

# DEPARTMENT OF SURGERY

2019 ANNUAL REPORT



# LETTER FROM THE CHAIR



Academic medical centers strive to balance the tripartite mission of clinical care, education, and research. In the Department of Surgery at the University of Chicago Medicine, our team comes together every day to achieve this goal as reflected in our strategic vision: premier multidisciplinary clinical programs anchored in translational research and leading-edge technology, inspiring training programs within a unique framework of surgical ethics and professionalism, and agenda-setting research that mines interfaces across intellectual domains.

The following pages feature the innovative work of our faculty across the range of our surgical specialties. We have much to celebrate: the first anniversary of our Level 1 Adult Trauma Center, the expansion of several residency and fellowship training programs, and achievements in research that are helping to define the future of surgical care.

Also this year, we created a new Section of Thoracic Surgery under the leader-ship of Jessica S. Donington, MD, MDSR, MSCR, FACS. Dr. Donington has launched a multidisciplinary clinic for lung cancer and has expanded screening capabilities in our growing number of off-site locations across the southwest suburbs of Chicago.

As we build our team, we continue our deep dedication to diversity, equity, and inclusion in our clinical programs, in our training programs, and in our research.

I hope these stories provide a glimpse into what makes the Department of Surgery at UChicago Medicine unique.

# **JEFFREY B. MATTHEWS, MD, FACS**

DALLAS B. PHEMISTER PROFESSOR OF SURGERY

CHAIR, DEPARTMENT OF SURGERY

SURGEON-IN-CHIEF, THE UNIVERSITY OF CHICAGO MEDICINE

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# Surgery by the Numbers

# **RESEARCH ACTIVITY**

Total new grant funding

\$10.1 million

Total new federal funding

\$6.5 million

Active grants & contracts

92

Active clinical trials

56

# EDUCATIONAL ACTIVITY

SECTION	RESIDENTS	FELLOWS	TOTALS
Cardiothoracic Surgery		3	3
Cardiothoracic Transplantation		1	1
Colon & Rectal Surgery		1	1
Complex General Surgical Oncology		2	2
Endocrine Surgery		1	1
General Surgery	46		46
Microsurgery		1	1
Neurosurgery		10	10
Otolaryngology – Head & Neck Surgery	10		10
Pediatric Surgery		2	2
Plastic & Reconstructive Surgery	13		13
Surgical Critical Care		1	1
Transplant Surgery		2	2
Urology	18	3	21
Vascular & Endovascular Surgery		2	2
Total	87	29	116

# CLINICAL ACTIVITY

SECTION	CASES	VISITS	RVUs
Cardiac Surgery	852	2,808	55,762
Colon & Rectal Surgery	1,051	5,144	25,402
General Surgery	2,308	13,806	68,146
Neurosurgery	1,081	9,808	41,629
Otolaryngology – Head & Neck Surgery	2,578	21,805	60,871
Pediatric Surgery	805	2,909	14,895
Plastic & Reconstructive Surgery	1,670	10,792	53,364
Thoracic Surgery	346	1,724	9,209
Transplant Surgery	332	1,617	18,341
Trauma & Acute Care	524	2,873	27,257
Urology	2,553	14,141	66,887
Vascular & Endovascular Surgery	909	5,164	31,648
Total	15,009	92,591	473,411
Ostomy		1,875	2,064
Grand Total	15,009	94,466	475,475



# at Comer Children's Hospital. Dr. Vricella's specialty is unlike any other, requiring the highest degree of technical dexterity. To operate on a heart the size of a walnut is, he said, "the perfect balance between courage and fear."

# Integrating Service Lines for Pediatric Cardiac Surgery



VALLUVAN
JEEVANDAM, MD
PROFESSOR OF SURGERY
CHIEF, SECTION OF
CARDIAC SURGERY

Led by **Valluvan Jeevanandam, MD**, the Section of Cardiac Surgery at the University of Chicago Medicine combines groundbreaking clinical practice and programs with research to provide patients, old and young, with an exceptional level of care.

This year, **Luca Vricella, MD**, Professor of Surgery, joined UChicago Medicine as the Director of Pediatric Cardiac Surgery for Comer Children's Hospital. Dr. Vricella is an internationally renowned pediatric cardiac surgeon and former Director of the Pediatric Cardiac Surgery and Heart Transplant Program at Johns Hopkins University.

"You almost become a part of your patients' families," said Dr. Vricella. "One of the most rewarding things is our interaction with our patients over time, as they grow, developing a lifelong connection. I have been doing this for 16 years since the completion of my training, and there are many 13- and 14-year-olds I operated on when they were babies. Now they're in middle school or early high school, and it's a great feeling to know that you have had an impact on their lives."

Dr. Vricella is also the Chief of Cardiac Surgery at Advocate Children's Hospital; in this role, he is working to integrate the two hospital systems. Advocate is nationally recognized for offering the highest standard of care in pediatric cardiac surgery, ranked as the 13th program in the country in 2019. Dr. Vricella has focused his efforts on integrating service lines between the institutions. This pioneering partnership will enrich opportunities for surgeons to pursue outstanding clinical work and research by pairing Advocate's powerful clinical operations with UChicago Medicine's world-renowned academic research operations. "We need to keep doing what we're doing," said Dr. Vricella. "We have a huge potential for being the largest clinical and research enterprise in Chicago, and the Midwest, to take care of pediatric patients with heart disease."

At UChicago Medicine, the pediatric cardiac surgery team always considers the child's recovery beyond the operating room, which is why a minimally invasive approach is always the preferred first plan of action. Not only does this method lessen pain for patients, but it shortens hospital stays and produces fewer complications. For his first case here, Dr. Vricella performed a minimally invasive procedure for congenital heart disease on a two-year-old child. Even after open-heart correction, the patient walked away with just a small incision after only two days.



We have recruited to the UChicago Medicine/Advocate partnership Narutoshi Hibino, MD, PhD, a distinguished clinician and world-class researcher whose field of expertise is tissue engineering and 3D bio-printing, which allows the creation of patient-specific vascular grafts and cardiac tissue. With the use of these revolutionary laboratory techniques, patients will potentially be able to receive their own individually printed custom-fit prostheses, which the body will not reject and which will grow with the patient without having to be replaced later in life.

Dr. Vricella and Dr. Hibino are excited to continue building the Pediatric Cardiac Surgery team and to implement programs that will enhance the future of pediatric cardiac surgery and fulfill the clinical and research mission of UChicago Medicine. "Pediatric cardiac surgery is a quintessential team sport," he said. "Everybody comes around this little patient and gives their very best to restore health and happiness to a child and family in need."

# **FACULTY HONORS**

Husam H. Balkhy, MD, was appointed Secretary of the International Society for Minimally Invasive Cardiothoracic Surgery.

**Takeyoshi Ota, MD, PhD**, was accepted as a member of the American Association of Thoracic Surgery.

# **FACULTY LISTING**

# **Professors of Surgery**

Husam H. Balkhy, MD Mahesh P. Gupta, PhD Valluvan Jeevanandam, MD Luca Vricella, MD

# **Associate Professors of Surgery**

Narutoshi Hibino, MD, PhD Takeyoshi Ota, MD, PhD

#### **Assistant Professor of Surgery**

Tae Song, MD

# **Clinical Associates**

Daniel Ciaburri, MD David Onsager, MD Arshad Yousuf, MD



"Pediatric cardiac surgery is a quintessential team sport."

LUCA VRICELLA, MD PROFESSOR OF SURGERY

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# Neil H. Hyman, MD, an expert in colon and rectal surgery, studies a computed tomography (CT) scan prior to surgery.

# Multidisciplinary Team Fosters Innovation throughout IBD Center's History



NEIL H. HYMAN, MD

PROFESSOR OF SURGERY

CHIEF, SECTION OF COLON
& RECTAL SURGERY

CO-DIRECTOR, DIGESTIVE
DISEASES CENTER

The University of Chicago Medicine has a long history of treating inflammatory bowel disease (IBD). Formally recognized as an entity in the 1930s, the Inflammatory Bowel Disease Center at UChicago Medicine has been responsible for developing field research and innovative surgical techniques through a truly multidisciplinary approach. The center's surgeons work alongside pathology, radiology, and medicine. As one of the select few IBD centers in the country to practice at this level of rigorous collaboration, it is able to provide a high level of care and expertise as well as remaining dedicated to research.

"Our average IBD patient is age 33 to 34— in the upswing of life, starting a career and family," said **Roger D. Hurst, MD**, Professor of Surgery. "This disease can be truly debilitating, and it's extremely rewarding to hear from our patients that the surgeries and care they receive at UChicago Medicine allow them to continue living healthy, productive, and fulfilling lives."

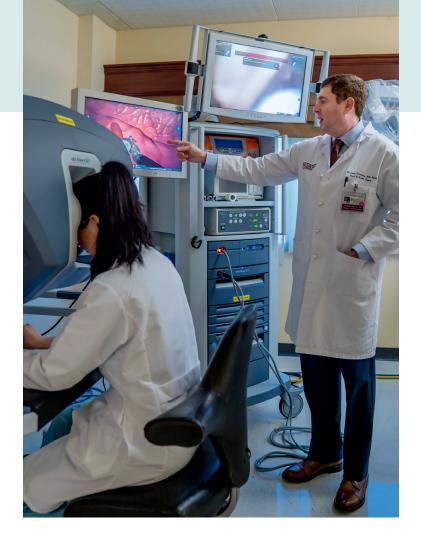
Under Dr. Hurst's surgical leadership, recent IBD Center outcomes research has focused on how medical therapy can impact surgery risks in cases of Crohn's disease and ulcerative colitis.

This is particularly important as new and innovative biologic medications, which can affect surgical healing, are becoming more readily available.

The IBD surgical team has long been committed to creating, and analyzing, old and new surgical techniques. Dr. Hurst, working with Fabrizio Michelassi, MD, recently published an account of their 25-year experience with the Michelassi stricture plasty, a technique designed to avoid sacrificing large amounts of bowel in long segments of stricturing Crohn's disease. UChicago Medicine has the most extensive experience in the world with this life-altering procedure.

In addition to creating new surgical techniques, the IBD Center also analyzes older procedures. One such example is the collaborative work with **Luka Pocivavsek**, **MD**, **PhD**, currently a first-year Vascular & Endovascular Surgery fellow. Working through the IBD Center, Dr. Pocivavsek and Dr. Hurst, seeking a better understanding of the consequences of restructuring or

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configuring intestine through the current surgical approaches, were able to partner with the Departments of Physics and Chemistry at the University to create a computer model of the geometrical effects on the intestine post-procedure. This model has given surgeons guidance on how to construct operations to maximize surgical outcomes.

"Being a part of UChicago creates the opportunity to collaborate in this way," said Dr. Hurst. "Not only can you work with other entities within UChicago Medicine, but there are many other resources available through the broader institution."

# **FACULTY HONORS**

**Benjamin Shogan, MD**, received the NIH ITM Pilot Award.

Benjamin Shogan, MD, and John C. Alverdy, MD, received the Chicago Surgical Society's Annual Resident Award in Basic Science.

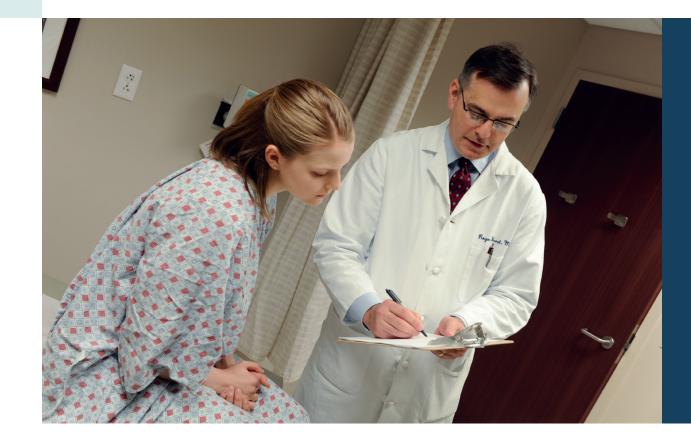
# **FACULTY LISTING**

**Professors of Surgery** 

Roger D. Hurst, MD Neil H. Hyman, MD

**Associate Professor of Surgery**Konstantin Umanskiy, MD

Assistant Professor of Surgery Benjamin Shogan, MD



"It's extremely rewarding to hear from our patients that the care they receive at UChicago Medicine allows them to continue living productive and fulfilling lives."

NEIL H. HYMAN, MD CHIEF, SECTION OF COLON & RECTAL SURGERY

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# Mustafa Hussain, MD, Director of the Center for the Surgical Treatment of Obesity, performs a duodenal switch on a patient with a BMI of 56 using advanced, minimally invasive techniques.

