

Department of Surgery 2019-2020



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Letter from the Chair



Dear Colleagues and Friends,

I am honored and privileged to serve as the newest Chair of the Department of Surgery at Northwestern Medicine. The accomplishments by our faculty, trainees, and staff have been truly amazing so far, and I am eagerly looking forward to

what the future has in store.

Needless to say, 2020 had been an incredibly difficult year. The COVID-19 pandemic forced society to face some of the toughest challenges. Through these difficult times, however, I've seen firsthand how the Northwestern community has stepped up without hesitation and demonstrated strong leadership skills while navigating uncharted territory. This annual newsletter highlights many of these outstanding accomplishments, which highlights the fact that our department is the strongest it's ever been.

U.S. News & World Report once again recognized Northwestern Memorial Hospital among the country's top hospitals, ranking the hospital No. 10 in the nation and No. 1 in Illinois. Additionally, Northwestern Central DuPage Hospital & Lake Forest Hospital were ranked No. 8 and No. 9 in Illinois, respectively.

On January 1, 2021, Palos Health joined Northwestern Medicine. With this addition, NM now offers care across 11 hospitals, more than 200 ambulatory sites, with a combined workforce of over 36,000 physicians, nurses and staff.

Within the department, faculty played key roles in planning efforts for our response to COVID-19, and later led efforts focused on reactivation. I want to especially thank Drs. Cord Sturgeon, Michael Shapiro, Karl Bilimoria, and Amy Halverson for their leadership efforts. Dr. Ankit Bharat, and his entire team, also did a fantastic job; in June 2020, they performed the first double lung transplant on a COVID-19 patient in the U.S. and received both national and international recognition. That initial success has now been translated into a series of lung transplants in these

critically ill patients, with a 100% success rate.

There have been a few departmental leadership transitions in the past year. Dr. Amy Halverson was officially appointed Vice Chair of Education in September 2020 and is currently serving as interim Program Director of the General Surgery Residency until this position is filled. Dr. Karen Ho also became the new Director of Resident Research and will help to grow the resident research enterprise. Dr. Joe Posluszny was officially appointed as the Clerkship Director.

Despite a difficult past year, I am very optimistic about what the future has in store for the Department of Surgery. I am incredibly proud of what we have achieved, and I look forward to working with all of you to take the department to even greater heights. I firmly believe that we should continue to foster a culture of excellence, where talented individuals from diverse backgrounds can achieve their full potential. I hope you enjoy reading this newsletter that highlights the numerous accomplishments of our team members.

Sincerely,

Harm B. Alam

Hasan B. Alam, MD
Loyal and Edith Davis Professor
Chair, Department of Surgery, Feinberg School of Medicine
Surgeon-in-Chief, Northwestern Memorial Hospital

Department Leadership



Hasan Alam, MDDepartment Chair, Surgery



Scott Strong, MD Vice Chair, Clinical Affairs



Karen Ho, MDDirector, Resident Research



Seema Khan, MDInterim Vice Chair, Research



Karl Bilimoria, MD, MSVice Chair, Quality



Amy Halverson, MD Vice Chair, Surgical Education



Joseph Posluszny, MD Clerkship Director



David Odell, MD, MMSc Co-Associate Clerkship Director



Nitin Katariya, MD Co-Associate Clerkship Director



Samuel Kim, MD Associate Program Director



Yue-Yung Hu, MD, MPH Associate Program Director



Derrick Christopher, MD, MBA Associate Program Director

Division Leadership



Nora Hansen, MD Chief, Breast Surgery



Patrick McCarthy, MD Chief, Cardiac Surgery



Scott Strong, MD Chief, Gastrointestinal Surgery



Joseph Leventhal, MD, PhD Interim Chief, Organ Transplantation



Gregory Dumanian, MD Chief, Plastic Surgery



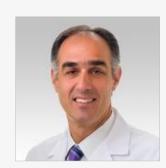
Jeffrey Wayne, MD Chief, Surgical Oncology



Ankit Bharat, MBBS 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.



89 Clinical



23 Research Faculty



Contr. Services/ Adjunct Faculty

Providing Excellent Clinical Care...

	Breast	Cardiac	Thoracic	GI	Transplant	Plastic	Trauma	Vascular	Surg Onc
OR Cases	1,284	955	1,234	2,589	661	2,362	885	942	1,087
Clinic Visits	8,154	2,475	3,891	12,517	3,169	14,610	659	3,587	5,568
wRVUs	31,386	63,086	41,059	58,761	43,928	64,949	41,694	35,024	31,374

Advancing Research & Innovation...



\$25.8MTotal Grant Funding



\$9.3MNIH Funding



Active Grants



Active Clinical Trials



Teaching the Surgeons of Tomorrow...

71 Residents				
28	8			
General (Categorical)	General (Prelim)			
7	14			
General (Research)	Plastic			
7	7			
Cardiothoracic	Vascular			
21 Fellows				
2	2			
Breast	Trauma/Critical Care			
4	4			
Transplant	Vascular			
6	3			
Cardiac/Cardiothoracic	Pediatric			

Faculty Promotions



Ankit Bharat, MD, Division of Thoracic Surgery, awarded tenure, Associate Professor of Surgery.



Nitin Katariya, MD, Division of Organ Transplantation, promoted to Associate Professor of Surgery.



Karl Bilimoria, MD, MS, *Division* of Surgical Oncology, promoted to tenured Professor of Surgery.



Daniela Ladner, MD, MPH, *Division of Organ Transplantation*, promoted to Professor of Surgery.



Rashmi Kabre, MD, *Division of Pediatric Surgery*, promoted to Associate Professor of Surgery.



Faculty Expansion



Mohammad Ali Abbass, MD was appointed as an Assistant Professor in the **Division of GI Surgery** on the Clinician-Educator track. Dr. Abbass received his medical degree from Damascus University in Syria in 2009. He completed his general surgery residency and colorectal surgery fellowship training at the Cleveland Clinic Foundation. He recently completed a clinical fellowship in hereditary colorectal cancer syndromes at the Cleveland Clinic Foundation. He is the first surgeon in the country to complete a fellowship in hereditary colorectal cancer syndromes and will develop an inherited colorectal diseases program for the NM Digestive Health Center. Dr. Abbass has written multiple peer-reviewed publications in notable journals and books as well as presented at society and professional conferences.



Andrew T. Arndt, MD was appointed as a Health System Clinician in the **Division of Thoracic Surgery** on the Health System Clinician track. Dr. Arndt earned his medical degree from Emory University in Atlanta in 2008. He completed general surgery residency at Rush University Medical Center in 2013 and a cardiothoracic surgery fellowship at Yale University in 2015. For the last several years, Dr. Arndt has served as Assistant Professor and Attending Surgeon in the Cardiovascular and Thoracic Surgery Department at Rush University Medical Center. Dr. Arndt has delivered several grand rounds and produced many publications on his clinical interests in the last few years.



Akhil Chawla, MD was appointed as Clinical Assistant Professor of Surgery in the **Division of Surgical Oncology** on the Health System Clinician/Academic track. He is director of the Northwestern Medicine Surgical Oncology Tumor Bank, Biorepository and Translational Research Laboratory in the West Region. His primary areas of investigational focus include clinical trials, biomarker design, and response assessment of cytotoxic and immune systemic therapies in gastrointestinal malignancies. He completed a two-year National Institutes of Health funded research fellowship focusing on solid tumor immunology at MD Anderson Cancer Center. He has completed his clinical residency training in surgery at Case Western Reserve University, and fellowship training in complex surgical oncology at Brigham and Women's Hospital, Dana-Farber Cancer Institute, and Massachusetts General Hospital.



Daniel G. Davila, MD was appointed as a Health System Clinician in the **Division of Gastrointestinal Surgery** on the Health System Clinician track. Dr. Davila was born in Denver, CO and attended the University of Colorado at Boulder. He obtained his medical degree at Northwestern University's Feinberg School of Medicine. He attended the Medical College of Wisconsin for his general surgery training before going to Emory University for additional fellowship training in advanced GI minimally invasive surgery. His clinical interests include abdominal wall hernias, bariatric surgery, foregut disease, and gallbladder disease.



Zachary Dietch, MD, MBA was appointed as an Assistant Professor in the **Division of Organ Transplantation** on the Clinician-Educator track. Dr. Dietch received his medical degree from George Washington University in 2011, and then completed a general surgery residency, as well as a MBA program, at the University of Virginia in 2018. Most recently he completed an abdominal transplantation fellowship at the University of California San Francisco, one of the busiest and highly ranked transplant programs in the country. Dr. Dietch has operative experience in the transplantation of all adult and pediatric abdominal organs, hepatobiliary surgery, as well as dialysis access. He is interested in health services outcomes research, with a particular interest in better understanding long-term functional and patient-centered outcomes after transplantation.



Piero M. Fisichella, MD, MBA was appointed as a Health System Clinician in the **Department of Surgery** on the Health System Clinician track. Dr. Fisichella earned his medical degree in 1994 from the University of Catania School of Medicine in Catania, Italy. He also earned his MBA from the Kellogg School of Business in 2013. He served as a surgery resident in Catania through 2000, and then again, in 2002 through 2007, at the University of Illinois at Chicago. He was a GI surgery research fellow at the University of California in San Francisco, and then later returned there for a clinical fellowship in minimally invasive surgery and bariatrics. Since 2014, Dr. Fisichella has been an Associate Professor of Surgery for Harvard Medical School and an Adjunct Associate Professor at Boston University Medical School.



Rafael Garza-Castillon Jr., MD, MSc was appointed as an Instructor of Surgery in the **Division of Thoracic Surgery** on the Clinician-Educator track. Dr. Garza-Castillon received his M.D. from Guadalajara Autonomous University in Guadalajara, Mexico in 2007. He completed a general surgery residency at the National Institute of Medical Sciences and Nutrition in 2015 and received his M.S. in clinical research from the University of Minnesota School of Public Health in 2016. Most recently, he completed a general thoracic surgery fellowship at Brigham and Women's Hospital. He will be supporting our advanced lung failure program including lung transplant/organ procurement and veno-venous ECMO/ ECMO cannulation.



Heather Himelhoch, PhD was appointed as a Research Assistant Professor in the **Division of Surgical Oncology** on the Research track. Dr. Himelhoch received her PhD in Epidemiology from the University of Illinois at Chicago in 2016. She is a health services researcher specifically focusing on the intersection of implementation and improvement sciences with the goal of improving healthcare delivery in both traditional and non-traditional settings. Since 2016, she has served as the Director of Implementation Science at Vanderbilt Health Affiliated Network and as a Research Assistant Professor of Medicine at Vanderbilt University Medical Center. She currently serves as the director of NM's Quality Innovation Center.

Faculty Expansion



Bin Jiang, PhD was appointed as an Assistant Professor in the **Division of Vascular Surgery** on the Investigator track. Dr. Jiang received her PhD in Biomedical Engineering at Northwestern in 2013. She is currently a Research Assistant Professor at Northwestern University's Center for Advanced Regenerative Engineering (CARE). Her research program integrates advanced regenerative engineering tools with precision medicine platform to generate patient specific, functional cells and tissues for tissue repair and regeneration. She currently has over \$600,000 active research funding from the NIH and the American Heart Association as the Principal Investigator. Dr. Jiang will be responsible for establishing a well-funded research program in regenerative or tissue engineering with significant emphasis on convergence research and translational activities to positively impact patient care in cardiovascular health.



Manoj Kandpal, MTech, PhD was appointed as a Research Assistant Professor in the **Division of Organ Transplantation** on the Research track. Dr. Kandpal earned his PhD in Chemical and Biomolecular Engineering from the National University of Singapore in 2013. Dr. Kandpal primarily works on developing computational pipeline and detecting role of gene-isoforms in genomic research. He is currently involved in diverse NGS data analysis projects, including but not limited to, cancer informatics (GBM, Ovarian, Breast, Prostate, etc.), transplantation, ALS, infectious disease, and pediatrics research. Analyses involve combination of traditional bioinformatics and machine learning approaches.



Sunjay Kaushal, MD, PhD was appointed as a Professor in the **Division of Pediatric Surgery** on the Investigator track. Dr. Kaushal recently joined Lurie Children's as the new Division Head of Cardiovascular-Thoracic Surgery. Dr. Kaushal served as an attending Cardiovascular-Thoracic Surgeon at Children's Memorial Hospital from 2007-2011. Dr. Kaushal received his medical degree at John Hopkins School of Medicine and completed his fellowship in pediatric cardiovascular surgery at the University of Michigan-Mott Children's Hospital. Dr. Kaushal's research includes prevention of reperfusion injury after heart-bypass, characterization of skeletal and heart muscle gene regulation, and clinical trials with cardiac stem cells in congenital heart disease surgery patients. He is attributed with two inventions: tissue-engineering vascular structures using endothelial cell progenitors and paraxylene films and their therapeutic uses.



Kalvin Lung, MD, MSc was appointed as an Assistant Professor in the **Division of Thoracic Surgery** on the Clinician Educator track. Dr. Lung received his medical degree from the University of Toronto, in Ontario, Canada in 2013. He then went on to complete a general surgery residency from 2013-2018 at Western University in London, Ontario, Canada, focusing on thoracic surgery electives. In 2018, Dr. Lung returned to the University of Toronto for a thoracic surgery residency. Dr. Lung has published multiple journal articles and presented several oral abstracts on his clinical and research interests in the last decade.



Jennifer L. McGrath, MD was appointed as an Assistant Professor in the **Division of Plastic Surgery** on the Clinician-Educator track. Dr. McGrath received her medical degree from the University of Pennsylvania in 2012. She completed her residency training at the McGaw Medical Center of Northwestern where she developed her love of pediatric plastic surgery. Dr. McGrath spent one year in the craniofacial biology lab during her plastic surgery residency, during which time she was awarded with a prestigious research fellowship by The Plastic Surgery Foundation, and she received best paper awards for her research presentations. Most recently she completed a craniofacial and pediatric plastic surgery fellowship at Children's National Medical Center in Washington, DC. Her clinical interests include cleft lip and palate surgery, craniofacial surgery, orthognathic surgery, Pierre Robin sequence, congenital hand surgery, hand trauma, breast surgery, vascular lesions, and soft tissue reconstruction.



Christopher Mehta, MD was appointed as an Assistant Professor in the **Division of Cardiac Surgery** on the Clinician-Educator track. Dr. Mehta received his medical degree from the Virginia Commonwealth University School of Medicine in Richmond, VA. He completed his integrated cardiothoracic residency and fellowship at Northwestern Memorial Hospital in 2019. Additionally, he completed an advanced aortic fellowship at the University of Pennsylvania in 2020. Dr. Mehta will partner with Dr. Christopher Malaisrie to lead our thoracic aorta program with emphasis on aortic valve procedures, aortic aneurysms and aortic dissections. He has already successfully launched the "direct to OR" program for acute aortic emergencies. He will be practicing a wide gamut of adult cardiac surgery including coronary artery bypass, valve operations, and surgery for atrial fibrillation. He also has several presentations and major publications from his training with us.



Denise A. Monahan, MD was appointed as a Health System Clinician in the **Division of Breast Surgery** on the Health System Clinician track. Dr. Monahan received her medical degree from the University of Miami Miller School of Medicine in 2007 in Miami, Florida. She completed her general surgery residency program at Jackson Memorial Hospital in the University of Miami Medical Center. In 2013, she completed her surgical oncology breast fellowship here at Northwestern. Dr. Monahan is currently an attending surgeon for Breast Surgical Oncology at the Northwestern Medicine Lake Forest Hospital.



Sherazuddin Qureshi, MD was appointed as a Health System Clinician in the **Division of Vascular Surgery** on the Health System Clinician track. Dr. Qureshi earned his medical degree from New York Medical College in Valhalla, New York in 2009. He then completed his residency at the Albany Medical Center in general surgery, which was then followed by a vascular surgery fellowship at Henry Ford Hospital in Detroit, Michigan. Dr. Qureshi has been working as a vascular surgeon since 2016 in Illinois, and he currently is a vascular surgeon for NM Regional Medical Group in Winfield, Illinois.

Faculty Expansion



Aqeel A. Sandhu, MD was appointed as a Health System Clinician in the **Division of Cardiac Surgery** on the Health System Clinician track. Dr. Aqeel Sandhu received his medical degree from King Edward Medical College, Pakistan in 1987. He completed his general surgery residency in 1998 from Harlem Hospital Center, an affiliate of Columbia University College of Physicians and Surgeons. In 2000, Dr. Sandhu completed his fellowship in cardiothoracic surgery from Beth Israel Deaconess Medical Center, affiliate of Harvard Medical School. He went on to complete an advanced fellowship in cardiothoracic surgery at the Cleveland Clinic in 2002, including several months training with Dr. Patrick McCarthy.



