

THE OHIO STATE UNIVERSITY WEXNER MEDICAL CENTER

Department of Surgery

YEAR IN REVIEW | FY2020



THE OHIO STATE UNIVERSITY

WEXNER MEDICAL CENTER



LETTER FROM THE CHAIR



The Department of Surgery at The Ohio State University Wexner Medical Center refuses to accept the status quo. With a culture of innovation and discovery, we're committed to action and improvement in all areas of our department.

Our goal is to be one of the nation's premier academic surgery programs with an environment that supports and challenges each of us to improve individual performance and develop the next generation of skilled surgeons. Our team of world-class surgeons and faculty continues to grow and is committed to advancing surgical techniques and research to transform patient lives. All nine surgical divisions and nine clinical centers enjoy the benefits of the latest technology, outstanding facilities and collaboration with experts from across the medical center and university.

Several important initiatives illustrate our commitment to quickly translating opportunities into action:

- Diversity, Equity and Inclusion: The Ohio State University College of Medicine has an active Anti-Racism Action Plan and a new vice chair of Diversity, Equity and Inclusion. As a department, we have layered this plan with our own efforts to recruit, retain and support Underrepresented Minorities in Medicine. This includes engagement with existing residents and fellows, medical students, high school students and the community.
- **COVID-19 response plan:** Our department acted swiftly to convert procedures in order to protect patients pivot as information about the pandemic evolves.
- Global Surgery program: An elective rotation abroad helps residents gain experience with different diseases and treatment approaches while discovering how other communities utilize health care resources.
- OR Coaching: Now a core element of our resident training program, OR Coaching utilizes dedicated observers to provide more immediate feedback on specific surgical skills to speed readiness for independent surgery.
- growing robotic surgery program.
- LEAD (Lead. Engage. Accelerate. Drive.) in Surgery: This elective helps PGY2 5 residents develop leadership abilities, which we believe are vital for becoming a successful, well-rounded surgeon.
- Research centers: Our Center for Surgical Health Assessment, Research and Policy (SHARP) helps of Transdisciplinary Exploration (CREATE) simplifies partnerships between clinicians, researchers, other university departments and private industry.

Every member of the Department of Surgery has been instrumental in our advancements. We also benefit from being part of The Ohio State University Wexner Medical Center, a U.S. News & World Report "Best Hospital" for 28 consecutive years and the top hospital in Columbus. Our department is currently #5 in NIH-funded research as measured by Blue Ridge — an improvement from #6 in 2018 and up from #25 in 2015 — while Doximity users rank our General Surgery Residency Program #22 nationally for reputation, up one spot from 2019.

With all that we have going for us in the Department of Surgery, it's a great time to be a Buckeye. I hope this brochure will provide more insight into our daily efforts and long-term desire to excel at everything we do.

GO BUCKS!

Timothy Pawlik, MD, MPH, MTS, PhD, FACS, FRACS (Hon.) Chair, Department of Surgery The Urban F. Meyer III and Shelley M. Meyer Chair for Cancer Research Surgeon in Chief

To learn more about Ohio State and the Department of Surgery, visit medicine.osu.edu/surgery.

and hospital staff alike. It's been rewarding to see the effectiveness of our collective efforts and our ability to

• Robotic surgery: Our investment in robotic surgery has helped us claim the top spot as the nation's fastest-

researchers identify the biophysical underpinnings of surgical disease, test innovative surgical approaches and optimize the cost, quality and outcomes of surgery. The Center for Research Education & Advancement



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THE OHIO STATE UNIVERSITY WEXNER MEDICAL CENTER



PLANNING FOR EXCELLENCE

Progress doesn't happen by chance. It requires careful consideration, honest dialogue and clear planning. At The Ohio State University Wexner Medical Center, we rely on our strategic plan to guide our decisions. Our mission, vision and values are not merely words. They are our blueprint for transformation.

The Department of Surgery's comprehensive strategic plan is the result of collaboration, engagement and ideas from faculty, staff and leaders across the medical center and university. It includes five key goal areas: talent and culture; research; education; health and well-being; and resource stewardship.

Department of Surgery Mission

We provide exceptional, patient-centered care; lead innovative surgical research; and train the next generation of surgeon leaders and scientists.

Department of Surgery Vision

We will improve the care of patients by building innovative clinical surgical programs and advancing translational scientific knowledge.

Department of Surgery Values

Excellence, Integrity, Innovation, Education, Quality and Diversity

Our Department

The Ohio State Department of Surgery 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

Nine 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

THE DEPARTMENT OF SURGERY a

TALENT AND CULTURE

Through recruitment and training, create a high-performing culture that values accountability, inclusion and collaboration. Continue to improve the faculty experience for all, with additional focus on cultivating women leaders in surgery.

RESEARCH Become a top 5 NIH-funded surgery department and national leader in health sciences research by supporting collaboration and developing the resources needed to pursue grants, publication opportunities and national awareness.

EDUCATION

Foster a culture that emphasizes daily learning within a supportive, professionally challenging environment that attracts the nation's best and brightest faculty, residents and fellows.

RESOURCE STEWARDSHIP: Being responsible

with our resources

SINCERIT

HEALTH AND WELL-BEING:

Improving health in our communities through innovative healthcare delivery models

STRATEGIC PLAN

INCLUSIVENESS



TALENT AND CULTURE: Developing a diverse and talented team of people

Driving breakthrough healthcare solutions to improve people's lives

MISSION To improve health in Ohio and across the world through innovation in research, education and patient care

VISION

By pushing the boundaries of discovery and knowledge, we will solve significant problems and deliver unparalleled care



Implementing an innovative, multidisciplinary education model

NOITAVONNI

RESOURCE STEWARDSHIP

RESEARCH:

Pioneering life-altering

biomedical discoveries

DETERMINATION

Focus on both cost savings and exterior funding, using metrics to track progress, establish accountability and identify areas for improvement.

HEALTH AND WELL-BEING

Serve as a surgical resource with an expanded scope of influence by reducing disparities of care for disadvantaged populations and working to become a surgical destination of choice locally, regionally, nationally and globally.

A GROWING TEAM OF VISIONAIRIES

A superior team delivers superior results

At Ohio State, we strive to recruit and retain the nation's best surgeons and medical visionaries, and we've added several new team members to our department in the past year. Here are some of the latest additions:



Matthew Kalady, MD Director and professor,

Division of Colon and Rectal Surgery A recognized expert on colorectal cancer and its hereditary syndromes, as well a National Cancer Institute/National Institutes of

Health-funded researcher in colorectal cancer genetics, author of more than 200 peer-reviewed publications and multiple book chapters, editor for colorectal surgery textbooks and supervisor of the Colorectal Cancer Biobank.



Wendy Wahl, MD, FACS, FCCM

Medical director for the Surgical Intensive Care Unit; program director for the Surgical Critical Care Fellowship; professor, Division of Trauma, Critical Care and Burn

Over 20 years of experience caring for critically ill patients, a fellow of the American College of Critical Care Medicine and the American College of Surgeons (ACS), and a member of the Society of Critical Care Medicine, Eastern Association for the Surgery of Trauma, American Burn Association and American Association for the Surgery of Trauma.



Amy Whitson, MD Assistant professor, Division of Trauma, Critical Care and Burn Specializes in burn surgery, wound healing and emergency surgery, as well as addressing disparities in care for underserved populations.

She owns a U.S. patent for engineering a procedure for placing and removing an investigational implantable osmotic mini-pump for the treatment of type 2 diabetes.



Michael Vallely, MBBS, PhD

Medical director for Ross Perioperative Services; professor, Division of Cardiac Surgery International expert in offpump coronary artery bypass

surgery (CABG), which gives Ohio State a new treatment option that isn't available anywhere else in central Ohio. Clinical interest centered on elderly and high-risk patients, including total-arterial, anaortic and off-pump CABG surgery; transcatheter and sutureless valve technologies; and minimally invasive heart and lung surgery.



Samilia Obeng-Gyasi, MD, MPH

Assistant professor, Division of Surgical Oncology Sees patients with benign breast disease and breast cancer. Her research focuses on improving health care delivery and understanding

socioeconomically based health care disparities among patients presenting with breast disease.

