

Department of Surgery
2016–2018 Annual Report

Advancing Surgical Innovation



 **NorthShore**
University HealthSystem

Medical Group

Chairman's Message

NorthShore University HealthSystem's (NorthShore's) Department of Surgery continues to develop and differentiate itself with innovative clinical programs, sophisticated research and academic production.

In the last two years, we have recruited additional surgeons with recognized expertise, and fellowship-trained subspecialists, adding depth to our already robust clinical program. Institutional and generous philanthropic support has enabled us to stay at the forefront of the most advanced techniques and technology, providing patients with state-of-the-art surgical care.

Our accomplished team of highly qualified surgeons embraces the latest robotic and minimally-invasive approaches, and our talented roster represents every major surgical subspecialty. The Department's ongoing development includes collaborative, multidisciplinary subspecialty offerings including sophisticated treatment for esophageal, lung and pancreatic cancer; organ-sparing surgery for laryngeal cancer; and personalized approaches for even the most complex cases.

Surgical education and academic productivity are also important elements of the Department's mission. University of Chicago Pritzker School of Medicine surgical trainees place NorthShore at the top of their educational experiences, and our faculty are regularly recognized for their dedication and teaching skills.

Research initiatives span a wide array of clinical and translational projects, and Department surgeons are driven to broadly contribute to the field, pushing surgical boundaries and improving patient outcomes. We continue to offer a large number of active clinical trials, and our faculty steadily publish in peer-reviewed journals.

We are grateful to our philanthropic supporters and honored by the trust of patients who come to us for care.

Department highlights described in this report reflect our collective commitment to innovation and outstanding patient care. We are proud of our success to date and look to the future with great anticipation and the promise of building upon our reputation and NorthShore's mission "to preserve and improve human life."

Finally, we would like to thank Mark R. Neaman, past CEO and current Executive Chairman of the Board, for his leadership, vision, and unwavering commitment to innovation and program development. With his support and insight, our Department of Surgery has become a national leader in advancing patient care through the use of new and creative technology while always putting patient outcomes first and foremost. This year's annual report is dedicated to Mark R. Neaman.



Dr. Mark Talamonti
Chairman of Surgery
Stanton and Margaret Rogers Palmer
Chair of Surgery



NorthShore Evanston Hospital



NorthShore Glenbrook Hospital

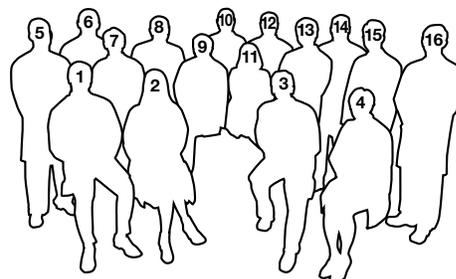


NorthShore Highland Park Hospital



NorthShore Skokie Hospital

On the cover: Department of Surgery physician leadership (front row from left) (1) Michael Ujiki, (2) Nancy Schindler, (3) Mark Talamonti and (4) Katharine Yao; (back row from left) (5) Brian Helfand, (6) John Linn, (7) Mark Gerber, (8) Richard Prinz, (9) James Boffa, (10) Omar Morcos, (11) Marian Macsai, (12) Stephen Haggerty, (13) Ki Wan Kim, (14) Woody Denham, (15) Mark Sisco and (16) Hyde Russell.



Advancing Surgical Innovation

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Department Highlights 2016–2018

Robotic Innovation

NorthShore surgeons continue to be at the forefront of the latest technology, including new advances and approaches in robotic surgery.

The Department implemented the robotic-assisted approach to appropriate pancreatic and liver surgeries in the spring of 2017. By the end of 2017, 37 percent of pancreatic resections and 47 percent of liver resections performed by Department Chairman Mark Talamonti, MD, used the robotic approach, exposing patients to less risk and less pain, and providing a shorter recovery and quicker return to baseline. More than 50 complex liver and pancreas operations have been performed since launching the robotic hepatobiliary program, and the team recently welcomed Melissa Hogg, MD, a nationally recognized expert in advanced robotic liver and pancreatic surgery.

A new hernia repair program led by John Linn, MD, also makes use of the latest robotic-assisted technology. We continue to track and compare outcomes of the patient surgical experience for future reporting. The Department of Surgery joined other

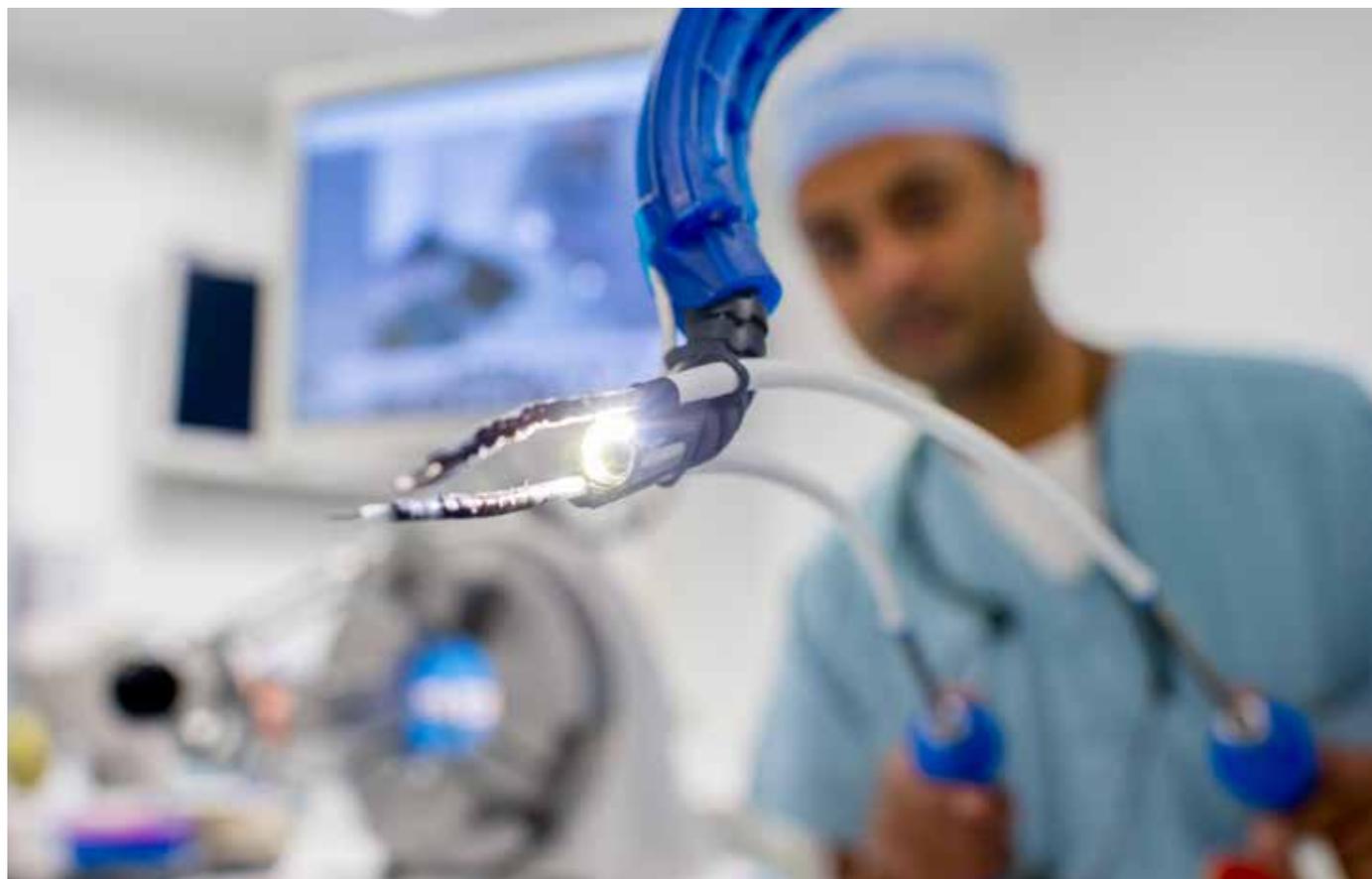
academic institutions assessing patient frailty, surgical techniques, impact of complications, primary therapies and associated survival benefits.

Colorectal surgeons are using the robotic approach to perform colon surgery with minimal morbidity and have begun using flexible robotic technology to perform endoluminal surgery, which preserves function and avoids the potential need for colostomy in select patients.

Katherine Kopkash, MD, will lead the first robotic mastectomy feasibility clinical trial in partnership with MD Anderson Cancer Center.

NorthShore's head and neck cancer surgeons Mihir Bhayani, MD, and Cheryl Nocon, MD, are using flexible robotic technology to perform complex throat and laryngeal procedures that preserve voice and swallowing function.

Our head and neck and endocrine surgeons are also training to bring robotic transoral thyroidectomy procedures to NorthShore, potentially providing a less invasive technique for this common surgery.

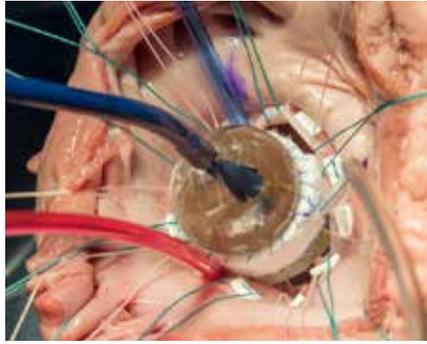


Dr. Mihir Bhayani is at the forefront of flexible robotic technology used for complex throat and laryngeal surgery.

NEW PROGRAMS

Cardiac Care Innovations

Transcatheter aortic valve replacement (TAVR) provides an innovative approach for patients who are not good candidates for traditional heart valve repair surgery.