# General

# Integrated Approach to Neuroendocrine Tumors Unites Oncology Experts



MITCHELL C. POSNER, MD

THOMAS D. JONES PROFESSOR OF SURGERY

CHIEF, SECTION OF GENERAL SURGERY

PHYSICIAN-IN-CHIEF,
COMPREHENSIVE CANCER
CENTER

Neuroendocrine tumors, or NETs, are usually slow-growing tumors that are often left undetected in patients until an advanced stage. The incidence of NETs is continuously increasing, partially due to increased patient and clinician awareness (high profile patients like Steve Jobs and Aretha Franklin had NETs) and partially due to an increased detection through advanced imaging and other diagnostic modalities. For patients, finding the right hospital and physicians is critical to successfully combating these rare tumors.

"There are about 170,000 cases per year in the United States, and we have an estimated 400 to 500 newly diagnosed cases in Chicago per year," said Xavier M. Keutgen, MD, FACS, an endocrine surgeon with advanced expertise in treating neuroendocrine, thyroid, parathyroid and adrenal tumors. He is the Director of the University of Chicago Medicine Neuroendocrine Tumor Center and works closely with a multidisciplinary team that specializes in NETs.

At UChicago Medicine, the recently created Neuroendocrine Tumor Program offers unique therapy options for even the most advanced tumors, and an integrated approach to NET care means patients can meet with surgical and medical oncology experts during the same clinic visit.

"Our NET multidisciplinary clinic is unique in the Chicago area and allows patients to receive surgical and medical opinions at the same time," said Dr. Keutgen. "Given the complicated nature of these tumors, and the care team's need for collecting lots of information about patients to build long-term treatment plans, this collaboration allows us to build a comprehensive view of a path forward."

Dr. Keutgen also specializes in complex liver resections for advanced metastatic NETs of the gastrointestinal tract and pancreas. He is one of the few surgeons in the country with expertise in extensive removal of neuroendocrine liver tumor metastases through a "debulking surgery," which uses techniques that preserve a maximal amount of normal liver tissue while removing these tumors (parenchymalsparing liver surgery).

Dr. Keutgen has a broad interest in basic science, translational, and clinical research. His scholarly work has focused on understanding molecular mechanisms that are responsible for endocrine tumor formation, in addition to the discovery of novel therapeutic methods to inhibit tumor growth.

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"We have two clinical trials to open focusing on combining medical and surgical therapies for advanced NETs," said Dr. Keutgen.

"My laboratory is dedicated to discovering novel drug delivery mechanisms for NETs, as well as studying their microenvironment to figure out how we can trigger the immune system to react to and attack these slowgrowing tumors."



The American College of Surgeons
National Accreditation Program
for Breast Centers gave the

UChicago Medicine Breast Center
Full Accreditation status this year.

Breast surgeon Nora T. Jaskowiak, MD,
(second from right), is the Surgical
Director of the center.

# **FACULTY HONORS**

**John C. Alverdy, MD**, received the Francis Straus Clinical Mentorship Award.

**John C. Alverdy, MD**, and **Benjamin Shogan, MD**, received the Chicago Surgical Society's Annual Resident Award in Basic Science.

Peter Angelos, MD, PhD, was editor of *Difficult Decisions in Endocrine Surgery* (Boston: Springer, 2018). He was also named the Oliver Cope Lecturer at Harvard University in November 2018 and elected Director of the American Board of Surgery.

Jean Bao, MD, served on the Breast Disease Site Work Group Committee for the Society of Surgical Oncology (SSO) and as an SSO Expert Representative for the Committee of Appropriateness Criteria: Imaging of the Axilla for the American College of Radiology.

**Oliver Eng, MD**, was appointed to the Society of Surgical Oncology Training Committee.

**Mustafa Hussain, MD**, received the Distinguished Clinician Award (Junior Faculty).

Nora T. Jaskowiak, MD, was listed a Top Doc for Women and a Top Cancer Doctor by *Chicago* magazine Castle Connolly named her a Top Cancer Doctor, Top Women's Doctor, and Top Regional Doctor.

Xavier M. Keutgen, MD, FACS, received the Career Enhancement Award from the Neuroendocrine Tumor Specialized Program for Research Excellence at the University of Iowa and NCI/NIH, and the 40 under 40 Cancer Award.

**Jeffrey B. Matthews, MD, FACS**, co-edited the 8th edition of *Shackelford's Surgery of the Alimentary Tract* and the 11th edition of *Schwartz's Principles of Surgery*.

**Mitchell C. Posner, MD**, received the Distinguished Clinician Award (Senior Faculty).

**Kevin K. Roggin, MD**, was selected as UChicago Medicine's Education Program Director of the Year.

**Jennifer Tseng, MD**, received Honorable Mention for Excellence, Pritzker Summer Research Program, the University of Chicago Pritzker School of Medicine. Kiran Turaga, MD, MPH, was elected Chair of the Peritoneal Surface Disease Site Working Group of the Society of Surgical Oncology, and he conducted the "Chicago Consensus on Peritoneal Surface Malignancy" at the University of Chicago. He was also selected as a Bucksbaum Institute Senior Faculty Scholar and was appointed to the Society of Surgical Oncology Education Council.

# **FACULTY LISTING**

**Professors of Surgery** 

John C. Alverdy, MD
Peter Angelos, MD, PhD
Nora T. Jaskowiak, MD
Edwin L. Kaplan, MD
Jeffrey B. Matthews, MD, FACS
Mitchell C. Posner, MD
Kevin K. Roggin, MD

## **Associate Professors of Surgery**

Mustafa Hussain, MD Vivek N. Prachand, MD Kiran Turaga, MD, MPH

# **Assistant Professors of Surgery**

Jean Bao, MD
Oliver Eng, MD
Xavier M. Keutgen, MD, FACS
Jennifer Tseng, MD

# Clinical Associate Professor of Surgery

Patricia Turner, MD

# **Research Professor**

Olga Y. Zaborina, PhD



"The multidisciplinary clinic allows patients to receive surgical and medical opinions at the same time."

XAVIER M. KEUTGEN, MD, FACS | ASSISTANT PROFESSOR OF SURGERY

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# David. M. Frim, MD, PhD, and Anita Bhansali, MD, work to implant monitoring electrodes into the brain of a patient. Dr. Frim specializes in caring for children and adults with central nervous system congenital anomalies.

# Dr. David Frim Brings New Hope for People with Congenital Nervous System Disease



DAVID M. FRIM, MD, PHD
RALPH CANNON PROFESSOR
OF SURGERY AND PEDIATRICS
CHIEF, SECTION OF
NEUROSURGERY

At 18 months, Margaret Hackett was diagnosed with a rare condition called craniometaphyseal dysplasia, which causes thickening of the bones in the skull. Despite living an active life, when Margaret began experiencing severe headaches as she started junior high, she and her family decided to seek help.

Margaret was diagnosed with hydrocephalus, a central nervous system (CNS) congenital anomaly that occurs when there is too much fluid in the brain's ventricles. After several surgeries, physicians told the Hackett family that there was nothing more they could do.

Left without guidance, Margaret's parents, Raynelle and Bill, anxiously searched for help. "I'll never forget that feeling of desperation, sitting in the hotel lobby and trying to find someone who could help us," said Bill.

Margaret conducted her own search online and came across a video of a doctor performing surgery on a young child with a similar condition. The physician in the video was **David M. Frim, MD, PhD**, Professor of Surgery and Chief of Neurosurgery. Dr. Frim specializes in caring for children and adults with CNS congenital anomalies. This neurosurgery program is one of the few in the country dedicated to providing comprehensive care for both children and adults with these types of anomalies.

Although Dr. Frim had never seen a case quite like Margaret's, he was willing to help.

Soon after the Hacketts found Dr. Frim, the bone growth at the base of Margaret's skull became increasingly aggressive, cutting off the flow of oxygen and blood to her brain and contributing to the development of another condition, Chiari malformation, in which brain tissue extends into the spinal canal. Dr. Frim and his team performed surgeries every three to six months to remove excess bone from the base of Margaret's skull. To provide additional room in her skull, Dr. Frim even performed a radical procedure—removing the back half of her skull, expanding it, putting it back together, and then repositioning it.

Since her initial diagnosis of hydrocephalus, Margaret, now 33, has undergone 37 brain and spinal cord surgeries.

"Dr. Frim always listened to our concerns," said Bill. "His advocacy for Margaret has built a deep sense of trust; Margaret has received the world's best care. The University of Chicago Medicine has been like a second family to us. We've gotten to know the nurses, interns, and residents, and they all know Margaret. It's an amazing, warm community."

DEPARTMENT OF SURGERY | NEUROSURGERY | NEUROSURGERY |



Margaret, Bill, and Raynelle Hackett

Margaret Hackett's determination and resiliency in the face of several complex medical conditions is an inspiration. She, along with her parents, hopes to help others whose lives are affected by similar circumstances. The Hackett family recently made a \$2.5 million gift to establish the Margaret Hackett Family Center Program in CNS Congenital Anomalies at the University of Chicago Medicine. The program seeks to create a centralized source of information on congenital anomalies, so patients and families can find resources and a community to help them better understand their diagnoses and options. In addition, the program will establish a network of medical professionals with expertise in treating patients with such anomalies and drive research focused on advancing understanding of these conditions and developing improved treatments.

"The program will help propel our research efforts, including determining which treatment approaches work best," said Dr. Frim. "Every step forward allows us to help more patients and families here in Chicago and beyond."

#### **FACULTY HONORS**

Issam A. Awad, MD, MSc, MA, was selected to deliver the Ninth Annual William L. Young/Allison Raaen Lecture at the University of California, San Francisco.

Issam A. Awad, MD, MSc, MA, and his Neurovascular Surgery Research Team presented at the American Heart Association's International Stroke Conference. He was also elected to the Association of American Physicians.

**David M. Frim, MD, PhD**, received a gift of \$2.5 million to educate scholars, students, faculty, patients, and their families in areas related to congenital anomalies of the nervous system.

**Le Shen, PhD**, received a Discovery Award from the Department of Defense's CDMRP Peer Reviewed Medical Research Program.

**Peter Christian Warnke, MD**, received an NIH Brain Initiative Grant for neural prosthesis and a grant for a movement disorder symposium at the University of Chicago Center in Beijing.

# **FACULTY LISTING**

# **Professors of Surgery**

Issam A. Awad, MD, MSc, MA David M. Frim, MD, PhD Javad Hekmatpanah, MD Peter Christian Warnke, MD Bakhtiar Yamini, MD

# **Assistant Professors of Surgery**

Paramita Das, MD, MS
Peleg Horowitz, MD, PhD
Edwin Ramos, MD

# **Clinical Professor of Surgery**

Leonard I. Kranzler, MD, JD

# **Clinical Associates**

Martin Herman, MD, PhD Christian W. Sikorski, MD

# **Research Assistant Professor**

Le Shen, PhD



"Every step forward allows us to help more patients and families here in Chicago and beyond."

DAVID M. FRIM, MD, PHD | CHIEF OF NEUROSURGERY

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# Ramon Ezequiel Quintana, a bilateral cochlear implant patient, shares a moment with his mother. Cochlear implants bypass damaged portions of the ear and directly stimulate the auditory nerve using an electrode. Signals generated by the implant are recognized

# Thirty Million Words Initiative Connects Medicine, Education, and Community



**NISHANT AGRAWAL, MD** PROFESSOR OF SURGERY CHIEF, SECTION OF OTOLARYNGOLOGY-**HEAD & NECK SURGERY** DIRECTOR OF HEAD & NECK SURGICAL ONCOLOGY

Dana L. Suskind, MD, Professor of Surgery and Pediatrics, still remembers meeting the parents of Ramon Ezequiel Quintana. These new parents faced the hardest of circumstances: their child, born prematurely, had no ability to hear.

"I still remember sitting at the conference room table with them. They were so scared, but so determined to give their little one all the opportunities in life," said Dr. Suskind, who is also the Director of the Pediatric Cochlear Implantation Program at the University of Chicago Medicine.

Thanks to early diagnosis of Ramon's hearing loss, his parents had an enormous opportunity to salvage the devastating diagnosis: to work with Dr. Suskind and allow her to perform cochlear implantation on their son. If successful, this procedure would give Ramon a fighting chance to develop speech and language skills on par with his peers born with complete hearing ability. Successful cochlear implantation requires neuroplasticity: the ability for a brain to develop with new stimuli, like spoken language. Although the brain may respond to spoken language at all ages to some degree, this outside stimulus is essential to healthy brain development in the early years.

Working closely with Dr. Suskind, Ramon's parents made the brave decision to intervene early in their child's diagnosis and opt for surgery.

"It was amazing that they embraced the implant," Dr. Suskind said.

Because he was implanted shortly after birth a critical period of rapid brain development— Ramon was not only able to hear sounds, he was also able to interpret them and build a rich arsenal of language. Today, Ramon is an exuberant seven-year-old thriving among his classmates and peers, and on target to reach his full potential for learning. He can sit at a table, play games, and receive three-step direction without repetition. His interactions are vibrant.