Become part of the surgical team at Ohio State, one of the largest and most diverse academic health centers in the country. We are continually looking for the best and brightest. See available opportunities at **wexnermedical.osu.edu/recruitment**.



Priya Dedhia, MD, PhD Assistant professor, Division of Surgical Oncology

of Surgical Oncology Uses human organoid technology to generate insulin-producing cells to study the molecular basis of thyroid cancer and parathyroid disease. Her work

has been published in 24 peer-reviewed journals, and she has made numerous presentations at invited seminars.



Carlo Contreras, MD Associate professor, Division

of Surgical Oncology Specializes in skin and soft tissue cancers, including melanoma, Merkel cell carcinoma, squamous cell carcinoma and basal cell carcinoma.

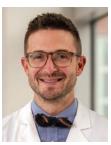
Barbra Miller, MD



Co-director of the new Ohio State University Comprehensive Adrenal Program and professor, Division of Surgical Oncology

Internationally known clinician and researcher of benign adrenal disorders,

adrenal cancer, subclinical disease states and palliative care. She leads the adrenal section of the American College of Surgeons Operative Standards in Cancer Surgery series, is a primary author of the 2020 AAES Guidelines for the Definitive Surgical Management of Thyroid Disease in Adults and serves on the Executive Council of the International Association of Endocrine Surgeons.



Brian Weiss, MD

Assistant professor, Division of Trauma, Critical Care and Burn Expertise includes the management of thoracic injuries, mechanical ventilation, right ventricular dysfunction, pulmonary

hypertension and extracorporeal support systems.



Bryan Tillman, MD, PhD Associate professor, Division of Vascular Diseases and Surgery Recipient of awards from Vascular Cures and the American Surgical Association for his research, which

explores the development of

novel endovascular devices.

New Leadership Role



Mark Arnold, MD

Executive vice chair of the Department of Surgery; professor, Division of Colon and Rectal Surgery

As the first colon and rectal surgeon hired at Ohio State with over 35 years of experience, Dr. Arnold

recently added a new leadership role. As executive vice chair, he will be an important contributor to the Department of Surgery's growth and ongoing improvements.

AWARDS AND RECOGNITION

DIVISION OF CARDIAC SURGERY

Bryan Whitson MD, PhD

 Cardiothoracic Representative to the American College of Surgeons

Nahush Mokadam, MD

- · President-Elect, Columbus Chapter, American Heart Association Board
- Feature Editor, Journal of Thoracic and Cardiovascular Surgery
- Deputy Editor, Annals of Thoracic Surgery

Renzhi Han, PhD

 Membership Committee, American Society of Gene and Cell Therapy (ASGCT)

Jianjie Ma, PhD

- Editorial Member, NIH Director's New Innovator (DP2)
- Member, NIH Special Emphasis Panel

Hua Zhu, PhD

- Early Careers Committee, Biophysical Society
- Academy of Cardiovascular Research Excellence (ACRE) Board

DIVISION OF COLON AND RECTAL SURGERY

Alan Harzman, MD

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 Associate Member of the American College of Surgeons Academy of Master Educators

Alessandra Gasior, DO

- Instrumental in ACMGE accreditation for pediatric colorectal surgery rotation at Nationwide Children's Hospital, first of its kind in U.S.
- ACGME Parental Leave Policy Task Force
- American Society of Colon and Rectal Surgeons (ASCRS) Pediatric to Adult Colorectal Special Interest Group Committee

Emily Huang, MD, MEd

- Associate Director of Education, CMIS (MIS/Robotic Surgery Programs)
- ASCRS 2021 Program Vice Chair, 2020 Program Committee, Young Researchers Committee, and Pelvic Floor Diseases Consortium

Lisa Cunningham, MD

Association of Surgical Education Research Fellowship 2020 – 2021

DIVISION OF GENERAL AND

GASTROINTESTINAL SURGERY Sabrena Noria, MD, PHD

- Chair Research and Education Committee, Ohio-Kentucky Chapter of the American Society for Metabolic and Bariatric Surgery
- Deputy Editor, Bariatric Surgical Practice and Patient Care

Courtney Collins, MD, MS

 Association of Surgical Education Research Fellowship 2020 – 2021

David Renton, MD

• SAGES Brandeis Award

Kellv Haislev, MD

• SAGES Research Award

Beniamin Poulose, MD, MPH

- American Surgical Association
- Director of Quality and Outcomes, Abdominal Core Health Quality Collaborative

Daniel Gallego-Perez, PhD

• Lumley Research Award

DIVISION OF PEDIATRIC SURGERY

Jennie Aldrink, MD

- Nationwide Children's Hospital Art of Medicine Award
- Golden Apple Teaching Award

Raj Thakkar, MD

• Denis R. King Teaching Award

Gail Besner, MD

- Chair of American Academy of Pediatrics Section on Surgery
- Inducted into The Ohio State University College of Medicine Mazzaferri-Ellison Society of Master Clinicians

Kate Deans, MD, MHSC

 Fellow of American Surgical Association

Ben Nwomeh, MD, MPH

- Fellow of American Surgical Association
- Nationwide Children's Hospital Physician of the Year Award

Renata Fabia, MD, PhD

• President Elect of North American Burn Society

Multiple faculty

- Eight faculty are members of Society of University Surgeons
- Five faculty are members of American Surgical Association
- Multiple faculty assumed new national committee memberships and visiting professorships

DIVISION OF SURGICAL ONCOLOGY

Valerie Grignol, MD

- American Cancer Society Cancer Physician Liaison
- Associate Program Director of Surgical Oncology's Fellowship Program

Jordan Cloyd, MD

• Ward Family Professorship

Aslam Ejaz, MD, MPH

 GME Assessment and Remediation Coach

DIVISION OF THORACIC SURGERY

Desmond D'Souza, MD

 Outstanding Achievement in Patient Service Hospital Consumer Assessment of Healthcare Providers and Systems

Peter Kneuertz, MD

- Publications Committee, Association for Academic Surgery (AAS)
- Program Committee, AAS
- Chair of The James OR block Utilization Committee

Robert Merritt MD

- and Systems
- Surgeons.
- Surgeons
- Clinical Oncology (ASCO)

Surgery

SURGERY

\$1.600.000

\$2,686,090

\$1.195.920

\$3,200,000

Chapter

Samilia Obeng-Gyasi, MD, MPH · Young Investigators Symposium, Eastern Cooperative Oncology

3/2022, \$231,000

DIVISION OF TRAUMA, CRITICAL CARE AND BURN

Carrie Sims, MD, PhD, FACS

- - Care Surgery

 Outstanding Achievement in Patient Satisfaction Hospital Consumer Assessment of Healthcare Providers

• Workforce for General Thoracic Surgery, Society of Thoracic

• Workforce for Media Relations and Communications, Society of Thoracic

 Thoracic Cancer Guideline Advisory Group (GAG), American Society of

• Alpha Omega Alpha, Ohio State

American Association of Thoracic

DIVISION OF TRANSPLANTATION

Ginny Bumgardner, MD, PhD, FACS

• ARTIST NIH Grant – 8/2019 – 7/2024.

• NIH R01 Grant – 7/2019 – 7/2024.

