The University of Chicago Medicine has maintained its revered place among academic medical centers due to our long-lasting commitment to superior clinical care, pioneering research and comprehensive surgical education. Since the opening of the original Billings Hospital building in 1927, University of Chicago clinicians and scientists have introduced numerous advances that have fundamentally changed the approach to the care of the surgical patient, including blood transfusion, hormone-based therapy for cancer, organ transplantation, and surgical procedures for peptic gastroesophageal disease.

The Center for Care & Discovery (CCD), our new adult hospital pavilion that opened earlier this year, begins another chapter in the history of University of Chicago Medicine as we advance science and surgery for the care of our patients on a local and global scale.

We envisioned the CCD as a patient- and family-centered hospital of the future that would serve as our main platform for multidisciplinary clinical collaborations and translational research innovation. Less than one year after moving into the CCD, our vision has already become reality. New clinical/translational collaborations such as the Vascular Anomalies Group, the ComprehensiveListening Center and our robotic cardiac surgery program have been launched. Already strong collaborations between surgeons, advanced interventional endoscopists and interventional radiologists have been taken to the proverbial next level. The CCD is revolutionizing the way we train the next generation of surgeons. The facility’s cutting-edge video-conference, data-capture and recording capabilities usher in a new era of surgical education at the University of Chicago Medicine. This hands-on and innovative education is preparing today’s surgical residents to be tomorrow’s best surgeons.

Scientific discovery remains the cornerstone of our Department’s legacy. Despite the challenges of the current climate of federal funding for biomedical research, our surgeons and scientists have received more than $17 million in intramural and extramural research grant funding. Breakthrough findings from our laboratories are leading to novel therapies and innovative surgical techniques that translate into new hope for some of our sickest and most complex patients. In addition to advancing clinical care, our scholarship continues to play key roles in new federal initiatives and healthcare policy.

Reflecting on this past year, it has been both humbling and exciting to see how this magnificent facility has advanced our capabilities as healers, investigators and educators. We are thrilled to see how this next phase of our history unfolds.

JEFFREY B. MATTHEWS, MD
Surgeon-in-Chief and Chairman, Department of Surgery
Dallas B. Phemister Professor of Surgery
TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLINICAL CARE</td>
<td>4</td>
</tr>
<tr>
<td>Cardiac &amp; Thoracic Surgery</td>
<td>6</td>
</tr>
<tr>
<td>General Surgery</td>
<td>8</td>
</tr>
<tr>
<td>Neurosurgery</td>
<td>10</td>
</tr>
<tr>
<td>Ophthalmology &amp; Visual Science</td>
<td>12</td>
</tr>
<tr>
<td>Otolaryngology—Head &amp; Neck Surgery</td>
<td>14</td>
</tr>
<tr>
<td>Plastic Surgery</td>
<td>16</td>
</tr>
<tr>
<td>Plastic &amp; Reconstructive Surgery</td>
<td>18</td>
</tr>
<tr>
<td>Transplantation</td>
<td>20</td>
</tr>
<tr>
<td>Urology</td>
<td>22</td>
</tr>
<tr>
<td>Vascular Surgery &amp; Endovascular Therapy</td>
<td>24</td>
</tr>
<tr>
<td>Selected Honors</td>
<td>26</td>
</tr>
<tr>
<td>Community Outreach</td>
<td>30</td>
</tr>
<tr>
<td>Surgery by the Numbers</td>
<td>32</td>
</tr>
<tr>
<td>EDUCATION</td>
<td>34</td>
</tr>
<tr>
<td>Current Residents &amp; Fellows</td>
<td>36</td>
</tr>
<tr>
<td>2013 Graduates</td>
<td>38</td>
</tr>
<tr>
<td>RESEARCH</td>
<td>40</td>
</tr>
<tr>
<td>Sponsored Research</td>
<td>42</td>
</tr>
<tr>
<td>Development</td>
<td>46</td>
</tr>
<tr>
<td>Faculty Publications</td>
<td>48</td>
</tr>
</tbody>
</table>

**HEALERS. EDUCATORS. INVESTIGATORS.**

Every day at the University of Chicago Medicine, Department of Surgery physicians tackle formidable tasks. As clinicians, teachers and researchers, they go to heroic lengths to help patients, train the next generation of physicians and seek innovative cures. These surgeons battle larger-than-life health challenges and take on surgeries that others are reluctant to perform. They routinely save the day, making enormous strides in advancing knowledge and improving the quality of life for their patients.
Clinical Care

LEADING-EDGE TECHNOLOGY, STATE-OF-THE-ART SPACE OPTIMIZED FOR SEAMLESS COLLABORATIONS. NOVEL TREATMENTS AND CLINICAL TRIALS. BURGEONING RESEARCH.

For these reasons and more, the Center for Care & Discovery truly serves as a model for future patient care.

One way our futuristic hospital is revolutionizing healthcare is through the new Comprehensive Listening Center. The first of its kind in the Chicagoland area, the Listening Center brings together experts in the subspecialty areas of cochlear implantation, audiology and surgery to assist patients with inner ear and hearing disorders, including chronic ear infection, vestibular disorders and tumors of the ear and lateral skull base. These programs are supported by our surgeons and allied healthcare professionals, including child life specialists, speech pathologists and audiologists.

With these services housed under one roof, our integrated, multidisciplinary team ensures patients with complex hearing and inner ear disorders receive a comprehensive treatment plan catered to their unique needs and background. The Listening Center is co-directed by Michael Gluth, MD, and Dana Suskind, MD.

Another program new to the University of Chicago Medicine is the vascular anomalies group, headed by Jessica Kanesh, MD, professor of surgery, chief of pediatric surgery and surgeon-in-chief of Comer Children’s Hospital. The vascular anomalies group is dedicated to the evaluation, treatment and management of vascular birthmarks and tumors of infancy, childhood and adolescence, including hemangiomas and port-wine stains as well as lymphatic, venous and arteriovenous malformations and less common vascular anomalies such as Kaposiform hemangioendothelioma.

Complex diseases like these require intimate collaboration among other pediatric subspecialists, including experts in the fields of cardiology, dermatology, diagnostic radiology, interventional radiology, genetics, neuroradiology, otolaryngology, plastic surgery and oncology. The collective expertise of these physicians sets up the University of Chicago Medicine as the referral site of choice for families whose children have complex vascular anomalies.

“A unique feature of our program is its close integration with our NIH-funded basic science research, which allows us to model vascular malformations and explore potential new treatments in the preclinical phase," Dr. Kanesh said. “When promising new approaches are identified, we can rapidly translate them for the benefit of affected children. This important effort allows our group to develop the cutting-edge of care for these patients.”

The Center for Care & Discovery also allows already existing programs to flourish in new and exciting ways. This year, Arieh Shalhav, MD, Fritz and Mary Lee Duda Family Chair and chief of urology, performed the hospital’s 5,000th robotic procedure, which includes more than 3,000 prostatectomies. This achievement makes our team of robotic surgeons one of the most experienced in the world. Our center’s foray into robotic surgery began in 2002, when Dr. Shalhav performed the first robotic surgery at the medical center.

David Frim, MD, PhD, section chief and Rajkiran Cannon Professor of Neurosurgery, leads one of the few programs in the nation that provides lifetime comprehensive care for patients with congenital anomalies of the nervous system.

In February, Dr. Frim was approached by Dan Kricke, who was born with hydrocephalus and lived his entire life with an implanted shunt. The device divertd excess fluid away from the brain but required lifelong monitoring and maintenance. Indeed, Mr. Kricke required numerous revision surgeries throughout his life.

When Mr. Kricke met with Dr. Frim, he struggled with concerns about both the shunt and his headaches, which were now gone, and could be surgically removed.

“Our specialists understand the complex nature of congenital anomalies as well as the challenges these patients face as children and as adults," Dr. Frim said. The program includes experts in neurosurgery, neurology, orthopaedic surgery, urology, rehabilitation medicine and genetics.

In addition, the Center for the Surgical Treatment of Obesity was re-designated an Astina Institute of Quality. The University of Chicago Medicine is the only institution in the Chicagoland area, and one of only a handful of programs nationally, that offers all four minimally invasive bariatric surgeries, including laparoscopic duodenal switch. Patients who qualify for bariatric surgery are supported by our team of experienced surgeons, Vivek Franchard, MD, Mustafa Hussein, MD, and John Averly, MD, as well as multidisciplinary experts in nursing, nutrition and psychology. This team approach ensures patients receive the unique treatment they need to acclimate and succeed after surgery.

Along with the Astina designation, the center holds the American Society for Bariatric Surgery’s designation as a Center of Excellence. Our center is one of few bariatric surgery programs in the nation that meets the criteria to achieve this important distinction. In the past year, our surgeons have been invited to speak regionally, nationally and internationally, and have been selected to perform live cases broadcast to major surgical regional and international conferences. Taken together, these distinctions acknowledge the collective expertise of our surgeons and staff and the commitment our medical center has toward high-quality care for obese patients.

We are also proud to have been designated as a comprehensive von Hippel-Lindau disease (VHL) Clinical Care Center for children and adults by the nonprofit organization VHL Family Alliance this year. The center was co-founded by Raymond Grogan, MD, and Sarah Nielsen, MS, CGC, genetic counselor. Dr. Grogan and Olufunmilayo I. Olopade, MD, serve as co-directors, while Ms. Nielsen is the center’s coordinator. The center includes the expertise of several other physicians in a wide range of subspecialties, including urology, neurosurgery, otolaryngology, gastroenterology, endocrinology, ophthalmology and more.

Our experts develop specialized care plans to meet patients’ specific needs, including a comprehensive surveillance plan to screen for early signs of VHL complications, and consultations with our experienced specialists. The center also offers genetic counseling and genetic testing for individuals at risk of VHL due to their personal or family history. Patients can also access resources to learn about and adjust to their new diagnosis.

“Our VHL Center, the only one of its kind in Illinois, is designed to meet a very specific need," Dr. Grogan said. “The multidisciplinary care we provide is the only way to take care of these complex patients. As soon as they walk through our doors, they’re immediately connected to the full array of specialty care they need to live with this disease.”

“A unique feature of our program is its close integration with our NIH-funded basic science research, which allows us to model vascular malformations and explore potential new treatments in the preclinical phase.”—Jessica Kanesh, MD

Professor of Surgery
Chief, Section of Pediatric Surgery

Department of Surgery 2015 Annual Report
The Section of Cardiac and Thoracic Surgery is dedicated to providing the highest level of care through our robust clinical practice and innovation in medical research. Our section, built on a strong foundation of expertise and experience, was the first to use the da Vinci robot to perform coronary artery bypass surgery and boasts the largest heart transplant program in Illinois. Our surgeons continue this tradition by pioneering new and innovative ways to treat the most complex diseases, including heart and multi-organ transplants, ventricular assist device implantation, complex cardiac reconstruction and minimally invasive heart valve and arrhythmia surgeries.

Our commitment to superior patient care is also supported by our extensive research ventures, leading to groundbreaking discoveries and, ultimately, better care for cardiac and thoracic patients. Our basic and translational research endeavors are regularly supported by the National Institutes of Health, and our significant collaborators include the Argonne National Laboratory, the Department of Health Studies and others.

We are proud to have welcomed Christopher Wigfield, MD, to our section this year. Dr. Wigfield, an authority in minimally invasive thoracic surgery, possesses strong subspecialty expertise in lung transplantation. He will join a transplant team that has worked together since 1998.

Delayed cardiomyopathy, or heart failure, is a frequent complication induced by doxorubicin therapy, a common anticancer drug used for treatment of many forms of cancer. Mahesh Gupta, PhD, received a $1.77 million grant from the National Institutes of Health to study the cardiotoxicity of anticancer drugs and the role of cardioprotective sirtuins to block doxorubicin toxicity to the heart.

During a panel discussion in October 2012, Valluvan Jeevanandam, MD, was invited to speak at the Bloomberg Healthcare Innovations Conference to discuss new discoveries in cardiovascular device therapies. This year, Wickii Vigneswaran, MD, and his team performed the 100th lung transplant since the inception of the lung transplantation program. We continue maintaining one of the busiest transplant centers in the region.

Mark Ferguson, MD, represented our institution at the European Society of Thoracic Surgeons’ annual meeting in Essen, Germany. He presented his expertise on recent advances in the management of Boerhaave’s syndrome, Barrett’s high grade dysplasia and early adenocarcinoma.

Valluvan Jeevanandam, MD, was invited to speak at the Bloomberg Healthcare Innovations Conference to discuss new discoveries in cardiovascular device therapies.
Our general surgeons are recognized for their subspecialty surgical expertise in a wide range of diseases, from pancreatic and colorectal cancer to esophageal diseases and morbid obesity. The section offers a comprehensive, multidisciplinary approach and advanced surgical techniques, including laparoscopic surgery, to achieve the most optimal outcomes for patients.