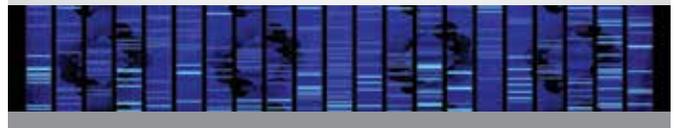
Our Joint Commission-certified left ventricular assist device (LVAD) program co-led by Hyde Russell, MD, and Cardiologist Rob Gordon, MD, can be life-saving for patients who have exhausted other conventional heart failure interventions including stents, pacemakers and open-heart surgery. The mechanical pump is implanted in patients with near end-stage heart failure, attached to the heart's left ventricle and powered by an external battery pack. LVAD can also serve as a bridge to heart transplantation. Another innovative offering involving our Division of Cardiac Surgery is transcatheter aortic valve replacement (TAVR), a nonsurgical, catheter-based treatment for patients with severe symptomatic aortic stenosis who are either high risk for or too sick for traditional heart valve repair surgery. The minimally invasive treatment inserts a new valve inside the diseased aortic valve. The TAVR procedure is performed in a specialized operating room with cutting-edge imaging capabilities. This nonsurgical heart treatment, performed through a specially designed system, allows precise placement of the new valve into the beating heart, while minimizing damage to the aorta and the heart. NorthShore launched the Partner III trial to assess the efficacy of TAVR in low-risk patients, and is also the lead site globally for the REPRISSE trial to test the next-generation LOTUS valve for TAVR.

Advanced Hernia Repair

A new, comprehensive program for minimally invasive hernia surgery is being led by John Linn, MD. As part of this initiative, a prospective, randomized trial of mesh materials for minimally invasive inguinal hernia repair, one of the first of its kind, was completed. An enhanced recovery program for complex abdominal wall reconstruction was implemented to improve patient recovery and maintain high-quality care. A robotic complex abdominal wall reconstruction program was established to enhance quality of life and minimize complications during repair of large ventral hernias. All hernia patients at NorthShore are now enrolled in one of the largest single-institution hernia databases in the country, and ongoing research efforts are focused on patient-centered outcomes and clinical trials of mesh materials for hernia repair.

Promoting Precision Medicine

NorthShore's Center for Personalized Medicine launched a partnership with Ambry Genetics, a leading clinical genetics-testing lab, to offer genetics testing and innovative research designed to advance precision medicine in preventive care. As part of the collaboration, NorthShore researchers partnered with Ambry to bring the Genetic Risk Score (GRS) to the commercial market. Developed by Jianfeng Xu, MD, DrPH, the GRS test quantifies a person's individual risk for select chronic diseases including some of the most prevalent forms of cancers. The test provides primary care physicians with a quantitative tool to better understand and classify risk of disease.



Select Honors and Accomplishments



David J. Winchester, MD, was elected as a member of the American Surgical Association (ASA) in April 2017.



Bruce Bauer, MD, was named one of the American Society of Maxillofacial Surgery's Visiting Professors for 2016–2017.



Marian Macsai, MD, received the 2017 Lifetime Achievement Award from the American Academy of Ophthalmology and the 2017 Year of Women Award from Women in Ophthalmology.



Mark Gerber, MD, achieved active fellowship in the American Laryngological, Rhinological and Otological Society, Inc. in February 2018.

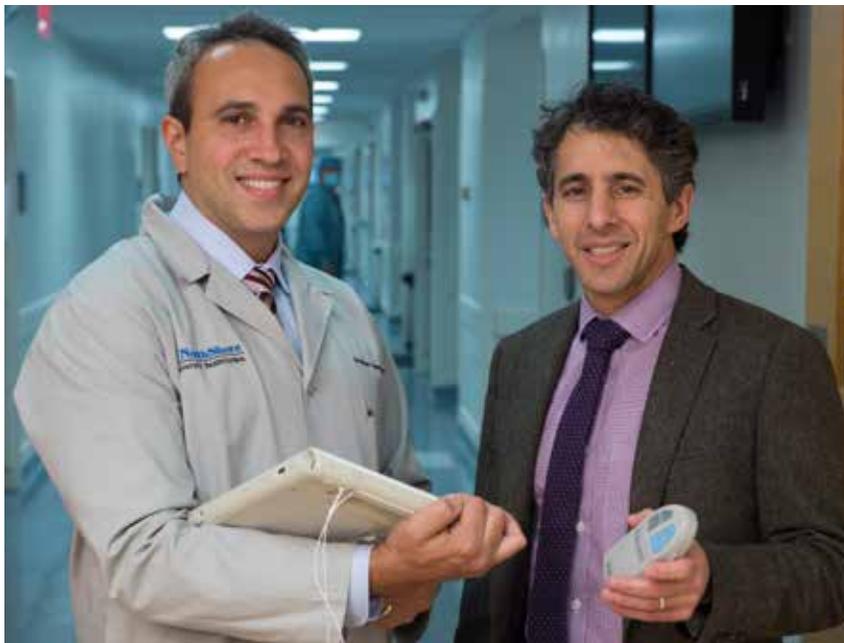


Mark Talamonti, MD, was elected president of The Western Surgical Association.



Katharine Yao, MD, was named Program Chair for the American Society of Breast Surgeons 2018 Annual Meeting.

NorthShore Medical Group Awards



Dr. Jonathan Pomerantz (left) and Dr. Mark Gerber

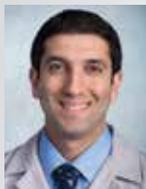
Mark Gerber, MD, was honored with the 2017 Distinguished Service in Specialty Care Award. A skilled surgeon who is renowned for his work on the treatment of pediatric airway stenosis, Dr. Gerber is Division Chief of Otolaryngology and a recognized innovator. Dr. Gerber is also an exceptional example of collaboration and teamwork across disciplines.

Peter Rabiah, MD, was honored with the 2016 Distinguished Contribution in Medicine Award. A pediatric ophthalmologist, Dr. Rabiah is passionate about eye care for children and has been relentless in his pursuit to optimize care and prevent unnecessary and devastating ophthalmologic complications in babies. A champion for preventive care, Dr. Rabiah led a successful effort to address retinopathy of prematurity (ROP), a devastating condition that causes blindness in premature babies—but with screening, there are effective treatment options.

Michael Ujiki, MD, was honored with the 2016 Outstanding Academician Award. Dr. Ujiki has brought new minimally invasive techniques to patients at NorthShore and played a leadership role in establishing the Grainger Center for Simulation and Innovation. He is dedicated to mentoring and teaching residents, fellows, students and other faculty. Dr. Ujiki has made significant contributions to the medical community at large by expanding and advancing minimally invasive surgical techniques.

New Recruits

Many talented physicians were recruited in the last two years, bringing additional depth and expertise to NorthShore's Department of Surgery.



Belal Bakir, MD
Ophthalmology



Scott Barnes, MD
Ophthalmology



Eugene Fernandes, MD
Cardiac Surgery



Andrew Francis, MD
Ophthalmology



Alexander Glaser, MD
Urology



Melissa Hogg, MD
Gastrointestinal and General Surgery



Amanda Karcioglu, MD
Otolaryngology



Joan Kim, MD
Ophthalmology



Sue Kim, MD
Otolaryngology



Katherine Kopkash, MD
Surgical Oncology



Cheryl Nocon, MD
Otolaryngology



Jennifer Paruch, MD
Gastrointestinal and General Surgery



Akhil Seth, MD
Plastic and Reconstructive Surgery



Paul Phelps, MD
Ophthalmology



Derek Wall, MD
Trauma

Grainger Center for Simulation and Innovation

The Grainger Center for Simulation and Innovation continues to make a national and international impact on the development and dissemination of surgical simulation training and the refinement of novel applications of minimally invasive surgery (MIS) and natural orifice procedures.

The Grainger Center for Simulation and Innovation's scholarly impact is contributing to a growing transformation of surgical practice toward less invasive, less costly procedures that reduce complications, enhance patient safety and maximize patient benefit.

Visiting international faculty are drawn to the Grainger Center for Simulation and Innovation and contributing to the advancement of surgical simulation and MIS techniques abroad. Tomokazu Kishiki, MD, of the Department of General Surgery at Kyorin University in Tokyo, Japan, completed a two-year fellowship here in 2017 and has since presented his work at the 21st Asian Surgical Conference.

The American Rhinologic Society Advanced Sinus and Skull Base Course

Thirty rhinology fellows attended The American Rhinologic Society Advanced Sinus and Skull Base Course led by Joseph Raviv, MD, which covered complex surgical anatomy and allowed fellows to carefully and efficiently perform procedures in the lab.

SAGES National Fellows Course

NorthShore hosted The Society of American Gastrointestinal and Endoscopic Surgeons (SAGES) National Fellows Course in Flexible Endoscopy in September 2017. The prestigious and well-attended course led by Michael Ujiki, MD, provided 60 fellows with hands-on experience with GI endoscopes, towers and instruments used for endoscopy and endoscopic surgery. Twenty-three techniques and procedures were practiced at 25 stations.



Dr. Joseph Raviv



Rhinology fellows from across the country attended the second annual national fellowship training symposium led by Dr. Joseph Raviv at the Grainger Center for Simulation and Innovation.

