Dear Colleagues and Friends,

I am pleased to share an overview of the past year’s highlights from the Northwestern Medicine Department of Surgery. We are fortunate to be part of a successful hospital corporation and burgeoning academic enterprise. We continue to grow and expand as a system, with the 3 Centegra Healthcare hospitals joining NMHC on Sept. 1st, bringing our system to 10 hospitals. The new NM-Lake Forest Hospital opened its doors last March and is already filled to capacity on a regular basis. Much work and attention this year was focused on implementing a common electronic health record instance throughout the system. Although incredibly complex and expensive, the transition to the EPIC foundation platform in early March went without a major hitch.

Northwestern Memorial Hospital was again listed in the U.S. News and World Report honor roll, ranked #13 nationally and #1 in Illinois for the 7th consecutive year. Construction of the beautiful new Simpson-Querrey research building is on time and on budget, scheduled to open next spring. This will allow for expansion of the Feinberg School of Medicine (FSM) research enterprise and will include several floors earmarked for Lurie Children’s research, further cementing the enhanced relationship between FSM and the children’s health enterprise.

Within the department, research funding continues to increase; we received the greatest amount of federal funding in our history this past year. Several of our junior faculty who have held ‘K’ grants are now transitioning into ‘R’ grant funding. Endowed professorships recognized ongoing research success for 2 faculty members: Ankit Bharat (Thoracic Surgery) was appointed as the Harold L. and Margaret N. Method Research Professor of Surgery, and Jason Wertheim (Transplant Surgery) was appointed as the Edward G. Elcock Professor of Surgical Research and Vice-Chair for Research within the Department of Surgery. Michael Abecassis, Chief of the Division of Transplant Surgery, was honored with the Tripartite Legacy Faculty Prize in translational science and education from FSM. Two longstanding members of the department, William Pearce and Robert Vanecko, recently retired and were appointed as Professor Emeriti.

The educational programs remain strong, both undergraduate and graduate. A record number of last year’s FSM graduating class matched in general surgery and surgical specialties. The general surgery residency was given approval to increase from 5 to 6 categorical residents. The residents have now begun an experience at Stroger Hospital for burn and trauma surgery, which has been a popular addition to the program. Last year’s graduating chief residents all matriculated to excellent specialty fellowships. We recently received news that all of our graduates passed the American Board of Surgery certifying examination, which now extends our 100% passage streak to a decade! Our general surgery residency program director, Dr. Shari Meyerson, recently announced that she would be leaving Northwestern to assume a leadership role at the University of Kentucky. I will thereafter assume the position of program director this fall, a role I held previously.

Nathaniel Soper, MD, FACS
Northwestern University reviews every department on a regular, scheduled basis. The Department of Surgery was subjected to such a review this past year. The process was lengthy and strenuous, with a self-study exercise followed by an in-depth review by internal and external experts. We were fortunate to have Drs. Jeffrey Drebin, Gerard Doherty and Selwyn Vickers as the external reviewers who led the review team. Thankfully, the final report was laudatory and made a number of good suggestions for improvement.

We were grateful to have outstanding visiting professors and lecturers over the past year who shared their knowledge and wisdom with our faculty and trainees: we therefore owe a debt of gratitude to Drs. Amir Ghaferi, Douglas Evans, Yolanda Colson, Armando Giuliano, Thomas Wakefield, John Alverdy, Lee Swanstrom, Hasan Alam and Caprice Greenberg for making the effort to visit us at Northwestern.

It continues to be my great honor to lead this outstanding assemblage of staff, faculty and trainees that constitute our Department of Surgery; it certainly makes coming to work most gratifying. My goal is that all of these individuals find their passion in what they do on a daily basis. This group of people truly buy in to our departmental vision statement: “Safer surgery today, better surgery tomorrow”!

I hope you enjoy this overview, and welcome any feedback you may have.

Respectfully yours,

Nathaniel J. Soper, MD, FACS
Loyal and Edith Davis Professor and Chair
Department of Surgery
Northwestern Medicine
Department Leadership

Nathaniel Soper, MD  
Loyal and Edith Davis Professor  
Chair, Department of Surgery

Scott Strong, MD  
Vice Chair, Clinical Affairs

Karl Bilimoria, MD, MS  
Vice Chair, Quality

Jonathan Fryer, MD  
Vice Chair, Surgical Education

Jason Wertheim, MD, PhD  
Vice Chair, Research

Amy Halverson, MD  
Surgery Clerkship Director

Shari Meyerson, MD  
Program Director

Ezra Teitelbaum, MD, MEd  
Associate Program Director

David Odell, MD, MMSc  
Associate Clerkship Director
Division Leadership

Nora Hansen, MD
Chief, Breast Surgery

Patrick McCarthy, MD
Chief, Cardiac Surgery

Scott Strong, MD
Chief, Gastrointestinal Surgery

Michael Abecassis, MD, MBA
Chief, Organ Transplantation

Gregory Dumanian, MD
Chief, Plastic Surgery

Jeffrey Wayne, MD
Chief, Surgical Oncology

Patrick McCarthy, MD
Interim Chief, Thoracic Surgery

Michael Shapiro, MD
Chief, Trauma & Critical Care

Mark Eskandari, MD
Chief, Vascular Surgery

David Bentrem, MD,
Chief, Surgery
Jess Brown VA Medical Center

Marleta Reynolds, MD
Chief, Pediatric Surgery

John Andrews, MD
Lake Forest Hospital
By the Numbers

The mission of Northwestern Medicine’s Department of Surgery is centered on improving the lives of others through excellent clinical care, research, and education. Our faculty, staff, residents, and fellows play an integral role in advancing our mission through our guiding principle—“Safer surgery today, better surgery tomorrow”.

Providing Excellent Clinical Care...

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<th>Breast</th>
<th>Cardiac</th>
<th>Thoracic</th>
<th>GI</th>
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<td>42,946</td>
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Advancing Research & Innovation...

$18,797,818 Total Grant Funding

130 Active Grants

19,652 SF Research Space

159 Active Clinical Trials

$11,304,768 Federal Funding

40 Contr. Services/Adjunct Faculty

Teaching the Surgeons of Tomorrow...

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<td></td>
<td>Total</td>
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<td>Pediatric</td>
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Faculty Promotions

David Bentrem, MD, Division of Surgical Oncology, promoted to Professor of Surgery.

Seok Jong Hong, PhD, Division of Plastic Surgery, promoted to Research Associate Professor of Surgery.

Eric Hungness, MD, Division of GI Surgery, promoted to Professor of Surgery.

James Mathew, PhD, Division of Organ Transplantation, promoted to Research Professor of Surgery.

Shari Meyerson, MD, Division of Thoracic Surgery, promoted to Professor of Surgery.

Heron Rodriguez, MD, Division of Vascular Surgery, promoted to Professor of Surgery.

Erin Rowell, MD, Division of Pediatric Surgery, promoted to Associate Professor of Surgery.

Cord Sturgeon, MD, Division of Surgical Oncology, promoted to Professor of Surgery.

Anthony Yang, MD, MS, Division of Surgical Oncology, promoted to Associate Professor of Surgery.
Daniel Borja-Cacho, MD, was appointed as Assistant Professor in the Division of Organ Transplantation on the Clinician-Educator career track. Dr. Borja-Cacho graduated from La Salle University in Mexico City in 1998. He completed fellowships in Hepato-Pancreato-Biliary (HPB) Surgery and Abdominal Transplant Surgery from the University of Minnesota. Since 2012, Dr. Borja-Cacho had been at the University of Arkansas for Medical Sciences, where he served as Surgical Director of the Liver Transplant Program, Surgical Director of the Laparoscopic Living Kidney Donor Program, and Director of the Transplant Service Line.

Seth Goldstein, MD, MPhil, was appointed as Assistant Professor in the Division of Pediatric Surgery on the Clinician-Educator career track. Dr. Goldstein practices pediatric general and thoracic surgery, as well as pediatric surgical oncology. He completed his residency and fellowship at Johns Hopkins Hospital. His research endeavors leverage his graduate work and industry background in biomedical engineering to devise and develop technologies that benefit children. Additionally, he is an accomplished health services researcher and has authored over 50 peer-reviewed journal publications and 10 book chapters.

Yue-Yung Hu, MD, MPH, was appointed as Assistant Professor in the Division of Pediatric Surgery. Dr. Hu graduated from SUNY Stony Brook School of Medicine in 2007. She completed General Surgery internship and residencies at Beth Israel Deaconess Medical Center and completed a General Surgery research fellowship at Brigham & Women’s Hospital. In 2010, Dr. Hu received her MPH at Harvard School of Public Health. Since 2015, she had been a Pediatric Surgery Fellow at Connecticut Children’s Medical Center.

Sumanas Jordan, MD, PhD, was appointed as Assistant Professor in the Division of Plastic Surgery on the Investigator career track. Sue received her MD from Emory University School of Medicine and her PhD in Biomedical Engineering from Emory University and Georgia Institute of Technology in 2010. She went on to complete her Plastic and Reconstructive Surgery Integrated Residency here at Northwestern. Sue recently completed a Reconstructive Microsurgery Fellowship at The Ohio State University. Dr. Jordan’s research focuses on the areas of bioactive materials and 3D printing for soft tissue engineering. Her clinical interests include surgical treatment of lymphedema and surgical treatments associated with gender dysphoria.
Monica Langer, MD, was appointed as Health System Clinician in the Division of Pediatric Surgery. Dr. Langer received her MD from the University of Saskatchewan in 2003. She subsequently completed an internship and residencies in General Surgery and Pediatric Surgery at the University of British Columbia. From 2011 to 2016, Dr. Langer practiced at Maine Medical Center. Since 2016, she has been a Locum Pediatric Surgeon at BC Children’s Hospital.

Robert Love, MD, was appointed as Health System Clinician in the Division of Thoracic Surgery. Dr. Love received his MD from Rush Medical College in 1982. He completed a General Surgery Residency at University of Wisconsin. Subsequently, he completed a Vascular Surgery Fellowship at Oxford University in England and then a Cardiothoracic Surgery Fellowship at University of Wisconsin. Since 2012, Dr. Love was a Professor of Surgery at the Medical College of Wisconsin. Dr. Love currently serves as the Program Director of Thoracic Surgery at Northwestern Medicine Regional Medical Group.

David Pinelli, PhD, was appointed as Research Assistant Professor in the Division of Organ Transplantation on the Research career track. Dr. Ellis received his PhD in Immunology and Molecular Pathogenesis from Emory University in 2016. Since then, Dr. Pinelli has been a post-doctoral fellow in the Transplant Immunology Laboratory at Northwestern University.

Mehul Raval, MD, MS, was appointed as Associate Professor in the Division of Pediatric Surgery on the Investigator career track. Dr. Mehul Raval practices general pediatric surgery and is particularly interested in conditions related to the thyroid and in using minimally invasive surgical techniques including robotic assisted surgery. As a physician scientist, Dr. Raval’s research focuses on improving the outcomes in children’s surgical care. A large portion of his work has revolved around quality and patient safety. Dr. Raval has authored more than 100 peer-reviewed publications and over a dozen chapters.
Dinee Simpson, MD, was appointed as Assistant Professor in the Division of Organ Transplantation on the Clinician-Educator career track. Dinee received her MD from New York University School of Medicine in 2006. She completed a General Surgery Internship and Residency at Brigham and Women’s Hospital and served as Chief Resident there until 2015. In 2017, Dinee completed a Fellowship in Solid Organ Transplantation at the University of Pennsylvania. Since then, Dinee has been an Assistant Professor of Surgery at Loyola University Medical Center.

Hadi Toeg, MD, MPH, was appointed as Assistant Professor in the Division of Cardiac Surgery. Hadi received his MD and MSc in Biochemistry from the University of Ottawa. He completed his residency and fellowship in Cardiac Surgery at the University of Ottawa Heart Institute in 2017. Dr. Toeg recently completed a Fellowship in Mechanical Circulatory Support and Heart Transplantation at the Mayo Clinic and also earned a MPH in Quantitative Methods from Harvard University. Dr. Toeg has received numerous academic and clinical awards. He has a broad clinical skill set and will be very involved with heart and lung transplantation, mechanical circulatory support and ECMO, surgery for Hypertrophic Cardiomyopathy, as well as CAB and valve repair and replacement.

Jonathan Tomasko, MD, was appointed as Health System Clinician in the Division of Cardiac Surgery. He received his MD from Albany Medical College in 2008 and went on to complete a General Surgery Residency at Penn State Milton S. Hershey Medical Center. Since then, Dr. Tomasko has been a Cardiothoracic Surgery Fellow here at Northwestern. Dr. Tomasko joins Dr. Gyu Gang at Central DuPage Hospital.

Ashley Vavra, MD, was appointed as Assistant Professor in the Division of Vascular Surgery on the Clinician-Educator career track. Ashley received her MD from Baylor College of Medicine in 2005. She went on to complete her General Surgery Residency and Vascular Surgery Fellowship here at Northwestern. Ashley also completed a research fellowship at Northwestern’s Institute for BioNanotechnology in Medicine, during which Dr. Melina Kibbe served as her mentor. Since 2012, Ashley has been an Assistant Professor of Surgery at the University of Colorado where she served as the Vascular Surgery Practice Director, Vascular Diagnostics Lab Medical Director, and Utilization Management Physician Advisor.
James Wade, MD, was appointed as Health System Clinician in the Division of Thoracic Surgery. Dr. Wade received his MD from Washington University in 2009. He then completed a General Surgery Internship and Residency at University of Massachusetts and University of Illinois College of Medicine at Peoria. In 2017, Dr. Wade completed a Cardiothoracic Surgery Fellowship at Virginia Commonwealth University.

Akira Yamada, MD, PhD, was appointed as Professor in the Division of Pediatric Surgery on the Clinician-Educator career track. Originally from Japan, Dr. Yamada trained at the Yamaguchi University School of Medicine, Kyushu University School of Medicine, the Tokyo Metropolitan Police Hospital Department of Plastic and Reconstructive Surgery, and the Department of Plastic and Reconstructive Surgery at Middlemore Hospital in New Zealand. He specializes in ear reconstruction, craniosynostosis, craniofacial surgery, cleft lip and palate; he is one of the most highly skilled surgeons in pediatric ear reconstruction in the world.
Northwestern Medicine Receives Transformative $25 Million Gift from the Bluhm Family Charitable Foundation

Northwestern Medicine Bluhm Cardiovascular Institute, the top-ranked cardiovascular program in Illinois for the last 10 consecutive years, received a $25 million gift from the Bluhm Family Charitable Foundation, formed by Neil G. Bluhm, a prominent Chicago philanthropist and real estate developer.

The world-class cardiovascular program that bears Bluhm’s name is now accessible throughout the Northwestern Medicine health system, which includes Chicago and the surrounding communities. The gift will fund, in part, a first-of-its-kind center that utilizes artificial intelligence and machine learning to advance the study and treatment of cardiovascular disease.

“I’m incredibly gratified that an increasing number of people have access to the very best care,” said Bluhm, founder and president of JMB Realty Corporation. “My support of Northwestern’s cardiovascular program has always been about sparking transformation and creating one of the top programs in cardiac care in the nation.”

Bluhm’s support began in 2005, when he provided the initial gift that facilitated the recruitment of Patrick M. McCarthy, MD, executive director of the Bluhm Cardiovascular Institute and Heller-Sacks professor of cardiothoracic surgery at Northwestern University Feinberg School of Medicine, and created the Northwestern Medicine Bluhm Cardiovascular Institute.

“Mr. Bluhm’s gifts have allowed us to rapidly improve our options for better and safer care for the many patients who face the life-threatening condition of heart disease,” Dr. McCarthy said. “On behalf of our team, we thank him for his trust, his philanthropy, and his unwavering belief that the burden of cardiovascular disease can be lessened through innovation, research and quality patient care.”

For Bluhm, watching his investment in Northwestern’s cardiovascular program grow has been one of the most gratifying experiences of his life.

“Dr. McCarthy and the entire team at Northwestern turned my investment into a reality where patients are receiving world-class care and researchers are innovating around heart and vascular disease treatments every day,” Bluhm said. “The success of this program has exceeded my high expectations, and I couldn’t be prouder to be making this additional gift to Northwestern Medicine.”

Dean M. Harrison, president and chief executive officer of Northwestern Memorial HealthCare, thanked Bluhm for his generosity and trust in the 1,800 physicians, nurses, researchers, administrators and staff who relentlessly pursue and sustain excellence at Bluhm Cardiovascular Institute.

“All of us at Northwestern Medicine are so grateful for the transformative gift from Neil and his family, and we will continue to strive toward the best possible results and safest, most novel treatments for all cardiovascular patients,” Harrison said.

Dr. McCarthy said that this most recent gift, in part, will help launch a new center focusing on harnessing the power of artificial intelligence (AI) and machine learning to improve diagnosis, treatment and research for cardiovascular disease.

“Artificial intelligence is the next frontier in breakthrough medicine, and Northwestern Medicine is leading the way by incorporating this emerging technology throughout its cardiovascular programs,” said Dr. McCarthy. “Cardiovascular disease remains the number one killer of Americans. Artificial intelligence offers an abundance of new ways to research and treat this pernicious disease.”

Currently, Northwestern Medicine is working with four companies to explore new ways to apply AI to clinical cardiovascular care. Northwestern Memorial HealthCare is in a
unique position to forge promising, leading-edge collaborations with these companies by leveraging the many strengths of Northwestern Memorial Hospital, an academic medical center that is the top-ranked hospital in Illinois; Northwestern University and the Feinberg School of Medicine; and Northwestern Medicine’s broad clinical network that now extends throughout the Chicago area and northwestern Illinois.

“By harnessing Northwestern Medicine’s integrated academic health system we can study the use of AI and machine learning in a community setting or for the most advanced research,” said Dr. McCarthy.