• TL1 NIH Grant - 6/2019 - 5/2020,

Sylvester Black, MD, PhD

• NIH R01 NIDDK, 3/2020 - 3/2025,

• Accelerator Award, \$150,000

Austin Schenk, MD, PhD

 American Heart Association Career Development Award, 4/2019 –

 Association of Women Surgeons Kim Ephgrave Visiting Professor Award

• Editor: Journal of Trauma and Acute

 Olga Jonasson Endowed Professorship

Heena Santry, MD

- American College of Surgeons Diversity and Inclusion Committee
- Founding member OH/KY/WV chapter of the Association of Women Surgeons
- Editorial Board of Annals of Surgery Open Access
- Three-year Guest Editor for the Association of Women Surgeons Issue of the American Journal of Surgery
- Big 10 Academic Alliance Academic Leadership Fellowship
- Ohio State President and Provost's Council for Women

Jon Wisler, MD

- Surgical Infection Society Bylaws Committee
- Academic and Behavioral Review Committee

Daniel Eiferman, MD

- Courage to Teach Society
- Committees: Young Fellows Association; American College of Surgeons Board of Governors Physician Competency and Health Workgroup; Central Surgical Association Young Surgeons
- Chair, Society of University Surgeons Publications Committee

DIVISION OF VASCULAR SURGERY

Jean Starr, MD, FACS

• Midwestern Vascular President

Mounir Haurani, MD, FACS

 Midwest Vascular traveling scholarship

Timur Sarac, MD

- Served on four Society for Vascular Surgeons President committees
- Executive Board of VEITH

EDUCATION

FY2020 by the Numbers

Residents: 49

45% male; 55% female

35% underrepresented minorities in medicine

25 are members of the AOA **National Medical Honor Society** or graduated from a top 25 U.S. News & World Report **Best Medical School**

Top 25 General Surgery Residency program in the nation on Doximity's 2019 Residency Navigator

> **35%** currently hold advanced degrees

150 peer-reviewed publications 100% went on to do a fellowship

Fellows: 20

Number of **ACGME-Accredited** Surgical Residencies: 3

Number of Specialty Fellowships: 6

To learn more, visit medicine.osu.edu/surgeryed.

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Want to change medicine? Keep learning.

To be one of the nation's leading academic surgical departments, we maintain daily focus on education, for both our surgeons-in-training and department members. This goal requires creative teaching, continual feedback and an awareness of leadership and learning styles. Our emphasis on education pays dividends for our residents and fellows, but also ensures that patients are treated with the very latest surgical methods. We're extremely proud of our graduates and their long tradition of excellence in community practice and academic medicine worldwide.

Residency Program

The Ohio State University Wexner Medical Center emphasizes three areas of professional growth—ongoing education, hands-on clinical experience and research. This multifaceted approach to learning is used in our general surgery and subspecialty residencies in colorectal, pediatric and vascular surgery. Ohio State residents work in world-class facilities with the latest technology, and our general surgery residents benefit from training time at the Ohio State Wexner Medical Center's University Hospital, Comprehensive Cancer Center – Arthur G. James Cancer Hospital and Richard J. Solove Research Institute, Richard M. Ross Heart Hospital, East Hospital and Nationwide Children's Hospital

New Cardiothoracic Surgery Integrated Residency

The Ohio State University Department of Surgery is now offering a six-year integrated cardiothoracic surgery residency program to prepare physicians for specialization in cardiothoracic surgery in both academic and community settings. Residents rotate on general surgery and cardiothoracic services at Ohio State Wexner Medical Center, and complete rotations on the congenital heart service at Nationwide Children's Hospital. Training includes straightforward and complex cases in both inpatient and outpatient settings, as well as grand rounds and didactic conferences.

New Vascular Surgery Residency

Ohio State is among the few institutions in the nation offering an integrated vascular surgery residency. This five-year program develops competency in the surgical treatment of patients with complicated vascular conditions. Training includes routine patient care, as well as complicated medical problems, in both inpatient and outpatient settings, along with regular interaction with other medical center specialists, grand rounds and didactic conferences. Residents who complete the program are prepared to serve in both academic and clinical care settings.

"Every team member is made to feel important, included and not intimidated. Not only does that create a great learning environment, but I think that's also the atmosphere needed for the best patient care." – Apeksha Dave, PGY2 Resident

Research Training Program

Upon completion of their second or third year of clinical training, general surgery residents interested in pursuing a career in research can enter Ohio State's DOS Research Training Program. To facilitate the transition to a career as a surgeon-scientist investigator and educator in academic medicine, program participants dedicate one to two years, without clinical responsibilities, to research education and training. Based on the individual's area of interest, this includes a mentored research project and completion of an advanced degree such as a Master of Medical Science, which has tracks for translational, clinical, health services and medical education research; a Master of Public Health; Master of Business Administration; or an alternate Master of Science degree, such as the Master of Science

"With our clinical training" and the professional development years, I feel very prepared for a future in academic medicine." - Chelsea Horwood, 2021 Chief Resident

in Anatomy. Residents apply for extramural funding from sources that may include Institutional T32 training grants, The Ohio State University Pelotonia Fellowship Program for cancer research, individual postdoctoral F32 grants, Mentored/PI-funded R01s or diversity supplement awards, medical society awards or the University Fellowship Award. To learn more, visit medicine.osu. edu/departments/surgery/education/residency/rtp.

Global Surgery Expands Resident Perspectives

Ohio State offers a unique global surgery rotation program that features economically diverse destinations to foster a more well-rounded understanding of how a geographical area's health care is impacted by its community. One available 2018 – 19 rotation was in Australia, a high-income location that has

similar medical practices as the U.S. but offers significant exposure to many international experts who may become important ongoing mentors throughout the participating resident's career. Also possible was a two-week rotation in Ethiopia, where residents could experience first-hand the resourcefulness and creativity often required in lower-income locations. To learn more, visit medicine.osu.edu/ departments/surgery/education/residency/global-surgery.

Fellowships

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

Elective Course Helps Residents Improve Leadership Skills

Ohio State now offers general surgery residents an elective course called LEAD in Surgery (with the acronym standing for Lead. Engage. Accelerate. Drive.). "We believe strong leadership is an incredibly important trait for those who want to influence the future of academic medicine," says Mary Dillhoff, MD, co-director of LEAD. "It is not something that should simply be left to chance." Available to PGY 2-5general surgery and lab residents, the one-year course meets one Sunday per month to teach personal and project management skills as well as effective leadership of others. The small class size of 15 or fewer promotes discussion and input from varied perspectives and different leadership styles. "Our goal is not to create cookie-cutter leaders, but to help each person understand their own leadership qualities and provide ideas for more effective collaboration and team building," course co-director Daniel Eiferman, MD, says. To learn more, visit medicine.osu.edu/departments/surgery/education/residency/lead.



OR Coaching Project Accelerates Learning

Ohio State residents can expect feedback within three days of a surgery that is performed as part of our innovative OR Coaching project. As a key element of our residency training program, the coaching is intended to give timely comments and constructive ideas for improvement, ultimately accelerating resident preparedness for independent surgery. This active monitoring of each resident's surgical skills and procedure-specific feedback for chief residents includes observation and evaluation of 12 cases (three each for lap chole, inguinal hernia, ventral hernia and lap colectomy). Following each observed operation, the attending, resident and project leaders E. Christopher Ellison, MD, and Phoenix Chen, PhD, MS, then fill out the same Surgical Entrustable Professional Activities (SEPAs) evaluation. Residents have noted how the program has helped them understand the positive impact of even small procedural changes and helped them correct potentially negative habits before they become ingrained.

Meet Our Education Team





Brittany Campbell, MBA General Surgery Residency Program Manager, Department of Surgery

Anna Patterson Program Manager, Research Education, Department of Surgery



Lori Barton Program Manager, Divisions of General and Gastrointestinal Surgery, Colon and Rectal Surgery and Trauma, Critical Care and Burn



Kaitlen Knight Program Manager, Divisions of Cardiac and Vascular Surgery





Angie Arnett, BBA Program Coordinator, Med III/IV, Department of Surgery

"Our goal is not to create cookie-cutter leaders, but to help each person understand their own leadership qualities and provide ideas for more effective collaboration and team building." — Daniel Eiferman, MD

