



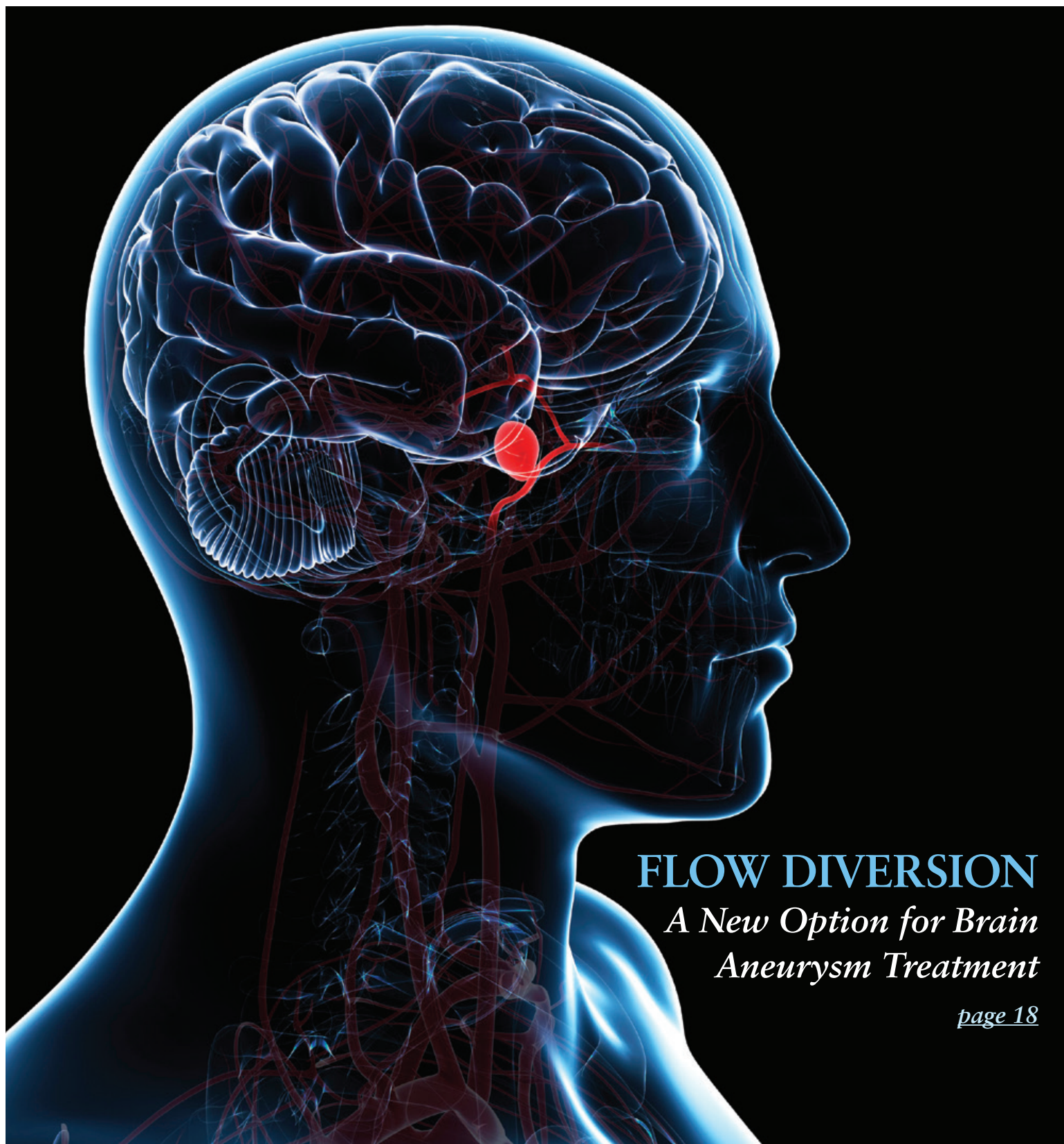
Beth Israel Deaconess
Medical Center



HARVARD MEDICAL SCHOOL
TEACHING HOSPITAL

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

INSIDE SURGERY



FLOW DIVERSION

*A New Option for Brain
Aneurysm Treatment*

page 18

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Message from the Chairman

In an era when we are able to fly halfway around the world in less than a day, it is hard to appreciate that only 113 years ago, Wilbur and Orville Wright made the first flight from Kill Devil Hills in North Carolina. With that stunning accomplishment, the brothers from Ohio realized a dream of humankind and forever altered the course of human events.

In David McCullough's book, *The Wright Brothers*, the Boston author quotes John T. Daniels, who witnessed the historic flight on December 17, 1903. "It wasn't luck that made them fly," he said of Wilbur and Orville. "It was hard work and common sense; they put their whole heart and soul and all their energy into an idea and they had the faith."

Indeed, the Wright brothers, who had long believed that human flight was "possible and practicable," persevered in the face of countless obstacles and a doubting public. "It is a fact that man can't fly," declared the *Washington Post*, echoing the sentiments of many at the time.

The history of surgery, and of our department, is not unlike the history of aviation. It is the story of determined women and men who have faith in their dreams and work relentlessly to achieve them — whether it is to discover how a disease develops to find an effective treatment ([page 24](#)), design a lifesaving new device ([page 30](#)), or discover novel treatments based on a new understanding of human biology ([page 36](#)).

As you will discover in this and previous issues of *Inside Surgery*, ours is a story of optimism, hard work, faith, and perseverance, with one common goal — to make the world a better place for all.



Elliot Chaikof, MD, PhD



Beth Israel Deaconess Medical Center



HARVARD MEDICAL SCHOOL
TEACHING HOSPITAL

Fall/Winter 2016

Volume 6, 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

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bidmc.org/surgery

Photography:

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Frank Curran, Danielle Duffey,
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Save the Date

September 22

Department of Surgery "Food is Medicine" Gala to support the Greater Boston Food Bank

Greater Boston Food Bank, 70 South Bay Ave., Boston

Tickets, information, and to donate: gbfb.org/events

November 2

Surgery Grand Rounds

Levitsky Visiting Professor of Cardiac Surgery

Christopher Caldarone, MD

Hospital for Sick Children, Toronto

November 4

Diabetic Lower Extremity Symposium: From Innovation to Therapy

Presented by the BIDMC Rongxiang Xu, MD, Center for Regenerative Therapeutics and the Wyss Institute for Biologically Inspired Engineering at Harvard University.

Joseph B. Martin Conference Center, Harvard Medical School, 77 Ave. Louis Pasteur, Boston

To register: DLESymposium.com

November 9

Surgery Grand Rounds

Salzman Visiting Professor of Vascular Surgery

Juan C. Parodi, MD

University of Michigan; University of Buenos Aires, Argentina

November 30

Surgery Grand Rounds

Silen Visiting Professor of Surgery

Caprice C. Greenberg, MD, MPH

University of Wisconsin School of Medicine and Public Health

Surgery Grand Rounds are held from 8-9 a.m. in the Joslin Diabetes Center Auditorium, One Joslin Place, Boston, MA. For a listing of all 2016-2017 Surgery Grand Rounds, go to: bidmc.org/surgery.

Department Welcomes Ted A. James, MD

Following a national search, the Department of Surgery is pleased to announce that **Ted A. James, MD**, has joined the department and BIDMC. Dr. James is Section Chief of Breast Surgical Oncology and Co-Director (with Tejas Mehta, MD, MPH, Radiology) of the BIDMC BreastCare Center. He is also Vice Chair of Academic Affairs in the Department of Surgery, a new position.

Dr. James came to BIDMC from the University of Vermont (UVM) College of Medicine, where he was a Professor of Surgery, with a secondary appointment as a Professor of Obstetrics/Gynecology. Among many other leadership roles at UVM, Dr. James was Director of Skin and Soft Tissue Surgical Oncology and Executive Director of the Clinical Simulation Lab.

Dr. James received his medical degree from Drexel University College of Medicine in Philadelphia, Pennsylvania. He completed his residency in general surgery at North Shore-Long Island Jewish, in Manhasset, New York, and a fellowship in surgical oncology at Roswell Park Cancer Institute in Buffalo, New York. Dr. James also earned a Master of Science in Health Care Management from Harvard University.

Dr. James's clinical interests include breast cancer, benign breast disease, and familial breast cancer risk. His research interests span quality improvement in



cancer care, mechanisms of tumor metastasis, and regenerative therapies in oncology. Dr. James has received funding from the federal government, state agencies, and foundations.

Dr. James holds leadership positions in many professional societies and lectures nationally and internationally. He is the recipient of numerous honors, including multiple awards for education, research, service, and leadership. Dr. James was a Macy Faculty Scholar in 2012. Supported by the Josiah Macy Jr. Foundation, this national program is designed to foster the careers of educational innovators.

"We are so pleased to welcome such an accomplished, superbly qualified surgical leader to our department and the medical center," says **Elliot Chaikof, MD, PhD**, Surgery Chairman.

ALUMNI SPOTLIGHT

PAULA FERRADA, MD, 2008

Paula Ferrada, MD, says that she followed her instincts to the specialty of trauma surgery. “I was a medical student when I decided to go into trauma,” recalls Dr. Ferrada, who serves as the Medical Director of the Surgical Intensive Care Unit and Trauma Intensive Care Unit at Virginia Commonwealth University Health System (VCU). “Trauma, emergency surgery, and the ICU all chose me, rather than me choosing them.”

At VCU, which is located in Richmond, Virginia, Dr. Ferrada and her surgical colleagues care for more than 4,000 trauma patients among 84,000 annual ED admissions. “VCU is a regional referral center, so we get the sickest of the sick,” she notes, acknowledging that the stress level can run high.

Dr. Ferrada is well prepared for this demanding environment. After graduating from medical school at the Universidad del Valle in her native Colombia and spending her internship year at the University of Miami, Dr. Ferrada headed to BIDMC for her surgical residency. She then completed a fellowship in surgical critical care at the University of Pittsburgh, followed by an additional year of fellowship training at the University of Maryland’s Shock Trauma Center.

When she reflects on the various leadership roles she now plays, Dr. Ferrada knows she was shaped by

“It means a lot to have an ongoing relationship with BIDMC because I look back on my training there with the utmost appreciation and pride.”

PAULA FERRADA, MD

her BIDMC years. “I saw leaders in action every day,” she says. “You learn a lot by listening and paying attention. At Beth Israel Deaconess, I learned how to manage myself, lead a team, and think critically. I’m proud of having trained there.”