Wilhelmina Schaefer, PhD was appointed as a Research Assistant Professor in the **Division of Surgical Oncology** on the Research track. Dr. Schaefer completed her doctoral dissertation focusing on primary care services and patient experiences from an international perspective. Since completion, she has been in the US, with varying experiences at Sinai Urban Health Institute, NorthShore University Health System, and finally at FSM. She has also received awards and training opportunities to broaden her knowledge and perspectives on health services research. Her prior scholarly efforts in the Netherlands indicate an expertise in collaboration, having published two dozen manuscripts with varying co-authors from academic institutions across Europe.



Alyssa M. Vela, PhD was appointed as an Assistant Professor in the **Division of Cardiac Surgery** on the Clinician-Educator track. Dr. Vela received her PhD from The University of North Carolina at Charlotte in 2018. She completed her pre-doctoral clinical internship in health psychology at the Louis Stokes Cleveland Veterans Administration Medical Center. Most recently, she completed a postdoctoral clinical health psychology fellowship at the McLaren Flint Department of Family Medicine. Dr. Vela joins Drs. Kim Feingold and Gail Osterman as a member of the Cardiac Behavioral Medicine team.



Jacklyn B. Wierzbicki, MD was appointed as a Health System Clinician in the **Division of Gastrointestinal Surgery** on the Health System Clinician track. Dr. Wierzbicki earned her medical degree from the Medical College of Wisconsin in Milwaukee in 2010. She then went on to complete her general surgery residency at the Southern Illinois University School of Medicine in 2016, which was followed by a bariatric fellowship at the University of Iowa Hospitals and Clinics. Dr. Wierzbicki has been a part of the Northwestern Medicine Regional Medical Group as a general and bariatric surgeon at Delnor Hospital in Geneva, Illinois since 2017. Dr. Wierzbicki also serves on the QIPS (Quality Improvement & Patient Safety) Committee and has expressed interest in resident education as well.

2020 Highlights

Survivor of COVID-19 Receives Double Lung Transplant at NMH



Mayra Ramirez, left, seated, and Brian Kuhns, right, both COVID-19 survivors due to double-lung transplant, pose Thursday, July 30, 2020, with their medical teams during their first news conference at Northwestern Memorial Hospital in Chicago. (Source: AP)

Ankit Bharat, MD, thoracic surgeon, led a team at Northwestern Memorial Hospital that performed a double lung transplant on a patient who survived COVID-19. It was the first surgery of its kind in the U.S. and proved to be life-saving for the 26-year-old patient whose lungs were severely damaged from the illness.

See the news coverage below to learn more:

- Coronavirus: Woman Receives First Known Lung Transplant in U.S. After COVID-19 Severely Damaged the Organ, from Yahoo! News
- COVID-19 Survivor Saved by This Mind-Blowing, First-Ever Procedure, from MSN.com
- Many Who Survive COVID-19 Have Lasting Health Issues; Dr. Ankit Bharat Fears There Will Be a Need for More Transplants, from CNN International
- COVID-19 Coronavirus Leads to Double Lung Transplant for Woman in Her 20s, from Forbes
- Lung Transplant on COVID-19 Patient Is a First for the U.S., from Medscape
- <u>U.S. Doctors Perform 1st COVID-19 Double Lung Transplant. Will It Become a Potential Treatment for Severe Cases?</u>, from Health.com
- Young Woman With Coronavirus Receives Double Lung Transplant in Chicago, from CBS News

2020 Highlights

NM Celebrates 2,000th Transcatheter Heart Valve Procedure

Northwestern Medicine Bluhm Cardiovascular Institute physicians completed their 2000th transcatheter heart valve procedure, a milestone innovation that has shifted valve repair and replacement from operating room to catheterization lab, dramatically reducing procedural time, recovery time and mortality risk for thousands of patients with heart valve disease.

Northwestern Memorial Hospital was one of a select group of American hospitals utilizing this technology in the earliest stages of trial and discovery and continues to be active in clinical trials for minimally invasive aortic, mitral and tricuspid valve interventions today. Physicians at Northwestern Medicine Central DuPage Hospital, who recently completed their 200th transcatheter valve replacement, also contributed to the 2,000th milestone.

"I'm feeling great," said Edith Burns, 90, of Chicago, who on August 24 underwent placement of a MitraClip, a device directed to the heart on a catheter where it is then positioned to "clip," or join two parts of the mitral valve together, eliminating backward flow of blood through the valve that can cause severe fatigue, shortness of breath and chest pain. "In fact I can't believe how good I feel right now less than a day after the procedure. I already went for a walk."

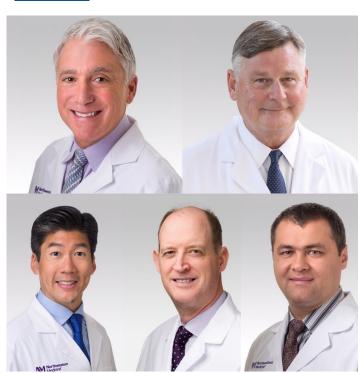
Northwestern Memorial Hospital performs the highest volume of transcatheter and surgical valve procedures in Illinois, having completed the most aortic, mitral and tricuspid valve procedures in the state. Northwestern's research activities in this area have grown tremendously since the first procedure in 2008. Currently, there are 18 transcatheter valve

trials, including 5 early feasibility studies, the critical first clinical step of research and development, and the first-in-human transcatheter trials for the tricuspid valve.

"This milestone could not have been reached without our patients, who put their trust in us as we worked together to pioneer a better way to treat heart valve disease," said Patrick McCarthy, MD, executive director of the Bluhm Cardiovascular Institute and chief of cardiac surgery at Northwestern Memorial Hospital. "This is what Bluhm Cardiovascular Institute is all about — combining research and exceptional outcomes for our patients, while offering them the most advanced options for treating their cardiovascular disease."

Source: NM Newsroom

Read More



Top, L-R: Dr. Charles Davidson, Dr. Patrick McCarthy Bottom, L-R: Drs. Chris Malaisrie, James Flaherty, Andrei Churyla

Karl Bilimoria, MD, MS, Receives 2020 Mentor of the Year Award

The Medical Faculty Council honored Karl Bilimoria, MD, MS, '10 GME, vice chair for quality in the Department of Surgery as a 2020 Mentor of the Year. Bilimoria was nominated by Anthony Yang, '02 MD, '09 GME, associate professor of Surgery in Division of Surgical Oncology.

"Dr. Bilimoria's proactive support in my career development is extraordinary to me and in regards to those he currently mentors, I can attest that they feel the same," Yang said.

Bilimoria joined Feinberg's faculty in 2003. He earned his medical degree in 2003 from Indiana University School of Medicine and completed his residency in general surgery at Northwestern University's McGaw Medical Center. He has completed fellowships at the MD Anderson Cancer Center, the American College of Surgeons and the National Institutes of Health and holds a master's degree in clinical investigation from Feinberg.

Bilmoria is the vice chair for quality in the Department of Surgery, the John B. Murphy Professor of Surgery and the director of the Surgical Outcomes and Quality Improvement Center of Northwestern University (SOQIC), a center of 50 faculty and staff focused on national, regional and local quality improvement research and practical initiatives. He is also vice president for quality and clinical integration for the Northwestern Medicine health system and a member of the Robert H. Lurie Comprehensive Cancer Center of Northwestern University.

He is currently the President of the Association for Academic Surgery, has published more than 350 peer-reviewed publications and is widely recognized as an expert in healthcare quality and delivery improvement.

Source: Melissa Rohman, FSM Office of Communications

To view Dr. Bilimoria's full interview, click here.



2020 Highlights

Making History: Hispanic Heritage



Dr. Caicedo is the director of the Hispanic Transplant Program at Northwestern Memorial Hospital, the first known program of its kind in the U.S. A team of more than 50, including bilingual physicians, social workers, a financial coordinator, a clinical research coordinator and other support staff, offers patients individualized, culturally sensitive care.

What do you love about your job?

I love that my job is very gratifying and fulfilling. I'm a Hispanic guy who came to this country without being able to speak English well. I finished three fellowships and went on to develop the first Hispanic transplant program in the nation.

I love that I can see how my team and I are making a difference in improving trust and care measures in the Latino community. We've increased the number of Hispanic additions to the kidney transplant waiting list by 91%. We've increased the living kidney donations in Hispanic people by 74%. We've decreased the disparity in transplants between Hispanic people and white people by 70%. Our outcomes are fantastic not only for kidney transplantation, but also for liver transplantation; for example, the survival rate is 94% for deceased donor liver transplantation and 100% for living donor liver

transplantation. That makes me feel good.

I love to work to understand the needs of the community. I love to work alongside 50 dedicated people in the Hispanic Transplant Program serving the Hispanic community. This makes me feel like I'm doing the right thing.

I love that our efforts with the Hispanic Transplant Program have inspired my colleagues to start the Northwestern Medicine African American Transplant Access Program and the Neurosurgery team at Northwestern Medicine to start a program focusing on brain tumor treatment for the Hispanic population. I love to teach other institutions in the country how to create culturally competent programs.

I love that I see a lot of faces of people who are very grateful for our team. I love the challenge every day to help people and make impossible things possible. It's always exciting to solve problems and give people solutions and a new life.

What obstacle(s) did you have to overcome to get to where you are today?

Everybody who has immigrated to the U.S. from other countries must overcome language and cultural barriers.

When I immigrated from Colombia, I was a fellow with very poor English. My attendings were very patient when I struggled. Northwestern Medicine literally opened the door for me by providing me with the best training in transplant surgery in the world. Other places in the country told me that I would have to wait 20 years for them to take me as transplant surgical fellow. Some offered me to a be a physician's assistant (PA) for one year before they will consider me as a transplant fellow, even though I was already

a surgeon doing kidney transplants in my home country of Colombia. I faced a lot of discrimination, but Northwestern Medicine gave me the opportunity to prove that I was a great surgeon.

I was a tourist visiting Chicago with my camera bag and all my dreams. My friends took a trolley to Navy Pier, and I said, "Go have fun, I'm going to go look for my future."

I stopped in Northwestern Memorial Hospital and asked to speak to Frank P. Stuart, MD, who was the chief of Transplant Surgery at the time. The administrator at the time helped print my CV off a floppy disc. I waited, and then Dr. Stuart and one of his attendings, Michael M. I. Abecassis, MD, MBA, who was the second in command at the time, talked to me and toured me around for one and a half hours. There was another fellow there from Chile who spoke Spanish and showed me the hospital.

Now, 20 years later, I'm the leader of the first Hispanic Transplant Program in the nation, the surgical director of the Liver Transplant Program, and director of the Living Donor Liver Transplant Program as well as hepatobiliary surgery. Northwestern Medicine opened the door for me.

I'm inspired by this quote from St. Francis of Assisi:

Start by doing what's necessary; then do what's possible; and suddenly you are doing the impossible.

How are you making history?

Because I created a first-of-its-kind Hispanic Transplant Program, I have been appointed inaugural chair of the Diversity Issues Committee of the American Society of Transplant Surgeons.

I'm a board member for Gift of Hope because of my work with the Hispanic population and my versatility as a pediatric and adult surgeon.

I have been part of the Minority Affairs Committee for the United Network for Organ Sharing and I am co -chair of the Inclusivity, Diversity, Equity, and Access (to Life) (IDEAL) task force in the American Society of Transplantation. I go around the country teaching Grand Rounds, and working with other centers to teach them about culturally competent care and ways they can change their approach to help with racial disparities in care.

Now, as part of our efforts, I have an R01 grant from the National Institutes of Health to implement culturally sensitive care to living donations for Hispanic people. Only 2% of transplant surgeons have received this type of grant, and it's a big deal.

I was also featured in Crain's Chicago Business' 40 Under 40.

What does your Hispanic heritage mean to you?

I'm a very proud Colombian. I'm also a proud American citizen. I came to this country because of opportunities and diversity. Immigration from different places is what has made the U.S. what it is. We have to return to embracing diversity. We have to let diversity make us strong again.

What are you most proud of?

When I started my academic career, I was in a little rural school in the middle of Colombia. Now, I look out the window of my office and see the city of Chicago. I'm at Northwestern Medicine, with one of the top medical schools in the nation and in the world. I'm very proud of that big jump.

I am one of many examples of what the U.S. is all about. If you work hard, you can find opportunities and do good things. I am proud to be the story of all of us. Proud of the passion. Proud to be in the U.S.

Source: HealthBeat (nm.org)

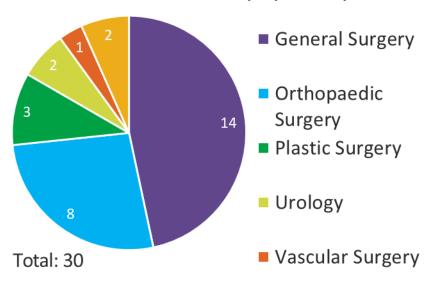
Surgical Education

Medical Student Education

Adjusting the Clerkship During a Pandemic

- Developed a two week virtual curriculum for students whose rotation was interrupted by COVID
- 23 additional students enrolled in the 2 week virtual curriculum to take care of their lecture requirements before joining the clerkship
- Additional 2 week virtual surgery elective developed and run by Dr. Katariya for students interested in a surgical career
- Up to three different types of students at any given time throughout the year:
 - 4 week students whose rotation was interrupted by COVID in March
 - 6 week students who took the 2 week elective
 - 8 week traditional clerkship students
- Orientation adjustments:
 - Very small number of students allowed to be in a room together at any given time
 - For this year, removed the OR simulation component of orientation
 - Added multiple stations to ensure that we could get all the students through orientation on the first day of the clerkship without too much downtime
 - Added camera driving station, gowning and gloving, skills training, and continued to teach suturing and FOLEY skills to small groups on the first day of the clerkship

Match Results by Specialty



All Surgery students matched successfully!



Left to right: Drs. Nathaniel Soper, Samuel South, Kelly Elleson, Steven Schuetz, Kristine Corkum, Ramiro Fernandez

2020 General Surgery Residency Graduates

Our graduates pursued careers and fellowships at the following institutions after completing their General Surgery Residency training:



Kristine Corkum, MD
Pediatric Surgery
University of Denver



Kelly Elleson, MDGeneral Surgery
Oak Hill Hospital



Ramiro Fernandez, MD
Thoracic Surgery
Cleveland Clinic



Steven Schuetz
Bolivian NGO
AY21-22, Breast Surgery—Northwestern



Samuel South, MD Trauma Surgery University of Utah

Surgical Education

2020 Edelstone-Bendix Day

Edelstone-Bendix Day honors residents and fellows who have completed their surgical education. During the William H. Pearce, MD Research Symposium, selected surgical residents and fellows present a basic science or clinical research project. In addition to these presentations, the department includes a research competition for residents, fellows and medical students. Trainees are encouraged to submit an abstract detailing their research. From the submissions, the Edelstone-Bendix Awards committee chose award winners. Following the symposium, a formal banquet is held to celebrate the graduates, their families and peers and to thank these individuals for the privilege of being a part of their surgical education journey.

Kanavel Surgical Scholars Award

The Allen B. Kanavel Surgical Scholars Award recognizes exceptional accomplishments achieved in the research laboratory. The award is given to senior-level surgical residents who have completed two or more years of research study during the course of their general surgery training. Dr. Richard Davis established Kanavel Surgical Scholars Award in memory and honor of Allen B. Kanavel, MD, chair of the Department of Surgery from 1919 to 1929.

2020 Award Winners:

Edmund Chen, MD & Ryan Ellis, MD, MS



Left photo (L-R): Drs. Karen Ho, Edmund Chen, Nathaniel Soper, Ryan Ellis

2019-2020 Resident & Fellow Teaching Award Winners

Matt Antalek (General Surgery)
Brook Golisch (General Surgery)
Jes Sanders (General Surgery)
Emily Cerier (General Surgery)
Jessie Ho (General Surgery)

Charles Logan (General Surgery)

Bona Ko (General Surgery)

Matt Snyder (General Surgery)

Ryan Campagna (General Surgery)

Ryan Ellis (General Surgery)

Kristine Corkum (General Surgery)

Sam South (General Surgery)

Mike Nooromid (Vascular)

Michel Eriberto (Thoracic)

Vaca Elbert (Plastics)

William H. Pearce, MD Research Symposium



The William H. Pearce, MD Research Symposium, which was started in 2019, is named in honor of a beloved vascular surgeon, scientist, and educator at Feinberg School of Medicine. In addition to serving as Program Director of the Vascular Surgery Fellowship and Chief of the Division of Vascular Surgery, Dr. Pearce was President of the American Association for Vascular Surgery and Chairman of the American Vascular Association. He had wide-ranging research interests and established the Vascular Surgery Scientist T32 Training Program in 2009. His many honors include induction into the Teaching Hall of Fame at Feinberg School of Medicine and Lifetime Achievement

Award from the Society for Vascular Surgery. Many of his former mentees have reached positions of eminence as clinicians, researchers, division chiefs, and department chairs.