RESEARCH

FY2020 by the Numbers

Total funding: **\$25.9 million**

Active grants: 104

Total FY2019 NIH funding: \$15,541,916



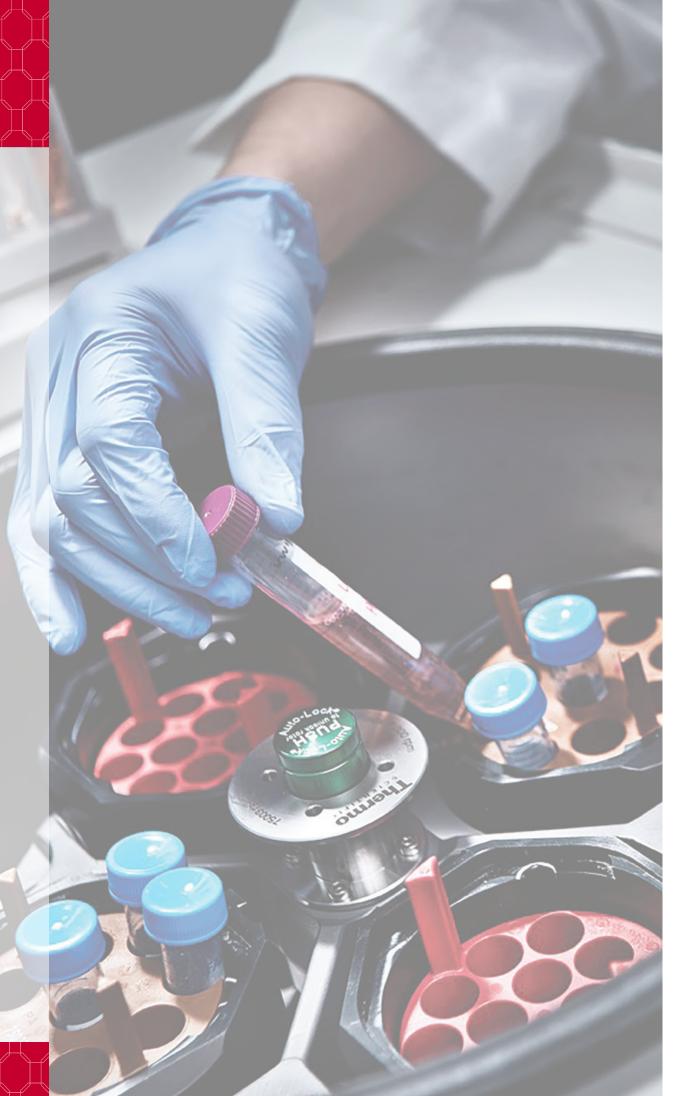
Principal investigators: 44

Total number of FY2020 NIH awards R01, R03, R21, K08, UM1, T32 and P30 grants: **29**

Clinical trials: 251

Publications: 360

*Blue Ridge ranking based on federal fiscal year 2019 (Oct. 1, 2018 – Sept. 30, 2019)



An Integrated, Collaborative Model to Support More Breakthroughs

With PhD and MD researchers as integrated members of the Ohio State Department of Surgery, we are able to facilitate more productive collaboration that improves the chances of success when transitioning research findings from bench to bedside.

Rather than relying on research from a disconnected lab, we have a team of active, engaged researchers and clinician-researchers who work together within our own department. This leads to an atmosphere that promotes more interaction and thorough evaluation of actual clinical applications. Our model is further enhanced by the availability of experts in other medical center departments, as well as other academic departments at The Ohio State University, such as engineering or biology.

NATIONAL RANKING

Knowing that the next medical advancement may be just a day away, the Department of Surgery team is passionate about research. Our collective efforts are apparent in our latest Blue Ridge ranking of fifth place among surgery departments nationwide based on National Institutes of Health funding. This is our highest-ever ranking and an improvement from sixth place last year and 18th in 2017.

> Our PhD and MD faculty drive our success through the pursuit of collaborative research. In addition to a robust portfolio of basic science and translational research, The Center for Surgical Health Assessment, Research and Policy (SHARP) provides resources for high-impact, high-quality health services research with a goal of furthering equitable and cost-effective surgical care.

Active studies from the previous year include:

Jianjie Ma, PhD; R01s for:

- "Hydrogel Encapsulation of a Tissue Repair Protein to Treat Chronic Wounds"
- "Myokine Function of MG53 in Muscle Injury-Repair and Regeneration"
- "MG53-mediated Membrane Repair in Muscle Physiology and Disease"

Renzhi Han. PhD: R01 for:

– "ANO5 in Muscle Health and Disease"

Hua Zhu. PhD: R01 for:

"Preservation of Limbal Stem Cell Function in Corneal Injury"

Ginny Bumgardner, MD, PhD;

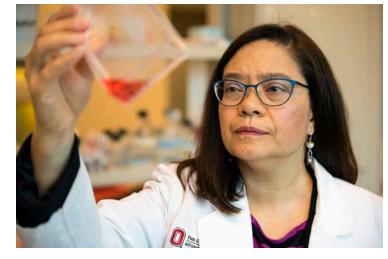
- T32 for "Advanced Research Training in Immunology for Surgery Trainees"
- R01 for "Investigating a Novel Cellular Therapy to Prevent and Treat Acute Antibody Mediated Kidney Transplant Rejection"
- TL1 for "The Ohio State University Center for Clinical and Translational Science"

Raphael Pollock, MD, PhD; P30s for:

– Cancer Center Support Grants

Bryan Whitson, MD, PhD;

- R01 for "Preservation and Rescue of The Lung Donor Allograft for Transplantation"
- Department of Defense grant for "Developing MG53 as a novel protein therapeutic for acute lung injury"



Ginny Bumgardner, MD, PhD, director of the Department of Surgery Research Training Program

Improving Research Through Mentorships

As a prolific researcher herself, Ginny Bumgardner, MD, PhD, actively promotes the value of research mentorship. "The relationship between mentor and mentee is a two-way street," she explains. "I've found that it enriches existing research by providing a new perspective, and it frequently leads both parties in valuable new directions."

"Good mentorship gives people the motivation and support they need, which is vital for cultivating people in the biomedical research pipeline," Dr. Bumgardner says. "It's a skill that our researchers must learn and continually work to improve—even those who have been a mentor for years." To ensure this training is accessible at Ohio State, Bumgardner is actively engaged on multiple fronts. In addition to supporting the availability of mentorship training workshops on campus, she promotes and requires her own ARTIST T32 program's mentors to complete training through the university's Center for Clinical and Translational Science (CCTS) educational activities.

She is principal investigator/program director of a renewal grant for the Advanced Research Training in Immunology for Surgical Trainees (ARTIST) NIH T32AI106704.

With this T32 competitive renewal, the NIH approved an increase in the number of postdoctoral training positions from two to four. The total award amount for the 2019 – 2024 cycle is more than \$1.6 million over the next five years. Bumgardner says these funds will support the surgeon-scientist pipeline and encourage new collaborations between Surgery faculty and basic scientist investigators through co-mentorship of surgical trainees investigating surgical problems with an immunologic basis.

Bumgardner's leadership roles reveal her commitment to both research and training. She is a transplant surgeon, associate dean for research education (ADM-Medicine Administration); director of Medical Student Research; director of the Department of Surgery Research Training Program; director of the College of Medicine's Master of Medical Science Program and director of the Ohio State University CCTS TL1 pre- and postdoctoral training program.

Unique Center Encourages and Supports Researchers

Ohio State's Center for **Surgical Health Assessment, Research** and Policy (SHARP) was founded to help researchers identify the biophysical underpinnings of surgical disease, test innovative approaches to surgical care and optimize the quality, cost and outcomes of surgery. With both new or experienced investigators, SHARP's thriving group of surgeon-scientists pursues a wide range of projects while connecting with other health and public health research entities across the Ohio State campus and beyond. SHARP members receive and provide mentorship through private consultations, brainstorming sessions, development seminars and research-in-progress meetings. They can also access physical space and a secure

database server, as well as staff support for project coordination, data management and statistical analysis. Dedicated resources are prioritized and allocated for R- and K-level grant opportunities or the equivalents from other

"Ohio State's support and financial backing of SHARP is a concrete illustration of our medical center's belief that the future of medicine is dependent on research." – Heena Santry, MD, MS, SHARP director

federal or philanthropic sources. "Ohio State's support and financial backing of SHARP is a concrete illustration of our medical center's belief that the future of medicine is dependent on research," says SHARP director Heena Santry, MD, MS.

To learn more about SHARP, visit medicine.osu.edu/departments/ surgery/research/health-services.

Universitywide Collaboration Amplified by New Center

Housed within the Department of Surgery, the Center for Research Education & Advancement of Transdisciplinary Exploration (CREATE) supports transdisciplinary collaboration to accelerate health care innovation for improved patient outcomes. This approach is intended to streamline product and technology development, expedite consultation, save costs and expand partnerships with private industry.

