comorbidity, funded by University of Washington; Aug. 1, 2018 – July 31, 2019
  - Steinberg, Steven, PI: Comparing outcomes of drugs and appendectomy (CODA), funded by University of Washington; April 1, 2017 – March 31, 2019
  - Evans, David, PI: Changes in exhaled 13CO<sub>2</sub>/12CO<sub>2</sub> breath delta value as an early indicator of infection in ICU patients, funded by Isomark, LLC; Feb. 10, 2016 – Feb. 10, 2019
  - Santry, Heena, PI: Subaward (University of Massachusetts): A new specialty responding to national needs: Does acute care surgery deliver?, funded by Agency for Healthcare Research and Quality; Sept. 30, 2017 – Sept. 29, 2019
  - Wisler, Jonathan, PI: In vivo characterization of epigenetic mediated, sepsis-related immunosuppression, funded by Surgical Infection Society; July 1, 2018 – June 30, 2019
  - Wisler, Jonathan, PI: Target aberrant epigenetic events in the treatment of sepsis, funded by American Association for the Surgery of Trauma; July 1, 2017 – Mar. 31, 2019
- Other research/academic accomplishments
  - Growth of a multidisciplinary surgical innovation center
  - Development of SHARP along with the department

## Awards and Recognition

- **Dr. Steven Steinberg**—Ohio Board of Emergency Medical, Fire, and Transportation Services, ACS Operative Decision Making Editorial Board—ACS Case Studies in General Surgery Editorial Board
- **Dr. David Evans**—Chair of ASPEN Research Section, Department of Emergency Medicine Woody Hayes Leadership Award
- **Dr. Amy Rushing**—Mentor for the University Institute for Teaching and Learning
- **Dr. Daniel Eiferman**—2018 Castle Connolly Top Doctor
- **Dr. Daniel Vazquez**—Upper Payment Limit (UPL) Advanced Care Patient Delivery Award, executive director, Center for Research, Education, and Advancement of Transdisciplinary Exploration (CREATE)

## Referral Information

For referral to Ohio State's Comprehensive Burn Center, please call 614-293-2876.

We offer both inpatient and outpatient services, including:

- Advanced dressing options to minimize pain, scarring and other complications
- Wound care and complex wound management
- Treatment for all burns, small to large, with special emphasis on:
  - Third-degree burns
  - Burns to the face, hands, feet, genitalia, perineum and joints
  - Electrical burns and lightning strikes
  - Chemical burns
  - Burns in patients with comorbid conditions

Our surgeons address the full scope of surgical critical care, trauma, burns, emergency general surgery and acute care surgery. **To have a patient transferred to our care, call the Transfer Center at 614-293-4444 (toll-free 800-824-8236).**





## Division of Vascular Diseases and Surgery

The mission of the Division of Vascular Diseases and Surgery is to deliver the highest quality of care to vascular patients throughout Ohio and the surrounding regions, to be at the forefront of vascular innovation through translational research and clinical outcomes studies, and to provide state-of-the-art vascular education to medical students, postgraduate trainees and vascular care providers.

Strategic planning remains a priority for us as we strive to expand our high-performance organization and workplace of choice. We want to maintain our history of success, while further increasing the division's clinical practice volume, number of translational and basic science research projects and scope of education under the leadership of new division director, Timur Sarac, MD.

Ohio State offers comprehensive general vascular disease and surgery services, from initial visit to diagnostic testing, interventional or minimally invasive endovascular treatments, open surgical treatments and, most importantly, ongoing lifelong post-treatment care. Specialized care is available in these dedicated areas, in and around Columbus:

- **Complex and Routine Aortic Aneurysm**
- **Complex and Routine Peripheral Vascular Disease**
- **Comprehensive Wound Center**
- **Minimally Invasive Treatment of Peripheral Artery Disease (PAD)**
- **Limb Preservation Program**
- **Ohio State Total Vein Care**
- Fully accredited **Vascular Ultrasound** and **Physiology Lab** available at the Richard M. Ross Heart Hospital, Ohio State University Hospital East and Outpatient Care Upper Arlington.

On the education front, Ohio State will be adding a new training option that allows medical students to move directly into a vascular surgery residency following medical school. At the same time, the traditional training path of a general surgery residency followed by a vascular surgery fellowship will remain, giving physicians options based on their personal interests.