"It's so fun to see him grow and see him take off from where he began," said Michelle Havlik, MHS, Ramon's speech pathologist, who has led his continued care in the years after surgery. "The struggle has always been to not laugh at him. He's a charming kid and randomly screams out silly words to make us laugh. To go from not speaking to speaking too much is amazing for his parents to see."

Although the cochlear implant is a groundbreaking piece of technology, it actually isn't the main puzzle piece on the road from

by the brain as sound

hearing loss to hearing. Rather, it is a conduit to what is truly essential for language development: a rich language environment.

At the end of the day, it was Ramon's parents who ensured their son's surgery was successful by providing him with an environment rich in parental talk and interaction at home.

Unfortunately, not all children grow up in rich language environments. A landmark study from researchers Betty Hart and Todd Risley (1995) demonstrated that children from lower-income households hear, on average, about thirty million fewer words than their peers from more affluent homes during the critical developmental period of birth to age four. Wanting to support not just hearing-impaired children but all children, in 2010 Dr. Suskind launched the Thirty Million Words (TMW) Initiative, a translational research program designed to provide parents with the tools and knowledge to enrich their children's home language environment. Today, the TMW Center for Early Learning + Public Health develops and scales interventions that place parents and caregivers at the center of their children's education. The center harnesses technology, works across systems, and informs how to bring best practices and interventions that work to scale.



In April 2014, the TMW Initiative was selected for a PNC Foundation multi-year grant supporting a large-scale, five-year longitudinal study of the program's impact on vocabulary development and school readiness in 200 to 250 children. TMW is slated to be implemented at the community level with a center-based approach that includes day care facilities, with the long-term goal of reaching parents and caregivers at the citywide level and beyond.

Just as cochlear implantation represents an incredible intersection between education and health at UChicago Medicine, so does the TMW Center. Ultimately, the initiative hopes to support a population-level shift in knowledge and behavior that leads to a future where all children start formal schooling ready to learn and thrive.

"The fact that Ramon is on target flies in the face of every statistic. At the TMW Center, we hope to help change the status quo of outcomes for all children." said Dr. Suskind.

#### **FACULTY HONORS**

Nishant Agrawal, MD, was awarded an Italy/USA cooperative grant for collaboration on HNSCC, a federal grant from NIH–Johns Hopkins University. He was also invited to join the Previously Untreated Locally Advanced Task Force of the NCI Head and Neck Cancer Steering Committee.

Elizabeth Blair, MD, became
President Elect of the Chicago
Metropolitan Chapter of the
American College of Surgeons
(ACS) and a member of the
national Board of Governors
for ACS. She was also published
in the New England Journal
of Medicine.

Michael B. Gluth, MD, published a textbook, *The Chronic Ear*, which has now been translated and released in Spanish. He was also guest professor and keynote lecturer for the International Microsurgery Workshop of the Ear and Skull Base at Fudan University in Shanghai, China, in November 2018.

Zhen Gooi, MD, and Nishant Agrawal, MD, received funding from the UChicago-HKU Global Partnership Fund.

Jayant M. Pinto, MD, was selected as a Bucksbaum Institute Senior Faculty Scholar, an honor that recognizes leadership in physicianpatient interactions and professionalism.

# **FACULTY LISTING**

#### Professors of Surgery

Nishant Agrawal, MD Fuad Baroody, MD Elizabeth Blair, MD Jayant M. Pinto, MD Louis Portugal, MD Dana L. Suskind, MD

# Associate Professor of Surgery

Michael B. Gluth, MD

# **Assistant Professors of Surgery**

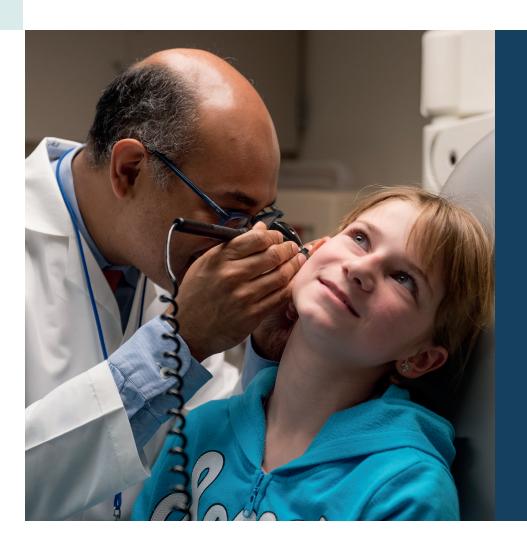
Zhen Gooi, MD Andrea Shogan, MD

# **Clinical Professor of Surgery**

Anthony J. Geroulis, MD

# **Clinical Associates**

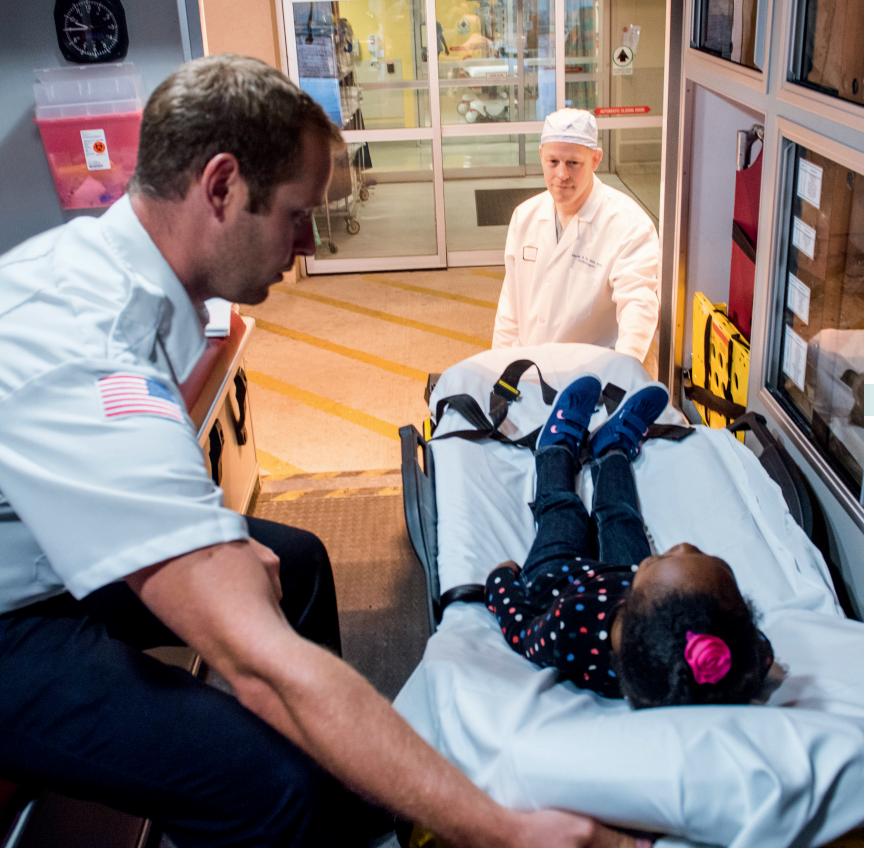
Nadieska Caballero, MD David Chan, MD Alan Harvey, DMD Anil R. Shah, MD



"At the TMW Center for Early
Learning + Public Health, we hope
to change the status quo of outcomes
for all children."

DANA L. SUSKIND, MD PROFESSOR OF SURGERY AND PEDIATRICS

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# Pediatric surgeon Mark Slidell, MD, MPH, meets an ambulance at Comer Children's Hospital. UChicago Medicine provides a plethora of services for children and their families, who are critically injured or exposed to violence on the South Side of Chicago.

# Strengthening a Rich History of Trauma Care Services for Children and Families



JESSICA J. KANDEL, MD

MARY CAMPAU RYERSON PROFESSOR OF SURGERY

SURGEON-IN-CHIEF,
THE UNIVERSITY OF CHICAGO
MEDICINE COMER CHILDREN'S
HOSPITAL

CHIEF, SECTION OF PEDIATRIC SURGERY

While the University of Chicago Medicine's adult trauma center celebrated its first birthday, the pediatric trauma center—opened in November 1986 by the City of Chicago Department of Public Health—marked its 32nd year. UChicago Medicine's Comer Children's Hospital is a designated Level 1 Pediatric Trauma Center, which means it is equipped to provide the highest level of surgical care for the most severely injured children. Comer Children's houses the only such pediatric trauma center on the South Side of Chicago.

"The Level 1 Adult Trauma Center has enhanced the capabilities of pediatric trauma and burn services, and provided a comprehensive system to treat the full range of trauma injuries in patients of all ages," said Mark Slidell, MD, MPH, Associate Professor of Surgery and Director of Pediatric Trauma.

The pediatric trauma team has worked in partnership with the adult trauma center since day one. Dr. Slidell was a part of the selection process for adult trauma surgeons, and the two teams frequently share learnings and experiences.

"The Level 1 Adult Trauma Center is helping to elevate what we do," said Dr. Slidell, "so we can strengthen our work as a cutting-edge facility. We constantly strive to improve patient care and protocols, violence recovery, and quality initiatives."

UChicago Medicine's pediatric trauma surgeons not only aim to save lives in the moment, but also to save the bright futures that lie ahead. "Kids are fighters; they bounce back, but they should have the opportunity to have a childhood and not be exposed to violence," said Dr. Slidell. "We are all responsible for the change we wish to see in our community."

UChicago Medicine's unique approach to pediatric trauma care provides an ecosystem of services for children and their families who are critically injured or exposed to violence on the South Side of Chicago. These efforts received a big boost thanks to a \$9.1 million gift by the Ellen & Ronald Block Family Foundation and the Hassenfeld Family Foundation.

The gift will integrate and expand clinical and community services under the Block Hassenfeld Casdin (BHC) Collaborative for Family Resilience. This program helps young patients and their families to recover from the immediate and long-lasting effects of trauma, which may be caused by gun injury, domestic or sexual violence, or child abuse.

critically injured or exposed to violence on the South Side of Chicago.

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The BHC Collaborative for Family Resilience is based on the premise that trauma caused by violence is best treated holistically—starting with personalized care of the child and family in the medical center, and continuing through discharge and recovery, even extending into the home, school, and neighborhood—through a network of community resources.

Key components of the BHC Collaborative involve:

- Helping children navigate their hospital experience by providing 24/7 Child Life interventions in the Comer Children's emergency room and support for children whose loved ones are treated at the Level 1 Adult Trauma Center.
- Providing wraparound resources to support the holistic needs of children and families experiencing trauma by linking them to specialized counseling services, including Healing Hurt People-Chicago, the REACT program, and other community-based social support.
- Investing in community-based organizations that provide critical resources aimed at helping children, families, and the community build long-term resiliency from trauma and violence.



# **FACULTY HONORS**

Nikunj K. Chokshi, MD, was named Director of the Pediatric ECMO Program at UChicago Medicine Comer Children's Hospital and was awarded a pilot grant from the Bucksbaum Institute for Clinical Excellence for "Improving Informed Consent for Extracorporeal Life Support (ECLS) using Video Simulations to Educate Family."

Jessica J. Kandel, MD, was invited to be the David Tapper Visiting Professor at Seattle Children's Hospital.

**Deborah S. Loeff, MD**, is the Chair of the Ethics Committee for the American Pediatric Surgical Association.

Bethany Slater, MD, FACS, was awarded a pilot grant from the Bucksbaum Institute for Clinical Excellence to study surgeon opioid prescribing for umbilical hernia repair.

Mark Slidell, MD, MPH, was appointed an Associate Junior Faculty Scholar, Bucksbaum Institute for Clinical Excellence. He was also awarded a pilot grant from the Bucksbaum Institute for "Improving a Patient-Centered Approach to Reducing Radiation Exposure in Adolescent Trauma Patients through Selective Computed Tomography (CT) Scan Use in Pediatric Victims of Blunt Abdominal Trauma."

# **FACULTY LISTING**

# Professors of Surgery

Jessica J. Kandel, MD Thomas Lee, MD

# **Associate Professors of Surgery**

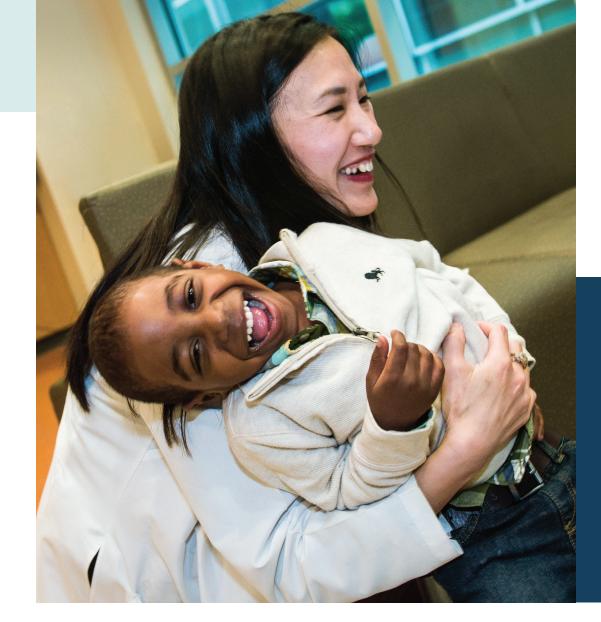
Grace Z. Mak, MD Mark Slidell, MD, MPH

# **Assistant Professors of Surgery**

Nikunj K. Chokshi, MD
Brian Jones, MD
Deborah S. Loeff, MD
Manish Raiji, MD
Carmelle Romain, MD
Kathryn Rowland, MD, MPHS
Bethany Slater, MD, FACS

# **Clinical Associate**

Arnold G. Coran, MD



"Kids are fighters; they bounce back, but they should have the opportunity to have a childhood and not be exposed to violence."