Grainger Center for Simulation and Innovation

Recognized Leadership

Director of Surgical Simulation and Vice Chair of Surgery for Innovation and Program Development Michael Ujiki, MD, has maintained an impressive track record of introducing and perfecting new MIS and natural orifice surgical techniques at NorthShore. In 2017, he was the first surgeon nationally to perform the anti-reflux mucosectomy (ARMS) procedure, which was practiced, researched and perfected in the Grainger Center for Simulation and Innovation facility prior to implementing it clinically on patients. ARMS is a novel natural orifice transluminal endoscopic surgery (NOTES) endoscopic treatment developed by a surgeon-scientist from Tokyo for patients suffering from gastroesophageal reflux disease (GERD). He and his team are in the process of designing a study on ARMS in the coming year to look at patient outcomes versus traditional treatments. This procedure helps reduce reflux and with it the related risks of Barrett's esophagus and esophageal cancer.

The Grainger Center for Simulation and Innovation also remains a destination for industry as a testing and training ground for innovative new surgical technologies. Among the new products tested in the lab last year is the da Vinci Xi[®], the latest in minimally invasive technology for complex procedures. The key benefit of this medical device is its ability to perform multi-quadrant surgery without repositioning the system. NorthShore Glenbrook Hospital is now using this technology in the operating room.



Director of Surgical Simulation
Dr. Michael Ujiki (center) is a leading surgical innovator and dedicated teacher. He has been awarded the Excellence in Teaching Award through the Department of Surgery at University of Chicago for three consecutive years.



Aaron Friedman, MD, led the 2018 Inaugural Chicagoland Laryngeal Surgery Dissection Course hosted by the Division of Otolaryngology–Head and Neck Surgery at the Grainger Center for Simulation and Innovation. Six visiting laryngologists taught otolaryngology residents from training programs throughout the city for this innovative, hands-on course, the first of its kind in the Chicago area, and one of only a few in the country.

Dr. Aaron Friedman performs and teaches state-of-the-art laryngeal treatments.

Achievements in Education 2016–2018



The Department's skills program led by Drs. Stephen Haggerty and Nancy Schindler was also recognized at the most recent education day.

Excellence in Teaching

University of Chicago and NorthShore's Department of Surgery host an annual Education Day to celebrate accomplishments in education, including excellence in teaching, innovations in education and educational scholarship. NorthShore's contributions to the training programs at University of Chicago are highly valued by residents and students; many faculty members were once again honored with Excellence in Teaching Awards. Department of Surgery Chairman Mark Talamonti, MD, is the only faculty member to achieve this honor every year since the award was instituted. The following physicians were recognized with awards in the 2016–2017 academic year:

Ermilo Barrera, MD	Mark Talamonti, MD
Stephen Haggerty, MD	Michael Ujiki, MD
Catherine Pesce, MD	David J. Winchester, MD
James Spitz, MD	Katharine Yao, MD



Residents from the University of Chicago Pritzker School of Medicine gain valuable skills and experience at the Grainger Center for Simulation and Innovation.

Critical Surgical Simulation Training

Surgical simulation and skills training at NorthShore continues to provide the bulk of simulation training to all levels of residents of the combined University of Chicago general surgery residency program. The multifaceted skills program led by Stephen Haggerty, MD, and colleagues is continually refined and used to evaluate surgical skills. The program is also helpful in remediation and improvement of surgical skills when residents fall behind, and importantly plays a major role in producing competent, excellent surgeons.

NorthShore hosts a one-day intern boot camp, a two-week skills rotation for second-year residents, an in-rotation curriculum for residents on each clinical rotation, and a half-day porcine lab for senior residents focused on management of uncontrolled bleeding during laparoscopic surgery.



Surgical Education Research Fellowship

Derek Wall, MD, (left) is completing a special Surgical Education Research Fellowship sponsored by the Association for Surgical Education. The fellowship is designed to equip investigators with the skills and knowledge needed to plan, implement and report research studies in the field of surgical education.

Education Leaders

In addition to Vice Chair of Education Nancy Schindler, MD, MHPE, the following faculty hold leadership roles in our training programs:

- Stephen Haggerty, MD, Associate Program Director for the General Surgery Residency
- Derek Wall, MD, Site Director for the University of Chicago Surgery Clerkship
- Manvi Maker, MD, Associate Program Director of the University of Chicago Ophthalmology Residency Program

University of Chicago Pritzker School of Medicine Academic Promotions

NorthShore contributions to surgical education and scholarship are further recognized through academic appointments and promotions at the University of Chicago Pritzker School of Medicine. The following physicians were appointed or promoted in the last two years:

Promotion to Clinical Professor:

- Michael Ujiki, MD
- Katharine Yao, MD

Promotion to Clinical Associate Professor:

- Brian Helfand, MD, PhD
- Stephen Haggerty, MD
- Jeremy Warner, MD

Appointment to Clinical Assistant Professor:

- Ki Wan Kim, MD
- Katherine Kopkash, MD
- Cheryl Nocon, MD
- Paul Phelps, MD
- Hyde Russell, MD
- Michael Shinnars, MD
- Derek Wall, MD

Hosting Visiting Professorships

Leading physicians are invited to share their expertise with NorthShore surgeons at a number of important annual lectures

John Alexander Lecture

- 2016—Michael J. Reardon, MD, Professor of Cardiothoracic Surgery, Houston Methodist DeBakey Heart & Vascular Center
- 2017—Valluvan Jeevanandam, MD, Professor of Surgery, University of Chicago Pritzker School of Medicine
- 2018—Gorav Ailawadi, MD, Professor of Surgery and Section Chief of Adult Cardiac Surgery, University of Virginia

David P. Winchester Oncology Lecture

- 2016—Armando E. Giuliano, MD, Professor of Surgery, Cedars-Sinai Medical Center
- 2017—David B. Hoyt, MD, FACS, American College of Surgeons Executive Director
- 2018—Steven D. Wexner, MD, PhD, Clinical Professor, Florida International University College of Medicine

Fry Lecture

- 2016—Sudish C. Murthy, MD, PhD, The Daniel and Karen Lee Endowed Chair in Thoracic Surgery, Cleveland Clinic Lerner College of Medicine
- 2017—Bryan Meyers, MD, MPH, Patrick and Joy Williamson Professor of Surgery, Washington University School of Medicine in St. Louis
- 2018—John Howington, MD, FACS, FCCP, Chairman of Thoracic Surgery, Saint Thomas Health, Nashville, TN

2016—Department of Surgery and Program for Personalized Cancer Care (PPCC) hosted Patrick C. Walsh, MD, University Distinguished Service Professor of Urology at The Johns Hopkins University School of Medicine

2018—B. Tucker Woodson, MD, Professor of Otolaryngology, Medical College of Wisconsin hosted by Mark Gerber, MD, for Chicago Laryngological and Otological Society

Research and Quality Advancements 2016–2018

Quality Fellowships

NorthShore Quality and Patient Safety Fellowship Programs provide an opportunity for physicians to focus on important principles in quality improvement and to complete a fellowship project under expert supervision in quality improvement and health services research.

Benjamin Lind, MD, completed his fellowship in November 2015, which focused on postoperative deep vein thrombosis (DVT) rate at NorthShore Evanston Hospital. His project worked to identify causes of the high postoperative DVT rate, and ways to lower it, and was successful in driving significant improvements from the bottom decile to the top decile in the National Surgical Quality Improvement Program general surgery data.

Jennifer Paruch, MD, is conducting a fellowship addressing the issue of variation in opiate prescription following outpatient general surgery procedures. She is testing the hypothesis that there is wide variation between providers, and that a significant

number of prescriptions are either unused or unnecessary. **Jonathan Pomerantz, MD**, completed his fellowship in November 2015, which focused on establishing a new screening protocol and treatment algorithm for patients at high risk for undiagnosed obstructive sleep apnea undergoing surgery under general anesthesia. The incidence of undiagnosed obstructive sleep apnea is reported to be as high as 24 percent, and postoperative morbidity and mortality are increased in patients with obstructive sleep apnea undergoing general anesthesia.

During the project, approximately 400 patients were screened and there were no postoperative complications related to obstructive sleep apnea in any of the patients. And while it was a relatively small number, 100 percent of the patients screened were confirmed to have obstructive sleep apnea.

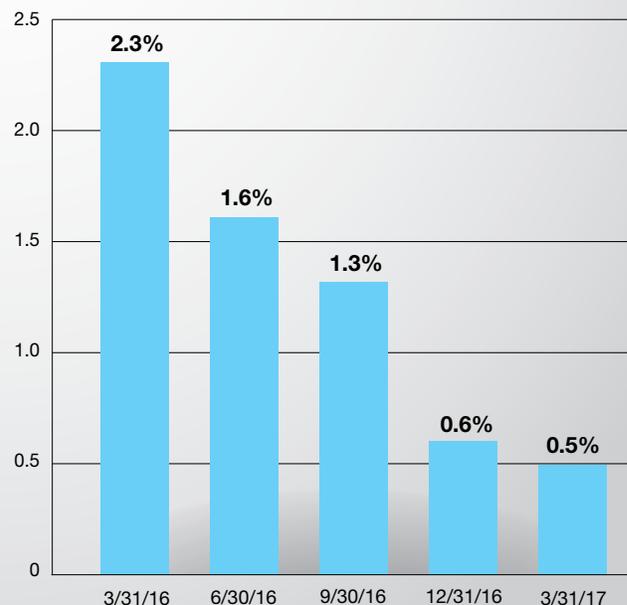
Dr. Pomerantz co-authored a paper on the fellowship program that was published in the *Journal of the American Board of Family Medicine*.



Dr. Benjamin Lind

Deep Vein Thrombosis (DVT)

The chart below displays the percentage of surgical patients who suffered postoperative DVT from March 2016 to March 2017. The dramatic improvement is a result of new preventive protocols led by Dr. Benjamin Lind.



