SPRING/SUMMER 2015 | Volume 5, No.2

>>

Beth Israel Deaconess Medical Center

HARVARD MEDICAL SCHOOL TEACHING HOSPITAL

News from the Roberta and Stephen R. Weiner Department of Surgery at Beth Israel Deaconess Medical Center

INSIDE SURGERY

Revealing the roles of cytomegalovirus

page 11

IN THIS ISSUE

3 ■ A Saving Grace: Patient's Arm Replanted

4 ■ Making a Difference: S. Daniel Abraham

6 ■ Harvard Medical School Promotions and Appointments

7 ■ Alumni Spotlight — Lisa Boyle, MD

8 ■ Weight Loss Surgery Program

11 ■ The Question I Own: Charles H. Cook, MD

12 ■ News Briefs

16 ■ The Gold Standard: Gold Humanism Society at BIDMC

17 ■ New Faculty

18 ■ Selected Faculty Publications

20 ■ A Heartfelt Thanks

Message from the Chairman

Surgery, like so much in life, requires collaboration — between doctors and patients; between patients and their loved ones, who play a vital role in the patient's recovery; and among caregivers working together on their patients' behalf.

Collaboration is also essential in our department's mission to improve health through innovation and discovery. As surgeons, we are dedicated to helping people live healthy lives, but we cannot do it alone. Helen Keller wisely observed, "Alone we can do so little; together we can do so much." For us to reach our highest potential, we must partner with others from all walks of life who share our dream of creating a better, healthier future for all.

In this issue, I am honored to acknowledge one such individual, S. Daniel Abraham, whose decades-long commitment to healthy living and world peace has improved countless lives. As you will read in our "Making a Difference" feature, Mr. Abraham's long collaboration with Dr. George L. Blackburn demonstrates the power of partnerships in achieving great things. We are very grateful to Mr. Abraham for partnering with us, and to Dr. Blackburn for his many contributions to the fields of surgery and nutrition.

This issue also features an article about our Weight Loss Surgery Program, which was founded by Dr. Blackburn, a pioneer in this treatment for obesity. We also describe the research of one of our surgeon-scientists, who is investigating the roles a common virus plays in critically ill surgical patients, and our residents' innovative efforts in support of enhancing humanism in the care of our patients.

I hope that you find *Inside Surgery* interesting and informative. As always, I look forward to your suggestions and feedback.

Elliot Chaikof, MD, PhD

Beth Israel Deaconess Medical Center

HARVARD MEDICAL SCHOOL TEACHING HOSPITAL

SPRING/SUMMER 2015

Volume 5, No. 2

Inside Surgery is published by the Office of the Chairman of the Roberta and Stephen R. Weiner Department of Surgery at Beth Israel Deaconess Medical Center for faculty, trainees, staff, alumni, affiliates, and friends.

The mission of the Department of Surgery:

- Provide care of the very highest quality
- Improve health through innovation and discovery
- Prepare future leaders in American surgery
- Serve our communities with sensitivity and compassion

Chairman, Surgery
Elliot Chaikof, MD, PhD

Vice Chair, Communications
Allen Hamdan, MD

Director of Surgery Communications
Editor/Writer
Hilary Bennett

Please forward comments, news items, and requests to be added to or removed from the mailing list to: Editor, *Inside Surgery*, Beth Israel Deaconess Medical Center, Department of Surgery, LMOB-9C, 110 Francis St., Boston, MA 02215.

E-mail: surgerycommunications@bidmc.harvard.edu

Tel: 617-632-8384

bidmc.org/surgery

Philip Zona, whose severed arm was replanted on New Year's Eve 2014, with two of his grandchildren.

A Saving Grace

Surgeon Replants Patient's Severed Arm

It was a task Philip Zona, a 74-year-old retired widower and youth hockey volunteer from Milton, had done countless times: using a woodsplitter to cut firewood for his wood stove.

But on the morning of New Year's Eve 2014, using a rented machine because his own was being repaired, the unimaginable happened. A piece of wood got jammed and Mr. Zona reached down — safely, he thought — to release it. In that split second, the machine's "ram" dropped down and sliced off his left arm just below the elbow, leaving it attached by little more than some skin.

Mr. Zona had asked a 16-year-old acquaintance, Danny Arens, to help him stack wood that morning, so fortunately he was not alone. "I didn't feel any pain and I knew I had to stay calm," he recalls. "I told Danny to get a strap from the barn and make a tourniquet, and then call 911. He did an incredible job, and within minutes the EMTs had arrived and I was on my way to Boston." Conscious and alert, Mr. Zona was asked if he had a preference as to which Level I Trauma Center to be taken to; he said Beth Israel Deaconess Medical Center, as this was where his late wife had received excellent care. It was a wise choice.

Matthew Iorio, MD, a fellowship-trained hand surgeon experienced in replanting fingers and limbs, was summoned to the Emergency Department that morning to evaluate Mr. Zona. "His overall health was good, and thanks to the EMTs and the young man who helped him and almost certainly saved his life, he was at the hospital soon after the accident so I felt we could safely try to save his arm," says Dr. Iorio, noting that time is of the essence when it comes to replanting fingers and limbs. The longer the finger or limb goes without blood flow, he explains, the

Continued on page 5 >

Everything is Possible

Donor's gift supports department's mission

Ever since he was a young boy growing up in modest means in Long Beach, New York, S. Daniel "Danny" Abraham has had a penchant for hard work, a head for business, and an irrepressible entrepreneurial spirit.

From making deliveries for local businesses on his bike to publishing a weekly town newspaper with paid advertising (starting at age 14), Danny Abraham came up with innovative ways to perform a needed public service and at the same time earn an income, which he used to help support his family.

Those qualities, coupled with a deep and abiding belief in the tenets of Judaism, led Mr. Abraham, now 90, to become the well-respected figure he is today. In addition to being a pioneer in the pharmaceutical and diet-food industry who founded the multi-billion dollar Slim-Fast Foods, the most successful diet product in history, Mr. Abraham is an effective and passionate advocate for Middle East peace whose Center for Middle East Peace and Economic Cooperation in Washington, D.C. has been a catalyst for positive change. He is also a philanthropist whose generous support of institutions devoted to higher education, peace, and healthy lifestyles have improved countless lives.

Despite his many achievements, Mr. Abraham, a World War II veteran, remains a down-to-earth, compassionate man of deep faith who believes that everyone deserves equal treatment and respect. "I try to live by the most famous law in the Torah, to 'Love your neighbor as yourself,'" he says.

Indeed, Mr. Abraham's fairness, optimism, intellect, and honesty have earned him many friends around the world, from presidents to prime ministers. For his 80th birthday, he received congratulatory letters from luminaries that included former U.S. President Bill Clinton and then-Israeli President and former Prime Minister Shimon Peres. In his endorsement of Mr. Abraham's memoir, *Everything is Possible*, Mr. Clinton described him as a "close friend and tireless advocate for peace."

> *"I am fortunate to have the ability to...support the Department of Surgery's mission to improve human health."*
>
> **S. Daniel Abraham**

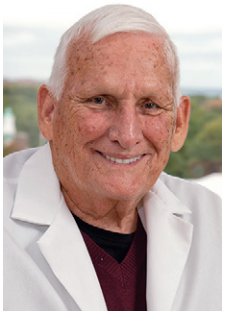
But the individual Mr. Abraham considers his "best friend and the single best person I know," is **George L. Blackburn, MD, PhD.** Dr. Blackburn is the S. Daniel Abraham Professor of Surgery at Harvard Medical School (established in 1998 with a gift from Mr. Abraham) and Director of the Center for the Study of Nutrition Medicine in the Department of Surgery.

A longtime friend and close advisor to Mr. Abraham, Dr. Blackburn helped him develop Slim-Fast as a meal-replacement product that was healthy and nutritionally balanced, which was very important to Mr. Abraham. "George guided me in so many ways, including helping me create a high-quality product that enabled people to control their weight and thus live longer, healthier, happier lives," says Mr. Abraham.