In one example of AI use, Bluhm Cardiovascular Institute partnered with Bay Labs, Inc., a west coast-based technology company developing innovative products that use AI to help clinicians process and analyze cardiac ultrasound images. Cardiac ultrasound, or echocardiography, is considered the gateway to the diagnosis and management of heart disease.

“Our partnership with Northwestern Medicine has advanced our work faster than we anticipated, and in exciting new directions,” said Charles Cadieu, PhD, co-founder and CEO of Bay Labs. “In the coming months, we are launching studies at Northwestern Medicine to advance towards three goals — to make echocardiography more widely accessible for the benefit of patient care wherever patients are seen, to increase the health system’s ability to deliver quality care at scale, and to use AI to improve the efficiency and quality of physician echocardiogram interpretation.”

AI is the latest advancement in cardiovascular care at Northwestern. Since Dr. McCarthy and Bluhm teamed up to create the Northwestern Medicine Bluhm Cardiovascular Institute in 2005:

- Northwestern Memorial Hospital’s cardiology and heart surgery program went from unranked by U.S. News & World Report to currently ranked seventh in the United States. The program has been first in Chicago and Illinois for the last 10 consecutive years.
- The number of cardiac surgeries performed at Northwestern Memorial Hospital has quadrupled.
- Patients now have access to world-class cardiovascular care closer to home, only traveling downtown for complex care.
- Northwestern Memorial Hospital was ranked first in the nation for heart failure survival for two consecutive years and first in Illinois and top 10 in the nation for heart attack and stroke survival, according to patient data from the Centers for Medicare and Medicaid.
- In 2017, surgeons at Northwestern Memorial Hospital performed 39 heart transplants, the most in Illinois in a single year in 20 years.

Source: NM Press Releases (Kara Spak)

Jonah Stulberg, MD, PhD, MPH, Led NMH-Sponsored DEA Drug Takeback Day

On April 28, 2018, Dr. Jonah Stulberg led the DEA Drug Takeback Day at Northwestern Memorial Hospital. In an effort to take unused medications out of the community and to provide a safe and convenient method of disposal, Northwestern Medicine and Ann & Robert H. Lurie Children’s Hospital of Chicago came together with the Drug Enforcement Administration (DEA) to host collection sites for National Prescription Drug Take Back Day. The effort allowed people to anonymously turn in expired, unused or unwanted drugs.

According to the DEA, Chicago has the highest rate of emergency room visits for drug overdoses in the U.S. In Cook County, overdose deaths increased by 69 percent last year.

"There are over 100 deaths a day due to drug overdose," said Dr. Stulberg. "Those are startling and horrible statistics."

Source: wgntv.com
Digestive Health Foundation Gala Raises $2.41 Million

With more than 400 guests in attendance, the Digestive Health Foundation at Northwestern Medicine recently hosted its third annual Gala to benefit patients at the Northwestern Medicine Digestive Health Center. The Gala raised a remarkable $2.41 million toward helping to transform digestive disease into digestive health.

In addition to benefiting the clinical, research and educational efforts of the Digestive Health Center, the Gala honored Steven J. Stryker, MD, a colon and rectal surgeon at Northwestern Memorial Hospital and professor of Clinical Surgery at Northwestern University Feinberg School of Medicine, as well as his wife Andréa J. Schwartz, vice president of Media Relations for Macy’s, U.S.

The evening featured the announcement of the creation of the “Steven J. Stryker Gastrointestinal Surgery, Education and Research Endowment,” which was recently established through a generous donation of $1 million from Mrs. Judith Blazer.

“We were thrilled to pay tribute to Dr. Stryker at this year’s Gala, and to shine much-deserved light on his longstanding leadership in gastroenterological surgery and his deep commitment to patient- and family-centered care,” said Lee Gould, president of DHF. “We are deeply grateful to Dr. Stryker and his wife Andréa Schwartz for their many contributions in the area of digestive health. Their tireless commitment is helping to promote continued progress for the benefit of the 60 to 70 million Americans affected by digestive illnesses.”

The 2018 Gala brought the total amount of funds raised by DHF, since the foundation’s inception in 2015, to more than $6 million. In just three years’ time, DHF has funded 30 pivotal, ongoing research initiatives, including the Digestive Health Foundation BioRepository, a tissue bank designed to support global research into digestive diseases and other medical disorders; two endowments, including the endowment recently established in honor of Dr. Stryker; and two specialized physician fellowships, through the Digestive Health Foundation Grant Awards program.

“Everyone who supported this year’s gala is crucial to the missions of both DHF and the Digestive Health Center,” said Stephen B. Hanauer, MD, an internationally recognized gastroenterologist and Clifford Joseph Barborka Professor of Medicine at Feinberg, who serves as medical director of the Digestive Health Center. “Thanks to the generosity of our friends and donors, the center’s three pillars—leading-edge research, patient care and education—are only growing stronger, and DHF is providing outstanding support for projects that are yielding much-needed solutions for people living with inflammatory bowel disorders, esophageal and swallowing disorders, colorectal neoplasia and cancer and more.”

Source: NM Connections (nmi.nmh.org)
Breast Surgeon Kevin Bethke, MD, is no stranger to leadership. As an associate professor of clinical surgery at Northwestern University Feinberg School of Medicine and associate director of the Lynn Sage Comprehensive Breast Center, he has won multiple awards for both clinical care and teaching. He now takes on a new role: chief of staff at Northwestern Memorial Hospital.

We talked to Dr. Bethke about his goals for his new position as chief of staff and the challenges facing Northwestern Memorial Hospital.

**What do you think is the most important role of the chief of staff?**

I think traditionally chief of staff has been more of an administrative position, overseeing credentialing and peer review. That’s certainly a large part of the role. But I think going forward, we need to focus more on physician engagement. Physician burnout is also an important topic right now, not only at Northwestern but around the country, and I think the Medical Staff Office is well positioned to lead that effort at Northwestern Memorial Hospital.

We now have more than 30,000 employees and 4,000 practicing physicians across Northwestern Medicine. It can be hard to feel like you’re part of something in such a large organization. So we want to create a supportive, welcoming community for physicians and allied health professionals at Northwestern Memorial Hospital.

**Do you have specific goals in mind that you’d like to achieve during your tenure?**

I’d like to see this newsletter become more of a go-to resource for physicians, a place they turn to for information, both professional and social. If you keep people informed about what’s going on and the reasons for the changes that are taking place, they will better understand and support those efforts. So communication is going to be an important focus for me.

Another important focus for me is physician well-being and the coordination of the various wellness programs offered by the hospital, Northwestern Medicine and the Medical Staff Office. I think we can help get the word out and inform physicians about these opportunities.

**What do you perceive to be the biggest challenges, or opportunities, facing the hospital, and how do you plan to navigate those?**

Well, we’re no longer really a hospital, are we? We’re a network. So the challenge for us is to maintain quality of care for all patients that come to us from across the health system but also to maintain our local culture. The culture at Northwestern Memorial Hospital is different from that at Lake Forest Hospital, different from the West Region. Every hospital environment is a little different; it needs to be to provide the highest quality care to the patients in those communities. But if we want our physicians and providers to feel involved in the great work we do here at NMH, we need to create an engaging local culture. I want NMH to be one of our physician’s communities, giving them the best chance to be successful, and not just a place to work.

It goes back to communication and wellness. I’d like to introduce new ways to feature the great people and great work at NMH. I think we can do more with photos and video. That’s why social media is so popular — it brings people together. That’s what Medical Staff Minute can do too.

**What is important for your colleagues to know about you as you forge a new working relationship with them?**

I’ve been at NMH for 23 years. For 20 years, I was in private practice until I joined NMG, so I understand both the private and employed side of being a physician. I am also a very busy surgeon and a clinician at heart. And, like all surgeons, I love surgery.

*Source: NMH Medical Staff Minute*
Surgical Oncologist Ryan P. Merkow, MD, was fellowship-trained at Memorial Sloan-Kettering Cancer Center and specializes in treating patients with upper gastrointestinal tract cancers, including pancreatic, liver, biliary, stomach and small bowel malignancies. He has a particular expertise using regional therapy techniques when treating patients with metastatic appendix or colorectal cancer. The first of these treatments is called hepatic artery infusion (HAI) chemotherapy, which is delivered through a specialized pump that is surgically placed. HAI chemotherapy is an effective treatment for patients with liver-dominant metastatic colorectal cancer and intrahepatic cholangiocarcinoma. The second regional therapy is referred to as cytoreductive surgery with hyperthermic intraperitoneal chemotherapy (CRS/HIPEC). This is another highly specialized treatment that addresses tumors that have spread to the lining, or peritoneum, inside the abdominal cavity.

Dr. Merkow, who arrived at Northwestern Memorial Hospital less than a year ago, has been able to use his unique background and partner with other experts at Northwestern Medicine to deliver new types of care to patients on the downtown campus. He plans to harness the collective expertise of Northwestern Medicine specialists through a new Regional Cancer Therapeutics Program.

When most people think of chemotherapy, they think of systemic treatment, in which medication is delivered via IV and circulates through a patient’s body to help kill cancer cells. Now there are ways to apply treatment directly to the cancer site in much higher doses. This cancer-fighting approach is called regional therapy, and it is a growing treatment option at Northwestern Medicine.

Regional cancer therapy refers to the delivery of targeted therapies, including chemotherapy and/or radiation, to a specific organ or compartment, sparing the rest of the body from potential toxicities. Traditional treatments can put normal tissues, remote from the region being treated, at risk. For example, systemic chemotherapy exposes the entire body to side effects, while chemotherapy delivered directly to the organ being treated spares surrounding tissues. In addition, in certain circumstances, the combination of regional and systemic therapies helps to focus the treatment where it is needed most, minimizing exposure to normal tissues. These treatment decisions are complex, and require the coordinated effort of all parts of a comprehensive, expert multidisciplinary cancer team.

**HIPEC Comes to NMH**

In January, Dr. Merkow became the first physician to perform CRS/HIPEC at Northwestern Memorial Hospital. CRS/HIPEC is used to treat a variety of cancers, including appendix, colorectal and ovarian cancer, as well as mesothelioma and a slate of rarer malignancies. The technical goals of the procedure are to remove all visible disease and then treat the intra-abdominal surfaces with heated chemotherapy for 90 minutes in an effort to destroy any microscopic cells that were not visible during resection. Dr. Merkow has performed several CRS/HIPEC procedures so far this year with positive outcomes. His first HIPEC procedure at Northwestern Memorial Hospital was featured on NBC News and was the subject of a patient story on breakthroughs.nm.org.
**Future Expansion**

Dr. Merkow is excited about the possibilities that regional therapies offer and hopes to continue growing the Regional Cancer Therapeutics Program at Northwestern Medicine. His vision is to establish a center that would incorporate multiple disciplines and treat a variety of diseases. “It would bring everything together, so patients would see that this is something we really specialize in here at Northwestern Medicine,” Dr. Merkow explains. “We really have an incredible fund of knowledge and expertise across campus, and harnessing that potential is one of my goals.”

Conditions that can be treated through regional therapy include:
- Colorectal cancer
- Appendix cancer
- Liver cancer
- Ovarian cancer
- Pseudomyxoma peritonei
- Melanoma
- Sarcoma
- Mesothelioma
- Other gastrointestinal malignancies
- Pediatric cancers (e.g., desmoplastic small round cell tumor)

The following regional therapy procedures are offered by a number of experienced, nationally recognized experts at Northwestern Medicine:
- Intraperitoneal chemotherapy
  - Hyperthermic intraperitoneal chemotherapy (HIPEC)
  - Early postoperative chemotherapy (EPIC)
- Liver-directed therapies
  - Hepatic artery infusion chemotherapy
  - Chemoembolization
  - Radioembolization (e.g., yttrium-90)
  - Thermal ablation (percutaneous and/or operative approaches)
  - External beam radiation therapy
- Isolated limb infusion

“We have a world-class team of experts who are national leaders in the field with a lot of experience,” Dr. Merkow says. “We discuss all of these patients as a group and figure out who would benefit from which treatments and in what sequence. Getting the right patient, the right treatment at the right time is essential, and we have one of the best teams in the country to achieve this standard. Every patient should have access to these effective treatment options.”

*Source: NMH Medical Staff Minute*

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**O Magazine Names Dr. Mamta Swaroop “Everyday Hero”**

Mamta Swaroop, MD, trauma & critical care surgeon, was featured in “11 Everyday Heroes Who Bring Healthcare to Those in Need” in the January 2018 issue of *O, The Oprah Magazine*. The article highlighted eleven inspiring individuals who help others in need. Dr. Swaroop was acknowledged for her community outreach efforts. In January 2017, she launched the Chicago South Side Trauma First Responders course. Coordinating with CeaseFire Chicago, Dr. Swaroop teaches participants how to tie a tourniquet with a T-shirt or scarf, how to safely transport people, and other important techniques that can help trauma victims buy more time. Since the course began, she has taught over 150 adults and teenagers. To read the full article, go to www.oprah.com.

*Photo Source: oprah.com*
**Surgical Education**

**Medical Student Education**

The FSM class of 2018 included eleven students who matched into categorical general surgery residency positions in the following programs: Case Western/University Hospitals Cleveland Medical Center; Cedars-Sinai Medical Center; UCLA Medical Center; Stanford University; Northwestern McGaw/NMH/VA; Vanderbilt University Medical Center; UCLA Medical Center; Madigan Army Medical Center; Mount Sinai Medical Center-Miami; Brigham & Womens Hospital; and University of Nebraska Medical Center. An additional fifteen students from the class of 2018 matched into surgical sub-specialties. Congratulations to Taylor Sutcliffe, recipient of the 2018 Julius Conn Award, given annually to the highest achieving surgery clerkship student based upon academic performance and professionalism.

The Department of Surgery is partnering with the Loyal Davis Surgical Interest Group (LDSIG) to expand the surgical opportunities for first and second year students. Our goal is to broaden surgical experiences and increase exposure to the field of surgery earlier on in medical school. Students have had the opportunity to practice technical skills through faculty-led suturing and peg transfer sessions. Additionally, a formalized OR shadowing process has been established as well as a trauma call experience for first and second year medical students. Last fall, the Department of Surgery held a lunch series through LDSIG for first and second year students to talk to faculty about their career as surgeons. Over 40 students took the time to meet with surgeons and learn about the career. We want to thank the following faculty for being the featured guests at the lunches: Drs. Rodriguez, DeCamp, Kulkarni, Stulberg, Soper, Stryker, and Fronza.
## New Residents & Fellows

<table>
<thead>
<tr>
<th>PRELIMINARY SURGERY</th>
<th>CARDIAC SURGERY</th>
<th>PLASTIC SURGERY</th>
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</thead>
<tbody>
<tr>
<td>Alexander Anavim</td>
<td>Anthony Mozer</td>
<td>Sofia Aronson</td>
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<tr>
<td>Andrew Gordon</td>
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<td>Jennifer Bai</td>
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<tr>
<td>Nicholas Xiao</td>
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<td>Jonathan Levine</td>
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<td>Timothy Janetos</td>
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<tr>
<td>Cole Rojas</td>
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<tr>
<td>Sudip Thakar</td>
<td></td>
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<tr>
<td>Scott Bowman</td>
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<td><strong>TRAUMA &amp; CRITICAL CARE</strong></td>
<td></td>
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<tr>
<td></td>
<td>Michael Masteller</td>
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<td></td>
<td>Alexander Johnston</td>
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<tr>
<td></td>
<td><strong>BREAST SURGERY</strong></td>
<td></td>
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<tr>
<td></td>
<td>Chandler Cortina</td>
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<td>Emil Fernando</td>
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<tr>
<td>GENERAL SURGERY</td>
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<td></td>
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<tr>
<td>Emily Cerier</td>
<td></td>
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<tr>
<td>Jessie Ho</td>
<td></td>
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<tr>
<td>Charles Logan</td>
<td></td>
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<tr>
<td>Sara Mills</td>
<td></td>
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<tr>
<td>Audra Reiter</td>
<td></td>
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<tr>
<td>Sean Sullivan</td>
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<td></td>
<td><strong>TRANSPLANT SURGERY</strong></td>
<td></td>
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<tr>
<td></td>
<td>Raj Patel</td>
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<td></td>
<td>William Boyan</td>
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<tr>
<td>THORACIC SURGERY</td>
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<tr>
<td>Jeffrey (Mark) Erfe</td>
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<td></td>
<td><strong>VASCULAR SURGERY</strong></td>
<td></td>
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<tr>
<td></td>
<td>Eric Pillado</td>
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<td></td>
<td>Brian Wernick</td>
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</tbody>
</table>
The 2018 Edelstone-Bendix Residents’ Research Day was held on Friday, June 15, 2018. This annual event featured presentations by residents and fellows, showcasing their outstanding accomplishments in both clinical and basic science research. The visiting professor this year was Dr. Hasan Alam, Norman Thompson Professor of Surgery and Section Head for the Section of General Surgery Michigan Medicine. Dr. Alam met with several residents and faculty, served as a judge for the research presentations, and lectured about the Reflections on an Academic Life.

Edelstone-Bendix Day concluded with the graduation dinner and awards ceremony which was held at The Ritz Carlton, where members of the Department’s faculty, fellows, and residents gathered to honor our graduates.

A number of awards were presented to fellows and residents for outstanding performance. The 2018 Alan B. Kanavel Surgical Scholar Award is awarded for exceptional accomplishments achieved in the research laboratory. This year’s recipient was Dr. Stephen Chiu, who was given the opportunity to present “Activated Donor-Derived Nonclassical Monocytes Migrate Out of the Allograft and Injure the Contralateral Lung After Single Lung Transplant,” and was awarded a monetary prize.

The chief resident presentation award, which is based on the graduating general surgery residents’ Edelstone-Bendix Residents’ Day presentations was awarded to Dr. Molly Meyers, who presented “Systemically Administered Collagen-Targeted Gold Nanoparticles Bind to Arterial injury Following Vascular Interventions,” and was also awarded a monetary prize for her winning presentation.