Our mission toward optimal patient outcomes would not be complete without the brilliant work of our clinicians and scientists. Researchers in the Section of General Surgery are conducting many studies designed to understand the deep complexity of diseases and establish cutting-edge therapies to fight them. Our ongoing studies include research on the effects of fumes and bariatric surgery on breast cancer risk and the pathophysiology of surgical infections.

Endocrine surgeons use advanced state-of-the-art imaging as a powerful aid for surgical cases.
The Section of Neurosurgery at the University of Chicago Medicine continues to evolve and innovate towards novel treatments of neurosurgical disease. With several of our faculty ranked among the Best Doctors or Top Doctors, we continue to provide outstanding clinical care to even the most complicated of patient cases.

Our faculty also provides comprehensive follow-up care to both pediatric and adult patients throughout their lifetimes, a feature unique to the University of Chicago Medicine. Our volumes of patients seeking treatment for brain and spine tumors, new vascular disorders, neck, back and spine disease, pediatric and congenital disorders of the nervous system, movement disorders or epilepsy continue to grow, as individuals from all over the country and overseas visit our state-of-the-art neuro-ICU in the Center for Care & Discovery. Clinical neurosurgical care at the University of Chicago Medicine has never been better.

The section continues to also support innovative developments in its basic and translational research programs. Physicians in the brain tumor program, for instance, are constructing new tumor models, drug delivery methods and gene therapy to bring groundbreaking treatment options to the forefront. Our epilepsy researchers are also working to make treatment more effective and less invasive by collaborating with brain imaging experts. Our faculty is also collaborating with engineers to develop realistic simulation models that will train the neurosurgical residents and physicians of the future. These devices have already been incorporated at many leading institutions as a teaching tool for neurosurgery.

Issam A. Awad, MD, MSc, MA

Issam A. Awad, MD, received federal funding for a multi-center study that seeks to understand the role of Rho kinase inhibitors as therapy for cerebral cavernous malformations, a disease he has studied for more than 25 years. Dr. Awad was also named the John Harper Seeley Professor of Surgery and was awarded the Shield of Distinction and Merit from the Lebanese Order of Physicians.

U.S. News & World Report included David Frim, MD, PhD, in its Best Doctor: Top 1% in the Nation list. Dr. Frim, an internationally recognized expert in congenital anomalies of the nervous system, was also named vice president of the Chicago Neurological Society.

Javad Hekmat-Panah, MD

Our 2013 neurosurgical education symposiums focused on mild head trauma, neurovascular disease and more.

Maciej Leaniak, MD

Maciej Leaniak, MD, was named the Outstanding Pole Abroad “Wybitny Polak” by the Republic of Poland.

Issam A. Awad, David Frim, Bakhtiar Yamini

Issam A. Awad, David Frim and Bakhtiar Yamini were included in this year’s list of Best Doctors in America, representing the top five percent of doctors nationwide.

Bakhtiar Yamini, MD

Bakhtiar Yamini, MD, was promoted to associate professor of neurosurgery. In a study published this year in the journal Nanomedicine, Dr. Yamini and his colleagues showed that nanoparticles carrying a commonly used chemotherapy drug called temozolomide reduced the size of malignant gliomas and extended survival in animal models.

Javad Hekmat-Panah, MD

Our neurovascular research team is continuing to investigate novel molecular treatments to replace standard surgery in parallel with clinical trials aimed at optimizing today’s surgical techniques.
The Section of Ophthalmology and Visual Science provides a wide range of comprehensive medical and surgical treatments for ocular diseases in patients of all ages. Our faculty offers the full range of surgical and medical services, such as refraction and contact lens fitting; cornea, cataract and external disease treatment; oculoplastics and orbital surgery as well as vitreoretinal surgery. We are proud to offer these services at the Duchossois Center for Advanced Medicine and the new Center for Care & Discovery.

The section is currently enrolled in many different clinical trials investigating topics ranging from dry eye disease to diabetic retinopathy. New trials have focused on macular degeneration by conducting randomized, controlled studies to evaluate the effects of different treatments on patients with choroidal neovascularization secondary to age-related macular degeneration.

Seenu Hariprasad, MD, received a $603,000 grant for his research, which seeks to determine the efficacy of gevokizumab as treatment for non-infectious, intermediate, posterior and panuveitis. Dr. Hariprasad’s other robust research interests revolve around treatments for age-related macular degeneration, retinal vascular occlusion, endophthalmitis and diabetic retinopathy. He was also named a Top Doctor by U.S. News & World Report.

Louise Sclafani, OD, was named president of the Women of Vision Optometry. She was also an invited speaker to the annual meetings of the American Optometric Association, the Mountain West Council of Optometry, the Georgia Optometric Association and the East-West Eye Conference. Dr. Sclafani also served as a panel member at the American Academy of Optometry’s Section on Cornea, Contact Lenses and Refractive Technology Symposium, “New Frontiers in Corneal Transplantation.”

Jeffrey Nichols, MD, and Mark Greenwald, MD, were named to this year’s list of Best Doctors in America.

Rima McLeod, MD, one of the nation’s foremost experts on toxoplasmosis, reported a novel approach to treating this deadly parasitic disease. The approach combines short strands of “antisense” nucleic acid-like material with a small peptide that can transport those strands through cell membranes and into parasites, where they disrupt genetic signals. When tested in newly infected mice, it reduced the number of viable parasites by more than 90 percent. Her research group has also made a protective vaccine and discovered human susceptibility genes to toxoplasmosis and how they work. They have found that different strains of toxoplasma are associated with different severities of disease at birth, different amounts of prematurity and different symptoms in adults, but all respond to treatment of the active infection. For her research achievements, Dr. McLeod was an invited speaker at the International Toxoplasmosis Meeting at Saint Catherine’s College in Oxford, England.

Kamal El Bissati, PhD, was the recipient of a special Knights Templar Scholar Award to study guanine synthase of Toxoplasma gondii and an award from the King of Morocco to establish a Maternal Child Toxoplasmosis and Genomics Center in Rabat, Morocco.

Steven Shevell, PhD, E. H. Moore Distinguished Service Professor, was elected a fellow of the American Association for the Advancement of Science. He also served as the keynote speaker at the International Colour Association 2012 meeting in Taipei, Taiwan and as an invited speaker at the Symposium in Memory of Yves Le Grand in Paris, France.

This year, Michael A. Saidel, MD, clinical assistant professor, published a research article on the relationship of keratoconus and sleep apnea syndrome. This particular paper was featured on the front cover of Cornea Journal. His work on keratoconus, zoster and corneal infections has been presented widely in 2013.
The Section of Otolaryngology–Head and Neck Surgery (OHNS) utilizes advanced surgical and non-surgical techniques to treat the most complex ear, nose and throat conditions. In addition to common screenings, such as hearing tests, our surgeons provide diagnostic tests and surgical procedures that are only available at leading academic and research institutions. The section consists of subspecialties that focus on specific diseases, such as speech language and voice disorders, allergies, sinusitis, hearing disorders, head and neck cancers, vocal cord disorders, hearing loss and more. A new program, unique in the Chicagoland area, is The Comprehensive Listening Center, which employs a multidisciplinary approach to treat hearing disorders.

Our otolaryngologists are also fervent scientists with diverse research interests. One particularly exciting research development involves Project ASPIRE, the brainchild of Dana Suskind, MD. Project ASPIRE seeks to understand the health disparities among children with cochlear implants who come from different socioeconomic statuses. Research suggests children from a lower socioeconomic background face more barriers after surgery. This research, and its sister project the Thirty Million Words Initiative, have sparked the attention of The White House and other advocacy agencies.

Fuad Baroody, MD, received the Distinguished Service Award from the American Academy of Otolaryngology–Head and Neck Surgery Foundation. Along with Mohamed Elsatih Bashir, PhD, Robert Naclerio, MD, identified new potential biomarkers of the allergic immune response in allergic pollen using lipidomic analyses of pollen lipids.

Jayant Pinto, MD, presented lectures as an invited guest faculty at the 2012 Congress of the Pan-American Association of Otorhinolaryngology in Mar Del Plata, Argentina. The conference brought together otolaryngologists from across Latin America, and included speakers from France, Spain and Germany. Dr. Pinto’s talks were titled “Aging and Rhinosinusitis” and “Genetic Factors in Chronic Rhinosinusitis.”

Dana Suskind, MD, was featured in a Remarkable Woman profile in the Chicago Tribune. Dr. Suskind’s research on her Thirty Million Words project was also featured in the New York Times for its social science implications in public policy.

Drs. Baroody and Naclerio, Ernest Mhoon, MD, and Kerstin Stenson, MD, were named to this year’s list of Best Doctors in America. Drs. Stenson and Baroody were recognized as Distinguished Faculty Award Winners from the Department of Surgery in the Senior Award category. The Faculty Advisory Committee selects these individuals for their records of accomplishment at the University of Chicago Medicine.
Pediatric Surgery

The Section of Pediatric Surgery offers world-renowned expertise and innovative treatment in all aspects of pediatric surgical care. Our faculty is specially trained in the latest minimally invasive techniques and operate in state-of-the-art facilities, all means to optimizing the surgical care experience of our youngest patients. This year, the section welcomed Jessica Kandel, MD, as its new section chief and professor of surgery. Under her leadership, the section will continue providing leading-edge, compassionate surgical care for childhood diseases, including congenital anomalies, cancer, abdominal abnormalities, inflammatory bowel disease, trauma injuries and median arcuate ligament syndrome. New to the section is the vascular anomalies group, which is helmed by Dr. Kandel.

Our surgeons continue to conduct a broad range of studies, which include research in optimal treatment of early uncomplicated appendicitis, pediatric solid tumor angiogenesis as well as patient safety in pediatric surgery. In work initiated by the late Dr. Donald Liu, and currently conducted by Valeriy Poroyko, PhD, stool and formula/breast milk samples are collected from neonatal patients, and the microbiome analyzed. The long-range goal of this research is to identify the factors that contribute to pathogenic bacteria propagation and any protective factors.

Jessica Kandel, MD, was named professor of surgery, section chief of pediatric surgery and surgeon-in-chief at the University of Chicago Medicine Comer Children’s Hospital.

Mark Slidell, MD, MPH, was accepted into the Surgical Outcomes Club Research Fellowship Program. The newly created one-year Surgical Outcomes Club Research Fellowship Program provides an avenue for young investigators to acquire the skills and knowledge to develop, execute and publish research studies in the field of surgical outcomes and health services research under the guidance of high-quality mentors and advisors.

In addition to clinical practice, continuing medical education is a fundamental mission shared by our pediatric surgeons. This year, our faculty visited many institutions, sharing their knowledge and expertise in pediatric diseases. Deborah Loeff, MD, delivered a presentation on minimal access surgery to pediatricians at Edward Hospital in Naperville, Ill. Andrea Lo, MD, also presented on pediatric surgical emergencies at the hospital.

Dr. Loeff was invited to serve as an ad hoc reviewer for articles submitted to the Journal of Pediatric Surgery. She was also appointed to the ethics and advocacy committee of the American Pediatric Surgical Committee.

A pediatric pedestrian safety study is currently underway to identify local environmental factors that contribute to childhood pedestrian injury events at our Pediatric Trauma Center. Our surgeons hope to utilize the study findings to modify the environment and reduce the risk of childhood pedestrian injuries within our local community.

Grace Mak, MD, served as a representative of our institution at several regional and national pediatric surgical associations. This year, she was welcomed as a new member of the Midwest Pediatric Surgery Consortium and a regional chapter of the Trauma Advisory Board, as well as a subcommittee member of the American Pediatric Surgical Association, focusing on simulation as a tool for surgical education. Dr. Mak is also the program director of the Pediatric Surgery Fellowship and institutional principal investigator for the Midwest Pediatric Surgical Research Consortium.

Section Highlights and Accomplishments

Jessica Kandel, MD (center), joins us from Columbia University.
Our surgeons in the Section of Plastic & Reconstructive Surgery are some of the most authoritative figures in their respective fields. Their advanced surgical skills and innovative research are pushing the boundaries of what we know about plastic surgery and reconstruction, particularly in the areas of post-mastectomy breast reconstruction, burns, maxillofacial disorders and cold hands syndrome. Our excellent patient outcomes could not be achieved without the strong multidisciplinary relationships forged across our robust clinical programs over many years.

A significant component of our educational efforts is the Chicago Breast Reconstruction Symposium. This annual meeting brings together experts across the spectrum of breast cancer care, including radiation oncology, oncology, breast surgery and reconstruction. In addition, our surgeons’ research has led us to the forefront of reconstructive surgery. They continue to conduct federally and non-federally funded studies on outcomes research for Raynaud’s and pediatric craniofacial anomalies, trauma molecular regeneration, fat grafting and breast reconstruction techniques.