MARK SLIDELL, MD, MPH | ASSOCIATE PROFESSOR OF SURGERY, DIRECTOR OF PEDIATRIC TRAUMA

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# Plastic and reconstructive surgeons Amanda Silva, MD, and Rebecca Garza, MD, have expanded breast cancer reconstruction services to patients at UChicago Medicine's Silver Cross, Ingalls,

and Orland Park facilities along with establishing a cosmetic surgery program.

# New Faculty Expand Access and Bring a New Perspective to UChicago Medicine



DAVID W. CHANG, MD
PROFESSOR OF SURGERY
CHIEF, SECTION OF PLASTIC
& RECONSTRUCTIVE SURGERY
DIRECTOR, MICROSURGERY
FELLOWSHIP

When it comes to the future of Plastic & Reconstructive Surgery, **Amanda Silva, MD**, and **Rebecca Garza, MD**, have their eyes fixed firmly on the horizon.

Both Dr. Silva and Dr. Garza have recently joined the faculty of the University of Chicago Department of Surgery and are providing a spectrum of surgical care to individuals in the Chicagoland area. In fact, they've already expanded breast cancer reconstruction services to patients at the University of Chicago Medicine's Silver Cross, Ingalls, and Orland Park facilities.

"We are able to provide breast reconstruction for patients who wouldn't have otherwise had access," said Dr. Garza.

Dr. Silva also has a strong clinical interest in head and neck reconstruction for cancer and trauma patients, including facial nerve injuries. Her varied surgical expertise dovetails with her research in improving patient outcomes and focusing patient-centered care in head and neck reconstruction and collaboration among different specialties.

"I trained here at UChicago, and it always felt like a family environment to me," said Dr. Silva. "Having supportive colleagues and good relationships between specialties is not the norm everywhere. It's refreshing and nice to come back here. The addition of the adult trauma center adds another layer of experience to the work I do and provides another way to give back to the community."

After training with **David W. Chang, MD**,
Chief of Plastic & Reconstructive Surgery
at UChicago Medicine, Dr. Garza also
became interested in surgical treatment of
lymphedema—a long-term condition that
can occur due to damage to or removal
of lymph nodes from an infection, trauma,
cancer treatment, or surgery. She performs
lymphovenous bypass, vascularized lymph
node transfers, and debulking procedures
to help patients with lymphedema, and
is actively studying the outcomes of
these surgeries.

In addition to their reconstruction work, Dr. Silva and Dr. Garza have helped build a cosmetic surgery program at UChicago Medicine, the first of its kind at this institution. The expansion of these

services provides patients with the opportunity to reach their ideal aesthetic goals and improve their quality of life.

Among her many interests, Dr. Garza also researches gender disparity among surgeons and trainees, including parenthood issues, the lack of uniformity in policies about maternity and paternity leave, and how to solve them.

"We should flourish in both home lives and careers, not either-or," said Dr. Silva. Both Dr. Silva and Dr. Garza are committed to studying institutional trends in female leadership today and how it can be different for the next generation of leaders in surgery.



# **FACULTY HONORS**

**David W. Chang, MD**, was elected President of the World Society for Reconstructive Microsurgery.

Lawrence J. Gottlieb, MD,

was an invited speaker at the 2018 American Society for Reconstructive Microsurgery Annual Meeting.

Russell R. Reid, MD, PhD,

was appointed the Bernard
G. Sarnat MD Professor in
Craniofacial Biology Research.
He also received the Bucksbaum
Institute Pilot Grant Award
and the Best Paper award
from the American Society
of Maxillofacial Surgeons.

# **FACULTY LISTING**

**Professors of Surgery** 

David W. Chang, MD Lawrence J. Gottlieb, MD Raphael Lee, MD Russell R. Reid, MD, PhD Lawrence S. Zachary, MD

**Assistant Professors of Surgery** 

Rebecca Garza, MD Amanda Silva, MD

**Clinical Professor of Surgery** 

Julius W. Few, MD

**Clinical Associates** 

Bruce Bauer, MD
Alan Chen, MD
Sara R. Dickie, MD
David P. Geldner, MD
Lawrence Iteld, MD
Sanjay Naran, MD
Michael Stosich, DMD, MS, MS
David Teplica, MD



"We are able to provide breast reconstruction for patients who wouldn't have otherwise had access."

REBECCA GARZA, MD | ASSISTANT PROFESSOR OF SURGERY

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# UChicago Medicine patient and former longtime smoker Marilyn Nesby with thoracic surgeon Jessica S. Donington, MD, MDSR, MSCR, FACS. Because Nesby was at high risk for developing lung cancer, she was recommended for a CT scan that caught the cancer at an early stage.

# Early Detection Improves Outcomes for Lung Cancer Patients



JESSICA S. DONINGTON, MD,
MDSR, MSCR, FACS
PROFESSOR OF SURGERY
CHIEF, SECTION OF THORACIC
SURGERY

Proactive screenings for lung cancer with a low dose CT scan can help detect the disease in its early stages, when it's much easier to treat and cure. Early stage lung cancer typically has no symptoms, and by the time symptoms appear, the cancer has already developed to an advanced stage. CT screenings are therefore recommended for individuals at high risk for developing lung cancer. It is through early detection and screening that our physicians can begin treatment sooner rather than later, to reduce the number of patients who progress to end-stage cancer or die from the disease.

A former longtime smoker, 72-year-old
Marilyn Nesby was at high risk for developing
lung cancer, which made her a good candidate for an early screening. Although she
was in reasonably good health, 50 years
of heavy smoking made her primary care
physician recommend that she be screened
for lung cancer. Nesby was recommended
for a low-dose CT scan; the scan detected
cancer at an early stage, before it had
the chance to spread rapidly. The speedy
and painless scan uses a small dose of
radiation to create detailed pictures of the
lungs. When a deformity was detected

on Nesby's upper right lung, she was referred to the lung cancer team at the University of Chicago Medicine.

Jessica S. Donington, MD, MDSR, MSCR, FACS, Chief of Thoracic Surgery, used a minimally invasive procedure to remove the tumor in Nesby's upper right lung and 10 nearby lymph nodes. This fairly nonintrusive procedure required just three small incisions, and Nesby was able to go home three days later. Because there were no traces of cancer in the lymph nodes, there was no need for chemotherapy or radiation therapy.

"As with most patients with Stage 1 lung cancer, Marilyn now has a very high chance to be cured," said Dr. Donington. Upon learning that she had cancer and needed surgery, Nesby had a great amount of fear, but she was optimistic and had robust faith in our multidisciplinary team and their plan for her care. "I turned to my faith and then I wasn't worried anymore," Nesby said. "And then once I met Dr. Donington and her team, I knew everything would be all right."

DEPARTMENT OF SURGERY | THORACIC at an early stage.

# TAKING PROACTIVE STEPS TO BATTLE LUNG CANCER

Lung cancer prehabilitation is a fundamental opportunity to increase treatment options, reduce treatment-related morbidity, and improve physical and mental health outcomes. After a patient receives a cancer diagnosis, the prehabilitation process can include physical and mental health assessments to prepare the body and mind for the intensity of cancer treatment. Pinpointing current areas of concern and anticipating future complications are the first vital steps in bettering health outcomes and lowering hospital costs.

Mark K. Ferguson, MD, Professor of Surgery, is a strong advocate for cancer prehabilitation at the University of Chicago Medicine. Dr. Ferguson is part of a multidisciplinary team that is implementing a new prehabilitation program this year, which will focus on how this system of care influences the stamina, strength, and balance of patients. "Our aim is to improve survival in lung cancer patients by expanding their treatment options and improving their surgical outcomes," said Dr. Ferguson.

Dr. Ferguson and his team have been working for the last four years on frailty and prehabilitation in terms of morphomics, the measurement of body component density or area on CT scans. This work has

demonstrated that patients who are underweight, have low muscle or fat area, or have low bone density have lower than expected survival after their lung cancer treatment.

Being underweight is also associated with an increased risk of postoperative complications.

Prehabilitation is recommended for most patients prior to lung cancer surgery. It can consist of regular unsupervised exercise at home or may include a formal physical therapy program. The duration may be two to six weeks, depending on a patient's needs and progress. By improving strength, stamina, and nutrition, patients have improved lung function, decreased risk of postoperative complications, and improved survival from their lung cancer. It is likely that, in the near future, such programs will be routinely available in the community, even permitting patients who travel a long distance to receive their care here to participate in prehabilitation.

Dr. Ferguson specializes in the surgical management of diseases of the lungs, esophagus, and thymus. His research interests include risk analysis, long-term outcomes after lung resection and esophageal resection, development of simulation methods for surgical training, and advanced techniques in surgical education.

# **FACULTY HONORS**

Jessica S. Donington, MD, MDSR, MSCR, FACS, was named the American Society of Radiation Oncology 2018 Honorary Member.

UChicago Medicine's **Thoracic**Oncology Team was awarded the
IASLC (International Association
for the Study of Lung Cancer)
Foundation Cancer Care Team
Award for North America in 2018.

#### **FACULTY LISTING**

**Professors of Surgery** 

Jessica S. Donington, MD, MDSR, MSCR, FACS Mark K. Ferguson, MD



"Our aim is to improve survival in lung cancer patients by expanding their treatment options and improving their surgical outcomes."

MARK K. FERGUSON, MD | PROFESSOR OF SURGERY

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# UChicago Medicine Performs Historic Back-to-Back Triple-Organ Transplants



**JOHN FUNG, MD, PHD** PROFESSOR OF SURGERY CHIEF, SECTION OF TRANSPLANTATION CO-DIRECTOR. TRANSPLANTATION INSTITUTE

Two 29-year-old patients from Michigan and Illinois are recovering following backto-back triple-organ transplants to replace their failing hearts, livers, and kidneys, marking a first in US health care history.

The operations, which lasted more than 17 and 20 hours each from December 19 to 21, 2018, marked the first time a US hospital ever performed more than one of these complex procedures within one year, much less within 27 hours. These cases are the 16th and 17th times this type of tripleorgan transplant has been performed in this country.

While the University of Chicago Medicine teams spent nearly two months preparing for these cases, they hadn't planned for the near-simultaneous occurrence of two triple-organ transplants.

"We never in our wildest dreams imagined both would take place at virtually the same time," said John Fung, MD, PhD, Chief of Transplantation and Co-Director of the UChicago Medicine Transplantation Institute. "Pulling this off can feel like trying to perform a high-wire ballet in the middle of running a marathon. But we were always confident in our patients, as well as our team's abilities."

Sarah McPharlin, an occupational therapist from Grosse Pointe Woods, Michigan, received her first heart transplant when she was just 12 after contracting a rare inflammatory condition of the heart called giant cell myocarditis. But a variety of complications over the next 17 years led to the failure of her transplanted heart. Fluid began to accumulate in her legs and abdomen, damaging her liver and kidneys. She consulted with transplant teams at several other hospitals, all of which told her they would be unable to perform the necessary triple-organ transplant. She was eventually referred to UChicago Medicine.

Daru Smith was first diagnosed with multisystem sarcoidosis five years ago. The rare and difficult-to-diagnose condition causes clusters of inflammatory cells to form in organ tissues, which can sometimes lead to an irregular heart rhythm and even heart failure. In addition to impacting his heart, sarcoidosis led to significant liver and kidney dysfunction.

On December 18, the first call about matching organs came for Smith. A day later, the same call about a match came for

Triple-organ transplant (heart-liver-kidney) recipients Sarah McPharlin and Daru Smith just a few weeks after their surgeries. The back-to-back operations marked the first time a US hospital has ever performed more than one of these complex procedures within one year, let alone within 27 hours.

McPharlin. Surgical teams from UChicago Medicine were dispatched to two different hospitals—one in Illinois and one out of state—to retrieve the sets of organs.

"The real heroes are the donors," said **Talia Baker, MD**, Associate Professor of Surgery and the Surgical and Program Director of UChicago Medicine's Liver Transplant Program. "It's always amazing to me that in the face of whatever unknown tragedy just happened to them, these donor families are able to have the peace of mind to consider donation and to give a gift of life to complete strangers."