Project teams include physicians; advanced practice providers; pharmacists; nurses; physical therapists; occupational therapists; respiratory therapists; dietitians; faculty from the colleges of Engineering, Design and Nursing; faculty from the Department of Computer Science and Engineering; graduate and undergraduate students from multiple colleges within Ohio State; and corporate partners.

Learn more about CREATE at medicine.osu.edu departments/ create.

William Carson, MD;

- UM1 for "Experimental Therapeutics of Anti-Cancer Agents With Phase I Emphasis"
- U01 for "Optimizing RNA Nanoparticles Size and Shape for Enhancing Cancer Targeting and Treatment"
- UG1 for "OSU as a Network Lead Academic Participating Site for the NCI NCTN"
- T32 for "Tumor Immunology"

Allan Tsung, MD; R01s for:

- "Surgery Triggered Immune" Response and Liver Metastases"
- "Endogenous Regulators of Inflammation in Liver Ischemia/ Reperfusion"

Jonathan Wisler, MD; K08 for:

- "Analyzing the Mechanism of Exosome Mediated DNA During Sepsis"

Prabhakara Nagareddy, M. Pharm, **PhD**; R00 for:

 "Mechanisms of Monocytosis" in Obesity: Implications for Cardiovascular Disease"

Zhiwei Hu, MD, PhD; R01s for:

– "Targeting Tissue Factor as a novel Oncotarget for Immunotherapy of Triple Negative Breast Cancer"

Sylvester Black, MD, PhD; R01 for:

– "Preservation of DCD Allograft Integrity for Liver

The Ohio State Department of Surgery is dedicated to mentoring and supporting our surgical scientists toward obtaining their K and R awards. In addition. both our residency and fellowship tracks allow for extensive research to support and cultivate our trainees' areas of interest.

CLINICAL CARE

Surgery Divisions FY2020 by the Numbers

Cardiac Surgery OR Cases: 835 wRVUs: 57,248

Colon and Rectal OR Cases: 1,324 wRVUs: 31,814

General and GI OR Cases: 2,389 wRVUs: 61,337

Pediatric OR Cases: 3,629 wRVUs: 81,268

Surgical Oncology OR Cases: 2,460 wRVUs: 95,641

> Thoracic OR Cases: 1,305 wRVUs: 26,565

Transplantation OR Cases: 946 wRVUs: 77,484

Trauma, Critical Care and Burn OR Cases: 2,210 wRVUs: 78,112

> Vascular OR Cases: 1,486 wRVUs: 55,506



Improving Patient Health and Changing Lives

Better clinical care motivates all we do in Ohio State's Department of Surgery. We serve as a surgical referral center for patients and physicians worldwide, and we specialize in some of the most complicated illnesses and conditions in both adults and children. As part of a research-driven, academic institution that is nationally ranked, we celebrate the role of continual learning and collaboration in better patient care.

FY2020 by the Numbers

Clinical Faculty: 88

Advanced Practice Providers: 86

Admissions: 8,148*

wRVUs: 564,975

OR Cases: 16,584

*Ohio State Wexner Medical Center Patient Statistics

New Comprehensive Adrenal Program – A Real Adrenaline Rush

The new Comprehensive Adrenal Program (CAP) brings together experts in over 20 disciplines from The Ohio State University Comprehensive Cancer Center – Arthur G. James Cancer Hospital and Richard J. Solove Research Institute and from The Ohio State University Wexner Medical Center to

provide comprehensive care for patients with benign and malignant adrenal disorders. CAP members reshape clinical care pathways to prevent endocrinedriven complications. Basic science research—led by CAP co-director and endocrinologist Larry Kirschner, MD, PhD, and surgeon Priya Dedhia, MD, PhD, an expert in organoid-based research—is an important feature of CAP, along with clinical and translational research. "Patients diagnosed with adrenocortical carcinoma, a rare disease not often treated by most physicians, frequently search nationally for experts to treat their cancer and work with their local team



to provide the best care possible," says John Phay, MD. "The Comprehensive Adrenal Program offers patients that expertise, collaboration and access to clinical trials." Members of the multidisciplinary team are nationally and internationally recognized leaders in their fields.

Surgeon and CAP co-director Barbra Miller, MD, notes, "A multidisciplinary approach like we have here at the OSUCCC – James is key to helping patients navigate complex evaluations and decisions regarding care for rare disease processes, especially when it comes to adrenal cancer." CAP works closely with Ohio State's Destination Medicine Program to provide seamless care for those traveling to Columbus from a distance.



Ohio State Surgeon Performs First Total Robotic Sleeve Lobectomy in Central Ohio

Robert Merritt, MD, director of the Division of Thoracic Surgery, has performed the first total robotic sleeve lobectomy in central Ohio. This complex procedure involves resection and reconstruction of the bronchus after tumor removal and offers a new option to patients with tumors that are limited to the bronchus with no other areas of invasion. "This procedure allows us to completely remove a tumor in the bronchus while preserving a significant amount of lung," Dr. Merritt explains. 'The standard of care for bronchial tumors without robotic assistance remains open surgery and removal of the entire lung, so this is a tremendous advancement."

In addition to the obvious benefit of lung preservation with a robotic sleeve lobectomy, patients can also expect smaller incisions, reduced pain, shorter hospital stays and faster overall recovery.

Lung Transplant Program Ranks Top 10 Nationally for Volume and Top in Ohio for Outcomes

The Comprehensive Transplantation Center at The Ohio State University Wexner Medical Center now ranks in the top 10 nationally for lung transplantation volume and also ranks first in the state of Ohio for lung transplantation outcomes—with an 89.61% first-year patient survival rate.

The program has grown steadily since 2012 and has maintained consistently positive outcomes even as volume has expanded. "Our truly multidisciplinary approach makes a significant difference," says Bryan Whitson, MD, PhD, cardiothoracic surgeon and director of thoracic transplantation at Ohio State. "Our patients benefit from the collaboration and expertise assembled in the Ross Heart Hospital. Our transplant pulmonology team, led by Dr. David Nunley, addresses all facets of care to give each patient the support needed to prepare for such a major procedure and maintain an effective treatment plan for the years that follow."

"Pioneering advanced therapies is also key to our positive outcomes," Whitson adds, citing as examples Ohio State's robust extracorporeal membrane oxygenation (ECMO) program, combined heart/lung transplants, international leadership in ex-vivo lung perfusion, and robust clinical trial participation.

Ohio State Launches Bariatric Robotic Program

As a Bariatric Surgery Center of Excellence, Ohio State remains committed to ongoing innovation. "Using a robot as a bariatric surgical tool shows potential," explains Bradley Needleman, MD. "While nearly 100% all of our bariatric procedures are performed using minimally invasive techniques, the addition of a robot provides more precision and better visualization. It also allows the surgeon to mimic more traditional surgery with the degrees of movement you would naturally have with your wrist."

Both Dr. Needleman and Vimal Narula, MD, perform robotic bariatric surgery at Ohio State. It is anticipated that this "wristed technology" offers real potential to eliminate leaks, strictures and bleeding, while also minimizing pain, reducing wound complications and shortening recovery times. Robotic technology also does the hard work moving instruments through the abdominal wall, making some operations easier for the surgeon to perform.

"Of course, every robotic bariatric surgery patient will continue to benefit from the multidisciplinary approach we use at the center as well," Dr. Needleman says. "The ongoing support from endocrinologists, physical therapists, dietitians, psychologists and other specialists is what truly sets our patients on the path to long-term success."







Division of Cardiac Surgery

The Ohio State Heart and Vascular Center cardiac surgery team brings together highly skilled surgeons, the most advanced technology and world-class facilities to deliver exceptional surgical heart care. The cardiac surgery team published more than 60 peer-reviewed articles in leading publications.

We specialize in the treatment of the most complex cardiac surgery patients with less invasive therapies, complex reoperations, coronary artery bypass surgery, heart valve surgery, aortic surgery, endovascular and transcatheter procedures, heart and lung transplantation, mechanical circulatory support and extracorporeal membrane oxygenation (ECMO).