### *Revolutionizing Treatment at the Aortic Center and for Critical Limb Ischemia*

Ohio State is one of only a handful of medical centers nationwide with a formal multidisciplinary approach to complex aortic disease and lower extremity disease. At Ohio State's Aortic Center, the most complex cases are reviewed by a team of specialists, including vascular surgeons, cardiac surgeons and cardiologists, so patients receive the most effective multi-modal treatment plan possible. To support initial diagnosis, acute care and long-term recovery, Ohio State also gives referring providers direct access to Aortic Center or Limb Salvage Center physicians for urgent and emergent patient conditions related to aortic disease.



## Faculty



Timur Sarac, MD

Director, Division of Vascular Diseases and Surgery

Director, Aortic Center

## Clinical Faculty

Hosam El Sayed, MBBCh, PhD

Michael Go, MD, FACS

Mounir Haurani, MD FACS

K. Craig Kent, MD

Bhagwan Satiani, MD, MBA, FACS

Jean Starr, MD, FACS

Patrick Vaccaro, MD MBA, FACS

## Research Faculty

Lian-Wang Guo, MS, PhD

Cameron Rink, PhD

Bowen Wang, PhD

## Education

- Two-year fellowship in vascular diseases and surgery, two-fellow increase accredited in 2006 by the ACGME; original accreditation for one fellow started in 1986; applying for ACGME Vascular Surgery Residency
- Limb Preservation Podiatric Surgery residency rotation; Limb Preservation Podiatric student visiting rotation has attracted multiple students from across the country
- Quarterly presentations for central Ohio multidisciplinary vascular care specialists through Mid-Ohio Endovascular Club
- Seventh year of Controversies in Vascular Diseases and tenth annual Non-invasive Vascular Symposium providing vascular disease education to physicians, nurses, vascular technologists, residents and students
- Established a Vascular Surgery Interest Group for medical students considering vascular surgery

## Publications and Research

- Division faculty and fellows published 141 scholarly articles, abstracts, posters, chapters and presentations
- Kent KC, Guo L-W, Gong SQ, Shi XD, Chen GJ. Perivascular drug delivery system. (P160359US01, USSN: 62/375387) (All inventors are equal contributors.) Patent application was filed on August 15, 2017.
- Dr. K. Craig Kent and Dr. Lian-Wang Guo received an Accelerator Award from the Ohio State University Technology Commercialization Office (funded by the state of Ohio). These funds will be used to conduct large animal experiments that test the viability of a nanoparticle-based perivascular drug delivery system to prevent intimal hyperplasia following open vascular surgery. Dr. Kent and Dr. Guo are co-inventors of this technology along with Dr. Shaoqin Gong at the University of Wisconsin-Madison.
- Lian Guo was invited to NIH Review Panel for Fellowships: Cell Biology, Developmental Biology, and Bioengineering (ZRG1 F05U)

## Awards and Recognition

- **Vascular surgery physicians**—Patient Satisfaction Survey score in the 99th percentile in quarter 2; overall patient satisfaction goal is 90th percentile nationwide
- **Gina Craig, RN (Upper Arlington arterial staff)**—Excellent patient satisfaction scores throughout FY2017. She was rated in the 90th percentile or above, which places her within the top 10 percent of office staff throughout the country. Her mean score was 96.1, putting her in the 96th percentile
- **Drs. Jean Starr, K. Craig Kent, Michael Go and Patrick Vaccaro**—2018 Castle Connolly Top Doctors
- **Dr. Jean Starr**—President-elect, Midwestern Vascular Surgical Society 2018-2019



## Referral Information

The physicians in the Ohio State Division of Vascular Diseases and Surgery accept referrals for patients with a variety of issues, including:

- Open and endovascular repair of aneurysms (abdominal, thoracic)
- Minimally invasive endovascular treatment of limb ischemia and claudication
- Bypass surgery on peripheral arteries
- Carotid endarterectomy
- Carotid artery stenting, including transcarotid and transfemoral
- Non-atherosclerotic vascular disease – compartment syndrome and thoracic outlet syndrome
- Peripheral arterial intervention and repairs
- Venous repairs
- Debridements
- Angiograms
- Interventions (angioplasty and stents)
- Venograms
- IVC filters
- Creation and repairing AV fistulae for dialysis
- Kidney and intestinal artery bypasses or stents

To refer, please call the Division of Vascular Diseases and Surgery at 614-293-8536, or fill out the one-page medical center referral form available at [wexnermedical.osu.edu/ReferralForm](http://wexnermedical.osu.edu/ReferralForm) and fax your referral to 614-293-1456.