Both triple-organ transplant surgeries followed a similar pattern:

- The heart transplants were performed first by Valluvan Jeevanandam, MD, Chief of Cardiac Surgery, who has now performed the heart transplants in all six of the institution's heart-liver-kidney surgeries.
- That was followed by the liver transplants, performed by Dr. Baker.
- Finally, each patient received a new kidney during the last stage of surgery, which was performed by Yolanda T. Becker, MD,
   Professor of Surgery and Director of the Kidney and Pancreas Program.



"We had a 22-person operating room team of surgeons, nurses, anesthesiologists, and others who rotated in and out—relay style—as each case progressed," Dr. Becker said. "We had prepared for each surgery to take between 24 and 32 hours. Instead, each surgery took significantly less time as the teams efficiently worked together."

OChicago Medicine has a long history of breakthroughs in transplantation dating back to 1904, when cardiac surgeon Alexis Carrel, MD, developed the technique for joining severed ends of blood vessels together. This procedure is what made organ transplantation possible, and Carrel received a Nobel Prize in 1912 for his work. The medical center also performed the first successful living-donor liver transplant in the world, the first segmental and split-liver transplants in the US, and the first pancreas transplant in Illinois.

# **FACULTY HONORS**

**Yolanda T. Becker, MD,** received the 2018 Friend of Transplant Nursing Award.

Anita S. Chong, PhD, received the 2017 award for Best Basic Science Paper in the *American Journal of Transplantation*.

#### **FACULTY LISTING**

# **Professors of Surgery**

Yolanda T. Becker, MD Anita S. Chong, PhD John Fung, MD, PhD J. Michael Millis, MD

# **Associate Professors of Surgery**

Talia Baker, MD Piotr P. Witkowski, MD, PhD

# Assistant Professor of Surgery

Diego di Sabato, MD

# **Clinical Associate**

Dympna Kelly, MD



"The real heroes are the donors.

It's always amazing to me that donor families are able to give a gift of life to complete strangers."

TALIA BAKER, MD | ASSOCIATE PROFESSOR OF SURGERY

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# Selwyn O. Rogers, Jr., MD, MPH, FACS, Chief of Trauma & Acute Care Surgery, leads a team of dedicated surgeons who are committed to providing exceptional care to trauma patients on the South Side of Chicago.

# The University of Chicago Brings Trauma Care to the South Side



SELWYN O. ROGERS, JR., MD, MPH, FACS

PROFESSOR OF SURGERY

CHIEF, SECTION OF TRAUMA
& ACUTE CARE SURGERY

FOUNDING DIRECTOR,

TRAUMA CENTER

EXECUTIVE VICE PRESIDENT

FOR COMMUNITY HEALTH

ENGAGEMENT

After years of anticipation and planning, the University of Chicago Medicine re-opened the adult trauma center on May 1, 2018. The successful launch was a result of rigorous training, preparation, and multidisciplinary collaboration across the entire institution.

It has been an eventful inaugural year. We have provided care for over 3,000 patients, 1,000 of whom were victims of penetrating trauma. That's a rate of almost 40 percent penetrating trauma patients, one of the highest in the country. This remarkable achievement could not have been realized without the diligence, dedication, and determined effort of our entire organization.

A smooth and seamless workflow was critical to success. Our Trauma Service Clinical Director, Deb Allen, and Trauma Patient Care Manager, Harleeann Demore, have done an outstanding job facilitating processes, systems, and performance improvement in an ongoing fashion.

We salute the efforts of our anesthesia colleagues who ensured smooth operating room integration and care in the SICU. We applaud the efforts of our nursing staff, from the Emergency Department to the ORs to the ICUs and floors, who provided exemplary care. We are grateful for our colleagues in all the Department of Surgery sections who

have participated in the care of our patients.

Every aspect of the institution, including social work, chaplaincy, environmental services, public safety, and countless others, contributed to the success of the trauma program.

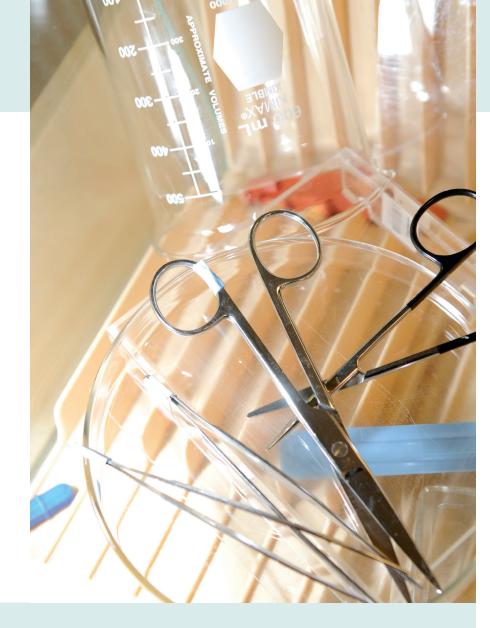
Recovery care is also a vital component of the healing process for trauma victims. To help expand those services, the Violence Recovery Program was launched in partnership with UChicago Medicine's Urban Health Initiative. The program connects victims of violence and their close contacts to violence recovery specialists, social workers, and chaplaincy in order to locate the resources the victims need for support and recovery. Philanthropic backing from the McCormick Foundation aided in bolstering recovery services offered by a number of community-based organizations.

Most importantly, we dedicate this year to the patients and families we have had the privilege of caring for. Meeting the community's need for adult trauma care on the South Side in partnership with UChicago Medicine has been hard fought. We look forward to the continued growth of the program over the coming years with the addition of a trauma fellowship as well as partnerships on violence prevention and recovery.

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to trauma patients on the South Side of Chicago.

DEPARTMENT OF SURGERY | TRAUMA & ACUTE CARE



Our current trauma faculty includes Selwyn O. Rogers, Jr., MD, MPH, FACS; Kenneth L. Wilson, MD, FACS; Peter Bendix, MD, MPH; Jennifer Cone, MD, MHS; David Hampton, MD, MEng; and Priya Prakash, MD. In the fall, we saw Gary C. An, MD, with his wisdom and pragmatism, leave for the University of Vermont. We have recruited two new faculty members to join our ranks. Brian Williams, MD, FACS, joined us from UT Southwestern and Parkland Hospital. He will serve as the SICU Co-Director and in a leadership role in launching a surgical critical care fellowship. Tanya Zakrison, MD, MPH, FACS, FRCSC, will be joining us from the University of Miami and Ryder Trauma Center, and will serve as Director of the trauma research programs. We welcome both to our section.

# **FACULTY HONORS**

Kenneth Wilson, MD, FACS, was deployed in the US Army for six months to provide surgical care to soldiers in the Middle East.

# **FACULTY LISTING**

### **Professor of Surgery**

Selwyn O. Rogers, Jr., MD, MPH, FACS

# **Associate Professors of Surgery**

Brian Williams, MD, FACS Kenneth Wilson, MD, FACS Tanya Zakrison, MD, MPH, FACS, FRCSC

# **Assistant Professors of Surgery**

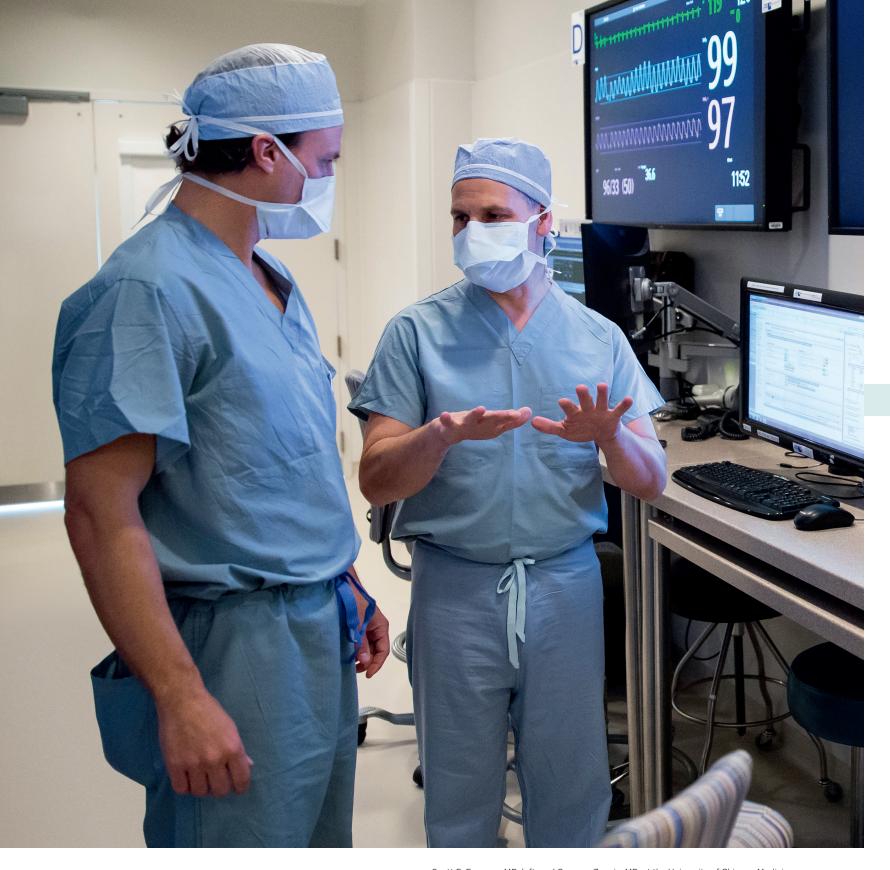
Peter Bendix, MD, MPH
Jennifer Cone, MD, MHS
David Hampton, MD, MEng
Priya Prakash, MD



"It has been an eventful inaugural year. We have provided care for over 3,000 patients, 1,000 of whom were victims of penetrating trauma."

SELWYN O. ROGERS, JR., MD, MPH, FACS | TRAUMA CENTER FOUNDING DIRECTOR

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# Scott E. Eggener, MD, left, and Gregory Zagaja, MD, at the University of Chicago Medicine Center for Care and Discovery. Dr. Eggener leads the UChicago Medicine High-Risk and Advanced Prostate Cancer Clinic, which was created to better assist men at risk for prostate cancer.

# Delivering Expertise and Cutting-Edge Treatment Options in the Fight against Prostate Cancer



ARIEH L. SHALHAV, MD
PROFESSOR OF SURGERY
CHIEF, SECTION OF UROLOGY
DIRECTOR, MINIMALLY INVASIVE
UROLOGY
DIRECTOR, ROBOTIC SURGERY

# STATE-OF-THE-ART CARE FOR MEN AT HIGH RISK FOR PROSTATE CANCER AND THOSE WITH ADVANCED DISEASE

Prostate cancer is one of the most common, and deadly, cancers for American men. The University of Chicago Medicine High-Risk and Advanced Prostate Cancer Clinic (UCHAP) was created to better assist men at risk for the disease. UCHAP was founded in late 2018 to improve care and enhance research opportunities for men with an elevated risk of developing prostate cancer and for those newly diagnosed with locally advanced or metastatic disease. The program, led by Scott E. Eggener, MD, provides a comprehensive genetic evaluation and screening plan for men with increased prostate cancer risk. For those recently diagnosed with aggressive forms of prostate cancer, the team also offers novel treatment strategies and access to leading-edge clinical trials.

"UCHAP is a response to an unmet need in Chicagoland for an expert multidisciplinary program for men with high risk and advanced prostate cancer," said **Arieh L. Shalhav, MD**, Chief of Urology and Director of the Robotic Surgery program. "We offer cutting-edge knowledge and treatment options to our patients."

OCHAP is staffed by a multidisciplinary team of national leaders who are highly specialized in managing patients with prostate cancer.

The team includes a urologic oncologist, medical oncologist, radiation oncologist, and genetic counselor.

Services available through UCHAP include access to novel blood-, urine-, and tissue-based biomarkers; advanced, high-quality multiparametric 3T MRI imaging; and access to the latest clinical trials to improve cure rates for men with high-risk prostate cancer.

DEPARTMENT OF SURGERY | UROLOGY prostate cancer.

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# UCHICAGO MEDICINE UROLOGIST PERFORMS CHICAGO'S FIRST ULTRASOUND TREATMENT FOR PROSTATE CANCER

Last year, a UChicago Medicine surgical team led by **Arieh L. Shalhav, MD**, Chief of Urology and Director of the Robotic Surgery program, used an Ablatherm<sup>®</sup> Robotic HIFU device to perform the first high-intensity focused ultrasound (HIFU) procedure in the city of Chicago for a patient with prostate cancer.

HIFU directs high-intensity focused ultrasound waves that heat and burn the targeted prostate tissue where the tumors are located. This has little effect on nearby tissue and can be focused to treat only the part of the prostate that contains the cancer. The process minimizes side effects like impotence or incontinence that are associated with radical



prostate surgery and radiation. This new treatment option is offered to patients with intermediate prostate cancer.

According to the Urology Care Foundation, most men who are told they have prostate cancer have localized disease, and about 25 percent of those patients could benefit from a minimally invasive procedure like HIFU. Since April, 15 patients have been treated at UChicago Medicine with the Focal One™, the most advanced version of the HIFU ablation system.