Primary Programs:

- Thoracic Transplant and Mechanical Circulatory Support **Program** – This is the only such program in central Ohio, and it provides cutting-edge technology including ex-vivo lung perfusion, total artificial heart, minimally invasive left ventricular assist devices (LVAD) and extracorporeal life support including ECMO.
- Minimally Invasive and Robotic Surgery Our surgeons offer valve replacement through keyhole operations to deliver leading transcatheter valve replacement therapy (TAVR). Our cardiac surgeons perform minimally invasive procedures, including coronary artery bypass surgery using a robot to mobilize the left internal mammary artery and small left-anterior thoracotomy incisions for an off-pump coronary artery bypass.
- **Total Arterial Off-Pump Revascularization** Our surgeons preferentially perform all arterial coronary artery bypass without the use of the heart-lung machine, off-pump coronary arty bypass (OPCAB) without touching the aorta (anaortic) to minimize the risk of stroke.
- Aortic Center In even the most complex aortic cases, the Ohio State Aortic Center combines the expertise of highly skilled cardiac surgeons and vascular surgeons to provide a tailored approach to each patient's care.
- Adult Congenital Heart Surgery Program Ohio State's Adult Congenital Heart Disease program is one of the largest in the country. Our cardiac surgeons at Ohio State Ross Heart Hospital work in tandem with colleagues from Nationwide Children's Hospital to bridge the gap in care for those adults transitioning from pediatric care for congenital heart disease.

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 medical center referral form available at wexnermedical.osu.edu/ReferralForm and fax your referral to 614-293-1456.

Faculty



Nahush Mokadam, MD* Director, Division of Cardiac Surgery Program Director, Cardiothoracic Surgery **Resident Education Programs**

Clinical Faculty

Adult Cardiac Surgery

John Bozinovski, MD Asvin Ganapathi, MD Michael Vallely, MBBS, PhD Bryan Whitson, MD, PhD

Pediatric and Congenital Cardiac Surgery

Sergio Carrillo, MD Mark Galantowicz, MD*, Chief of Congenital Cardiac Surgery Patrick McConnell, MD Toshiharu Shinoka, MD

Research Faculty

Chuanxi Cai, PhD Renzhi Han. PhD Jae-kyun Ko, PhD Haichang Li, DVM, PhD Pei-Hui Lin, PhD Jianjie Ma, PhD Prabhakara Nagareddy, PhD Hua Zhu. PhD



Division of Colon and Rectal Surgery

The Division of Colon and Rectal Surgery at Ohio State is recognized for our patient care related to diseases and cancer of the colon and rectum. We have earned a procedure rating of "high performing" for colon cancer surgery from U.S. News & World Report.

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.

Primary Programs:

- Pelvic Floor Disorders Clinic This program is offered two days per month at our convenient Outpatient Care Upper Arlington location. The clinic provides comprehensive testing and evaluation, and a range of treatment options for men and women diagnosed with a variety of pelvic floor disorders.
- **Robotic Surgery** This fast-growing program 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, to expand our robotic volume for colectomy and lower anterior resection (LAR).
- **Colorectal Transitional Care** Under the leadership of Alessandra Gasior, DO the Center for Colorectal Transitional Care is a collaborative effort that helps children born with colorectal malformations and other congenital conditions have a smooth transition of care once they reach adulthood.
- Anal Cancer Screening Program The first formal program in Ohio and one of few in the country should improve the diagnosis and treatment of anal cancer, which has increased at an alarming rate, particularly among the often underserved population of HIV-positive gay men. Lead by Dr. Syed Husain, this program will be available in 2021 at The James at Martha Morehouse Outpatient Care.
- Colorectal Cancer The OSUCCC James colorectal cancer treatment team includes internationally recognized specialists in the prevention, diagnosis, genetic sequencing and treatment of colorectal cancers. Working together across several medical disciplines (oncologists, surgeons, radiologists, pharmacists and others), our expert team develops individualized treatment plans that target each patient's biologically unique malignancy.

Referral Information

The Division of Colon and Rectal Surgery 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 and fax your referral to 614-293-1456.

Faculty



Matthew Kalady, MD Director, Division of Colorectal Surgery

Clinical Faculty

Mark Arnold, MD Lisa Cunningham, MD Alessandra Gasior, DO Alan Harzman, MD* Emily Huang, MD, MEd Syed Husain, MBBS Amber Traugott, MD



Division of General and Gastrointestinal Surgery

Ohio State has been recognized as "high performing" in gastroenterology and GI surgery by U.S. News & World Report. Our Division of General and Gastrointestinal Surgery is a pioneer in minimally invasive surgery with a high volume of foregut surgery, bariatric surgery, advanced therapeutic endoscopy, hepatobiliary surgery, and hernia repair and complex abdominal wall reconstruction.

Primary Programs:

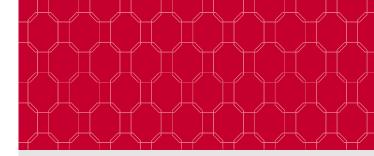
- Comprehensive Weight Management and Metabolic Bariatric Surgery Program – In FY2020 launched a new robotic bariatric surgery program (see page 23 for more information); telehealth appointments now available.
- Center for Abdominal Core Health Advancing patient care through programs such as complex abdominal wall reconstruction, monthly complex hernia conferences, a robotic hernia program and a comprehensive abdominal core surgery rehabilitation protocol. Telehealth and next day appointments available.
- Comprehensive Esophageal Health Center A multidisciplinary foregut clinic launching in New Albany in 2021. Telehealth and next day appointments available.

Referral Information

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

- Bariatric surgery
- Esophageal/foregut disease
- Hernia repair
- Gastrointestinal 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 and fax your referral to 614-293-1456.



Faculty



Benjamin Poulose, MD, MPH* Director, Division of General and Gastrointestinal Surgery

Clinical Faculty

Stacy Brethauer, MD, FACS, FASMBS Courtney Collins, MD, MS Kelly Haisley, MD Michael Meara, MD, MBA Vimal Narula, MD Bradley Needleman, MD* Sabrena Noria, MD, PhD Kyle Perry, MD David Renton, MD

Research Faculty

Daniel Gallego-Perez, PhD

* Castle Connolly 2020 Top Doctor

Department of Surgery I 29



Division of Pediatric Surgery

The Division of Pediatric Surgery is one of the largest and most diverse divisions of its kind. The division maintains active clinical programs focused on general pediatric surgery, minimally invasive surgery, robotic surgery, surgical oncology, surgical endocrinology, trauma, burns, chest wall deformities, bariatric surgery, inflammatory bowel disease, hepatobiliary surgery, neuromodulation and pediatric colorectal surgery.

Each of the 16 faculty members in the division bring individual strengths and talents to the division, and are recognized for their expertise in clinical care, research and education. One of the most important aspects of the program is the opportunity to train the next generation of pediatric surgeons through our highly desirable training programs in pediatric surgery, as well as several additional specialty training programs.



Primary Programs:

- Pediatric Robotic Surgery The busiest robotic surgery programs of any children's hospital in the United States. The hospital's new, state-of-the-art Da Vinci Xi Robot will allow performance of more diverse, complex operations on even smaller children.
- Pediatric Trauma and Burn Program The Trauma Program has been verified by the American College of Surgeons as a Level 1 program since 1991, and the Burn Program has been verified by the American Burn Association as a verified Center since 2003. The Burn Program uses state-of-the-art techniques to accelerate burn wound healing. One of the newest techniques is Recell, which uses a small sample of the patient's own skin to produce spray-on skin cells that cover an area 30 times larger than previous methods.
- Pediatric Surgical Research and Simulation Center -Research in pediatric surgery encompasses a broad range of basic, clinical, translational and outcomes projects. The department is a leader in presentations at national academic meetings. Our trainees continue to receive prestigious national awards—an unprecedented 35 awards in the past nine years. Faculty members publish 150-200 papers a year. A new Conference and Simulation Center at Nationwide Children's Hospital will be a wonderful addition to the numerous simulation and training opportunities for faculty, staff and visitors.