Lawrence J. Gottlieb, MD, was chosen as one of this year’s Best Doctors in America. Raphael C. Lee, MD, ScD, Paul S. and Alene T. Russell Professor of Surgery, Medicine and Organismic Biology, was chosen to serve on the National Advisory Council for Biomedical Imaging and Bioengineering. He was also selected for membership to the National Academy of Engineering and the International Academy for Medical and Biological Engineering.

Julie E. Park, MD, chaired the newly formed Nemerle’s Microsurgery Group of the American Society for Reconstructive Microsurgery and created the first NMMG travel fellowship. Russell R. Reid, MD, PhD, was appointed to the editorial board for the Journal of Craniomaxillofacial Trauma and Reconstruction.

David H. Song, MD, MBA, was invited into the Bucksbaum Institute as a senior faculty scholar. The senior faculty scholars are selected for their outstanding achievements as clinicians, teachers and mentors. They will work with and help train and advise Bucksbaum Institute students, junior faculty and associate junior faculty scholars. Lawrence S. Zachary, MD, was honored by Castle Connolly Medical as a Top Doctor for Ten Years.

This year’s Chicago Breast Reconstruction Symposium drew 124 attendees from all corners of the country. Engaging panel discussions and presentations focused on coordination of reconstruction with adjuvant radiation therapy, an aspect of breast cancer care that is a subject of intense scrutiny and controversy.

Lawrence J. Gottlieb, MD, was chosen as one of this year’s Best Doctors in America. Raphael C. Lee, MD, ScD, Paul S. and Alene T. Russell Professor of Surgery, Medicine and Organismic Biology, was chosen to serve on the National Advisory Council for Biomedical Imaging and Bioengineering. He was also selected for membership to the National Academy of Engineering and the International Academy for Medical and Biological Engineering.

Julie E. Park, MD, chaired the newly formed Nemerle’s Microsurgery Group of the American Society for Reconstructive Microsurgery and created the first NMMG travel fellowship. Russell R. Reid, MD, PhD, was appointed to the editorial board for the Journal of Craniomaxillofacial Trauma and Reconstruction.

Lawrence J. Gottlieb, MD, was chosen as one of this year’s Best Doctors in America. Raphael C. Lee, MD, ScD, Paul S. and Alene T. Russell Professor of Surgery, Medicine and Organismic Biology, was chosen to serve on the National Advisory Council for Biomedical Imaging and Bioengineering. He was also selected for membership to the National Academy of Engineering and the International Academy for Medical and Biological Engineering.

Julie E. Park, MD, chaired the newly formed Nemerle’s Microsurgery Group of the American Society for Reconstructive Microsurgery and created the first NMMG travel fellowship. Russell R. Reid, MD, PhD, was appointed to the editorial board for the Journal of Craniomaxillofacial Trauma and Reconstruction.

Lawrence J. Gottlieb, MD, was chosen as one of this year’s Best Doctors in America. Raphael C. Lee, MD, ScD, Paul S. and Alene T. Russell Professor of Surgery, Medicine and Organismic Biology, was chosen to serve on the National Advisory Council for Biomedical Imaging and Bioengineering. He was also selected for membership to the National Academy of Engineering and the International Academy for Medical and Biological Engineering.

Julie E. Park, MD, chaired the newly formed Nemerle’s Microsurgery Group of the American Society for Reconstructive Microsurgery and created the first NMMG travel fellowship. Russell R. Reid, MD, PhD, was appointed to the editorial board for the Journal of Craniomaxillofacial Trauma and Reconstruction.

Lawrence J. Gottlieb, MD, was chosen as one of this year’s Best Doctors in America. Raphael C. Lee, MD, ScD, Paul S. and Alene T. Russell Professor of Surgery, Medicine and Organismic Biology, was chosen to serve on the National Advisory Council for Biomedical Imaging and Bioengineering. He was also selected for membership to the National Academy of Engineering and the International Academy for Medical and Biological Engineering.

Julie E. Park, MD, chaired the newly formed Nemerle’s Microsurgery Group of the American Society for Reconstructive Microsurgery and created the first NMMG travel fellowship. Russell R. Reid, MD, PhD, was appointed to the editorial board for the Journal of Craniomaxillofacial Trauma and Reconstruction.

Lawrence J. Gottlieb, MD, was chosen as one of this year’s Best Doctors in America. Raphael C. Lee, MD, ScD, Paul S. and Alene T. Russell Professor of Surgery, Medicine and Organismic Biology, was chosen to serve on the National Advisory Council for Biomedical Imaging and Bioengineering. He was also selected for membership to the National Academy of Engineering and the International Academy for Medical and Biological Engineering.

Julie E. Park, MD, chaired the newly formed Nemerle’s Microsurgery Group of the American Society for Reconstructive Microsurgery and created the first NMMG travel fellowship. Russell R. Reid, MD, PhD, was appointed to the editorial board for the Journal of Craniomaxillofacial Trauma and Reconstruction.

Lawrence J. Gottlieb, MD, was chosen as one of this year’s Best Doctors in America. Raphael C. Lee, MD, ScD, Paul S. and Alene T. Russell Professor of Surgery, Medicine and Organismic Biology, was chosen to serve on the National Advisory Council for Biomedical Imaging and Bioengineering. He was also selected for membership to the National Academy of Engineering and the International Academy for Medical and Biological Engineering.

Julie E. Park, MD, chaired the newly formed Nemerle’s Microsurgery Group of the American Society for Reconstructive Microsurgery and created the first NMMG travel fellowship. Russell R. Reid, MD, PhD, was appointed to the editorial board for the Journal of Craniomaxillofacial Trauma and Reconstruction.
The University of Chicago Medicine’s transplant surgeons are world-renowned experts in the areas of kidney, liver, islet and pancreas transplantation, as well as complex surgical procedures requiring transplantation of multiple organs. Our high standard of patient care stems from a strong history of “firsts,” including the first-ever animal organ transplant, performed by University of Chicago’s Alexis Carrel in 1904. Dr. Carrel would go on to win a Nobel Prize for his achievements. Our section went on to perform the first successful living-donor liver transplant in the world and the first heart-liver-kidney transplant in the world. Currently, our institution offers more transplant options than any other hospital in the state.

This year, the section received generous federal and non-federal funding that will support our investigative efforts to understand diseases and improve the outcomes of transplant patients all over the globe. Our research includes studies on infections and the stability of transplantation tolerance as well as randomized clinical trials to test the safety and efficacy of certain medications in pancreatic islet transplantation.

Yolanda Becker, MD, was appointed vice-chair of the OPTN/UNOS Policy Oversight Committee.

Anita Chong, PhD, received $5.6 million in funding from the National Institutes of Health to study “Infections and the Stability of Transplantation Tolerance.”

Piotr Witkowski, MD, PhD, received $1.9 million in research funding to assess the safety and efficacy of reparixin in pancreatic islet transplant procedures.

The University of Chicago Medicine hosted a surgical research conference in Beijing. The meeting focused on molecular mechanisms and bioengineering for surgical diseases, and the keynote address was delivered by Jack Gilbert, BSc, PhD, professor and environmental microbiologist at the University of Chicago.

The meeting was coordinated by J. Michael Millis, MD. He represented our institution at several national and international professional societies and conferences this year, including the International Pediatric Transplant Association and the United Network for Organ Sharing.

Dr. Millis, Dr. Becker, John Renz, MD, PhD, and J. Richard Thistlethwaite, MD, PhD, were selected for this year’s list of Best Doctors in America.

Dr. Witkowski was an invited speaker at the 2012 Indo US Science and Technology Forum in India, where he presented on pancreas procurement and preservation for the pancreatic islet isolation and transplantation.
The Section of Urology is dedicated to providing the best available care to our patients, generating new medical knowledge and educating the next generation of urology leaders. We are proud to be the leading institution in the state for minimally invasive treatment options of urological cancer and disease. As one of the top urology programs in the country, our surgeons offer specialized expertise across the entire spectrum of urologic care, including urologic oncology, reconstruction, salvage procedures and female urologic surgery, frequently utilizing the most advanced surgical techniques to perform surgery. Indeed, our faculty members are also some of the most experienced robotic surgeons in the nation.

Our urologists also devote much of their efforts to scientific discovery, with a particularly strong research interest in urologic oncology. Currently, our laboratories are combining conventional surgical therapies with standard and experimental adjuvant treatments to improve the understanding of molecular, genetic and biochemical pathophysiologic processes of urological cancers. In addition, our ongoing clinical investigations have focused on quality of life after prostatectomies, the effects of green tea capsules in men with prostate intraepithelial neoplasia and more.

Gregory Bales, MD, was named president of the Illinois State Urological Society.

Scott Eggener, MD, was welcomed into the Bucksbaum Institute for Clinical Excellence as a senior faculty scholar. In this role, Dr. Eggener will train and advise Bucksbaum Institute students, junior faculty and associate junior faculty scholars. He was also named a co-director of the section’s prostate cancer program. The program’s other co-director, Gregory Zagaja, MD, will continue his clinical and outreach activity, while Dr. Eggener assumes the research and academic leadership of the program.

To recognize the international outreach of his pediatric urologic research, the 9th Annual Congress of the Working Group for Pediatric Urology of the German Society of Pediatric Surgery awarded Mohan Gundeti, MD, the award for the International Guest Overseas Lecture. Dr. Gundeti was also named the new consulting editor on pediatrics for the British Journal of Urology International.

Carrie Rinker-Schaeffer, PhD, was named president of the Metastasis Research Facility. Arieh Shalhav, MD, performed the University of Chicago Medicine’s 5,000th robotic procedure, making our institution the 22nd worldwide to reach that milestone.

The 2013 list of Best Doctors in America includes Gary Steinberg, MD, and Dr. Eggener.
As one of the leading vascular centers in Chicago, the section is dedicated to providing special expertise in many areas, including abdominal aortic aneurysms, peripheral arterial disease, stroke and median arcuate ligament syndrome. Many of our collaborations have led to established comprehensive centers, including the Center for Aortic Diseases, one of the busiest of its kind in the region, and the Center for Venous Disease. Our section also boasts one of the first accredited vascular ultrasound laboratories, which is staffed by our team of board-certified imaging technologists. The vascular laboratory testing provides more detailed evaluations of a patient’s vascular condition before surgery, allowing our surgeons to more deeply understand their needs.

In the realm of scientific research, our vascular surgeons are directing their investigative efforts toward gene therapy, the prevention of restenosis and venous histology. Specific studies include the investigation of the biomechanics of intimal hyperplasia and the imaging and molecular determinants of carotid atherosclerotic plaque vulnerability. The section continues to provide clinical services at our affiliate Weiss Memorial Hospital in Chicago and in Matteson, Ill.

The Bucksbaum Institute for Clinical Excellence, an initiative designed to improve doctor-patient communication and clinical decision making, appointed Ross Milner, MD, as the first Bucksbaum master clinician. In this role, Dr. Milner will mentor faculty and student scholars and explore new methods to improve the doctor-patient relationship. His investigation includes a pilot grant from the Bucksbaum Institute to study professionalism among surgery residents.

Christopher Skelly, MD, was chosen as a Top Doctor by U.S. News & World Report. Dr. Skelly was also appointed a fellow of the American Heart Association. Election as a fellow of the American Heart Association recognizes an individual’s scientific and professional accomplishments as a cardiovascular or stroke expert as well as volunteer leadership and service.

The University of Chicago Medicine is one of 200 hospitals in the country that will participate in the Vascular Quality Initiative. This national quality improvement project will collect and analyze vascular outcomes data to develop high standards of care for vascular patients everywhere. Robert Steppacher, MD, will lead these efforts on behalf of the institution.

The Section of Vascular Surgery hosted a free abdominal aortic aneurysm screening at Matteson, Ill.

Darwin Eton, MD, and Dr. Milner were named distinguished reviewers for the Journal of Vascular Surgery. This designation is based on the quality, quantity and timeliness of their reviews and is reserved for the publication’s top reviewers. In addition, Dr. Eton also received the distinction of being a key reviewer, which is the group from whom future members of the Editorial Board are selected.

Matthew Blecha, MD, clinical associate, presented “Acute Limb Ischemia for Primary Physicians” at the American Medical Forum in Northerland, Ill.