Resident Competition

First place, basic science: Katherine Ott, MD

First place, clinical research: Megan Bouchard, MD

Honorable mention, senior resident: Rami Khorfan MD, MS

Honorable mention, senior resident: Cary Schlick, MD

Honorable mention, senior resident: Tarik Yuce, MD

Honorable mention, junior resident: Emily Jeong Cerier, MD

Honorable mention, junior resident: Jeffrey Mark Erfe, MD, MS

Fellow Competition

First place: Booker T. Davis, IV, PhD MS

Honorable mention: Stephen Chiu, MD

Honorable mention: Courtney Devin, MD

Honorable mention: Mecca B.A.R. Islam, MS

Student Competition

First place: Joan R. Guitart

Honorable mention: Marc Altimari

Honorable mention: Benjamin Stocker

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 2019-2020 Excellence in Teaching award winners are:

1st Time Recipients







Samuel Kim, MD



Timothy Lautz, MD



Ryan Merkow, MD, MS



Vitaliy Poylin, MD

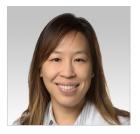
2nd Time Recipients



Karl Bilimoria, MD, MS



Derrick Christopher, MD, MBA



Yue-Yung Hu, MD, MPH



Eric Hungness, MD



Rashmi Kabre, MD



Jonah Stulberg, MD, PhD, MPH

4th Time Recipients



Karen Ho, MD



Kyle Mueller, MD

5 or More Times Recipients



Kevin Bethke, MD



Amy Halverson, MD



Nabil Issa, MD



Michael Shapiro, MD



Cord Sturgeon, MD



Jeffrey Wayne, MD

Excellence in Teaching Wall of Fame

(Have won 5 or more times over course of NU faculty career)

David Bentrem, MD	Amy Halverson, MD	Michael Shapiro, MD
Kevin Bethke, MD	Nabil Issa, MD	Cord Sturgeon, MD
Greg Dumanian, MD	Michael McGee, MD	Mark Toyama, MD
Mark Eskandari, MD	Joseph Schneider, MD, PhD	Jeffrey Wayne, MD

2020 Research Mentor Awards

Fizan Abdullah, MD, PhD	Karen Ho, MD	Joseph Posluszny, Jr., MD
David Bentrem, MD	Andrew Hoel, MD	Mehul Raval, MD, MS
Karl Bilimoria, MD, MS	Seok Hong, PhD	Steven Schwulst, MD
Jeanette Chung, MD	Catherine Hunter, MD	Aimen Shaaban, MD
Susan Clare, MD, PhD	Patrick McCarthy, MD	Ashley Vavra, MD
Seth Goldstein, MD, MPhil	Ryan Merkow, MD, MS	Jason Wertheim, MD, PhD
Richard Green, MD	David Odell, MD, MMSc	Zheng Jenny Zhang, MD, MSc

Research

In Fiscal Year 2020, the Department of Surgery researchers continued to pursue a vast array of innovative explorations and investigations. The department requested a record amount of grant dollars and won a record number of awards this year, despite the pandemic. Through the hard work and dedication of our research faculty and staff, the department continues to grow its research enterprise.

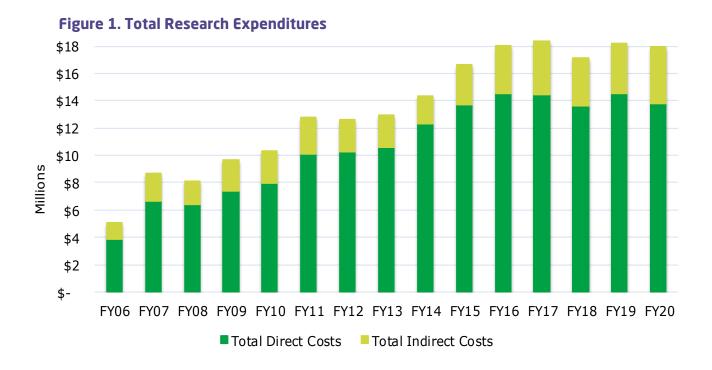
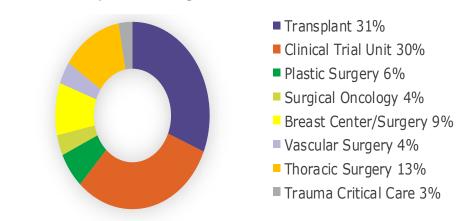


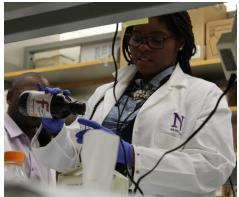
Figure 2. Research Expenditures by Division



View a complete list of faculty research awards on our website here.







By the Numbers

\$97.3M

Proposals Requested

\$17.9M

Amount of Research Expenditures

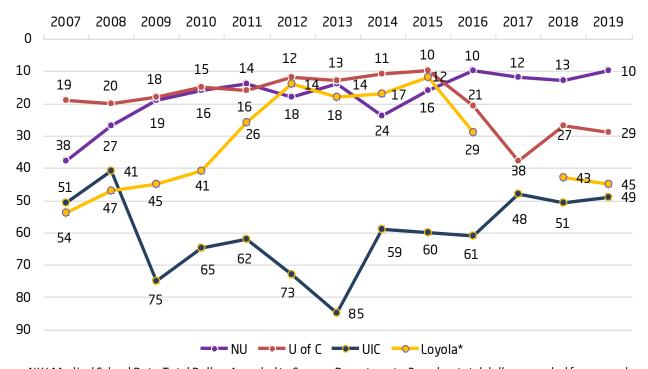
\$25.8M

Total Grant Funding Awarded

107

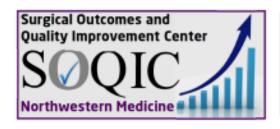
Number of Proposals Submitted

Figure 3. NIH Rankings



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.

Surgical Outcomes Quality Improver

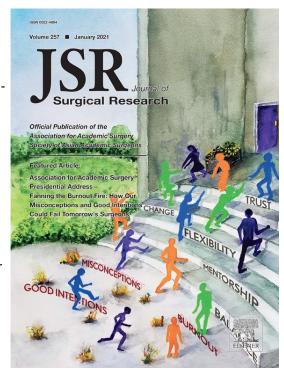


28 Faculty

12 Fellows 24 Staff

Notable Awards and National Leadership Roles

- In 2019-20, Karl Bilimoria, MD, MS, was President of the Association for Academic Surgery. His Presidential Address, "Fanning the Burnout Fire: How Our Misconceptions and Good Intentions Could Fail Tomorrow's Surgeons" during the 2020 Academic Surgical Congress in Orlando, FL can be seen here. It was also featured on the cover of the Journal of Surgical Research (see right photo).
- <u>Association for Academic Surgery</u>: Ryan Merkow, MD, MS is Chair, Health Services Research Committee and Jonah Stulberg, MD PhD MPH is Chair of the Education Committee
- Surgical Outcomes Club: Ryan Merkow, MD, MS is Treasurer
- American Pediatric Surgical Association Mehul Raval, MD MS is Chair of the Quality and Safety Committee (QSC)
- American Academy of Pediatrics Mehul Raval, MD MS is Chair of the Committee on the Delivery of Surgical Care



Banner Year for Publications and Presentations

In 2020, SOQIC team members published 219 manuscripts, including papers in NEJM and JAMA.

SOQIC maintains substantial grant funding from a variety of sources, including the Agency for Healthcare Research & Quality (AHRQ), National Cancer Institute (NCI), National Institutes of Child Health and Human Development (NICHD), National Institute on Drug Abuse (NIDA), National Heart, Lung and Blood Institute (NHLBI), Blue Cross Blue Shield of Illinois, American College of Surgeons (ACS), Accreditation Council for Graduate Medical Education (ACGME), American Board of Surgery (ABS), and numerous other foundation awards.

T32 and Expansion of SOQIC Research Fellowship Program

July 2020 saw the launch of an NCI-funded T32 training grant, *Collaborative Northwestern Surgical Oncology Research Training (CONSORT) (Co-Pls Drs. Karl Bilimoria and Seema Khan).* With this T32, SOQIC was able to expand the number of research fellows to 14. We are also anticipating another training grant to be awarded soon. Learn more about the SOQIC research fellowship program here.

ment Center (SOQIC)

Launch of Illinois Cancer Collaborative

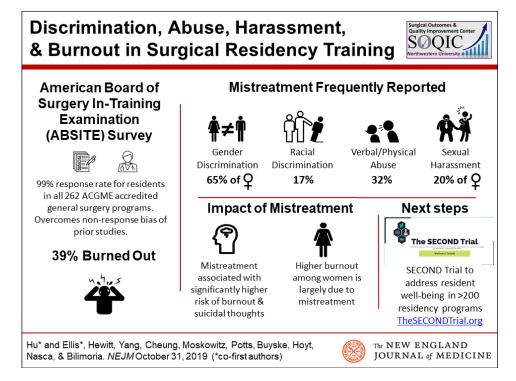
In May 2020, a new statewide collaborative was launched by SOQIC, under the leadership of Anthony Yang, MD MS. With initial start-up funding from SOQIC and the Lurie Cancer Center, the ILCC is an opportunity for Illinois hospitals to partner together to rapidly and efficiently address the unique challenges that we all face in providing safe and optimal cancer care to patients during and after the COVID-19 pandemic. Working groups include Breast Cancer (Dr. Yang), Colorectal Cancer (Ryan Merkow, MD MS), Lung Cancer (David Odell, MD MMSc), Prostate Cancer (Gregory Auffenberg, MD MS), along with a hospital operations working group. For more information, please see http://ilcancer.org/



Karl Bilimoria, MD, MS
Director, SOQIC

Nationally Prominent SECOND Trial Making an Impact

The SECOND Trial is a first-of-its-kind national prospective, pragmatic cluster-randomized trial in which programs are given confidential program-specific reports of their performance data (e.g., burnout rate) compared to other programs in the country based on surveys of their trainees. Led by Karl Bilimoria, MD, MS and Yue-Yung Hu, MD, MPH, 212 programs were randomized to a control arm vs. intervention arm. Programs randomized to the intervention arm receive the Wellness Toolkit along with implementation support to determine how best to improve the learning environment and resident well-being. For more information, please see http://thesecondtrial.org/



Surgical **E**ducation **C**ulture **O**ptimization through targeted interventions based on **N**ational comparative **D**ata (SECOND) Trial

Surgical Outcomes Quality Improver



Illinois Surgical Quality Improvement Collaborative (ISQIC) Leadership

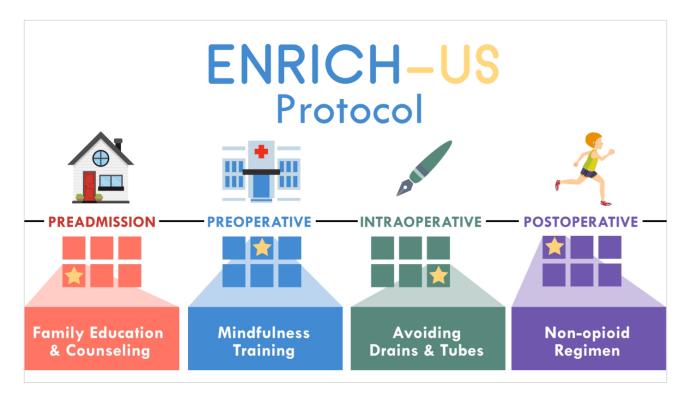
In September 2020, Michael McGee, MD, joined Karl Bilimoria, MD, MS, as ISQIC co-director. Additionally, in 2020, Dr. McGee, with support from Abbott Laboratories, introduced to ISQIC-participating hospitals a comprehensive prehabilitation program to address nutrition, smoking cessation, physical functioning and cognitive preparedness prior to colorectal surgery.

Improving Technical Skills with Operative Video Review and Assessment

In an innovative approach to help practicing surgeons get feedback to improve their technical skills, Jonah Stulberg MD PhD MPH and Karl Bilimoria, MD MS are leading an effort to capture operative video through a novel platform and then bring surgeons together to discuss the videos. This has been done with colorectal surgery, resulting in two recent high-profile publications in <u>JAMA Oncology</u> & <u>JAMA Surgery</u>. Now they are bringing together physicians across the NM health system in multiple specialties to review videos and improve technical skills.

ENRICH-US Pediatric Surgery Initiative

Mehul Raval, MD MS (co-PI Jane Holl, MD MPH), funded by NICHD, launched the *ENhanced Recovery in Children Undergoing Surgery* (ENRICH-US) R01 as an effort to improve recovery for pediatric patients who are undergoing gastrointestinal procedures. The ENRICH-US study will enroll 1,200 patients from 18 U.S. pediatric hospitals. For more information, please see http://www.enrich-us.org/



ment Center (SOQIC)

Northwestern Medicine Quality Innovation Center (NM QIC)

NM QIC improves care across the NM health system by serving as a leader in developing innovative approaches at the intersection of quality and research across all medical specialties, and serving as the incubator for these innovative initiatives. For example, Enhanced Recovery Programs were launched and successfully implemented across the health system to standardize the delivery of care of surgical care across numerous specialties.

Re-Triage in Trauma

Since joining SOQIC in 2019, Anne Stey, MD MSc, has been awarded numerous grants for her work focusing on processes influencing trauma surgical care, specifically in the area of re-triage. Dr. Stey received funding from the American College of Surgeons, American Association for the Surgery of Trauma, and Northwestern Memorial Insurance Company (NMIC). She is also a recipient of Northwestern University's A Chicago Center for Excellence in Learning Health Systems Research Training (ACCELERAT) K12 award (PIs David Cella and Abel Kho).



Heather Himelhoch, PhD, MPH
Director, NM QIC



Division of

Breast Surgery

Clinical

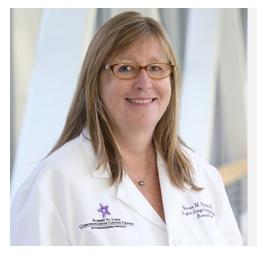
- The High Risk Breast Clinic and Risk Assessment and Prevention Program has continued to expand its footprint in the Breast Surgery Division over the last year.
- Dr. Bethke led surgical efforts to develop an Enhanced Recovery Process (ERP) for mastectomy patients, which went live in FY20.
- Dr. Hansen was named Vice President of the Chicago Surgical Society.
- Hosted successful Lynn Sage Breast Symposium held completely virtual with over 700 participants.
- Through partnering with Radiology, SaviScout was implemented for eligible patients, which is the opportunity for seed placement instead of needle locs for surgical patients.

Research

- Dr. Khan successfully secured the competitive renewal of Northwestern Cancer Prevention Consortium (now called Cancer Prevention Clinical Trials Network) funded as a UG1 grant.
- Dr. Khan received funding of a new RO1 titled "A phase II study of the determinants of transdermal drug delivery to the normal and the radiated breast".



Left to right: Drs. Seema Khan, Nora Hansen, Swati Kulkarni, Kevin Bethke



"Modern management of breast disease requires an in-depth knowledge of not only surgery, but also breast imaging, image-directed biopsy techniques, pathology, radiation oncology, medical oncology and oncologic reconstructive surgery. The educational programs to which we contribute emphasize this multidisciplinary nature of modern breast care and the need for incorporating patient education and decision-making into the treatment paradigm."

- Nora Hansen, MD, Chief

Education

- Successfully completed virtual interviews for our fellowship program and matched our top 2 recruits.
- Barb Guido, APRN, was accepted into the City of Hope Intensive Course in Genomic Cancer Risk Assessment. She will bring this additional expertise to our high risk patients.

Regional Participation/Expansion

- Our breast surgeons are participating on the NM Breast Surgery Clinically Integrated Program, which partners with breast programs across the system to streamline care for breast surgery patients.
- Participating on Breast Cancer Patient Navigation Project this is a multidisciplinary project that's focused
 on revamping patient navigation and coordination for breast cancer patients to enhance access and
 patient experience.

FY20 Overview

Clinical

Number of OR Cases	1,284
Number of Clinic Visits*	8,154
Total wRVUs	31,386

^{*}All arrived appointment types

Research

Total Grant Funding	\$7.55M
NIH Funding	\$7.08M
Total Number of Active Grants	17
Total Publications	18

Education

2 Fellows

^{*}Excludes general surgery residents

Cardiac Surgery

Clinical

- USNWR Top 10 Cardiology & Heart Surgery Program in the nation for 6 consecutive years and #1 in Illinois for 13 consecutive years.
- NMH saw an increase in aortic dissection cases through the first six months of FY20 and continues to lead the state in number of cases, performing more than 20% of cases in Illinois.
- Nearly 1 in 3 (~31%) surgical mitral valve repairs in the state of Illinois takes place at Northwestern Medicine over the last 4.5 years.
- More than 100 physicians have performed surgical mitral valve repair in IL; Dr. McCarthy has performed more than 20% of cases; nearly 29% are performed by BCVI cardiac surgeons.