S. Daniel Abraham recently made a gift of $3.3 million to endow a professorship in the Department of Surgery.

Along the way, Dr. Blackburn also gave Mr. Abraham advice about improving his own health — advice that helped shape Mr. Abraham's belief in the importance of a healthy lifestyle. Even at 90, Mr. Abraham, who is married with 27 grandchildren and seven great-grandchildren, works out virtually every day.

To honor his longtime friend and collaborator, and provide ongoing funding to the Department of Surgery, Mr. Abraham recently made another very generous ($3.3 million) gift — this time to endow the George L. Blackburn, MD, PhD, Professorship of Surgery. "I am fortunate to have the ability to honor someone of George's



George L. Blackburn, MD, PhD

great intellect and innovative accomplishments and at the same time support the Department of Surgery's mission to improve human health," says Mr. Abraham. The first incumbent of the professorship will be announced in the next issue of *Inside Surgery.*

Dr. Blackburn is known internationally for many accomplishments in the fields of surgery and nutrition. These include pioneering the development of intravenous nutrition formulations, establishing the first multi-disciplinary nutrition support service in the United States, and developing the first evidence-based guidelines for weight loss surgery. Dr. Blackburn also recently identified a novel link between diet and cancer. His work inspired the 2014 establishment of the Feihe Nutrition Laboratory at Beth Israel Deaconess Medical Center at Harvard Medical School, which will conduct studies on the connections among diet, nutrition, and cognition across people's lifespans.

"I am overwhelmed by this honor," says Dr. Blackburn, "and very grateful to Danny for his wisdom and his recognition that for us to move forward, we need the resources to be able to continue our leadership in surgical innovation that has defined our department for decades."

→ To learn how you can support the Department of Surgery, please contact Michele Urbancic at murbanci@bidmc.harvard.edu or 617-632-8388.

< *Continued from page 3*

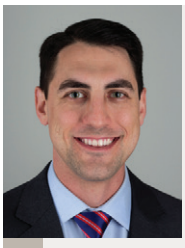
more risky it becomes to the patient to try to replant it.

Dr. Iorio and the OR team spent more than 13 hours replanting Mr. Zona's arm. This was a complex operation that involved quickly restoring blood flow with a shunt, then doing painstaking microsurgical repairs: re-joining bones, blood vessels, and pencil-thin nerves, and taking tissue from his thigh to repair some of the blood vessels. Five days later, Mr. Zona went back to the OR to have his flexor muscles reconstructed and strengthened with a tendon graft.

Ten days after the accident, Mr. Zona was discharged to Spaulding Rehabilitation Hospital, where for another 10 days he received physical therapy until he could return home. He continues to receive physical and occupational therapy at nearby BID-Milton Hospital, where he also sees Dr. Iorio frequently for follow-up visits.

It is too soon to tell what the ultimate outcome will be, says Dr. Iorio, as the risk of infection, of bones not healing, or of unmanageable pain remain for a long time, and nerves regenerate only about an inch a month. But so far, so good, he says. "The goal is to enable Mr. Zona to have some motor function and protective sensation in his arm and hand, but it will be at least a year before we know the full outcome, though at this time [mid-April], he is doing remarkably well and already demonstrating some active motion in his wrist and fingers," says Dr. Iorio.

Mr. Zona, who says he feels great, understands that his recovery will be long and that there are no guarantees. But he is characteristically optimistic, happy to be alive, and thankful for the chance to have a functioning arm after such a devastating injury. "Dr. Iorio is my hero," he says. "He's a wonderful doctor and very kind. I'm so grateful to him and everyone at the hospital for the phenomenal care I've received. I am truly blessed."



Matthew Iorio, MD, is fellowship-trained in hand surgery and experienced at replanting fingers and limbs.

→ For more information about Dr. Iorio and BIDMC's Plastic and Reconstructive Surgery division and replantation services, please visit our website: bidmc.org/surgery>plastic and reconstructive surgery. For information about BIDMC's Trauma Program, please visit: bidmc.org/surgery>trauma program.

Harvard Medical School Promotions

The Department of Surgery congratulates the following faculty members on their Harvard Medical School promotions and appointments.

PROMOTED TO:
ASSOCIATE PROFESSOR OF SURGERY

Sidharta (Sidhu) P. Gangadharan, MD
Area of Excellence: Clinical expertise and innovation with significant supporting activities in administration and institutional service

Sidhu P. Gangadharan, MD, is Chief of Thoracic Surgery and Interventional Pulmonology and Program Director of BIDMC's Cardiothoracic Residency Program. He is known internationally as an expert in minimally invasive thoracic surgery and airway surgery, specifically in the surgical treatment of tracheobronchomalacia (TBM). Largely as a result of his reputation, BIDMC treats more adults with TBM than any other hospital in the world.

Dr. Gangadharan's investigations encompass outcomes research relating to minimally invasive thoracic surgery (VATS lobectomy) and TBM; developing novel therapies for TBM and other complex airway disease, including 3D printing for airway interventions; surgical education; and developing new methods of staging lung cancer using near-infrared imaging technology.

Dr. Gangadharan has 46 original peer-reviewed publications and 21 chapters, serves in leadership roles in the Society of Thoracic Surgeons, and is a member of the Advisory Board of the Joint Council on Thoracic Surgery Education. In 2008 he received the Department of Surgery's John L. Rowbotham Award for Excellence in Teaching, and in 2009 was a BIDMC Rabkin Fellow in Medical Education.

APPOINTED AS:
ASSOCIATE PROFESSOR OF SURGERY

Charles H. Cook, MD
Area of Excellence: Investigation with significant supporting activities in clinical expertise, administration, and institutional service

Charles H. Cook, MD, is Chief of Acute Care Surgery, Trauma, and Surgical Critical Care, a division responsible for emergency general surgery, management of trauma patients, and the care of critically ill surgical patients.

In addition to his clinical and administrative responsibilities, Dr. Cook conducts research focused mainly on the causes and consequences of cytomegalovirus (CMV) reactivation during critical illness and, more recently, the ubiquitous virus's role in a deadly form of brain tumor called glioblastoma (see page 11). Dr. Cook's CMV-related research has been continuously funded by the National Institutes of Health for more than 10 years.

Dr. Cook has 80 original peer-reviewed publications, and holds two U.S. patents. As an expert in surgical infectious diseases, Dr. Cook has presented his work nationally and internationally. He is a former recipient of the Joseph Susman Memorial Award from the Surgical Infection Society, of which he is an active member and has served in leadership roles.

ALUMNI SPOTLIGHT

Lisa Boyle, MD, '87

There are few things in life that Lisa Boyle, MD, relishes more than a challenge. Whether it is performing a complex thyroidectomy, managing the entire clinical enterprise of a large teaching hospital, or — on her days off when she heads to the local firing range — trying to hit a bull's-eye with her new rifle, Dr. Boyle finds great satisfaction in striving to be the best she can possibly be.

Ever since she was a young girl growing up in upstate New York, Dr. Boyle, an endocrine surgeon who is now Vice President of Medical Affairs and Chief Medical Officer at Medstar Georgetown University Hospital in Washington, D.C., has been driven to take on new challenges. After graduating *cum laude* from Georgetown University School of Medicine, she sought out the most competitive surgical residency programs in the nation, including Beth Israel Hospital's, then led by William Silen, MD.

"I remember well the day I interviewed at Beth Israel," says Dr. Boyle. "It was cold and dreary, but everyone I met was warm and wonderful — thoughtful and serious-minded but also welcoming. Plus it was very clear that women were treated equally, which was not always the case in those days. When I was matched with BI, I was so incredibly excited! I knew that training under the legendary Dr. Silen and the program's other renowned surgeons would give me the greatest opportunity to pursue whatever I decided I wanted to do in my career."