There were three open competitions for excellence in research. The winners presented their research and were awarded a monetary prize for winning in their respective categories:

- **Fellow Open Competition**: Chitaru Kurihara, MD
- **Resident Basic Science Research Competition**: Kristine Corkum, MD and Mimi Wu Young, MD
- **Resident Clinical Research Competition**: Ryan Ellis, MD

*Left to right: Drs. Ezra Teitelbaum, Andre Son, William Reddy, Matthew Chia, Simon Moradian, Tarik Yuce, Ben Deschner, Christina Minami*
Fellow as Teacher and Resident as Teacher awards are bestowed on those Department of Surgery trainees who meet a series of eligibility criteria. Awardees are regarded as excellent role models, clinicians and learners to their peers, students, and other health professionals. They are noted to make teaching a purposeful activity in their daily efforts and reliably participate in Department of Surgery education-related activities and reporting systems.

**RESIDENT AS TEACHER AWARDS**

Alison Blake, MD (General Surgery)
Matt Chia, MD (Vascular Surgery)
Ben Deschner, MD (General Surgery)
Courtney Furlough, MD (Vascular Surgery)
Bart Imielski, MD (Thoracic Surgery)
Azad Karim, MD (Thoracic Surgery)
Julian Klosowiak, MD (Plastic Surgery)
Jonathan Massie, MD (Plastic Surgery)
Christina Minami, MD (General Surgery)
Simon Moradian, MD (General Surgery)
Katherine Ott, MD (General Surgery)
William Reddy, MD (General Surgery)
Chad Purnell, MD (Plastic Surgery)
Andre Son, MD (Thoracic Surgery)
Tarik Yuce, MD (General Surgery)

**FELLOW AS TEACHER AWARDS**

Gabe Wallace, MD (Vascular Surgery)
Michael Soult, MD (Vascular Surgery)
Rahul Rasheed, MD (Critical Care)
Austin Ward, MD (Thoracic Surgery)
Surgical Education

Excellence in Teaching Awards

The “Excellence in Teaching” awards recognize faculty members who excel at supporting resident and medical student learning. We are grateful to these surgeons for their efforts in distinguishing themselves as outstanding educators. The 2017-2018 Excellence in Teaching award winners are:

David Bentrem, MD*
Kevin Bethke, MD*
Jonathan Fryer, MD*
Catherine Hunter, MD

Nabil Issa, MD*
Shari Meyerson, MD*
Heron Rodriguez, MD
Clark Schierle, MD, PhD

Michael Shapiro, MD*
Nathaniel Soper, MD*
Cord Sturgeon, MD*
Ezra Teitelbaum, MD, MEd

Jeffrey Wayne, MD*
Anthony Yang, MD, MS
Jeffrey Zawacki, MD

*These faculty members have been awarded the Excellence in Teaching Award a minimum of five times. They are members of the Teaching Wall of Honor.
<table>
<thead>
<tr>
<th>Date</th>
<th>Speaker</th>
<th>Title</th>
<th>Institution</th>
<th>Location</th>
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<tr>
<td>October 4, 2018</td>
<td>Dr. Chris Malaisrie</td>
<td>TBD</td>
<td>Northwestern University</td>
<td>Arkes 6 VC Room</td>
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<tr>
<td>October 18, 2018</td>
<td>Dr. Jonathan Fryer</td>
<td>TBD</td>
<td>Northwestern University</td>
<td>Arkes 6 VC Room</td>
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<td>November 1, 2018</td>
<td>TBD</td>
<td>Fall Research</td>
<td>Northwestern University</td>
<td>Arkes 6 VC Room</td>
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<tr>
<td>November 8, 2018</td>
<td>Dr. Debra DaRosa</td>
<td>Gerald Ujiki Lectureship &amp; Teaching Awards</td>
<td>Northwestern University</td>
<td>250 E. Superior, 3rd Flr, Canning</td>
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<td>November 15, 2018</td>
<td>Dr. Justin Dimick</td>
<td>SOQIC Lectureship</td>
<td>University of Michigan</td>
<td>241 E. Huron, Pritzker</td>
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<td>November 29, 2018</td>
<td>Drs. Harris, Furlough, Phillips, Schlick, Williamson, &amp; Yuce</td>
<td>Quality Improvement</td>
<td>Northwestern University</td>
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<td>December 6, 2018</td>
<td>Dr. Yuman Fong</td>
<td>Harold Method Lectureship</td>
<td>City of Hope Medical Center</td>
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<td>December 13, 2018</td>
<td>Dr. Nathaniel Soper</td>
<td>Faculty Meeting</td>
<td>Northwestern University</td>
<td>Arkes 6 VC Room</td>
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<td>January 10, 2019</td>
<td>Dr. Nathaniel Soper</td>
<td>State of the Department</td>
<td>Northwestern University</td>
<td>Arkes 6 VC Room</td>
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<tr>
<td>January 17, 2019</td>
<td>Dr. Michael McGee</td>
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<td>Northwestern University</td>
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<td>January 31, 2019</td>
<td>Dr. Mamta Swaroop</td>
<td>TBD</td>
<td>Northwestern University</td>
<td>Arkes 6 VC Room</td>
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<td>February 7, 2019</td>
<td>Dr. Jason Ko</td>
<td>TBD</td>
<td>Northwestern University</td>
<td>Arkes 6 VC Room</td>
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<td>February 14, 2019</td>
<td>Dr. Robin McLeod</td>
<td>Loyal Davis Lectureship</td>
<td>University of Toronto</td>
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<td>February 28, 2019</td>
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<td>Spring Research</td>
<td>Northwestern University</td>
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<tr>
<td>March 14, 2019</td>
<td>Dr. Jack Cronenwett</td>
<td>John Bergan Lectureship</td>
<td>Dartmouth-Hitchcock Medical Center</td>
<td>241 E. Huron, Pritzker</td>
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<td>March 21, 2019</td>
<td>Dr. Aimen Shaaban</td>
<td>TBD</td>
<td>Northwestern University</td>
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<td>Northwestern University</td>
<td>Arkes 6 VC Room</td>
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<td>April 4, 2019</td>
<td>Dr. Ryan Merkow</td>
<td>TBD</td>
<td>Northwestern University</td>
<td>Arkes 6 VC Room</td>
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<td>Dr. Selwyn Rogers, Jr.</td>
<td>Charles Mayo Lectureship</td>
<td>University of Chicago</td>
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<td>April 25, 2019</td>
<td>Dr. Kevin Bethke</td>
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<td>Arkes 6 VC Room</td>
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<td>May 9, 2019</td>
<td>Dr. John Kim</td>
<td>Update on New Techniques and Technologies in Prosthetic Breast Reconstruction</td>
<td>Northwestern University</td>
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<td>May 23, 2019</td>
<td>Dr. Bryan Meyers</td>
<td>Thomas Shields Lectureship</td>
<td>Washington University</td>
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<td>June 21, 2019</td>
<td>Dr. Melina Kibbe</td>
<td>Faculty Retreat/Edelstone-Bendix Day</td>
<td>University of North Carolina</td>
<td>TBD</td>
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</table>
Research

The Department of Surgery has had a very productive year from a research prospective in 2018. From September 2017 through June 2018, eighty-seven proposals were submitted with an estimated value of over $39M, resulting in $12M in awards; NIH-funded awards totaled $8.16M. Within the local market, Northwestern continues to outperform other academic medical centers in NIH rankings. Among the 17 clinical departments in Feinberg School of Medicine (FSM), the Department of Surgery has the second largest reporting award amount.

Year At A Glance

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<thead>
<tr>
<th></th>
<th>$18,797,818</th>
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<td><strong>Total Grant Funding</strong></td>
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<td><strong>Federal Funding</strong></td>
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<td><strong>Active Clinical Trials</strong></td>
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<td><strong>Active Grants</strong></td>
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<td><strong>Unique Patents Filed</strong></td>
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<td>19,652 SF</td>
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<td><strong>Research Space</strong></td>
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</table>

Figure 1. Local AMC Surgery Department NIH Rankings

Data: NIH Medical School Data. Total Dollars Awarded to Surgery Departments. Based on total dollars awarded for research grants, training grants, fellowships, program grants, and cooperative agreements (U01 grants). R&D contract dollars have been removed from totals.

*Loyola unranked in 2017*
Figure 2. Total Research Expenditures

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<th>Year</th>
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<th>Total Indirect Costs</th>
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<td>$1.2</td>
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<td>FY08</td>
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<td>FY09</td>
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<td>FY17</td>
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**Total Faculty Patents Filed**

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<th>Type</th>
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<td>Provisional</td>
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<td>PCT</td>
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<tr>
<td>Nationalization</td>
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<td>Utility</td>
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<td>Divisional</td>
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<td>Continuation</td>
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<tr>
<td>Principal Investigator</td>
<td>Proposal Title</td>
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<td>------------------------</td>
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<td><strong>BREAST SURGERY</strong></td>
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<tr>
<td>Swati Kulkarni, MD</td>
<td>Evaluating the protective effect of a tissue selective estrogen complex (TSEC) in women with newly diagnosed ductal carcinoma in situ</td>
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<td>Seema Khan, MD</td>
<td>Cancer Prevention Agent Development Program: Early Phase Clinical Research</td>
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<tr>
<td>Seema Khan, MD</td>
<td>Task Order 4 Cost Reimbursable: NWU2013-02-01 A Phase I Trial of Inhaled Iloprost for the Prevention of Lung Cancer in Former Smokers</td>
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<tr>
<td>Seema Khan, MD</td>
<td>Task Order 13, NU-Cost Reimbursable A Phase I Multicenter Pilot Study Aimed at Validating y-OHPdG as a Biomarker</td>
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<td>Seema Khan, MD</td>
<td>Progesterone Signaling and Blockade in Human Breast Tumorigenesis and Prevention</td>
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<td>Seema Khan, MD</td>
<td>Task Order 14, NU-Cost Reimbursable Phase I Trial of Endoxifen Gel Versus Placebo Gel in Women Undergoing Breast Surgery</td>
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<td>Seema Khan, MD</td>
<td>Preclinical and Clinical Studies of Breast Cancer Prevention with Transdermal Anti-Progesterone Agents</td>
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<td>Swati Kulkarni, MD</td>
<td>Alterations in Gene Expression and ER-alpha Binding Profile in Mammary Tissue after Bariatric Surgery</td>
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<td>Swati Kulkarni, MD</td>
<td>Preventing Tumor Progression in Women with High-Risk DCIS</td>
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<td>Seema Khan, MD</td>
<td>Task Order 3 Cost Reimbursable: NWU2013-01-03 Intra-mammary U of C</td>
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<td>Swati Kulkarni, MD</td>
<td>Real-time volumetric specimen imager for 3D intra-operative lumpectomy margin assessment</td>
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<td><strong>CLINICAL TRIALS UNIT</strong></td>
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<tr>
<td>Kathleen Grady, PhD</td>
<td>Mechanical circulatory support: Measures of adjustment and quality of life</td>
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<td>S. Chris Malaisrie, MD</td>
<td>Prot#2015-08 MVIV: PARTNER 3 Mitral Valve-in-Valve - A Prospective, Single-Arm, Multicenter Study to Investigate the Safety and Effectiveness of SAPIEN 3 Transcatheter Heart Valve Implantation in Patients with a Failing Mitral Bioprosthetic Valve</td>
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<td>Patrick McCarthy, MD</td>
<td>APOLOLO Trial Clinical Investigation Plan - Transcatheter Mitral Valve Replacement with the Medtronic Intrepid™ TMVR System in patients with severe symptomatic mitral regurgitation</td>
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<tr>
<td>S. Chris Malaisrie, MD</td>
<td>Prot# PCT1101.011-C: Perclot IDE - Prospective, Multicenter, Multidisciplinary, Controlled Clinical Investigation Evaluating the Safety and Efficacy of Perclo® Polysaccharide Hemostatic System</td>
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<td>Heron Rodriguez, MD</td>
<td>Prot# 771-0013: Expanding Patient Applicability with Polymser Sealing OVAIion Alto StEnt Graft IDE Study (ELEVATE IDE Study)</td>
</tr>
<tr>
<td>Duc Thinh Pham, MD</td>
<td>The Multi-disciplinary Shock Team and its Effect on Outcomes in Cardiogenic Shock Patients at Northwestern Memorial Hospital</td>
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<tr>
<td>Principal Investigator</td>
<td>Proposal Title</td>
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<tr>
<td><strong>CLINICAL TRIALS UNIT (cont.)</strong></td>
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<tr>
<td>Kathleen Grady, PhD</td>
<td>Mechanical circulatory support: Measures of adjustment and quality of life</td>
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<td><strong>GI/ENDOCRINE SURGERY</strong></td>
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<tr>
<td>Jonah Stulberg, MD, PhD, MPH</td>
<td>System-Level Implementation to Reduce Excess Opioid Prescribing in Surgery</td>
</tr>
<tr>
<td>Jonah Stulberg, MD, PhD, MPH</td>
<td>Illinois Surgical Quality Improvement Collaborative (ISQIC) Opioid Reduction Initiative</td>
</tr>
<tr>
<td>Jonah Stulberg, MD, PhD, MPH</td>
<td>A Multidisciplinary Collaboration to Minimize Diversion of Opioids</td>
</tr>
<tr>
<td>Eric Hungness, MD</td>
<td>A Randomized Control Trial of Mesh Suture Repair Versus Traditional Suture Repair for Paraesophageal Hernia</td>
</tr>
<tr>
<td><strong>PLASTIC SURGERY</strong></td>
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</tr>
<tr>
<td>Mohammed Alghoul, MD</td>
<td>Periorbital Rejuvenation Study</td>
</tr>
<tr>
<td>Robert Galiano, MD</td>
<td>In-vivo functional muscle regeneration utilizing an implantable modular bioreactor</td>
</tr>
<tr>
<td>Robert Galiano, MD</td>
<td>Development of a Designer Proline-rich antimicrobial peptide Chaperone protein inhibitor (DPC) for treating multi-drug resistant wound infections</td>
</tr>
<tr>
<td>John Kim, MD</td>
<td>A Prospective, Randomized Multi-Center Clinical Study Comparing Outcomes in Patients Undergoing Acellular Dermal Matrix (ADM) Assisted Immediate Post-Mastectomy Breast Reconstruction</td>
</tr>
<tr>
<td>Thomas Mustoe, MD</td>
<td>Locally applied statins to reduce scarring</td>
</tr>
<tr>
<td>John Kim, MD</td>
<td>In-vivo study of gluteal vein caliber and anatomy to improve safety in gluteal augmentation</td>
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<tr>
<td><strong>SURGICAL ONCOLOGY</strong></td>
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<tr>
<td>Karl Bilimoria, MD, MS</td>
<td>Evaluating the Implementation of a Multi-Component Quality Collaborative</td>
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<tr>
<td>Anthony Yang, MD, MS</td>
<td>Statewide Learning Collaborative to Improve Adherence to Breast Cancer Guidelines</td>
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<tr>
<td>Anthony Yang, MD, MS</td>
<td>Why do Patients Refuse VTE Prophylaxis? Improving Nurse-Patient Conversations at the Bedside</td>
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<tr>
<td><strong>THORACIC SURGERY</strong></td>
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<tr>
<td>Ankit Bharat, MBBS</td>
<td>High Carbon Dioxide Impairs Lung Repair</td>
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<tr>
<td>Ankit Bharat, MBBS</td>
<td>High Carbon Dioxide Impairs Lung Repair</td>
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<tr>
<td>David Odell, MD, MMSc</td>
<td>Development of a Novel Statewide Learning Collaborative to Increase Lung Cancer Guideline Adherence and Improve Cancer Care Delivery</td>
</tr>
</tbody>
</table>
## Newly Funded Projects