Our MALS team brings together the expertise of vascular surgeons, pediatric surgeons, advanced practice nurses, social workers, psychologists and radiologists.
SELECTED HONORS

CARDIOVASCULAR & THORACIC SURGERY
Mark K. Ferguson, MD
Co-editor, CTISNet

Walid Vigneswaran, MD
Abstract Reviewer, International Society of Heart and Lung Transplantation

Gerhard Ziemer, MD, PhD
Chicago's Top Doctors, Chicago magazine

AMERICA'S TOP DOCTORS, U.S. News & World Report

GENERAL SURGERY
John Alverdy, MD
Scientific Advisory Committee Chair, The University of Chicago
Senior Faculty Scholar, Bucksbaum Institute for Clinical Excellence, The University of Chicago

Peter Angelos, MD, PhD
Excellence in Medical Ethics Award, American Association of Clinical Endocrinology
Joel J. Reznek Lecturer, Society of University Surgeons
Chair, Endocrine Surgery Committee, Society of Surgical Oncology
Secretary-Treasurer, United States Executive Council, Society of Surgical Oncology
Councilor-at-Large, Society of Surgical Oncology Training Committee
Vice Chairman, Society of Surgical Oncology

Jeffrey Matthews, MD
Member, James IV Association of Surgeons, Inc.
Best Doctors in America, Best Doctors, Inc.
President Elect, Chicago Surgical Society

Eugene Choi, MD
Scientific Program Committee, Society of Surgical Oncology
Grants and Fellowship Committee, Society of Surgical Oncology
Representative, Society for Surgery of the Alimentary Tract
Member, Molecular Diagnostic Working Group

Marc Fattal, MD
Program Committee, Society for Surgery of the Alimentary Tract (SSAT)
President, International Society for Digestive Surgery
Councilor, International Society of Surgery

Mitchell C. Peaner, MD
America's Top Doctors, Castle Connolly Medical Ltd.
Best Doctors in America, Best Doctors, Inc.
Chairman, Program Committee, Western Surgical Association

Gary An, MD
Editorial Board, Computational and Mathematical Methods in Medicine

Tina Jakowitlak, MD
Senior Faculty Member, Bucksbaum Institute for Clinical Excellence, The University of Chicago

Swati Kulakarni, MD
Member, The American Society of Breast Surgeons
Member, Chicago Surgical Society
Member, Society of University Surgeons

Kevin Rogin, MD
Vice Chairman, Society of Surgical Oncology Training Committee
Councillor-at-Large, Society of Surgical Oncology
Executive Council, Society of Surgical Oncology
Excellence in Teaching Award, Department of Surgery, University of Chicago

Jeffrey Matthews, MD
Member, James IV Association of Surgeons, Inc.
Best Doctors in America, Best Doctors, Inc.
President Elect, Chicago Surgical Society

Swati Kulakarni, MD
Senior Faculty Member, Bucksbaum Institute for Clinical Excellence, The University of Chicago

Javad Helmsat-panah, MD
Distinguished Educator/Mentor Lifetime Achievement Award

Eugene Choi, MD
Scientific Program Committee, Society of Surgical Oncology
Grants and Fellowship Committee, Society of Surgical Oncology
Representative, Society for Surgery of the Alimentary Tract
Member, Molecular Diagnostic Working Group

Raymon Gragen, MD
Co-Director, van Hiert Lindeau Clinical Care Center, The University of Chicago
Junior Faculty Scholar, Bucksbaum Institute for Clinical Excellence, The University of Chicago

Mukta Kranke, MD
Excellence in Teaching Award, Department of Surgery, The University of Chicago

Konstantin Umaneky, MD
Excellence in Teaching Award, Department of Surgery, The University of Chicago

NEUROSURGERY
Iseam A. Awa'd, MD, MS, MA (honorary)
The Sir Victor Honson Lecturer, National Hospital for Neurology and Neurosurgery, University College
The John Harper Sessay Professorship, The University of Chicago
Shield of Distinction and Merit, The Lebanese Order of Physicians

David M. Frim, MD, PhD
Best Doctor: Top 1% in the Nation, U.S. News & World Report
Patient's Choice Award, Patient's Choice, Inc.
Representative from the Muscol Society, American Academy of Ophthalmology

Louise Scalfani, OD
Legado Award, American Optometric Association Corema and Contact Lens Honorary Kentucky Colonel, Kentucky Optometric Association
President, Women of Vision in Optometry

Javad Helmsat-panah, MD
Distinguished Educator/Mentor Lifetime Achievement Award

Maejig S. Lesniak, MD
Outstanding Pole Abroad “Wojtyla Polak,” Republic of Poland

Distinguished Alumni Award, Johns Hopkins Neurosurgery

John D. Arnold Mentor Award for Sustained Excellence in Mentoring Medical Students, The University of Chicago

St. Ignatius College Prep Alumni Award for Excellence in Medicine

OPTOMETRY & VISUAL SCIENCE

Mark Greenwald, MD
Annual Distinguished Alumni Visiting Professorship, Departments of Ophthalmology and Pediatrics, Children's National Medical Center
Senior Honor Award, American Academy of Ophthalmology

Seenu Hariprasad, MD
Senior Honor Award, American Academy of Ophthalmology and Pediatrics,

David M. Frim, MD, PhD
Best Doctor: Top 1% in the Nation, U.S. News & World Report
Patient's Choice Award, Patient's Choice, Inc.
Representative from the Muscol Society, American Academy of Ophthalmology

Louise Scalfani, OD
Legado Award, American Optometric Association Corema and Contact Lens Honorary Kentucky Colonel, Kentucky Optometric Association
President, Women of Vision in Optometry

Javad Helmsat-panah, MD
Distinguished Educator/Mentor Lifetime Achievement Award

Maejig S. Lesniak, MD
Outstanding Pole Abroad “Wojtyla Polak,” Republic of Poland

Distinguished Alumni Award, Johns Hopkins Neurosurgery

John D. Arnold Mentor Award for Sustained Excellence in Mentoring Medical Students, The University of Chicago

St. Ignatius College Prep Alumni Award for Excellence in Medicine

OPTOMETRY & VISUAL SCIENCE

Mark Greenwald, MD
Annual Distinguished Alumni Visiting Professorship, Departments of Ophthalmology and Pediatrics, Children's National Medical Center
Senior Honor Award, American Academy of Ophthalmology

Seenu Hariprasad, MD
Senior Honor Award, American Academy of Ophthalmology and Pediatrics,

David M. Frim, MD, PhD
Best Doctor: Top 1% in the Nation, U.S. News & World Report
Patient's Choice Award, Patient's Choice, Inc.
Representative from the Muscol Society, American Academy of Ophthalmology

Louise Scalfani, OD
Legado Award, American Optometric Association Corema and Contact Lens Honorary Kentucky Colonel, Kentucky Optometric Association
President, Women of Vision in Optometry

Otolaryngology-Head & Neck Surgery

Fraid Baronody, MD
Head and Neck Surgery Foundation Distinguished Service Award, American Academy of Otolaryngology
Top Doctor for 2013, Pediatric Otolaryngology, Castle Connolly Medical Ltd

Distinguished Clinician Award, Senior Faculty, The University of Chicago Medicine and Biological Sciences.

Jacquelyne Corey, MD
Top 1% of Physicians, U.S. News & World Report


Robert Naclerio, MD
Editorial Board, Journal of Allergy and Clinical Immunology

Dana Suklind, MD
Remarkable Woman Profile, Chicago Tribune

Michael Gluth, MD
Valerie Aker Research Prize, Ear Science Institute Australia & University of Western Australia School of Surgery

Teacher of the Year, Department of Otolaryngology, University of Arkansas for Medical Sciences

PEDIATRIC SURGERY

Mark Stadler, MD, MPH
Research Fellowship Award, Surgical Outcomes Club Research Fellowship Program

PLASTIC & RECONSTRUCTIVE SURGERY

Lawrence J. Gottlieb, MD
Best Doctors, U.S. News & World Report

Ameicano Top Doctors, Castle Connolly Medical Ltd.

1st place, Trunk, Genitalia and Chest, Wall Category in WSRM Best Normal Competition, World Society of Microsurgery

David H. Song, MD, MBA
Senior Faculty Scholar, Bucklebaum Institute for Clinical Excellence, The University of Chicago

Invited panelist, “Profitability and Microsurgical Breast Reconstruction: Damascus or Reality,” Future of Breast Reconstruction, American Society for Reconstructive Microsurgery Annual Meeting

Editorial Board, Archives of Plastic Surgery

Associate Editor, Business Section, Aesthetic Plastic Surgery Journal

Board Vice President, Finance & Treasurer, American Society of Plastic Surgeons

Editor, Reconstructive Microsurgery Newsletter, American Society for Reconstructive Microsurgery

Russell K. Reid, MD, PhD
Assistant Editor, Pediatric/Craniofacial Section of the Plastic Surgery Education Network (PSEN)

Editorial Board, Journal of Craniofacial/Spacial Trauma and Reconstruction

Co-Chairman, A/ASIF Basic Principles in Craniomaxillofacial Fixation

Lawrence S. Zechary, MD
Top Doctor for Ten Years, Castle Connolly Medical Ltd.

TRANSPLANTATION

Anita S. Chong, PhD
Co-Chair, Basic Science Committee, The Transplantation Society

Mentor, Women in Transplantation Initiative

J. Michael Mills, MD
The Hippocrates Award

UROLOGY

Carrie Rinker-Schaeffer, PhD
President, Metastasis Research Faculty

Gregory Balas, MD
President, Illinois State Urological Society

Treasurer, Genitac Urological Society

DEPARTMENT OF SURGERY 2013 ANNUAL REPORT 27
Scott Eggener, MD
Senior Faculty Scholar, Bucksbaum Institute for Clinical Excellence, The University of Chicago
Editorial Board, Canadian Journal of Urology
Editorial Board, World Journal of Urology
Co-Director, Aspen Urological Conference
Executive Board, IVUMed

Mohan S. Gundeti, MD
Best Paper Award, European Society of Pediatric Urology (ESPU)
Award for the International Guest Overseas Lecture, 9th Annual Congress of the Working Group for Pediatric Urology of the German Society of Pediatric Surgery
Course Director, The University of Chicago Pediatric Robotic Urology Update and Live Case Demonstration Course

Donald J. Vander Griend, PhD
Young Investigator Award, The Society for Basic Urologic Research

VASCULAR SURGERY & ENDOVASCULAR THERAPY

Darwin Eton, MD
Key Reviewer, Journal of Vascular Surgery
Distinguished Fellow, Society of Vascular Surgery

Ross Milner, MD
First Master Clinician, Bucksbaum Institute for Clinical Excellence, The University of Chicago
Ambulatory Medical Director, Heart and Vascular Center, The University of Chicago
Clinical Ethics Fellow, The University of Chicago
Excellence in Teaching Award, Department of Surgery, The University of Chicago
Co-Director, Clinical Excellence Track for the Undergraduate School
America’s Top Doctors, Castle Connolly Medical Ltd.

Christopher Skelly, MD
Top Doctors, U.S. News & World Report
Fellow, American Heart Association

SURGICAL RESEARCH

Karl Matlin, PhD
Ad hoc reviewer, Special emphasis panel, NIDCR, NIH

Joel Collier, PhD
Member, Committee on Immunology
Invited speaker, Keynote address, Donor Research Seminar on Biomaterials and Tissue Engineering
Member, IACUC Committee
Co-organizer, “Design of Cell-Instructive Materials” Symposium at the 2013 Spring Meeting of the Materials Research Society
COMMUNITY OUTREACH

The Section of Cardiac and Thoracic Surgery showcased their commitment to fight against heart disease in the annual Heart Walk in Grant Park, organized by the American Heart Association. The University of Chicago Medicine was represented by 29 walk teams that raised a grand total of $54,892. L. J. Johnson, business administrator, led the section’s “Put Your Heart Into It” walk team, whose 16 walkers raised a total of $6,051. Funds raised through the annual Heart Walk benefit groundbreaking research initiatives focused on cardiovascular disease.

This year, David Frim, MD, Ralph Cannon Professor and chief of neurosurgery, served as a member of the host committee in charge of organizing A Safe Haven’s Holiday Fundraiser. A Safe Haven is a local non-profit organization dedicated to helping people transition from homelessness to sustainability. The Holiday Fundraiser specifically supported homeless veterans.

“Our responsibility as neurosurgeons goes beyond our patients to the entire community that we serve,” said Dr. Frim. “Joining our community partners to support their most worthy causes is an imperative.”

During the past year, the Section of Vascular Surgery continued its community engagement, with a particular emphasis on patient education. The section provided counseling at the Kidney Fund’s “Kidney Action Day,” an event coordinated to educate people on kidney disease and prevention. The section also offered patient education and screenings for peripheral arterial disease at the Black Tract Team, composed of faculty, staff, and families, took their biannual medical trip to the Dominican Republic. There, they teamed up with Medical Aid for Children of Latin America to work on cases at the Hospital Padre Bellini and to train residents in international humanitarian surgery.

While Dr. Song worked the plastic surgery aspect of the medical cases, Dr. Langeman contributed ear, nose and throat expertise, treating hearing problems, tympanic membrane perforations and benign tumors of the head and neck. By joining forces, both surgeons were able to innovatively work together on special cases.