Another big draw of the program, says Dr. Boyle, was the opportunity to spend her elective fourth year as a general surgery registrar at Guy's Hospital in London. "It was such an amazing experience to work in a different health system at a time when resources were relatively modest. I had to rely heavily on physical diagnosis and perform most operations myself, which I was well-prepared for because of my earlier training. When I came back to Boston for my chief year, I felt very confident."

Although Dr. Boyle entered her residency planning to become a cardiac surgeon, she was so impressed by Dr. Silen that she decided to become a general surgeon. "Dr. Silen, who was not only brilliant but also an extraordinary surgeon, did a beautiful thyroidectomy, and I loved that operation," says Dr. Boyle, which led her eventually to specialize in endocrine surgery.

Following her residency and six years at the David Grant USAF Medical Center in California, Dr. Boyle spent 20 years at Medstar Washington Hospital Center in Washington, D.C. There, she had many leadership roles, including running the general surgery residency program and serving as Associate Director of Surgery as well as Chief of Endocrine Surgery, a program she helped launch and grow. She also led a lab focusing on thyroid cancer research.

In early 2013, Dr. Boyle was recruited to her current position, which entails managing all clinical aspects of the 609-bed Medstar Georgetown University Hospital, including 22 clinical departments, all graduate medical education programs, medical staff affairs, risk management, quality initiatives, and physician relations, as well as participating in the design of a new hospital. "I was attracted to a whole new set of challenges with this role, which I love," says Dr. Boyle, who also still operates, trains residents, and does other clinical work two and a-half days a week.

Her many accomplishments notwithstanding, Dr. Boyle, who is married to a retired vascular surgeon and has two young adult children and three stepchildren, is most proud of the compassion she shows to her patients. "Early in my training, Dr. Silen imprinted on me the importance of being a compassionate doctor. In so many ways, my residency training made me who I am today."

BIDMC Weight Loss Surgery Program

Improving Health, Transforming Lives

By the time her weight climbed to nearly 260 pounds, Carrie Peckham, a 40-year-old preschool teacher and single mother, had a litany of health problems — sleep apnea, hypertension, high cholesterol, borderline diabetes, and back pain. Unable to run after her eight-year-old daughter and students, bend over, or wear normal-sized clothing, Ms. Peckham decided to consider weight loss (bariatric) surgery.

For Peter Barrows, a 54-year-old married father of two who works for the state, the decision to consider bariatric surgery was prompted by his well-founded fear that he might die prematurely. A longtime diabetic with a family history of heart disease, Mr. Barrows's weight had crept up to 306 pounds, he had high cholesterol, and little energy.

Like more than 78 million adults in the United States, Ms. Peckham and Mr. Barrows were obese, meaning that their body mass index (BMI), an indicator of excess body fat, was 30 or greater. (Someone who is 5'4" with a BMI of 30 weighs 174 pounds; a 5'10" person with a BMI of 30 weighs 209 pounds.) Among obese individuals in this country — a number that increases every year with no signs of abating — up to 18 million, or nearly one in four, are severely obese, with a BMI of 40 or more.

Carrie Peckham has lost 70 percent of her excess body weight and all of her obesity-related health problems since her weight loss surgery in June 2014.

A safe, effective option

As the Greek physician Hippocrates wisely noted more than two millennia ago, being overweight "is not only a disease itself, but the harbinger of others." Indeed, the list of obesity-related health problems is long: diabetes, hypertension, high cholesterol, stroke, sleep apnea, coronary heart disease, gastric reflex, stress incontinence, infertility, gallbladder disease, depression, a risk of certain cancers, and poor blood flow. According to the American Society for Metabolic and Bariatric Surgery (ASMBS), obese adults have a 50 to 100 percent increased risk of premature death compared to people of healthy weight.

As many obese people know all too well, measures like weight loss diets, drugs, and exercise regimens often fail to take off significant weight and keep it off

over the long term. "I tried everything from weight lifting and dietary changes and would lose some of the weight, but couldn't maintain the loss or control my diabetes," says Mr. Barrows. The same was true for Ms. Peckham. And they are hardly alone: among people who are severely obese, non-surgical options have an abysmal 95 percent failure rate.

Another option

But for many, there is another option: bariatric surgery. According to a National Institutes of Health consensus statement, bariatric surgery is the only treatment proven to consistently achieve long-term weight loss among the severely obese. The ASMBS states that bariatric surgery helps prevent, improve, or resolve more than 40 obesity-related conditions, and reduces premature death by 30 to 40 percent.

Daniel Jones, MD, is Medical Director of BIDMC's Weight Loss Surgery Program, which is accredited by the Metabolic and Bariatric Surgery Accreditation Quality and Improvement Program (see sidebar, page 10). He and fellow bariatric surgeon **Benjamin Schneider, MD**, are both fellowship trained in advanced laparoscopy, train other bariatric surgeons in the department's fellowship program, and collectively have performed more than 2,500 bariatric procedures. "We are also one of the oldest bariatric surgery programs in the country," says Dr. Jones, noting that BIDMC surgeon **George L. Blackburn, MD, PhD**, a pioneer in bariatric surgery, performed the first such procedure in New England in 1973.

Drs. Jones and Schneider are members of an experienced, multidisciplinary team that includes dietitians, an exercise physiologist, an anesthesiologist, a bariatrician (internist), social worker, nurses, and administrative staff, all of whom work extensively with bariatric surgery patients. The program also has close ties with other BIDMC specialists, such as plastic surgeons, cardiologists, and sleep specialists, as well as connections to experts at Joslin Diabetes Center.

A host of resources

In addition, the program offers a host of other resources for patients. These include monthly information sessions and support groups, an e-newsletter, a patient reunion, patient-education materials, and a state-of-the-art inpatient facility with specialized equipment and specially trained nursing staff. "We have a very comprehensive, patient-centered program designed to help patients achieve and maintain their goals," says Dr. Jones.

The BIDMC Weight Loss Surgery Program offers three procedures: the Roux-en-Y (RNY) gastric bypass, the laparoscopic adjustable gastric band (lap band), and the latest and now most popular option, the sleeve gastrectomy (gastric sleeve). Each has advantages and disadvantages, which are discussed in detail with patients so they can make an informed choice that best meets their needs.

Lifetime follow-up

To qualify for bariatric surgery at BIDMC, patients must be between 18 and 70 years old and have a BMI of 40 or more, or a BMI of 35 or more with associated high-risk co-morbid conditions. They must also have undergone a least one serious attempt at weight loss with diet and exercise, and be committed to lifestyle changes and lifetime follow-up.

The goals of bariatric surgery are to improve or resolve weight-related co-morbidities, allow patients to discontinue or decrease medications, improve quality of life, and enhance mobility. It certainly achieved these goals — and much more — for both Ms. Peckham and Mr. Barrows, as it does for the majority of patients nationwide.

Dr. Jones performed gastric sleeve surgery on Ms. Peckham in June 2014. She has since lost 83 pounds, or 70 percent of her excess body weight, and

Carrie Peckham and her daughter, Abby. Ms. Peckham is thrilled with the results of her weight loss surgery. "I feel healthier now than I did at 20," she says.

Members of the Weight Loss Surgery Program team include (from left): Tashima Sorhaindo, LaTasha Brown, Benjamin Schneider, MD, Kate Otto, RD, Steven Henriques, MD, Michelle Davis, RD, Daniel Jones, MD, Leigh-Ann Berk, NP, Erin Hogan, RN, and Mia Saimeri. Not pictured are: Edward Hatchigian, MD, Linda Trainor, RN, Sue Levy-Walker, RN, and Randa Gae Smith.

is working toward losing 100 total pounds. "All my health issues have resolved: I'm off my blood pressure medications, I don't need to use my CPAP [for sleep apnea], and my cholesterol and blood sugars are now normal," says Ms. Peckham. "I can eat virtually anything but just in smaller portions, and I feel full." In addition to being able to keep up with her daughter and students, Ms. Peckham loves how she feels. "I'm always happy and smiling. I feel healthier now at 40 than I did at 20."