"As surgeons, we strive to find gentler ways of curing disease and developing effective treatment options that are less disruptive to the human body and quality of life," said Dr. Shalhav. "Focal HIFU fills a significant void between two stressful options: active surveillance and whole gland therapy. It ultimately allows patients to maintain a better quality of life after treatment."

#### **FACULTY HONORS**

Gregory T. Bales, MD, was recognized by US News & World Report for Adult Urology, specifically for pubovaginal sling surgery and pelvic organ prolapse and reconstructive surgery. He is also a Member of the Office of Education's Genitourinary Reconstructive Work Group in the American Urological Association.

Scott E. Eggener, MD, is the
Assistant Editor for the Journal
of Urology, on the American Board
of Urology Exam Committee,
Vice-Chair of the AUA Guideline
on Testicular Cancer panel,
Co-Chair of ASCO Guideline on
Molecular Markers in Localized
Prostate Cancer panel, and the
European Urology Reviewer of
the Month.

Mohan S. Gundeti, MD, received funding from the Delhi Faculty Steering Committee for his proposal "Developing the Pediatric Minimal Invasive Surgery Program in India and Southeast Asia."

#### **FACULTY LISTING**

#### **Professors of Surgery**

Piyush Agarwal, MD Gregory T. Bales, MD Scott E. Eggener, MD Glenn Gerber, MD Mohan S. Gundeti, MD Carrie W. Rinker-Schaeffer, PhD Arieh L. Shalhav, MD Gregory Zagaja, MD

**Assistant Professor of Surgery** 

Sarah Faris, MD

Clinical Associate
Steven Nold, MD



"We strive to find gentler ways of curing disease and developing effective treatment options that are less disruptive to the human body and quality of life."

ARIEH L. SHALHAV, MD | CHIEF OF UROLOGY

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# loss Milner, M.D. Vascular Surgery

# Ross Milner, MD, examines a patient following a successful vascular surgery. Milner, Director of the UChicago Medicine Center for Aortic Diseases, is an internationally recognized expert in vascular surgery and specializes in treating complex aortic conditions.

# Vascular & Endovascular Vascular Surgery Brings Opportunity for International Exchange



**CHRISTOPHER L. SKELLY. MD** 

ASSOCIATE PROFESSOR OF SURGERY CHIEF, SECTION OF VASCULAR & ENDOVASCULAR SURGERY DIRECTOR, VASCULAR SURGERY FELLOWSHIP PROGRAM DIRECTOR, VASCULAR LAB

The University of Chicago is internationally recognized as a leader in aortic surgery, and faculty members like Ross Milner, MD, Professor of Surgery, and Trissa A. Babrowski, MD. Assistant Professor of Surgery, draw physicians from across the globe to learn new techniques and treatments. This year, the Section of Vascular & Endovascular Surgery brought in physicians from all over the world-including Australia, New Zealand, Japan, Canada, Vietnam, and South Korea—to study aortic aneurysm treatment and dissection treatment This hands-on program, directed by both Dr. Milner and Dr. Babrowski, enables the visiting physicians to use simulators and operate the devices, so they can successfully use them at home.

"Physicians can see these techniques in our program. While they may have access to the same devices and technologies at home, they may not have used them in a certain way, so they can apply what they've learned here to their own practices," said Dr. Milner. In addition to operating room activities, the program includes academic conferences featuring case and research presentations. "It is excellent exposure for our residents and fellows, and has led to long-lasting relationships for many of them," said Dr. Babrowski.

This program has been extremely successful and is highly regarded by visiting physicians.

After they return home (with bags of University of Chicago "swag" from the bookstore) raving to their colleagues about the experience the program offered, the same international hospitals have asked to send more physicians. The program represents an integral part of the Department of Surgery's mission—expand knowledge and build diverse relationships. "We develop strong relationships," said Dr. Milner. "It works out well from an international meeting standpoint, from a case standpoint, and from an academic and research standpoint." Dr. Milner has been asked to be a visiting professor at Siriraj University Hospital in Thailand for a week in 2020.

"The opportunity to interact with groups of surgeons with different skill sets, experiences, and challenges in their own practices affords us the potential to grow and learn as providers also," said Dr. Babrowski. Across the world, training paradigms, patient anatomies, and populations may differ, but there are many methods applicable to all practices. "As much as we're providing education and a training opportunity to them, when they present cases, we learn from them as well," said Dr. Milner. "We learn some of the techniques they use; it truly is an international exchange. This is a unique component to our aortic program."



Physicians from all over
the world come to UChicago
Medicine to study aortic aneurysm treatment and dissection
treatment with Dr. Ross Milner
and Dr. Trissa A. Babrowski.
This hands-on program enables
the visiting physicians to use
simulators and operate the
devices, so they can successfully use them at home.

# **FACULTY HONORS**

Trissa A. Babrowski, MD, was named Medical Director of the Limb Salvage Program. She was also named the Biological Sciences Division's Distinguished Clinician. Additionally, she was appointed Associate Program Director for the Vascular Surgery Fellowship program.

Chelsea Dorsey, MD, received an American Heart Association spotlight and was appointed Director of Preclinical Advising, Pritzker School of Medicine. This new title recognizes Dr. Dorsey's experience as a career advisor, a faculty participant in the student-led Women of Color in Medicine forum and Women at Work panel, a MERITS fellow, a UChicago Careers in Health Professions Mentor, and a faculty coordinator for the MS3 vascular surgery rotation.

Ross Milner, MD, and Trissa A. Babrowski, MD, performed the first TEVAR case in Chicago with a newly FDA-approved minimally invasive device. Christopher L. Skelly, MD, was selected as a question writer for VESAP5, an online self-assessment program designed to meet the Maintenance of Certification requirements of the Vascular Surgery Board of the American Board of Surgery. Additionally, his clinical trial "Fist Assist" tests a novel device to improve fistula outcomes.

# **FACULTY LISTING**

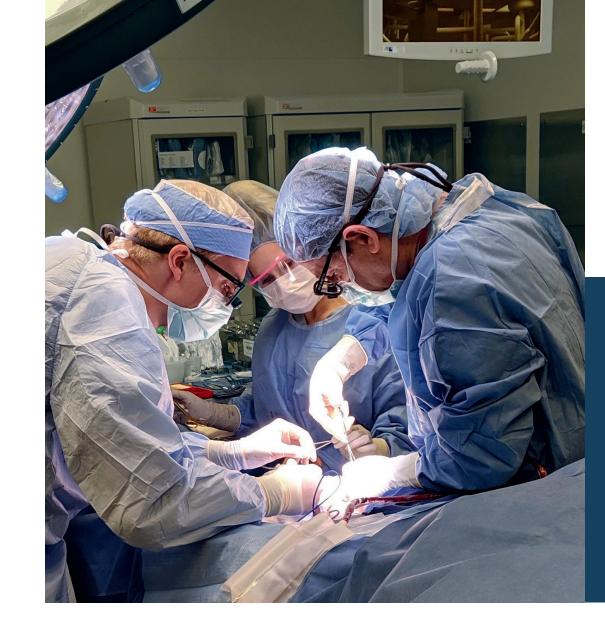
**Professor of Surgery** Ross Milner, MD

**Associate Professor of Surgery** Christopher L. Skelly, MD

**Assistant Professors of Surgery** Trissa A. Babrowski, MD

Chelsea Dorsey, MD

Clinical Associates
Matthew J. Blecha, MD
Paul Lantz, DPM



"The opportunity to interact with groups of surgeons with different skill sets, experiences, and challenges affords us the potential to grow and learn as providers."

TRISSA A. BABROWSKI, MD | ASSISTANT PROFESSOR OF SURGERY

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# Sponsored Research

PRINCIPAL INVESTIGATOR	SECTION	RESEARCH TITLE	GRANT
Gupta	Cardiac	Exploring Roles of Sirtuins in Protecting Diabetic Hearts	F
Gupta	Cardiac	Improving Post-Surgery Recovery of Failing Hearts by Targeting Cardiomyocyte Senescence	F
Jeevanandam	Cardiac	A Prospective, Randomized, Controlled, Unblinded, Multi-Center Clinical Trial to Evaluate the HeartWare® Ventricular Assist Device System for Destination Therapy of Advanced Heart Failure	СТ
Jeevanandam	Cardiac	A Prospective, Randomized, Multicenter Clinical Trial to Evaluate the Safety and Efficacy of the HeartAssist 5® VAD System Compared to the HeartMate II® VAD and HVAD® for Left Ventricular Support in Patients Awaiting Cardiac Transplantation	СТ
Jeevanandam	Cardiac	Cytosorb Reduction of Free Hemoglobin/Acute Kidney Injury (AKI) during Cardiac Surgery	СТ
Jeevanandam	Cardiac	Driveline Silicone Skin Interface (SSI) Registry	СТ
Jeevanandam	Cardiac	SOPRANO: A Prospective, Multicenter, Double-Blind, Randomized, Placebo-Controlled, Parallel-Group Study to Assess the Efficacy and Safety of Macitentan in Patients with Pulmonary Hypertension after Left Ventricular Assist Device	СТ
Ota	Cardiac	Scaffold-Free Tissue-Engineered Cardiac Patch Processed with a Novel 3D Bio-Printer for Myocardial Restoration	F, CT
Ota	Cardiac	Use of the NuPulseCV iVAS for the Treatment of Bridge-to-Transplant Patients: A First-in-Human (FIH) Study	СТ
Song	Cardiac	NOVEL LUNG TRIAL Extension and REVIVE PAS Study: Normothermic Ex Vivo Lung Perfusion (EVLP) as an Assessment of Extended/Marginal Donor Lungs for Transplant	СТ
Song	Cardiac	Post-Approval Study of the Organ Care System (OCS™) Lung System: Thoracic Organ Perfusion (TOP) Registry	СТ
Cannon	Colon & Rectal	The United States Ileo-Pouch Anal Anastamosis Study (TULIP)	NF, CT
Hyman	Colon & Rectal	A Randomized Controlled Trial to Assess the Performance and Safety of a Novel Ostomy Ring (Osto-Ring™) to Improve Ileostomy and Colostomy Management	NF, CT

FUNDING TYPE KEY: F = FEDERAL / NF = NON-FEDERAL / CT = CLINICAL TRIAL

PRINCIPAL INVESTIGATOR	SECTION	RESEARCH TITLE	GRANT
Hyman	Colon & Rectal	Efficacy and Safety of LifeSeal Kit for Staple Line Sealing in Colorectal and Coloanal Anastomoses: A Prospective Randomized Study	СТ
Hyman	Colon & Rectal	Surgery Research Network Chair Agreement	NF, C1
Alverdy	General	Covira/UChicago Collaboration	NF
Alverdy	General	Gut Pathogen Virulence and Its Therapeutic Modulation during Surgical Injury	F
Вао	General	Coleman 4R Patient Care Sequences for Cancer and Supportive Care	NF
Fleischer	General	Geometric Singularities in Anastomotic Wall Stress and Perturbed Flow as Applied to Gastrointestinal Surgery and Its Effects on Anastomotic Leak	NF
Keutgen	General	Neuroendocrine Tumor (NET) Specialized Program of Research Excellence (SPORE)	NF
Turaga	General	The C.L.O.T. Investigation: Prospective, Multicenter, Multidisciplinary, Controlled Clinical Investigation Evaluating the Safety and Efficacy of PerClot® Polysaccharide Hemostatic System	СТ
Awad	Neurosurgery	Atorvastatin Treatment of Cavernous Angiomas with Symptomatic Hemorrhage Exploratory Proof of Concept (AT CASH EPOC) Trial	F
Awad	Neurosurgery	Bridge Funding of CCM-Specific Research Database for Trial Readiness	NF
Awad	Neurosurgery	MIS+rtPA for ICH Evacuation Phase III (MISTIE III)	NF
Awad	Neurosurgery	Oral Propranolol in Cav Mals	NF
Awad	Neurosurgery	PSA — Ranger Biotechnologies	NF
Awad	Neurosurgery	Signaling Aberrations and Cerebral Cavernous Malformation Pathogenesis	NF
Awad	Neurosurgery	TLR4 and the Microbiome in CCM Disease	NF
Awad	Neurosurgery	Trial Readiness in Cavernous Angiomas with Symptomatic Hemorrhage	F
Shen	Neurosurgery	The Role of CCM Proteins in Intestinal Inflammation	F

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# Sponsored Research (continued)