<table>
<thead>
<tr>
<th>Principal Investigator</th>
<th>Proposal Title</th>
<th>Award Amount</th>
<th>Sponsor</th>
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</thead>
<tbody>
<tr>
<td><strong>THORACIC SURGERY (cont.)</strong></td>
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<tr>
<td>David Odell, MD, MMSc</td>
<td>Assessment of Quality Variation in Lung Cancer Treatment in a Statewide Collaborative</td>
<td>$40,000</td>
<td>Thoracic Surgery Foundation for Research and Education</td>
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<tr>
<td>David Odell, MD, MMSc</td>
<td>A Learning Collaborative Model for the Study of Lung Cancer</td>
<td>$40,000</td>
<td>American College of Surgeons</td>
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<tr>
<td>David Odell, MD, MMSc</td>
<td>Development of a Novel Lung Cancer Collaborative in Illinois</td>
<td>$80,000</td>
<td>The Thoracic Surgery Foundation</td>
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<tr>
<td><strong>TRANSPLANT SURGERY</strong></td>
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<tr>
<td>Michael Abecassis, MD, MBA</td>
<td>Integrating Mechanistic Insights from Diverse Models to Prevent CMV Reactivation following Transplantation</td>
<td>$2,545,096</td>
<td>National Institute of Allergy and Infectious Diseases</td>
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<tr>
<td>Joseph Leventhal, MD, PhD</td>
<td>T Cell Receptor Repertoire Analysis as a Biomarker for Predicting Graft Rejection in Transplant Recipients</td>
<td>$999,297</td>
<td>U.S. Army Medical Research and Materiel Command</td>
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<tr>
<td>Michael Abecassis, MD, MBA</td>
<td>Proteogenomic Monitoring and Assessment of Kidney Transplant Recipients</td>
<td>$500,000</td>
<td>Transplant Genomics, Inc.</td>
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<tr>
<td>Joseph Leventhal, MD, PhD</td>
<td>T Cell Receptor Repertoire Analysis as a Biomarker for Predicting Graft Rejection in Transplant Recipients</td>
<td>$413,864</td>
<td>U.S. Army Medical Research and Materiel Command</td>
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<tr>
<td>Joseph Leventhal, MD, PhD</td>
<td>T Cell Receptor Repertoire Analysis as a Biomarker for Predicting Graft Rejection in Transplant Recipients</td>
<td>$357,633</td>
<td>U.S. Army Medical Research and Materiel Command</td>
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<tr>
<td>Michael Abecassis, MD, MBA</td>
<td>Transplant Surgery Scientist Training Program</td>
<td>$229,909</td>
<td>National Institute of Diabetes, Digestive and Kidney Diseases</td>
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<tr>
<td>Jason Wertheim, MD, PhD</td>
<td>[Frankel Foundation Transplant Grants] Attenuation of graft injury following extremity transplantation in rodents</td>
<td>$210,000</td>
<td>Northwestern Memorial Hospital</td>
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<tr>
<td>Jason Wertheim, MD, PhD</td>
<td>Optimization and control of hepatocyte activity via biofunctional modification</td>
<td>$161,748</td>
<td>National Institute of Diabetes, Digestive and Kidney Diseases</td>
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<tr>
<td>Joseph Leventhal, MD, PhD</td>
<td>Prot# CSL842_3001: A Double-Blind, Randomized-Withdrawal, Placebo-Controlled Study to Evaluate the Efficacy and Safety of Human Plasma-Derived C1-Esterase Inhibitor as Add-on to Standard of Care for the Treatment of Refractory Antibody Mediated Rejection in Adult Renal Transplant Recipients</td>
<td>$141,570</td>
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<tr>
<td>Anat Roitberg-Tambur, DMD, PhD</td>
<td>HLA-DQ Immunogenicity and Its Role in Antibody Mediated Rejection in Solid Organ Transplantation</td>
<td>$100,000</td>
<td>Vanguard Charitable Endowment Program</td>
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<tr>
<td>Zheng Jenny Zhang, PhD</td>
<td>Operating Microscope System for Translational Research in Regenerative and Transplant Medicine</td>
<td>$71,000</td>
<td>Office of Naval Research</td>
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<tr>
<td>Jason Wertheim, MD, PhD</td>
<td>IPA for David Ivancic</td>
<td>$69,463</td>
<td>Jesse Brown VA Medical Center</td>
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<tr>
<td>Jason Wertheim, MD, PhD</td>
<td>Modulating senescence in induced pluripotent stem cell-derived endothelial cells for vascular disease modeling and therapy</td>
<td>$67,378</td>
<td>National Heart, Lung, and Blood Institute</td>
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<td>Jason Wertheim, MD, PhD</td>
<td>Hartwell Fellowship for Iman Sarami, MD</td>
<td>$50,000</td>
<td>Hartwell Foundation</td>
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<tr>
<td>Jason Wertheim, MD, PhD</td>
<td>Engineering Podocyte Microenvironments</td>
<td>$50,000</td>
<td>American Society of Transplantation</td>
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<tr>
<td>Zheng Jenny Zhang, PhD</td>
<td>Colony Stimulating Factor-1 in Graft Vascular Disease</td>
<td>$49,592</td>
<td>National Heart, Lung, and Blood Institute (via Albert Einstein College of Medicine, Inc.)</td>
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<td>Daniela Ladner, MD, MPH</td>
<td>National Patient Community, Caregiver and Advocacy Group Directed Strategies to Lead Comparative Effectiveness Research for Liver Cirrhosis</td>
<td>$49,012</td>
<td>Patient-Centered Outcomes Research Institute (via Trailhead Institute)</td>
</tr>
<tr>
<td>Anat Roitberg-Tambur, DMD, PhD</td>
<td>HLA Epitopes in Organ Transplantation – Clinical Applications</td>
<td>$20,000</td>
<td>Vanguard Charitable Endowment Program</td>
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<tr>
<td>Jason Wertheim, MD, PhD</td>
<td>Modulating senescence to improve induced pluripotent stem cell derived endothelial cells for clinical applications</td>
<td>$20,000</td>
<td>Association for Academic Surgery and the Association for Academic Surgery Foundation</td>
</tr>
<tr>
<td><strong>TRAUMA &amp; CRITICAL CARE SURGERY</strong></td>
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<td>Steven Schwulst, MD</td>
<td>The role of innate immunity in the traumatic brain injury-induced immune suppression syndrome</td>
<td>$189,052</td>
<td>National Institute of General Medical Sciences</td>
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<tr>
<td><strong>VASCULAR SURGERY</strong></td>
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<tr>
<td>William Pearce, MD</td>
<td>Vascular Surgery Scientist Training Program</td>
<td>$244,872</td>
<td>National Heart, Lung, and Blood Institute</td>
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<tr>
<td>Karen Ho, MD</td>
<td>The Role of Gut Microbiota in Neointimal Hyperplasia After Vascular Injury</td>
<td>$160,488</td>
<td>National Heart, Lung, and Blood Institute</td>
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<tr>
<td>Karen Ho, MD</td>
<td>The Role of Gut Microbiota in Neointimal Hyperplasia After Vascular Injury</td>
<td>$50,000</td>
<td>Society for Vascular Surgery Foundation and the American College of Surgeons</td>
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<tr>
<td>Karen Ho, MD</td>
<td>Gut Microbe-Dependent Metabolites as Modulators and Biomarkers of Atherosclerosis</td>
<td>$50,000</td>
<td>Vascular Cures</td>
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<tr>
<td>Tadaki Tomita, MD</td>
<td>Alvin H Baum Clinical Simulation Faculty Fellowship Grant: Ultrasound Guided Femoral Artery Access</td>
<td>$45,000</td>
<td>Northwestern Memorial Hospital</td>
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<tr>
<td>Mark Eskandari, MD</td>
<td>Northwestern Vascular Surgery Fellowship 2018-2019</td>
<td>$15,000</td>
<td>Bard Peripheral Vascular, Inc.</td>
</tr>
</tbody>
</table>
Clinical

The Division of Breast Surgery demonstrated strong clinical performance in FY18, with 7% growth and a Likelihood to Recommend top-box score of 87%. The Lynn Sage Comprehensive Breast Center, led by Dr. Nora Hansen, was accredited by the National Accreditation Program for Breast Center (NAPBC), which recognizes achievement in collaborative, multi-disciplinary patient care planning. The center continues to be the highest volume NAPBC-accredited program in Chicago and Illinois.

Research

Dr. Seema Khan continues to lead the Northwestern Cancer Prevention Consortium (NCPC). The NCPC is one of four NCI-funded consortia, structured for the conduct of early phase, biomarker-based trials of cancer prevention agents. She has also secured another competitive renewal of “Preclinical and Clinical Studies of Breast Cancer Prevention with Transdermal Anti-Progesterone Agents with BCRF.” In addition, Dr. Khan is the leader of a project which is studying the lipid metabolism markers in breast tissue and breast cancer risk. This project is part of the Avon Foundation for Breast Cancer Research and Care Program at the Robert H. Lurie Comprehensive Cancer Center. Dr. Khan was also awarded funding to work with Shenzhen People’s Hospital in China. Her medical team will provide education and training with the goal of helping to build a high-level comprehensive medical center for breast disease. She continues to work on her study titled “A Randomized, Double-blind, Placebo-controlled Study of 4-hydroxytamoxifen Topical Gel in Women with Mammographically Dense Breast” as a consortium through University of Texas MD Anderson and NCI.
Dr. Swati Kulkarni continues progress on her study titled “Evaluating the protective effect of a tissue selective estrogen complex (TSEC) in women with newly diagnosed ductal carcinoma in situ,” which is now called The Promise Study. This study is now open to enrollment at 6 different cancer institutions across the nation including Dana Farber, Johns Hopkins, USC, Washington University in St. Louis, University of Pennsylvania, and Northwestern Lake Forest Hospital. She is planning to advance the study with Northwestern Medicine hospitals in western Illinois. In addition, she has been very involved in marketing strategies for this study. Through a collaboration with NUCATS, she has created social media campaigns for the study and has created education materials to inform the community about DCIS and clinical trials.

**Education**

Dr. Batul Al-zubeidy and Dr. Michelle Han were the graduating Lynn Sage Breast fellows during fiscal year 2018. Dr. Al-zubeidy accepted a position at Northwestern Medicine’s Central DuPage Hospital and Delnor Hospital; Dr. Han has joined Swedish Medical Center in Seattle, Washington.

On August 1, 2018, Dr. Chandler Cortina and Dr. Emil Fernando joined the Division of Breast Surgery as the 2018-2019 Lynn Sage Breast Fellows. Dr. Cortina joins Northwestern from Rush University Medical Center and Stroger Hospital of Cook County in Chicago, IL. Dr. Fernando comes from the Cleveland Clinic in Cleveland, OH.

**Faculty News**

In September 2018, Dr. Kevin Bethke assumed the role of Chief of Staff of the Northwestern Memorial Hospital. His vision for the year focuses on physician engagement, wellness, and burnout. He will also be working to enhance communication and introduce new ways to recognize the NMH medical staff.
Divisions of
Cardiac & Thoracic Surgery

Cardiac Surgery

Clinical

In the most recent U.S. News & World Report rankings, Northwestern’s cardiology & heart surgery program was ranked #7 in the nation. Additionally, for the eleventh straight year, the cardiology and heart surgery program has been ranked #1 in Illinois. Overall, the program’s downtown surgical volumes grew 19% from the previous year. The cardiac surgery west region surgical volumes have grown 30% over the past year with the addition of Drs. Gyu Gang and Jonathan Tomasko. A large contributor to the recognition as an elite program has been the progressive treatment of heart valve disease, the program’s role in pioneering the latest advances in transcatheter valve therapies, and the phenomenal quality of patient care. Cardiac surgery volumes have grown 320% since 2004, and the total case volume at NMH has risen to 1,620 (projected for 2018).

Research

The division welcomed Dr. Michael Borger, Professor of Cardiac Surgery and Director of Cardiac Surgery at Leipzig Heart Center, University of Leipzig, to the annual Cardiothoracic Surgery Alumni and Graduation Day, which was held in June 2018. The event featured research presentations by faculty and fellows, as well as Dr. Borger’s keynote lecture entitled “Learning in Cardiac Surgery: Lessons Learned from Minimal Invasive Mitral Valve Procedures.”

Select ongoing research efforts by our faculty include:

- Dr. Patrick McCarthy is principal investigator and member of the national Steering Committee and Valve Solutions Committee for the Apollo Trial and early feasibility study entitled “Intrepid: Evaluation of the Safety and Performance of the Twelve Transcatheter Mitral Valve Replacement System in High Risk Patients with Severe Symptomatic Mitral Regurgitation.” He is also on the Edwards Lifesciences Global Tricuspid Leadership Team, and Abbott Structural Heart Medical Advisory Board.

- Dr. James Cox was appointed Director of Cardiac Surgery Research; 24 publications and projects are pending or in development.
Education

Jeffrey “Mark” Erfe, MD, and Anthony Mozer, MD, recently joined the division as trainees in the integrated cardiothoracic surgery program. Dr. Erfe comes from Yale School of Medicine and Dr. Mozer is an incoming traditional fellow from the University Of Louisville School Of Medicine. Ryo Suzuki, MD, joins the Advanced Cardiac Surgery Fellowship Program from the Keio University School of Medicine. He completed his training at University of California San Francisco.

Daniel Enter, MD, who graduated from the traditional program, is at Cedars Sinai for additional training in heart transplant and mechanical support. Jonathan Tomasko, MD, who recently graduated as a traditional fellow, has joined Dr. Gyu Gang in BCVI West Region and practices at Central DuPage Hospital. Daniel Holloway, MD, a recent graduate of the Advanced Cardiac Fellowship program, will go to University of Calgary as a staff cardiac surgeon.
Clinical

The Division of Thoracic Surgery experienced a transition in 2018 as Dr. Malcolm DeCamp left Northwestern and Dr. Patrick McCarthy was named interim division chief. Despite this departure, the division performed stably throughout the remainder of the year. Overall, the group experienced a slight decline in volume year-over-year but demonstrated strong patient satisfaction performance with a top-box LTR score of approximately 88%.

The division again FY18 to focus on maturation of the new advanced lung failure disciplines including our lung transplant and veno-venous extracorporeal membrane oxygenation (ECMO) clinical programs. The division was successful in hiring the campus’ first physician extender for advanced lung failure. In addition, the campus performed its 65th lung transplant during FY18 and participated in a campus-wide UNOS site visit that resulted in the lung transplant program earning high praise and strong remarks from the campus’ surveyors.

FY18 also brought the first operating year of an integrated thoracic oncology program. Housed within the Robert H. Lurie Comprehensive Cancer Center, the thoracic surgery division joined space programmed for thoracic medical oncology and interventional pulmonary medicine. This co-location has resulted in enhanced faculty engagement, ease of complex care referral/case planning, and most notably an enhanced patient experience for those who turn to Northwestern Medicine for lung cancer treatment.

Research

Dr. David Odell was awarded a K07 from the NCI to study issues related to quality in the delivery of lung cancer care. In addition, Dr. Odell was selected as the winner of the Feinberg School of Medicine Research Day (in the Education Research category).

Dr. Ankit Bharat is a Co-I on Dr. Harris Perlman’s R01 (“Macrophage Modulation of Lung Fibrosis”) and Dr. Vadim Backman’s R01 (“Translating buccal nanocytology for lung cancer screening into clinical practice”); he is also a PI on a Thoracic Surgery Foundation for Research and Education award and a Co-PI on an American Lung Association award.

Education

The 25th Annual Thomas W. Shields Lecture was hosted by the Division on May 17, 2018, and featured guest lecturer Yolanda K. Colson, MD, PhD from Brigham and Women’s Hospital. Dr. Colson’s keynote presentation focused on academic surgery and innovation.
Dr. Robert Vanecko, Professor Emeritus

Dr. Robert Vanecko transitioned to Professor, Emeritus, effective June 1, 2018. Dr. Vanecko has made myriad contributions to the academic and scholarship domains of Northwestern University and the broader medical and surgical community. Notably, Dr. Vanecko has held prominent leadership roles for Northwestern University including regular faculty appointments (circa 1964), Assistant Dean, Graduate Medical Education (1988 – 1990), Assistant Dean, Graduate Medical Education and Continuing Education (1990 – 2000), and Program Director, Cardiothoracic Residency program (2004 – 2007). Dr. Vanecko also had/has the honor of being appointed to many local and national societal organizations including Alpha Omega Alpha, Thoracic Surgery Directors Association, Illinois Surgical Society, Illinois Medical Society, American College of Surgeons, American College of Chest Physicians, and American Association of Thoracic Surgery. In many of these roles (most of which were contemporaneous), he was not only a contributing practitioner, he also authored and steered landmark work related to credentialing, technical skill, surgical education, and health policy. In his prospective faculty role, Dr. Vanecko will continue to provide formal and informal mentorship to current and future medical students, residents, and fellows; and we expect and look forward to his participation on our marquee annual events and ongoing conference discussions.

Dr. David Odell earned numerous education accolades during FY18, including being the recipient of the STS President’s Award for the best presentation by a junior faculty member, elected Chair of the Mentorship Taskforce for STS, appointed as a question writer for SESATS by the American Board of Thoracic Surgery, and earning an award for the Best Abstract, Health Services Research Category, at the ACS Clinical Congress.

Drs. David Odell & Ankit Bharat

Dr. Shari Meyerson (left) and Lung Force Hero Meaghan Hanifin in-studio with John Williams at WGN Radio
Division of
Gastrointestinal Surgery

2018 proved to be another successful year for the Division of GI Surgery. The Division experienced an increase in clinical activity as new faculty members (Drs. Kyle Mueller and Ezra Teitelbaum) were integrated into the group. Faculty members were also busy with presenting at several prominent national meetings as well as earning competitive funding for exciting research initiatives. In May 2018, Dr. Anne Marie Boller moved back to Minnesota to be closer to family. With that, Dr. Amy Halverson assumed the role of interim Surgical Director of the Integrated Pelvic Health Center, and the Division of GI Surgery is actively recruiting for two colon and rectal surgeons to meet patient and programmatic demands in the areas of colorectal cancer, inflammatory bowel disease, inherited neoplasms, and pelvic floor disorders.

**Faculty Recognition**

In addition to her role as the Surgery Clerkship Director, **Dr. Amy Halverson** was appointed as the interim Surgical Director of the Northwestern Medicine Integrated Pelvic Health Program.

**Dr. Scott Strong** was appointed to the American Society of Colon and Rectal Surgeons’ Executive Council as the Research Foundation President. In addition to this new role, Dr. Strong will also serve as the Chair of the IBD Committee and the Fundamentals of Rectal Cancer Surgery Committee.

**Dr. Ezra Teitelbaum** was appointed as the Associate Director of the General Surgery Residency Program.
Digestive Health Foundation

The Digestive Health Foundation (DHF) boasted record fundraising accomplishments in 2018. The annual gala held on June 9, 2018, honoring Ms. Andréa J. Schwartz and Dr. Steven J. Stryker raised $2.45 million. Proceeds will support research and educational initiatives led by faculty and staff in the Northwestern Medicine Digestive Health Center. In 2018, the DHF funded:

- **Research projects and initiatives totaling $298,150**
- **Division of GI Surgery DHF Grant Recipients:**
  - Perioperative Lidocaine Pharmacokinetics in Patients Receiving Intravenous Lidocaine Analgesia during and after Colorectal surgery. PI: Shireen Ahmad, MD, Michael F. McGee, MD, Michael J. Avaram, PhD
  - A Multidisciplinary Collaboration to Minimize Diversion of Opioids. PI: Jonah Stulberg, MD, PhD, MPH
- **DHF Biorepository in the amount of $309,500**
- **Contributed to the building of endowments and fellowships**
  - Stephen B. Hanauer Fellowship in IBD
  - Alvin I. Goodman Esophageal Fellowship (non-endowed)
Division of Organ Transplantation

Clinical

As obesity and chronic illness rates continue to rise, lower quality, or marginal, organs are becoming more common. Northwestern’s transplant program has become one of the leaders in taking marginal organs by pursuing advanced cost-benefit analyses, clinical and surgical techniques, and superior care of patients pre- and post-transplant. Waitlisted patients can be offered organs that otherwise would be discarded.