Notable Grants in the Department

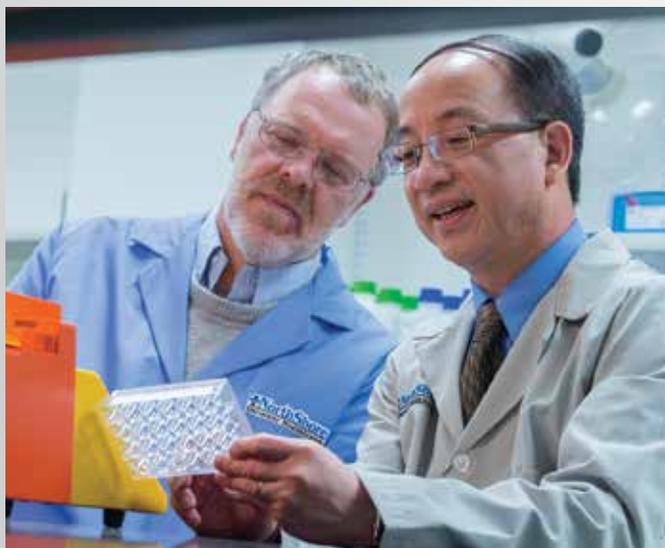
Simon Hayward, PhD, was awarded a five-year National Institutes of Health (NIH) R01 grant entitled “Inflammatory Pathways in Benign Prostatic Hyperplasia and Lower Urinary Tract Symptoms (BPH/LUTS).” Intolerance and poor response to common benign prostatic hyperplasia (BPH) medications often result in surgery for many elderly men, a significant number of whom are not ideal candidates for surgical procedures. This project will test the links between inflammatory and immune response to disease progression in the prostate and will also test potential new therapies in mouse models.

Dr. Hayward hopes that by understanding the role of immune/inflammatory action in BPH progression, novel medical approaches can be developed to reduce pathogenesis and slow the progression of this disease, thus avoiding complications of surgery.

Jianfeng Xu, MD, DrPH, is the NorthShore principal investigator on an innovative prostate cancer research project supported by a major Department of Defense (DoD) Prostate Cancer Research Program Impact Award. “The Role of Mutations in BRCA2 and Other Known and Novel Cancer Susceptibility Genes in Inherited Risk for Lethal Prostate Cancer” is a collaborative study with Johns Hopkins University and the University of Utah.

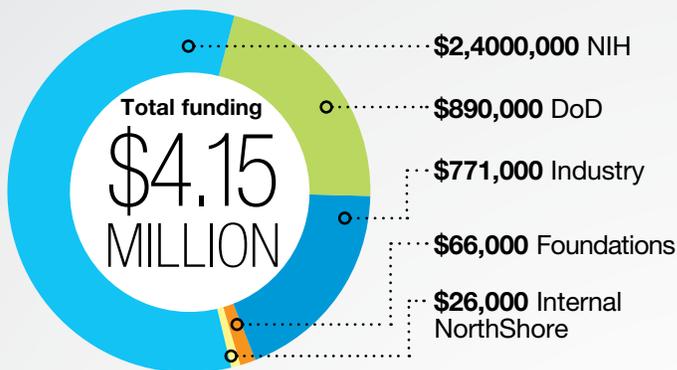
Dr. Xu and his research partners are testing the hypothesis that multiple rare mutations in DNA repair genes can contribute to lethal (aggressive) prostate cancer by screening germline (inherited) DNA from patients who died of prostate cancer at a young age. The team is testing a genetic model based on a panel of these mutations that could significantly predict lethal prostate cancer.

They hope their results will be useful in predicting risk and identifying a subset of men at high risk for aggressive prostate cancer prior to prostate-specific antigen (PSA) screening and biopsy, as well as predicting and identifying a subset of men at high risk for lethal prostate cancer after biopsy or surgery.



Dr. Simon Hayward and Dr. Jianfeng Xu

Research Funding by Type



Michael Ujiki, MD, and Mason Hedberg, MD, a University of Chicago Pritzker School of Medicine surgical resident, received a grant from the Society of American Gastrointestinal and Endoscopic Surgeons (SAGES) Research & Career Development Committee/SAGES Board of Governors to study correlation of biomarkers with clinical risk to predict progression or regression of Barrett’s esophagus. This is a continuation of their project recently published in the *Annals of Surgery*, 2018; Barrett’s Esophagus Assessment of Risk (BEAR) Score.

The goal is to develop a mobile application that will be able to make recommendations based on molecular and clinical factors. This grant provides the opportunity for extensive pathological analysis to study the molecular factors involved in the disease. The award amount of \$29,926 was presented at the annual SAGES Foundation Awards Luncheon in April 2018 and at the SAGES Annual Scientific Session/16th World Congress of Endoscopic Surgery, and the project should conclude by the summer of 2019.

Katherine Kopkash, MD, received a grant award in the amount of \$25,000 from the Auxiliary of NorthShore Breast and Ovarian Research Program to measure clinical and patient-reported outcomes of patients undergoing robotic nipple-sparing mastectomies (RNSM) using validated surveys. Additionally, the study will measure physician satisfaction with RNSM using a previously published ergonomic questionnaire for breast surgeons performing nipple-sparing mastectomies.

The goal is to demonstrate that RNSM is at least equivalent to open NSM for clinical and patient-reported outcomes but is superior for physician satisfaction. The findings from this study will provide pilot data to launch a larger multi-center trial of RNSM. We would plan to study the ergonomic effects of RNSM on physicians using electromyopathy (EMG) measurements to provide objective data that RNSM benefits the surgeon.

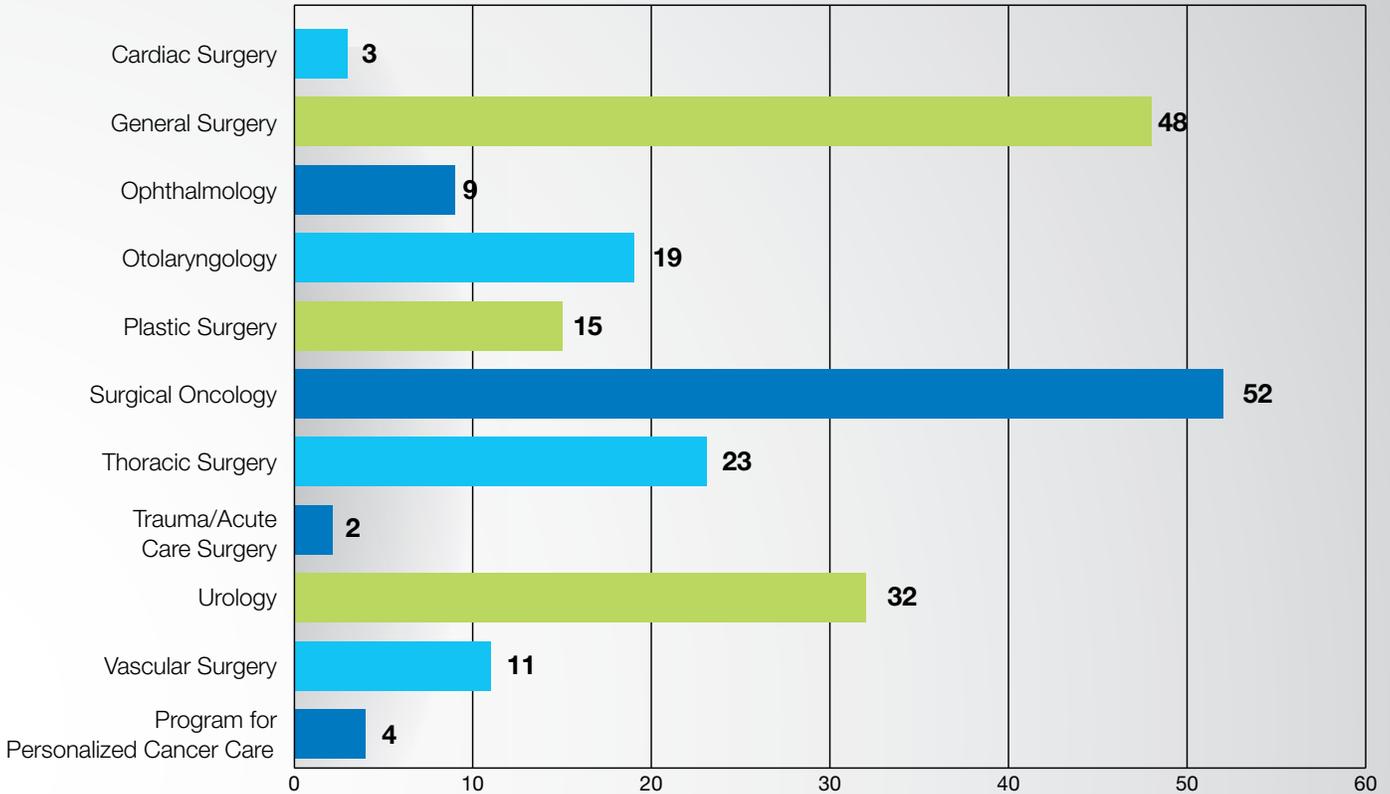
NorthShore will be poised to become the leader for minimally invasive breast surgery and could become a training center for RNSM.

Pioneering Clinical Trials

NorthShore's patients benefit from a broad range of innovative clinical trials, and our physicians are leaders in novel research programs.

Number of Active Clinical Trials

By Division in Department of Surgery



The Auxiliary of NorthShore University HealthSystem Grants

Seth Krantz, MD, and Marian Macsai, MD, were each awarded Auxiliary Mid-Size Grants for promising research studies.

Dr. Krantz's project will focus on the performance of an inherited cancer panel in predicting outcomes among patients diagnosed with lung cancer. NorthShore's genomic health initiative and existing biobank of lung cancer samples provides opportunity for more long-term study and one of the goals of the project is to develop preliminary data necessary to apply for NIH and other external funding.