Mr. Barrows underwent the lap band procedure more than two years ago. He shed 60 pounds, a loss he has maintained, and his health has improved dramatically. "My blood sugars are excellent, I take half the medication I used to for my diabetes and cholesterol, my neuropathy is much better, and I feel far more energetic and alive," he says.

Ms. Peckham and Mr. Barrows, both of whom did extensive research before choosing BIDMC, are grateful for the excellent care and support they received, and continue to receive, from the BIDMC Weight Loss Surgery Program team. "Dr. Jones, my dietitian, and the entire team have been supportive, respectful, and outstanding," says Mr. Barrows, a sentiment echoed by Ms. Peckham. "I couldn't have asked for better care," she says. "It has been a phenomenal experience."

Referrals and Appointments:
617-667-2845 or bidmc.org/wls

The first appointment is a monthly information session to learn about the Weight Loss Surgery Program, meet the team, and ask questions. Visit bidmc.org/wls for dates, a BMI chart, and other helpful information.

The Importance of Accreditation

MBSAQIP
METABOLIC AND BARIATRIC SURGERY ACCREDITATION AND QUALITY IMPROVEMENT PROGRAM
ACCREDITED CENTER

BIDMC's Weight Loss Surgery Program is accredited by the Metabolic and Bariatric Surgery Accreditation and Quality Improvement Program (MBSAQIP). This accreditation requires a rigorous peer evaluation in accordance with nationally recognized standards and on-site visits by a trained MBSAQIP bariatric surgeon surveyor.

Accreditation demonstrates that a program offers high-quality, multidisciplinary care, has the personnel and infrastructure to ensure patient safety and excellent clinical outcomes, and reports its outcomes to identify areas for continuous quality improvement. In addition to other advantages, multiple studies have shown that undergoing bariatric surgery in an accredited center reduces mortality significantly (in one 2013 study, by more than three times).

In many issues of *Inside Surgery*, we focus on the question a member of our faculty "owns" — a question that inspires his or her research.

THE QUESTION I OWN — Charles H. Cook, MD

Chief, Acute Care Surgery, Trauma, and Surgical Critical Care

Up to 80 percent of adults in the United States have been infected by cytomegalovirus (CMV), a member of the herpes family that also includes the viruses that cause chickenpox and shingles, infectious mononucleosis, and cold sores.

Unlike its close kin, CMV rarely causes noticeable symptoms in healthy individuals, so most people will never know they have been infected. But like the other herpes-family viruses, CMV never leaves the body; it remains latent, held in check — if all goes well — by the immune system.

It has long been known that CMV is frequently reactivated in patients with suppressed immune systems, with the ability to cause serious harm. But as a result of more than a decade of continuous NIH-funded research by Charles H. Cook, MD, it is now known that the ubiquitous virus can also be reactivated and potentially cause harm in people with competent immune systems — particularly those whose bodies are under severe stress, whether from serious illness, trauma, or burns.

Dr. Cook first became intrigued with CMV during his Surgical Critical Care Fellowship at Ohio State University Hospital, when he wondered whether CMV reactivation might play a role in the poor outcomes of some intensive care unit patients. Indeed, a prospective study he led revealed that CMV was reactivated in many of the critically ill patients in the study, and that their risk of death was double that of patients without CMV reactivation.

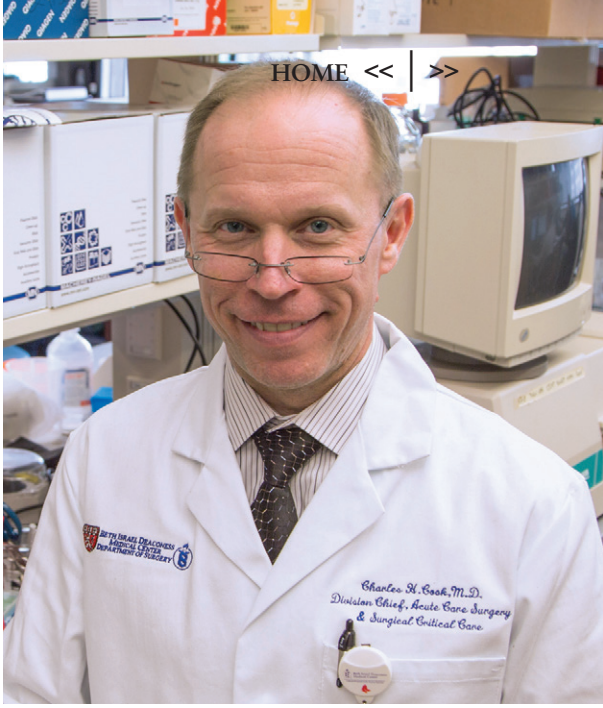
Using a mouse model developed in his lab, Dr. Cook sought answers to many important questions. What triggered CMV reactivation in critically ill, but immune-competent, patients? Was CMV reactivation merely a "bystander" in people who were already very sick, or was it a "driver"— a pathogen that contributed to their worse outcomes? And if it was a driver, how exactly was it harming patients, and how might that be prevented?

One by one, Dr. Cook has answered these questions in his laboratories at Ohio State and, since early 2014, at BIDMC.

CMV reactivation, he discovered, is triggered by inflammatory stimuli released during severe bacterial infection (sepsis), a condition that makes it temporarily easier for reactivation to occur. "Actually, it is now known that the development of *any* inflammatory state — whether from sepsis, burns, trauma, or conditions such as inflammatory bowel disease (IBD) or ulcerative colitis, can trigger CMV reactivation in immune-competent adults," says Dr. Cook, adding that others have found that CMV virus reactivation also occurs among healthy people as result of psychological stress.

In his mouse model, Dr. Cook and his team demonstrated that reactivation of CMV, which tends to reside in the lungs, can cause lung injury in immune-competent hosts, thus demonstrating that CMV is not an innocent bystander. He further showed that the anti-viral medication ganciclovir can prevent reactivation and associated lung injury in mice. This, and Dr. Cook's previous work, laid the foundation for an ongoing, multicenter U.S. clinical trial that is evaluating whether anti-viral treatment will prevent CMV reactivation and thereby reduce lung injury and respiratory failure in critically ill patients.

Building on his previous work but taking it in a different direction, Dr. Cook is collaborating with neurosurgeon Nino Chiocca, MD, PhD, at Brigham and Women's Hospital, to better understand the role of CMV in glioblastoma, a deadly form of brain cancer. As the understanding of the role of CMV in diseases continues to grow, Dr. Cook anticipates and looks forward to other such collaborations aimed at improving patients' outcomes.



Charles H. Cook, MD, in his lab. Dr. Cook collaborates with postdocs Marion Griessl, PhD, and Michael Gutknecht, a PhD candidate.

NEWS BRIEFS

Daniel Jones, MD, Vice Chair of Technology and Innovation, received the American College of Surgeons/American Surgical Association Health Policy Scholarship for 2015.

Bernard Lee, MD, MBA, MPH, Chief of Plastic and Reconstructive Surgery, was selected to receive the American College of Surgeons/American Society of Plastic Surgeons Health Policy Scholarship for 2015. The scholarships enable Drs. Jones and Lee to attend the weeklong Leadership Program in Health Policy and Management at Brandeis University.

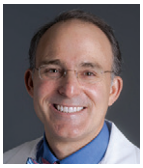
Lori B. Lerner, MD, Urology, Beth Israel Deaconess Hospital-Plymouth, was named as an Editor of the *Canadian Journal of Urology*.