Another of her leadership roles is directing VCU’s Surgical Critical Care Fellowship. “I love teaching,” says Dr. Ferrada, who won an Outstanding Teacher Award at Harvard Medical School in 2006. “It’s part



of who I am. To me, the most gratification I have is watching my fellows succeed.”

Dr. Ferrada has a longstanding focus on teaching surgeons to use ultrasound. Her interest began with FAST (Focused Assessment with Sonography in Trauma) ultrasound, which is an effective diagnostic tool for evaluating the heart and abdomen. “I became interested in it when I was instructing medical students at BIDMC,” she explains.

“Sometimes a specific patient becomes your inspiration. During my residency, there was a patient who had cholangitis [an infected biliary tract]. She was sick and required resuscitation but she was on blood thinners, so we could not place a central line due to the risk of bleeding. We asked the cardiologist to perform an echocardiogram to guide therapy, which turned out to be the right thing to do. It made me wonder if we could teach surgeons how to use ultrasound to evaluate [blood] volume status, instead of guessing.”

From there, Dr. Ferrada proceeded to train her colleagues in using ultrasound. “When I got to VCU, none of the surgeons used ultrasound,” she says. “Now we own it.” She has received numerous honors for her ultrasound teaching and is editor of the book “Ultrasonography in the ICU: Practical Applications,” which has had a widespread impact on clinical practice.

Dr. Ferrada is actively involved with the Pan-American Trauma Society, an organization that her father, also a surgeon, founded with the goal of encouraging international collaboration. “In North America and Latin America, we all have our strengths

ALUMNI NEWS

and can help each other grow,” she says. She serves as chair for the society’s Education and Research Committee and founded a scholarship that sends North American trauma fellows to Latin America for a month as part of an educational exchange. “I believe we need to learn from each other. With education and innovation, we can improve practice in both worlds and ultimately achieve better patient care.”

Dr. Ferrada is comfortable serving as a role model, most notably to young women who are attracted to surgery but hold themselves back. “My advice to medical students is: do what you want to do — what’s in your heart,” she says, “because when you find it, it doesn’t feel like a sacrifice. A lot of female students say ‘But I want to have a family.’ I tell them, go ahead! It takes planning but if you really want it then you can make it possible.”

Not surprisingly, when a social media campaign, “[I Look Like a Surgeon](#),” took off last summer with the goal of shattering stereotypes, Dr. Ferrada enthusiastically jumped on board. “In Latin America and many other areas of the world, few women go into surgery,” she says. “I want to be part of changing that.” She also served as chair of the Virginia Chapter of the Association of Women Surgeons, further continuing her mission of mentoring and nurturing future surgeons.

Regarding her own training and development as a surgeon, she is grateful to the BIDMC faculty, whom she found to be very open-minded. “I feel nostalgic when I think of Beth Israel Deaconess. Many mentors and friends who are still there helped me become who I am now,” she says, citing **Amy Evenson, MD**, **Christopher Boyd, MD**, **Michael Cahalane, MD**, **Mark Callery, MD**, **Daniel Jones, MD**, and **Tara Kent, MD**.

“I was thrilled to have one of my mentees rotate at BIDMC recently,” Dr. Ferrada adds. “It means a lot to have an ongoing relationship with the medical center, because I look back on my own training there with the utmost appreciation and pride.”

Richard A. Lynn, MD, who serves on the Board of Directors of the Society for Vascular Surgery (SVS) and the American College of Surgeons Foundation, was given a Presidential Citation Award at the annual SVS meeting in June. The award was presented in recognition of Dr. Lynn’s exemplary service to the SVS and his leadership of the SVS Community Practice Committee.



In June 2015, the Brody School of Medicine at East Carolina University in North Carolina named **J. E. “Betsy” Tuttle-Newhall, MD**, 1995, as Chair of its Department of Surgery. Previously, Dr. Tuttle-Newhall served as the division chief of abdominal

transplant surgery and primary transplant surgeon at Cardinal Glennon Pediatric Hospital in St. Louis. She was also co-director of the Abdominal Transplant Center at St. Louis University Hospital School of Medicine. While in St. Louis, Dr. Tuttle-Newhall was the recipient of several Medals of Honor from the U.S. Department of Health and Human Services for her work to improve and expand organ donation. Dr. Tuttle-Newhall completed a surgery residency and a clinical fellowship in surgery at BIDMC (New England Deaconess Hospital), followed by a surgical critical care fellowship at the University of North Carolina at Chapel Hill and an abdominal transplant surgery fellowship at Duke University Medical Center. Following her fellowships, Dr. Tuttle-Newhall held several positions at Duke.

Steven Teitelbaum, MD, 1993, is a plastic surgeon in private practice in Santa Monica, California, and Associate Clinical Professor of Plastic Surgery at UCLA. He is president of the California Society of Plastic Surgeons and president of the Aesthetic Society Education and Research Foundation, the world’s largest research organization dedicated to aesthetic surgery.

**Alumni,
we’d like to
keep in touch
with you!**

To ensure that you continue to receive *Inside Surgery* and invitations to special alumni-only events, please send your current e-mail and preferred mailing address to surgerycommunications@bidmc.harvard.edu, or to our mailing address listed on page 2. Also, please send us news of your accomplishments and activities to share with our readers. Send information to the editor at surgerycommunications@bidmc.harvard.edu.

New Faculty



Louis M. Chu, MD

Division: Cardiac Surgery

Medical School: New York Medical College, Valhalla, NY

Residency: Beth Israel Deaconess Medical Center, Boston, MA

Fellowship: Cardiothoracic Surgery, Brigham and Women's Hospital, Boston, MA

Phone: 617-632-8383

Dr. Chu sees patients at BIDMC.



Christopher Hoover, MD

Division: Urology

Medical School: Rush University Medical College, Chicago, IL

Residency: Boston Medical Center, Boston, MA

Fellowship: Urology, BIDH-Plymouth, Plymouth, MA

Phone: 508-210-5913

Dr. Hoover sees patients primarily at BIDH-Plymouth.



Jennifer L. Wilson, MD

Division: Thoracic Surgery/Interventional Pulmonology

Medical School: University of Missouri Kansas City School of Medicine

Residency: General Surgery, Swedish Medical Center, Seattle, WA

Fellowship: Cardiothoracic Surgery, BIDMC, Boston, MA

Phone: 617-632-8252

Dr. Wilson sees patients at Cambridge Health Alliance and BIDMC.



Eugene Fukudome, MD

Division: Plastic and Reconstructive Surgery

Medical School: Warren Alpert Medical School of Brown University, Providence, RI

Residency: General Surgery, Massachusetts General Hospital;

Plastic Surgery, Harvard Plastic Surgery Combined Residency Program, Boston, MA

Fellowship: Plastic Surgery, Brigham and Women's Hospital, Boston, MA

Phone: 617-632-7827

Dr. Fukudome sees patients at BIDMC, BIDH-Needham, and Atrius Health.



Dhruv Singhal, MD

Division: Plastic and Reconstructive Surgery

Medical School: University of Pittsburgh School of Medicine, Pittsburgh, PA

Residency: General Surgery, Brigham and Women's Hospital;

Plastic Surgery, Combined Harvard Plastic Surgery Program, Boston, MA

Fellowship: Craniofacial Surgery, Chang Gung Memorial Hospital; Microsurgery, China Medical University Hospital, Taiwan

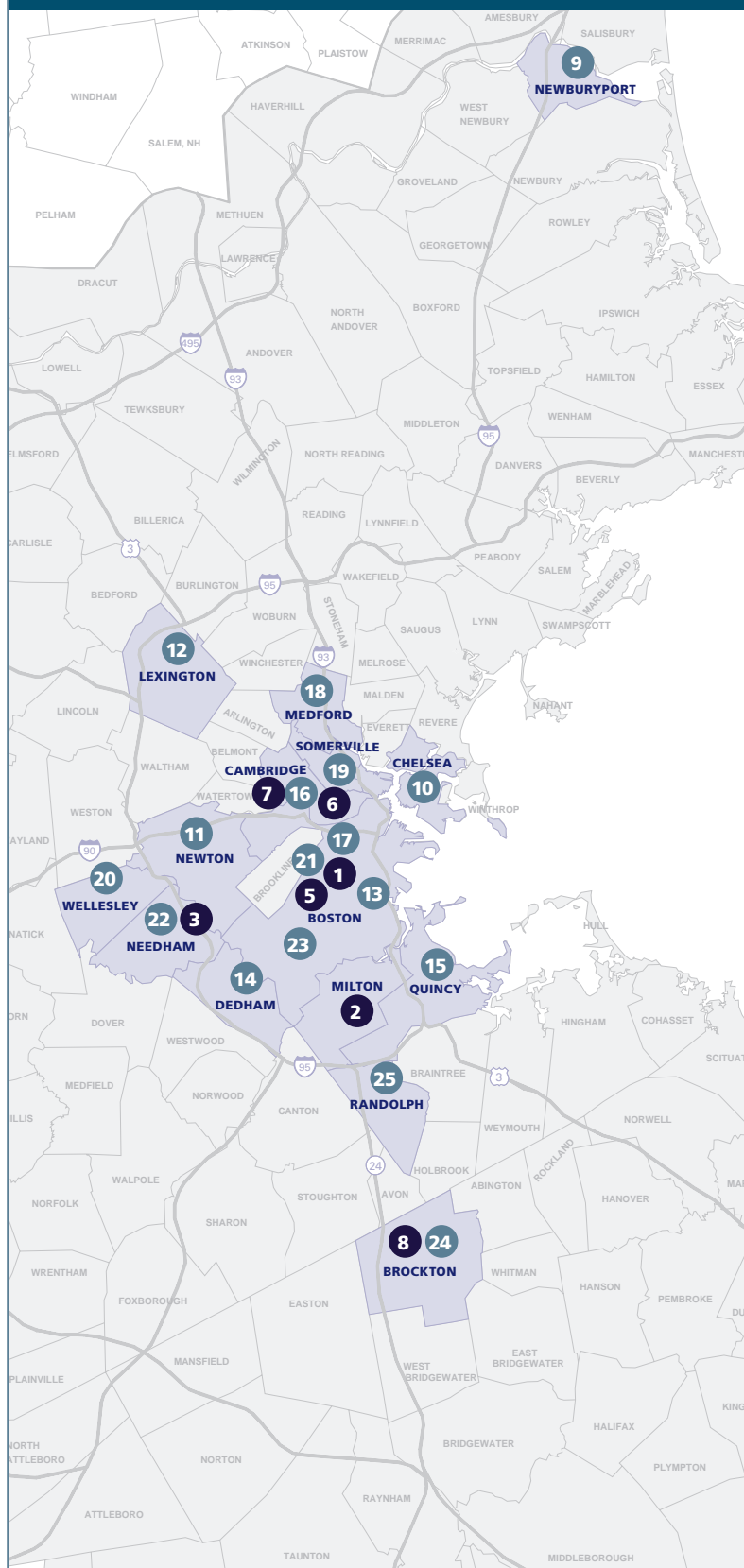
Phone: 617-632-7827

Dr. Singhal sees patients at BIDMC and BIDH-Needham.