PRINCIPAL INVESTIGATOR	SECTION	RESEARCH TITLE	GRANT
Warnke	Neurosurgery	A Double-Blind, Controlled Phase 2B Study of the Safety and Efficacy of Modified Stem Cells (SB623) in Patients with Chronic Motor Deficit from Ischemic Stroke	СТ
Warnke	Neurosurgery	Chemotherapy Induced Glioma Stem Cell Niche	NF
Warnke	Neurosurgery	Stereotactic Laser Ablation for Temporal Lobe Epilepsy (SLATE)	СТ
Warnke	Neurosurgery	Visualase™ Visualization Database (VIVID-1)	СТ
Yamini	Neurosurgery	A Phase I Study of Ad-RTS-hIL-12, an Inducible Adenoviral Vector Engineered to Express hIL-12 in the Presence of the Activator Ligand Veledimex in Subjects with Recurrent or Progressive Glioblastoma or Grade III Malignant Glioma	СТ
Yamini	Neurosurgery	A Phase I Study of Safety and Tolerability of Acetazolamide with Temozolomide in Adults with Newly Diagnosed MGMT Promoter-Methylated Malignant Glioma	СТ
Agrawal	OHNS	Earlier Detection of Cancers Using Complementary Liquid Biopsy Approaches	NF
Baroody	OHNS	A Study to Evaluate the Efficacy of Dupilumab as an Adjunct for Subcutaneous Grass Immunotherapy to Reduce Provoked Allergic Rhinitis Symptoms Using the Nasal Allergen Challenge Model	СТ
Baroody	OHNS	Evaluating Factors Involved in Dymista's Superior Clinical Efficacy to Fluticasone Propionate in the Treatment of Seasonal Allergic Rhinitis	СТ
Blair	OHNS	Professionalism and Diversity Issues in Graduate Medical Educations: Identifying Challenges and Simulation-Based Solutions	NF
Gluth	OHNS	The Human Temporal Bone Laboratory Resource for Basic and Applied Inner Ear Sciences	NF
Gooi	OHNS	Impacting the Oral HPV Continuum: Mouth Study (Men and Women Offering Understanding of Throat HPV)	СТ
Pinto	OHNS	A Phase III, Radomized, Multicenter, Double-Blind, Placebo-controlled Clinical Trial of Omalizumab in Patients with Chronic Rhinosinusitis with Nasal Polyps	СТ
Pinto	OHNS	A Randomized, Double-Blind, Placebo-Controlled, Multicenter Study of the Efficacy and Safety of STG320 Sublingual Tablets of House Dust Mite (HDM) Allergen Extracts I Adults and Adolescents with HDM Associated Allergic Rhinitis	СТ

PRINCIPAL INVESTIGATOR	SECTION	RESEARCH TITLE	GRANT
Pinto	OHNS	Pesticides, Olfaction, and Prodromal Neurodegeneration among US Farmers — Resubmission 01	NF
Suskind	OHNS	Thirty Million Words: Early Care	NF
Suskind	OHNS	Thirty Million Words: Well Baby	NF
Suskind	OHNS	3Ts: Help Build Your Child's Brain	NF
Suskind	OHNS	TMW Center for Early Learning + Public Health	NF
Hernandez	Pediatric	Development of Novel Acoustic Clusters for Improving Combinatorial  Neuroblastoma Therapy — Resubmission 01	NF
Kandel	Pediatric	Laboratory Operating Support for Dr. Jessica Kandel FY19 — Renewal 03	NF
Mak	Pediatric	Multi-institutional Trial of Non-operative Management of Uncomplicated Pediatric Appendicitis	NF
Slater	Pediatric	Flourish™ Pediatric Esophageal Atresia Device	СТ
_ee	Plastics	Effect of Entrepix Ultra-Polished Scalpel on Incisional Inflammation and Fibrosis	NF
Gilbert	Surgical Research	Dimensions US-China: Collaborative Research: How Historical Constraints, Local Adaptation, and Species Interactions Shape Biodiversity across an Ancient Floristic Disjunction	F
Gilbert	Surgical Research	Genito-Urinary Microbiologic Determinants of Self-Perceived Bladder Health	NF
Gilbert	Surgical Research	Perinatal Depression and the Human Microbiome — Resubmission 01	NF
Gilbert	Surgical Research	Primary Immune Deficiency Gut Microbiome Study	NF
Gilbert	Surgical Research	RoL: FELS: RAISE: Does Everyone's Microbiome Follow the Same Rules?	NF

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# Sponsored Research (continued)

PRINCIPAL INVESTIGATOR	SECTION	RESEARCH TITLE	GRANT
Chong	Transplant	Internal-Overcoming Pathogen-Mediated Immune Evasion: A Translational Approach to Pediatric Staphyloccocus Aureus Vaccine Development	NF
Chong	Transplant	Overcoming Pathogen-Mediated Immune Evasion: A Translational Approach to Pediatric Staphyloccocus Aureus Vaccine Development	NF
Chong	Transplant	Supramolecular Nanofiber Vaccines	NF
Millis	Transplant	A Multicenter Randomized Study to Monitor Transplant Medication Compliance of Kidney, Liver, Heart and Lung Transplant Recipients Using the SIMpill Electronic Medication Adherance Monitoring System	СТ
Millis	Transplant	An Open-Label, Phase 2 Study in Patients with Renal Allograft and Polyoma BK Viruria for the Prevention of Polyoma BK Viremia, Polyoma BK Nephropathy and Renal Allograft Rejection	СТ
Millis	Transplant	A Prospective Study Evaluating the Safety and Effectiveness of EVARREST® Fibrin Sealant Patch in Controlling Mild or Moderate Hepatic Parenchyma or Soft Tissue Bleeding During Open Abdominal, Retroperitoneal, Pelvic and Thoracic (Non-Cardiac) Surgery in Pediatric Patients	СТ
Millis	Transplant	Evaluating NULOJIX Long-Term Safety in Transplant, ENLiST Registry (IM103076)	СТ
Witkowski	Transplant	Advancing Treatment for Pancreatitis: A Prospective Observational Study of TPIAT	F, CT
Witkowski	Transplant	A Phase 2a, Randomized, Open-Label, Active Control, Multi-Center Study to Assess the Efficacy and Safety of Bleselumab in Preventing the Recurrence of Focal Segmental Glomerulosclerosis in De Novo Kidney Transplant Recipients (7163-CL-3201)	СТ
Witkowski	Transplant	A Phase 2/3, Multicenter, Randomized, Double-Blind, Placebo-Controlled, Parallel Assignment Study to Assess the Efficacy and Safety of Reparixin in Pancreatic Islet Auto-Transplantation (REP0112)	СТ
Witkowski	Transplant	A Randomized, Double-Blind, Placebo-Controlled, Phase 2 Trial to Evaluate the Efficacy and Safety of a Vaccine, ASP0113, in Cytomegalovirus (CMV)-Seronegative Kidney Transplant Recipients Receiving an Organ from a CMV-Seropositive Donor (0113-CL-2001)	СТ
Witkowski	Transplant	A Randomized Double-Blind Placebo-Controlled Study to Evaluate the Efficacy and Safety of CINRYZE® (C1 Esterase Inhibitor [Human]) for the Treatment of Acute Antibody-Mediated Rejection in Kidney Transplant Patients	СТ

PRINCIPAL INVESTIGATOR	SECTION	RESEARCH TITLE	GRANT
Witkowski	Transplant	A Safety, Tolerability and Efficacy Study of Sernova's Cell Pouch for Clinical Islet Transplantation (PROSVA201701)	СТ
Witkowski	Transplant	Collaborative Islet Transplant Registry (CITR)	NF
Witkowski	Transplant	Phase 3 Prospective, Randomized, Multicenter, Open-Label, Controlled Trial to Assess the Efficacy and Safety of Cellular Immunotherapy with MDR-101 for Induction of Immune Tolerance in Recipients of HLA-Matched, Living Donor Kidney Transplants (MDR-101-MLK)	СТ
An	Trauma	Agent-Based Models to Address the Crisis of Reproducibility and Precision Medicine	F
Eggener	Urology	A Phase 3 Study to Evaluate the Safety and Efficacy of 99mTc-MIP-1404 SPECT/CT Imaging to Detect Clinically Significant Prostate Cancer in Men with Biopsy Proven Low-Grade Prostate Cancer Who Are Candidates for Active Surveillance (proSPEC T-AS)	СТ
Eggener	Urology	A Randomized Controlled Trial of ADV-TK + Valacyclovir Administered during Active Surveillance for Newly Diagnosed Prostate Cancer	СТ
Eggener	Urology	A Randomized Controlled Trial of Magnetic Resonance Imaging-Targeted Biopsy Compared to Standard Trans-Rectal Ultrasound Guided Biopsy for the Diagnosis of Prostate Cancer in Men without Prior Biopsy	СТ
Eggener	Urology	A Randomized Study of Enzalutamide in Patients with Localized Prostate Cancer Undergoing Active Surveillance (ENACT)	СТ
Eggener	Urology	Prospective Validation of Prostate Biomarkers for Repeat Biopsy: The Priority Study	СТ
Eggener	Urology	REASSURE ME: Reducing the Effects of Active Surveillance Stress, Uncertainty and Rumination through Engagement in Mindfulness Education	F, CT
Eggener	Urology	SIMCAP (Surgery in Metastatic Carcinoma of Prostate): Phase 2.5 Multi-institution Randomized Prospective Clinical Trial Evaluating the Impact of Cytoreductive Radical Prostatectomy Combined with Best Systemic Therapy on Oncologic and Quality of Life Outcomes in Men with Newly Diagnosed Metastatic Prostate Cancer	NF, CT
Steinberg	Urology	A Multicenter Clinical Trial of Intravesical Bacillus Calmette-Guerin (BCG) in Combination with ALT-803 in Patients with BCG Unresponsve High Grade Non-Muscle Invasive Bladder Cancer	СТ

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# Sponsored Research (continued)

PRINCIPAL INVESTIGATOR	SECTION	RESEARCH TITLE	GRANT
Steinberg	Urology	An Integrated Phase II/III, Open-Label, Randomized, Parallel and Controlled Study of the Safety and Efficacy of CG0070 Oncolytic Vector Regimen in Patients with Non-Muscle Invasive Bladder Carcinoma In Situ Disease (NMIBCis, Meaning cis and cis with TA and/or T1) and Who Have Failed BCG Therapy and Refused Cystectomy	СТ
Steinberg	Urology	An Open-Label, Single Arm, Phase II, Multicenter Study of the Safety and Efficacy of CG0070 Oncolytic Vector Regimen in Patients with Non-Muscle Invasive Bladder Carcinoma Who Have Failed BCG Therapy and Refused Cystectomy	СТ
Steinberg	Urology	A Phase 1b Multicenter, Open Label Study Evaluating Safety, Tolerability and Preliminary Efficacy of GemRIS 225 mg in Subjects with Muscle-Invasive Transitional Cell Carcinoma of the Bladder	СТ
Steinberg	Urology	A Phase 1/2, Placebo-Controlled, Randomized Study to Evaluate the Safety, Immune Response and Clinical Activity of HS-410 in Patients with Non-Muscle Invasive Bladder Cancer Who Have Undergone Transurethral Resection of Bladder Tumor (TURBT)	СТ
Steinberg	Urology	A Phase Ib/II, Open-Label Study of the Safety and Pharmacology of Atezolizumab Administered with or without Bacille Calmette-Guérin in Patients with High Risk Non Muscle Invasive Bladder Cancer	СТ
Steinberg	Urology	A Phase III, Open-Label Study to Evaluate the Safety and Efficacy of Instiladrin® (rAd-IFN/Syn3) Administered Intravesically to Patients with High Grade, BCG Unresponsive Non-Muscle Invasive Bladder Cancer (NMIBC)	СТ
Steinberg	Urology	Quality Improvement Initiative Protocol Measuring Surgical Recovery after Radical Cystectomy	СТ
Zagaja	Urology	Evaluation of the TULSA-PRO MRI-Guided Transurethral Ultrasound Prostate Ablation in Patients with Localized Prostate Cancer: A Prospective, Single-Arm, Pivotal Clinical Study	СТ
Skelly	Vascular	Evaluation of the Gore® Excluder® Iliac Branch Endoprosthesis for the Treatment of Common Iliac Artery Aneurysms or Aorto-Iliac Aneurysms	СТ
Skelly	Vascular	Global Registry for Endovascular Aortic Treatment Outcomes Evaluation "GREAT"	СТ

FUNDING TYPE KEY: F = FEDERAL / NF = NON-FEDERAL / CT = CLINICAL TRIAL

# Select Publications

#### **CARDIAC SURGERY**

Kitahara H, Nisivaco S, **Balkhy HH**. Graft
Patency after Robotically Assisted Coronary
Artery Bypass Surgery. Innovations (Phila).
2019 Apr;14(2):117-123. doi: 10.1177/15569845198
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Kitahara H, Hirai T, Nathan S, **Balkhy HH**. First Report of a Hybrid Robotic Beating-Heart Quadruple Totally Endoscopic Coronary Artery Bypass: Toward Complete Revascularization. Eur J Cardiothorac Surg. 2019 Mar 16. pii: ezz076. doi: 10.1093/ejcts/ezz076. [Epub ahead of print]. PMID: 30879074.

Cotter EKH, Banayan JM, **Song TH**, Chaney MA, Ko H, Cantu E, Diamond J, Weiss SJ, Cypel M, Keshavjee S. Lung in a Box: Ex Vivo Lung Transplantation. J Cardiothorac Vasc Anesth. 2018 Aug;32(4):1971-1981. doi: 10.1053/j. jvca.2017.12.019. Epub 2017 Dec 12. No abstract available. PMID: 29449154.