One notable case involved a young man who had suffered an acaloric burn as a result of a novelty. Along with excessive scarring on his neck and face, the man had a chronic infection in his right ear that caused persistent draining and excessive pain. Dr. Song released the man’s scars to give him more mobility, while Dr. Langeman opened the man’s ears to release the infection and create a new canal. Together, the surgeons created a stent to ensure that the ear healed properly.

A few months later, Dr. Song and Dr. Langeman followed up with the patient and found he no longer suffered from infections and can now hear.

The Urology Foundation. Cyclists, which included medical professionals, cancer survivors, friends and family, cycled for 10 days through Patagonia from Argentina to Chile. This year’s ride raised approximately £450,000. Surgeons across our different sections have also traveled across the world to perform, in many cases, life-changing surgery for children and adults in developing countries. Faisal Baroody, MD, director of pediatric otolaryngology, and Mark Slidell, MD, assistant professor of otolaryngology, were invited by John P. Kreis, MD, director of intensive care, to perform a case in Haiti. In this case, a girl had choked on a foreign object, which eventually lodged into her lung. Five unsuccessful attempts were made to remove the object before UCM doctors flew to Port-au-Prince, Haiti, for three days with donated instruments.

Dr. Baroody performed the bronchoscopy to remove the foreign object. “Luckily, we were successful in retrieving the foreign object after several tries, as it was positioned very deep within her left lung. We were fortunate to have avoided a dangerous open lung procedure,” he said. “The child awoke very well and was discharged from the hospital the next day.”

Last April, Scott Eggerer, MD, associate professor of surgery and director of translational and outcomes research, led a team of eight surgeons to four hospitals in the West Bank and Gaza Strip. This team, coordinated by the Palestinian Children’s Relief Fund, was composed of surgeons from around the world, including two graduates of University of Chicago Medicine’s urologic fellowship program. Together, Dr. Eggerer and his team were able to combine their expertise in pediatric, reconstruction and oncology into an efficient collaboration for urologic cases.

David H. Song, MD, MBA, Cynthia Chow Professor of Surgery, and Alex Langeman, MD, assistant professor of surgery, took their biannual medical trip to the Dominican Republic. There, they teamed up with Medical Aid for Children of Latin America to work on cases at the Hospital Padre Bellini and to train residents in international humanitarian surgery.
# Department of Surgery by the Numbers

## Clinical Activity

<table>
<thead>
<tr>
<th>Section</th>
<th>Cases</th>
<th>Visits</th>
<th>RVUs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cardiac &amp; Thoracic Surgery</td>
<td>1,111</td>
<td>2,729</td>
<td>52,686</td>
</tr>
<tr>
<td>General Surgery</td>
<td>2,841</td>
<td>14,151</td>
<td>74,624</td>
</tr>
<tr>
<td>Neurosurgery</td>
<td>1,121</td>
<td>5,450</td>
<td>34,464</td>
</tr>
<tr>
<td>Ophthalmology &amp; Visual Science</td>
<td>785</td>
<td>14,852</td>
<td>43,254</td>
</tr>
<tr>
<td>Otolaryngology–Head &amp; Neck Surgery</td>
<td>2,229</td>
<td>17,025</td>
<td>49,977</td>
</tr>
<tr>
<td>Pediatric Surgery</td>
<td>822</td>
<td>1,623</td>
<td>16,518</td>
</tr>
<tr>
<td>Plastic &amp; Reconstructive Surgery</td>
<td>1,345</td>
<td>6,956</td>
<td>42,093</td>
</tr>
<tr>
<td>Transplantation</td>
<td>429</td>
<td>2,054</td>
<td>15,221</td>
</tr>
<tr>
<td>Urology</td>
<td>2,322</td>
<td>10,836</td>
<td>62,848</td>
</tr>
<tr>
<td>Vascular Surgery &amp; Endovascular Therapy</td>
<td>635</td>
<td>2,687</td>
<td>24,566</td>
</tr>
</tbody>
</table>

## Educational Activity

### Residents

<table>
<thead>
<tr>
<th>Section</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Surgery</td>
<td>44</td>
</tr>
<tr>
<td>Neurosurgery</td>
<td>11</td>
</tr>
<tr>
<td>Ophthalmology &amp; Visual Science</td>
<td>9</td>
</tr>
<tr>
<td>Otolaryngology–Head &amp; Neck Surgery</td>
<td>10</td>
</tr>
<tr>
<td>Plastic &amp; Reconstructive Surgery</td>
<td>12</td>
</tr>
<tr>
<td>Urology</td>
<td>16</td>
</tr>
</tbody>
</table>

### Fellows

<table>
<thead>
<tr>
<th>Section</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cardiac &amp; Thoracic Surgery</td>
<td>3</td>
</tr>
<tr>
<td>General Surgery—Colon &amp; Rectal Surgery</td>
<td>1</td>
</tr>
<tr>
<td>General Surgery—Endocrine Surgery</td>
<td>2</td>
</tr>
<tr>
<td>General Surgery—Surgical Oncology</td>
<td>5</td>
</tr>
<tr>
<td>Ophthalmology &amp; Visual Science—Vitreoretinal Surgery</td>
<td>2</td>
</tr>
<tr>
<td>Pediatric Surgery</td>
<td>2</td>
</tr>
<tr>
<td>Plastic &amp; Reconstructive Surgery</td>
<td>1</td>
</tr>
<tr>
<td>Transplantation</td>
<td>2</td>
</tr>
<tr>
<td>Urology</td>
<td>3</td>
</tr>
<tr>
<td>Vascular Surgery &amp; Endovascular Therapy</td>
<td>2</td>
</tr>
</tbody>
</table>

## Research Activity

- Total Grant Funding: $17,155,154
- Federal Funding: $12,426,069
- Active Grants: 133
- Active Clinical Trials: 53
- Peer-Reviewed Publications: 130
- Invited Presentations: 200+
This year, the University of Chicago Medicine debuted the Operative Performance Research Institute, an innovative program that aims to systemically transform surgical patient care. The program’s researchers, led by Alexander Langerman, MD, will investigate how healthcare information technology, industrial engineering and quality improvement initiatives can be optimized to advance surgical care and the training of future surgeons.

“You'll find an abundance of data in other areas of a hospital, but one place where high-quality data is lacking is in the operating room,” Dr. Langerman said. “OPRI’s mission is to set in place a streamlined method of capturing high-quality data in the operating room so surgeons can make better informed decisions that impact efficiency, teaching and patient outcomes.”

To this end, researchers will develop and implement frameworks to improve workflows in operating rooms. Dr. Langerman and his team will also utilize a special investigational technique, known as “dynamic operational mapping,” to more deeply understand how surgeons’ decisions affect these workflows.

The team is also developing personal video capture systems to allow faculty members to record how they work and online forums to discuss systems-based problems.

In June, OPRI hosted its first annual symposium at the Center for Care & Discovery, which was attended by experts in computer science, social science, medicine, business administration and other fields. The symposium focused on innovative solutions to universal problems in the operating room.

The Section of General Surgery received grant funding from the Graduate Medical Education Committee to develop and implement a five-year curriculum in systems-based practice.

The expertise of the surgical faculty and will have replay capabilities to enhance resident teaching. Dr. Langerman envisions an OR with ubiquitous data-recording capabilities. “We’re finding new ways to utilize sensors in the operating room to capture the day-to-day activities and better understand obstructions to efficient workflow and how to improve patient care,” based on work over the summer, OPRI was recently awarded an early release of the Microsoft Kinect 2.0, an advanced motion capture recording system that allows the facility to capture video systems to record how these new frameworks improve the surgical experience in real time.

The University of Chicago Medicine also hosted its first annual symposium at the Center for Care & Discovery, which was attended by experts in computer science, social science, medicine, business administration and other fields. The symposium focused on innovative solutions to universal problems in the operating room.

The Section of General Surgery received grant funding from the Graduate Medical Education Committee to develop and implement a five-year curriculum in systems-based practice. The initial implementation of the curriculum included junior residents, who participated in learning sessions, committee work and online forums to discuss systems-based problems.

This year, the curriculum will expand and include project implementation for senior residents. This new feature of the systems-based practice will allow fourth- and fifth-year residents to pick systems-based topics of their choice, such as quality improvement or documentation errors, and work with faculty to implement practical and sustainable solutions to remedy these issues.

In June, OPRI hosted its first annual symposium at the Center for Care & Discovery, which was attended by experts in computer science, social science, medicine, business administration and other fields. The symposium focused on innovative solutions to universal problems in the operating room.

The Section of General Surgery received grant funding from the Graduate Medical Education Committee to develop and implement a five-year curriculum in systems-based practice. The initial implementation of the curriculum included junior residents, who participated in learning sessions, committee work and online forums to discuss systems-based problems.

This year, the curriculum will expand and include project implementation for senior residents. This new feature of the systems-based practice will allow fourth- and fifth-year residents to pick systems-based topics of their choice, such as quality improvement or documentation errors, and work with faculty to implement practical and sustainable solutions to remedy these issues.

In June, OPRI hosted its first annual symposium at the Center for Care & Discovery, which was attended by experts in computer science, social science, medicine, business administration and other fields. The symposium focused on innovative solutions to universal problems in the operating room.

The Section of General Surgery received grant funding from the Graduate Medical Education Committee to develop and implement a five-year curriculum in systems-based practice. The initial implementation of the curriculum included junior residents, who participated in learning sessions, committee work and online forums to discuss systems-based problems.

This year, the curriculum will expand and include project implementation for senior residents. This new feature of the systems-based practice will allow fourth- and fifth-year residents to pick systems-based topics of their choice, such as quality improvement or documentation errors, and work with faculty to implement practical and sustainable solutions to remedy these issues.
<table>
<thead>
<tr>
<th>Resident/Fellow Name</th>
<th>PGY Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blake Anderson</td>
<td>1</td>
</tr>
<tr>
<td>Ryan Salvador</td>
<td>4</td>
</tr>
<tr>
<td>Joseph Pariser</td>
<td>5</td>
</tr>
<tr>
<td>Richelle Williams</td>
<td>6</td>
</tr>
<tr>
<td>Marko Rojnica</td>
<td>3</td>
</tr>
<tr>
<td>Mindy Stack</td>
<td>6</td>
</tr>
<tr>
<td>Deana Shenaq</td>
<td>6</td>
</tr>
<tr>
<td>Susan Sharpe</td>
<td>6</td>
</tr>
<tr>
<td>Juan Carlos Pelayo</td>
<td>8</td>
</tr>
<tr>
<td>Pankaj Dangle</td>
<td>5</td>
</tr>
<tr>
<td>Rena Malik</td>
<td>1</td>
</tr>
<tr>
<td>Mahua Dey</td>
<td>3</td>
</tr>
<tr>
<td>Megan Miller</td>
<td>6</td>
</tr>
<tr>
<td>Herbert Hedberg</td>
<td>1</td>
</tr>
<tr>
<td>Armenian Berghir</td>
<td>1</td>
</tr>
<tr>
<td>Elliott Boring</td>
<td>1</td>
</tr>
<tr>
<td>John Brugn</td>
<td>1</td>
</tr>
<tr>
<td>Darvon Ryen</td>
<td>1</td>
</tr>
<tr>
<td>Benjamin Ferguson</td>
<td>1</td>
</tr>
<tr>
<td>Marko Rojnica</td>
<td>3</td>
</tr>
<tr>
<td>Kristina Guzman</td>
<td>2</td>
</tr>
<tr>
<td>Natalie Gwaltie</td>
<td>2</td>
</tr>
<tr>
<td>Della Kantar</td>
<td>2</td>
</tr>
<tr>
<td>Samuel Lee</td>
<td>2</td>
</tr>
<tr>
<td>Jacqui Lee</td>
<td>2</td>
</tr>
<tr>
<td>Kingsley Odeon</td>
<td>2</td>
</tr>
<tr>
<td>Michael Wlita</td>
<td>2</td>
</tr>
<tr>
<td>Jennifer Defaas</td>
<td>5E</td>
</tr>
<tr>
<td>Susan Lee</td>
<td>5E</td>
</tr>
<tr>
<td>Forrest Singh</td>
<td>5E</td>
</tr>
<tr>
<td>Ashutosh Sipple</td>
<td>5E</td>
</tr>
<tr>
<td>Yael Vigmanerat</td>
<td>5E</td>
</tr>
<tr>
<td>Shawn Eigsten</td>
<td>5E</td>
</tr>
<tr>
<td>Josie Benan</td>
<td>3</td>
</tr>
<tr>
<td>Monica Komolak</td>
<td>3</td>
</tr>
<tr>
<td>Joanne Hilly</td>
<td>3</td>
</tr>
<tr>
<td>Benjamin Dhigan</td>
<td>3</td>
</tr>
<tr>
<td>Mindy Stack</td>
<td>3</td>
</tr>
<tr>
<td>Marc Araz</td>
<td>3</td>
</tr>
<tr>
<td>Irma Raring</td>
<td>3E</td>
</tr>
<tr>
<td>Jennifer Sales</td>
<td>3E</td>
</tr>
<tr>
<td>Markus Rigone</td>
<td>3E</td>
</tr>
<tr>
<td>Babak Sakhaei</td>
<td>3E</td>
</tr>
<tr>
<td>Juan Barriento Abarra</td>
<td>4</td>
</tr>
<tr>
<td>Momen Khre</td>
<td>4</td>
</tr>
<tr>
<td>Ryan Whelan</td>
<td>4</td>
</tr>
<tr>
<td>Megan Miller</td>
<td>4</td>
</tr>
<tr>
<td>Lisa Palter</td>
<td>4</td>
</tr>
<tr>
<td>Jordan Oreni</td>
<td>4</td>
</tr>
<tr>
<td>Erica Carlez</td>
<td>5</td>
</tr>
<tr>
<td>Michelle Cowen</td>
<td>5</td>
</tr>
<tr>
<td>Ian Daniel</td>
<td>5</td>
</tr>
</tbody>
</table>
### 2013 GRADUATES