Research

- Dr. McCarthy is a National Co-Principal Investigator for REPAIR-MR. The purpose of this study is to
 compare the outcomes of Mitral Valve (MV) repair with open heart surgery, which is the current standard
 treatment, to patients who have their MV repaired with an implantable MitraClip device. The MitraClip
 System offers a less invasive procedure to repair the mitral valve in this population.
- Dr. James Cox received the 2020 Jacobson Innovation Award from the American College of Surgeons. He is the second cardiac surgeon to ever receive this prestigious award.

Education

- Eriberto Michel: Winner of the Resident as Teacher Award, Northwestern Department of Surgery
- Vinod H. Thourani, M.D., FACS, FACC from the Georgetown University School of Medicine, served as the 30th Arthur DeBoer Visiting Professor. He gave the Arthur DeBoer Visiting Professor Lectureship entitled, "Past, Present, and Future of TAVR and TMVR."



"The Division of Cardiac Surgery is widely respected throughout the nation as an innovator and leader by focusing on three main objectives: improving measurable outcomes within the service line, elevating the reputation and brand of the program and expanding and growing the program's impact on patients."

- Patrick McCarthy, MD, Chief

Regional Participation/Expansion

- Recruitment of Dr. Aqeel Sandhu, as a Health System Clinician to the Division of Cardiac Surgery. Dr. Sandhu will be the Surgical Director of Cardiac Surgery in the Bluhm Cardiovascular Institute's Northwest Region, and will lead initiatives related to quality and outcomes, patient satisfaction, access and growth, and program alignment with BCVI services across the NM system.
- Continued growth of the cardiac surgery practice at Central DuPage Hospital, under the leadership of Dr. Gyu Gang and Dr. Jonathan Tomasko. Under their stewardship, the program has experienced a 5 year CAGR of 10% growth in cardiac surgery volumes.

FY20 Overview

Clinical

Number of OR Cases	955
Number of Clinic Visits*	2,475
Total wRVUs	63,086
LTR Provider Score	92.0%

^{*}All arrived appointment types

Research

Total Grant Funding	\$1.3M
NIH Funding	\$938,575
Total Number of Active Grants	34
Total Publications	88

Education



Dr. James Cox received the 2020 <u>Jacobson Innovation</u>

<u>Award</u> from the American College of Surgeons



Dr. Chris Malaisrie presented his study at the 2020 Society of Thoracic Surgeons (Feb. 2020)

In the News

Emotions After a Heart Attack & Manage Your Stress After a Heart Attack—Featuring Dr. Kim Feingold, Director of Cardiac Behavioral Medicine



Division of

Gastrointestinal Surgery

Clinical

- Dr. Eric Hungness developed a COVID-related training curriculum and videos related to the use of personal protective equipment in response to the pandemic.
- Dr. Michael McGee launched a statewide colorectal prehabilitation project and assisted Surgical Services with implementing the development of ERAS pathways for various surgical specialties.
- Dr. Alex Nagle, Director of Bariatric Surgery at Northwestern Memorial Hospital, developed and implemented an Enhanced Recovery After Surgery (ERAS) pathway for Bariatric Surgery in addition to earning accreditation by the Metabolic and Bariatric Surgery Accreditation and Quality Improvement Program (MBSAQIP).
- Dr. Jonah Stulberg chairs the Quality Committee for the Digestive Health Center and served as the clinical lead for a system-wide effort to streamline our hernia mesh contract.

Research

- Dr. Michael McGee earned funding from Abbott Laboratories for his study titled "Implementing Preoperative Nutrition, Prehabilitation, and Smoking Cessation Programs in the Illinois Surgical Quality Improvement Collaborative with the American College of Surgeons' Strong for Surgery Program."
- Dr. Vitaliy Poylin received a Research in Robotic Technology Grant from the American Society of Colon and Rectal Surgeons for his study titled "Systematic Assessment of Robotic Technology in Colon and Rectal Surgery."
- Dr. Jonah Stulberg was awarded an R18 grant for \$1.4 million for his study titled "Preventing Opioid Misuse through Safe Opioid Use Agreements between Patients and Surgical Providers."

Education

- Dr. Amy Halverson was appointed Vice Chair of Surgical Education as of September 2020.
- Dr. Eric Hungness continued to provide surgical leadership for Northwestern Simulation resulting in its reaccreditation as a Comprehensive Education Institute.
- Dr. Jonah Stulberg developed and leads the senior residents' hernia skills laboratory.

FY20 Overview

Clinical

Number of OR Cases	2,589
Number of Clinic Visits*	12,517
Total wRVUs	58,761

^{*}All arrived appointment types

Research

Total Grant Funding	\$1.4M
NIH Funding	\$448,522
Total Number of Active Grants	8
Total Publications	45

Patient Success Story:

'I'm a different human being': WGN Chief Meteorologist Tom Skilling shares how weight loss surgery changed his life— Featuring Dr. Eric Hungness

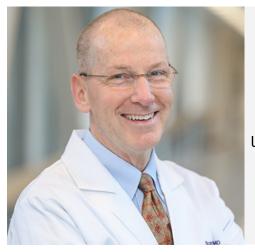


In the News

- Dr. Scott Strong recaps his talk on preparing patients with inflammatory bowel disease for surgery, which he presented at the virtual Advances in Inflammatory Bowel Disease 2020 regional meeting July 25—<u>View</u> <u>More</u>
- American College of Surgeons panels warn vaping and marijuana use before an operation can be harmful—Featuring Dr. Jonah Stulberg
- 10 NM physicians, including Dr. Amy Halverson, participated in the "Scholars of Wellness" program to drive meaningful change in their departments. Read More



Scholars of Wellness Participants: Drs. D. Mark Courtney, Jeanne Horowitz, Anne Schultz, Jenna Swisher, Mehmet Dokucu, Amy Halverson, Anthony Yang, Manjot Gill, Angela Chaudhari, and Rajan Shah



"We have a passion for education and a commitment to creating a learning and training environment that ensures our students and residents realize their utmost potential. They learn in the evidenced-based, multidisciplinary care setting of Northwestern Medicine, where compassion, diversity, empathy, inclusion, and quality are prioritized.

Lastly, innovation and research are integral to the division's success with particular interests focused on clinical outcomes, device development, opioid misuse, and quality assurance."

- Scott Strong, MD, Chief

Division of

Organ Transplantation

FY20 Overview

Clinical

Number of OR Cases	661
Number of Clinic Visits*	3,169
Total wRVUs	43,928
Total Transplants	293

Research

Total Grant Funding	\$7.10M
NIH Funding	\$1.03M
Total Number of Active Grants	9
Total Publications	27

Education

Number of residents/fellows*	7
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^{*}Excludes general surgery residents

Clinical

- Restarted the autoislet transplant program.
- Deceased donor liver transplant increased 22% over prior year, unrelated to COVID-19.
- African American Transplant Access Program (AATAP) continues to grow. Over the past 2 years there has been a 55% increase in transplant evaluations of Black patients.
- 45 patients evaluated within AATAP in past year and 9 already transplanted (AATAP is voluntary and most patients are still evaluated outside of AATAP due to concern of bias from patients).



"The Division of Organ Transplantation educates future leaders in intra-abdominal transplantation, conducts cutting-edge research that will help advance the field and provides exceptional care for patients."

- Joseph Leventhal, MD, PhD, Interim Chief

^{*}All arrived appointment types



Patient Success Stories

- <u>Perfect match: Daughter donates kidney to her mother with diabetes</u> featuring Dr. Dinee Simpson (Credit: ABC7 Chicago)
- New Hope for Organ Transplantation: Life Without Anti-Rejection Drugs featuring Dr. Joseph Leventhal (Credit: LeapsMag)

Research

- Initiated a Phase III trial of tolerance induction in living donor kidney transplant patients.
- Started liver perfusion trial to improve function of marginal donor livers.

Education

- Dr. Katariya created a Virtual Surgical Elective for FSM students during the Stay at Home Order.
- The CTC Summer Immersion Program was held virtually.

Regional Participation/Expansion

• Expanded satellite clinic presence to sites in Oak Lawn, Huntley, Olympia Fields; Bloomington/Normal expansion was delayed due to COVID-19.

Division of

Pediatric Surgery

General Pediatric Surgery

- Rashmi Kabre, MD, is part of the Midwest Pediatric Surgery Consortium, a multicenter collective that conducted a study on nonsurgical treatment of appendicitis for some patients. The study, "Association of Nonoperative Management Using Antibiotic Therapy vs. Laparoscopic Appendectomy with Treatment Success and Disability Days in Children with Uncomplicated Appendicitis," was published in the August issue of the <u>Journal of the American Medical Association</u>.
- No Longer Burdened with a Ventilator
 When Awake, Mariella Finds New Freedom—

 Featuring Drs. Anthony Chin and Rashmi Kabre.



The Chicago Institute for Fetal Health marks 100 fetal surgeries while expanding treatment options

• <u>The Chicago Institute for Fetal Health offers cutting-edge fetoscopic spina bifida repair surgery</u>—Featuring Drs. Aimen Shaaban & Amir Alhajjat.



Transplant Surgery

- Pandemic, protests don't stop successful kidney transplant— Featuring Dr. Caroline Lemoine.
- Anne Marie finds hope in Chicago with 'Dr. Superman' for rare condition—Featuring Dr. Riccardo Superina.
- Dr. Caroline Lemoine was named the Surgical Director of the Pediatric Kidney Transplant Program.
- <u>Leading the Way in Living Donor Organ Transplantation</u>—
 Featuring Drs. Riccardo Superina, Juan Carlos Caicedo, and Caroline Lemoine.

Left: Dr. Riccardo Superina successfully performed surgery on Anne Marie, a five-year-old patient who was diagnosed with the Abernethy malformation, a rare deformity of the blood vessels in the abdomen



"Our training program is one of the first of its kind in the country. Housestaff will gain an in-depth understanding of child health and learn to treat patients' growing bodies with the unique surgical approaches they require."

- Marleta Reynolds, MD, Surgeon-in-Chief, Lurie Children's Hospital

Plastic & Reconstructive Surgery

- Montgomery's Head Shape Corrected with Minimally Invasive Procedure—Featuring Dr. Noopur Gangopadhyay.
- Dr. Arun Gosain was admitted into the American College of Surgeons Academy of Master Surgeon Educators—Read More.
- NAM Therapy Brightens Carter's Smile—Featuring Dr. Arun Gosain.

Cardiovascular-Thoracic Surgery

- Dr. Sunjay Kaushal was appointed as the Division Head of Cardiovascular Thoracic Surgery in November 2020—Read More.
- After 225 Days, Greta Goes Home with a New Heart.

New Outpatient Center in Skokie



Chicago-area families have more access to Lurie Children's expertise in pediatric care than ever before, as the final portion of the hospital's Skokie outpatient center opened in November 2020.

Four divisions within Lurie Children's Department of Surgery will be among the specialties that have clinic time and space in the new Skokie Specialty Care area at 3722 W. Touhy Avenue. These include Orthopaedics and Sports Medicine, Otolaryngology, Pediatric Surgery and Urology.

"Lurie Children's new suburban location in Skok-

ie, with family friendly hours and free parking, makes access to world-class surgical and medical specialists, who are specially trained to treat a broad range of conditions in children, more convenient for many families," said Marleta Reynolds, MD, Surgeon-in-Chief and Chair of the Department of Surgery. Read More

Plastic Surgery

Clinical

- Our multidisciplinary Gender Pathways Program was fully launched in FY20 and has grown rapidly since beginning. This program, led by plastic surgeon Dr. Sumanas Jordan, offers a range of surgical, medical, and mental health services from medical providers who are dedicated to helping people achieve their unique transition-related goals.
- Clinical volume growth driven by increase in aesthetic, nerve, and gender affirming surgeries.
- Launched lymphedema program.

Research

- Dr. Dumanian promoted and led courses on the procedure called "Targeted Muscle Reinnervation (TMR)", which was developed here at NM, with the support of a DOD grant. With support of this grant, 12 courses were held at Northwestern and were attended by over 100 surgeons from around the country.
- Dr. Galiano, alongside Dr. Jay Hong and Dr. Thomas Mustoe, secured grant funding in the form of a
 multicenter grant from the DOD to investigate muscle regeneration. This 2-year grant will likely lead to
 more funding, continuing our successful track record in the use of tissue engineering to restore skin and
 muscle in wounded warriors.
- Dr. Kim and his research team are pursuing a multiple grant-funded novel experimental hypothesis about implants generating a heightened immune surveillance that could have collateral protective response against breast cancer. Additionally, they are initiating clinical trials with novel anti-scar techniques and mesh technologies in aesthetic and reconstructive breast surgery.
- Dr. Ko received grant funding from the DOD as part of a multicenter prospective clinical trial evaluating the effects of brief electrical stimulation on peripheral nerve regeneration.

Education

- Matched with our top recruits: Dr. Paige Hackenberger (OSU) and Dr. Jonathan Bricker (Northwestern).
- Secured two exciting placements for our research residents -- Dr. Simon Moradian conducting research on osseointegration (OI) at Shirley Ryan Ability Lab and Dr. Julian Klosowiak completing an internship at the FDA reviewing plastic surgery-related devices and implants.
- Received funding from McGaw to implement a new Flap Based Anatomy Course -- first session began September 2020.
- Held multiple applicant Meet & Greet sessions, virtually introducing our program to over 200 candidates.
- Began participating in the Illinois Academic Plastic Surgery (I-APS) Collaborative, a virtual case-based conference for IL plastic surgery residency programs to meet quarterly to discuss challenging cases.

"Our mission is to push the frontiers of plastic surgery through the highest quality patient care, clinical and laboratory research and education of the next generation of plastic surgeons."

- Gregory Dumanian, MD, Chief



FY20 Overview

Clinical

Number of OR Cases	2,362
Number of Clinic Visits*	14,610
Total wRVUs	64,949

^{*}All arrived appointment types

Research

Total Grant Funding	\$1.25M
NIH Funding	\$84,969
Total Number of Active Grants	17
Total Publications	50

Education

14

^{*}Excludes general surgery residents



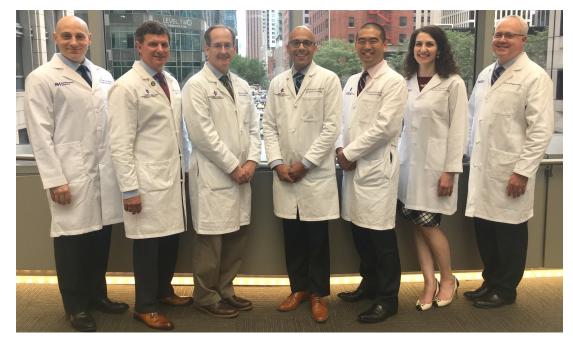
Members of the Gender Pathways team, left to right: Dr. Marco Ellis (Surgery); Dr. Diana Bowen (Urology)

Dr. Angela Chaudhari (OBGYN);

Dr. Sumanas Jordan (Surgery)

Division of

Surgical Oncology



Left to right: Dr. Ryan Merkow

Dr. Jeffrey Wayne

Dr. David Bentrem

Dr. Karl Bilimoria

Dr. Anthony Yang

Dr. Dina Elaraj

Dr. Cord Sturgeon

Clinical

- Dr. Elaraj completed a one-year program with the Academy for Quality and Safety Improvement with a project entitled "Primary hyperaldosteronism screening in the pre-operative clinic".
- Dr. Sturgeon is the new Director of Surgical Services.
- Chicago Magazine Top Doctors 2020: Wayne and Bentrem.
- Castle Connolly America's Top Doctors 2020: Wayne and Bentrem.

Research

Dr. Bilimoria received a T32 grant, and Dr. Yang received a K08 grant.

Education

- Bilimoria was named the 2020 FSM Mentor of the Year.
- Teaching and mentoring awards—Drs. Ryan Merkow, Karl Bilimoria, Cord Sturgeon, Jeff Wayne, David Bentrem.

Regional Participation/Expansion

- Recruitment of Dr. Akhil Chawla to West Region with clinical teaching appointment at NU.
- Expanded clinics at LFH.
- Expansion of Melanoma, Sarcoma, and GI Tumor boards to include North, West, and Northwest Regions.
- Appointment of Dr. Wayne to system-wide cancer center operations group.



"We are dedicated to being a leader in cutting-edge, multidisciplinary and personalized clinical care through our partnership with Northwestern Medicine. In addition to being leaders in their respective clinical fields, many of our faculty have a research interest in surgical quality and clinical outcomes, for which they are nationally known."