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



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* Ihab Halaweish, MD Brian Kenney, MD, MPH* Marc Michalsky, MD, MBA* Peter Minneci, MD, MHSC Benedict Nwomeh, MD, MPH* Oluyinka Olutoye, MD, PhD* Rajan Thakkar, MD Richard Wood, MD

Research Faculty

David Brigstock, PhD



Division of Surgical Oncology

In the Division of Surgical Oncology, our goal is to provide cancer patients with innovative treatment in a caring, supportive environment characterized by internationally recognized medical expertise, education and research. Our surgical oncologists work alongside other world-renowned cancer experts at The Ohio State University Comprehensive Cancer Center – Arthur G. James Cancer Hospital and Richard J. Solove Research Institute (OSUCCC – James), an NCI-designated comprehensive cancer center that has been ranked as a top cancer hospital for the past 22 years by U.S. News & World Report. Recognizing that there is no routine cancer because everyone's disease is biologically different, our large and experienced surgical oncology team reaches across multiple disciplines to design the best treatment plan for each patient's specific disease.

2020-21

Primary Programs:

- Breast Our breast surgical oncology experts work at the Stefanie Spielman Comprehensive Breast Center, which offers a full continuum of care in one location with state-ofthe-art technology—from prevention and screening through diagnosis, treatment and survivorship. Our surgeons provide cutting-edge, multidisciplinary breast cancer treatment and evaluate patients who are at high risk for cancer. The breast cancer team is also nationally recognized for its innovative research in many fields, including health equity, clinical trials and novel approaches to care.
- **Endocrine** Our endocrine specialists focus on surgical diseases of the thyroid gland, parathyroid and adrenal glands, and neuroendocrine tumors—managing benign and malignant tumors, as well as disorders of hormone excess and perform complex, minimally invasive and robot-assisted procedures. Over the past 15 years, Ohio State has been a top NIH-funded group in thyroid cancer, providing expertise in its diagnosis, surgical management and personalized treatment. Starting in fiscal year 2021, our new Comprehensive Adrenal Program offers cutting-edge, multidisciplinary treatment and clinical trials for a wide range of adrenal disorders.
- Gastrointestinal (GI) The OSUCCC James gastrointestinal cancer team includes internationally recognized experts in the prevention, diagnosis and treatment of esophageal, hepatobiliary, pancreas, stomach and colorectal malignancies. Our surgeons have extensive experience in complex minimally invasive abdominal operations. Working across several disciplines, our surgical team, in concert with the full multidisciplinary team, develops individualized treatment plans that target each patient's unique cancer, including innovative regional therapies for metastatic cancer. This team is also focused on methods to improve patient outcomes through innovation—including telehealth for cross-institutional collaboration and a pre-surgical exercise program.
- Melanoma/Sarcoma Patients with these cancers benefit from multidisciplinary surgical expertise spanning the full spectrum of cutaneous and soft tissue malignancies. The Skin and Melanoma Center at the OSUCCC – James offers patients with melanoma, Merkel cell carcinoma, squamous cell carcinoma, basal cell carcinoma and other rare skin tumors individualized treatment options-including intralesional therapies, enrollment in clinical trials and robotic resection. Dedicated to the optimal therapy of patients with a variety of primary and recurrent tumors, the Soft Tissue Sarcoma Center at the OSUCCC -James is led by internationally recognized surgeon-scientists whose clinical and laboratory discoveries continue to advance the standard of care.

Referral Information

To refer, call the Division of Surgical Oncology via The James Line at 800-293-5066, or fill out the one-page referral form available at cancer.osu.edu and fax your referral to 614-293-9449.

Faculty



Allan Tsung, MD Director, Division of Surgical Oncology

Clinical Faculty

Breast Doreen Agnese, MD* William Carson, MD* William Farrar, MD* Samilia Obeng-Gyasi, MD, MPH Bridget Oppong, MD Ko Un "Clara" Park, MD Stephen Povoski, MD* Endocrine Priya Dedhia, MD, PhD Barbra Miller, MD John Phay, MD Gastrointestinal Jordan Cloyd, MD Mary Dillhoff, MD Aslam Ejaz, MD, MPH Andrei Manilchuk, MD Timothy Pawlik, MD, MPH, PhD* Melanoma/Sarcoma Joal Beane, MD Carlo Contreras, MD Valerie Grignol, MD* Raphael Pollock, MD, PhD*

Research Faculty

Zhiwei Hu. PhD Hai Huang, PhD Anne Strohecker, PhD



Division of Thoracic Surgery

Dedicated to providing multidisciplinary care for malignant and benign diseases of the chest, Ohio State's Division of Thoracic Surgery earned a distinguished threestar rating from the Society of Thoracic Surgeons (STS) for both lobectomy and esophagectomy, which denotes the highest category of quality. This places our division among the elite for general thoracic surgery in the U.S. and Canada.

Primary Programs:

- Robotic Surgery Ranked first in Ohio with over 200 robotic lobectomy procedures in FY 2020.
- Minimally Invasive Thymectomy for Myasthenia Gravis A multidisciplinary program formed with Neurology.
- Minimally Invasive Esophagectomy A combined program of minimally invasive surgery, GI medicine and oncology with over 260 procedures completed from 2014 – 2020.
- Lung Volume Reduction Surgery Program With 19 cases performed in FY2019, Ohio State has performed more lung volume reduction surgeries than any medical center in the country and is the only hospital in central Ohio offering the procedure.
- **Thoracic Surgery** Our surgeons collaborate with the lung and gastrointestinal disease sites at The Ohio State University Comprehensive Cancer Center – Arthur G. James Cancer Hospital and Richard J. Solove Research Institute and 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).

Referral Information

The surgeons in the 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/ReferralForm** and fax your referral to 614-293-1456.

Faculty



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

Clinical Faculty

Desmond D'Souza, MD Peter Kneuertz, MD



Division of Transplantation Surgery

The Ohio State University Wexner Medical Center has performed more than 10,500 solid organ transplants since its first transplant, a kidney, 53 years ago. Fewer than 10% of adult transplant centers in the United States have achieved this milestone.

As central Ohio's only adult comprehensive transplant center, Ohio State performs nearly 600 transplants each year, and ranks sixth by volume in the United States with excellent patient outcomes.

Primary Programs:

- Kidney Transplant Program As one of the largest programs in the country, Ohio State uses donor exchange and chains to aggressively transplant many patients who might otherwise be ineligible due to incompatibility with their donor.
- Living Donor Liver Program Ohio State has expanded liver transplant donor and recipient criteria and is one of only two locations in Ohio able to perform adult living liver donor transplants.
- Liver Cancer One of only 41 comprehensive cancer centers in the nation as designated by the National Cancer Institute, Ohio State offers treatment for hepatocellular carcinoma and prepares these patients for liver transplantation.
- Pancreas Auto Islet Program This specialized treatment for patients suffering from chronic pancreatitis and some other pancreas diseases utilizes a patient's own islet cells for reintroduction after a total pancreatectomy.
- New Outreach Clinics Added new clinic locations in Lima and Cincinnati as part of the Healthy State Alliance with Mercy Health.

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 are 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.

Photo top left: Every April during "Donate Life" month, Ohio State's Comprehensive Transplant Center plants a pinwheel garden on the front plaza of the Ohio State Wexner Medical Center. This coming April, more than 11,000 pinwheels will be planted, each representing a lifesaving transplant performed at Ohio State since 1967. Each pinwheel has one stem supporting eight spokes, symbolic of the power of one hero to save up to eight lives through organ donation.



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 Amer Rajab, MD, PhD Austin Schenk, MD, PhD



Division of Trauma, Critical Care and Burn

Formed in 2006, the Division of Trauma, Critical Care and Burn provides surgical care for multiple trauma, burns, urgent and emergent general surgery conditions and surgical critical care.

Primary Programs:

- Level I Trauma Center at Ohio State University Hospital -Designation awarded by the American College of Surgeons that recognizes our role as a regional resource to care for the most critically ill and injured patients.
- Level III Trauma Center at Ohio State East Hospital Established in 2018 with plans to transition to a Level II Trauma Center.
- Acute Care Surgery offered at University Hospital and East Hospital – 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.
- Adult Burn Center Treating more than 700 patients annually and the only adult burn center in central Ohio verified by the American College of Surgeons and the American Burn Association with an inpatient burn rehabilitation ranked among the best in the country by U.S. News & World Report.