Find A Doctor

All Department of Surgery faculty are listed on Beth Israel Deaconess Medical Center's Find A Doctor website at findadoc.bidmc.org. There you can search for a surgeon by name, specialty, hospital, and location. Listings include gender, practice locations, educational backgrounds, languages spoken, and clinical interests.

Department of Surgery CLINICAL LOCATIONS



The Department of Surgery provides care in many locations throughout the region, as listed on this map. For details about the services provided at each location and our growing network, please contact Jennifer Kelly, Surgery Administration, at jkelly16@bidmc.harvard.edu.

Inpatient and Outpatient Care

- 1 BIDMC
- 2 BIDH–Milton
- 3 BIDH–Needham
- 4 BIDH–Plymouth
- 5 Boston Children's Hospital
- 6 Cambridge Hospital
- 7 Mount Auburn Hospital
- 8 Signature Healthcare Brockton Hospital

Outpatient Care

- 9 Anna Jaques Hospital
- 10 BIDHC–Chelsea
- 11 BIDHC–Chestnut Hill
- 12 BIDHC–Lexington
- 13 Bowdoin Street Health Center
- 14 Dedham Medical Associates/Atrius Health
- 15 Granite Medical Associates/Atrius Health
- 16 Harvard University Health Center
- 17 Harvard Vanguard Medical Associates –Kenmore Square/Atrius Health
- 18 Harvard Vanguard Medical Associates –Medford/Atrius Health
- 19 Harvard Vanguard Medical Associates –Somerville/Atrius Health
- 20 Harvard Vanguard Medical Associates –Wellesley/Atrius Health
- 21 Joslin Diabetes Center
- 22 Needham Wound Care Center
- 23 New England Baptist Surgicare
- 24 Signature Medical Group–Brockton
- 25 Signature Medical Group–Randolph

NEWS BRIEFS

Michael Yaffe, MD, PhD, a faculty member of the Division of Acute Care Surgery, Trauma, and Surgical Critical Care, and also the Division of Surgical Oncology, recently received a Bronze Star Medal. The Bronze Star is awarded to members of the U.S. Armed Forces for heroic or meritorious achievement or service in a combat zone. A Lieutenant Colonel in the U.S. Army Reserve Medical Corps, Dr. Yaffe is also the David H. Koch Professor of Biology and Biological Engineering at Massachusetts Institute of Technology. Dr. Yaffe recently served as a trauma surgeon with the 402nd Forward Surgical Team at Bagram Air Base and the HKIA NATO base in Afghanistan, under command of the 1st Special Forces Group. During his tour there he performed more operations on U.S. military members, NATO personnel, and Afghan

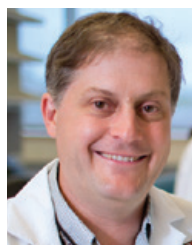


soldiers than any other Forward Surgical Team surgeon had performed in the previous 12 months. Pictured is Dr. Yaffe at a Special Forces base in Afghanistan.



Anthony P. Monaco, MD, and **Christiane Ferran, MD, PhD**, were feted at a dinner in May to celebrate two major honors. The Anthony P.

Monaco Transplant Surgery Service was named in honor of Dr. Monaco, and Dr. Ferran was named the Lewis Thomas Professor of Surgery at Harvard Medical School. Dr. Monaco, a giant in the field of transplant surgery and transplant immunology and the Peter Medawar Professor of Surgery, was the first chief of Transplant Surgery at BIDMC. Dr. Ferran, a professor of Surgery since 2009, conducts basic research on the roles of the molecule A20 in a range of diseases, which could lead to new therapies. She is a member of the Division of Vascular and Endovascular Surgery, the Division of Nephrology, the Center for Vascular Biology Research, and the BIDMC Transplant Institute.



Leo E. Otterbein, PhD, Transplant Surgery, received a Small Business Innovation Research (SBIR) Direct to Track II grant from the National Institutes of Health, entitled “HBI-002 to Treat Delayed Graft Function in Kidney Transplant.” HBI-002, an oral agent, delivers carbon monoxide as a therapeutic. In preclinical studies, this agent has proven effective in preventing or treating conditions that include neural injury, sickle cell disease, and multiple sclerosis.



Ron Alterman, MD, Chief of Neurosurgery, was elected secretary/treasurer of the American Society for Stereotactic and Functional Neurosurgery, the leading society for this subspecialty. After fulfilling this role for two years, Dr. Alterman will serve as vice president for two years, and then assume the presidency for two years. Dr. Alterman is also a member of the Executive Committee of the World Society for Stereotactic and Functional Neurosurgery.



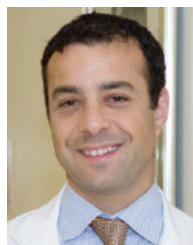
In June, Farr 8 on BIDMC's West Campus became the medical center's new 20-bed inpatient Cardiac Surgery Unit and the first floor at the medical center to feature all private rooms. With soothing colors, decorative panels with natural themes, and light-filled rooms and corridors, Farr 8 was designed to help promote a quiet healing environment for cardiac surgery patients, according to Chief of Cardiac Surgery **Kamal Khabbaz, MD**. Other features include pull-out sofas or recliners so family members can comfortably stay overnight; lighting in corridors and patient rooms that can be dimmed to help patients sleep; and spacious, wheelchair-accessible bathrooms and showers. High priority was also given to keeping staff in close proximity to patients, with two satellite nurses' stations that are strategically positioned in the unit, and storage areas and telemetry displays located throughout the floor. "This space reflects who we truly are in terms of our quality, outcomes, efficiency, and most importantly the tremendous caregiving team we have built. All of these translate into excellent results for our patients," says Dr. Khabbaz, pictured above at the ribbon-cutting ceremony with Marjorie Serrano, RN, Nursing Director of Cardiac Surgery.

A. James Moser, MD, Co-Director of the BIDMC Pancreas and Liver Institute, was interviewed in a May 1 article in *Fortune Magazine* entitled "Connecting the Dots on Cancer." The feature discusses the development by biopharmaceutical company Berg Health of targeted drugs for pancreatic cancer that were developed using artificial intelligence. One drug, BPM 31510, is going into Phase II clinical trials. Through "Project Survival," an initiative led by Dr. Moser, the Pancreas and Liver Institute and Berg are partners in an international, cross-sector collaboration to discover and validate treatment biomarkers for pancreatic cancer, a leading cause of cancer deaths.



HPB

The impact of the journal, *HPB*, continues to grow, establishing it as an increasingly important resource for specialists worldwide involved in the management of hepatobiliary and pancreatic disease as well as those in related fields. At 2.918, the journal's current impact factor — a measure reflecting the average annual number of citations to recent articles published in an academic journal — places *HPB* in the top 40 of all surgical journals (38th of 199) and above many other well-established journals. **Mark Callery, MD**, Chief of General Surgery, is one of the three editors of *HPB*.



Andrew (Drew) Wagner, MD, Urology, was a faculty member of the Third Uro-Oncology International Symposium at Hospital Israelita Albert Einstein in Sao Paulo, Brazil. The faculty included cancer specialists from throughout North and South America and abroad. Dr. Wagner spoke on kidney, prostate, and bladder cancer before some 400 attendees. BIDMC Urology and the Department of Urology at Albert Einstein in Sao Paulo are developing an ongoing collaboration that includes live broadcast teleconferences as well as the possibility of an exchange program for research fellows from each institution.

NEWS BRIEFS



Sidhu Gangadharan, MD (right), Chief of the Division of Thoracic Surgery and Interventional Pulmonology, and **Michael Kent, MD**,

Director of Minimally Invasive Thoracic Surgery, now provide comprehensive pulmonary services to patients on the Anna Jaques Hospital campus in Newburyport, Mass., via the Thoracic Clinic at Anna Jaques Cancer Center, which is affiliated with BIDMC.



A. James Moser, MD (left), Co-Director of the BIDMC Pancreas and Liver Institute, and **Raul J. Guzman, MD**, Vascular and Endovascular Surgery, were elected as fellows of the American Surgical Association.



Ekkehard Kasper, MD, PhD, Neurosurgery, assumed several leadership roles in national societies over the past year. Dr. Kasper is serving as an executive committee member of the American Association of Neurological

Surgeons (AANS)/Central Nervous System (CNS) tumor section, and as scientific program officer for the 2016 AANS/CNS meeting. He is also an executive committee member of the European Association of Neurosurgical Societies and the Asian Congress of Neurosurgical Surgeons. In addition, Dr. Kasper is serving on the advisory board of *Neurosurgical Reviews* and the *Asian Journal of Neurosurgery*.



Daniel Jones, MD, a Surgery Vice Chair, was recognized as President-elect of the Society of American Gastrointestinal and Endoscopic Surgeons (SAGES) at the society's annual meeting. Dr. Jones will assume the role

of president of the 6,000-member society in early 2017. Dr. Jones has championed numerous SAGES initiatives, including FUSE, a national program to teach the proper, safe use of devices in the operating room; Fundamentals of Laparoscopic Surgery; and the SAGES Masters Program. Dr. Jones was also recently appointed to the Board of Trustees of the Society of Surgery of the Alimentary Tract (SSAT). **Jennifer Tseng, MD, MPH**, and **Mark Callery, MD**, are serving as Secretary and Treasurer, respectively, of the SSAT.

Carl Hauser, MD, Acute Care Surgery, Trauma, and Surgical Critical Care, and **Leo E. Otterbein, PhD**, Transplant Surgery, received and will co-direct a \$10 million, five-year Focused Program Award from the Department of Defense entitled "DAMP-Mediated Innate Immune Failure and Pneumonia after Trauma." This work will continue the groundbreaking research of the role of intracellular "danger" molecules (damage-associated molecular patterns, or "DAMPs") that modulate innate-immune inflammatory responses when released by trauma, cell death, or infection.

The preliminary work for this grant was supported by a BIDMC Affinity Research Collaborative (ARC) grant. Collaborating in this multidisciplinary program are BIDMC investigators **Michael Yaffe, MD, PhD**, the Department of Surgery; **Simon Robson, MD, PhD**, the Department of Medicine; **Daniel Talmor, MD, MPH**, the Department of Anesthesia, Critical Care, and Pain Medicine; and **James Lederer, PhD**, the Department of Surgery at Brigham and Women's Hospital. The program has been named the HALO Project (Harvard Longwood) Trauma Consortium.