Samant SA, Pillai VB, **Gupta MP.** Cellular Mechanisms Promoting Cachexia and How They Are Opposed by Sirtuins 1. Can J Physiol Pharmacol. 2019 Apr; 97(4):235-245. PMID: 30407871.

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John R, Bhimaraj A, Bruckner BA, Lowes BD,
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Imamura T, Juricek C, **Song T, Ota T, Onsager D,** Sarswat N, Kim G, Raikhelkar J, Kalantari S, Sayer G, Burkhoff D, Jeevanandam V, Uriel N. Improvement in Biventricular Cardiac Function after Ambulatory Counterpulsation. J Card Fail. 2019 Jan;25(1):20-26.

Parker DM, Everett AD, Stabler ME, **Vricella L**, Jacobs ML, Jacobs JP, Thiessen-Philbrook H, Parikh CR, Brown JR. Biomarkers Associated with 30-Day Readmission and Mortality after Pediatric Congenital Heart Surgery. J Card Surg. 2019 May; 34(5):329-336. PMID: 30942505.

Nelson-McMillan K, **Vricella LA**, Stewart D, Young J, Shah AS, **Hibino N**, Coulson JD. Recovery from Total Acute Lung Failure After 20 Months of Extracorporeal Life Support. ASAIO J. 2019 Mar 19. PMID: 30908288.

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Score: A Novel Risk Score Predicts Survival after Pediatric Heart Transplantation. World
J Pediatr Congenit Heart Surg. 2019 May;
10(3):296-303. PMID: 31084316.

#### **COLON & RECTAL SURGERY**

Xue L, Williamson A, Gaines S, Andolfi, C, Paul-Olson T, Neerukonda A, Steinhagen E, Smith R, **Cannon L**, Polite B, **Umanskiy K**, **Hyman N**. Advances in Colon Cancer. Curr Prob Surg, 2018; 55(3):76-116.

**Hyman N**, Morris A. Local Excision. In Operative Standards for Cancer Surgery, Volume 2, Section III (Rectal cancer), Wolters Kluwer, Philadelphia, 2019:223-244.

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Umanskiy K, Hyman N. Anastomotic Complications. In Steele SR, Hull TL, Hyman N, Maykel J, Read T, Whitlow C eds. The ASCRS Manual of Colon and Rectal Surgery, third edition, Springer, 2019, pp 135–144.

Lightner AL, **Shogan BD**, Mathis KL, Larson DW, Duchalais E, Pemberton JH, Dozois EJ. Revisional and Reconstructive Surgery for Failing Ileal Pouch-Anal Anastomosis Is Associated with Good Function and Pouch Salvage in Highly Selected Patients. Disease of the Colon and Rectum. 2018;61(8):920-930. PMID 29944583.

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Surgery. 2018;10. PMID 29633119.

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#### **GENERAL SURGERY**

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Oshima G, Poli EC, Bolt MJ, Chlenski A, Forde M, Jutzy JMS, Biyani N, **Posner MC**, Pitroda SP, Weichselbaum RR, Khodarev NN. DNA Methylation Controls Metastatis-Suppressive 14q32-Encoded miRNAs. Cancer Research. Cancer Research. 2018. [Epub ahead of print]. PMID: 30538122.

Fleshman J, Branda M, Sargent D, Boller A, George V, Abbas M, Peters W Jr, Maun D, Chang G, Herline A, Fichera A, Mutch M, Wexner S, Whiteford M, Marks J, Birnbaum E, Margolin D, Larson D, Marcello P, **Posner MC**, et al. Disease-Free Survival and Local Recurrence for Laparoscopic Resection Compared with Open Resection of Stage II to III Rectal Cancer: Follow-Up Results of the ACOSOG Z6051 Randomized Controlled Trial. Annals of Surgery, August 3, 2018. (Epub ahead of print). PMID: 30080730.

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# **NEUROSURGERY**

Tank A, Hobbs J, **Ramos E**, Rubin DS. Opioid Dependence and Prolonged Length of Stay in Lumbar Fusion: A Retrospective Study Utilizing the National Inpatient Sample 2003–2014. Spine (Phila Pa 1976). 2018 Dec 15; 43(24): 1739-1745. PMID: 29794587.

Liu X, Issa NP, Rose S, Wu S, Sun T, Towle LV, Warnke PC, Tao JX. The First-Hour-of-the-Day Sleep EEG Reliably Identifies Interictal Epileptiform Discharges during Long-Term Video-EEG Monitoring. Seizure. 2018 Dec; 63: 48-51. PMID: 30399461. Issa NP, Lee S, Wu S, Rose S, Towle VL, Warnke PC, van Drongelen W, Tao JX. Reply to "Which Small Sharp Spikes Are Benign Epileptiform Transients of Sleep?" Clin Neurophysiol. 2018 Nov; 129(11):2495-2496. PMID: 30268708.

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# OTOLARYNGOLOGY—HEAD & NECK SURGERY

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## **PLASTIC & RECONSTRUCTIVE SURGERY**

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#### **VASCULAR & ENDOVASCULAR SURGERY**

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# 2019 Residents & Fellows

Robert Keskey

Adam Lam

CARDIOTHORACIC SURGERY	PY
Andrew Brownlee	7
Caitlin Burke	7
Jamie Eridon	8
CARDIOTHORACIC TRANSPLANT SURGERY	PY

COLON & RECTAL SURGERY	PY
Marco Bertucci Zoccali	6

Hidefumi Nishida

		PROGRAM	1 YEAR = <b>PY</b>
GENERAL SURGERY	PY		PY
Salman Alsafran	6	Jason Liu	4
Julia Amundson	1	Michelle McMahon	2
Mikhail Attaar	2	Jared Miller	3
Andrew Benjamin	4	Ryan Morgan	1
Julia Berian	5	James Oyeniyi	2
Elliot Bishop	4	Ann Polcari	1
Darren Bryan	4	Elizabeth Poli	3
Vanessa Buie	3R	Brian Ruhle	2R
Chase Corvin	2	Seth Sankary	2
BobieJo Ferguson Bryan	1	Andrew Schneider	4
Brian Fleischer	2	Darryl Schuitevoeder	6
Sara Gaines	2R	Scott Sherman	7
Kristina Guyton	5	Kinga Skowron	5
Theodore Hart	5	lan Stines	4
Herbert Hedberg	4	Bailey Su	3R
Lea Hoefer	1	Ashley Suah	3
Sanjiv Hyoju	1		
Olga Kantor	5		

2R

2

GENERAL SURGERY (CONTINUED)	PY
Trevor Symalla	3R
Dong-Kha Tran	2R
Alexander Trenk	1
Tanaz Vaghaiwalla	6
Janani Vigneswaran	3
Zachary Waxman	3
Michael White	5
Jelani Williams	1
Ashley Williamson	2R
Hunter Witmer	1
Harry Wong	3
Hoover Wu	2
Lai Xue	3
Lindsey Zhang	2R

NEUROSURGERY	PY
Arjang Ahmadpour	2
Brandyn Castro	3
Jason Choi	4
Anudariya Dean	1
Jonathan G. Hobbs	7
Ajay Patel	1
Andrew Platt	3
Sean Polster	6
David Satzer	3
Valentina Vasenia	5

PROGRAM YEAR = PY

OTOLARYNGOLOGY— HEAD & NECK SURGERY	PY
Dara Adams	2
Brandon Chiu	5
Camil Correia	4
Adam Howard	2
Paige Kennedy	3
Avery Nelson	1
Marianella Paz-Lansberg	5
Laura Petrauskas	1
Lauren Sowa	4
Kenneth Yan	3

PEDIATRIC SURGERY	PY
Jared Emolo	5
Rebecca Kirschner	4
Minna Wieck	7

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# 2019 Residents & Fellows (continued)

PLASTIC & RECONSTRUCTIVE SURGERY	PY
Shailesh Agarwal	9
Maureen Beederman	5
Tim Bruce	3
Jill Froimson	1
Kareem Hassan	4
Anne Huang	1
Laura Humphries	6
Jeff Kim	6
Hannes Prescher	2
Tulsi Roy	4
Afaaf Shakir	2
Jesse Smith	5
Lydia Williams	3
Mimi Wu Young	2

TRANSPLANT SURGERY	PY
Rosario Angelica Perez Gutierrez	8

UROLOGY	PY
Brittany Adamic	3R
Melanie A. Adamsky	5
Joshua Aizen	3R
William R. Boysen	5
Caleb Cooper	1
Richard Fantus	4
Clark Judge	2
Audry Kang	3
Craig Labbate	3R
Johnny Lindquist	2
Mohammad Mahmoud	4
John Richgels	3
Christopher Riedinger	4
Joseph F. Rodriguez, III	5
Ragheed Saoud	7
Steven Sidelsky	1
Matthew Sloan	1
Joel Wackerbarth	3
Tanya Watts	3
Ryan P. Werntz	8

# PROGRAM YEAR = **PY**

VASCULAR & ENDOVASCULAR	
SURGERY	PY
Steven Maximus	7
Luka Pocivavsek	6

# 2019 Graduates

# CARDIOTHORACIC SURGERY FELLOWSHIP

JAMIE ERIDON, MD: Attending Cardiothoracic Surgeon at Northern Light Health, Brewer, ME

# **COLON & RECTAL SURGERY FELLOWSHIP**

# MARCO BERTUCCI ZOCCALI, MD:

Assistant Professor of Surgery at Columbia University Irving Medical Center, New York Presbyterian, New York, NY

# **ENDOCRINE SURGERY FELLOWSHIP**

**SALMAN ALSAFRAN, MD:** Assistant

Professor at Department of General Surgery,
Kuwait University, Kuwait City, KW

# GENERAL SURGERY RESIDENCY

JULIA BERIAN, MD: Colon and Rectal
Surgery Fellowship at University of
Minnesota, Minneapolis, MN

KRISTINA GUYTON, MD: Colon and Rectal Surgery Fellowship at Cleveland Clinic, Cleveland, OH

**THEODORE HART, MD:** Vascular Surgery
Fellowship at Stanford University Medical
Center, Stanford, CA

**OLGA KANTOR, MD:** Breast Surgery
Fellowship at Massachusetts General
Hospital, Dana-Farber Cancer Institute,
Brigham and Women's Hospital,
Boston, MA

KINGA SKOWRON, MD: Colon and Rectal Surgery Fellowship at University of Chicago Medicine, Chicago, IL

MICHAEL WHITE, MD: Surgical Oncology
Fellowship at MD Anderson Cancer Center,
Houston, TX

# MICROSURGERY FELLOWSHIP

SHAILESH AGARWAL, MD: Associate

Surgeon at Brigham and Women's Hospital and Assistant Professor at Harvard Medical School, Cambridge, MA

# **NEUROSURGERY RESIDENCY**

JONATHAN G. HOBBS, MD: Attending
Physician at Porter Regional Hospital,
Valparaiso, IN

# OTOLARYNGOLOGY—HEAD AND NECK SURGERY RESIDENCY

**BRANDON CHIU, MD:** Faculty at Alaska Native Medical Center, Anchorage, AK

# MARIANELLA PAZ-LANSBERG, MD:

Rhinology Fellowship at Massachusetts

Eye and Ear, Boston, MA

# PLASTIC & RECONSTRUCTIVE SURGERY RESIDENCY

LAURA HUMPHRIES, MD: Craniofacial
Fellowship at University of Pennsylvania
Children's Hospital of Philadelphia,
Philadelphia, PA

**JEFF KIM, MD:** Microsurgery Fellowship at Stanford University, Stanford, CA

## SURGICAL CRITICAL CARE FELLOWSHIP

JARED EMOLO, MD: General Surgery
Resident at University of Chicago Medicine,
Chicago. II

# SURGICAL ONCOLOGY FELLOWSHIP

**SCOTT SHERMAN, MD:** Assistant Professor of Surgical Oncology at University of Iowa, Iowa City, IA

# TRANSPLANTATION FELLOWSHIP

ROSARIO ANGELICA PEREZ GUTIERREZ, MD:
Pancreatic Islet Transplantation Fellowship
at University of Chicago Medicine,

# **UROLOGY RESIDENCY**

Chicago, IL

**MELANIE A. ADAMSKY, MD:** Private Practice in Chicago, IL

**WILLIAM R. BOYSEN, MD:** Reconstructive
Fellowship at Duke University, Durham, NC

JOSEPH F. RODRIGUEZ, III, MD: Urologic
Oncology Fellowship at University of
Oklahoma, Norman, OK

# UROLOGY ONCOLOGY FELLOWSHIP

RYAN P. WERNTZ, MD: Faculty in
Urologic Oncology at Greenville Health
System, NC

# VASCULAR SURGERY FELLOWSHIP

**STEVEN MAXIMUS, MD:** Assistant Professor at University of California, Davis

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