Referral Information

Burn Center

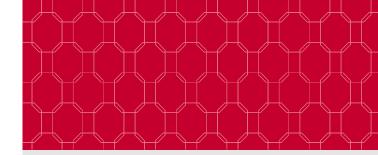
For referral to Ohio State's Comprehensive Burn Center, please call 614-293-BURN (2876).

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, from small to large, with special emphasis on:
- Third-degree burns
- Burns to face, hands, feet, genitalia, perineum and joints
- Electrical burns and lightning strikes
- Chemical burns
- Burns in patients with comorbid conditions

Other Critical Care Referrals

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 or 800-824-8236.



Faculty



Carrie Sims, MD, PhD, FACS Director, Division of Trauma, Critical Care and Burn

Clinical Faculty

Daniel Eiferman, MD* Ihab Elhassan, MD David Lindsey, MD Heena Santry, MD Michael Sutherland, MD, FACS Wendy Wahl, MD, FACS, FCCM Brian Weiss, MD Amy Whitson, MD Jonathan Wisler, MD

Research Faculty

Scott Strassels, PharmD, PhD



Division of Vascular Diseases and Surgery

The Division of Vascular Diseases and Surgery specializes in the comprehensive care of diseases of the arteries, veins and lymphatic system. Each year, our division has over 7,942 outpatient visits and performs over 1,828 endovascular cases and major open vascular surgeries. We specialize in complete care for any vascular condition, from a patient's initial visit to diagnostic testing, interventional or minimally invasive endovascular treatments (such as stenting and angioplasty), open surgical treatments (such as bypass surgery) and, most importantly, ongoing lifelong post-treatment care.

Primary Programs:

- Aortic Center Combines the expertise of highly skilled physicians, such as vascular surgeons, cardiac surgeons and cardiologists, to provide a tailored approach to each patient's care. This includes conventional surgery and new, minimally invasive procedures. In addition to scheduled aortic procedures, the Aortic Center also provides treatment for emergent and life-threatening aneurysms.
- **Limb Preservation Program** Part of the Comprehensive Wound Center, offering a multidisciplinary approach and advanced techniques to treat patients with limbthreatening conditions.
- Ohio State Total Vein Care Outpatient treatment from board certified vascular surgeons with more than 30 years' experience in the treatment of venous disease.
- Vascular Ultrasound Expanded inpatient and outpatient services with new same-day reporting with VascuPro™ vascular lab reporting software.

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 and fax your referral to 614-293-1456.





Timur Sarac, MD Director, Division of Vascular Diseases and Surgery Director, Aortic Center Program Director, Vascular Surgery **Resident Education Programs**

Clinical Faculty

Michael Go, MD, FACS* Mounir Haurani, MD, FACS Kristine Orion, MD Jean Starr, MD, FACS* Bryan Tillman, MD, PhD Patrick Vaccaro, MD, MBA, FACS*

Department of Surgery Administrative Leadership

Our department is fortunate to have a committed team of administrators who provide the oversight and direction to foster outstanding patient care, research and education.



Paola Basar, MBA Senior Administrator, Department of Surgery



Justin Feezell, MHA Administrator, Divisions of Cardiac, Thoracic, and Vascular Surgery



Nicholas Jacoby, MBA Administrator, Division of Surgical Oncology



Lisa Lawrence, MBOE Administrator, Divisions of General and Gastrointestinal Surgery; Colon and Rectal Surgery; and Trauma, Critical Care and Burn



Jov Leemaster Senior Marketing/ Communications Consultant, Department of Surgery



Judy Opalek, PhD Director of Research Administration, Department of Surgery



Kirsten Schroeder Administrative Assistant, Department of Surgery



Laura Stillion, MHA, FACHE Administrative Director. Comprehensive Transplant Center. Division of Transplantation Surgery



Booker Wooten Finance Manager, Department of Surgery



COVID-19 RESPONSE

Facing the unprecedented challenges posed by a national pandemic, the surgery team at Ohio State responded decisively, and we continue to adapt as new insight on the virus emerges.

Department of Surgery's Rapid Response to COVID-19 Protects Patients and Staff

Already dedicated to providing comprehensive care to critically ill and injured patients, Ohio State's Division of Trauma, Critical Care and Burn (TCCB) drove many of the new procedures required throughout the Department of Surgery during the COVID-19 pandemic.

Even as other surgical divisions had to decrease or stop services to reduce or eliminate potential points of exposure, the TCCB division maintained a 24/7 presence, providing acute surgery, trauma and critical care to patients—many of whom had COVID-19.

Throughout the initial months of the pandemic, TCCB division director Carrie Sims, MD, met twice weekly with the Ohio State Wexner Medical Center leadership to coordinate all activities with the hospital command center.

Quick Turnaround Protects Surgery Residents During Pandemic

To buoy resident morale during the COVID-19 pandemic, the Department of Surgery coordinated weekly virtual "happy hours." During one session, residents expressed concern about inadequate eye protection. Within 24 hours, Alan Harzman, MD, the surgery residency program director, had secured and delivered a set of goggles to every resident in the program.

The TCCB division also developed a short curriculum on the basics of ICU management that included several interactive video lectures and a primer.

In addition, surgical faculty volunteered to see all patients who were COVID-19-positive or considered potentially positive in order to protect our residents from any unnecessary exposure. The Division of General and Gastrointestinal Surgery also identified a pool of surgeons to be on stand-by if more ICU capacity was required or numerous surgeons fell ill—a circumstance that fortunately never developed.

Although Ohio State has transitioned to a lessrestrictive phase of COVID-19 management -non-elective procedures have resumed, and hospital patients are allowed one visitor over age 18 each day—the initial protocols we developed and the insights we gained remain critical to our long-term virus control and treatment procedures.





COLUMBUS UNEXPECTED

UTT

"Of course, there's life outside of residency, too, and Columbus has proven to be a great place to live. I think what surprised me most was how young and vibrant the crowd was here. I really love the diversity in Columbus and the unique neighborhoods." – Ruth Ackah, PGY2 Resident

It's likely that Columbus has more than you ever expected.

and to explore.

- over 109 languages represented here.
- downtown.
- national average.

- November 2018
- Almanac
- 2018

IN THE

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Columbus is a great place to start out, to stay, to raise a family

• We're Big – Ohio's capital is the 14th largest city in the U.S. and the second largest in the Midwest behind Chicago.

• We're Diverse – Our diversity makes us a top test market and there are

• We're Accessible – The average commute is just over 20 minutes, and John Glenn Columbus International Airport is just 10 minutes from

• We're Affordable – The cost of living in Columbus is 10% below the

• We've Earned Many High Marks and Accolades:

- Ranked #1 among the largest Midwest metros for: • Population growth (U.S. Census Bureau) • Job growth (U.S. Bureau of Labor Statistics) • Wage growth (U.S. Department of Labor)

- #3 City for New Grads to Live, Work, Play - Realtor.com, 2019 - **#5 Trending Destination** – Airbnb's 2018 *Travel Trends* - **#10 Best Big City to Live in Right Now** - Money magazine,

- Columbus scored 100/100 on The Municipal Equality Index by the Human Rights Campaign, which includes measures of employment, housing and public attitudes toward the LGBTQ community

- "One of the nation's best metro areas for the arts" - Places Rated

- **#1 Rising City for Startups** - Forbes, October 2018 - #5 Top U.S. City for Entrepreneurs and Start-Ups - Business.org,

- Ranks globally on The New York Times list of "52 Places to go in 2019"



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- 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, 800-293-5066
- 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 onepage Ohio State Wexner Medical Center referral form available at wexnermedical.osu.edu/ReferralForm and fax your referral to 614-293-1456.

To download organ transplant referral forms, visit wexnermedical.osu.edu/transplant.

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

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- As referring physician, you will receive confirmation of the appointment for your records via mail, fax or Ohio State CareLink.



An easy way to communicate directly with Ohio State surgeons.

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

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, Orthopedic 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.

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