BIDMC's one-year [Surgical Critical Care Fellowship](#) provides training to surgeons seeking to become leaders in acute care surgery and surgical critical care. The highly regarded program, which is accredited by the Accreditation Council for Graduate Medical Education (ACGME), recently received approval to expand the number of fellows from one to two, according to Program Director **Alok Gupta, MD**.



Michael Cahalane, MD, Acute Care Surgery, Trauma, and Surgical Critical Care, recently assumed the role of president of the Aesculapian Club at Harvard Medical School (HMS). Founded in 1902, the Aesculapian Club is dedicated to enhancing the lives of HMS students and fostering interactions among faculty and students. Dr. Cahalane, who was previously the club's treasurer, is serving a two-year term.



Allen Hamdan, MD, a Surgery Vice Chair, was selected to receive the Harvard Medical School (HMS) 2016 Dean's Community Service Faculty Award for his work on the Department of Surgery Committee for Social Responsibility. HMS will donate \$1,000 to the Greater Boston Food Bank (GBFB) on behalf of Dr. Hamdan's work. Dr. Hamdan was also nominated by the GBFB for the Myra Kraft Community MVP Award. The award, which celebrates volunteerism and provides grants to the recipients' volunteer organizations, is given by the New England Patriots Charitable Foundation. Dr. Hamdan started and leads BIDMC's successful annual "[Food is Medicine](#)" fundraiser for the GBFB. He is also Chairman of the GBFB Board of Advisors.



Annals of Internal Medicine cited **George Blackburn, MD, PhD**, General Surgery, as its best reviewer in 2015. The journal, which has been published by the American College of Physicians since 1927, grades the quality of each review, and its editors gave the top grade to Dr. Blackburn's work in 2015. "Despite the 'behind the scenes' nature of the work, reviewing for journals is a vital component of scholarship," wrote *Annals* Editor-in-Chief Christine Laine, MD, MPH, in a commendation letter to Dr. Blackburn. "By helping to improve the quality of published work, superb reviewers not only help the journal, but also authors, readers, and the general public."



Resident **Nakul Raykar, MD, MPH**, and John Meara, MD, DMD, MBA, co-authored an op-ed that was published in March in the *Los Angeles Times*: "The Sustainable Development Goals and Surgery: Is a 'Moon Shot' the Answer?" Now on his research elective, Dr. Raykar is Chief Fellow of the Program in Global Surgery and Social Change at Harvard Medical School. Dr. Meara is the Kletjian Professor of Global Surgery at Harvard Medical School and co-chair of the Lancet Commission on Global Surgery. The authors pointed out that improving global health requires universal access to strong health systems that include safe, affordable, and timely surgical and anesthesia care, which is unavailable to the vast majority of the world's population. Dr. Raykar was also the first author of a recent paper in the *Bulletin of the American College of Surgeons* entitled "Progress in Achieving Universal Access to Surgical Care: An Update and a Path Forward," which summarizes ongoing initiatives and the ACS's future role in making surgical care available to billions of people worldwide. Dr. Meara was also an author of the paper.

NEWS BRIEFS



Resident **Anita Mamtani, MD**, received the Resident/Fellow Essay Award for the “Best Clinical Research Paper” from the Society of Surgical Oncology (SSO) at the SSO’s 69th Annual Cancer Symposium in 2016. Dr. Mamtani

is also the 2015 recipient of the Lynn Sage Symposium Scholar award given by the Lynn Sage Breast Cancer Foundation, and received the Memorial Sloan Kettering Cancer Center Chairman’s Award for Excellence in Clinical Research for her work this year under her mentor, Monica Morrow, MD.



Resident **Sayuri Jinadasa, MD**, received an “Outstanding Abstract” award for her abstract “The Effect of Positive End-Expiratory Pressure on Intracranial Pressure and Cerebral Hemodynamics” in a BIDMC resident and fellow poster competition. Dr. Jinadasa is doing

her research elective at BIDMC with the Critical Care research team, where she works closely with principal investigators M. Dustin Boone, MD, and Daniel Talmor, MD, MPH.

Surgery Chairman **Elliot Chaikof, MD, PhD**, and **Richard Cummings, PhD**, Director of the Department of Surgery-based National Center for Functional Glycomics and the new Harvard Medical School Center for Glycoscience ([see page 36](#)), received a grant from Radcliffe Institute for Advanced Study at Harvard University to present a workshop in September on “Mapping the Human Glycome in Health and Disease.”



Adnan Majid, MD, Thoracic Surgery and Interventional Pulmonology, was a Visiting Professor at Clinica Alemana de Santiago in Chile. Dr. Majid lectured on minimally

invasive techniques for the diagnosis and staging of lung cancer. Here Dr. Majid (center) poses with (from left) Sebastián Fernández-Bussy, MD, Director of Interventional Pulmonology of Clinica Alemana, and Juan Hepp, MD, Clinica Alemana’s Medical Director.

Neurosurgeon **Christopher S. Ogilvy, MD**, Director of the BIDMC Brain Aneurysm Institute, received the 2016 Annual Award for Excellence in Clinical Research Mentorship. The award recognizes a faculty member in the department whose commitment to and investment in the clinical research development of students, residents, fellows, and/or junior faculty demonstrates excellence in mentoring. “Many accomplished clinical research scholars emphasize the critical importance of the mentorship and guidance they received from others in establishing an independent academic career,” notes **Jim Rodrigue, PhD**, Vice Chair of Clinical Research in the Department of Surgery. “We want to acknowledge our own faculty members who give so freely of their time and expertise in creating a supportive environment that encourages the development of residents, fellows, and junior faculty as clinical scientists.” The award was presented to Dr. Ogilvy during Surgery Grand Rounds in June. “This award is a reflection of the good people I’m working with, for a mentor is only as good as his mentees. From the college students, medical students, residents, and fellows on our team, I have encountered some of the brightest and most interested — and interesting — people I have ever worked with,” says Dr. Ogilvy.



Sumner Slavin, MD, Plastic and Reconstructive Surgery, was a faculty member of the Breast Cancer Coordinated Care Symposium sponsored by MedStar Georgetown University Medical Center in Washington, D.C. Dr. Slavin moderated the “Current Management of Lymphedema” session and gave a presentation on “Myths about Lymphedema Risk.”



Amy Evenson, MD (left), and **Barbara Wegiel, PhD**, Transplant Surgery, were selected to participate in

the Harvard Medical School Leadership Development Course for Physicians and Scientists. The goal of the three-day course, which took place in the spring, is to build on participants’ knowledge base and skills to enhance their professional development as administrative leaders in academic medicine.



The BIDMC Brain Aneurysm Institute, led by **Christopher S.**

Ogilvy, MD, and **Ajith Thomas, MD**, was a sponsor of the 15th annual “Arterial Challenge” on April 24. The Arterial Challenge included a walk and 5K race that began and ended at Fenway Park. Three other Boston hospitals also sponsored the event, which raised funds for the nonprofit [Brain Aneurysm Foundation](#). Established in 1994 by Dr. Ogilvy and Brain Aneurysm Institute nurse practitioner **Deidre Buckley, NP**, the Brain Aneurysm Foundation is the nation’s foremost nonprofit organization dedicated to providing awareness, education, support, and research funding to reduce the incidence of brain aneurysm ruptures. This year, the hospital team that raised the most funds received half of the money raised in a direct research grant. The BIDMC team was the hands-down winner, raising nearly \$23,000. Department of Surgery members who ran in the 5K were: Dr. Ogilvy, **Hilary Bennett**, Surgery Administration, and resident **Sayuri Jinadasa, MD**. Pictured are (from left): Dr. Ogilvy, Dr. Thomas, Ms. Bennett, and Ms. Buckley.

Stephen Odom, MD, Acute Care Surgery, Trauma, and Surgical Critical Care, ran the Boston Athletic Association’s (BAA) Boston Marathon for the third consecutive year on April 18, completing the race in four hours, 30 minutes. Dr. Odom (wearing red bandana), who has run 11 marathons, was a member of “[Team BIDMC](#),” which raised funds for the medical center. Dr. Odom was among 52 runners on Team BIDMC, which is part of the BAA’s official charity program.

This year, Dr. Odom raised more than \$12,000 for Team BIDMC. One generous donation came from an anonymous donor in gratitude for the lifesaving care Dr. Odom gave his wife when she suddenly stopped breathing and collapsed during a flight in January en route from Los Angeles to Australia.

Dr. Odom, who was starting a long-awaited vacation with his wife, responded immediately when

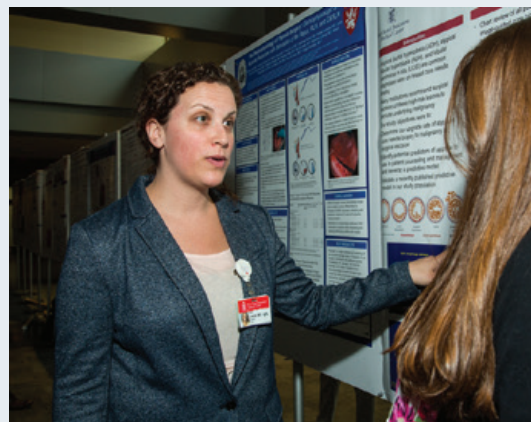


the flight attendants asked if a doctor was on board. After restoring the woman’s pulse with CPR, Dr. Odom and another passenger, a physician assistant, kept her breathing using a manual resuscitator for nearly four hours until the plane landed in Hawaii and the woman could be transported to a local hospital. Dr. Odom and his wife rebooked their flight to Sydney and had a wonderful vacation.

NEWS BRIEFS

The fifth annual Harvard Medical School Surgery Research Day was held at Harvard Medical School in May. The daylong event, which highlights the research of surgical trainees at BIDMC and three other Boston teaching hospitals (Boston Children's Hospital, Brigham and Women's Hospital, and Massachusetts General Hospital), was launched in 2012 by BIDMC. From among the 212 trainees who submitted abstracts, 16 were selected to make an oral presentation, four of whom are from BIDMC. They are: **Jiaxuan Chen, PhD** (Mentor: **Elliot Chaikof, MD, PhD**), **Oliver Chow, MD** (Mentor: BIDMC alumnus **Julio Garcia-Aguilar, MD, PhD**), **Sarah Deery, MD** (Mentor: **Marc Schermerhorn, MD**) and **Rabya Saraf, BA** (Mentor: **Robina Matyal, MD**). Dr. Chow received second prize for the Best Clinical Oral Presentation: "KRAS and Combined KRAS/TP53 Mutations in Locally Advanced Rectal Cancer are Independently Associated with Decreased Response to Neoadjuvant Therapy."