Nurhan Torun, MD, Ophthalmology, was inducted as a Fellow of the North American Neuro-Ophthalmology Society (NANOS) at the society's annual meeting in San Diego, CA, where she made two presentations. Among the requirements for membership as a Fellow are a chief interest in neuro-ophthalmology, special achievement in clinical neuro-ophthalmology, active membership in NANOS, and completion of a neuro-ophthalmology fellowship.

Samuel Lin, MD, Plastic and Reconstructive Surgery, is a Co-Principal Investigator with Tufts University investigator David Kaplan, PhD, on a recent NIH-funded (RO1) grant, "Degradable Orthopedic Hardware," based on their ongoing research, which has found that screws and plates made of silk can be used to fix broken bones. The biocompatible bone screws and plates offer many advantages over traditional metal-based devices.

Ekkehard Kasper, MD, PhD, Neurosurgery, was awarded the 2014-2015 Young Mentor Award from the Harvard Medical School (HMS) Office for Diversity Inclusion and Community Partnership. The Young Mentor Award recognizes faculty in the early stages of their careers who devote time to mentoring others. Recent previous Department of Surgery recipients were **Samuel Lin, MD** (2012-2013), and **Bernard Lee, MD, MBA, MPH** (2011-2012), Plastic and Reconstructive Surgery.

Ranjna Sharma, MD, Surgical Oncology, was appointed to serve on the Constitution and Bylaws Committee of the Society of Surgical Oncology.



Jorge G. Arroyo, MD, MPH, was recently promoted to Associate Chief of Ophthalmology at BIDMC. Dr. Arroyo, Director of the Retina Service Center in the Division of Ophthalmology, is a national leader in the treatment of complex retinal disorders.

Thirteen Department of Surgery faculty members were named as "Top Doctors" by *Boston Magazine*: **Michael Cahalane, MD, Mark Callery, MD, Elliot Chaikof, MD, PhD, Anurag Das, MD, Raul Guzman, MD, Allen Hamdan, MD, Daniel Jones, MD, Kamal Khabbaz, MD, Abraham Morgentaler, MD, Marc Schermerhorn, MD, Benjamin Schneider, MD, Sumner Slavin, MD,** and **Richard Whyte, MD, MBA.**

An article by **Mark Callery, MD**, Chief of General Surgery, and BIDMC Surgery Residency Program alumnus **David Linehan, MD**, University of Rochester Medical Center, entitled "Pretreatment Assessment of Resectable and Borderline Resectable Pancreatic Cancer: Expert Consensus Statement," was selected for recognition by the Society for Surgical Oncology (SSO) as a frequently cited *Annals of Surgical Oncology* article during the last two years. This achievement was announced in March at the SSO Annual Cancer Symposium in Houston, TX.

Resident **Ahmed Ibrahim, MD, PhD**, was recently awarded a doctoral degree (PhD), which was completed under the supervision of **Samuel Lin, MD**, and **Bernard Lee, MD, MBA, MPH**, Plastic and Reconstructive Surgery, and Steven Hovius, MD, PhD, and Marc Mureau, MD, PhD, at Erasmus University in the Netherlands. The title of Dr. Ibrahim's thesis was "Acellular Dermal Matrix in Postmastectomy Breast Reconstruction."

Adnan Majid, MD, and **Erik Folch, MD**, Thoracic Surgery/ Interventional Pulmonology, co-led the fourth annual BIDMC "Introduction to Interventional Pulmonology Course." The course included lectures and hands-on teaching in BIDMC's Carl J. Shapiro Simulation and Skills Center. In March, Dr. Majid was a course director and Dr. Folch a faculty member at SIBBA 2015, an international interventional pulmonology course held in Columbia.

Margie Stuppard, Manager of Practice Operations in Surgical Specialties, was named as a BIDMC 2015 "Black Achiever." Ms. Stuppard, who has worked at BIDMC for 15 years, was honored at the hospital's 26th annual Rev. Martin Luther King Jr. event in January.

James Rodrigue, PhD, Transplant Surgery and Vice Chair of Clinical Research, was recently appointed an Associate Editor for *Clinical Transplantation*, one of the leading journals in the field. Also, on behalf of the American Society of Transplant Surgeons (ASTS) and the American Society of Transplantation (AST), Dr. Rodrigue was invited to participate as a faculty member of the 2015 Annual Meeting of the American Transplant Congress in Philadelphia, where he will give a presentation on "Overcoming Disparities and Reducing Economic Barriers to Live Kidney Donation."

Christopher Ogilvy, MD, and **Ajith Thomas, MD**, Neurosurgery, were co-directors (with BIDMC neurologist Magdy Selim, MD, PhD) of a daylong Harvard Medical School CME course, "Ischemic and Hemorrhagic Update: Current Practices and Future Directions" held recently in Boston.

The fifth annual IDEAS™ symposium, "Defining Grand Challenges for Surgery and Robotics," was held at Harvard Medical School on March 28. Co-led by Surgery Chairman **Elliot Chaikof, MD, PhD**, and Henrik Christensen, PhD, from George Institute of Technology, the daylong program featured an international faculty of robotics experts, a poster session, and cocktail hour. Stefano Stramigioli, PhD, University of Twente (left), and Jeffrey Trinkle, PhD, Rensselaer Polytechnic Institute/National Science Foundation (right), were among the faculty who presented at this year's symposium.

Dr. Stramigioli is Professor of Advanced Robotics at the University of Twente, Editor-in-Chief of the IEEE *Robotics and Automation Magazine*, and leads the European Union's robotics innovation program, which is the largest civilian-funded robotics program in the world. Dr. Trinkle is responsible for advancing President Obama's National Robotics Initiative through the National Science Foundation.

NEWSBRIEFS

Peter Chang, MD, MPH, Urology, was the inaugural winner of the 2015 Society of Asian Academic Surgeons Junior Faculty Scholarship, which provided funding for Dr. Chang to attend the Surgical Investigators Course at the 2015 Academic Surgical Congress in Las Vegas, NV, in February. Also, Dr. Chang was invited to participate in the Movember Foundation International Health Outcomes Collaborative Network, and will be attending the network's annual meeting in Australia this summer. The goal of this international network is to accelerate improvements in outcomes of importance to men with prostate cancer and their families.

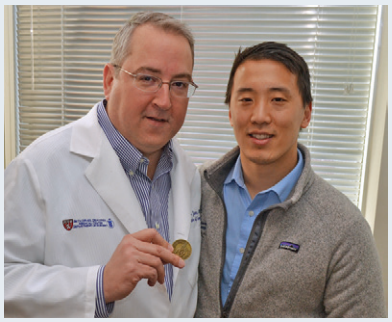
Research fellow **George Cheng, MD, PhD**, and his advisor **Adnan Majid, MD**, Thoracic Surgery/ Interventional Pulmonology, were featured in an article in the *Boston Globe* about their research, which is using 3-D printing technology to create personalized airway stents based on patients' anatomies. Also involved in this work is research fellow **Sebastian Ochoa, MD**. A clinical trial of the devices is planned for next year.

The department's **Surgery Research Report 2013-2014** is available online and in print. To access the report online go to the Surgery home page (bidmc.org/surgery). To request a print copy, e-mail surgerycommunications@bidmc.harvard.edu or call 617-632-8384.

David Campbell, MD, Vascular and Endovascular Surgery, and **Barry Rosenblum, DPM**, Podiatry, went on a medical mission in Cape Verde last fall. While there, they participated in a course on the management of diabetes and its complications, and visited the island's main hospitals to share their expertise. Accompanying them was BIDMC interpreter Carla Iozza. A Cape Verdean surgeon will visit BIDMC this year, and Drs. Campbell and Rosenblum plan to return to Cape Verde in the near future.

Mary Beth Cotter, RN, Surgery Administration, coordinated a gift drive in December for children at the Murphy School in Dorchester, many of whom might not have received any presents for the holidays. Twenty-one children, grades K-8, received wrapped gifts of items from their wish lists from many members of the Department of Surgery. The drive was just one of many coordinated by members of the department's Committee on Social Responsibility.