Over the coming year, additional focus and resources will be placed on the living donor program. The living donor program is the largest program in Chicago and one of the largest programs in the country. The program connects patients with live donors in order to receive a life-saving transplant more quickly rather than wait for a deceased organ to become available. Due to the success of the living donor program, the team celebrated another successful six-way kidney swap in February. The patient chain included three sets of friends, an aunt and a niece, second cousins, and a good Samaritan whose efforts started the “swapportunity.”

The team, in partnership with the Cardiothoracic Surgery team, performed the second ever combined liver-heart transplant at NMH this year. In addition, there were two successful combined heart-kidney transplants.

Research

In FY18, the Comprehensive Transplant Center (CTC) submitted 34 grant proposals totaling $17.4 million. In this same period, CTC researchers were awarded grants totaling over $7.75 million.

Dr. Joseph Leventhal, in collaboration with Co-Investigator Dr. James Mathew, received a three-year Technology Development Award totaling $999,297 from the Department of Defense via the U.S. Army Medical Research and Materiel Command’s Fiscal Year 2016 Reconstructive Transplant Research Program, part of the Congressionally-Directed Medical Research Programs. The objective of the project is to develop a new sensitive and non-invasive technology to prospectively diagnose subclinical rejection that is applicable to VCA. These studies will be conducted in renal transplant patients.

Dr. Anat Tambur received two multi-year awards from the Paul Terasaki Research Foundation (via Vanguard Charitable Endowment Program). The first award totals $100,000 over five years. This research project is geared specifically to support work that is part of the research component of post-doctoral fellows who are in an HLA-Director-in-Training Program in the Tambur Lab. The work is focused on different aspects of HLA antibodies in the context of solid organ transplantation and it is aimed to identify characteristics that may predict immunogenicity and antigenicity of donor/recipient HLA-mismatched combinations. The long-term goal is to have tools that will help minimize development of do-novo donor-specific HLA antibodies (DSA) and therefore promote longer graft survival.

Dr. Tambur’s second award from the Paul Terasaki Research Foundation totals $300,000 over three years. There are three sub-projects that are designed to better inform clinical practice by focusing on the single patient (and his/her donor) to determine the properties of HLA mismatched antigens that trigger an immune response. The study includes patients transplanted at three different centers (Northwestern, University of Alabama Birmingham, and Edmonton). The research will utilize a variety of existing physical, computational, and biochemical methods as well as 3D modeling analysis in order to provide more granular information regarding immunogenicity of certain HLA mismatched combinations and the risk of dnDSA formation for a given set of HLA mismatches. The experiments will also involve a series of adsorption/elution experiments using “single-single” HLA-DQ coated beads and homozygote DQ cell lines as well as an investigation into the unique immunogenicity and pathogenicity of HLA-DQ.
Dr. Katherine Hekman, who is currently supported through an NRSA F32 Fellowship under the primary mentorship of Dr. Jason Wertheim, was selected as the recipient of the highly competitive 2018 Association for Academic Surgery (AAS) and the Association for Academic Surgery Foundation (AASF) Research Fellowship Award, Basic/Science/Translation Research. This one-year award for $20,000 supports Dr. Hekman’s project entitled “Modulating senescence to improve induced pluripotent stem cell derived endothelial cells for clinical applications.”

Dr. Jenny Zhang was awarded a subcontract totaling $49,592 from the National Heart, Lung, and Blood Institute (via Albert Einstein College of Medicine, Inc.). The goal of this study is to test the effect of colony stimulating factor-1 receptor (CSF-1R) inhibition in graft vascular disease (GVD) using a mouse vascularized heterotopic heart transplant model. As the Director of the CTC Microsurgery Core, Dr. Zhang will oversee heart transplantation surgeries in mice along with the post-operative recovery as well as dose-monitoring, echocardiography and post-mortem tissue analysis.

Dr. Daniela Ladner received a one-year Tier III award totaling $49,012 from the Patient-Centered Outcomes Research Institute (via Trailhead Institute) to support a study entitled “National Patient Community, Caregiver and Advocacy Group Directed Strategies to Lead Comparative Effectiveness Research for Liver Cirrhosis.” In this program, each tier was designed to move partnerships within the healthcare community toward the development of high-quality research proposals.

Tier I awards provided seed money to individuals and groups that have healthcare research ideas and interest in patient-centered research. Pipeline to Proposal awardees who enter at Tier I were evaluated to determine if they should advance to Tier II, where they have a year to further develop their research partnerships. Tier II awards develop research capacity, create new partnerships, and build the infrastructure needed to conduct research. Tier III awards fund the development of high-quality research proposals that can be submitted for PCOR funding (see figure below).
**Research (cont.)**

**Dr. Jason Wertheim** was recently awarded an R01 totaling $1.58 million over 5 years from the National Institute of Diabetes, Digestive and Kidney Diseases for his study entitled “Repairing the Kidney Endothelium via Targeted Extracellular Matrix Modifiers”. This study investigates a new strategy to deliver bioactive agents to specific regions of the kidney vasculature, called the tissue extracellular matrix. The science involves development and validation of a dual functional nanomaterial to repair and protect the damaged endothelium of the kidney that is a primary contributor to chronic kidney disease leading to kidney failure and necessitating dialysis or kidney transplantation.

Dr. Jason Wertheim was also recently awarded a FY17 Peer Reviewed Medical Research Program - Discovery Award totaling $316,000 over 18 months by the Department of Defense’s U.S. Army Medical Research and Materiel Command through its Congressionally-Directed Medical Research Programs. The study entitled “Uncovering the circulating factor in FSGS” seeks to develop preliminary data that will 1) provide knowledge on the mechanisms of disease initiation in FSGS and 2) enable subsequent development of an early-stage diagnostic test or therapeutic intervention that removes or deactivates the identified factor. Primary focal segmental glomerulosclerosis (FSGS) is one of the most common chronic glomerular diseases of the kidney in young adults, causes renal failure requiring dialysis, and tends to recur after kidney transplantation, altogether increasing the strain on both the health of patients—military or civilian—and the healthcare systems that care for them.

**Dr. Michael Abecassis** has submitted an IDE application to the FDA for use of a test invented at NU and recently issued a patent to non-invasively monitor patients following kidney transplantation. This IDE application is in preparation of a submission to NIAID of a U01 for a multi-center randomized controlled trial testing a monitoring strategy using this test versus the standard of care.

**Education**

**Transplant Surgery Clinical Fellowship**

Raj B. Patel, MD & William P. Boyan, Jr., MD joined Kofi Atiemo, MBChB, & Rebecca Craig-Schapiro, MD, PhD, in the transplant surgery fellowship program.

**T32 Transplant Surgery Scientist Training Program**

Fran Lee, MD, and Jessica Voss, PhD, are in their second year of fellowship in the Northwestern University Collaborative Transplant-Related Immunology and Biomedical Engineering (NUCTRIBE). Nik Mazumder, MD, MPH, will soon begin his second year in the Northwestern University Transplant Outcomes Research Collaborative (NUTORC) track.

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**Michael Abecassis, MD, MBA, Wins 2018 Tripartite Prize**

Michael Abecassis, MD, MBA, the James Roscoe Miller Distinguished Professor of Medicine and founding director of the Comprehensive Transplant Center, has been named the winner of the 2018 Tripartite Legacy Faculty Prize in Translational Science and Education.

“Winning this award is both flattering and humbling. I think this is a really important award because it is recognition of what my career and academic medicine really revolve around: the tripartite mission,” said Abecassis, also chief of Organ Transplantation in the Department of Surgery. The Tripartite Legacy award is presented annually to a faculty member who has demonstrated excellence in research that emphasizes translational approaches, teaching, mentoring and leadership. *(Source: Feinberg Office of Communications)*

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CTC Summer Student Immersion Program

The 2018 Comprehensive Transplant Center Summer Student Immersion Program (CTCSSIP) received over 150 applications from students across the country. Student selection is highly competitive and is dependent on an in-depth curriculum vitae review, phone interview, and an application form submission that requests students’ academic record (GPAs, SAT, ACT, MCAT, GRE scores, etc.). Students are then paired with a transplant faculty member for the 8-week research internship. The 2018 CTCSSIP accepted 20 students who presented their work at the cumulative poster session on July 27, 2018.

This spring the Department of Surgery celebrated the investiture of Dr. Jason Wertheim as the Edward G. Elcock Professor of Surgical Research.

Left to right: Drs. Michael Abecassis, Jason Wertheim, & Nathaniel Soper
The Division of Plastic Surgery continues to increase in clinical productivity. Growth this year was focused on reconstructive procedures, specifically breast and lower extremity, as well as the aesthetic practice. With the addition of former resident Dr. Sumanas (Sue) Jordan to the faculty in August, the practice looks to increase the volume of patients by incorporating gender affirmation procedures and surgery for cancer-related lymphedema.

Research

Dr. Mohammed Alghoul continues to work on clinical research in both oculoplastic and breast surgery. He received a research grant from MERZ in the amount of $35,000 to study an innovative application of Calcium Hydroxylapatite in Periorbital Rejuvenation.

Dr. Gregory Dumanian recently concluded a randomized clinical trial on the treatment of amputee pain. His work on a novel mesh suture continues; he recently received funding for a randomized clinical trial at Walter Reed and Maryland Shock Trauma. His has earned patents in the United States, China, Australia, Japan, Mexico, and the European Union.

Dr. Marco Ellis was recently awarded the American Society of Maxillofacial Surgery CRANIO Fellowship, which grants junior faculty a traveling stipend.

Dr. John Kim was named Vice-Chair of the American Society of Plastic Surgeon's Annual Meeting Council and served as Chair of the ASPS Breast and Body Symposium. He was also awarded an American Society of Aesthetic Plastic Surgery Education Foundation Grant.

Dr. Jason Ko continues to work with Dr. Dumanian as the Co-PI of the Department of Defense-funded clinical trial comparing targeted muscle reinnervation (TMR) to standard muscle implantation for the treatment of neuromas in upper and lower extremity amputees. Dr. Ko is also evaluating the biomechanical strength and healing properties of mesh suture in flexor tendon repairs in cadaver and animal models, along with other orthopedic applications.
Dr. Robert Galiano was awarded a NIH Phase I STTR grant with Arrevus, Inc. to study a Designer Proline rich antimicrobial peptide chaperone protein inhibitor (DPC) to treat multi-drug resistant wound infections. His work on in-vivo functional muscle regeneration utilizing an implantable bioreactor continues with Wake Forest University Health Systems.

Education

The plastic surgery residency continues to increase in the number of applicants and to attract the top medical school candidates nationally. This year, the program received over 200 applications for the two residency positions in the integrated program. The intern class of 2025 includes Dr. Jennifer Bai from the University of Maryland School of Medicine and Dr. Sofia Aronson from the Warren Alpert Medical School of Brown University. Last year’s chief residents are currently completing fellowship training—Dr. Chad Purnell is doing a craniofacial surgery fellowship at the University of Washington in Seattle, WA, and Dr. Walter Sweeney is doing an aesthetic surgery fellowship in Los Angeles, CA.
The Division of Surgical Oncology concluded a successful year. Our team not only demonstrated strong clinical performance, as achieved by performing ahead-of-budget for divisional wRVU’s, we also maintained strong performance with respect to our patient satisfaction (Likelihood to Recommend, or LTR), concluding the year at 92.2% top-box rated scoring.

Of particular note, there have been a number of new surgical services offered at Northwestern thanks to the arrival and expertise of Dr. Ryan Merkow, who joined the division in September 2017. In January 2018, Dr. Merkow became the first physician to perform CRS/HIPEC at Northwestern Memorial Hospital. CRS/HIPEC is used to treat a variety of cancers, including appendix, colorectal and ovarian cancer, as well as mesothelioma and a slate of rarer malignancies. The technical goals of the procedure are to remove all visible disease and then treat the intra-abdominal surfaces with heated chemotherapy for 90 minutes in an effort to destroy any microscopic cells that were not visible during resection.

Dr. Merkow is also leading the expansion of regional therapies at Northwestern Medicine, which is a cancer-fighting approach to the disease that applies treatment directly to the cancer site in much higher doses. He has a particular expertise using regional therapy techniques when treating patients with metastatic appendix or colorectal cancer. The first of these treatments is called hepatic artery infusion (HAI) chemotherapy, which is delivered through a specialized pump that is surgically placed. HAI chemotherapy is an effective treatment for patients with liver-dominant metastatic colorectal cancer and intrahepatic cholangiocarcinoma. The second regional therapy is referred to as cytoreductive surgery with hyperthermic intraperitoneal chemotherapy (CRS/HIPEC). This is another highly specialized treatment that addresses tumors that have spread to the lining, or peritoneum, inside the abdominal cavity. Dr. Merkow is working with colleagues across the system to harness the collective expertise of Northwestern Medicine specialists through a new Regional Cancer Therapeutics Program.

Many faculty of the division participate in the Surgical Outcomes and Quality Improvement Center (SOQIC) at Northwestern University. Led by Dr. Karl Bilimoria, the center continued to realize many successes in 2017, which include:

- SOQIC faculty have published nearly 30 publications in peer reviewed journals, including the New England Journal of Medicine and JAMA, since January of 2018.
- Dr. Ryan Merkow was elected to the Board of Directors for the Surgical Outcomes Club.
- SOQIC received the Best Overall Abstract award at the Academic Surgical Congress.
- Dr. Karl Bilimoria was elected President of Association for Academic Surgery.
- Dr. Anthony Yang was elected to AAS Leadership and Executive Council as a Counselor.
- Dr. Anthony Yang and Julie Johnson, PhD, received grant funding through the Northwestern Memorial Foundation, for “Why do Patients Refuse VTE Prophylaxis? Improving Nurse-Patient Conversations at the Bedside.”
- SOQIC received additional funding through the ABS, ACS and ACGME to continue the Flexibility In Duty Hour Requirements for Surgical Trainees (FIRST) Trial data collection and analysis through 2020.
- SOQIC continues to run the Illinois Surgical Quality Improvement Collaborative (ISQIC), which leads over 50 hospitals in quality and process improvement. Current initiatives include post discharge VTE best practices and reducing opioid prescribing. SOQIC is also coordinating the First Annual Illinois State Surgical Meeting planned for April 2019.
Additionally, Dr. David Bentrem continues his translational research on the topic of pancreatic cancer as a co-investigator on two R01 grants. He is also a collaborator on two ECOG-ACRIN clinical trials. Finally, Dr. Wayne was a collaborator on a clinical trial with John Wayne University titled “Multicenter Selective Lymphadenectomy for Melanoma Trial II: A Phase III Multicenter Randomized Trial of Sentinel Lymphadenectomy and Complete Lymph Node Dissection versus Sentinel Lymphadenectomy Alone in Cutaneous Melanoma Patient with Molecular or Histopathological Evidence of Metastases in the Sentinel Node”. He has also taken a role as a co-investigator on the Robert H. Lurie Comprehensive Cancer Center’s Senior Leadership P grant through the NCI.

Education

Numerous faculty were awarded Excellence in Teaching awards by the residents in recognition as their roles as educators. Additionally, within the Surgical Outcomes and Quality Improvement Center (SOQIC), which includes a number of Surgical Oncology faculty, there are many residents and 8 research fellows working on projects with faculty. SOQIC has a strong commitment and formal program to training surgical trainees in health services and outcomes research. Finally, SOQIC has started a new 5-year collaboration with the ACS, ABS and ACGME to investigate issues in surgical education.

Drs. Elaraj and Sturgeon provided key mentorship to medical students through Feinberg School of Medicine’s Area of Scholarly Concentration program. In this program, students perform a hypothesis-driven investigation or formal project in an individualized area of independent study within biomedical research or a medically-related field. Additionally, Dr. Elaraj is serving as a faculty instructor for the Medical Decision Making course for 2nd year medical students. Dr. Sturgeon mentored 5 medical students working with him on health-related quality of life and financial burden in endocrine surgery patients.

Left to right: Drs. Ryan Merkow, Jeffrey Wayne, David Bentrem, Karl Bilimoria, Anthony Yang, Dina Elaraj, Cord Sturgeon
Clinical

Clinical volume and acuity in trauma, acute care surgery, and critical care remain high. Performance measures reflect high-quality care with excellent outcomes. The Trauma program at Northwestern Medicine continues to participate robustly as a Level 1 Trauma Center. The General Surgery practice continues to grow and further promotes the excellent multi-disciplinary collaboration across the system. The Surgical Critical Care service remains as a valued local and tertiary referral source providing intensive care for most surgical patients. Division faculty are also active in community and state policy initiatives to decrease violent crime in the Chicago area, which continues to rise, and focus on these initiatives is critical.

Research

Divisional research activity has continued to flourish this year and reflects productivity and diversity. There are ongoing efforts in global health, basic science, and education research, with an extensive list of publications and presentations at national and international meetings.

Dr. Steven Schwulst entered the third year of his four-year NIH K08 grant awarded from the National Institute of General Medical Sciences. His project is entitled, “The role of innate immunity in the traumatic brain injury-induced immune suppression syndrome.”

Dr. Joseph Posluszny received support from the NM Quality Committee to develop a quality improvement project designed to reduce reintubation rates in the SUC. He also had a project accepted for presentation at the EAST national trauma meeting dealing with predicting length of stay in Trauma and Emergency General Surgery patients.