This year's BIDMC organizing committee members were Surgery Chairman **Elliot Chaikof, MD, PhD** (event chair), **Christiane Ferran, MD, PhD**, and **Charles Cook, MD**. The Visiting Professor was **Timothy R. Billiar, MD**, Chair of the Department of Surgery, George Vance Foster Endowed Professor of Surgery, and Distinguished Professor at the University of Pittsburgh, who spoke on "Precision Medicine for Trauma: A Strategy for Stratification." The evening before the event, Dr. Billiar and BIDMC surgical trainees chosen to give oral presentations and their mentors attended a dinner at the Harvard Club of Boston hosted by Drs. Chaikof, Ferran, and Cook.



Resident Ali Linsk, MD



The Distinguished Visiting Professorship of Cardiac Surgery was recently named in honor of **Ronald M. Weintraub, MD**, in recognition of his illustrious career and service to the Department of Surgery. The announcement was

made by Chief of Cardiac Surgery **Kamal Khabbaz, MD**, at a dinner in May honoring **William E. Cohn, MD**, the first Ronald M. Weintraub, MD, Visiting Professor of Surgery. Dr. Cohn (pictured), an alumnus of the BIDMC Cardiothoracic Surgery Fellowship Program, is a Professor of Surgery at Baylor College of Medicine and Director of the Center for Technology and Innovation. He is also Director of the Cullen Cardiovascular Research Laboratory at the Texas Heart Institute.



Carl Hauser, MD, Acute Care Surgery, Trauma, and Surgical Critical Care, recently assumed the role of President of the Western Trauma Association (WTA) at the WTA's annual meeting. The WTA's mission is to improve trauma care

through research, education, collaboration, and the development of physicians in specialties involved in the care of trauma patients.

Kevin Mitchell joined the department as Director of Surgery Development in June. Mr. Mitchell comes to BIDMC with extensive experience and success in fundraising for mission-driven nonprofit organizations, including Lahey Health, Tufts Medical Center, and uAspire, a national nonprofit that assists low-income young people and families. To learn about giving opportunities in the Department of Surgery, please contact Mr. Mitchell at kmmitch@bidmc.harvard.edu or 617-632-8388.

The Department of Surgery and the Joseph M. Koufman Foundation awarded educational grants to four surgical nurses in May. The annual grant, which was established in 2005 for nursing career enhancement, is awarded

to nurses with prominent leadership potential who also demonstrate humanism and excellence in patient care. Pictured are (from left) Surgery Chairman **Elliot Chaikof, MD, PhD**; Clinton Koufman, MD; honorees **Abigail Magruder, RN** (Inpatient Services), **Diane DiNobile, NP** (Inpatient Services), **Heidee Albano, RN** (Perioperative Services), and **Diane Proodian, NP** (Ambulatory Services); and Dr. Koufman's grandson, Steven Leckie, MD.



A daylong Harvard Medical School course, “Ischemic and Hemorrhagic Update: Current Practices and Future Directions” was held in May in Boston. Tailored to neurovascular medical and surgical clinicians, the program focused on the innovative management of patients with complex cerebrovascular disease. The course director was **Christopher S. Ogilvy, MD**, Neurosurgery, Director of the BIDMC Brain Aneurysm Institute. Course co-directors were **Ajith Thomas, MD**, Brain Aneurysm Institute co-director, and **Magdy Selim, MD, PhD**, BIDMC Neurology.

of us who have worked with Nassrene and Tommy know they have earned this honor after several years of consistent and tireless dedication to their patients, selflessness, pride in their work, and academic rigor,” wrote their peers. “They accomplished all of this while maintaining their humility and sense of humor. They have led by example and certainly will continue to do so in the year to come.”



Stephen Odom, MD, Acute Care Surgery, Trauma, and Surgical Critical Care, was selected by the 2016 graduating Harvard Medical School (HMS) class as this year's recipient of the Excellence in Clinical Instruction at BIDMC

Award. “We feel incredibly fortunate that HMS students have the opportunity to learn from faculty like Dr. Odom, who are dedicated not only to medicine but also to teaching and developing the next generation of physicians,” said 2016 HMS graduate and Faculty Awards Committee member Daniel Rosen, MD.



Jim Rodrigue, PhD, Transplant Surgery and a Surgery Vice Chair, was selected as a Fellow of the American Society of Transplantation (AST). Designation as a fellow recognizes members who have demonstrated an exceptional commitment to the field of transplantation and outstanding service to AST. Also, Dr. Rodrigue accepted the invitation to join the Kidney Disease: Improving Global Outcomes (KDIGO) Transplant Candidate Guideline Work Group. KDIGO is dedicated to improving the care and outcomes of kidney disease patients worldwide. The Transplant Candidate Guideline Work Group comprises a group of international experts with multidisciplinary backgrounds who will collaborate on the development of guidelines on the evaluation and management of candidates for kidney transplantation.



Nassrene Elmadhun, MD, and **Tommy Curran, MD**, were selected by their peers as Administrative

Chief Residents for the academic year 2016-2017. “All

NEWS BRIEFS



Project Health CV held its first annual fundraising gala this spring, which raised more than \$20,000 for the organization. Project Health CV was founded by BIDMC urologist **Michael Kearney, MD**, BIDMC interpreter **Ernestina DaMoura-Moreira**, and other members of the BIDMC community to provide healthcare services to the people of Cape Verde. To date, Project Health CV has led seven medical missions to Cape Verde. The fundraising event featured dinner, live music, and special guest speakers **Pedro Carvalho**, Cape Verde Consul General, and 5th District Suffolk Representative **Evandro Carvalho**. Pictured (above) at the gala are (from left): **Luis DaCosta**, **Ernestina DaMoura-Moreira**, **Michael Kearney, MD**, **Roger Lefevre, MD**, **Eurizandra Pinto**, and **Carla Iozza**. For more information go to projectthealthcv.com.



The fifth annual Harvard Medical School-BIDMC Surgery Boot Camp took place in March.

The course is led by **Alok Gupta, MD**, Acute Care Surgery, Trauma, and Surgical Critical Care, who was a member of the team that developed the course and has led it since its inception. This year, residents **Ammara Watkins, MD**, and **Charity Glass, MD**, were on the Steering Committee and **Bonnie Gallivan**, Surgery Education, was the course administrator. Surgery Boot Camp is a four-week, interactive, practice-based curriculum designed to prepare fourth-year medical students for their surgical internship by helping them develop clinical skills in a safe, structured setting. Students learn to perform common operating room and emergency procedures, make sound decisions regarding

perioperative floor and ICU management, understand surgical anatomy, and improve communication so they can easily transition to and excel in their first year of surgical training. Surgery Boot Camp faculty includes attendings (**Ranjna Sharma, MD**, pictured) and trainees in the Department of Surgery as well as clinicians from other BIDMC departments, including nursing.

Every year, one of the highlights of the SAGES (Society of American Gastrointestinal and Endoscopic Surgeons) annual meeting is the “Top Gun Shoot Out,” during which qualifying surgical



trainees from around the nation demonstrate their laparoscopic skills and speed using training stations developed by surgeon **James “Butch” Rosser, MD**. This year’s winner of a coveted SAGES “Top Gun” trophy for the fastest time on a laparoscopic suturing task was BIDMC Minimally Invasive Surgery fellow **Paul Sanders, MD** (pictured with Dr. Rosser). According to **Daniel Jones, MD**, a Surgery Vice Chair, an impressive number of former BIDMC fellows have also earned Top Gun awards: **Shawn Tsuda, MD** (Overall Champ, 2008); **Henry Lin, MD** (Overall Champ, 2nd place, 2009); **Rob Lim, MD** (Second Fastest Suture, 2009; and Fastest Suture, 2010); and **Abe Frech, MD** (Overall Champ, 2012). This year’s SAGES annual meeting, which was attended by more than 2,500 surgeons from around the world, was held in Boston.

Mary Beth Cotter, RN, and **Mary Ward, RN**, Surgery Administration, were selected to make oral presentations at the annual conference of the National Surgical Quality Initiative Program (NSQIP) in San Diego, California. Ms. Cotter presented on “Meeting the Quality Needs of Our Surgical and Perioperative Staff.” Ms. Ward addressed “Practice Changes for Reducing Urinary Tract Infections in Colon and Rectal Surgical Patients.”

Clowes Surgery Research Symposium

In April, the department held its annual Surgery Research Symposium in conjunction with the Clowes Distinguished Visiting Professorship in Surgery Research. This year's Clowes Visiting Professor was K. Craig Kent, MD, Chairman of the Department of Surgery at the University of Wisconsin School of Medicine and Public Health.

Department trainees at all levels were invited to submit abstracts in one of two categories: basic science or clinical research. From among 30 submitted abstracts, 10 were selected for presentation at the symposium: five in basic research and five in clinical research. Following the presentations, the judges selected a winner in each category, each of whom received recognition and an



From left: Jesus Revuelta-Cervantes, PhD, Ana Tellechea, PharmD, PhD, Manuel Castillo, MD (who presented for Ammara Watkins, MD), Prathima Nandivada, MD, Clowes Visiting Professor K. Craig Kent, MD, Ali Linsk, MD, Meredith Baker, MD, Sarah Deery, MD, and Nimber Abushehab, MD (who presented for Apar Patel, MD, MPH). Not present for the photo were Ingrid Rica, PhD, and Tonghui Lin, PhD.

award at Surgery Grand Rounds.

The award recipient for basic science was **Ana Tellechea, PharmD, PhD**, whose presentation title was “A novel therapeutic strategy for diabetic wounds: Dressings delivering mast cell stabilizers.” The award recipient for clinical research was **Meredith Baker, MD**, for her presentation, “Predictors of Omegaven failure in the treatment of parenteral nutrition-associated liver disease.”

Neurosurgery Residency Program is Accredited

Following the approval by the Residency Review Committee of the Accreditation Council for Graduate Medical Education (ACGME) in April, the BIDMC Department of Surgery now offers a general Neurosurgical Residency Program.

The seven-year residency is a combined program with Boston Medical Center (BMC). The program director is James Holsapple, MD, Chief of Neurosurgery at BMC; the BIDMC site program director is **Ajith Thomas, MD**, co-director of the BIDMC Brain Aneurysm Institute.