Dr. Macsai's project will investigate whether the drug Glanatec™ (approved in Japan for treating high eye pressure) is a safe and effective alternative to corneal transplant in patients with Fuchs endothelial dystrophy (FED), which is a frequent cause of visual disability due to an inherited dysfunction of the cornea endothelial cells. If untreated, FED can result in blindness. Following a successful pilot study, an application will be made to the Food and Drug Administration (FDA) to gain approval for wider use of the drug to extend benefits to the U.S. population.



Dr. Marian Macsai and Dr. Seth Krantz

Enhanced Recovery After Surgery

NorthShore surgeons are embracing Enhanced Recovery After Surgery (ERAS) pathways: proven multidisciplinary and collaborative approaches designed to optimize perioperative nutrition, standardize perioperative anesthetic regimens to minimize pain/opioid use, encourage early mobilization and oral intake, and improve patient education and participation. ERAS pathways have conclusively been shown to decrease length of stay and decrease perioperative complications.

NorthShore established an ERAS protocol in 2016 for colorectal surgery patients designed to reduce surgical site infections (SSIs). The National Surgical Quality Improvement Program (NSQIP) data reflects the significant drop in SSI rate for colorectal surgery at Evanston Hospital since the ERAS implementation.

A new ERAS protocol for mastectomy patients with implant-based reconstruction has been established. This

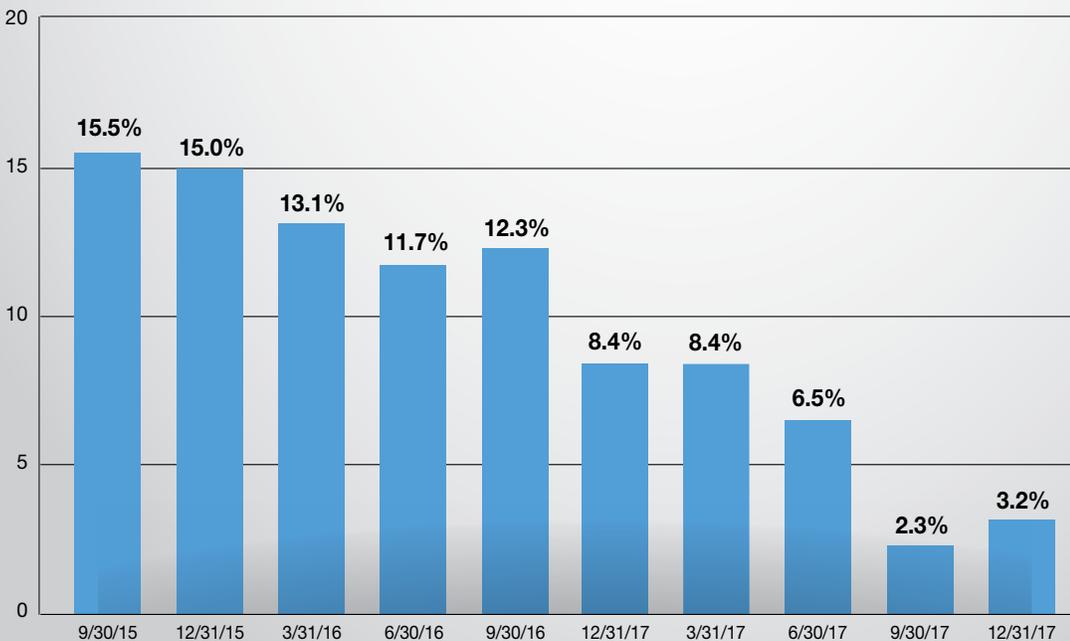


protocol includes a regional block prior to surgery to help with pain control, and all patients will receive an education booklet and special instructions on preparing for surgery.

Anesthesiologist Dr. Rebecca Blumenthal and surgeon Dr. Joseph Muldoon worked together to establish an ERAS protocol for colorectal surgery.

Surgical Site Infections at Evanston Hospital for Colorectal Surgery

The percentage of colorectal surgery patients suffering surgical site infection at Evanston Hospital has dropped significantly from September 2015 to December 2017 largely due to the ERAS pathways protocol.



Advancing Surgical Innovation

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Department of Surgery Directory p20



Division Highlights 2016–2018

Division of Cardiac Surgery

The Division of Cardiac Surgery continues to provide leading-edge cardiac surgery for NorthShore patients. NorthShore's cardiovascular surgery team earned a top composite 3-star rating from the prestigious Society of Thoracic Surgeons (STS) for coronary artery bypass (CAB) procedures, and for aortic valve replacement (AVR) plus CAB procedures. NorthShore is one of only 23 hospitals out of a total of 1,017 hospitals to earn this superior designation.

This distinction is in no small part due to the highly trained surgeons in the Division. Division Chief Hyde Russell, MD, was named the Owen L. Coon Chair of Cardiothoracic Surgery in 2017. Fellowship-trained Eugene Fernandes, MD, joined the Division in 2018 bringing additional depth and expertise in treating advanced cardiac conditions.

The Division has made continued progress in its left ventricular assist device (LVAD) program for heart failure patients. The Joint Commission-certified program is a collaborative effort with NorthShore cardiologists and provides new, lifesaving hope for patients with near end-stage heart failure. NorthShore is one of only a handful of area institutions offering extracorporeal membrane oxygenation (ECMO) providing both cardiac and respiratory support, temporarily allowing the patient's heart and lungs to recover in acute situations, before and after surgery.

Our collaborative Heart Rhythm Program in partnership with NorthShore electrophysiologists and structural heart experts offers the most advanced treatment options for patients with atrial fibrillation (aFib). Positive patient outcomes continue to drive growth in clinical volume. Our new lead management program and innovative hybrid aFib ablation treatment are attracting an increasing number of patients.

Our continued partnership with NorthShore's interventional cardiologists has resulted in tremendous progress and growth in aortic and mitral valve replacement procedures. Dr. Russell closely collaborates with cardiology colleagues including Ted Feldman, MD, in developing and teaching new mitral valve balloon procedures. A two-day course drew physicians from across the country who were able to observe a live surgical procedure and take part in training exercises in our Grainger Center for Simulation and Innovation.

The Division extended education opportunities to the NorthShore community. A patient-centered symposium in 2017 highlighted the latest in treatment options from the NorthShore Cardiovascular Institute.

For more information, visit northshore.org/cardiovascular-institute

Division of Gastrointestinal and General Surgery

Clinical volume continues to increase across the Division, and the number of our faculty is growing and advancing academically to meet the demands of this growth to bring the best care to our patients.

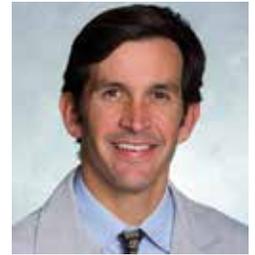
The Division implemented a robotic-assisted hepatobiliary program (more details on page 2) led by Department Chair Mark Talamonti, MD, and a comprehensive program for minimally invasive hernia surgery (more details on page 3) directed by John Linn, MD. These advanced offerings reflect our commitment to the latest technologies and the most sophisticated technique to maximize positive patient outcomes.

Stephen Haggerty, MD, along with the other Division faculty, are committed to providing quality education to the next generation of physicians as they go through their training. Dr. Haggerty completed the prestigious Medical Education Research, Innovation Teaching and Scholarship (MERITS) Fellowship at the University of Chicago Pritzker School of Medicine, advancing his role as a well-respected educator.

Our bariatric program draws a growing number of patients from throughout the region. We are participating in a national, multi-center endoscopic sleeve gastropasty (ESG) trial, a minimally invasive endoscopic weight-loss procedure to provide our patients a larger number of options when deciding what treatment is best for them.

Michael Ujiki, MD, was named the Louis W. Biegler Chair of Surgery. Dr. Ujiki is a leader in endoscopic treatment of gastroesophageal reflux disease (GERD), and NorthShore is part of a national trial studying a new, incisionless procedure for GERD patients. Dr. Ujiki was the first in the country to perform the procedure and is the only surgeon in the region offering the advanced treatment option.

For more information, visit northshore.org/generalsurgery



Hyde Russell, MD
Division Chief

Eugene Fernandes, MD
Jonathan Somers, MD



Michael Ujiki, MD
Division Chief

Woody Denham, MD
Stephen Haggerty, MD
Melissa Hogg, MD
John Linn, MD
Barbara Loris, MD
Joseph Muldoon, MD
Jennifer Paruch, MD
James Spitz, MD
Mark Talamonti, MD
Philip Theodoropoulos, MD

Division of Gastrointestinal and General Surgery (continued)

Section of Trauma/Acute Care Surgery/Surgical Critical Care

Trauma and acute care specialist Derek Wall, MD, joined the team and is part of offering a more robust trauma/acute care surgical program at all four hospitals. Two new trauma/acute care surgeons will be recruited to join the team this year. The Level I Trauma Center at Evanston Hospital ensures that a trauma surgeon is available 24/7 and crucial specialists are on-site within an hour. Glenbrook, Highland Park and Skokie Hospitals are designated Level II Trauma Centers.

The entire team is specially trained in REBOA (resuscitative endovascular balloon occlusion of the aorta), a new catheter technique designed to save the lives of patients with severe and rapid bleeding in the abdomen and chest who would otherwise bleed to death. The advanced technique has saved the lives of gunshot and accident victims.

Andrew Agos, MD, Carlos Ortega, MD, and Dr. Wall were instructors for two Advanced Trauma Life Support course at the Grainger Center for Simulation and Innovation that drew residents from across the region.