<table>
<thead>
<tr>
<th>Residents/Fellow</th>
<th>Name</th>
<th>PGY Year</th>
<th>Position After Leaving UC Program</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GENERAL SURGERY</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resident</td>
<td>Sam Kingsley</td>
<td>Graduate</td>
<td>Trauma Critical Care Fellowship, John H. Stroger, Jr. Hospital, Cook County, Chicago, IL</td>
</tr>
<tr>
<td>Resident</td>
<td>Carla Mencio</td>
<td>Graduate</td>
<td>Vascular Surgery Fellowship, Beth Israel University, Boston, MA</td>
</tr>
<tr>
<td>Resident</td>
<td>Allan Plotz</td>
<td>Graduate</td>
<td>Trauma Critical Care, Brigham and Women’s, Boston, MA</td>
</tr>
<tr>
<td>Resident</td>
<td>Katarzyna Tumaszewski</td>
<td>Graduate</td>
<td>Burns Critical Care Fellowship, University of California, Davis, CA</td>
</tr>
<tr>
<td>Resident</td>
<td>Maria Zweit</td>
<td>Graduate</td>
<td>MIS Fellowship, University of Maryland, Baltimore, MD</td>
</tr>
<tr>
<td>Colon and Rectal Surgery Fellow</td>
<td>Brian Celli</td>
<td>Graduate</td>
<td>LifeBridge Health, Baltimore, MD</td>
</tr>
<tr>
<td>Surgical Oncology Fellow</td>
<td>Gautham Gokani</td>
<td>Graduate</td>
<td>Southern Illinois University, Carbondale, IL</td>
</tr>
<tr>
<td>Surgical Oncology Fellow</td>
<td>Gautham Gokani</td>
<td>Graduate</td>
<td>Yale New Haven Hospital, New Haven, CT</td>
</tr>
<tr>
<td><strong>NEUROSURGERY</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fellow</td>
<td>Sherese Ferguson</td>
<td>Graduate</td>
<td>Neuro-oncology fellowship, University of Texas M.D. Anderson Cancer Center, Houston, TX</td>
</tr>
<tr>
<td>Fellow</td>
<td>Ippei Takagi</td>
<td>Graduate</td>
<td>Private Practice, Little Rock, AR</td>
</tr>
<tr>
<td><strong>OPHTHALMOLOGY &amp; VISUAL SCIENCE</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resident</td>
<td>Khushboo Agrawal</td>
<td>Graduate</td>
<td>Vitreoretinal Surgery Fellowship at New York Eye and Ear Infirmary, New York, NY</td>
</tr>
<tr>
<td>Resident</td>
<td>Indria Batra</td>
<td>Graduate</td>
<td>Vitreoretinal Surgery Fellowship at John Moran Eye Center, University of Utah, Salt Lake City, UT</td>
</tr>
<tr>
<td>Resident</td>
<td>Neha Gangal</td>
<td>Graduate</td>
<td>Glaucoma Fellowship at Harvard Department of Ophthalmology, Massachusetts Eye and Ear Infirmary, Boston, MA</td>
</tr>
<tr>
<td>Fellow</td>
<td>Khiron Ittara</td>
<td>Graduate</td>
<td>Retinal Vascular Consultants, Mercy Hospital, Chicago, IL</td>
</tr>
<tr>
<td><strong>OTOLOGY</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resident</td>
<td>Christian Oreny</td>
<td>Graduate</td>
<td>Hinesdale Oasis Medical Group</td>
</tr>
<tr>
<td>Resident</td>
<td>Volkswagen Voldermeier</td>
<td>Graduate</td>
<td>Elko Hospital</td>
</tr>
<tr>
<td><strong>PEDIATRIC SURGERY</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fellow</td>
<td>Anthony Hagan</td>
<td>Graduate</td>
<td>Pediatric Surgery, University of Miami, Coral Gables, Florida</td>
</tr>
<tr>
<td><strong>PLASTIC &amp; RECONSTRUCTIVE SURGERY</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resident</td>
<td>Matthew Greaves</td>
<td>Graduate</td>
<td>Craniofacial and pedictic plastic surgery Fellowship, University of Pittsburgh</td>
</tr>
<tr>
<td>Patient</td>
<td>Transplantation</td>
<td>Graduate</td>
<td>Microsurgery Fellowship, Memorial Sloan-Kettering Cancer Center</td>
</tr>
<tr>
<td>Fellow</td>
<td>Aleks Kopek</td>
<td>Graduate</td>
<td>Private Practice</td>
</tr>
<tr>
<td><strong>TRANSPLANTATION</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fellow</td>
<td>Q.Li</td>
<td>Graduate</td>
<td>Transplant Fellowship, Thomas E. Starzl Transplantation Institute, UPMC, Pittsburgh, PA</td>
</tr>
<tr>
<td><strong>UROLOGY</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resident</td>
<td>Kyle Kirilken</td>
<td>Graduate</td>
<td>Private Practice, Advent Health Chicago</td>
</tr>
<tr>
<td>Resident</td>
<td>Alexander Rosen</td>
<td>Graduate</td>
<td>Private Practice, Fort Myers, FL</td>
</tr>
<tr>
<td>Fellow</td>
<td>Michael Lane</td>
<td>Graduate</td>
<td>Private Practice, Clearwater, FL</td>
</tr>
<tr>
<td><strong>VASCULAR SURGERY</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fellow</td>
<td>Samantha Mina</td>
<td>Graduate</td>
<td>Cook County Hospital</td>
</tr>
</tbody>
</table>
The Department of Surgery is pushing the boundaries of medicine through groundbreaking research. With more than $17 million in annual funding, our scientists are pursuing basic, applied and clinical research projects across a diverse range of topics, including tissue repair and regeneration, new antibiotic strategies, vaccines, transplantation, cardiovascular disease, childhood development and innovations in surgical practice. These studies take advantage of the multidisciplinary nature of surgery, as well as the University of Chicago Medicine’s culture of tackling some of the most challenging and pressing problems in medicine.

One example of a unique multidisciplinary effort is the collaboration between Joél Collier, PhD, and Anita Chong, PhD, who are combining immunology with bioengineering to develop new molecularly defined vaccine platforms to treat diseases where existing immunotherapy platforms fall short. Their work, which has been supported by the NIH, the Bill and Melinda Gates Foundation and the University of Chicago Women’s Board, represents an uncommonly integrated approach to the design of new materials and new vaccines. “Engineers and immunologists collaborate at other institutions, of course, but many other collaborations are set up where the materials are synthesized in one lab and then handed over to the immunology’s group for testing,” Dr. Collier said. “Such a unidirectional collaboration is the opposite of what we have built between our groups. For us, a continuous back-and-forth via joint group meetings, co-mentored students and hallway discussions allows us to continuously merge basic studies of immunological mechanisms into design improvements for the technologies.”

Successful vaccines have to be designed to interact with the immune system so that they elicit the appropriate protective response without any adverse effects. To achieve this response, vaccines must contain several components, including parts of the microbe that can be recognized by the immune system (antigens), plus other molecules that call the immune system into action (adjuvants). Vast strides are being made in identifying specific antigens for vaccines, but adjuvants capable of tuning the type of immune response that is generated have been harder to achieve. Collier and Chong have developed “self-adjuvanting” materials, where antigens “self-assemble” into nanoparticles and nanofibers when they are mixed in solution. Because the materials are designed and produced by Collier’s group, they can be engineered and improved as details of their mechanism of action are discovered. These new platforms are now enabling the development of strategies for treating diseases previously intractable to vaccination, as well as conditions not usually thought to be within the purview of vaccines. “Our collaboration can provide insights into how biomaterials interact with the immune system,” Dr. Chong said. “Maximizing this interaction may lead to a new class of self-adjuvanting vaccines, while conversely, minimizing or shaping the interaction may result in biomaterials that are optimized for wound healing and repair.”

Collier and Chong are part of a growing effort at the University of Chicago Medicine to develop immunologically active materials. In a collaboration with Matt Terrel, PhD, director of the Institute for Molecular Engineering, Collier and Chong are conducting a project to understand how the physical characteristics of nanoparticles contribute to some of their unique immunological properties. This team is also working to change the way vaccines are distributed across the globe. Presently, all vaccines must be shipped and stored at tightly controlled refrigerated temperatures. Many developing countries, especially those in the tropics, lack the ability to consistently maintain this “cold chain” all the way to the patient, so the effectiveness of many vaccines is compromised in the locations that most desperately need them. To address this shortcoming, Collier and colleagues are exploring and expanding the thermal and environmental stability of their materials-based vaccines, in a project funded by The Bill and Melinda Gates Foundation.

The work of Dana Suskind, MD, professor of surgery and co-director of the Comprehensive Listening Center, is an example of the immediate impact that research in the department is achieving. Dr. Suskind has been expanding her Thirty Million Words (TMW) initiative, which takes its name from previous research showing that economically disadvantaged children hear 30 million fewer words by the age of three compared with children in wealthier communities. TMW is a parent-directed, parent-tested initiative designed to close this gap through parent-child interaction. Its 12-week curriculum employs animation and video modeling to build daily behavior-changing strategies for participants. To evaluate the program locally, Dr. Suskind and the TMW team performed a one-on-one visit to 20 Southside Chicago families. Participants completed Language Environmental Analysis (LENA) recordings and were given individualized feedback.

“For us, a continuous back-and-forth via joint group meetings, co-mentored students and hallway discussions allows us to continuously merge basic studies of immunological mechanisms into design improvements for the technologies.”

JOEL COLLIER, PHD
ASSOCIATE PROFESSOR, SURGICAL RESEARCH

DEPARTMENT OF SURGERY 2013 ANNUAL REPORT
### CARDIAC & THORACIC SURGERY

<table>
<thead>
<tr>
<th>Principal Investigator</th>
<th>Research Title</th>
<th>Grant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shahab A. Akhter</td>
<td>Driveline Silicone Skin Interference Registry</td>
<td>Non-Federal, Clinical Trial</td>
</tr>
<tr>
<td></td>
<td>Withholding of GME to Prevent Venereal Remodeling and Heart Failure After CABG</td>
<td>Federal</td>
</tr>
<tr>
<td>Mark R. Ferguson</td>
<td>A Phase II Study of Neoadjuvant Chemotherapy With GEM-C, DEXA, and Cisplatin Followed by Surgery in Patients With Locally Advanced Adenocarcinoma of the Esophagus</td>
<td>Clinical Trial</td>
</tr>
<tr>
<td></td>
<td>MAGNETOMERA: A Double-Blinded, Randomized, Placebo-Controlled Phase II Study to Assess the Efficacy of Induction IV 3x150 mg Ara-C and Antigen-Specific Cancer Immunotherapy as an Adjunct Therapy in Patients With Recurrent MAGE-1</td>
<td>Clinical Trial</td>
</tr>
<tr>
<td></td>
<td>ProGEM™ Pelvic Air Leak Reseat &amp; Repair: A Prospective Cohort Post-Approval Study of ProGEM™ Pelvic Air Leak Reseat in the Treatment of Visceral Pneumonic Air Leaks after Standard Thoracic Surgery</td>
<td>Non-Federal, Clinical Trial</td>
</tr>
<tr>
<td></td>
<td>Facilitating the Transition from Standard to Robotic Procedures Using the NASA Task Load Index: A Pilot Study</td>
<td>Clinical Trial</td>
</tr>
<tr>
<td>Melissa P. Gupta</td>
<td>The Role of PARP-SIR2 Signalling in Heart Failure</td>
<td>Non-Federal, Clinical Trial</td>
</tr>
<tr>
<td></td>
<td>Activation of nurture to prevent adverse cardiac remodeling after CABG</td>
<td>Clinical Trial</td>
</tr>
<tr>
<td></td>
<td>Blooding cardiac toxicity of anticancer drugs</td>
<td>Clinical Trial</td>
</tr>
<tr>
<td>Nibhanu Jeramiahandan</td>
<td>Interagency Registry of Mechanically Assisted Circulatory Support</td>
<td>Clinical Trial</td>
</tr>
<tr>
<td></td>
<td>The Heartburn Left Ventricular Assist Device (LVAD) System</td>
<td>Clinical Trial</td>
</tr>
<tr>
<td></td>
<td>A Prospective, Randomized, Controlled, Uni-Bladed, Multi-Center Clinical Trial to Evaluate the Heartburn Left Ventricular Assist Device for Destination Therapy of Advanced Heart Failure</td>
<td>Clinical Trial</td>
</tr>
<tr>
<td></td>
<td>Surgical Abdominal Nerve Systolic Reduction for Patients With Peritoneal or Longstanding Peritoneal Acids: A Randomized Unblinded Minimally Invasive Surgery</td>
<td>Clinical Trial</td>
</tr>
<tr>
<td></td>
<td>Risk Assessment and Comparative Effectiveness of Left Ventricular Assist Device and Medical Management in Ambulatory Heart Failure Patients</td>
<td>Clinical Trial</td>
</tr>
<tr>
<td></td>
<td>OptiCardia Temporary Total Artificial Heart (THt) Postmarket Surveillance Study</td>
<td>Clinical Trial</td>
</tr>
<tr>
<td></td>
<td>Evaluation of the Heartburn Ventricular Assist System for the Treatment of Advanced Heart Failure: Continued Access Protocol</td>
<td>Clinical Trial</td>
</tr>
<tr>
<td>Mani Ramez</td>
<td>The effect of broader geographic swings in Medicare reimbursement for long transplant candidates</td>
<td>Non-Federal, Clinical Trial</td>
</tr>
</tbody>
</table>