According to Chief of Neurosurgery **Ron Alterman, MD**, the combined BIDMC-BMC Neurosurgical Residency Program is the culmination of years of work that began when he joined BIDMC in 2011. This included enhancing existing programs, building new ones, and recruiting new faculty and other clinicians.

Today, BIDMC Neurosurgery has an international reputation for providing outstanding clinical care across all neurosurgical subspecialties, with particular strengths in vascular neurosurgery, functional neurosurgery, trauma neurosurgery, chronic pain management, and neurosurgical oncology.

In addition, the division has an active program of basic and clinical research, and also trains fellows in endovascular and cerebrovascular neurosurgery, neurosurgical oncology, and functional neurosurgery. The division's success is a “credit to our outstanding faculty, mid-level providers, and staff,” says Dr. Alterman.

The combined BIDMC/BMC Neurosurgical Residency Program will provide residents with a unique opportunity to train at three of the busiest medical centers in New England, all of which treat patients with some of the most complex neurologic conditions. The residency also includes a wealth of research opportunities.

During their seven years of training, residents will spend equal amounts of time at BIDMC and BMC, six months at Boston Children's Hospital, and one year conducting research.

Ultimately, the program will have a total of seven residents, but began this year with one resident, who started in July. This year's resident is **Aristotelis Filippidis, MD, PhD**, who previously was a neurosurgery fellow at Boston Medical Center.



GOING with the FLOW

Flow Diversion — A New Option for Brain Aneurysm Treatment

The BIDMC Brain Aneurysm Institute Surgical Team (from left)

Christopher S. Ogilvy, MD
Director

Deidre Buckley, NP
Clinical Program Manager

Ajith Thomas, MD
Co-Director

Justin Moore, MD
Fellow

Christoph Griessenauer, MD
Fellow

Tom Byrne, 68, runs a successful commercial cleaning business, but the native Irishman's true calling is being an entertainer. When Mr. Byrne, known to family and friends as "Tommie," isn't working his day job, he plays piano and sings Irish tunes at pubs, dances, and weddings throughout the Boston area.

Last fall Mr. Byrne, who lives in Braintree, was out walking his dogs when a searing pain radiated across his chest and arms. His wife, Rosemary, a nurse practitioner, insisted that he get immediate medical attention. The news was upsetting: An MRI revealed that Mr. Byrne had two brain aneurysms. His doctor referred him to neurosurgeon **Ajith Thomas, MD**, Co-Director of the BIDMC Brain Aneurysm Institute.

A brain aneurysm is a weak, bulging area in an artery in the brain. It poses no danger unless it bursts and floods the brain with blood — in which case it is often deadly or has devastating, permanent health consequences.

"Before the incident that brought me to Dr. Thomas, I'd sometimes feel a pain up the back of my

neck when I sang a high note or laughed, but I didn't think much of it," recalls Mr. Byrne, his Irish brogue still intact. In a sense Mr. Byrne was lucky, as most people with unruptured brain aneurysms have minimal or no symptoms.

After additional imaging tests were done at BIDMC, it was discovered that Mr. Byrne had three, not two, aneurysms — two on the right side of his brain on the internal carotid artery, and one on the left. All were about 3.5-4 mm in size. Dr. Thomas, who points out that about 20 percent of patients have multiple aneurysms, recommended treatment without delay.

Immediate treatment

"Not all aneurysms require immediate — or even any — treatment, but because of their number, location, and Mr. Byrne's personal and family health history, we recommended immediate treatment to prevent rupture," says Dr. Thomas.

The Brain Aneurysm Institute offers open surgical and endovascular options for the treatment of brain

Patient Tommie Byrne was treated with two Pipeline devices.

aneurysms by neurosurgeons with extensive experience in both. In fact, the Institute has one of the largest volumes of brain aneurysm patients in the United States, last year performing approximately 400 procedures.

One treatment option is clipping, an open surgical procedure to seal off the aneurysm neck and thus prevent blood from entering the aneurysm, which obliterates it. Another is coiling, an endovascular approach in which the aneurysm is packed with a tiny platinum coil, which causes the blood within it to clot, thereby destroying it. Coiling sometimes also requires the placement of an expandable stent across the neck, or opening, of the aneurysm to keep the coil in place (called stent-coiling).

A different concept

But Mr. Byrne was an excellent candidate for a relatively new endovascular option that is based on an entirely different concept

— flow diversion. “The flow-diversion device [Pipeline Embolization Device, which was FDA approved in 2011]

represents a paradigm shift and is one of the most significant advances in aneurysm treatment in the last 20 years,” says **Christopher S. Ogilvy, MD**, Director of the Brain Aneurysm Institute and Director of Endovascular and Operative Neurosurgery.

A mesh tube made of platinum and a cobalt-nickel alloy, the Pipeline device is placed via a catheter in the artery from which the aneurysm protrudes, covering the neck of the aneurysm. The device diverts blood past the aneurysm, which induces clotting within the aneurysm that prevents it from expanding or rupturing.

Studies to date show that between 75 to 96 percent of aneurysms are closed off from the circulation using the Pipeline device, with many remaining aneurysms virtually disappearing over a matter of months. In contrast, between five to 25 percent of patients undergoing coiling require re-treatment at some point.

The Pipeline device also offers other important advantages, according to Dr. Ogilvy. “This device expands the number of patients who can undergo

endovascular treatment safely or, in some cases, any type of treatment at all,” he says.

At first Pipeline was used mostly for the treatment of very large or wide-necked aneurysms, which often could not be effectively treated with coiling. But studies at BIDMC and elsewhere have shown that it can be used safely and effectively for many different types of aneurysms, including tiny ones that formerly were too risky to treat with an endovascular approach. “Pipeline is also useful for treating so-called pseudo-aneurysms, which were previously very difficult to treat, as well as for dissecting aneurysms,” says Dr. Thomas.

Learning curve

As with any new surgical technology, there is a learning curve before a neurosurgeon becomes expert in the use of the Pipeline device, which is essential to achieving excellent patient outcomes. “We have been using the Pipeline device since 2012, and have one of the largest experiences in New England, now performing up to 30 percent of our endovascular procedures with the device,” says Dr. Thomas.

Last December, Mr. Byrne underwent treatment with one Pipeline device for the two aneurysms on the right side of his brain; in January 2016, he had the third aneurysm treated with a second device. Performed by Dr. Thomas, each procedure took less than two hours and both times Mr. Byrne stayed in the hospital only one night. His first night home after the initial procedure he was out walking his dogs.

“When I met with Dr. Thomas, he was so friendly, calm, and reassuring that I was not the least bit nervous about my treatment,” says Mr. Byrne. “I had utmost confidence in him. Also, everything was explained to us in clear terms, so we were well-informed. The care provided by Dr. Thomas, Dede [Buckley, NP], and the neurosurgery fellows was exceptional, as was the nursing care.”

Today, Mr. Byrne is feeling and doing very well:



The Pipeline flow-diversion device diverts blood past the aneurysm; this induces clotting within the aneurysm, which prevents it from expanding or rupturing.



Neurosurgeon Christopher S. Ogilvy, MD, is Director of the Brain Aneurysm Institute.

Brain Aneurysm Facts

- An estimated six million people in the United States have an unruptured brain aneurysm, or one in 50 people
- Women are more likely than men to have brain aneurysms, and most aneurysms develop after age 40
- About 30,000 people in the United States suffer a brain aneurysm rupture each year
- Ruptured brain aneurysms are fatal in about 40 percent of cases
- Of those who survive a brain aneurysm, about 66 percent suffer some permanent neurological deficit
- Early diagnosis and treatment save lives

running his cleaning business, charming audiences with his music, and, as a result of his health scare, eating better and now 30 pounds lighter. As do all patients, he undergoes regular follow-up evaluations, which thus far have shown that his aneurysms are shrinking in size and are expected to be completely obliterated within the next six months.

Mr. Byrne has no side effects from treatment and, equally important, no nagging fears that a ruptured brain aneurysm could rob him of precious time with his family, which includes six grandchildren. “I put my

trust in Dr. Thomas and his wonderful team, and I couldn’t be happier or healthier for it,” he says.

The Brain Aneurysm Institute is leading numerous clinical trials, including some multi-center studies, looking at the outcomes of patients undergoing treatment with the Pipeline device for various types of aneurysms, and has published several papers on the subject in leading journals. “In addition to offering this treatment to our patients,” says Dr. Ogilvy, “we are committed to learning more about its potential uses and outcomes for the benefit of patients worldwide.”

The BIDMC Brain Aneurysm Institute provides multidisciplinary treatment for patients with a wide range of neurovascular conditions, including aneurysms, ischemic or hemorrhagic stroke, and neurovascular malformations. The Institute accepts referrals of patients on an emergency or non-urgent basis.

The Brain Aneurysm Institute is led by nationally renowned neurosurgeon **Christopher S. Ogilvy, MD**, Director of Endovascular and Operative Neurosurgery at BIDMC. Dr. Ogilvy

works closely with neurosurgeon and Institute Co-Director **Ajith Thomas, MD**, and a team that includes neurovascular fellows, a research nurse, vascular neurologists, neuroradiologists, a neurointensivist, and Clinical Program Manager **Deidre Buckley, NP**, who is dedicated solely to the care and education of brain aneurysm patients.

Direct Transfer Line

617-667-7000 (Page “9COIL”)

Direct Emergency Department Access

617-754-2494

Appointments or Referrals for Non-Urgent Patients

brainaneurysm@bidmc.harvard.edu
617-632-9940



To learn more about Brain Aneurysm Institute services and/or to subscribe to its free, informative physician newsletter, *Neurovascular News*, please visit: bidmc.org/brainaneurysm.

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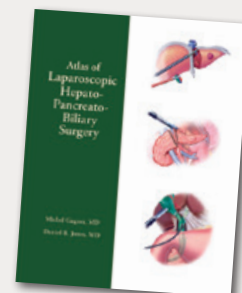
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The Bookshelf

Books by our faculty

Michel Gagner, MD, and **Daniel Jones, MD**. *Atlas of Hepato-Pancreato-Biliary Surgery*. 591 pages, heavily illustrated. Published by Ciné-Med, 2015.

Daniel Jones, MD, Robert Andrews, MD, **Jonathan Critchlow, MD**, and **Benjamin Schneider, MD**. *Minimally Invasive Surgery: Laparoscopy, Therapeutic Endoscopy, and NOTES*. 400 pages. Published by JP Medical Publishers, 2015.