- Jeffrey Wayne, MD, Chief

FY20 Overview

Clinical

Number of OR Cases 1,087 Number of Clinic Visits* 5,568 Total wRVUs 31,374 LTR Provider Score 94.0%

Research

Total Grant Funding	\$1M
NIH Funding	\$776,611
Total Number of Active Grants	12
Total Publications	124

Education

Number of residents/fellows*	3-4
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^{*}Excludes general surgery residents

Northwestern Medicine Offering Breakthrough Cancer Therapy

Featuring Dr. Ryan Merkow

Dr. Merkow discusses using a hepatic artery infusion pump to deliver high dose chemotherapy

Read More



^{*}All arrived appointment types

Thoracic Surgery

Clinical

- 44 Lung Transplants in FY2020 (1st COVID Lung Transplant in the US).
- Conducted 75 Respiratory ECMO Runs, which is how many times ECMO had to be utilized on a patient.
- The Respiratory ECMO Program of Northwestern Medicine achieved an important milestone with its first successful ECMO Transport. This has been a long-term program goal since inception in 2017, and is the next step in advancing as a leading ECMO program.

Research

- Discovered new pathway for Primary Graft Dysfunction (PGD) after lung transplant.
- Pioneered Lung Transplant for COVID19.
- Pioneered a remote surveillance program for lung cancer combining patient reporting outcomes and telehealth technology.

Education

- National lead center for the Thoracic Surgery SECOND Trial assessing the culture of surgical training.
- Thoracic Resident team National Runner up in the STS surgical competition.
- Matched top candidates for both our Integrated (Sandeep Bharadwaj) and Traditional (Mickyas Eskender) programs.

Regional Participation/Expansion

- Started Thoracic Surgery Program in McHenry region.
- System wide integration of Thoracic Surgery.
- Combined weekly Thoracic Surgery Grand Rounds.



"We aim to provide unparalleled personalized care to our patients based on clinical innovation, scientific advancements and state-of-the-art technology."

- Ankit Bharat, MD, Chief

FY20 Overview

Clinical

Number of OR Cases	1,234
Number of Clinic Visits*	3,891
Total wRVUs	41,059

^{*}All arrived appointment types

Research

Total Grant Funding	\$1.9M
NIH Funding	\$1.9M
Total Number of Active Grants	4
Total Publications	79

Education

Number of residents/fellows*	9
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^{*}Excludes general surgery residents







Top photo (L-R): Alexandra Klonis, APN, CNP; Mark Saine, PA-C; Vanessa Hoppner, PA-C

Middle photo (L-R): Drs. Ankit Bharat and Samuel Kim

Left: Our research on the cover of Science
Translational Medicine. First report to show the
importance of lung transplantation as the only lifesaving treatment in some patients suffering from
lung framework destruction due to COVID-19.

Division of

Trauma & Critical Care

Clinical

- The Division of Trauma, General Emergency Surgery, and Surgical Critical Care was key in the Department of Surgery's COVID response. The service demonstrated great flexibility to respond to the pandemic by remodeling the service and then rebounding during reactivation.
- Division faculty are 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

- Dr. Schwulst has continued scientific achievement and received an RO1 Research Project grant this year.
- Dr. Anne Stey submitted an application for a K-grant titled "Timeliness of Management of Trauma Related Hemorrhage and Trauma Related Coagulopathy."

Education

- Our faculty have increased their leadership roles within the Department of Surgery's Residency Program –
 Dr. Joseph Posluszny was named Clerkship Director and Dr. Nabil Issa continues as Clerkship Sub-I Director.
- We matched two new fellows this year.
- Drs. Issa and Shapiro won teaching awards.



Left to right: Dr. Joseph Posluszny, Christine Schilling, Brittany Cook, Erinn White, Dr. Nabil Issa, Dr. Anne Stey, Dr. Steven Schwulst, Dr. Mamta Swaroop, Dr. Michael Shapiro



"We aim to be recognized for clinical excellence, outstanding teaching, exemplary scientific inquiry and administrative service in the field of trauma, surgical critical care and emergency general surgery."

- Michael Shapiro, MD, Chief



Dr. Hasan Alam (left) presenting Dr. Anne Stey with the American Association for the Surgery of Trauma (AAST) Research and Education Scholarship Award

FY20 Overview

Clinical

Number of OR Cases	885
Number of Clinic Visits*	659
Total wRVUs	41,694

^{*}All arrived appointment types

Research

Total Grant Funding	\$986,682
NIH Funding	\$896,682
Total Number of Active Grants	4
Total Publications	54

Education

Number of residents/fellows*	2
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^{*}Excludes general surgery residents

Vascular Surgery

Clinical

 Continued growth of the vascular surgery practice at Northwestern Lake Forest Hospital, under the leadership of Dr. Tadaki Tomita and Dr. Mark Eskandari. Under their stewardship, the program has experienced a 4 year CAGR of 23% growth in vascular surgery activity.

Research

 Recruitment of Dr. Bin Jiang, PhD, as a tenure-eligible Assistant Professor to the Division of Vascular Surgery and Department of Biomedical Engineering. Dr. Jiang will be responsible for establishing a robust research program in regenerative and tissue engineering with emphasis on convergence research and translational activities.

FY20 Overview

Clinical

Number of OR Cases	942
Number of Clinic Visits*	3,587
Total wRVUs	35,024
LTR Provider Score	90.6%

^{*}All arrived appointment types

Research

Total Grant Funding	\$955,398
NIH Funding	\$628,094
Total Number of Active Grants	25
Total Publications	24

Education

Number of residents/fellows*	7
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^{*}Excludes general surgery residents

Regional Participation/Expansion

- Recruitment underway for a Health System Clinician to support growth and expansion of vascular programming in Northwestern Medicine Northwest Region (McHenry and Huntley Hospitals).
- Karen Ho, MD, will be covering the Jesse Brown VA Medical Center as a 0.3 FTE starting September 2020.
- Continued growth of the vascular surgery program at Northwestern Lake Forest Hospital, including the
 recruitment of John Golan, MD. Andrew Hoel, MD, will also now be expanding his ambulatory clinic to
 include a weekly clinic at that location.

"Northwestern Vascular Surgery provides cutting-edge medical, endovascular, and traditional surgical approaches to the management of a broad spectrum of vascular problems. We have a long-standing reputation for delivering outstanding clinic care, research funding, and training of students, nurses, residents, and fellows."

- Mark Eskandari, MD, Chief



Education

- Michael S. Conte, M.D., from the University of California, San Francisco, served as the 8th Annual John J.
 Bergan Visiting Professor. He gave the Department of Surgery Grand Rounds lecture entitled, "Making a Better Vein Bypass Graft: A Translational Journey."
- Grace Wang, M.D., from the University of Pennsylvania, was the October 2019 vascular fall visiting professor. She presented at the vascular conference on, "Looking Beyond 30 Days: Reintervention after TEVAR."
- The Vascular Surgery trainees received the following awards:
 - *Brian Wernick, Fellow as Teacher Award, Northwestern Department of Surgery
 - *Michael Nooromid, Resident as Teacher Award, Northwestern Department of Surgery
 - *Courtney Furlough:

Alpha Omega Alpha Honor Medical Society

Northwestern University Center for Bioethics and Medical Humanities Exploratory Grant

Northwestern Electronic Data Warehouse Pilot Data Program Grant

American College of Surgeons Leadership and Advocacy Summit Travel Award

*Matthew Chia:

Exemplary Professional Nominee, Northwestern Department of Surgery Goldberg Travel Award, Northwestern Department of Surgery



Left: On February 1, 2021, Dr. Tadaki Tomita successfully completed the first TCAR (transcarotid artery revascularization) procedure at Northwestern Medicine Lake Forest Hospital.

Clinical Integration

The Northwestern Medicine Department of Surgery has recently named the alignment and integration of surgery throughout our Northwestern Medicine (NM) network a departmental strategic priority. A Clinical Integration Workgroup has been assembled and a charter created to guide their work.

Opportunity Statement: Opportunity exists to develop a common blueprint for surgical care delivery, create shared standards, and coordinate planning to enhance patient access and distinguish Northwestern Medicine.

Goal: Create a model Northwestern Medicine regional surgical network in which each NM hospital has the premier surgical program within their community.

Our initial projects:

- 1. Create a directory of all general surgeons and general surgery subspecialists within the NM system (about 180).
- 2. Take an inventory of all current and planned system-wide quality, research, surgical innovation and standardization initiatives.
- 3. Develop programs and a playbook to aid in the recruitment of NM regional surgeons.
- 4. Determine integration and alignment gaps, support new initiatives, address common barriers.
- 5. Foster stronger working relationships between regions through teleconferencing, CME symposia, newsletters, social events.

First and foremost is the fostering of strong, trusting working relationships between all regions and surgeons. NM is fond of the phrase "Integration occurs at the speed of trust" and our focus will always be on developing and maintaining these strong relationships as we look for ways to improve surgical care throughout the system.





Feinberg/Galter



Prentice



Lake Forest



Central DuPage



Delnor



Kishwaukee



Valley West



Huntley



Woodstock



McHenry



Palos Health

FY21 Strategic Priorities



Recruit top talent, with an emphasis on diversity.



Evaluate and plan for divisional presence/ leadership in other NM regions/hospitals.



Establish a faculty mentorship program.



Provide departmental research support (bridge funding, pilot grants, biostatistical/EDW support, study coordinators, etc.)



Enhance the residency program (engagement, educational platform, rotational structure, rotation-specific curricula, and recruitment strategies).

Mission & Vision

Vision: To be a distinguished surgical department that delivers comprehensive and innovative care within an integrated academic health system, pursues research that defines the future of surgery, trains the next generation of surgical leaders, and emphasizes diversity, equity and inclusion in all missions.

Mission: Within a diverse, inclusive and equitable environment, we will:

- Provide the highest quality, evidence-based, comprehensive, and compassionate patient care across a broad range of surgical specialties;
- Develop leaders in academic surgery through state-of-the-art training programs which are conducive to outstanding education for all learners across the career continuum;
- Expand the frontiers of knowledge by advancing research, innovation, creativity, and collaboration and the translation of surgical sciences to patient care.



Select Faculty Honors & Awards

Bentrem, David, MD

Named Top Doctor by Castle Connolly, 2019.

Chair of membership committee, Society of Clinical Surgery

Bharat, Ankit, MBBS

National Press Conference on June 11 and July 30 for performing the first and second COVID-19 Lung Transplant performed in the United States at NMH.

Featured in the New York Time, Washington Post, BBC International, CNN International, PBS Newshour, Good Morning America for the first and second COVID-19 Lung Transplant performed in the United States at NMH.

Featured on WGN for the first ECMO - COVID Transfer from NM McHenry to NMH in March 2020.https://wgntv.com/news/medical-watch/northwestern-medicine-doctors-turn-to-rare-treatment-for-covid-19-patient-with-few-options-left/

National Press Conference on January 10, 2020 for the 100th Lung Transplant performed at Northwestern Memorial Hospital.

Bilimoria, Karl, MD, MS

2019 Founding Chair of Inaugural Illinois Surgical Conference

2020 American College of Surgeons Academy of Master Surgeon Educators

2020 Mentor of the Year Award, Feinberg School of Medicine

Elaraj, Dina, MD

Completed one year program w/Academy for Quality & Safety Improvement. Project title: 'Primary Hyperaldosteronism Screening in the Pre-Operative Clinic'.

Eskandari, Mark, MD

Named Regional "Top Doctors" by Castle Connolly, 2020.

Garza-Castillon, Rafael, MD, MSc

Participated in the first and second bilateral lung transplant in the United States for a patient who had severe COVID-19, completed Master of Science in Clinical Research from University of Minnesota School of Public Health, First (in NMH) outside hospital VV ECMO cannulation and transport to NMH (I performed cannulation and transferred the patient in the ambulance to NMH), 2020.

Grady, Kathleen, PhD

Winner, Heart Failure Society of America Nursing Leadership Award, September, 2019.

Gordon, Elisa, PhD, MPH

Appointment as Member of the National Academies of Sciences, Engineering, and Medicine Committee on A Fairer and More Equitable Cost-Effective and Transparent System of Donor Organ Procurement, Allocation, and Distribution

Appointment as a Member of the federal Advisory Committee on Blood and Tissue Safety and Availability (ACBTSA)

Elected as Co-Chair of the American Society of Transplantation Psychosocial and Ethics Community of Practice

Hansen, Nora, MD

Chicago Magazine by Castle Connolly Top Doctors Recognition Award 2019.

Castle Connolly Exceptional Women in Medicine Award 2019.

Elected Vice President Chicago Surgical Society September 2020

Ho, Karen, MD

Elected Member, Alpha Omega Alpha Medical Honor Society, 2020.

Elected Member, Society for University Surgeons, 2020.

Khan, Seema, MD

Awarded UG1CA242643 (Khan) for the continuation of the Northwestern Cancer Prevention Consortium.

Khan, Seema, MD (cont.)

Awarded 1R01CA237607-01, Biomarkers to Improve Targeting of Breast Cancer Prevention in Women with Atypical Hyperplasia.

Breast Cancer Research Foundation Grantee for Pre-clinical & clinical studies of breast cancer prevention with transdermal anti-progesterone agents

Kim, John YS, MD

Plastic Surgery Foundation Visiting Professor (Mount Sinai, New York; Cleveland Clinic, Florida; LSU, Louisiana), 2019/2020.

Co-Chair, Aesthetic Breast Reconstruction Symposia, American Society for Aesthetic Plastic Surgery, 2019/2020.

Chair Elect, Scientific Committee PSTM, American Society of Plastic Surgery, 2019.

Ko, Jason, MD, MBA, FACS

Elected as a Fellow of the American College of Surgeons, 2020.

Named a member of the Editorial Board of the journal, Orthoplastic Surgery, 2020.

Lautz, Tim, MD

Department of Surgery Excellence in Teaching Award, October 2020

Mathew, James, PhD

Elected as Fellow to American Society of Transplantation (FAST), 2020.

McCarthy, Patrick, MD

Department of Surgery Research Mentoring Award, Northwestern University Feinberg School of Medicine, 2019.

McGee, Michael, MD

Named Co-Director of the Illinois Surgical Quality Improvement Collaborative (ISQIC)

Merkow, Ryan, MD, MS

2019 Top 25 Abstract of Meeting, SSAT Research Conference

2020 Annual Department of Surgery Excellence in Teaching Award, Northwestern University

2020 Annual Department of Surgery Research Mentoring Award, Northwestern University

Pham, Duc Thinh, MD

ACUTE Mechanical Support Council, ISHLT, 2020.

Pinelli, David, PhD

AST Transplant Diagnostics Community of Practice Case Presentation Award.

Raval, Mehul, MD, MS

Chair of the American Academy of Pediatrics (AAP) Section on Surgery (SoSU) - Committee on the Delivery of Surgical Care (DSC)

Chair of the American Pediatric Surgical Association (APSA) Quality and Safety Committee (QSC)

Mentor for 2019 American College of Surgeons Quality and Safety Conference Best Trainee Abstract (Awarded to S. Kim)

Sambandam, Yuvaraj, PhD

Awarded Dr. Michael M. Abecassis Transplant Innovation Endowment Grant, 2020.

Schaefer, Wilhelmina, PhD

Received pilot grant award from the Osher Center for Integrative Medicine at Northwestern University, 2020

Simpson, Dinee, MD

NKFI Board Rising Star Award, The National Kidney Foundation of Illinois, August 2019.

Community SHEro Award, Distinctively Me for Girls, for dedication to advocating, educating, and comforting African American families, August 2019.

Stey, Anne, MD

American Association for Surgery of Trauma Research Scholarship 6/1/2020-6/1/2021.

Scott, Strong, MD

President, Research Foundation of American Society of Colon and Rectal Surgeons.

Castle Connolly Top Doctor, 2020.

Castle Connolly Top Doctor for Cancer, 2020.

Select Faculty Honors & Awards

Stulberg, Jonah, MD, PhD, MPH

Awarded Excellence in Teaching, Department of Surgery, 2020.

Elected as Chair, AAS Education Committee, Association for Academic Surgery (AAS), 2019.

Elected as Chair, Surgical and Perioperative Care Interest Group, AcademyHealth, 2019.

Vela, Alyssa, PhD

Invited Speaker, "Psychosocial Risk and Behavioral Health Considerations for Heart Failure," American Heart Association Heart Failure Expo, virtual, September 2020.

Wayne, Jeffrey, MD

Named Top Doctor by Castle Connolly, 2020.

Named Top Doctor by Chicago Magazine, 2020.

Elected to Membership by the American Surgical Association 2019.

Elected to President, IL Surgical Society, 2020-2021.