## Referring a Patient? *It's never been easier.*

Our referral team will provide you with the personalized help you and your patients require—just call the numbers below and fax our one-page referral form. If you have any questions during any part of the referral process or about the status of your referral, please call our referral specialists at **614-293-5123**.

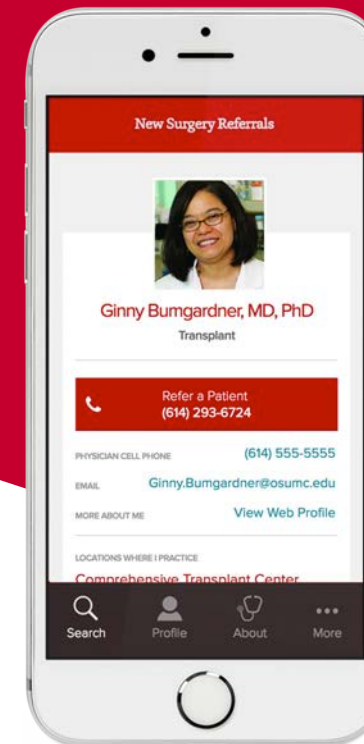
- Abdominal Transplantation Surgery (Kidney, Liver, Pancreas): 800-293-8965
- Bariatric Surgery: 614-366-6675
- Cardiac Surgery: 614-293-5502
- Colon and Rectal Surgery: 614-293-3230
- General and Gastrointestinal Surgery: 614-293-3230
- Heart Transplantation: 800-538-1886
- Lung Transplantation: 866-204-3411
- Pediatric Surgery: 614-722-3900
- Surgical Oncology: The James Line, 614-293-5066
- Thoracic Surgery: 614-293-9059
- Vascular Diseases and Surgery: 614-293-8536

For all of our divisions except Pediatric Surgical Oncology and Transplantation Surgery, complete our one-page Ohio State Wexner Medical Center referral form available at [wexnermedical.osu.edu/ReferralForm](http://wexnermedical.osu.edu/ReferralForm) and fax your referral to **614-293-1456**.

To download organ transplant referral forms, visit [wexnermedical.osu.edu/trxreferral](http://wexnermedical.osu.edu/trxreferral).

After we have received your fax, we will manage the scheduling and notification process.

- We will contact your patient directly to schedule a convenient time and location for their appointment.
- As referring physician, you will receive confirmation of the appointment for your records via mail, fax or OSU DocLink.

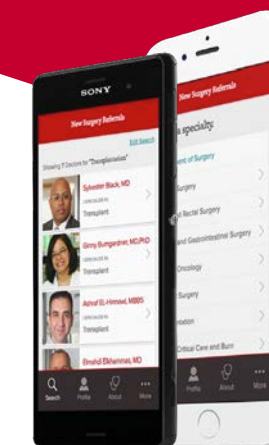


## Introducing an easy way to communicate directly with Ohio State surgeons.

Use our New Surgery Referrals app to quickly access surgeons' cell phone numbers, email addresses and more.



New Surgery Referrals to The Ohio State University Wexner Medical Center



The app gives physicians a direct line of contact to consult and collaborate with a surgeon, improving the referral experience. Discuss a case directly with these Ohio State divisions of surgery:

- Cardiac Surgery
- Colon and Rectal Surgery
- General and Gastrointestinal Surgery
- Surgical Oncology
- Thoracic Surgery
- Transplantation Surgery
- Trauma, Critical Care and Burn
- Vascular Diseases and Surgery

Download now at [go.osu.edu/referralapp](http://go.osu.edu/referralapp)

Use activation code **W3xn3r\$urg3ry**



Disclaimer: This app is a pilot for the Department of Surgery and is not a complete listing of every surgeon at Ohio State. Information for ENT-Facial Plastic Surgery, Orthopaedic Surgery, Neurosurgery, Urology, Plastic Surgery and Ob/Gyn Surgery is not available at this time. You may not text or email personal health information to a physician.



FOR MORE INFORMATION, VISIT  
[WEXNERMEDICAL.OSU.EDU/SURGERY](http://WEXNERMEDICAL.OSU.EDU/SURGERY)



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