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 — Susan Hagen, PhD

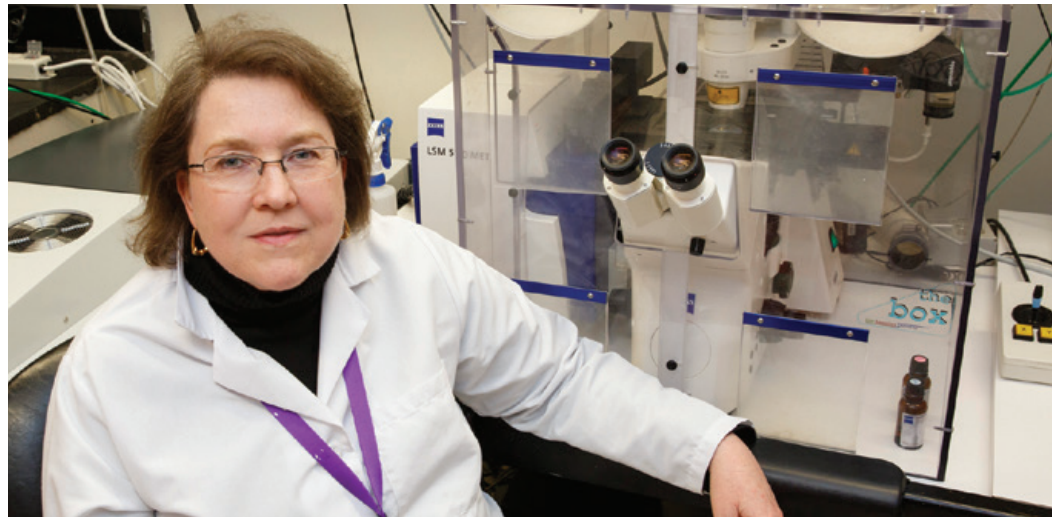
Associate Vice Chair of Research

Gastric cancer is a leading cause of cancer deaths worldwide. The greatest risk factor for the disease, which has a low survival rate because it is usually diagnosed at a late stage, is infection with the bacterium *Helicobacter pylori*. “More than half of the world’s population is infected with *H. pylori*,” says **Susan Hagen, PhD**, noting that fortunately only a small number of infected people develop gastric cancer.

Although antibiotics are effective against *H. pylori*, gastric cancer remains a persistent global public health problem. “In developing countries, giving antibiotics is expensive and patient compliance can be a challenge,” says Dr. Hagen, adding that particularly virulent strains of *H. pylori* are endemic in many regions, such as in South America and east Asia, including Japan, South Korea, and China.

“We know that foods high in salt work together with *H. pylori* to help gastric cancer develop, but it is not yet known how the infection leads to the disease,” says Dr. Hagen. “This is the question I own: What are the critical steps between *H. pylori* infection and the development of gastric cancer? Finding answers to this question could point the way toward methods for the early detection or treatment of this disease.”

Through her research, Dr. Hagen has discovered that a “pivotal factor” in the development



of gastric cancer is disruption of the stomach’s mucosal barrier. This disruption occurs because there is a change in the composition of epithelial “tight junctions.”

A tight seal

As the words suggest, tight junctions are part of epithelial cells that form a tight seal so that food and other substances in the stomach stay put and do not cross into the blood. *H. pylori* infection leads to long-term chronic gastritis — inflammation of the stomach — that disrupts the structure of the tight junctions and, thus, the ability of epithelial cells to form a protective seal. In some manner, says Dr. Hagen, this loss of barrier function leads to cancer formation.

The concept of “gastric mucosal barrier” was introduced to Dr. Hagen more than 25 years ago by her mentor, former Beth Israel Hospital Surgeon-in-Chief **William Silen, MD**. “Dr. Silen played a huge part in my career by introducing me to this interesting and important area of gastric physiology,” says Dr. Hagen.

Recently, Dr. Hagen and her

colleagues searched for proteins that might be responsible for maintaining the protective barrier function of epithelial cells in the stomach. “This led us to claudin-18, an important component of gastric tight junctions and a protein that is down-regulated in the majority of gastric tumors,” she says.

To determine the role of claudin-18 in cancer development, Dr. Hagen studied “gene-knockout” mice bred to lack the gene for claudin-18. “We studied the changes that occur when claudin-18 is not present and saw that the entire stomach of these mice had developed cancer within 20 weeks of birth,” says Dr. Hagen, noting that the animals did not need to be infected with *H. pylori* to develop cancer.

Claudin-18: A tumor suppressor

Further cell-based studies revealed that inflammation results in the lack of claudin-18 expression in cells. Based on this work, Dr. Hagen concluded that *H. pylori* infection is needed to start the process but once claudin-18 is gone,

"What are the critical steps between H. pylori infection and the development of gastric cancer? Finding answers to this question could point the way toward methods for the early detection or treatment of this disease, a leading cause of cancer deaths worldwide."

Susan Hagen, PhD

cancer development can proceed without the bacteria. "This means that a single tight junction protein such as claudin-18 can function as a major tumor suppressor, which we never would have thought possible," says Dr. Hagen.

Using genomic approaches, Dr. Hagen and her group further discovered that by the time the claudin-18 deficient mice were seven weeks old, many of the genes associated with cancer stem cells — and thus cells needed for the development of gastric cancer — were highly expressed. The gene-profiling Dr. Hagen conducted also revealed several potential early biomarkers of cancer development that she will investigate further.

Dr. Hagen has forged collaborations to obtain clinical

samples from patients with different stages of gastric cancer to ensure that the results in mice are applicable to humans. "We're continuing to look at how gastric cancer develops with the goal of translating the results of our work into the clinical setting," she says.

In addition to conducting gastric cancer research, Dr. Hagen has many other roles. She is an Executive Committee member of the Harvard Digestive Diseases Center, a large National Institutes of Health-funded center that Dr. Silen started many years ago to support gastroenterology-related research in the Harvard community. She runs the center's

Microscopy and Histopathology Core and also directs a large Microscopy and Histology Core at BIDMC. In addition, Dr. Hagen has numerous responsibilities in her role as Associate Vice Chair of Research in the Department of Surgery: She leads the department's Surgical Horizons Seminar Series, reviews research appointments, and oversees departmental space.

"Thanks to Dr. Silen, who inspired me and so many others, I own a question that enables me to make an important contribution and offers the potential to help alleviate suffering among people worldwide," says Dr. Hagen.

Living Liver Donor Program Begins

Just three and a-half weeks following their surgery, liver donor Renee Hanna and her brother-in-law Charles Pompeo, the recipient, attended a family wedding (right). Ms. Hanna and Mr. Pompeo were the first patients to undergo living donation and transplantation, respectively, in the BIDMC Transplant Institute's Living Liver Donor Program.

Mr. Pompeo, 49, suffered from end-stage liver disease due to cirrhosis, and was among approximately 100 BIDMC patients awaiting a deceased donor liver. On May 3, the married father of four received a lobe (about half) of Ms. Hanna's liver during a daylong procedure performed by **Robert Fisher, MD**, Director of the Transplant Institute and Chief of Transplant Surgery, and transplant surgeons **Amy Evenson, MD**, and **Khalid Khwaja, MD**.

According to Dr. Fisher, the livers of living donors and their recipients regenerate to nearly full size and function within a matter of weeks. Mr. Pompeo will take immunosuppressive drugs for the rest of his life, but with a healthy lifestyle and lifelong follow-up care, his prognosis is "excellent," says Dr. Fisher, noting that

Ms. Hanna is doing very well and also has an excellent prognosis. The highest priority of the new program is donors' safety, he emphasizes.

Despite the fact that the donor evaluation involved numerous tests and assessments, a major operation, and a seven-day hospitalization, donating part of her liver to Mr. Pompeo was not a hard decision for Ms. Hanna, 43 and a mother of four, to make. "He's my brother-in-law and I didn't want anything to happen to him," she explained to **Denise Morin, MSN, RN, CCTC**, Living Liver Donor Coordinator, who noted that several other members of the close-knit family also offered to be Mr. Pompeo's donor.



For more information about the Living Liver Donor Program, contact Ms. Morin at dsmorin@bidmc.harvard.edu or call the Transplant Institute at 617-632-9700.



An attendee at the Introduction to Interventional Pulmonology course learns endobronchial ultrasound (EBUS) techniques on a simulator under the guidance of Adnan Majid, MD (right).

Sharing Expertise through Training and Teaching

Becoming an academic surgeon requires at least seven, and often several more, years of education and training following medical school. But learning hardly ceases once a surgeon's formal education ends. Indeed, with rapid changes in technology and the fast pace of new medical information, practicing surgeons must continually acquire new knowledge and skills to provide patients with the best possible care.

In addition to caring for patients and conducting research, many faculty members in the Department of Surgery devote considerable time to sharing their specialized expertise with colleagues around the world through a range of courses and activities throughout the year.

Here we focus on ongoing programs offered by two Surgery divisions — Urology and Thoracic

Surgery and Interventional Pulmonology — that are providing unique educational experiences for practicing physicians at all levels.

Safe, reproducible robotic surgery

For the past four years, **Andrew (Drew) Wagner, MD**, Director of Minimally Invasive Urologic Surgery, has presented the popular “New England Robotics Course in Urologic Surgery.” Dr. Wagner, who is known nationally for his expertise in complex urologic robotic surgery, points out that the course is “one of only three in the nation, and the only one in the Northeast, dedicated to training Urology attendings, fellows, and residents in robotics.”

The two-day program provides attendees with didactic and hands-on instruction in the latest approaches to safe and reproducible

robotic kidney, prostate, and bladder surgery. In addition to Dr. Wagner, who is the course director, and his BIDMC Urology colleague **Peter Chang, MD, MPH**, the faculty comprises some of the most accomplished urologic robotic surgeons in the country. Attendees come from hospitals in Boston and throughout the Northeast.

Course participants have access to top-of-the-line surgical robots and simulation stations, enabling them to practice skills with one-on-one guidance from faculty. Topics include the basics of room and robot arrangement and patient positioning in a mock OR, port placement, and robotic surgical technique using robotic simulation software.

For many, a highlight of the course is the moderated live case of a robotic laparoscopic partial nephrectomy, this year performed by Drs. Wagner and Chang. “I

appreciated the opportunity to learn from these experts in the live case about what to do in a challenging situation,” says urologist Vincent Cooper, MD, of Glens Falls Hospital in New York, who started his hospital’s robotics program.

Hagop Sarkissian, MD, who attended the course a few years ago when he was a fourth-year Urology resident at the University of Vermont Fletcher Allen Health Center, says, “I found the course indispensable, especially the live case. We got to see the procedure play-by-play and to hear the surgeons think out loud, so we understood why they did things a certain way, always with an emphasis on safety first. We all know these surgeons’ names and it was fantastic to have them so accessible to us in such a collegial atmosphere.”