Zhang, Zheng J., MD, MSc

Sun Lee Award for outstanding, pioneering contribution to the progress of experimental microsurgery by the International Society for Experimental Microsurgery, 2020

Research Mentor Award by the Department of Surgery, 2020

Core Facilities Service Excellence Award for the Microsurgery Core's continued outstanding performance, 2020

Select Faculty Presentations

Abdullah, Fizan, MD, PhD

Invited Speaker, "Future of Children's Surgery", Seattle Children's Hospital, Seattle, Washington, September 20, 2019.

Invited Speaker, "LMIC Surgery and Technology" Northwestern Buffet Idea Dialogue, Northwestern University, Chicago, IL, July 9, 2020.

Bentrem, David, MD,

Moderator, ACS Clinical Congress-Boston, Hepatobiliary and Pancreas I, October 22, 2019.

Schlick C, Khorfan R, Odell D, Merkow R, Bentrem DJ. Adequate nodal harvest as a quality measure: Is it associated with histology or use of neoadjuvant therapy? Society of Surgical Oncology, Boston, MA, March, 2020.

Schlick C, Odell D, Khorfan R, Merkow R, Bentrem DJ. Associations between patient and hospital factors and margin positivity in resectable esophageal cancer. ACS Clinical Congress, Washington, DC.

Bharat, Ankit, MBBS

"ECLS Management without Anticoagulation" @ AATS Mechanical Support for the Heart & Lung Symposium, Houston, TX Feb 14-15, 2020.

"Double lung transplant in COVID19 infection." AAPI Virtual Conference. Brigham & Women's Hospital, Harvard Medical School. June 22, 2020.

"Double lung transplant in COVID19 infection. Einstein Transplant Week Symposium." Faculdade Israelita de Ciências da Saúde Albert Einstein (FICSAE. São Paulo, Brazil. October 10, 2020.

Bilimoria, Karl, MD, MS

A Critical Evaluation of Publicly Available Hospital Quality Reporting Systems. AAS Fundamentals of Surgical Research Course, Argentine Congress of Surgery. Buenos Aires, Argentina, October 2019.

Moving from FIRST to SECOND: A Proposal for Another National Trial to Improve Surgical Training. Robin McLeod Lectureship, University of Toronto. Toronto, CA, December 2019.

Fanning the Burnout Fire: How our Misconceptions and Good Intentions Could Fail Tomorrow's Surgeons. Kredel Springs Lecture. MUSC Visiting Professorship. Charleston, SC, June 2020.

Borja-Cacho, Daniel, MD

Total Pancreatectomy and Autologous Islet Transplantation. 7th Congress Mexican Society Hepato Pancreato Biliary Surgery. Mexico, December 2019.

Radioembolization in Liver Surgery and Liver Transplant. 7th Congress Mexican Society Hepato Pancreato Biliary Surgery. Mexico, December 2019.

Su-Hsin C, Wang M, Pozo M, Ladner L, Borja-Cacho D. Geocode State Trend of the Prevalence of Non-alcoholic Steatohepatitis: State-level Equity and Utility. Meeting: Cutting Edge of Transplantation 2020.

Caicedo-Ramirez, Juan C., MD

Perceptions of a Culturally Targeted Hispanic Kidney Transplant Program: A Mixed Methods Study and The Hispanic Paradox in Patients with Liver Cirrhosis: Current Evidence from a Large Regional Retrospective Cohort Study. University of Michigan Virtual TREE Meeting, September 2020.

Live Discussion with Transplant Surgeon Dr. Juan Carlos Caicedo (Virtual). Gift of Hope Facebook Live Report, September 2020.

Churyla, Andrei, MD

STS Annual Meeting 2020- Presentation: Safety of Atrial Fibrillation Ablation with Surgical Aortic Valve Replacement: STS Adult Cardiac Surgery Database Outcomes.

Second Annual Catheter and Surgical Therapies for Atrial Fibrillation(Cast-AF) Summit- Presentation-Long-Term Benefits of Concomitant AF Surgery.

Eskandari, Mark, MD

Lecturer, "Total Aortic Occlusion With Worsening Visceral And Renal Ischemia After TEVAR For Acute TBAD Can be Due to Complete Dissection Flap Detachment And Distal Migration: Causes And Diagnostic: Urgent Open Flap Excision Is Life Saving." 46th Annual VEITH Symposium, New York, NY, November 19-23, 2019.

Lecturer, "Long-Term Patency of Primary Inferior Vena Cava Reconstructions." 46th Annual VEITH Symposium, New York, NT, November 19-23, 2019.

Lecturer, "Aneurysmorrhaphy and Open Ligation of Persistent Endoleaks." The Houston Aortic Symposium, Houston, TX, March 5-7, 2020.

Select Faculty Presentations

Feingold, Kim, PhD

Invited Speaker, "Medical Psychology Career Development ." Virginia Commonwealth University, Department of Psychology. Richmond, Virginia. November, 2019

Invited Speaker, "Coping with Heart Failure". 14th Annual Holiday Heart Failure Symposium. Chicago, Illinois. December 5-7, 2019

Paper presentation, "Acupuncture History, Expectations, and Post-Operative Experience among Cardiac Surgery Patients: The ACU-Heart Pilot Trial." International Congress on Integrative Medicine and Health. Cleveland, OH. April 28-May 1, 2020.

Garza-Castillon Jr., Rafael, MD, MSc

Invited presenter, (virtual meeting) for the XLIV International Congress of General Surgery, Mexico. Topic: VV ECMO and lungs transplant for COVID-19 patients, Virtual session with Mexico's embassy in Chicago: Successful Mexican-Americans in Chicago, Interviews regarding first lung transplant for COVID-19 with major national Hispanic television networks (CNN en espanol, People magazine Spanish, Telemundo).

Gordon, Eiisa, PhD, MPH

Gordon, EJ. Invited presentation: Racial Disparities in Transplantation (Your car goes where your eyes go). Keynote Presentation. Duke University Transplant Infectious Disease Research Symposium. Live, Digital Meeting.

Gordon, EJ. Invited presentation: Ethical issues about conducting deceased donor organ intervention research in the context of transplant candidates considering accepting those organs in the USA. All-Russian Congress of Transplant Surgeons. Live, Digital Meeting.

Gordon, EJ. Invited presentation: Clinical Trials: Opportunities for All. American Association of Kidney Patients 45th Annual national Patient Meeting. Digital Meeting.

Grady, Kathleen, PhD

Invited speaker, "Demographic, Psychosocial, and Behavioral Patient Characteristics in INTERMACS: What do we know and where do we go from here?" The relevance of registry research for clinical practice: Gender differences in ventricular assist device recipients with a focus on psychosocial and behavioral factors workshop. Trier University, Trier, Germany, October, 2019.

Invited speaker, "Patient-centered Decision Making and PROs in Patients with Recovered-EF." Utah Cardiac Recovery Symposium (U-CARS). Salt Lake City, Utah. January, 2020.

Invited speaker, "Challenges and Potential Solutions for Young Adult Heart Transplant Recipients Transitioning from Pediatric to Adult Care." National Nursing Research Roundtable/National Institutes of Health. Bethesda, MD. March, 2020.

Hansen, Nora, MD

Invited Speaker, Evidence of Breast Recurrence Score Tests in the Neoadjuvant Setting, Genomic Health Advisory Board, Chicago, IL, October 2, 2019.

Speaker, Breast Cancer Today and Tomorrow / Treatment, Trends, Research and Discovery, Panelist, Chicago, IL, November 2019.

Panelist, Breast Cancer Today and Tomorrow / Treatment, Trends, Research and Discovery, Chicago, IL, November 2019.

Ho, Karen, MD

Invited Speaker, "Shaping Peripheral Arterial Remodeling and Inflammation with Gut Microbes," Vascular Annual Meeting, Society for Vascular Surgery, Virtual, June 25, 2020.

Invited Speaker, "Metaorganismal TMAO Pathway Driving Scleroderma Pathogenesis: Novel Gene-environment Interaction Paradigm and Therapeutic Target," Scleroderma Foundation Early Career Investigator Workshop, Virtual, July 16, 2020.

Invited Speaker, "Gut Microbe-Dependent Metabolites as Modulators and Biomarkers of Atherosclerosis," 2020 Vascular Cures Innovation Summit, Virtual, September 18, 2020.

Hoel, Andrew, MD

Guest Speaker, "Abdominal Aortic Aneurysms" FDA-Vascular Implant Surveillance and Interventional Outcomes Meeting, Silver Spring, MD. September 9, 2019.

Lecturer, "Techniques for Managing Small Vessel Access during EVAR/TEVAR" 44th Annual Northwestern Vascular Symposium, Chicago, IL. December 12, 2019.

Hummel, Mary, PhD

Invited Speaker, "Cytomegalovirus: Master Manipulator of Host Cell Transcription", Rush University, Chicago, IL, Feb. 19, 2020.

Johnson, Julie, MSPH, PhD

Johnson, JK and Ramaswamy, R. Bridge the QI and IS Gap to Reduce Opioid Prescribing. 2019 Institute for Healthcare Improvement National Forum. Workshop Presentation, Orlando, Florida, December 11, 2019.

Johnson, JK; Schaefer, W; Shallcross, M; Stulberg, JJ. Using an implementation framework to assess barriers and facilitators to implementation in a multi-hospital system. 13th Annual Conference on the Science of Dissemination and Implementation. Poster Session: Clinical Care Settings: System-level Interventions", December 15-17, 2020.

Invited speaker: Johnson, JK. Bridging the Improvement and Implementation gap. Microsystem Festival 2020. Jongkoping, Sweden. February 28, 2020.

Katariya, Nitin, MD

Invited Discussant, AHPBA Annual Meeting, March 2020.

Speaker/Moderator, Technical Challenges - Kidney/ Pancreas American Society of Transplant Surgeons Winter Symposium, Miami, Florida, January 2020.

Khan, Seema, MD

American Society of Clinical Oncology, Plenary Session. "A randomized Phase III trial of systemic therapy plus early local therapy versus systemic therapy alone in women with de novo Stage IV breast cancer: a trial of the ECOG-ACRIN Research Group (E2108)." Virtual Meeting, May, 2020.

Translational Advances in Cancer Prevention Agent Development. Division of Cancer Prevention, National Cancer Institute. "Local transdermal drug delivery to the breast for cancer prevention." Virtual Meeting, August 2020.

Lynn Sage Breast Cancer Symposium. "Local therapy of limited disease in Stage IV Breast Cancer: what is the evidence?" Chicago, IL. October 2019.

Kim, John YS, MD

Principal Investigator, "In-Vivo MRI Investigation of Gluteal Vein Anatomy in Relation to Gluteal Fat Grafting," Plastic Surgery The Meeting 2019, San Diego, CA, September 20, 2019.

Principal Investigator, "Correction of Implant Malposition in Breast Reconstruction: Risk Factors and Outcomes," Plastic Surgery The Meeting 2019, San Diego, CA, September 22, 2019.

Moderator, "Dueling Perspectives, How I Did It and How Would You Do It?," Plastic Surgery The Meeting 2019, San Diego, CA, September 23, 2019.

Kim, Samuel, MD, FACS

Covid Presentation on the American Medical Association Website.

Ko, Jason, MD, MBA

Co-Chair and Faculty, "Nerve Transfers: A Contemporary Pathway to Improve Function and Relieve Neuropathic Pain," Precourse. American Society for Surgery of the Hand, 75th Annual (Virtual) Meeting, San Antonio, TX. September 30, 2020.

Faculty, "Management of the Lower Extremity Bone Gap," Breakout Panel. American Society for Reconstructive Microsurgery Annual Meeting, Ft. Lauderdale, FL. January 12, 2020.

Chair, "Nerve Transfers Versus Tendon Transfers to Restore Upper Extremity Function," Instructional Course Lecture. American Association for Hand Surgery Annual Meeting, Ft. Lauderdale, FL. January 10, 2020.

Kulkarni, Swati, MD

Department of OBGYN Grand Rounds. "From Mastectomy to Active Surveillance: The Promise of Personalized Treatment for Ductal Carcinoma in Situ." Northwestern University, Chicago, IL. January 24, 2020.

Invited Promise Study Interview. Bright Pink, Chicago, IL. January 22, 2020.

Lautz, Tim, MD

Many BT*, Lautz TB, Dobrozsi S, Wilkinson KH, Rossoff J, Le-Nguyen AL, Dakhallah N, Piche N, Winschenk W, Cooke-Barker J, Coodhue C, Zamora A, Kim E, Talbot L, Quevedo OG, Murphy AJ, Commander SJ, Tracy ET, Short SS, Meyers RL, Rinehardt HN, Aldrink JH, Dasgupta R, Lal D. Optimal Management of Children with Neutropenic Appendicitis: A Pediatric Surgical Oncology Research Collaborative Study. American Pediatric Surgical Association 2020 May;

Select Faculty Presentations

Lautz, Tim, MD (cont.)

Harris CJ*, Heaton TE, Murphy AJ, Helenowski IB, Mansfield SA, LaQuaglia MP, Cavalli M, Cooke-Barber J, Donaher A, Kim ES, Zobel M, Goodhue CJ, Aldrink JH, Richards H, Malek MM, Kalsi R, Fialkowski EA, Short SS, Bleicher J, Meyers RL, Piche N, Joharifard S, Troutt M, Dasgupta R, Lautz TB. Clinical and Functional Outcomes of Children Treated for Chest Wall Sarcoma: A Pediatric Surgical Oncology Research Collaborative Study. American Pediatric Surgical Association 2020 May

Ledwon, Joanna, PhD

Ledwon JK, Topczewska JM, Huang CC, Gosain AK.
Correlation between different tissue expansion protocols
and changes in gene expression. 65th Annual Meeting of
the Plastic Surgery Research Council, April 2020, virtual
(Plast Reconstr Surg Glob 8(4S):149-150)

Kelsey LJ, Ledwon JK, Janes L, Sasson D, Gosain AK. Correlation between regenerated motor neurons and graft length in rat cross-face nerve grafts. Presented at the American College of Surgeons Clinical Congress 2020, Virtual, October 3-7, 2020

Lee, Oukseub, PhD

Invited poster presenter in "Prevention of BRCA1-associated mammary cancers by Selective Progesterone Receptor Modulators (SPRM) in mice". P1-12-01. San Antonio Breast Cancer Symposium. San Antonio, TX. December 10-14 2019.

Leventhal, Joseph, MD, PhD

Invited Speaker, "Update on Northwestern Chimerism Trial", 4th Int'l Workshop on Clinical Tolerance, Univ of Pittsburgh, PA, Sept 5, 2019.

Invited Speaker, "Donor Bone Marrow and Stem Cells as Mediators of Clinical Tolerance", ASHI/BANFF Joint Program Planning Committee Mtg, Pittsburgh, PA Sept 26, 2019.

Invited Grand Rounds Speaker, "Transplantation Tolerance through Therapeutic Cell Transfer: Where Do We Stand", New York University Langone Health, Jan 15, 2020.

Mathew, James, PhD

Invited Speaker, "Biomarkers of Clinical Transplant Tolerance", 45th Annual Meeting of ASHI, Pittsburgh; September 23-27, 2019.

Invited Speaker, "Regulatory T cells - Bench to Bedside", 16th Congress of the Asian Society of Transplantation; New Delhi. September 29 - October 2, 2019.

Invited Speaker, "Clinical Transplant Tolerance", 16th Congress of the Asian Society of Transplantation; New Delhi. September 29 - October 2, 2019.

McCarthy, Patrick, MD

Invited Presenter, "Giants of Cardiothoracic Surgery CTSNet Roundtable January 2020," Filming during The Society of Thoracic Surgery (STS) 56th Annual Meeting. New Orleans, LA, January 2020.

Chair: Keynote Lecturer, "Transcatheter Mitral Valve Replacement (TMVR): Where are we now?" WSCTS-RCS The International TAVI Congress, The Aortic Valve Congress. Edinburgh, Scotland, February 2020.

Invited Visiting Professor, "The Relentless Pursuit of Perfection; Three Decades of Surgery for Atrial Fibrillation and Mitral Valve Disease," Ronald Weintraub Visiting Professor in Cardiac Surgery at the Beth Israel Deaconess Medical Center and Harvard Medical School. Boston, MA, June 10, 2020.

McGee, Michael, MD

"You've Recovered from a Diverticular Abscess - Do You Need a Resection?" in the Diverticulitis: Debunking the Multitude of Myths session at the American College of Surgeons Clinical Congress (Virtual), October 5, 2020.

Moderator, "When and How to Quit Cigarettes, Vaping, and Marijuana Use Prior to Surgery" American College of Surgeons Clinical Congress (Virtual), October 7, 2020.

Merkow, Ryan, MD, MS

PROMIS Training Workshop. Advanced Topics in PRO Use: Surgical Oncology. Chicago, IL. June 2020.

Northwestern University Radiology Body Section Conference. "Role of Regional Cancer Therapies in the Modern Era". Chicago, IL. February 2020.