Trauma nurses are active educators in the national Stop the Bleed program, teaching techniques including tourniquets, applying pressure and packing a wound to community groups. Trauma Services Manager and nurse June Smith, RN, coordinates the NorthShore program, part of an American College of Surgeons initiative launched in 2015. The program is designed to provide basic skills to the public, enabling them to help at the scene of an accident or other traumatic event until professional help arrives.

Dr. Wall published a paper on pediatric appendectomies in *The Journal of Trauma and Acute Care Surgery*.

Our Acute Care Surgery service repeatedly receives a 5-star rating in patient loyalty surveys.



James Boffa, MD
Section Chief

Andrew Agos, MD
Carlos Ortega, MD
Derek Wall, MD

Division of Ophthalmology

The Division continues to have tremendous growth. The number of ophthalmic sub-specialties has increased, ensuring that NorthShore patients can have any or all of their issues taken care of locally.

Four new physicians were recruited, bringing additional fellowship-trained specialty expertise and depth to the Division. Paul Phelps, MD, an oculo-plastic surgeon; Joan Kim, MD, a cornea surgeon; Belal Bakir, MD, a specialist in glaucoma surgery; and retired Air Force Colonel Scott Barnes, MD, a comprehensive ophthalmologist, joined the team.

Our patients have access to important clinical trials, including a Glanatec pilot project for FDA approval to treat Fuchs endothelial dystrophy (more detail on page 11). Other current clinical trials include a multisite NIH-sponsored Zoster Eye Disease Study (ZEDS) trial; a placebo-controlled trial to evaluate the efficacy of a long-term valacyclovir and ocular recurrence of herpes zoster; a trial on the effect of a new delivery method of topical steroids in the treatment of chalazion; and a trial on anterior ischemic optic neuropathy.

In addition to the clinical trials available to the patients, our faculty have provided integral education opportunities for our residents. Manvi Maker, MD, developed a hands-on training program for ophthalmology residents to practice cataract surgery on animal eyes using a functional phacoemulsification machine.

The commitment of the Division to provide the best and latest care for NorthShore patients is regularly exemplified by its presence in peer-reviewed literature, ensuring that they are held to the highest standards.

For more information, visit northshore.org/ophthalmology



Marian Macsai, MD
Division Chief

Belal Bakir, MD
Scott Barnes, MD
Rebekah Braslow, MD
Troy Close, MD
Andrew Francis, MD
Jay Futterman, MD
Joshua Herz, MD
Andrea Honigsblum, MD

Samira Khan, MD
Joan Kim, MD
Katherine Kwan, OD
Ann Laurenzi-Jones, OD
Manvi Maker, MD
Paul Phelps, MD
Peter Rabiah, MD
Scott Rosen, MD
Paras Shah, MD

Division of Otolaryngology

Clinical volume across the Division continues to grow, as we are a recognized resource in the region for treatment of many complex conditions. The Division opened a new state-of-the-art hub facility at Skokie Hospital as well as a new office in Lake Bluff, increasing access for patients in Lake County.

Mihir Bhayani, MD, and Cheryl Nocon, MD, are leading the charge to reduce surgical morbidity with the use of minimally invasive techniques including advanced flexible, robotic technology which markedly improves transoral access to hypopharyngeal tumors at the base of the tongue and larynx. NorthShore is one of the first health systems in the region to offer this procedure, as well as other innovative techniques including sialendoscopy, a minimally invasive endoscopic procedure for salivary gland disease that preserves the gland and treats this otherwise very painful disease. Our sialendoscopy program has developed into the largest of its kind in the region.

The Division is very active in the latest research and is involved in both sponsored and investigator-initiated studies. Dr. Nocon is leading a study related to racial disparities and patient understanding of a diagnosis of oral cavity squamous cell carcinoma and subsequent decisions about treatment. Mark Gerber, MD, is the local principal investigator on a pioneering study to screen for cytomegalovirus (CMV) in newborns with the aim of determining whether early treatment reduces the risk for hearing loss. Aaron Friedman, MD, and NorthShore are part of a multi-institutional study related to medical therapy for human papillomavirus (HPV)-associated recurrent respiratory papillomatosis patients with laryngeal, tracheal and/or pulmonary involvement.

These studies, along with the Division's robust involvement of providing education in the Grainger Center for Simulation and Innovation, have positioned the Division of Otolaryngology at NorthShore as leaders around the area for state-of-the-art clinical care.

For more information, visit northshore.org/otolaryngology-head-neck-surgery



Mark Gerber, MD
Division Chief

Mihir Bhayani, MD
Judy Chen, MD
Aaron Friedman, MD
Steven Horwitz, MD
Amanda Karcioglu, MD

Sue Kim, MD
Cheryl Nocon, MD,
Jonathan Pomerantz, MD
Joseph Raviv, MD
Michael Shinnars, MD

Audiology

Kathryn Bialobok, AuD
Theresa Delecenserie, AuD
Kristine Erickson, AuD
Janet Han, AuD
Alyssa Herrera, AuD
Margaret Molloy, AuD
Alison-Marie Olivo, AuD
Lyn Rutledge, AuD
Maria Secaras, AuD
Lukas Suveg, AuD
Jennifer von Doring, AuD

Speech Pathology

Christine Martin, MA
Steve Uliana, MM, MS

Division of Plastic and Reconstructive Surgery

Clinical volume and academic productivity continue to grow in the Division of Plastic and Reconstructive Surgery while the team continues to earn excellent patient loyalty scores.

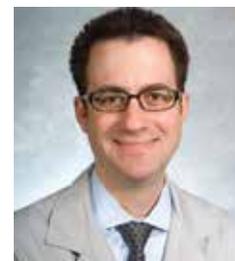
Mark Sisco, MD, is the principal investigator for an industry-sponsored multi-center trial. The purpose of this study is to directly compare the surgical (infections, reconstructive failure or operative intervention) and cosmetic outcomes between two acellular dermal matrices that are already commercially available. Information obtained from this study will increase our knowledge of acellular dermal tissues in general, and any potential differences when comparing the two acellular dermal matrices in postmastectomy breast reconstruction.

In addition to research, the faculty's influence in the field of plastic and reconstructive surgery is demonstrated by their numerous invitations to present and educate within various medical societies. Dr. Sisco was invited to present as the plastic surgery guest expert at the American Society of Breast Surgeons Annual Meeting in 2018. Michael Howard, MD, was inducted into the prestigious American Association of Plastic Surgeons, thus recognizing Dr. Howard in a group of distinguished surgeons in the field of plastic and reconstructive surgery.

Jeremy Warner, MD, directed the Eighth Annual Chicago Rhinoplasty Symposium at the Grainger Center for Simulation and Innovation. Dr. Warner was also an instructor for the American Society of Aesthetic Plastic Surgery Annual Meeting rhinoplasty course.

Bruce Bauer, MD, was the keynote speaker at the University of Pennsylvania Perelman School of Medicine Edwin & Fannie Gray Hall Center for Human Appearance Research Conference. Dr. Bauer was also one of four visiting professors sponsored by the American Society of Maxillofacial Surgeons to travel throughout the United States.

For more information, visit northshore.org/plastic-surgery



Mark Sisco, MD
Division Chief

Bruce Bauer, MD
Michael Howard, MD
Akhil Seth, MD
Jeremy Warner, MD

Division of Surgical Oncology

The Division of Surgical Oncology continues to receive excellent loyalty scores, and much of it has to do with the comprehensive programs that are being established by the Division to provide the best care to NorthShore patients diagnosed with cancer.

Katherine Kopkash, MD, joined the Division in 2017 and now leads the new Oncoplastic Breast Surgery program, featuring fellowship-trained specialists in breast surgery focused on both eliminating cancer, and cosmetic outcomes. NorthShore is one of the first health care systems in the region to develop a dedicated program for oncoplastics.

Katharine Yao, MD, has expanded research efforts in order to take a very overwhelming time in patients' lives when first receiving cancer diagnoses and make it easier for them to make the best, most informed decision about their treatment for their health. A research pilot study, "Impact of an In-Visit Decision Aid on Patient Knowledge about Contralateral Prophylactic Mastectomy" aimed at helping patients make decisions in breast surgery was led by Dr. Yao and published in 2017 and is being expanded to include other sites for continued effectiveness. Additionally, Dr. Yao received funds from The Auxiliary of NorthShore for breast and ovarian cancer research to pilot a study incorporating mindfulness intervention into the decision aid she has developed, aimed at reducing anxiety around new breast cancer diagnoses.

The Division is also involved in important endocrine surgery research. Current projects have shown that there are major differences between papillary and follicular thyroid cancer, and that these differences affect the staging of these two cancers, so separate staging systems should be considered. Richard Prinz, MD, led another very novel project, in partnership with Oxford Biodynamics in Oxford, England, which entailed the creation of a blood assay that used epigenetic biomarkers to detect cancer in patients with thyroid nodules. Success of this project may lead to the elimination of diagnostic surgeries for patients with thyroid nodules of undetermined significance. The project was presented at the 2018 American Association of Endocrine Surgeons meeting and has been accepted for publication.

For more information, visit northshore.org/cancer



Katharine Yao, MD
Division Chief

Ermilo Barrera, MD
Katherine Kopkash, MD
Lawrence Krause, MD
Tricia Moo-Young, MD
Catherine Pesce, MD
Richard Prinz, MD
David J. Winchester, MD

Division of Thoracic Surgery

The Division continues to grow in clinical volume and research productivity, and our team has made multiple presentations at national meetings and works collaboratively with NorthShore's oncologists. The Division is committed to the mission of educating the future generation of surgeons. In collaboration with the University of Chicago Pritzker School of Medicine, we continue to train surgical fellows and residents.