Dr. Mamta Swaroop continues to make progress on global health initiatives. The Bolivian Trauma Initiative is in the implementation phase of the legislated prehospital system developed collaboratively with Bolivian Officials. An official seat in the government continues for Dr. Swaroop’s Global Surgery Fellow, currently Erica Ludi, a resident from Emory University.

Dr. Swaroop presented as the Key Note Speaker at the

Left to right:
Dr. Steven Schwulst
Dr. Michael Shapiro
Dr. Mamta Swaroop
Dr. Nabil Issa
Dr. Joseph Poslusnzy
Christine Schilling, PA-C
Royal College of Surgeons Global Frontiers Conference in London in June 2018 on the work to date in Bolivia and also held the first international TRUE Communities Course.

**Education**

The Surgical Critical Care Fellowship enters its tenth year with two new fellows. Dr. Michael A. Masteller joins Northwestern Medicine upon completion of his residency at Mount Sinai in Chicago and Dr. Alexander M. Johnston comes to us from the Guthrie Clinic/Robert Packer Hospital. Dr. Nabil Issa has continued to thrive as Program Director as it has aligned well with his special interests in curriculum development.

Several division faculty members were again recognized by the Department of Surgery for excellence in teaching. In our contact with residents and medical students on the trauma/emergency surgery, critical care and night float rotations the faculty continues to emphasize an educational balance that embraces preparation, clinical excellence, and professional integrity.

**Faculty News**

Dr. Mamta Swaroop received the 2018 MLK Humanitarian Award. Each year, five members of the Northwestern Medicine workforce are presented with awards for their extraordinary contributions to the community and for embodying Dr. King’s legacy of humanitarianism for her work in Chicago communities and global health. She was also named as one of Oprah’s Health Heroes for 2018 for her work in Chicago, where her team has taught more than 700 trauma first responders in the TRUE (Trauma Responders Unify to Empower) Communities Course.
Clinical

The 42nd annual Northwestern Vascular Symposium was held in Chicago, IL, December 7-9, 2017. The symposium provided a comprehensive analysis of the current management of vascular disease including treatment of extracranial cerebrovascular and supra-aortic trunk disease, new approaches to lower extremity arterial and venous problems, cutting-edge developments in open and endovascular approaches to treat aortic and visceral arterial disease, and novel techniques for hemodialysis access, complex venous problems, and upper extremity disorders. Fifty-one world-renowned physicians presented on their areas of expertise. One-hundred-eighty registered attendees represented the United States and several other countries.

Dr. Hoel is the site principal investigator for a new clinical trial using a custom-made Thoracic Branch Endoprosthesis. Drs. Hoel and Eskandari successfully treated the first patient in Illinois with this device at Northwestern. This minimal invasive uses cutting edge technology for the treatment of aortic arch aneurysms is only available at a few select medical centers in the country.

Dr. Rodriguez and Dr. Eskandari hosted a 2-day aortic surgical education course for Latin American physicians. These case presentations and live case presentations allow for international recognition of the vascular surgery division.

Drs. Tomita and Eskandari expanded the available vascular surgery services at Northwestern Lake Forest Hospital after moving into the new facility this year. In addition to carotid surgery, lower limb endovascular therapy, lower limb bypass surgery, and dialysis access surgery, these two physicians performed the first carotid stent (CAS) procedure and endovascular aortic aneurysm repair (EVAR) this year at Lake Forest Hospital. In addition, the first outpatient accredited vascular laboratory is now open with Dr. Tomita serving as the Medical Director.

Drs. Eskandari, Rodriguez, and Vavra continue to increase the clinical activity at the Jesse Brown VA Medical Center. In addition, the hybrid operating room was renovated with installation of a new Philips system. Advantages of this new system includes a 60-70% reduction in radiation exposure for patients and healthcare works as well as improved imaging technology.

Research

Michael Nooromid, MD, and Eddie Blay, Jr., MD, completed their Vascular Surgery Scientist Training Program (T32) June 30, 2018. Dr. Nooromid is currently one of the first year fellows in Vascular Surgery and Dr. Blay is completing his fourth year in the General Surgery residency at Temple University, Lewis Katz School of Medicine, Philadelphia, PA. The incoming T32 trainees are Dr. Courtney Furlough who will be working with Dr. Andy Hoel, and Dr. Rhami Khorfan who will be working with Dr. Karl Bilimoria. Drs. Edmund Chen and Pieter Norden are continuing their research projects under the mentorship of Drs. Karen Ho and Tsutomu Kume, respectively.

Resident Katherine Hekman, MD, is continuing her studies under the F32 award from NIH, “Modulating Senescence in Induced Pluripotent Stem Cell-Derived Endothelial Cells for Vascular Disease Modeling and Therapy” under the mentorship of Dr. Jason Wertheim.

The work of Drs. Blay, Chen, Furlough, Khorfan, Norden, and Nooromid, is funded by the Vascular Surgery Scientist Training Program T32 Grant. Collectively, the vascular surgery trainees have 13 publications in peer-reviewed journals, and 21 presentations regionally, and nationally for the year.
Education

We are proud to announce the accomplishments of our trainees for the 2017-2018 academic year. Graduates from the vascular surgery fellowship program include Dr. Ashish Jain and Dr. Michael Soult. Ashish joined a hospital-based practice within Novant Presbyterian in Charlotte, NC. Michael is now a faculty member at Loyola University Medical Center in Maywood, IL. The department of surgery awarded four teaching awards for the academic year 2017-2018 – Matthew Chia, MD (Resident as Teacher), Courtney Furlough, MD (Resident as Teacher), Michael Soult, MD (Fellow as Teacher), and Gabe Wallace, MD (Fellow as Teacher). Katherine Hekman, MD, was awarded an Alpha Omega Alpha (AOA) medical honor induction in the Northwestern University Chapter. Dr. Hekman was also awarded a Trainee Research Award in Basic Science from the Association for Academic Surgeons. She is currently studying the cell cycle within transplant surgery on an F32 scholarship.

Integrated resident, Michael Nooromid, MD, continued his investigations on the relationship of the microbe-derived metabolites produced by the intestinal microbiome and its impact on arterial remodeling after injury with mentor, Dr. Karen J. Ho. His work is funded by the Vascular Surgery Scientist Training Program T32 Grant. Collectively, the vascular surgery trainees have 23 publications in peer-reviewed journals, and 37 presentations regionally, nationally, and internationally for the year. The 6th Annual John J. Bergan, MD, honored lecturer was Dr. Thomas Wakefield from the University of Michigan. His talk was titled, “Targeting inflammation to treat thrombosis in VTE.” The division had a successful match season for both the integrated residency and traditional fellowship programs.

We welcome Eric Pillado, MD, from the University of California, Los Angeles as our new resident intern, and Brian Wernick, MD, from St. Luke’s University Health Network our newest fellow.

Faculty News

Dr. Eskandari was named a Castle Connolly “Top Doctors’ and was appointed to the Northwestern University Chapter of Alpha Omega Alpha Honor Medical Society. Dr. Eskandari was also appointed to the Society for Vascular Surgery Public and Professional Outreach Committee.

Dr. Hoel was appointed as the Chair for the Ad-Hoc Committee on Surgeon Engagement for Northwestern Memorial Hospital, and the Chair of the Society of Vascular Surgery Medicare Matching Audit Committee.

Continued on next page
Dr. Ho was appointed as the Director of Vascular Surgery Research at Northwestern Memorial Hospital. Dr. Ho received 2 NIH funded awards as co-investigator from the NIH. The first project is titled, “Modulating senescence in induced pluripotent stem cell-derived endothelial cells for vascular disease modeling and therapy”, and is funded for a total of $195,738 over 3 years. The second project is titled “A synthetic heparin derivative that targets collagen to repair damaged vasculature after balloon angioplasty”, and is funded for a total of $197,551 over 1 year.

Dr. Rodriguez was named a Distinguished Fellow for the Society of Vascular Surgery, and he was promoted to Professor of Surgery and Radiology at Northwestern University.

Dr. Tomita is a new member of the Midwestern Vascular Surgery Society and FACS. He was appointed Medical Director of the Lake Forest Hospital Outpatient Vascular Lab and received the Alvin H. Baum Clinical Simulation Faculty Fellowship Grant.
Dr. William Pearce, Professor Emeritus

Dr. Pearce retired after more than 30 years of service in the Northwestern University Department of Surgery, Division of Vascular Surgery. He served as the Chief of Vascular Surgery from 1998 to 2010, among countless other honors bestowed upon him locally, regionally, and nationally. His influence and leadership in areas of research, education, clinical care, and humanitarianism will leave a lasting legacy in the field of vascular surgery.

Left to right:
Dr. Heron Rodriguez
Dr. Karen Ho
Dr. Tadaki Tomita
Dr. Mark Eskandari
Dr. William Pearce
Dr. James Yao
Dr. Andrew Hoel

Dr. Pearce (center) with clinic staff and APNs

Left to right:
Rita Herm-Barabasz
Lauren Broucek
Jennifer Schroeder
Katy Cary
Bekka Sobolewski
Dr. William Pearce
Bobbie Moore
Matt Meador
Kara Easton
Yolanda Flemming
JoAnna McGrath
At Jesse Brown VA Medical Center (JBVAMC), our mission is “putting Veterans first.” The VA remains the largest single employer of physicians and nurses in the United States as well as the largest educator of Health Care Professionals in the U. S. JBVAMC is the only VA healthcare facility in the city of Chicago. The 170-bed inpatient facility accommodates more than 8,000 inpatient admissions annually. The Surgical Service encompasses nine sections (General Surgery, Orthopedics, Optometry, Ophthalmology, Otolaryngology, Plastics, Podiatry, Urology, and Vascular) and performs over 3,000 operations annually.

Clinic access was recently rated 3rd best throughout VHA among similar complexity centers. Thoracic Surgery is back at Jesse Brown and the program is led by Dr. Frank Podbielsky, our full-time thoracic surgeon. Dr. Ashley Vavra is a new part-time provider in our section of Vascular Surgery and Dr. Sue Jordan is a new part-time plastic surgeon.

Drs. Jason Wertheim and Josh Meeks have merit funding from the VA BLRD. A new merit award from HSRD is starting in collaboration with NU ISQIC focused on improving chemoprophylaxis for Veterans after major cancer surgery.

The medical students continue to enjoy their rotations at Jesse Brown. Over the last five years, over seventy percent of NU medical students rate the value of the VA clinical training as very good or excellent.

**Affiliate Updates**

**Lurie Children’s Hospital**

Lurie Children’s was once again ranked in the top 10 nationally by U.S. News & World Report. The American College of Surgeons has named Lurie Children’s a level 1 pediatric surgery center three years in a row and Parents magazine named it as one of the country’s 20 most innovative children’s hospitals in 2018. The pediatric health transplant program is one of the largest in the Midwest and U.S. News & World Report ranked it as the 3rd best Pediatric Cardiology & Heart Surgery hospital in the nation.

On June 9, 2018, Lurie Children’s opened a new 44-bed state-of-the-art Regenstein Cardiac Care Unit (CCU). The new unit on the 22nd floor of the hospital will add 48 beds for intensive care and 24 beds for cancer and blood disorders in 2019, bringing the total number of beds from 288 to 360.

This fall, Lurie Children’s will open another suburban location for outpatient procedures. The Lurie Children’s Surgery Center in Northbrook will be approximately 26,000 square feet and house a state-of-the-art high definition 3T MRI, 4 operating rooms, and private rooms for pre- and post-operative care. It will be the only facility on the Northshore dedicated solely to children.

**Faculty News**

**Dr. Aimen Shaaban** serves as the Director of The Chicago Institute for Fetal Health at Lurie Children’s. The Chicago Institute has a multidisciplinary, multi-institutional mandate to provide a complete spectrum of care for the fetus and mother ranging from prevention to disease to in utero fetal surgery. The Chicago Institute for Fetal Health has one of the largest Spina Bifida Multi-Disciplinary Clinics in the world and is the only fetal center in Illinois that treats myelomeningocele in utero.

**Dr. Joseph Forbess** was awarded grant support from both the American Heart Association and the National Institutes of Health to study biodegradable stents for patients with congenital heart disease. His laboratory has developed a dual helical biodegradable stent for use in both blood vessels and the tracheobronchial tree, and is developing novel bioresorbable polymeric molecules that allow for drug elution of desirable pharmacologic agents in the form of
nanoparticles or coatings that can be applied to bioreversible stent polymers. Most recently, working with Edward Thorp, PhD, of the Department of Pathology, he has been studying the therapeutic potential and mechanisms of omental immune cells in pediatric and adult cardiac disease. New preliminary data generated indicate that cardio-omentopexy slows progression to heart failure after pressure overload-induced left ventricular hypertrophy in rodents. He has authored or co-authored over 100 articles and book chapters. Dr. Forbess was named the Division Head of Pediatric Cardiovascular-Thoracic Surgery in August 2018.

**Dr. Fizan Abdullah** will remain the Permanent Council President of the G4 Alliance through 2018. He led the 2018 G4 Alliance Permanent Council Meeting in Mozambique and the 2018 G4 Alliance Permanent Council Meeting in Geneva.

**Dr. Ann O'Connor** became the first general pediatric surgeon in the Midwest to perform a robotic sleeve surgery. Dr. O’Connor is the program director of the Adolescent Bariatric Surgery Program and a leading authority in the surgical treatment of obesity and obesity-related disorders in teenagers. She is also the only pediatric surgeon in Illinois certified by the American Board of Obesity Medicine.
Northwestern Lake Forest Hospital

On Saturday, March 3, 2018, an orchestrated transfer of patients from the old Lake Forest Hospital to the new Northwestern Medicine Lake Forest Hospital (NLFH) occurred. Patients were brought by ambulance or wheeled through the tunnel system between the two facilities. The transfer was complete within hours and without incident. By Sunday, the first operation at the new hospital was performed (laparoscopic appendectomy). The new facility includes modern and spacious inpatient rooms replete with huge flat screen televisions, bathroom and shower, all of which would be the envy of a five star hotel. The operating rooms are outfitted with the latest technology for laparoscopic, robotic and open procedures. These features were recently highlighted in a live telecast of an orthopedic procedure performed by Drs. Tom Nemickas and Peter Thadani.

Northwestern Medicine continues to grow in the North Region, posting double-digit growth in new patient visits for the past several years. While the number of surgical cases has risen only 5%, OR minutes have increased around 10% indicating an increasing length and complexity of cases.

NLFH continues to grow the department of surgery through the recruitment of new surgeons who bring additional or new skills to the hospital. Dr. Michael McGuire, urologist, joined NLFH in June. He came from NorthShore system where he was the Chief of the Division of Urology and Director of the John and Carol Walter Center for Urological Health. He completed his undergraduate training at University of Illinois, his MD at University of Chicago, his Urology Residency at Northwestern and his fellowship at Kettering Memorial.

Ribbon cutting ceremony on February 13, 2018
Dr. Mary Maish, thoracic surgeon, will be joining the department in November. She is originally from Barrington, Illinois and will be returning to Illinois from Fremont, California. There she served as the Chief of Thoracic Surgery at Washington Township Medical Foundation. She received her BA from Northwestern University, her MD from Rush Medical College, and her Masters of Public Health from Harvard University. She did her surgical training at University of Pennsylvania Affiliated Hospitals, Baylor College of Medicine, MD Anderson, and a clinical thoracic fellowship at University of Southern California.

Dr. Denise Monahan, breast surgeon, started a High Risk Breast Clinic at NLFH this year. The Breast Conference now meets regularly in a joint teleconference with participants at NMH.

Dr. Stephen Ganshirt, general surgeon, has been elected the next Secretary-Treasurer of the Medical Staff of the hospital and will, over the course of the next six years, work his way up to President of the Medical Staff.

The Department of Surgery is participating in the General Surgery System Clinical Collaborative and the Value Analysis Committee with the Central Region, and is working to expand the ERAS protocols implemented for Colon-Rectal surgery to other procedures such as Orthopedics.
Faculty Honors & Awards

**Michael Abecassis, MD, MBA**
Tripartite Legacy Faculty Award for Translational Science and Education. April 5, 2018.

**Carl Backer, MD**

**Karl Bilimoria, MD, MS**
James IV Association of Surgeons Traveling Fellow, 2016-2018
Academic Surgical Congress 2018 Best Overall Abstract
Member of ASCI- American Society for Clinical Investigation
Fellow of the American Surgical Association
President of Association for Academic Surgery

**James Cox, MD**
2017 Award as “The Father of Arrhythmia Surgery”.
Thirtieth Anniversary of the first Maze Procedure. Miami, Florida.

**Gregory Dumanian, MD**
American Board of Plastic Surgery, Senior Oral Board Examiner 2018
Visiting Professor, Memorial Sloane Kettering. September 2017.
Visiting Professor, Indiana University, October 2017.

**Mark Eskandari, MD**
2018 Castle Connolly “Top Doctors”
2018 Northwestern University Chapter of Alpha Omega
Alpha Honor Medical Society

**Jonathan Fryer, MD**
Membership in the American Surgical Association
American Society of Transplant Surgeons named annual research award “The Jonathan Fryer Resident Scientist Scholarship Award”

**Kathleen Grady, PhD**
Elected to the Board of Directors, International Society for Heart and Lung Transplantation, April, 2018.

**Karen Ho, MD**
Science in Medicine Teaching Award, Northwestern Office of Medical Education
Visiting Scholar, Department of Surgery, University of Chicago

**Andrew Hoel, MD**
Chair, Ad-Hoc Committee on Surgeon Engagement, Northwestern Memorial Hospital
Chair, Society for Vascular Surgery Medicare Matching Audit Committee

**Nabil Issa, MD**
“Best Trauma/SICU Teacher Award” by Emergency Medicine Residents at Northwestern. 2018.

**Seema Khan, MD**
Nora Cooney Mara Compassionate Care Award for attending staff at the RHLCC awards ceremony, January 30, 2018.