Anthony Monaco, MD, Director *Emeritus* of the BIDMC Transplant Institute, was the inaugural speaker of a new Translational Immunology lecture series, which brings together clinical and laboratory researchers in immunology to enhance awareness of current research in the field. Lectures take place on the second Thursday of each month throughout the year at the Center for Life Science in the Longwood Medical Area.



Harvard Medical School student Jonny Kim (right), an active duty member of the military (U.S. Navy), presented his unit's coin to **Daniel Jones, MD**, Vice Chair of Technology and Innovation, in appreciation for Dr. Jones's mentorship during Mr. Kim's surgical rotation. Giving unit-specific coins as a gesture of thanks is a longstanding military tradition.

Geoffrey C. Gurtner, MD, Stanford University, was this year's Clowes Visiting Professor of Surgical Research. Dr. Gurtner presented at Grand Rounds on "The Art of the Practical: Translating Scientific Discovery into the Real World," interacted with faculty and trainees, and was the guest at a dinner in his honor. The visiting professorship was named after the late **George H. A. Clowes Jr., MD**.

The Breath of Life

Boston TV station WCVB aired a story earlier this year about BIDMC patient Jennifer Champy, who was treated for tracheobronchomalacia (TBM) by leading TBM experts **Sidhu Gangadharan, MD**, and **Adnan Majid, MD**, Thoracic Surgery/Interventional Pulmonology. Ms. Champy, of South Carolina, had been told by multiple doctors nationwide that there was nothing that could be done for the incapacitating breathing difficulties that required her to quit her job as a nurse, undergo a tracheotomy, and be considered for hospice several times. Following her treatment and recovery, Ms. Champy walks up to five miles a day and is enrolled in school to become a nurse practitioner.

Sidhu Gangadharan, MD, and Adnan Majid, MD, with their patient Jennifer Champy.

"For as long as I live," says Ms. Champy, "I will be grateful to these doctors who saved and gave me back my life."

Fellowship Matches

The department is pleased to announce the following fellowship matches for members of the 2015 BIDMC General Surgery Residency graduating class.

Cardiothoracic Surgery

Scott Atay, MD
The University of Texas MD Anderson Cancer Center
Houston, TX

Denis Gilmore, MD
Vanderbilt University Medical Center
Nashville, TN

Antonio Lassaletta, MD
Beth Israel Deaconess Medical Center
Boston, MA

Pediatric Surgery

Erica Fallon, MD
The Hospital for Sick Children
University of Toronto, Canada

Yue-Yung Hu, MD
University of Connecticut School of Medicine
Hartford, CT

Plastic and Reconstructive Surgery

Jeff Chang, MD
Stanford University
Stanford, CA

Trauma/Surgical Critical Care

Claudia Lozano-Guzman, MD
Thomas Jefferson University
Philadelphia, PA

Vascular Surgery

Andy Lee, MD
Stanford University
Stanford, CA

The Gold Standard

Gold Humanism Society Advances Humanistic Values

Members of the Gold Humanism Society at BIDMC from the Department of Surgery are (from left): residents Mariam Eskander, MD, and Nakul Raykar, MD; faculty champion Michael Cahalane, MD; and residents Eliza Lee, MD, and Ali Linsk, MD. Not pictured are residents Dre Irizarry, MD, and Nisha Narula, MD.

BIDMC has always had a well-earned reputation for providing compassionate patient care. Indeed, this was the inspiration for the hospital's "Human First" marketing campaign.

But in the fast-paced world of a large academic medical center, providing humanistic care and maintaining a collaborative work environment cannot be left to chance. It must be imbedded in systems and the culture, recognized and rewarded, and supported and modeled at all levels — from medical students and residents through senior attending physicians, nursing and ancillary staff, and hospital leadership.

To enhance humanism throughout BIDMC, a group of residents led by surgical residents **Nakul Raykar, MD**, and **Mariam Eskander, MD**, worked with Amy Ship, MD, of the Department of Medicine, to establish the Gold Humanism Society at BIDMC in 2013. The group's faculty champion from the Department of Surgery is acute care/trauma surgeon **Michael Cahalane, MD**.

Selected for pilot grant

BIDMC's Gold Humanism Society was initially funded by a 2013 grant from the Arnold P. Gold Foundation to establish a pilot residency chapter of the Gold Humanism Honor Society (GHHS). Since 2002, GHHS has recognized trainees and faculty in medical schools and residency training programs who embody its humanistic values. As one of 10 U.S. medical centers selected to receive the pilot grant, BIDMC now has one of the most active chapters, according to Dr. Raykar, who co-chairs the group with Department of Radiology resident George Watts, MD.

"From our initial meeting in the fall of 2013, there has been sustained interest in and enthusiasm among residents for this initiative," says Dr. Raykar. Dr. Eskander, Vice Chair for Membership, notes that despite residents' packed schedules, participation at quarterly meetings is consistently high, and membership includes residents from virtually every BIDMC department with a residency program, as well as medical students.

Six initiatives in first year

In its first year, the Gold Humanism Society at BIDMC has launched six initiatives while laying the foundation for other longer-term projects. One is an annual hospital-wide recognition program, the Gold Humanism Faculty Awards; the awards are given to faculty who exhibit compassion, empathy, and humanism in their daily interactions with patients. The first Department of Surgery recipient was acute care/trauma surgeon **Stephen Odom, MD**.

Other initiatives included reintroducing family-centered informational posters in ICU patient rooms, establishing an interdisciplinary provider group to discuss common traumatic ICU experiences, and planning a summit aimed at improving day-to-day interactions among specialties.

Structural humanism

One objective of the group is to structuralize humanistic care during daily routines. Drs. Raykar and Eskander point out that there are some practices that well-meaning providers perform routinely, such as early-morning rounds, that can be perceived negatively by patients, who often do not realize that opportunities will be available later

in the day to discuss their care and concerns with their doctors.

"With recognition of the problem and attention to workable solutions, we feel these issues can be easily addressed," says Dr. Raykar. The group has had initial conversations with the Institute for Healthcare Improvement (IHI) to incorporate proposed solutions into a pilot program of an IHI initiative called "Always Events." The next step, which will be launched over the summer, is a qualitative research project exploring these interactions.

Yet another initiative is an accompaniment program for patients staffed by mentored medical students. Launched in early 2015, the accompaniment program, dubbed "All EARS," trains and dispatches selected first- or second-year medical students to the bedsides of surgical patients in need of support and a listening ear during a particularly difficult time to be alone. The program benefits not only the patients, but also the students and social support staff.

> *"We believe that humanism should be the norm."*
> **Nakul Raykar, MD, Surgery Resident**

"We all believe that being an excellent doctor requires not only knowledge and technical skills but also compassion and inter-professional collaboration, and that humanism should be the norm," says Dr. Raykar. "Through these and future efforts, we want to help make BIDMC the most humanistic medical center in the nation."

New Faculty

Lori B. Lerner, MD

Medical Director, Beth Israel Deaconess Hospital-Plymouth Urology

Division: Urology

Medical School: University of Arizona College of Medicine, Tucson, AZ

Internship: General Surgery, University of Arizona, Tucson, AZ

Residency: General Surgery, Urology, Dartmouth Hitchcock Medical Center, Lebanon, NH

Fellowship: Endourology, Bay of Plenty, Tauranga, New Zealand

Clinical Interests: male voiding dysfunction, laser prostate surgery, benign prostatic hyperplasia, bladder reconstruction, neurologic disorders of the urinary tract

Research Interests: laser prostate surgery, sleep-disordered breathing and voiding dysfunction, surgical therapies for benign prostatic hyperplasia, catheter-associated urinary tract infections

Phone: 508-210-5913

Alia Qureshi, MD, MSc

Division: General Surgery

Medical School: University of Toronto Medical School

Internship/Residency: University of Toronto Residency Program

Fellowship: Minimally Invasive Surgery, The Swedish Cancer Center, Seattle, WA

Clinical Interests: minimally invasive surgery, foregut surgery, anti-reflux procedures, gastric surgery

Research Interests: resident education, gastric oncology

Phone: 781-453-3650

Selected Faculty Publications

Acute Care Surgery, Trauma, and Surgical Critical Care

Gates JD, Arabian S, Biddinger P, Blansfield J, Burke P, Chung S, Fischer J, Friedman F, Gervasini A, Goralnick E, **Gupta A**, Larentzakis A, McMahon M, Mella J, Michaud Y, Mooney D, Rabinovici R, **Sweet D**, Ulrich A, Velmahos G, Weber C, **Yaffe MB**. The initial response to the Boston Marathon bombing: Lessons learned to prepare for the next disaster. Ann Surg 2014;260(6):960-6.