ACS Clinical Congress. Ethics Colloquium: The Ethics of Extraordinary Care. San Francisco, CA. October 2019.

Osterman, Gail, PhD

Co-Moderator, "Special Population with Special Challenges" the BCVI Heart Failure Symposium, Chicago, Illinois, December 2019

Pawale, Amit, MD

Outcomes of Heart Transplantation Bridging Strategies: Durable VAD vs IABP vs Medical Therapy. ISHLT 40th Annual Meeting, Montreal, Canada, April 2020.

Risk Factors for Fungal Infection in a Ventricular Assist Device Cohort. ISHLT 40th Annual Meeting, Montreal, Canada, April 2020.

Pham, Duc Thinh, MD

Invited speaker, "Are Durable LVADs Adequate Support for the Failing RV", AATS Mechanical Support for the Heart and Lung Symposium. Houston, TX. February 2020.

Invited speaker, "Cases That I Would Have Managed Differently", STS 56th Annual Meeting. New Orleans, LA. January 2020.

Invited speaker, "Acute mechanical circulatory support, Devices in Heart Failure Conference", Paris, France. December 2019.

Pinelli, David, PhD, D(ABHI)

Invited Speaker, "Bridging the Gap with Multiple Single Antigen Vendors: The Northwestern University Experience." Immucor Virtual HLA Scientific Symposium. July 14, 2020.

Raval, Mehul, MD, MS

Raval MV. Opioid Stewardship and Patient-Reported Outcomes. Pediatric Advocacy: Opioid Stewardship Amid the COVID-19 Pandemic Session. American College of Surgeons Quality and Safety Conference 2020. August, 2020 (Invited speaker and panelist)

Raval, MV. Thinking Global and Acting Local - Updates on Pediatric Appendicitis. Metropolitan Group Hospitals Residency in General Surgery Grand Rounds, Advocate Lutheran General Hospital. Park Ridge, IL; January 28, 2019 (Invited Speaker)

Raval, MV. Baseline Implementation Assessment for the ENhanced Recovery In CHIldren Undergoing Surgery (ENRICH-US) for Inflammatory Bowel Disease Study. Crohn's & Colitis Foundation Investigators Research Symposium. Newark, NJ; October 2019 (Plenary Oral Presentation – Raval)

Roitberg-Tambur, Anat, DMD, PhD

Invited Speaker, ASHI-BANFF Joint Conference. HLA and antibody mediated rejection 101. Pittsburgh, September 2019.

Invited Speaker, Which HLA antibodies can I cross? American Society of Nephrology - Washington DC, November 2019.

Invited Speaker, Role of epitope matching and high molecular typing - India, New Delhi, December 2019.

Sambandam, Yuvaraj, PhD

Presenter, "Immune Monitoring Core: Part of NU GoKidney and NephroHUB Core B for Cell-Based Therapeutics", NUGoKidney Innovation Symposium, Sep 10, 2020. (Virtual).

Co-author, "Diagnosis of kidney transplant rejection by tracking donor-reactive T-cell clones in the post-transplant biopsy, blood and urine samples" 28th International Congress of The Transplantation Society (TTS), Sep 13-16, 2020 (Virtual).

Co-author, "Development And Cell Surface Testing Of A Novel Nanofiber Technology For Targeted Delivery Of Therapeutic Regulatory T Cells", American Transplantation Congress -2020 (ATC), May 30-June 3, 2020, Philadelphia, Pennsylvania, USA (Virtual).

Schaefer, Wilhelmina, PhD

Presenter. "Assessing the use of an opioid contract in acute pain management: Patient-provider agreements to improve prescription opioid storage and disposal." Institute for Public Health and Medicine Population Health (IPHAM) Forum, Chicago, IL, December 4, 2018.

Presenter. Medication Disposal Interventions. American College of Surgeons (ACS) Quality and Safety Conference. Virtual, August 2020.

Schwulst, Steven, MD

Invited speaker, "Aged Mice Demonstrate Preserved Learning and Memory after Traumatic Brain Injury Compared to Young Mice." Shock Society, 43st Annual Conference on Shock.

Shapiro, Michael, MD

Holmstrom AL, Ott KC, Ellis RJ, Weiss H, Shapiro MB, Yang AY. Improvement in Trauma Tertiary Survey Performance and Increased Identification of Missed Injuries Following a Focused Quality Improvement Initiative. Academic Surgical Congress. Houston, TX, February 4, 2020.

Select Faculty Presentations

Simpson, Dinee, MD

Invited Panelist, "How Far We Have Come". Women in Medicine Summit: Evolution of Empowerment, Drake Hotel Chicago IL, September 21, 2019.

Invited Panelist, "Overcoming Barriers/Challenges to Leadership", Northwestern Women in Medicine Symposium: Leading the Way, Chicago, IL, October 2019.

Invited Keynote Speaker, "Choosing Your Lens" Northwestern Medicine 41st Annual Reverend Dr. Martin Luther King Jr. Commemorative Humanitarian Awards Program, Chicago, IL, January 2020.

Stey, Anne, MD

Moderator, Trauma & Surgical Critical and Vascular Presentations III. Academic Surgical Congress. Orlando, FL, Feb 2020.

Presenter, Describing the Density of High-level Trauma Centers in the 15 Largest US Cities. Western Trauma Podium Presentation, Sun Valley, ID, Feb 2020.

Strong, Scott, MD

Invited Speaker, "National Accreditation Program for Rectal Cancer," Society of Pelvic Surgeons, Chicago, IL, September 5, 2019.

Invited Speaker, "Rectal Cancer and Rectal MRI: Surgeon Point of View," Radiological Society of North America, Chicago, IL, December 6, 2019.

Invited Speaker, "IBD Beyond the Gut: Colorectal Surgeon Perspective," Crohn's and Colitis Congress, Austin, TX, January 24, 2020.

Stulberg, Jonah, MD, PhD, MPH

Keynote Speaker, "Minimizing Opioid Prescribing Following Surgery," GetConnected2020, Washington, DC, March 4, 2020.

Invited Speaker, "Introduction and Welcome: The Role of the Surgical Collaborative in Addressing the Opioid Epidemic," National Summit on Acute Pain Management, Washington, DC, October 23-25, 2019.

Invited Speaker, "Formative Feedback and Video Review in Minimally Invasive Colectomy," Michigan Surgical Quality Collaborative (MSQC) Conference -Driving Surgical Change, Detroit, MI, October 11, 2019.

Vavra, Ashley, MD

Chia M,* Wernick B, Ngo Khanh L, Mansukhani N, Vavra AK. Perioperative Transfusion is Associated with Complications After Lower Extremity Arterial Bypass: A Propensity-matched Analysis. Midwest Vascular Surgical Society Annual Meeting. Milwaukee, WI, Sep 2020.

Chia M,* Feinglass J, Vavra AK. Prevalence of Aortic Surgery in Illinois by Specialty. Midwest Vascular Surgical Society Annual Meeting. Milwaukee, WI, Sep 2020.

VC Filter Removal for All? How I Approach My IVC Filter Patients, Midwestern Vascular Surgical Society New Horizons Annual Meeting, September 2019

Vela, Alyssa, PhD

Expert panelist, "Heart Failure & Covid19: Perspectives and Considerations," Webinar presented by the American Heart Association Midwest, May 2020.

Wayne, Jeffrey, MD

Chappell AG, Doe SC, You SS, Gerami P, Alam M, Kim JYS, and Wayne JD. Multidisciplinary Approach to Dermatofibrosarcoma Protuberans: Eliminating Risk of Recurrence While Promoting Immediate Reconstruction. Best Presentation Award, 2019 American Society of Plastic Surgeons Meeting, San Diego, CA, September 21, 2019.

Zhang, Zheng J., MD, MSc

Invited speaker, "Modelling Kidney Ischemia and Reperfusion Injury and Allograft Rejection." Northwestern CTC Research Seminar, October 28, 2020.

Select Faculty Publications

Abdullah, Fizan, MD, PhD

Salazar JH, Goldstein SD, Swarup A, Boss EF, Van Arendonk KJ, **Abdullah F.** Transfusions in Children's Surgery: Characterization and Development of a Model for Benchmarking. *Journal of Surgical Research* 2020 Aug;252:47-56. [PMID: 32222593, 32222593]

Ghomrawi HM, Many B, Rizeq Y, Baumann LM, Vacek J, Port E, Kwon S, **Abdullah F**. Baseline preoperative physical activity for surgical patients varies from healthy population controls. Journal of Pediatric Surgery 2020 May;55(5):959–963. [PMID: 32067805, 32067805]

Many BT, Rizeq YK, Kwon S, Vacek JC, Goldstein SD, Hunter CJ, Ghomrawi H, **Abdullah F**. Quantifying postoperative sleep loss associated with increased pain in children undergoing a modified Nuss operation. Journal of Pediatric Surgery 2020 Jan; [PMID: 31982091, 31982091]

Bentrem, David, MD

Schlick C, Ellis R, Merkow R, Yang A, **Bentrem DJ**. Predictors of post-discharge venous thromboembolism following hepatectomy for malignancy. HPB- 2020 accepted.

Pham T, Stempel S, Shields M, Spaulding C, Kumar K, **Bentrem DJ**, Matsangou M, Munshi H. Quercetin enhances the anti-tumor effects of BET inhibitors by suppressing hnRNPA1. Int J of Molecular Sciences PMID-31480735.

Kerlakian S, Dhar V, Abbott D, Kooby D, Merchant N, Kim HJ, Martin R, Scoggins C, **Bentrem DJ**, Weber S, Cho C, Maithel S, Ahmad S. Cyst Location and presence of High Grade Dysplasia or Invasive Cancer in Intraductal Papillary Mucinous Neoplasms of the Pancreas: A Seven Institution Study from the Central Pancreas Consortium. HPB 2019;21(4):482-8. PMID-30361110.

Bethke, Kevin, MD

Lee,O; Sullivan,ME; Xu,Y; Rogers,C; Muzzio,M; Helenowski,I; Shidfar,A; Zeng,Z; Singhal,H; Jovanovic,B; Hansen,N; **Bethke,KP**; Gann,PH; Gradishar,W; Kim,JJ; Clare,SE; Khan,SA. Selective Progesterone Receptor Modulators in Early-Stage Breast Cancer: A Randomized, Placebo-Controlled Phase II Window-of-Opportunity Trial Using Telapristone Acetate. Clin Cancer Res. 2020 Jan; 26(1): 25-34. PMID: 31570566 ISSN: 1078-0432

Lee,O; Pilewskie,M; Karlan,S; Tull,MB; Benante,K; Xu,Y; Blanco,L; Helenowski,I; Kocherginsky,M; Yadav,S; Hosseini,O; Hansen,N; Bethke,K; Muzzio,M; Troester,MA; Dimond,E; Perloff,M; Heckman-Stoddard,B; Khan,SA. Local Transdermal Delivery of Telapristone Acetate Through Breast Skin, Compared With Oral Treatment: A Randomized Double-Blind, Placebo-Controlled Phase II Trial. Clin Pharmacol Ther. 2020 Sep; PMID: 32996592

Bharat, Ankit, MBBS

Residual endotoxin induces primary graft dysfunction through ischemia/reperfusion-primed alveolar macrophages. J Clin Invest. 2020 Aug 3;130(8):4456-4469.doi: 10.1172/JCl135838. https://pubmed.ncbi.nlm.nih.gov/32692317/

Thoracoscopic lung biopsy under regional anesthesia for interstitial lung disease. Reg Anesth Pain Med 2020 Apr;45(4):255-259. doi: 10.1136/rapm-2019-100686. https://rapm.bmj.com/content/45/4 Made the Cover of the April 2020 Regional Anesthesia & Pain Medicine Journal

High CO 2 Levels Impair Lung Wound Healing. Am J Respir Cell Mol Biol. 2020 Aug;63(2):244-254. doi: 10.1165/rcmb.2019-03540C. PMID: 32275835. https://pubmed.ncbi.nlm.nih.gov/32275835/

Bilimoria, Karl, MD, MS

Hu YY, Ellis RJ, Hewitt DB, Yang AD, Cheung EOY, Moskowitz JT, Potts JR, Buyske J, Hoyt DB, Nasca T, **Bilimoria KY**. Surgical Residents' Experiences With Discrimination, Abuse, Harassment and Burnout. New England Journal of Medicine. 2019;381(18), 1741-1752.

Bilimoria KY, Birkmeyer JD, Burstin H, Dimick JB, Joynt Maddox KE, Dahlke AR, DeLancey JO, Pronovost PJ. Rating the Raters: An Evaluation of Publicly Reported Hospital Quality Rating Systems. New England Journal of Medicine Catalyst. 2019; 2642-0007.

Yuce TK, Chung JW, Barnard C, **Bilimoria KY**. Association of State Certificate of Need Regulation With Procedural Volume, Market Share, and Outcomes Among Medicare Beneficiaries. JAMA. 2020;324(20):2058-2068.

Select Faculty Publications

Borja-Cacho, Daniel, MD

Gabr A, Kulik L, Mouli S, Riaz A, Ali R, Desai K, Mora RA, Ganger D, Maddur H, Flamm S, Boike J, Moore C, Thornburg B, Alasadi A, Baker T, **Borja-Cacho D**, Katariya N, Ladner DP, Caicedo JC, Lewandowski RJ, Salem R.Hepatology. Liver Transplantation Following Yttrium-90 Radioembolization: 15-year Experience in 207-Patient Cohort. 2020 May 16. doi: 10.1002/hep.31318. Online ahead of print. PMID: 32416631.

Caicedo-Ramirez, Juan C., MD

Trends and predictors of multidimensional health-related quality of life after living donor kidney transplantation. Peipert JD, **Caicedo JC**, Friedewald JJ, Abecassis M, Cella D, Ladner DP, Butt Z Qual Life Res. 2020 Apr 13. doi: 10.1007/s11136-020-02498-2. PMI 32285345.

Liver Transplantation Following Yttrium-90 Radioembolization: 15-year Experience in 207-Patient Cohort. Gabr A, Kulik L, Mouli S, Riaz A, Ali R, Desai K, Mora RA, Ganger D, Maddur H, Flamm S, Boike J, Moore C, Thornburg B, Alasadi A, Baker T, Borja-Cacho D, Katariya N, Ladner DP, **Caicedo JC**, Lewandowski RJ, Salem R Hepatology. 2020 May 16. doi: 10.1002/hep.31318. PMID: 32416631.

Implementing culturally competent transplant care and implications for reducing health disparities: A prospective qualitative study. Gordon EJ, Romo E, Amórtegui D, Rodas A, Anderson N, Uriarte J, McNatt G, **Caicedo JC**, Ladner DP, Shumate M Health expectations: an international journal of public participation in health care and health policy. 2020 Oct 09; [Epub ahead of print].

Clare, Susan, MD, PhD

Zeng Z, Vo A, Li X, Shidfar A, Saldana P, Blanco L, Xuei X, Luo Y, Khan SA, **Clare SE**. (2020). Somatic genetic aberrations in benign breast disease and the risk of subsequent breast cancer, NPJ Breast Cancer, 6, 24.

Bodelon C, Oh H, Derkach A, Sampson JN, Sprague BL, Vacek P, Weaver DL, Fan S, Palakal M, Papathomas D, Xiang J, Patel DA, Linville L, **Clare SE**, Visscher DW, Mies C, Hewitt SM, Brinton LA, Storniolo AMV, He C, Chanock SJ, Garcia-Closas M, Gierach GL, Figueroa JD (2020). Polygenic risk score for the prediction of breast cancer is related to lesser terminal duct lobular unit involution of the breast. NPJ Breast Cancer, 6, 41.

Davaadelger B, Choi MR, Singhal H, **Clare SE**, Khan SA, Kim JJ. (2019). BRCA1 mutation influences progesterone response in human benign mammary organoids. Breast Cancer Res. 21, 124.

Churyla, Andrei, MD

Churyla A, Desai A, Kruse J, Cox J, McCarthy P. Concomitant atrial fibrillation ablation in patients undergoing coronary artery bypass and cardiac valve surgery. Journal of Cardiovascular Electrophysiology. 2020;31(8):2172-8.

Churyla A, Andrei A-C, Kruse J, Cox JL, Kislitsina ON, Liu M, et al. Safety of Atrial Fibrillation Ablation with Isolated Surgical Aortic Valve Replacement. The Annals of Thoracic Surgery. 2020. (in press)

Churyla A. When should I worry? When should I be happy? Journal of Cardiovascular Electrophysiology. 2020; 1-2.

Eskandari, Mark, MD

Joung HS, Nooromid MJ, **Eskandari MK**, Wayne JD. Surgical approach, management, and oncologic outcomes of primary leiomyosarcoma of the inferior vena cava: An institutional case series. J Surg Oncol. 2020 Aug 8. doi: 10.1002/jso.26163. Epub ahead of print. PMID: 32772373.