### GENERAL SURGERY

<table>
<thead>
<tr>
<th>Principal Investigator</th>
<th>Research Title</th>
<th>Grant</th>
</tr>
</thead>
<tbody>
<tr>
<td>John C. Polley</td>
<td>Interplay of diet and the establishment of the juvenile gut microbiome</td>
<td>Federal</td>
</tr>
<tr>
<td></td>
<td>Panintestinal Effects on the Gut Barrier from Surgery</td>
<td>Federal</td>
</tr>
<tr>
<td></td>
<td>Investigation of pathogen interactions, common molecular responses, and outcome measure efficacy during sleepwalking using the human genomic model on colonoscopies</td>
<td>Non-Federal, Educational Program Support Agreement</td>
</tr>
<tr>
<td></td>
<td>Support for the First International Summer on Anaerobiosis</td>
<td>Federal</td>
</tr>
<tr>
<td></td>
<td>Educational Program Support Agreement</td>
<td>Non-Federal, Clinical Trial</td>
</tr>
<tr>
<td>Gary C. An</td>
<td>Molecular Biology and Hematopoietic Stem Cells</td>
<td>Federal</td>
</tr>
<tr>
<td></td>
<td>Rehabilitation Engineering Research Center (REDCe) on Spinal Cord Injury</td>
<td>Federal</td>
</tr>
<tr>
<td></td>
<td>EMBOSS-Hierarchical Representation and Simulation of Modular Cellular Systems</td>
<td>Federal</td>
</tr>
<tr>
<td>Swati Hubani</td>
<td>A Study Evaluating the Effect of Flavone on Biomarkers of Breast Cancer Risk</td>
<td>Federal, Clinical Trial</td>
</tr>
<tr>
<td></td>
<td>Post-Study to Analyze a new mechanism underlying response to famotidine therapy in breast cancer patients</td>
<td>Federal, Clinical Trial</td>
</tr>
<tr>
<td></td>
<td>Bariatric Surgery and Breast Cancer Risk in postmenopausal women</td>
<td>Federal, Clinical Trial</td>
</tr>
<tr>
<td></td>
<td>Hypertension and Breast Cancer Inflammation</td>
<td>Federal, Clinical Trial</td>
</tr>
<tr>
<td></td>
<td>A Post-Study to Evaluate Factors That Influence the Choice for Contralateral Prophylactic Mastectomy in Women With Operable Breast Cancer</td>
<td>Federal, Clinical Trial</td>
</tr>
<tr>
<td>Mattia Frasca</td>
<td>An Anaesthetic Phase II Trial of Neoadjuvant CD40L with Selective Use of Combined Modality Chemoradiation for Locally Advanced Rectal Cancer in Patients Undergoing Low Anterior Resection with Total Mesorectal Excision</td>
<td>Federal, Clinical Trial</td>
</tr>
<tr>
<td>Marco Pati</td>
<td>Minimally Invasive Educational Support Agreement</td>
<td>Non-Federal, Clinical Trial</td>
</tr>
<tr>
<td></td>
<td>Weighting Factors and Benefits of Laparoscopic Anti-Reflux Surgery in Patients with Morbidly Excessive Reflux</td>
<td>Federal, Clinical Trial</td>
</tr>
<tr>
<td>Michael Freeman</td>
<td>ACCLIDOC Community Clinical Oncology Program (CCOP)</td>
<td>Non-Federal, Clinical Trial</td>
</tr>
<tr>
<td></td>
<td>ACCLIDOC Alliance</td>
<td>Non-Federal, Clinical Trial</td>
</tr>
</tbody>
</table>

### NEUROLOGY

<table>
<thead>
<tr>
<th>Principal Investigator</th>
<th>Research Title</th>
<th>Grant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Atique Ahmed</td>
<td>Genetically Modified Neural Stem Cell Based Virotherapy for Invasive Glioneurin</td>
<td>Federal</td>
</tr>
<tr>
<td>Imm et el.</td>
<td>Genomic and Prognostic Characterization of Cerebral Hemorrhagic Stroke</td>
<td>Federal, Clinical Trial</td>
</tr>
<tr>
<td></td>
<td>Cortisol: Evaluating Accelerated Resolution of IVH Phase III (CLEAR IVH)</td>
<td>Federal</td>
</tr>
<tr>
<td></td>
<td>ICU Infarction in Therapy for Cerebral Cerebral Malignant</td>
<td>Federal</td>
</tr>
<tr>
<td>Lina Bygenviknova</td>
<td>Non-invasive delivery of otic cells as therapeutic vehicles to the blind</td>
<td>Federal</td>
</tr>
<tr>
<td></td>
<td>Navel Tumor Selection: RNA Vaccine Platform for Treatment of the Brain Tumor</td>
<td>Federal</td>
</tr>
<tr>
<td>Youri Fire</td>
<td>Minimally Invasive Educational Support Agreement</td>
<td>Federal</td>
</tr>
<tr>
<td></td>
<td>Outcomes in patients undergoing surgical intervention for Chiari type I deformities in Spondyloepiphysial</td>
<td>Non-Federal, Clinical Trial</td>
</tr>
<tr>
<td>Marcin Leonard</td>
<td>Magnetic vortex microaggregate for glaucoma therapy</td>
<td>Federal</td>
</tr>
<tr>
<td></td>
<td>Keratotom Y Cells and Dextrotag Virotherapy of Glioneurin</td>
<td>Federal</td>
</tr>
<tr>
<td></td>
<td>Comparative Use of IVCDs with Radiation and Tomotherapy in Patients With Newly Diagnosed Glioblastoma Multiforme</td>
<td>Non-Federal, Clinical Trial</td>
</tr>
<tr>
<td></td>
<td>Keratotom Y Cells in Malignant Glioma</td>
<td>Federal</td>
</tr>
<tr>
<td></td>
<td>Neural Stem Cell Based Virotherapy for Malignant Glioma</td>
<td>Federal</td>
</tr>
<tr>
<td></td>
<td>An International Randomized Double Blind, Prospective Study of Rilpivirine250mg and Adjunct Tomotherapy in Patients With Newly Diagnosed, Glioblastoma Multiforme (The ACT 2 T Test)</td>
<td>Non-Federal, Clinical Trial</td>
</tr>
<tr>
<td>Dan Kordesch</td>
<td>Cerebral Aneurysm Gapping Training Simulator using Virtual Reality and Haptics</td>
<td>Federal</td>
</tr>
<tr>
<td>Cheng-Shi Lin</td>
<td>Pathographic Artifacts in Human Cerebral Cerebral Malignant</td>
<td>Non-Federal</td>
</tr>
<tr>
<td>Elizabet Yaron</td>
<td>NF-45 GUS and the Response to DNA Methyltransferase</td>
<td>Non-Federal</td>
</tr>
<tr>
<td></td>
<td>Nanoparticles and Nanocapsules for Glaucoma Targeting</td>
<td>Non-Federal</td>
</tr>
<tr>
<td></td>
<td>Development of Uptake &amp;Particle for Intranasal Delivery of Antimetabolites</td>
<td>Federal</td>
</tr>
</tbody>
</table>

### OPHTHALMOLOGY & VISUAl SCIENCE

<table>
<thead>
<tr>
<th>Principal Investigator</th>
<th>Research Title</th>
<th>Grant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sense Stem</td>
<td>A Multicenter Randomized Evaluation of Efficacy for Treatment with Intravitreal Kenalog in Subjects with Macular Edema Following Intravitreal Injection</td>
<td>Non-Federal, Clinical Trial</td>
</tr>
<tr>
<td></td>
<td>An Open-Label, Multi-Center Extension Study of the Safety and Efficacy of the New Injection of IFN-2b (Euthymo) Approved Intravitreal Insert 0.5 mg and the Safety of IFN-2b in Subjects with Diabetic Macular Edema</td>
<td>Non-Federal, Clinical Trial</td>
</tr>
<tr>
<td></td>
<td>A Phase 2A, Multi-Center, Randomized, Comparator-Controlled Study Evaluating Safety™ and Early Monitoring in an Adjunctive Therapy to Lucentis® or Avasulfan™: A Prospective Analysis in the Treatment of Subjects with Central Macular Necrosis/Secondary to Age-Related Macular Degeneration</td>
<td>Non-Federal, Clinical Trial</td>
</tr>
<tr>
<td></td>
<td>A Randomized, Double-Blinded, Placebo-Controlled Study of Genasense® in the Treatment of Active Non-Arteritic Ischemic Optic Neuropathy of Patients</td>
<td>Non-Federal, Clinical Trial</td>
</tr>
<tr>
<td>Susan Friedberg</td>
<td>Student Dry Eye Program</td>
<td>Non-Federal</td>
</tr>
<tr>
<td>Kira McNeel</td>
<td>Treatment of Congenital Tauroptosis</td>
<td>Federal</td>
</tr>
<tr>
<td></td>
<td>Towards a Vaccine to Prevent Tauroptosis</td>
<td>Federal</td>
</tr>
<tr>
<td></td>
<td>Optimizing Inhibition of T. Gondii ENR</td>
<td>Federal</td>
</tr>
</tbody>
</table>

### DEPARTMENT OF SURGERY 2015 ANNUAL REPORT
OTOLARYNGOLOGY—HEAD & NECK SURGERY

Principal Investigator: Jacqueline Conry
Research Title: The prevalence, pathophysiology, diagnosis, and treatment of acquired and hereditary angiodema in the ear, nose, throat, and head.
Grant: Non-Federal, Clinical Trial

A. Landerman

Research Title: Antibiotic Usage in Head and Neck Surgery
Grant: Non-Federal, Clinical Trial

Robert M. Kavoussi

Research Title: Nonsurgical delivery of an intranasal, clinically effective, targeted drug delivery system with peripheral, local, clinical, and endoscopic indications
Grant: Non-Federal, Clinical Trial

PLASTIC & RECONSTRUCTIVE SURGERY

Principal Investigator: R. P. Collier
Research Title: Modular Self-Assembled Coatings for Biomaterials
Grant: Federal

Research Title: Stable Self-Adjuvanting Vaccines via Peptide Self-Assembly
Grant: Federal, Clinical Trial

Principal Investigator: J. M. Park
Research Title: Enriched Dressing in Nipple-sparing Mastectomy
Grant: Non-Federal, Clinical Trial

SURGICAL RESEARCH

Principal Investigator: J. A. Collier
Research Title: Synthetic Protein and Peptide Assemblies as Novel Adjuvants and Vaccines
Grant: Federal

D. J. Collier

Research Title: Stable Self-Adjuvanting Vaccines via Peptide Self-Assembly
Grant: Federal

PLASMA & IMMUNE MODULATION

Principal Investigator: J. R. Thistlethwaite
Research Title: Polyoma BK Viremia, Polyoma BK Nephropathy and Renal Allograft Rejection
Grant: Federal

Research Title: An Open-Label, Phase 2/3, Double-Blind, Placebo-Controlled, Two-Part Study (Part 1 Open Label) to Assess the Safety, Efficacy and Pharmacokinetics of Single Intravenous Doses of SIMPLISMA in De Novo Kidney Transplant Recipients
Grant: Non-Federal, Clinical Trial