Guidry CA, Mansfield SA, Sawyer RG, **Cook CH**. Resistant pathogens, fungi, and viruses. Surg Clin North Am 2014;94(6):1195-1218.

Ledderose C, **Bao Y**, **Zhang J**, **Junger WG**. Novel method for real-time monitoring of ATP release reveals multiple phases of autocrine purinergic signaling during immune cell activation. Acta Physiol (Oxf) 2015;213(2):334-45.

Raghavan K, Lagisetty KH, Butler KL, **Cahalane MJ**, **Gupta A**, **Odom SR**. Intraoperative fires during emergent colon surgery. Am Surg 2015;81(2):82-3.

Cardiac Surgery

Mahmood F, Owais K, Montealegre-Gallegos M, Matyal R, Panzica P, Maslow A, **Khabbaz KR**. Echocardiography derived three-dimensional printing of normal and abnormal mitral annuli. Ann Card Anaesth 2014;17(4):279-83.

Mahmood F, Owais K, Taylor C, Montealegre-Gallegos M, Manning W, Matyal R, **Khabbaz KR**. Three-dimensional printing of mitral valve using echocardiographic data. JACC Cardiovasc Imaging 2015;8(2):227-9.

Colon and Rectal Surgery

Dagoglu N, Mahadevan A, Nedea E, **Poylin V**, **Nagle D**. Stereotactic body radiotherapy (SBRT) reirradiation for pelvic recurrence from colorectal cancer. J Surg Oncol 2015; in press.

Poylin V, **Quinn J**, **Messer K**, **Nagle D**. Gabapentin significantly decreases posthemorrhoidectomy pain: A prospective study. Int J Colorectal Dis 2014;29(12):1565-9.

General Surgery

Bakhos C, Oyasiji T, **Elmadhun N**, **Kent M**, **Gangadharan S**, **Critchlow J**, Fabian T. Feasibility of minimally invasive esophagectomy after neoadjuvant chemoradiation. J Laparoendosc Adv Surg Tech A 2014;24(10):688-92.

Chellali A, **Schwaitzberg SD**, **Jones DB**, Romanelli J, Miller A, Rattner D, Roberts KE, Cao CG. Toward scar-free surgery: An analysis of the increasing complexity from laparoscopic surgery to NOTES. Surg Endosc 2014;28(11):3119-33.

Stanford FC, **Jones DB**, **Schneider BE**, **Blackburn GL**, Apovian CM, Hess DT, Chiodi S, Robert S, Bourland AC, Wee CC. Patient race and the likelihood of undergoing bariatric surgery among patients seeking surgery. Surg Endosc 2014; in press.

Neurosurgery

Agarwalla PK, Stapleton CJ, Phillips MT, Walcott BP, Venteicher AS, **Ogilvy CS**. Surgical outcomes following encephalo-duroarteriosynangiosis in North American adults with Moyamoya. J Neurosurg 2014; in press.

Stapleton CJ, Walcott BP, Butler WE, **Ogilvy CS**. Neurological outcomes following intraprocedural rerupture during coil embolization of ruptured intracranial aneurysms. J Neurosurg 2015;122(1):128-35.

Stippler M, Boone MD. Neurotrauma. Int Anesthesiol Clin 2015;53(1):23-38.

Thomas AJ, **Ogilvy CS**. ISAT: Equipoise in treatment of ruptured cerebral aneurysms? Lancet 2015;385(9969):666-8.

Thomas AJ, **Ogilvy CS**. Treatment of dural AVFs with cortical venous reflux-endovascular therapy and surgery preferred modality of treatment. World Neurosurg 2015; in press.

Ophthalmology

Marra KV, Wagley S, Omar A, Kinoshita T, Kovacs KD, Silva P, **Kuperwaser MC**, **Arroyo JG**. Case-matched comparison of vitrectomy, peripheral retinal endolaser, and endocyclophoto-coagulation versus standard care in neovascular glaucoma. Retina 2015; in press.

Wagley S, Marra KV, Salhi RA, Gautam S, Campo R, Veale P, Veale J, **Arroyo JG**. Periodontal disease and age-related macular degeneration: Results from the National Health and Nutrition Examination Survey III. Retina 2015; in press.

Otolaryngology/Head and Neck Surgery

Young VN, **Mallur PS**, Wong AW, Mandal R, Staltari GV, Gartner-Schmidt J, Rosen CA. Analysis of potassium titanyl phosphate laser settings and voice outcomes in the treatment of Reinke's edema. Ann Otol Rhinol Laryngol 2014; in press.

Plastic and Reconstructive Surgery

Iorio ML, Bayomy AF, Huang JI. Morphology of the extensor carpi ulnaris groove and tendon. J Hand Surg Am 2014;39(12):2412-6.

Iorio ML, Han KD, Evans KK, Attinger CE. Combined Achilles tendon and soft tissue defects: Functional outcomes of free tissue transfers and tendon vascularization. Ann Plast Surg 2015;74(1):121-5.

Koolen PG, **Ibrahim AM**, Kim K, Sinno HH, **Lee BT**, **Schneider BE**, **Jones DB**, **Lin SJ**. Patient selection optimization following combined abdominal procedures: Analysis of 4925 patients undergoing panniculectomy/abdominoplasty with or without concurrent hernia repair. Plast Reconstr Surg 2014;134(4):539e-50e.

Nguyen LT, Min YK, **Lee BT**. Nanoparticle biphasic calcium phosphate loading on gelatin-pectin scaffold for improved bone regeneration. Tissue Eng Part A 2015; in press.

Vargas CR, Nguyen JT, Ashitate Y, Silvestre J, Venugopal V, Neacsu F, Kettenring F, Frangioni JV, Gioux S, **Lee BT**. Near-infrared imaging for the assessment of anastomotic patency, thrombosis, and reperfusion in microsurgery: A pilot study in a porcine model. Microsurgery 2015; in press.

Podiatry

Dinh T, Braunagel S, **Rosenblum BI**. Growth factors in wound healing: The present and the future? Clin Podiatr Med Surg 2015;32(1):109-19.

Rosenblum BI. Preface. Current update on orthobiologics in foot and ankle surgery. Clin Podiatr Med Surg 2015;32(1):xvii-xviii.

Surgical Oncology

Bliss LA, **Yang CJ**, **Chau Z**, **Ng SC**, McFadden DW, **Kent TS**, **Moser AJ**, **Callery MP**, **Tseng JF**. Patient selection and the volume effect in pancreatic surgery: Unequal benefits? HPB (Oxford) 2014;16(10):899-906.

Bliss LA, **Yang CJ**, **Kent TS**, **Ng SC**, **Critchlow JF**, **Tseng JF**. Appendicitis in the modern era: Universal problem and variable treatment. Surg Endosc 2014; in press.

Downs-Canner S, Van der Vliet WJ, Thoolen SJ, Boone BA, Zureikat AH, Hogg ME, Bartlett DL, **Callery MP**, **Kent TS**, Zeh HJ, **Moser AJ**. Robotic surgery for benign duodenal tumors. J Gastrointest Surg 2015;19(2):306-12.