Chia MC, Wallace GA, Cheng BT, Ho KJ, **Eskandari MK**. Identifying a Safe Carotid Stump Pressure Threshold for Selective Shunting during Carotid Endarterectomy. Ann Vasc Surg. 2020 Jun 15:S0890-5096(20)30503-3. doi: 10.1016/j.avsg.2020.06.002. Epub ahead of print. PMID: 32554199.

Nooromid MJ, Caicedo JC, Pham DT, Kundu SD, **Eskandari MK**. Successful Resection of a Retrohepatic Inferior Vena Cava Primary Leiomyosarcoma with Atrial Thrombus Extension in a 30-Week Pregnant Woman. Ann Vasc Surg. 2020 May 16:S0890-5096(20)30413-1. doi: 10.1016/j.avsg.2020.05.014. Epub ahead of print. PMID: 32428643.

Feingold, Kim, PhD

Carroll, A.J., Goergen, J., Wafford, Q.E., Flaherty, J., & **Feingold, K.** (2020). Assessment and management of psychiatric conditions and substance use in Takotsubo syndrome: A systematic review and synthesis of case studies. General Hospital Psychiatry, 65, 54-63. PMID: 32497926

Galiano, Robert, MD

Hsieh JC, Joshi CJ, Wan R, **Galiano RD**. The Northwestern Abdominoplasty Scar Model: A Tool for High-Throughput Assessment of Scar Therapeutics. Adv Wound Care (New Rochelle). 2020 Jul;9(7):396-404. doi: 10.1089/wound.2018.0900. Epub 2020 Apr 29. PMID: 32320363; PMCID: PMC7307678.

Wu Young MY, Dolivo DM, Hong SJ, Iyer H, Mustoe TA, **Galiano RD**. Decellularized Fetal Matrix Suppresses Fibrotic Gene Expression and Promotes Myogenesis in a Rat Model of Volumetric Muscle Loss. Plast Reconstr Surg. 2020 Sep;146(3):552-562. doi: 10.1097/PRS.0000000000007093. PMID: 32459729.

lyer H, Lanier S, Dolivo D, Arenas GA, Hong SJ, Mustoe TA, **Galiano RD**. Allogeneic Decellularized Muscle Scaffold Is Less Fibrogenic and Inflammatory than Acellular Dermal Matrices in a Rat Model of Skeletal Muscle Regeneration. Plast Reconstr Surg. 2020 Jul;146(1):43e-53e. doi: 10.1097/PRS.00000000000006922. PMID: 32590650.

Gordon, Elisa, PhD, MPH

Gordon EJ, Knopf E, Philips C, Mussell A, Lee J, Veatch R, Abt P, Dunn S, Reese P. Transplant candidates' perceptions of informed consent for accepting deceased donor organs subjected to intervention research and for participating in post-transplant research. American Journal of Transplantation 2020;20(2):474-492.

Doshi MD, **Gordon EJ**, Freedman BI, Glover C, Locke JE, Thomas CP. Integrating APOL1 kidney-risk variant testing in live kidney donor evaluation: An expert panel opinion. Transplantation. 2020; In Press.

Mehrotra S, Schantz K, Friedewald J, Ladner DP, Becker Y, Formica R, Barah M, Gu Jiayi, **Gordon EJ**. Physician and Patient Acceptance of Policies to Reduce Kidney Discard. Clinical Transplantation. 2020, In Press.

Grady, Kathleen, PhD

Grady KL, Cristian-Andrei A, Shankel T, Chinnock R, Miyamoto S, Ambardekar A, Anderson A, Addonizio L, Latif F, Lefkowitz D, Goldberg L, Hollander S, Pham M, .Van't Hoff K, Weisberg-Benchell J, Yancy C, Liu M, Melody N, Pahl E. 2019(Dec). Pediatric heart transplantation: Transitioning to adult care (TRANSIT): Feasibility of a Pilot Randomized Controlled Trial. Journal of Cardiac Failure. 25 (12):948-958.

Dew MA, DiMartini AF, Dobbels F, **Grady KL**, Kaan A, Young QR. (2019). The approach to the psychosocial evaluation of cardiac transplant and mechanical circulatory support candidates. Current Heart Failure Reports. 6:201-211.

White-Williams C, Fazeli-Wheeler P, Myers S, Kirklin J, Pamboukian S, Naftel D, **Grady KL**. 2020 (Jan). Health related quality of life improves from before to 2 years after MCS, regardless of implant strategy: Analyses from Intermacs. Journal of Heart and Lung Transplantation. 39 (1):62-73.

Hansen, Nora, MD

Lee O, Sullivan ME, Xu Y, Rogers C, Muzzio M, Helenowski I, Shidfar A, Zeng Z, Singhal H, Jovanovic B, **Hansen N**, Bethke KP, Gann PH, Gradishar W, Kim JJ, Clare SE, Khan SA. Selective Progesterone Receptor Modulators in Early-Stage Breast Cancer: A Randomized, Placebo-Controlled Phase II Window-of-Opportunity Trial Using Telapristone Acetate. Clin Cancer Res. 2020 Jan 1;26(1):25-34. doi: 10.1158/1078-0432.CCR-19-0443. Epub 2019 Sep 30. PMID: 31570566

Oukseub Lee, Melissa Pilewskie, Scott Karlan, Mary Beth Tull, Kelly Benante, Yanfei Xu, Luis Blanco, Irene Helenowski, Masha Kocherginsky, Shivangi Yadav, Omid Hosseini, **Nora Hansen**, Kevin Bethke, Miguel Muzzio, Melissa A Troester, Eileen Dimond, Marjorie Perloff, Brandy Heckman-Stoddard, Seema A Khan. Local transdermal delivery of telapristone acetate through breast skin, compared to oral treatment: a randomized double-blind, placebocontrolled Phase II trial, Clin Pharmacol Ther, 2020 Sep 30. doi: 10.1002/cpt.2041. Online ahead of print.

Ho, Karen, MD

Cason, C.A., Kuntz, T.M., Chen, E.B., Wun, K., Nooromid, M.J., Xiong, L., Gottel, N.R., Harris, K.G., Morton, T.C., Avram, M.J., Chang, E.B., Gilbert, J.A., **Ho, K.J.** (2020). Microbiota Composition Modulates Inflammation and Neointimal Hyperplasia after Arterial Angioplasty. Journal of Vascular Surgery, 71(4):1378-1389.

Chen, E.B., Shapiro, K.E., Wun, K., Kuntz, T., Theriault, B.R., Nooromid, M.J., Leone, V.A., Harris, K.G., Jiang, Q., Spedale, M., Xiong, L., Gilbert, J.A., Chang, E.B., **Ho, K.J.** (2020). Microbial Colonization of Germ-Free Mice Restores neointimal hyperplasia development after arterial injury. Journal of the American Heart Association, 9(5):e013496. doi: 10.1161/JAHA.119.013496.

Select Faculty Publications

Ho, Karen, MD (cont.)

Nooromid, M.J., Chen, E.B., Xiong, L., Shapiro, K.E., Jiang, Q., Demsas, F., Eskandari, M., Priyadarshini, M., Chang, E.B., Layden, B.T., **Ho, K.J.** (2020). Microbe-Derived Butyrate and its Receptor Free Fatty Acid Receptor 3 (FFAR3) but not FFAR2 Mitigate Neointimal Hyperplasia Susceptibility after Arterial Injury. Journal of the American Heart Association, 9(13):e016235. doi: 10.1161/JAHA.120.016235.

Hoel, Andrew, MD

Khanh LN, Helenowski IB, **Hoel AW**, Ho KJ. The Comorbidity -Polypharmacy Score is an Objective and Practical Predictor of Outcomes and Mortality after Vascular Surgery. Ann Vasc Surg. 2020 Jun 3:S0890-5096(20) 30470-2. doi: 10.1016/j.avsg.2020.05.055. Epub ahead of print. PMID: 32502672.

Jarvis K, Pruijssen JT, Son AY, Allen BD, Soulat G, Vali A, Barker AJ, **Hoel AW**, Eskandari MK, Malaisrie SC, Carr JC, Collins JD, Markl M. Jarvis K, et al. Parametric Hemodynamic 4D Flow MRI Maps for the Characterization of Chronic Thoracic Descending Aortic Dissection. J Magn Reson Imaging. 2020 May;51(5):1357-1368. doi: 10.1002/jmri.26986. Epub 2019 Nov 12.J Magn Reson Imaging. 2020. PMID: 31714648.

Schneider JR, Wilkinson JB, Rogers TJ, Verta MJ, Jackson CR, **Hoel AW**, Schneider JR, et al. Results of carotid endarterectomy in patients with contralateral internal carotid artery occlusion from the Mid-America Vascular Study Group and the Society for Vascular Surgery Vascular Quality Initiative. J Vasc Surg. 2020 Mar;71 (3):832-841. doi: 10.1016/j.jvs.2019.05.040. Epub 2019 Aug 21.I Vasc Surg. 2020. PMID: 31445827.

Hong, Seok Jong, PhD

Zhao J, Jia S, Xie P, Friedrich E, Galiano RD, Qi S, Mao R, Mustoe TA, **Hong SJ**. Knockdown of sodium channel Nax reduces dermatitis symptoms in rabbit skin. Lab Invest. 2020 Jan 10. doi: 10.1038/s41374-020-0371-1.

Bogdanovic E, Potet F, Marszalec W, Iyer H, Galiano R, **Hong SJ**, Leung KP, Wasserstrom JA, George AL Jr, Mustoe TA. The sodium channel NaX: Possible player in excitation-contraction coupling. IUBMB Life. 2020 Feb 6. doi: 10.1002/iub.2247.

Xu W*, Dielubanza E, Maisel A, Leung K, Mustoe T, **Hong S***, Galiano R*. Staphylococcus aureus impairs cutaneous wound healing by activating the expression of a gap junction protein, connexin-43 in keratinocytes. Cell Mol Life Sci. 2020 May 14. doi: 10.1007/s00018-020-03545-4. *Co-corresponding author.

Hummel, Mary, PhD

Forte E, Zhang Z, Thorp EB, **Hummel M**. Cytomegalovirus Latency and Reactivation: An Intricate Interplay With the Host Immune Response. Front Cell Infect Microbiol. 2020;10:130.

Heald-Sargent TA, Forte E, Liu X, Thorp EB, Abecassis MM, Zhang ZJ, **Hummel MA**. New Insights into the Molecular Mechanisms and Immune Control of Cytomegalovirus Reactivation. Transplantation. 2020 May;104(5):e118-e124.

Issa, Nabil, MD

Salzman DH, McGaghie WC, Caprio TW, et al. A Mastery Learning Capstone Course to Teach and Assess Components of Three Entrustable Professional Activities to Graduating Medical Students. Teach Learn Med. 2019;31 (2):186-194. doi:10.1080/10401334.2018.1526689.

Weingarten N, **Issa N**, Posluszny J. Fellow-led SICU morbidity and mortality conferences address patient safety, quality improvement, interprofessional cooperation and ACGME milestones. Am J Surg. 2020;219 (2):309-315. doi:10.1016/j.amjsurg.2019.01.026.

Mastery Learning in Health Professions Education, Editor in Chief: William McGaghie-Chapter 14: Mastery Learning for Clinical Emergencies, Springer publishing, 2020. ISBN-13: 978-3030348106.

Johnson, Julie, MSPH, PhD

Fjeldstad ØD, **Johnson JK**, Margolis PA, Seid M, Höglund P, Batalden PB. Networked health care: Rethinking value creation in learning health care systems. Learn Health Sys. 2019;e10212. https://doi.org/10.1002/lrh2.10212

Kreutzer, L; Yang, AD; Sansone, C; Minami, C; Saadat, L; Bilimoria, KY; **Johnson, JK**. Barriers to Providing VTE Chemoprophylaxis to Hospitalized Patients: A Nursing-Focused Qualitative Evaluation. Journal of Hospital Medicine. 2019 October, 14(11). DOI 10.12788/jhm.3290.

Johnson, Julie, MSPH, PhD (cont.)

Berger, E; Kruetzer, L; Reinhart, S, Halverson, A.; O'Leary, K; Williams, M; Bilimoria, K; **Johnson, JK**. Evaluation of Changes in Quality Improvement Knowledge Following a Formal Educational Curriculum within a Statewide Learning Collaborative. Journal of Surgical Education. 2020 Jun 15;S1931-7204(20)30133-1. doi: 10.1016/j.jsurg.2020.04.018.

Jordan, Sumanas, MD, PhD

Sood R, Stoehr J, Janes LE, Ko JH, Dumanian GA, **Jordan SW**. Cell Phone Application to Monitor Pain and Quality of Life in Neurogenic Pain Patients. Plas Reconstr Surg Glob Open 2020 Apr; 8(4):e2732. PMID: 32440405

Mioton LM, Dumanian GA, Shah N, Qiu CS, Ertl WJ, Potter BK, Souza JM, Valerio IL, Ko JH, **Jordan SW**. Targeted muscle reinnervation improves residual limb pain, phantom limb pain, and limb function: A Prospective study of 33 major limp amputees. Clin Orthop Relat Res. 2020 May 20. Online ahead of print. PMID: 32452928

Mioton LM, Dumanian GA, Fracol ME, Apkarian AV, Valerio IL, Souza JM, Potter BK, Tintle SM, Nanos GP, Ertl WP, Ko JH, **Jordan SW**. Benchmarking Residual Limb Pain and Phantom Limb Pain in Amputees through a Patient-reported Outcomes Survey. Plast Reconstr Surg Glob Open. 2020 Jul 15;8(7):e2977. PMID: 32802669

Katariya, Nitin, MD

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Kim, Samuel, MD, FACS

Malignant melanoma arising in a primary mediastinal germ cell tumor (2020)

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Select Faculty Publications

Ko, Jason, MD, MBA

Mioton LM, Dumanian GA, Sood R, Apkarian AV, Valerio IL, Souza JM, Potter BK, Tintle SM, Nanos GP, Ertl WJ, **Ko JH**, Jordan SW. Benchmarking residual limb pain and phantom limb pain in amputees through a patient-reported outcomes survey. Plast Reconstr Surg GO 2020; 8(7): e2977.

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Residual endotoxin induces primary graft dysfunction through ischemia/reperfusion-primed alveolar macrophages (2020)

Meld Scoring System to Predict Outcomes in Patients Who Undergo VV ECMO Implantation (2020)

Ladner, Daniela, MD, MPH

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Leventhal, Joseph, MD, PhD

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Malaisrie, Chris, MD

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Merkow, Ryan, MD, MS

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Osterman, Gail, PhD

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Pawale, Amit, MD

Miller MA, Adams DH, Pandis D, Robson PM, **Pawale A**, Pyzik R, Liao SL, El-Eshmawi A, Boateng P, Garg J, Waterford S, Weiner MM, Dukkipati SR, Reddy VY, Fayad ZA, Trivieri MG. (2020). Hybrid positron emission tomography/Magnetic resonance imaging in arrhythmic mitral valve prolapse. JAMA Cardiology 5(9):1000-1005.

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Pham, Duc Thinh, MD

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Pinelli, David, PhD

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Poylin, Vitaliy, MD

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Raval, Mehul, MD, MS

Piper KN, Baxter KJ, McCarthy I, **Raval MV**. Distinguishing Children's Hospitals From Non-Children's Hospitals in Large Claims Data. Hosp Pediatr. 2020 Jan 3.

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Roitberg-Tambur, Anat, DMD, PhD

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Select Faculty Publications

Sambandam, Yuvaraj, PhD

Paul, M.K., Marati, V.R., **Sambandam, Y.**, Queimado, L., Chaudhuri, G., Ramachandran, I., Ilang Kumaran, R. (2020). Targeting Therapies for Cancer Stem Cells. In: Pathak S and Banerjee A (eds) Cancer Stem Cells: New Horizons in Cancer Therapies. Singapore: Springer Singapore, 273-312. Book chapter.

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Schwulst, Stephen, MD

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Shapiro, Michael, MD

(Chapters/Textbooks) Quach Q, **Shapiro MB**. Critical Care Management of Neurotrauma. In Naidech A, ed. Neurocritical Care. Cambridge University Press, 2020, in press.

Simpson, Dinee, MD

Mazumder N, Gabra L, Atiemo K, Kho AN, Daud A, Levitsky J, Ladner DP, **Simpson DC**. Outcomes for Black Patients with Cirrhosis: Results from a Large Cohort Study. American Society of Transplant Surgeons Winter Symposium Jan 2020.

Stey, Anne, MD

Stey AM, Wybourn CA, Lyndon A, Knudson MM, Dudley RA, Liu P, Bongiovanni T, Ryan GW. (2020) How care decisions are made among interdisciplinary providers caring for critically injured patients: A qualitative study. Surgery. 167(2):335-339.

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Wayne, Jeffrey, MD

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