**Swati Kulkarni, MD**
Society of University Surgeons Travel Award for Mid-Career Academic Surgery Professional Development Course, February, 2017
Excellence in Medical Student Teaching for Focused Clinical Experiences from the Office of Medical Education, Northwestern Medicine, 2017

**Joseph Leventhal, MD, PhD**
Poster of Distinction Award, ATC, “Durable Donor Hematopoietic Stem Cell (HSC) Chimerism is Associated with Protection from Native Renal Disease Recurrence in Recipients of Combined HSC/Kidney Transplants.” June 2018.

**James Mathew, PhD**
Guest Editor of Special Issue on Clinical Transplant Tolerance: Human Immunology (Journal). May 2018.
Faculty Honors & Awards (cont.)

**Michael McGee, MD**
2017 Northwestern Memorial Hospital Improvement Day, Award Winner
2018 Resident Teaching Award, Department of Urology, Northwestern University
Appointed as Feinberg 12th Floor East Patient Ward Medical Director
Appointed as Digestive Health Center, Operations Committee, Co-Chair, Appointed as Northwestern Memorial Healthcare System-wide General Surgery System Clinical Collaborative, Co-Chair (2018-Present)

**Ryan Merkow, MD, MS**
Association for Academic Surgery – Nominations Committee, 2017-2019
Association for Academic Surgery – Clinical & Health Services Committee, 2018-2020
ECOG-ACRIN Surgery Committee, 2018-present
Surgical Outcomes Club Board of Directors, 2017-2020

**Shari Meyerson, MD**
Chair, Early specialization committee, Thoracic Surgery Directors Association, January 2018.

**William Pearce, MD**
2018 Chicago Consumers Checkbook Top Doctors in the Chicago Area

**Duc Thinh Pham, MD**
Accepted as Fellow, American College of Surgeons

**Joseph Posluszny, MD**
Northwestern Feinberg School of Medicine Recognition of Exemplary Professionalism, August 2018.

**Heron Rodriguez, MD**
Distinguished Fellow, Society of Vascular Surgery, 2017

**Margo Shoup, MD**
President, Central Surgical Association, 2018-2019.
Treasurer-Western Surgical Association, 2017-2022.

**Nathaniel Soper, MD**
Philip E. Donahue Keynote Speaker at the 10 Annual Olga Jonasson Symposium/9th Warren H. Cole Society Scientific Meeting, Chicago, IL
Honorary Fellow of the Brazilian College of Digestive Surgeons at the Brazilian Digestive Disease Week in Brasilia, Brazil, November 13, 2017

**Scott Strong, MD**
America’s Top Doctors
America’s Top Doctors for Cancer
American Board of Colon and Rectal Surgery: Senior examiner
American Society of Colon and Rectal Surgeons
  Chair, Inflammatory Bowel Disease Committee
  Chair, Fundamentals of Rectal Cancer Surgery Committee
  Member, Executive Council
  President, Research Foundation

**Jonah Stulberg, MD, PhD, MPH**
Certificate of Appreciation, American College of Surgeons (ACS), August 2017
Excellence in Teaching Award, Northwestern University Feinberg School of Medicine, September 2017

**Cord Sturgeon, MD**
American Thyroid Association Guidelines Steering Committee 2018 (Chair)

**Mamta Swaroop, MD**
Academic Co-Lead, Global Surgery Satellite Session, Consortium of Universities for Global Health 2018
Co-Chair, Knowledge and Community Committee, Illinois Partnership for Safety, Illinois Department of Public Health, Office of Health Promotion, February 2018
Co-Chair, Women in Medicine Symposium, Northwestern Medicine, Chicago, IL, March 2018
39th Annual Martin Luther King Humanitarian Award Recipient, Northwestern Medicine
Academic Lead, Global Surgery Satellite Session, Consortium of Universities for Global Health 2019
Visiting Professor, Richard Jennings Field Jr. Lectureship, Department of Surgery, University of Mississippi Medical Center, May 2018
Faculty Honors & Awards (cont.)

**Mamta Swaroop, MD (cont.)**
Key Note Address at Global Surgery Frontiers Royal College of Surgeons, June 2018

**Tadaki Tomita, MD**
2017 Scholarship to attend School of Medicine’s Designing and Implementing Simulation-Based Mastery Learning Curricula

**Jeffrey Wayne, MD**
Top Doctor, Surgery, Chicago Magazine, January 2018
Humanitarian Award, Melanoma Research Foundation, September 2017

**Jason Wertheim, MD, PhD**
Named Edward G. Elcock Professor of Surgical Research, Northwestern University
Faculty Presentations

**Michael Abecassis, MD, MBA**


Invited Speaker, NUATC Case Manager Conference, Chicago, IL. “Have We Achieved Pareto Optimality or Pareto Efficiency in Transplantation?” October 3, 2017.


**Carl Backer, MD**

Eltayeb OM, Backer CL. Vivien Thomas and his many contributions to congenital heart surgery: time to call it the BTT shunt. Poster presentation, Congenital Heart Surgeons’ Society Annual Meeting, Chicago, Illinois, October 22-23, 2017.


**Katherine Barsness, MD, MS**


Mastery Learning: The Gold Standard of Simulation-based Surgical Education. Pediatric Surgery Symposium, Children’s Hospital Colorado, Denver, Colorado. April 2018


Stake, CE; Hebal, F; Quan, H; Manworren, R; Harris, ZP; Barsness, KA. “Adherence to FDA Safety Warnings for Tramadol in Pediatric Tertiary Care Hospitals.” World Congress of Pain. September 2018. Boston, MA.

Hebal, F; Stake, CE; Quan, H; Manworren, R; Barsness, KA. “Pediatric Opioid Prescribing Patterns in the US from 2007-2016.” World Congress of Pain. September 2018. Boston, MA.

**David Bentrem, MD**

Faculty Presentations (cont.)

David Bentrem, MD (cont.)

Pitt H, Bentrem DJ. Does surgeon volume impact pancreaticoduodenectomy outcomes? ACS 2018 Clinical Congress, October 21, 2018. (Boston, MA)


Benjamin A, Talamonti M, Roggin K, Bentrem DJ, Baker M. Neoadjuvant chemotherapy is associated with higher rates of margin negative resection and improved survival in patients with extrahepatic cholangiocarcinoma. DDW 2017.


Karl Bilimoria, MD, MS


Keynote Speaker, Baylor College of Medicine’s Research Day. Informing Policy with Evidence: The FIRST Resident Duty Hour Trial. Houston, TX, June 2017.


Outcome-Based Reimbursements in Cancer Care: Is This Just Around the Corner? MD Anderson 16th Oncology Update: Advances and Controversies, Steamboat Spring, CO, January 2018.


Ankit Bharat, MBBS


Faculty Presentations (cont.)

Karl Bilimoria, MD, MS (cont.)


Andrei Churyla, MD

“CAD”. M3 Surgery Clerkship Lecture. Northwestern University. Chicago, IL

“On Call Adventures”. Cardiothoracic Surgery Residents and Mid-Level Providers Conference Northwestern University. Chicago, IL

“nContact System”. EP Didactic Conference. Northwestern University. Chicago, IL

“Surgery for HCM”. HCM Patient Town Hall Meeting. Northwestern University. Chicago, IL

“Stent Sizing”. Cardiothoracic Surgery Residents and Mid-Level Providers Conference Northwestern University. Chicago, IL

James Cox, MD

CSI-UCSF Symposium – San Francisco, CA – “Why the Maze Procedure Works” September 8-9, 2017

Visiting Professor – Ohio State University – Columbus, Ohio – September 29, 2017

Maze Masters Course (7 Lectures) – Boston, MA – September 30-October 1, 2017

AATS STARS Conference – Miami, FL – Luncheon Keynote Address: “Why AF Surgery is so Confusing” November 17-18, 2017

The aMAZE Trial Investigators Meeting – Chicago, IL – Keynote Address: “The aMAZE Trial and the Maze Procedure” December 2, 2017

Boston Atrial Fibrillation Conference – Orlando, FL – “Development of a New Linear Cryocatheter for Atrial Fibrillation ablation

Concomitant Surgical Ablation of AF Symposium – Ft. Lauderdale, FL - Panel Moderator January 29, 2018

International Symposium on Left Atrial Appendage – Los Angeles, CA – “AtriClip and Other Surgical Tools, LAAOS III and More” February 9-10, 2018

AATS Annual Meeting – San Diego, CA – “Innovation in 2018” April 28-May 2, 2018

Visiting Professor – Washington Hospital Center – Washington, DC – June 11-12, 2018

Visiting Professor – West Virginia University – Morgantown, WV – June 13, 2018

Retirement Ceremonies for Thomas L. Spray, MD – Philadelphia, PA – “My Personal and Professional Tribute to Tom Spray” June 29, 2018

Rocky Mountain Valve Symposium – Missoula, MT – “Modern History of Mitral Valve Surgery”

“Concurrent Surgery for Atrial Fibrillation” July 19-21, 2018


Maze Masters Course – Toronto, Canada – September 15-17, 2017

Visiting Professor – Univ. of Western Ontario – London, Ontario – September 18-19, 2017

Venice Arrhythmias Meeting – Venice, Italy – “PVI Alone is Not Adequatee to Treat Long-Standing Persistent AF” October 26, 2017

Invited Lecture – Utrecht, Netherlands – “Why and How to Treat Concomitant AF and the LA Appendage” October 30, 2017

Continued on next page
James Cox, MD (cont.)


Invited Lecture – Stockholm, Sweden – “Why and How to Treat Concomitant AF and the LA Appendage” November 7, 2017

Navigating the Maze Symposium – Barcelona, Spain – “The Highest Standards for AF Management” “Indications and patient Selection for Concomitant AF” April 22-24, 2018

Gregory Dumanian, MD


Mioton L and Dumanian GA. Amputee phantom and amputee pain: A survey of 720 subjects. ASPN Phoenix, AZ 1/13/2018

Dumanian GA. The latest in abdominal wall reconstruction. ASRM Phoenix, AZ 1/15/2018.

Fracol M and Dumanian GA. Targeted muscle reinnervation of the lower extremity: an anatomic dissection. ASPN Phoenix, AZ 1/15/2018

Dumanian GA. AAHS/ASPN/ASRM Combined panel, targeted muscle reinnervation. Phoenix, AZ 1/14/2018


Park E and Dumanian GA. The use of processed nerve allografts as interposition grafts following neuroma excision to treat painful abdominal wall neumomas. Midwest Association of Plastic Surgeons. Chicago, IL 4/14/2018.


Treatment of the divided nerve. Course, ASPS. Orlando, FL. 10/8/2017

Mark Eskandari, MD
Visiting Professor, “Thoracic Aortic Dissection: Diagnosis and Treatment”. Allegheny General Hospital, Pittsburgh, PA, April 17, 2018.

Donald Fry, MD

Jonathan Fryer, MD
Fryer J. Training surgeons to make important decisions. American College of Surgeons. San Diego, CA 10/24/2017.
Fryer J. Where do we come from? What are we? Where are we going? Northwestern Memorial Hospital. Chicago, IL 3/15/2018.
Fryer J. Value and barriers to use of a SIMPL tool for resident feedback. Surgical Education Week. Austin, TX 5/4/2018.

Arun Gosain, MD
Topczewska, JM; Ledwon, JK; Qiu, CS; Bi, AS; Topczewski, J; Gosain, AK. “Osteoclast Activity Required for Cranial Suture Patency.” 63rd Annual Plastic Surgery Research Council. May 2018. Birmingham, AL.
Faculty Presentations (cont.)

Arun Gosain, MD (cont.)

Turin, SY; Ledwon, JK; Bae, H; Lee, T; Tepole, AB; Topczewska, JM; Gosain, AK. “Multi-Scale Modeling of Tissue Expansion: Genome Expression Patterns in the Acute Stretch Scenario.” 63rd Annual Plastic Surgery Research Council. May 2018. Birmingham, AL.


Kathleen Grady, PhD


Quality of Life Research in Cardiovascular Disease. 43rd Ten-Day Seminar on Epidemiology and Prevention of Cardiovascular Disease (sponsored by the AHA & CDC). Lake Tahoe, CA. 2017.

Cardiovascular Quality of Care and Outcomes Research. 43rd Ten-Day Seminar on Epidemiology and Prevention of Cardiovascular Disease (sponsored by the AHA & CDC). Lake Tahoe, CA. 2017.


Karen Ho, MD

Ho, KJ. Stem cell and gene therapies for peripheral artery disease, 31st Nursing Conference on Selected Topics in Vascular Disease, Chicago, IL, November 3, 2017.

Andrew Hoel, MD


Lecturer, “Type II Endoleak Management.” University of Wisconsin School of Medicine and Public Health Grand Rounds, Madison, WI. July 23, 2018.
Faculty Presentations (cont.)

Andrew Hoel, MD (cont.)

Seok Jong Hong, PhD
Invited speaker, Title: A murine model for pressure induced tissue damage. February 9-10, 2018, AAWC (Association for the Advancement of Wound Care)-Pressure Ulcer Summit, Atlanta Airport Marriott Gateway, Atlanta, GA
Ping Xie, Mimi Wu Young, Huining Bian, Solmaz N. Leilabadi, Seok Hong, Thomas A. Mustoe, Robert D. Galiano. RENAL DYSFUNCTION AGGRAVATED IMPAIRED DIABETIC CUTANEOUS WOUND HEALING. The Symposium on Advanced Wound Care Spring | 30th Wound Healing Society meeting (SAWC Spring | WHS). Charlotte, NC (April 25-29, 2018)
Huining Bian, Ping Xie, Elena Bogdanovic, Emily Elizabeth Friedrich, Seok Jong Hong, Robert Galiano, Thomas Mustoe. Fibroblast Mediated NAX Signaling Drives Inflammation in Open Wounds. The Symposium on Advanced Wound Care Spring | 30th Wound Healing Society meeting (SAWC Spring | WHS). Charlotte, NC (April 25-29, 2018)

Catherine Hunter, MD

Nabil Issa, MD
“Combating the Opioid Epidemic through Pain Management Training of Surgical Interns.” Nooromid M, Issa N, Stulberg J. ASE annual meeting, San Antonio, TX May 1-4, 2018
"Fellow-Led SICU Morbidity and Mortality Conferences Address Patient Safety, Interprofessional Cooperation and ACGME Milestones." Weingarten N, Issa N, Poslusny J. ASE annual meeting, San Antonio, TX May 1-4, 2018
Moderator, Session 2- ASE annual meeting, San Antonio, TX May 1-4, 2018

Rashmi Kabre, MD
Synthesis and Application Module (SAM) 6, Northwestern University, Feinberg School of Medicine, Department of Emergency Medicine, Course Faculty: Pyloric Stenosis. August 2018.

Seema Khan, MD
Faculty Presentations (cont.)

**Seema Khan, MD (cont.)**


**John Kim, MD**


**Swati Kulkarni, MD**

Invited Discussant, American College of Surgeon’s Clinical Congress, Disparities in Biopsychosocial Concerns when Facing a Breast Cancer Diagnosis: Results of a Distress Screening Program. San Diego, California, October 2017.

Invited Discussant, American College of Surgeon’s Clinical Congress, Survival Outcomes of Neoadjuvant Chemotherapy Timing Start in Relation to Date of Diagnosis and Surgery in Cases of Breast Cancer. San Diego, California, October 2017.


**Daniela Ladner, MD**


Daniela Ladner, MD (cont.)


Opportunities to go from good to great. Grand Rounds, Dep of Transplant, Georgetown University, March, 2018.

Opportunities in Transplantation. Grand Rounds, Dep of Surgery, Northwestern University, April, 2018.


Timothy Lautz, MD

Corkum, KS; Lautz, TB; Lockhart, BA; Johnson, EK; Rowell, EE. “Testicular tissue cryopreservation for prepubertal males receiving fertility threatening medical therapy.” Academic Surgical Congress. January 18. Jacksonville, FL.


Cairo, S; Rothstein, D; Raval, MV; Berkelhamer, S; Meyer, A; Lautz, TB. “Neonatal Tracheostomy and Gastrostomy: An Opportunity for Improved Coordination of Care.” Pediatric Academic Society. May 2018. Toronto, ON.

Joseph Leventhal, MD, PhD

Sept 8-10, 2017 - 3rd International Workshop on Clinical Tolerance, Stanford, CA

Sept 27-29, 2017 - Canadian Society of Transplantation/Cell Transplant & Regenerative Medicine Society Annual Scientific Mtg, Halifax, Nova Scotia Canada

Oct 19, 2017 - Transplant Symposium Memorial Hermann Texas Medical Center, Houston, TX

May 2-5, 2018 - Int’l Cell Therapy Conference, Montreal, Canada

May 14 , 2018- Harvard University, Cambridge, MA

Aug 30-Sept 5, 2018 - 9th Int’l Conf on Living Donor Abdominal Transplant Conf, Matera, Italy
Faculty Presentations (cont.)

S. Chris Malaisrie, MD

Speaker - "Percutaneous Mitral Valve Replacement - Where are we?". 4th Annual Case-Based Coronary & Structural Heart Intervention Update. Northwestern University. Chicago, IL. Sept. 2017
Speaker - “Surgical procedures and outcomes in BAV patients”. Cardiology Grand Rounds. Northwestern University. Chicago, IL. Feb. 2018

Irvine, CA


Speaker - "Chronic Thromboembolic Pulmonary Hypertension (CTEPH) Epidemiology, Diagnosis and Treatment". 13th Annual Heart Failure Holiday Symposium. Northwestern University. Chicago, IL. Dec. 2017
Speaker - "Chronic Thromboembolic Pulmonary Hypertension (CTEPH) Epidemiology, Diagnosis and Treatment". North Shore Hospital CV Grand Rounds. Manhasset, New York. Dec. 2017
Speaker - “Aortic root implantation: technical considerations”. China Heart Congress 2017. Beijing, China

Speaker - “Degenerative Mitral Regurgitation – How to repair”. China Heart Congress 2017. Beijing, China
Speaker - Video Presentation: "Minimally Invasive Aortic Valve Replacement Techniques". China Heart Congress 2017. Beijing, China
Speaker - “TAVR vs SAVR”. AATS Post-Graduate Session. ASCVTS Meeting. Moscow, Russia. May 2018
Speaker - “Minimally-invasive AVR?” Meet the Experts. ASCVTS Meeting. Moscow, Russia

James Mathew, PhD

Invited Speaker, Updates on Immune Monitoring on Tolerance Trials. Third International Workshop for Clinical Tolerance, Stanford, CA; September 8, 2017

Patrick McCarthy, MD

The role of mitral valve surgery in the era of percutaneous therapy. The 3rd Annual Pacific Northwest Cardiovascular Summit at Oregon Health & Science University (OHSU) Knight Cardiovascular Institute. Portland, OR, September 2017.
Faculty Presentations (cont.)