TRANSLATION

Principal Investigator: J. D. Chang
Research Title: Mechanics of Venture: Engineering Tissue in Vitro and Application to Clinical Translation
Grant: Federal

J. Michael Milne

Research Title: Transplantation in People with HIV infection
Grant: Non-Federal, Clinical Trial

Research Title: A Multi-Center Randomized Study to Monitor Transplant Rejection and Survival of Patients Receiving Off-Patent, On-Time, and End-Point Therapy
Grant: Non-Federal, Clinical Trial

Research Title: An Open-Label, Phase 2 Study to Treat Patients with Final Allograft and/or Polyethylene to Prevent Polymer, Vascular, Renal, Hepatobiliary and Final Allograft Rejection
Grant: Non-Federal, Clinical Trial

UROLOGY

Principal Investigator: J. B. Bierer
Research Title: A Phase 3, Double-Blind, Placebo-Controlled, Two-Part Study (Part 1 Open Label) to Assess the Safety, Efficacy and Pharmacokinetics of Single Intravenous Doses of SIMPLISMA in De Novo Kidney Transplant Recipients
Grant: Non-Federal, Clinical Trial

Research Title: A Phase 2A, Randomized, Open-Label, Action-Controlled Multi-Center Study to Assess the Safety and Efficacy of and IFN-α + thymosin α1 in De Novo Nephron Transplant Recipients
Grant: Non-Federal, Clinical Trial

VASCULAR SURGERY & ENDOVASCULAR THERAPY

Principal Investigator: J. D. Michaleris
Research Title: A 6-month, multi-center, randomized, open-label trial of an intravenously administered, vasoactive peptide to improve cardiovascular function in patients undergoing percutaneous cardiac intervention.
Grant: Non-Federal, Clinical Trial

Research Title: A 12-month, multi-center, randomized, open-label trial to evaluate the efficacy and safety of TX-001RR in patients with NSTEMI
Grant: Federal, Clinical Trial

Research Title: A randomized, placebo, multi-center trial to compare the efficacy and safety of Tocilizumab vs placebo in patients undergoing hip-replacement surgery.
Grant: Non-Federal, Clinical Trial
The Department of Surgery is deeply grateful for our donors and their generous contributions to the University of Chicago Medicine. Through our donors’ partnerships and commitment, we have seen an incredible year as a leading provider of care in all of our clinical and educational programs, as well as our research and patient care pursuits. Every gift from our donors helps our surgeons and allied healthcare partners advance the care of patients with complex diseases for years to come.

Grateful patient Bill Davis’ experience at the University of Chicago Medicine highlights the remarkable treatment he received as an individual. A retired chairman, president, and chief executive of R.R. Donnelly & Sons Company, Davis learned that he had a life-threatening fistula—an abnormal connection between veins and arteries in the brain—so rare that most neurosurgeons go through their entire careers without ever seeing a case like it. To treat Davis, Issam Awad, MD, John Harper Seeley Professor of Surgery and director of neurovascular surgery, teamed up with Seon-kyu Lee, MD, PhD, director of interventional neuroradiology. Through a less invasive technique that utilizes a tiny catheter to find the malformation, Drs. Awad and Lee were able to successfully cure Davis’ fistula by blocking the connection with medical superglue and even uncover the rare blood-clotting tendency that had caused his condition. As a demonstration of their gratitude, the Davis family contributed $1 million to establish the Judy and Bill Davis Research Fund in Neurovascular Surgery, allowing Dr. Awad to expand research efforts and, in turn, make an impact on future patients with neurovascular diseases.

Die-hard White Sox fan Frank Smith also found hope for his lung cancer at the University of Chicago Medicine in Mark Ferguson, MD, and Ravi Salgia, MD, PhD. Smith, who was previously misdiagnosed by two outside physicians, was fully aware of his family’s history with cancer and believed his chances were grim. However, after months of chemotherapy, radiation therapy and surgery for his cancer at the University of Chicago Medicine, Smith felt he was truly cared for by his doctors every step of the way.

“We always felt like these physicians were right there for us,” Smith’s wife, Jan, said. “I’ve worked in doctors’ offices my whole life, but the doctors at the University of Chicago gave us their phone numbers and their e-mail addresses. I had never seen that before.”

Now in remission, the Smiths have committed to supporting Dr. Ferguson’s research. Their gifts will help physicians-in-training investigate the fundamentals of cancer causation and treatment.

There are many ways you can be involved with advancing the goals of the Department of Surgery. For more information on how you can join us or make a gift, please contact:

STEPHANIE DAHL
Campaign Director
University of Chicago Medicine and Biological Sciences Development
sdahl@mcdmail.uchicago.edu
(773) 834-4726
http://supportucmc.uchicago.edu

A.S.C.R.S. Research Foundation
Alvin H. Bunn Family Fund
American Cancer Society Illinois Division, Inc.
American College of Surgeons
Blum-Koveer Foundation, Inc.
Mr. and Mrs. William Davis
Mr. and Mrs. David Dioguardi
Ethicon Endo-Surgery
Mr. and Mrs. Monty R. Field
Foley Family Foundation
Mr. and Mrs. Richard Hill
Howard Hughes Medical Institute
Dr. and Mrs. Paul H. Jordan
Mr. James Klick and Ms. Therese Castiglioni
Mr. and Mrs. Stephen Macumber
Michael Rolfe Pancreatic Cancer Foundation
Mr. and Mrs. John P. Paleczny
Petersen Aluminum Corporation
Mr. and Mrs. Theodores H. Roberts
Drs. Ghulam and Zubie Sheikh
Mr. and Mrs. John B. Snyder
Thoracic Surgery Foundation for Research & Education
Mr. and Mrs. Richard W. Tinberg
Mrs. Ruth E. Ultmann
Mr. and Mrs. Allan Wolfstat
Zaccone Family Foundation

“We always felt like these physicians were right there for us. I’ve worked in doctors’ offices my whole life, but the doctors at the University of Chicago gave us their phone numbers and their e-mail addresses. I had never seen that before.”

—JAN SMITH
Intra-aortic balloon: A minimally invasive approach to support the failing heart.


Examining the pathogenesis of breast cancer

10.4056/sigs.3717348.


Raymon Granger, PhD


immunotherapy is not affected by depletion
Lesniak M. The efficacy of interleukin-12 glioma
deliver doxorubicin to malignant glioma.
Ahmed A, He C, Lesniak M. TAT modified gold
Molecular Therapy
Auffinger B, Tobias A, Thaci B, Han Y, Lesniak M,
and tumor induced regulatory T cells in malignant
Wainwright D, Dey M, Chang A, Lesniak M. Natural
A, Lesniak M. Drug-loaded nanoparticle systems
Auffinger B, Morshed R, Tobias A, Cheng Y, Ahmed
chemotherapy for the treatment of glioblastoma.
ςυμβάνονται με την ειδικότητά τους και η αιτιολογία της
και τον σκεπτικισμό που μεταφέρει η τεχνητή νοημοσύνη.
και την υποχρέωση να επιστρέψει σε καθαρή νοημοσύνη και αξιολόγηση των
ζώνες της ευπνίας και της οργάνωσης του
προσώπου [45]. Επίσης έχει και ένα σημαντικό ρόλο στη
ήμερα της Ευρώπης που είναι προσωπική και
και την κοινωνική υγεία της χώρας. Η τεχνητή
νοημοσύνη θα μπορούσε να είναι μια εξαιρετική ικανότητα
και την επικαιρότητα της τεχνητής νοημοσύνης.
και την επικαιρότητα της τεχνητής νοημοσύνης.
και την επικαιρότητα της τεχνητής νοημοσύνης.
και την επικαιρότητα της τεχνητής νοημοσύνης.
J Laparoendosc Adv Surg Tech
series and a 20-year review of the literature.

Lo A, Baird R, De Angelis P. Arterio-esophageal
fistula after stenting for esophageal atresia.

Martin K, Zavalkoff S, Emil S, Lo A. Transitioning
Surg Res

Patel R, Geroulis AJ. Use of Topical Antibacterial
Head & Neck

Langerman A, Rangarajan S, Athavale S, Pham
PLASTIC & RECONSTRUCTIVE SURGERY

Emil S, Gaied F, Lo A. Gangrenous appendicitis

PLoS ONE

Sun T, Mrksich M, Collier J. A self-adjuvanting

TRANSPLANTATION

Raynaud’s Phenomenon – A Novel Therapeutic
Bank J, Fuller S, Henry G, Zachary L. Fat Grafting

Global Open

SUPT et al. Complications in Otolaryngology-

J

Eur

Transplant Proc

J

Transplant Proc

JSLS

Decastro G, Shalhav A. Functional Outcomes in

UROLOGY

Uzzo R. Differential Use of Partial Nephrectomy

Haiti Earthquake.

Emergencies: Lessons Learned From the 2010

Academic Medicine

David H. Song, MD, MBA

J Pediatr Gastroenterol Nutr

Andrea Lo, MD

Immunology

Toll-Like Receptors.

Response to Transplantation Antigens.

Marek-Trzonkowska N, Krzystyniak A, Wardowska
Diabetes Care

Chen J, Pompano R, Santiago F, Sciammas R,

Chong A. Impact of immunosuppression


Langerman A, Barjas M, Emken L, DuBeau C, Bales G, Steinberg G. Intraoperative Embolization Of Renal Cell Tumor Thrombus During

Steinberg G, Shaefi S, Mahmood F. Intraoperative


Marek-Trzonkowska N, Krzystyniak A, Wardowska

Steinberg G, Schoenberg M, Bivalacqua T. The Use

Incidence, risk factors, and complications for patients undergoing cystectomy

OLUGO


Carr-Ekert-Schaffer, PhD


Arisa S, Ching, PhD


Gloria L. Zetterman, MD, PhD肪

Piotr Witkowski, MD, PhD


MM<LocationComponent>

PLoS ONE


Norm D. Smith, MD

Porpiglia F, Alvarez-Maestro M, Francesca F, Deho F, Olufenwa F, Gundeti MS. Robotic Assisted


Int Immunopharmacol


Raynaud’s Phenomenon – A Novel Therapeutic
Bank J, Fuller S, Henry G, Zachary L. Fat Grafting


David H. Steinberg, MD

Gary D. Steinberg

Norm D. Smith, MD

Incidence, risk factors, and complications for patients undergoing cystectomy

Incidence, risk factors, and complications for patients undergoing cystectomy


David H. Song, MD, MBA

J Laparoendosc Adv Surg Tech
series and a 20-year review of the literature.

Lo A, Baird R, De Angelis P. Arterio-esophageal
fistula after stenting for esophageal atresia.

Martin K, Zavalkoff S, Emil S, Lo A. Transitioning
Surg Res

Patel R, Geroulis AJ. Use of Topical Antibacterial
Head & Neck

Langerman A, Barjas M, Emken L, DuBeau C, Bales G. Intraoperative Embolization Of Renal Cell Tumor Thrombus During


Langerman A, Barjas M, Emken L, DuBeau C, Bales G, Steinberg G. Intraoperative Embolization Of Renal Cell Tumor Thrombus During


Langerman A, Barjas M, Emken L, DuBeau C, Bales G, Steinberg G. Intraoperative Embolization Of Renal Cell Tumor Thrombus During
significant negative impact on limb salvage.

advanced infrainguinal occlusive disease has a superficial femoral artery intervention for Surg.

implants for hemodialysis treatment. Eur J Vasc Endovasc Surg

consecutive Hemodialysis Reliable Outflow graft Stent Graft Natural Selection Global Postmarket Registry (ENGAGE).

primary aortoenteric fistula following Phil M. Pittman, L. Craig R, Joel R. Milner, MD Thirty-day outcome and quality of life Vasc Endovasc Surg

of leg ulcers after a broad scale intervention in a defined geographical population in Sweden. J Vasc Surg

expression profiling. J Urol

do not discriminate genomically by microRNA different morphologies of urachal adenocarcinoma Steinberg G, White K, Stricker T, Paner G. The Prospective Prostate Cancer Cells.

is an Androgen Receptor-Repressed Gene that promotes Castration-Resistant Prostate Cancer. PLoS ONE

against a malaria epitope. Biomaterials 34: 1037-1045.

assembled peptide nanofibers raising durable antibody responses against a malaria epitope. Biomaterials Science 1: 1037-1045.

inflammation. Biomaterials 34

assembled peptide nanofibers raising durable antibody responses against a malaria epitope. Biomaterials Science 1: 1037-1045.

assembled peptide nanofibers raising durable antibody responses against a malaria epitope. Biomaterials Science 1: 1037-1045.
Department of Surgery
5841 South Maryland Avenue
Chicago, IL 60637

Web site: http://surgery.uchicago.edu
Facebook: http://www.facebook.com/uchicagosurgery
Twitter: http://twitter.com/uchicagosurgery