We are participating in the National Cancer Institute's ALCHEMIST Trial (Adjuvant Lung Cancer Enrichment Marker Identification and Sequencing Trials) looking at biomarkers and personalized treatment for lung cancer patients.

Seth Krantz, MD, is leading a pilot study in collaboration with Jianfeng Xu, MD, DrPH, looking at somatic mutations in lung cancer patients to identify those at high risk of developing other cancer or recurrence of cancer (more detail on page 11).

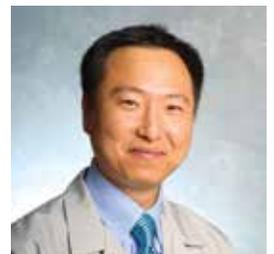
NorthShore's Thoracic Tumor Bank and Biorepository for thoracic oncology continues to be a rich resource for clinical data and research related to lung or esophageal cancer or malignancies in the chest cavity.

The Division collaborates with Michael Ujiki, MD, and John Linn, MD, in providing care for esophageal cancer, an area of steady growth, as NorthShore is one of the few institutions in the Chicago area offering minimally invasive esophagectomy.

We are committed to embracing new, minimally invasive ways to provide care for advanced thoracic procedures to improve outcomes, and are now offering robotic-assisted thoracic surgery. NorthShore is at the forefront of robotic surgery.

We have an important emphasis on lung cancer screening and smoking cessation and have focused outreach efforts and education of primary care physicians about eligibility for critical lung cancer screening. We are working with the NorthShore Kellogg Cancer Center team to develop a formal program for smoking cessation that will be established at NorthShore this year, reflecting the institution's commitment to this important public health issue.

For more information, visit northshore.org/thoracic-surgery



Ki Wan Kim, MD
Division Chief

Seth Krantz, MD

Division of Urology

Brian Helfand, MD, PhD, took over the role of Division Chief as the Division continues to grow. Dr. Helfand was named the Ronald L. Chez Family and Richard Melman Family Chair of Prostate Cancer. Alexander Glaser, MD, will be joining the team this year, and he will focus on the treatment of benign urologic conditions including benign prostatic hyperplasia and kidney stones.

NorthShore's Active Surveillance program now includes more than 500 men with low-risk prostate cancer, making it the largest cohort in the Midwestern United States.

The Division has five active National Institutes of Health (NIH)-funded clinical studies including: Prostate Cancer Specialized Program of Research Excellence (SPORE); Reducing the Effects of Active Surveillance, Stress, Uncertainty and Rumination Thru Engagement in Mindfulness Education (REASSURE ME); Symptom of Lower Urinary Tract Dysfunction Research Network (LURN); NanoCytology to Mitigate Overdiagnosis of Prostate Cancer SBIR grant; and Risk-Stratification of Prostate Cancers via Field Carcinogenesis Nanocytology.

There are currently 17 active research studies, including four non-NIH-funded studies including A Randomized Study of Enzalutamide in Patients With Localized Prostate Cancer (ENACT) and the International Consortium for Prostate Cancer Genetics (ICPCG).

Our team achieved national recognition at the annual American Urologic Association meeting for the two most outstanding research poster presentations. We had 16 clinical manuscripts published this year in peer-reviewed journals including *Journal of Urology*.

The Division continued its focus on cancer biology research and earned a new NIH research grant supporting a NorthShore-based collaboration with the Department of Urology at Northwestern University to examine the role of inflammation in prostate disease. We established a collaboration with NorthShore's genomics team and the University of Chicago to examine the effects of genes expressed in prostate cancer stromal cells in racial minorities.

Collaborations with other institutions including McGill University in Canada and Newcastle University in England expanded in projects related to the role of microenvironment in modifying androgenic signaling in the prostate and the role of stem cells in models of prostate cancer.

Collaborative research with the Purdue University Cancer Center is pursuing single-cell RNA-Seq analysis, enabling us to determine the gene expressed in individual cells in prostate tumors to work out pathways to stabilize prostate cancer.

We continue to advance genomic translational research and are working with the industry to develop and offer our unique single nucleotide panel (SNP)-based Genetic Risk Score throughout the United States and China while we are conducting several clinical trials to assess implementation of our SNP-based Genetic Risk Score in clinic.

Our physician-scientists showed, for the first time, that inherited mutations in several major genes (BRCA2, BRCA1 and ATM) are associated with grade reclassification among prostate cancer patients undergoing active surveillance. This finding has important clinical utility in decision-making of active surveillance.

For more information, visit northshore.org/urology

Division of Vascular Surgery

The Division of Vascular Surgery continues to exceed its loyalty top-box score goals, and our doctor communication continues to rank in the top decile as reported by our patients. In order to meet the needs of our patient population, our Division looks to expand and provide the highest quality care while maintaining these top scores. This is in no small part due to the physicians and staff in our group who strive each day to improve the patient experience and increase patient safety and outcomes.

Benjamin Lind, MD, completed his quality fellowship focusing on postoperative deep vein thrombosis (DVT). His examination to identify the causes and ways to lower the rate of DVT led to a substantial decrease in DVT rate at Evanston Hospital, thus increasing the safety of all surgical patients.

In line with quality initiatives, the Division remains active in an international registry of the HeliFX Aortic Securement System for endovascular abdominal aortic aneurysms and an MR angiography study of peripheral arteries in collaboration with the Department of Radiology. Since 2014, they have also been active participants in the Vascular Quality Initiative (VQI), a nationwide quality consortium of vascular surgeons.

Additionally, Nancy Schindler, MD, MHPE, was appointed as the Chief Patient Experience and Provider Engagement Officer for NorthShore. In this new corporate role, she will oversee our patient experience and provider engagement efforts across the entire organization. She will work with the Quality and Care Transformation team to ensure that our patient experience and provider engagement improvement efforts are integrated and aligned with our clinical improvement efforts. Dr. Schindler will continue to see patients at the Cardiovascular Institute, and she will continue to lead key educational efforts within the Department of Surgery.

For more information, visit northshore.org/vascularsurgery



Brian Helfand, MD, PhD
Division Chief

**Jeffrey Albaugh, PhD
APRN, CUCNS**
Michael Blum, MD
Peter Colegrove, MD
Alexander Glaser, MD
Thomas Keeler, MD
Kristian Novakovic, MD
Sangtae Park, MD, MPH



Omar Morcos, MD
Division Chief

Benjamin Lind, MD
**Nancy Schindler, MD,
MHPE**

Essential Philanthropy 2016–2018

The Department is grateful for all of its donors and is pleased to highlight the following powerful examples of donor impact.

- Katharine Yao, MD, NorthShore Chief of Surgical Oncology and Vice Chair of Research and Development in the Department of Surgery, believes individual genetics can tell us much more about a patient's contralateral breast cancer risk. With the support of the **Harold and Jane Perlman family**—in loving memory of Joni Perlman-Rosenberg—Dr. Yao is leading a study to analyze the genetic makeup of women who have been diagnosed with contralateral breast cancer. In addition, **Carrie and Kenneth Coquillette** have generously supported a breast genomics research fellow to help enroll patients into research studies using a single nucleotide panel (SNP) to assess a woman's risk of breast cancer.
- Thanks to the philanthropic commitment of **The Grainger Foundation**, the Grainger Center for Simulation and Innovation is contributing to a growing transformation of surgical practice toward less invasive, less costly procedures that reduce complications, enhance patient safety and maximize patient benefit. The hundreds of courses now offered in the Grainger Center for Simulation and Innovation have provided medical students, residents, fellows, practicing surgeons and international faculty the opportunity to refine and perfect procedures in a safe, controlled environment. The Grainger Center for Simulation and Innovation training courses and equipment have also been generously supported by medical technology industry leaders **KARL STORZ Endoscopy-America, Inc.** and **Medtronic**.
- NorthShore Life Director **Bill Davis and his wife Judy** supported a research team of cancer biologists from the Program for Personalized Cancer Care in a promising new project to reduce prostate cancer risk and the need for prostate surgery. Led by principal investigator Simon Hayward, PhD, the Jean Ruggles Romoser Chair of Cancer Research, the study validated that prostate inflammation (which can lead to cancer) can be controlled much more effectively by treating this pre-condition with an already existing anti-inflammatory drug originally designed to treat auto-immune disorders.
- Comparative effectiveness research (CER) related to breast and other cancers has been advanced by David P. Winchester, MD, the David J. Winchester Chair of Surgical Oncology, thanks to the ongoing, 20-year support of **Elvira Butz and the Butz Foundation**. Dr. Winchester serves on the Executive Committee of the American Joint Committee on Cancer that revised the staging guidelines for breast cancer in 2017.



From left, Dr. Hyde Russell, Board Member Percy Berger and Dr. Mark Talamonti at Dr. Russell's investiture.

Endowed Chair Appointments

Simon W. Hayward, PhD, was named the Jean Ruggles Romoser Chair of Cancer Research.

Brian T. Helfand, MD, PhD, was named the Ronald L. Chez Family and Richard Melman Family Chair of Prostate Cancer.

Hyde M. Russell, MD, was named the Owen L. Coon Chair of Cardiothoracic Surgery.

Michael B. Ujiki, MD, was named the Louis W. Biegler Chair of Surgery.

Jianfeng Xu, MD, DrPH, was named the Ellrodt-Schweighauser Family Chair of Cancer Genomic Research.