Thoolen SJ, van der Vliet WJ, **Kent TS**, **Callery MP**, Dib MJ, **Hamdan A**, **Schermerhorn ML**, **Moser AJ**. Technique and outcomes of robot-assisted median arcuate ligament release for celiac artery compression syndrome. J Vasc Surg 2015; in press.

Yang CJ, **Bliss LA**, **Schapira EF**, Freedman SD, **Ng SC**, Windsor JA, **Tseng JF**. Systematic review of early surgery for chronic pancreatitis: Impact on pain, pancreatic function, and re-intervention. J Gastrointest Surg 2014;18(10):1863-9.

Thoracic Surgery and Interventional Pulmonology

Fernandez-Bussy S, Labarca G, Descalzi F, Pires Y, Santos M, **Folch E**, **Majid A**. Endobronchial chondromas. Respir Care 2014;59(12):e193-6.

Le X, Desai NV, **Majid A**, Karp RS, Huberman MS, Rangachari D, **Kent MS**, **Gangadharan SP**, **Folch E**, VanderLaan PA, Costa DB. *De novo* pulmonary small cell carcinomas and large cell neuroendocrine carcinomas harboring EGFR mutations: Lack of response to EGFR inhibitors. Lung Cancer 2015; in press.

Transplant Surgery

Asman Y, **Evenson AR**, Even-Sapir E, Shibolet O. (18) F-FDG- PET-CT as a prognostic tool prior to liver transplantation, resection and loco-ablative therapies for hepatocellular carcinoma. Liver Transpl 2015; in press.

Beard RE, Yee EU, Mortele KJ, **Khwaja K**. Multicystic biliary hamartoma: A report of a rare entity and a review of the literature. Int J Surg Case Rep 2014;5(12):919-23.

LaPointe Rudow D, Hays R, Baliga P, Cohen DJ, Cooper M, Danovitch GM, Dew MA, Gordon EJ, Mandelbrot DA, McGuire S, Milton J, Moore DR, Morgievich M, Schold JD, Segev DL, Serur D, Steiner RW, Tan JC, Waterman AD, Zavala EY, **Rodrigue JR**. Consensus conference on best practices in live kidney donation: Recommendations to optimize education, access, and care. Am J Transplant 2015; in press.

Ramanathan R, Sharma A, Kaspar M, Behnke M, Song S, Stravitz RT, Cotterell A, Posner M, **Fisher RA**. Local allograft irradiation as an adjunct for treating severe resistant rejection after liver transplantation in adults. Liver Transpl 2015;21(1):47-56.

Rodrigue JR, Paek MJ, Egbuna O, Waterman AD, Schold JD, Pavlakis M, Mandelbrot DA. Readiness of wait-listed black patients to pursue live donor kidney transplant. Prog Transplant 2014;24(4): 355-61.

Wegiel B, Larsen R, Gallo D, Chin BY, Harris C, Mannam P, Kaczmarek E, Lee PJ, Zuckerbraun BS, Flavell R, Soares MP, **Otterbein LE**. Macrophages sense and kill bacteria through carbon monoxide-dependent inflammasome activation. J Clin Invest 2014;124(11):4926-40.

Urology

Lunenfeld B, Mskhalaya G, Zitzmann M, Arver S, Kalinchenko S, Tishova Y, **Morgentaler A**. Recommendations on the diagnosis, treatment and monitoring of hypogonadism in men. Aging Male 2015;6:1-11.

Pierorazio PM, Johnson MH, Ball MW, Gorin MA, Trock BJ, **Chang P**, **Wagner AA**, McKiernan JM, Allaf ME. Five-year analysis of a multi-institutional prospective clinical trial of delayed intervention and surveillance for small renal masses: The DISSRM Registry. Eur Urol 2015; in press.

Tullius SG, Biefer HR, Li S, Trachtenberg AJ, Edtinger K, Quante M, Krenzien F, Uehara H, Yang X, Kissick HT, Kuo WP, Ghiran I, de la Fuente MA, **Arredouani MS**, Camacho V, Tigges JC, Toxavidis V, El Fatimy R, Smith BD, Vasudevan A, ElKhal A. NAD+ protects against EAE by regulating CD4+ T-cell differentiation. Nat Commun 2014;5:5101.

Vascular and Endovascular Surgery

Angsana J, **Chen J**, Smith S, Xiao J, Wen J, **Liu L**, **Haller CA**, **Chaikof EL**. Syndecan-1 modulates the motility and resolution responses of macrophages. Arterioscler Thromb Vasc Biol 2015;35(2):332-40.

Kim W, **Haller C**, Dai E, Wang X, Hagemeyer CE, Liu DR, Peter K, **Chaikof EL**. Targeted antithrombotic protein micelles. Angew Chem Int Ed Engl 2015; 54(5):1461-5.

Matyal R, Shakil O, Hess PE, **Lo R**, Jainandunsing JS, Mahmood B, Hartman GS, **Schermerhorn ML**, Mahmood F. Impact of gender and body surface area on outcome after abdominal aortic aneurysm repair. Am J Surg 2015;209(2):315-23.

Studer P, **da Silva CG**, **Revuelta-Cervantes JM**, **Mele A**, **Csizmadia E**, Siracuse JJ, Damrauer SM, **Peterson CR**, Candinas D, Stroka DM, Ma A, Bhasin M, **Ferran C**. Significant lethality following liver resection in A20 heterozygous knockout mice uncovers a key role for A20 in liver regeneration. Cell Death Differ 2015; in press.

The Bookshelf

Books by our faculty

Daniel B. Jones, MD, Robert A. Andrews, MD, **Jonathan F. Critchlow, MD**, and **Benjamin Schneider, MD**, Editors. *Minimally Invasive Surgery: Laparoscopy, Therapeutic Endoscopy and NOTES.* Published by JP Medical Publishers, 2014.

A Heartfelt Thanks

Our surgeons and staff regularly receive cards, letters, and e-mails from grateful patients and family members thanking them for all they do. All are heartfelt, and some are especially poignant.

At right (used with permission) is one such e-mail sent earlier this year to ***Sidhu Gangadharan, MD****, Chief of Thoracic Surgery/ Interventional Pulmonology, by Kelly Eagan, the daughter of patient James Eagan, of Rome, New York. Dr. Gangadharan and* ***Adnan Majid, MD****, Director of Interventional Pulmonology, treated Mr. Eagan for a severe airway disease called tracheobronchomalacia (TBM).*

Dear Dr. Gangadharan,

Last year at this time you performed surgery on my 72-year-old father, James D. Eagan. He had tracheobronchomalacia. I'm not sure I can even explain what we went through to finally get to your hands. I view it as a miracle. Over years — many, many years — we had diagnosis after diagnosis: asthma, allergies, COPD, etc. Hospital stays were frequent and becoming the norm in our lives.

The tragedy was that when my father laughed, he would have a coughing fit that would eventually send him to the ER. If you know my father at all you would know he's an Irishman who loves life, a good story, and a good hearty laugh. His quality of life was extremely compromised. He struggled with the energy needed to spend time with his grandkids, and life just seemed to exhaust him. By chance, he was sent to a doctor here in Syracuse who had worked with you. She recognized his condition [TBM], made a call, and he was on his way to Boston.

We were all so worried about the surgery and how he would do but felt he really had no choice. The surgery was long and the recovery was not easy, but today my father is a new man! He has his color, his energy, his humor, and his life back.

I cannot thank you enough for giving me back my father and my kids their grandfather. You should know that he is living life to the fullest — enjoying adventures with his grandkids, traveling with my mom, and laughing…a lot!

I know every day we have with him is a gift from you. My family thinks of you often and wishes you well always.

My sincerest thanks,
Kelly Eagan
Manlius, New York