Patrick McCarthy, MD (cont.)


Surgical Scope 2017-2018
Patrick McCarthy, MD (cont.)


Looking Back, and Looking Forward: CV Research at CCF. Special Seminar for the 20 Year Anniversary of the Cardiovascular Dynamics Laboratory.  Cleveland, OH, May 2018.


Faculty Presentations (cont.)

Michael McGee, MD

Implementing an Enhanced Recovery Program for Surgery, September 21, 2017

Healthy Hearts in the Heartland (H3), Great Lakes Practice Transformation Network (GLPTN) and Vizient (Webinar).


Improving Patient Outcomes, Costs, & Patient Satisfaction through Care Standardization. Lake Forest Hospital Grand Rounds, April 6, 2018.

Evidence-Based Prevention of Surgical Site Infection. Illinois Health and Hospital Association, Midwest Alliance for Patient Safety & Great Lakes Partners Hospital Improvement Innovation Network (HIIN) Surgical Site Infection Safety Session. Naperville, IL May 1, 2018


Ryan Merkow, MD, MS


Shari Meyerson, MD


Meyerson SL. Kids these days. University of South Dakota, Department of Surgery faculty retreat, Sioux Falls, SD, September 29, 2017.

Meyerson SL. Encouraging autonomy. University of South Dakota, Department of Surgery resident retreat, Sioux Falls, SD, September 30, 2017.

Meyerson SL. Teaching in a one-room schoolhouse. University of South Dakota, Department of Surgery combined faculty/resident retreat, Sioux Falls, SD, September 30, 2017.


Faculty Presentations (cont.)

Jota Nakano, MD

Temporary Left Ventricular Assist Device-Supported High-risk Coronary Artery Bypass Grafting. The AATS Mechanical Circulatory Support Symposium Poster Competition, Houston, TX, 2018. Poster

Duc Thinh Pham, MD

“CAD” Surgery Clerkship 6 Didactics Lecture. Northwestern University. Chicago, IL. June 2018. (Speaker)

“Valvular Heart Disease and Live Transplant: Is TAVR and Option?” 2018 Annual Meeting of the American Transplant Congress. Seattle, WA. June 2018. (Speaker)

Abbott Heart Failure Users Meeting. Phoenix, AZ. May 2018. (Group Facilitator)

Waveform Bootcamp. Medtronic. Chicago, IL. April 2018. (Co-Director)


ISHLT Symposium “Quality of Life with a VAD: We’ve Come a Long Way”. Nice, France. April 2018 (Panelist)

“The impact of pre-operative atrial fibrillation on patients undergoing surgical and transcatheter aortic valve replacement” STS 54th Annual Meeting. Fort Lauderdale, FL. January 2018 (Poster Presentation)


The 13th Annual Heart Failure Holiday Symposium. Chicago, IL December 2017 (Course Director)

David Pinelli, PhD

Pinelli DF, Tambur AR. Can We Expect the “Unexpected”? Poster presentation. American Transplant Congress, Seattle, WA. June 2-6, 2018.


Joseph Posluszny, MD


Faculty Presentations (cont.)

Marleta Reynolds, MD
Invited Speaker, Measuring the Impact of Brace Intervention on Pediatric Pectus Carinatum. Pacific Association of Pediatric Surgery, Sapporo, Japan; May 2018.

Heron Rodriguez, MD


Erin Rowell, MD
Simulating pediatric laparoscopic oophorectomy in a piglet model,” Advanced Technologies in Reproductive Engineering workshop, Annual Oncofertility Conference, Northwestern University, Chicago, IL, November 14, 2017.

Establishing an Oncofertility Program to benefit current & future patients,” Oncofertility Virtual Grand Rounds webinar, Northwestern University, Chicago, IL, October 18, 2017.

Margo Shoup, MD
Aug 2017- Midwest Surgical Association Presidential Address, Chicago, IL

Oct 2017-American College of Surgeons Clinical Congress-Oral Presentation- A Rizzo, M Malangoni, M Shoup. Maintenance of certification for the American Board of Surgery. Results of a survey to the Diplomates, San Diego, CA

Nov 2017-Western Surgical Association Paper Discussant-“Preoperative Chemoradiation Induces Primary-Tumor Complete Response More Frequently than Chemotherapy Alone in Gastric Cancer”, Phoenix, AZ

Mar 2018-AHPBA Paper Discussant- Pancreatectomy and body mass index: an international evaluation of cumulative postoperative complications using the comprehensive complications index. American Hepatopancreatobiliary Association, Miami Florida

Mar 2018-Central Surgical Association Moderated Scientific Session, Columbus, OH

May 2018-Inagural Surgical Oncology Visiting Professor, “Building a Successful Cancer Program; my Community Experience”, University of Kansas, Kansas City, KS
Nathaniel Soper, MD
Invited Speaker: “Engendering Operative Autonomy in Surgical Trainees”, University of Wisconsin, Madison, WI, September 13, 2017
Invited Speaker for Main Lecture: “Engendering Operative Autonomy in Surgical Trainees”, Argentine Association of Surgery, October 10, 2017
Facilitator: “Meet the Expert Session - ME314 (The Difficult Gallbladder: Tricks of the Trade), American College of Surgeons Clinical Congress, San Diego, CA, October 25, 2017
Invited Lecture: “Engendering Operative Autonomy in Surgical Trainees”, Advocate Illinois Masonic Medical Center, Chicago, IL, November 21, 2017
Invited Lecture for Video Perfection from SAGES U: "Cholecystectomy with intraoperative cholangiogram (IOC)", SAGES, Seattle, WA, April 12, 2018
Co-Chair for Achalasia Management Session: Current Status, SAGES, Seattle, WA, April 13, 2018
Invited Lecture: “Engendering Operative Autonomy in Surgical Trainees”, Integral Medicine Institute (IMIP Healthcare), Recife, Brazil, May 23, 2018
Invited Lecture: “The Difficult Laparoscopic Cholecystectomy: Strategies for a Safe Operation”, Integral Medicine Institute (IMIP Healthcare), Recife, Brazil, May 23, 2018
Invited Lecture: “Per Oral Esophageal Myotomy: Concepts and Early Results”, Integral Medicine Institute (IMIP Healthcare), Recife, Brazil, May 24, 2018
Moderator: Residents and Fellows Research Conference, Digestive Disease Week, Washington, DC, June 2, 2018
Scientific Session Debater: “Pros and Cons: Difficult Decision in GERD and Colonic Polyps”, Washington DC, June 4, 2018
Roy D. McClure Lecturer: “Engendering Operative Autonomy in Surgical Trainees”, Henry Ford Health System, Detroit, MI, June 13, 2018

Scott Strong, MD
Presentations at annual meetings:
American College of Surgeons
Advances in Inflammatory Bowel Disease
American Society of Colon and Rectal Surgeons

Jonah Stulberg, MD, PhD
Faculty Presentations (cont.)

Jonah Stulberg, MD, PhD (cont.)

Cord Sturgeon, MD
First International Conference on Thyroid Surgery. The diagnosis and treatment of primary hyperparathyroidism in the US. Shenzhen, China. September 15, 2017.
University of Hong Kong Department of Surgery Tumor Conference. Health-Related Quality of Life in Endocrine Surgery Patients. Hong Kong, China SAR. September 21, 2017.
Royal Australasian College of Surgeons Debate. Focused parathyroidectomy is the best management for well localized primary hyperparathyroidism. Sydney, NSW, Australia. May 9, 2018.

Mamta Swaroop, MD
Invited Lecturer, 35th International Surgical Symposium, Uniformed Services University of the Health Sciences and Walter Reed National Military Medical Center, Bethesda, MD, October 2017.
Invited Lecturer, Empowerment: An Ethical Dilemma, University of Chicago, March 2018.
Invited Lecturer, Road Traffic Incidents: Disparities in Pre-Hospital to Hospital Trauma Care, Helmets in Pillion Riders, Consortium of Universities for Global Health (CUGH), NYC, March 2018.
Invited Lecturer, Road Traffic Injury Symposium Prevention Panel, Harvard Global Health Institute, April 2018.
Visiting Professor, Richard Jennings Field Jr. Lectureship, Department of Surgery, University of Mississippi Medical Center, May 2018.
Grand Rounds, Department of Surgery, University of Mississippi Medical Center, May 2018.

Tadaki Tomita, MD
Tomita TM. Surgical Management of Carotid Stenosis. LFH Cardiology Grand Rounds, May 11, 2018, Lake Forest, IL.
Faculty Presentations (cont.)

**Jason Wertheim, MD, PhD**


**Anthony Yang, MD, MS**


Invited Lecturer. “General Surgery Written Review Course.” The Osler Institute, Skokie, IL, July 2018.

Invited Lecturer. “Abdominal Neoplasms and Pain.” Department of Surgery Core Curriculum, Northwestern Memorial Hospital, Chicago, IL, August 2017.

**Zheng Jenny Zhang, MD**


*Young Investigator Award Winner


Faculty Publications

Fizan Abdullah, MD, PhD


Michael Abecassis, MD, MBA


Mohammed Alghoul, MD


Carl Backer, MD

Carl Backer, MD (cont.)


Katherine Barsness, MD


David Bentrem, MD


Kevin Bethke, MD


Faculty Publications (cont.)

Kevin Bethke, MD (cont.)


Ankit Bharat, MBBS

C Kurihara et al. ECMO can successfully support patients with severe acute respiratory distress syndrome in lieu of mechanical ventilation. Critical Care Medicine. In-Press.


Karl Bilimoria, MD, MS

Faculty Publications (cont.)

**Karl Bilimoria, MD, MS (cont.)**


**Juan C. Caicedo-Ramirez, MD**


Salem, R., Gabr, A., Riaz, A., Mora, R., Ali, R., Abecassis, M., ... Lewandowski, R. J. (Accepted/In press). Institutional decision to adopt Y90 as primary treatment for hepatocellular carcinoma informed by a 1,000-patient 15-year experience. Hepatology. DOI: 10.1002/hep.29691


Faculty Publications (cont.)

Derrick Christopher, MD, MBA
Christopher, D. A., & Woodside, K. J. (2017). Expanding the donor pool: Organ donation after brain death for extracorporeal membrane oxygenation patients. Critical Care Medicine, 45(10), 1790-1791. DOI: 10.1097/CCM.0000000000002633

Jeanette Chung, PhD

Andrei Churyla, MD

Susan Clare, MD, PhD

Mark Cohen, PhD


James Cox, MD
Faculty Publications (cont.)

James Cox, MD (cont.)


Gregory Dumanian, MD


Faculty Publications (cont.)

Dina Elaraj, MD


Marco Ellis, MD


Osama Eltayeb, MBBS


Mark Eskandari, MD


Faculty Publications (cont.)

Mark Eskandari, MD (cont.)


Joseph Forbess, MD, MBA

James, L., Tandon, A., Nugent, A., Malik, S., Ramaciotti, C., Greil, G., ... Hussain, T. (2018). Rationalising the use of cardiac catheterisation before Glenn completion. Cardiology in the young, 28(5), 719-724. DOI: 10.1017/S1047951118000240


Applied Biomaterials, 105(7), 2153-2161. DOI: 10.1002/jbm.b.33754

Donald Fry, MD


Faculty Publications (cont.)

Donald Fry, MD (cont.)


Jonathan Fryer, MD


Robert Galiano, MD


Hassan Ghomrawi, PhD, MPH


Paul Goetz, PhD


Elisa Gordon, PhD, MPH
Elisa Gordon, PhD, MPH (cont.)

Ladin, K., Emerson, J., Berry, K., Butt, Z., Gordon, E. J., Daniels, N., ... Hanto, D. W. (Accepted/In press). Excluding patients from transplant due to social support: Results from a national survey of transplant providers. American Journal of Transplantation. DOI: 10.1111/ajt.14962


Arun Gosain, MD


Faculty Publications (cont.)

Arun Gosain, MD (cont.)


Julia Grabowski, MD


Kathleen Grady, PhD


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Faculty Publications (cont.)

**Kathleen Grady, PhD (cont.)**


**Amy Halverson, MD**


**Nora Hansen, MD**


**Karen Ho, MD**


**Andrew Hoel, MD**


Faculty Publications (cont.)

Andrew Hoel, MD (cont.)


Seok Jong Hong, PhD


Eric Hungness, MD


Nabil Issa, MD


Salzman DH, McGaghie WC, Caprio TW, Hufmeyer KH, Issa NA, Cohen ER, Wayne DB. A Mastery Learning Capstone Course to Teach and Assess Components of Three Entrustable Professional Activities to Graduating Medical Students. Accepted for Publication September 2018.
Faculty Publications (cont.)

Julie Johnson, PhD, MSPH


Hesselink, G., Johnson, J., Batalden, P., Carlson, M., Geensen, W., Groenewoud, S., ... Wollersheim, H. (2017). 'Reframing Healthcare Services through the Lens of Co-Production' (RheLaunCh): A study protocol for a mixed methods evaluation of mechanisms by which healthcare and social services impact the health and well-being of patients with COPD and CHF in the USA and the Netherlands. BMJ Open, 7(9), e017292. DOI: 10.1136/bmjopen-2017-017292


Nitin Katariya, MD


Seema Khan, MD


John Kim, MD
John Kim (cont.)


Jason Ko, MD

Swati Kulkarni, MD


Daniela Ladner, MD


Theodoropoulos, N., Nowicki, M. J., Chinchilla-Reyes, C., Dionne, S., Jaramillo, A., Mone, T., ... Ison, M. G. (2018). Deceased organ donor screening for human immunodeficiency virus, hepatitis B virus and hepatitis C virus: Discordant serology and nucleic acid testing results. Transplant Infectious Disease, 20(1), [e12821]. DOI: 10.1111/tid.12821


Daniela Ladner, MD (cont.)


Timothy Lautz, MD


Oukseub Lee, PhD


Joseph Leventhal, MD, PhD


**Joseph Leventhal, MD, PhD (cont.)**


**Xuefeng Liu, PhD**


**S. Chris Malaisrie, MD**

Murphy, I., Collins, J., Powell, A., Markl, M., McCarthy, P., **Malaisrie, S., Carr, J., Barker, A.** Comprehensive 4-stage categorization of bicuspid aortic valve leaflet morphology by cardiac MRI in 386 patients. The International Journal of Cardiovascular Imaging, Aug 2017, Vol.33 (8), pp.1213-1221. 2017


Faculty Publications (cont.)

S. Chris Malaisrie, MD (cont.)


James Mathew, PhD


Mathew JM* and Leventhal J. Clinical transplant tolerance – Coming of age (Editorial for Special Issue on Clinical Transplant Tolerance). Human Immunology: 2018. 79(5); 255-257.


Patrick McCarthy, MD


McCarthy PM. We don’t know what we need to know about atrial fibrillation. J Thorac Cardiovasc Surg 2018;155(4)1522-23.


Faculty Publications (cont.)

**Patrick McCarthy, MD (cont.)**


**Michael McGee, MD**


**Ryan Merkow, MD, MS**


**Shari Meyerson, MD**


Faculty Publications (cont.)

Shari Meyerson, MD (cont.)


David Odell, MD, MMSc


Michael Mongé, MD


William Pearce, MD

Faculty Publications (cont.)

William Pearce, MD (cont.)


Duc Thinh Pham, MD


David Pinelli, PhD


Valenzuela, N. M., Askar, M., Heidt, S., Jindra, P., Madbouly, A., Pinelli, D., ... Hidalgo, L. G. (Accepted/In press). Minimal data reporting standards for serological testing for histocompatibility. Human Immunology. DOI: 10.1016/j.humimm.2018.08.008

Joseph Poslusnzy, Jr., MD


Marleta Reynolds, MD


Faculty Publications (cont.)

Marleta Reynolds, MD (cont.)


Heron Rodriguez, MD


Anat Roitberg-Tambur, DMD, PhD


Erin Rowell, MD


Joseph Schneider, MD, PhD


Steven Schwulst, MD


Aimen Shaaban, MD


Michael Shapiro, MD


Faculty Publications (cont.)

Michael Shapiro, MD (cont.)

Margo Shoup, MD

Nathaniel Soper, MD


Santos BF, Soper NJ eds. (2018); Choledocholithiasis: Comprehensive Surgical Management, Springer, Switzerland


Scott Strong, MD


Faculty Publications (cont.)

Scott Strong, MD (cont.)

Jonah Stulberg, MD, PhD, MPH


Cord Sturgeon, MD


Riccardo Superina, MD


Riccardo Superina, MD (cont.)


Mamta Swaroop, MD


Ezra Teitelbaum, MD, MEd

Faculty Publications (cont.)

Ezra Teitelbaum, MD, MEd (cont.)


Tadaki Tomita, MD


Jeffrey Wayne, MD


Jason Wertheim, MD, PhD


Faculty Publications (cont.)

Jason Wertheim, MD, PhD (cont.)


Qiang Wu, PhD


Anthony Yang, MD, MS


Zheng Jenny Zhang, MD