With gratitude to the following donors for their philanthropic support of the Department of Surgery 2016–2018

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John and Carol Walter
George Keith Weiss
Mr. and Mrs. William J. White
Sallyan Windt

*deceased

Department of Surgery Directory 2016–2018

Cardiac Surgery

(847) 570-2868

Hyde Russell, MD

Division Chief
Cardiovascular Surgery,
TAVR, Surgery for Heart
Failure, Mechanical Circulatory
Support

Eugene Fernandes, MD

Cardiovascular Surgery,
TAVR, Lead Extraction

Jonathan Somers, MD

Cardiovascular Surgery,
TAVR

Gastrointestinal and General Surgery

(847) 570-1700

Michael Ujiki, MD

Division Chief
General Surgery, Advanced
Laparoscopic and Bariatric
Surgery, Minimally Invasive
Surgery, POEM, Esophageal
Disorders

Woody Denham, MD

General Surgery, Advanced
Laparoscopic and Bariatric
Surgery

Stephen Haggerty, MD

General Surgery, Advanced
Laparoscopic and Bariatric
Surgery

Melissa Hogg, MD

Oncologic Surgery, Liver,
Pancreas, Robotic Surgery

John Linn, MD

General Surgery, Advanced
Laparoscopic and Bariatric
Surgery, Minimally Invasive
Surgery

Barbara Loris, MD

General Surgery, Laparoscopic
Surgery, Varicose Veins

Joseph Muldoon, MD

General and Oncologic
Colon/Rectal Surgery

Jennifer Paruch, MD

General and Oncologic
Colon/Rectal Surgery

Gastrointestinal and General Surgery (continued)

James Spitz, MD

General and Oncologic
Colon/Rectal Surgery

Mark Talamonti, MD

Oncologic Surgery, Liver,
Pancreas, Robotic Surgery

Philip Theodoropoulos, MD

General Surgery, Laparoscopic
Surgery

Ophthalmology

(847) 251-2020

Marian Macsai, MD

Division Chief
Comprehensive
Ophthalmology, Cornea/
Refractive Surgery, Cataract
Surgery, External Eye Disease,
Dry Eye, Pterygium, Cornea
Crosslinking

Belal Bakir, MD

Cataract Surgery,
Comprehensive
Ophthalmology, Glaucoma

Scott Barnes, MD

Cataract, Eyelid, Pterygium
and PRK/LASIK Surgery,
Glaucoma Laser Surgery
and iStent, Diabetic Eye
Disease, Plaquenil Screening,
Comprehensive
Ophthalmology, Uveitis

Rebecca Braslow, MD

Comprehensive
Ophthalmology

Troy Close, MD

Glaucoma, Neuro and
Comprehensive Ophthalmology

Andrew Francis, MD

Surgical Retina, Pediatric
Retina

Jay Futterman, MD

Comprehensive
Ophthalmology, Cataract
Surgery, Glaucoma, Diabetic
Eye Disease, Pterygium,
Glaucoma Surgery

Ophthalmology (continued)

Joshua Herz, MD

Comprehensive
Ophthalmology, Cornea/
Refractive Surgery, Cataract
Surgery, External Eye Disease

Andrea Honigsblum, MD

Comprehensive
Ophthalmology, Glaucoma,
Diabetic Care, Uveitis, Dry Eye

Samira Khan, MD

Retina Surgery, Adult Retina
Disease, Diabetic Care, Age-
Related Macular Degeneration,
Retinal Detachment

Joan Kim, MD

Cornea and Refractive
Surgery, Cataract, PRK/LASIK
Surgery, Dry Eye,
Comprehensive
Ophthalmology, Pterygium,
Cornea Crosslinking

Katherine Kwan, OD

General Contact Lens Fitting,
Post-Cataract Operative Care

Ann Laurenzi-Jones, OD

Contact Lens Fitting for
Corneal Disease and General
Contact Lens Fitting

Manvi Maker, MD

Retinal Disease, Diabetic
and Plaquenil Screening,
Intraocular Injection

Paul Phelps, MD

Functional and Cosmetic
Ophthalmic Plastic Surgery

Peter Rabiah, MD

Comprehensive Pediatric
Ophthalmology, Uveitis, Adult
Strabismus, Retinopathy of
Prematurity

Scott Rosen, MD

Comprehensive
Ophthalmology

Paras Shah, MD

Pediatrics and Comprehensive
Ophthalmology, Strabismus,
Pterygium, Glaucoma

Otolaryngology

(847) 504-3300

Mark Gerber, MD

Division Chief
Pediatric Otolaryngology,
Bronchoesophagology

Mihir Bhayani, MD

General Otolaryngology,
Head and Neck Cancer

Judy Chen, MD

Pediatric Otolaryngology

Aaron Friedman, MD

Laryngology, Laryngeal
Surgery and Voice
Rehabilitation

Steven Horwitz, MD

General Otolaryngology

Amanda Karcioğlu, MD

General Otolaryngology, Nasal
and Sinus Surgery, Thyroid/
Parathyroid Surgery

Sue Kim, MD

General and Pediatric
Otolaryngology

Cheryl Nocon, MD

General Otolaryngology, Head
and Neck Cancer

Jonathan Pomerantz, MD

General Otolaryngology

Joseph Raviv, MD

Rhinology, Nasal and Sinus
Surgery, Endoscopic Skull
Base Surgery

Michael Shinnars, MD

Neurotology, Acoustic
Neuroma Surgery, Cochlear
Implants, Stapes Surgery

Plastic and Reconstructive Surgery

(847) 504-2300

Mark Sisco, MD

Division Chief

Aesthetic and Cosmetic Surgery, Breast Reconstruction, Microsurgery

Bruce Bauer, MD

Pediatric Plastic and Reconstructive Surgery

Michael Howard, MD

Aesthetic Breast Surgery, Breast Reconstruction, Peripheral Nerve Surgery, Wound Care

Akhil Seth, MD

Aesthetic and Cosmetic Surgery, Breast Reconstruction, Microsurgery

Jeremy Warner, MD

Cosmetic Surgery Face and Body, Plastic and Reconstructive Surgery

Surgical Oncology

(847) 570-1700

Katharine Yao, MD

Division Chief

Breast Surgery

Ermilo Barrera, MD

Breast Surgery, General Surgery, Melanoma, Sarcoma

Katherine Kopkash, MD

Breast Surgery, Oncoplastic Breast Surgery, Robotic Surgery

Lawrence Krause, MD

Breast Surgery

Tricia Moo-Young, MD

Endocrine Surgery, General Surgery

Catherine Pesce, MD

Breast Surgery

Surgical Oncology (continued)

Richard Prinz, MD

Endocrine Surgery

David J. Winchester, MD

Breast Surgery, Endocrine Surgery, General Surgery, Melanoma, Sarcoma, Isolated Limb Infusion and Isolated Limb Perfusion

Thoracic Surgery

(847) 570-2868

Ki Wan Kim, MD

Division Chief

General and Oncological Thoracic Surgery, Robotic Surgery

Seth Krantz, MD

General and Oncological Thoracic Surgery, Robotic Surgery

Trauma/ Acute Care Surgery/ Surgical Critical Care

(847) 570-1700

James Boffa, MD

Section Chief

Trauma/Acute Care Surgery, General Surgery, Laparoscopic Surgery

Andrew Agos, MD

Trauma/Acute Care Surgery, General Surgery, Laparoscopic Surgery, Robotic Surgery

Carlos Ortega, MD

Trauma/Acute Care Surgery, General Surgery, Laparoscopic Surgery

Derek Wall, MD

Trauma/Acute Care Surgery, General Surgery, Laparoscopic Surgery

Urology

(847) 503-3000

Brian Helfand, MD, PhD

Division Chief

Urologic Oncology, Prostate Cancer, Benign Prostatic Hyperplasia

Jeffrey Albaugh, PhD, APRN, CUCNS

Sexual Health and Rehabilitation

Michael Blum, MD

General Urology

Peter Colegrove, MD

General Urology, Incontinence, Erectile Dysfunction

Alexander Glaser, MD

Benign Prostatic Hyperplasia, Kidney Stones

Thomas Keeler, MD

General Urology, Pediatric Urology, Incontinence

Kristian Novakovic, MD

Urologic Oncology, Robotic and Computer-Assisted Surgery, Minimally Invasive Surgery

Sangtae Park, MD, MPH

Urologic Oncology, Robotic and Computer-Assisted Surgery

Vascular Surgery

(847) 663-8050

Omar Morcos, MD

Division Chief

Peripheral Vascular Disease, Aneurysms, Dialysis Access, Venous Disease and Varicose Veins, Carotid Artery Disease

Benjamin Lind, MD

Peripheral Vascular Disease, Aneurysms, Dialysis Access, Venous Disease and Varicose Veins, Carotid Artery Disease

Nancy Schindler, MD, MPHE

Varicose Veins/Endovenous Ablation, Venous Disease



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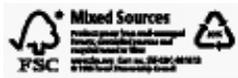
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Department of Surgery Research Day



Dr. Sangtae Park (left) confers with pioneering urologist Dr. Patrick Walsh, visiting from Johns Hopkins School of Medicine.



Dr. Brian Helfand (left) and Dr. Jianfeng Xu study one of the many poster presentations at NorthShore's Department of Surgery Research Day.

The Department of Surgery used its first Research Day to honor recently retired Charles (Chaz) Brendler, MD, and his many contributions to the Department of Surgery, Division of Urology, and as a founder of the Program for Personalized Cancer Care (PPCC) at NorthShore. Dr. Brendler embodies the endless academic pursuit of improving clinical care for his patients, a core trait that drives the Department's mission to improve outcomes and enhance quality of life. His contributions have enriched the Department of Surgery's commitment to discovering "what's next" to treat a wide array of conditions in order to benefit patients.



Research scientist Dr. Chi-Hsiung (Ed) Wang (left) with recently retired Dr. Charles Brendler, who was honored at the Department's first Research Day celebration.