That sentiment was echoed by Joshua Kaplan, MD, a Urology fellow at Temple University who attended this year. “The open discussions and atmosphere of collaboration engendered learning,” he says. “I learned some valuable tips for performing complex procedures more smoothly.”

Despite the growing demand and uses for robotic surgery in Urology (90 percent of prostatectomies are done robotically today, for example), traditional surgical training does not typically offer the resources required to become an expert at robotic surgery, according to Dr. Wagner. “Most centers lack the dedicated time and simulator space for robotic skill acquisition outside of the OR. Even centers with the latest robotic technologies often lack the highly specialized expertise to provide the necessary

training, particularly for complex procedures,” he says.

Dr. Wagner adds that robotic surgery has a steeper learning curve than conventional surgery and also poses unique challenges, including the fact that the operation is performed not at the patient’s side with the trainee and surgeon-mentor together, but rather from a console. “A course like ours is an essential starting point to learn safety and begin to appreciate the necessary training required to advance to the expert level,” he says.

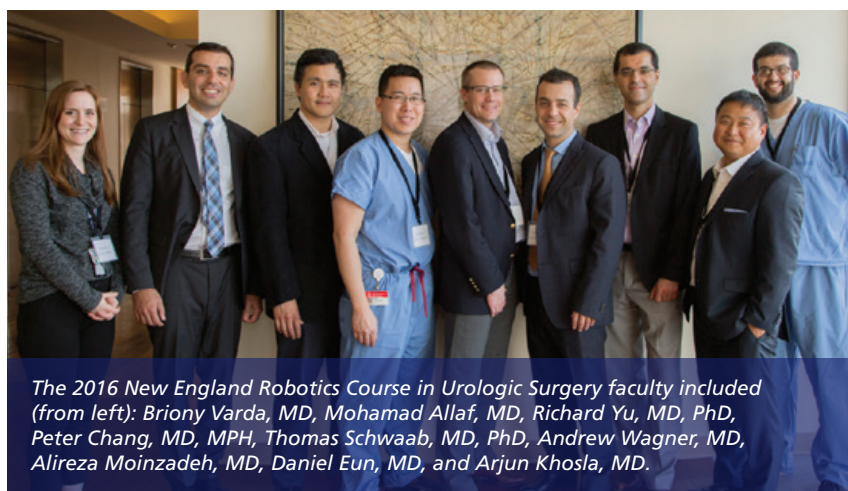
Teaching interventional pulmonologists

For years, interventional pulmonologists **Adnan Majid, MD**, and **Erik Folch, MD**, of the Division of Thoracic Surgery and Interventional Pulmonology, have offered a number of unique

Procedures” and “Introduction to Interventional Pulmonology.” Taught by Drs. Majid, Folch, and a faculty of other local and international IP experts, these daylong courses include didactics and hands-on training in BIDMC’s Carl J. Shapiro Simulation and Skills Center.

In early 2016, Drs. Majid and Folch offered a new course on endobronchial ultrasound (EBUS). EBUS technology combines ultrasound with endoscopy to obtain images in and around the bronchial tree or lungs, thereby avoiding the need in some cases for surgical biopsies for lung cancer diagnosis and staging. Pulmonologists from throughout Latin America attended the full-day program, which included hands-on training in the Simulation and Skills Center.

IP faculty also offer courses



The 2016 New England Robotics Course in Urologic Surgery faculty included (from left): Briony Varda, MD, Mohamad Allaf, MD, Richard Yu, MD, PhD, Peter Chang, MD, MPH, Thomas Schwaab, MD, PhD, Andrew Wagner, MD, Alireza Moizadeh, MD, Daniel Eun, MD, and Arjun Khosla, MD.

educational opportunities to interventional pulmonology (IP) fellows and attendings throughout the United States and Latin America.

Each year, Drs. Majid and Folch co-direct two popular courses at BIDMC: “Introduction to Bronchoscopy and Pulmonary

to doctors closer to their home institutions. For the past two years, for example, Dr. Majid has been a co-director of the “Ibero-American Symposium on Basic and Advanced Bronchoscopy” in Colombia.

In a novel international program, Dr. Majid is co-founder and co-program director (with Sebastián Fernández-Bussy, MD, of Clinica Alemana in Chile) of the Interventional Pulmonology Fellowship for Latin America, which was launched in 2009. Fellows in this one-year program spend one to two months at BIDMC and five other hospitals in countries around the world (Spain, England, Germany, Chile, and Mexico).

“Fellows learn something unique at each center, which makes this an especially valuable program,” says Dr. Majid, who is also the Program Director of the Combined BIDMC-Massachusetts General



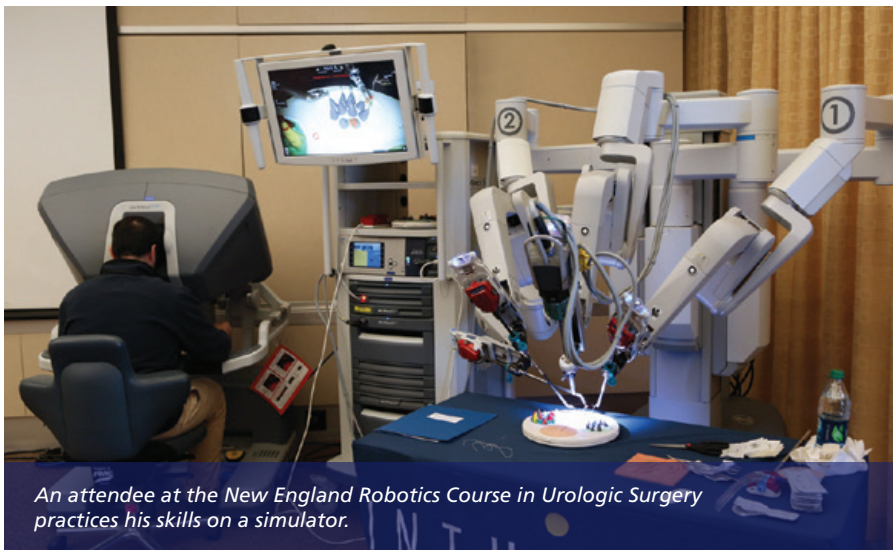
Erik Folch, MD, gives advice on technique to participants in the annual Introduction to Interventional Pulmonology course.

Hospital Fellowship Program in Interventional Pulmonology.

Drs. Majid and Folch also regularly host visiting doctors from Central and South America and Spain, who spend one to two months at BIDMC observing, practicing in the Simulation and

Skills Center, and attending courses. In addition, every month, two Pulmonary and Critical Care fellows from all of the Boston training programs and other parts of the country come to BIDMC to train in bronchoscopy and pulmonary procedures.

“An important mission of an academic medical center such as ours is teaching — not only medical students and residents who train here, but also fellows and attending physicians, both locally and internationally, who seek us out for our specialized expertise,” says Dr. Majid. “Everyone benefits from these educational programs — instructors and attendees alike — but those who benefit the most are patients.”



An attendee at the New England Robotics Course in Urologic Surgery practices his skills on a simulator.

BIDMC to Host Simulation Training

The American College of Surgeons (ACS) asked BIDMC to host the 9th Annual Accredited Education Institute Postgraduate Course, this year on the topic of simulation. Surgeons and physicians from more than 100 other medical centers will be coming to Boston in mid-September to learn about simulation

at the BIDMC Carl J. Shapiro Skills and Simulation Center, which was the first in New England to receive ACS accreditation as a Level I facility for simulation-based skills training. We will report on this course in a future issue of *Inside Surgery*.

Teaching Awards Recognize Faculty and Residents

Every June, years of hard work and dedication are recognized and celebrated at the Department of Surgery's white coat ceremony, when incoming chief residents receive their new white coats from graduating chief residents, and departmental teaching awards are presented. Congratulations to this year's new chief residents and award recipients.

ABSITE* AWARDS

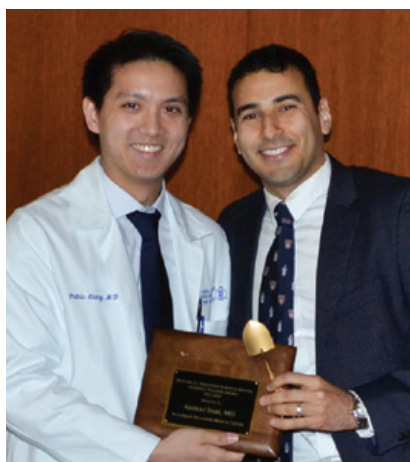
Highest Junior-Level Resident on the 2016 ABSITE
Meredith Baker, MD

Highest Senior-Level Resident on the 2016 ABSITE
Tovy Kamine, MD

Residents scoring above the 90th percentile on the 2016 ABSITE
Christopher Digesu, MD
Prathima Nandivada, MD
Kortney Robinson, MD
John Tillou, MD
Daniel Wong, MD

RESIDENT TEACHER AWARD

Ashraf Sabe, MD
Voted by residents as the senior resident who best exemplifies teaching to other residents.



Resident Patric Liang, MD (left), presents the Resident Teacher Award to Ashraf Sabe, MD.



With General Surgery Residency Program Director Tara Kent, MD, MS (far left), and Surgery Chairman Elliot Chaikof, MD, PhD (far right), the new Chief Residents don their chiefs' white coats for the first time. From left are: John Tillou, MD, Oliver Chow, MD, William ("K.C.") Collins, MD, Omar Karim, MD, Nassrene Elmadhun, MD, John ("Jack") McCallum, MD, Emily Koeck, MD, Victor Chien, MD, and Tommy Curran, MD. The new chief residents received their white coats from the 2016 graduates during the time-honored White Coat Ceremony in June.

ISAAC O. MEHREZ, MD, AWARD

Dre Irizarry, MD
To the third-year resident selected by Mount Auburn Hospital surgeons for "Dedication to the highest quality care, honesty, willingness to learn, and a sense of humor."

GEORGE W.B. STARKEY AWARD

Mark Callery, MD
To the faculty member with the highest-rated teaching evaluations from third-year Harvard Medical School students in the Core Surgery Clerkship.

HAROLD BENGLOFF AWARD

Jordan Gutweiler, MD
(Mount Auburn Hospital)
Voted by residents as the faculty member who best exemplifies humanism in teaching.

JOHN L. ROWBOTHAM AWARD

Michael O'Shea, MD
(Saint Vincent Hospital)
Voted by residents as the faculty member who best exemplifies excellence in teaching.

MOUNT DESERT ISLAND BIOLOGICAL LABORATORY

Also announced at the awards ceremony were the second-year residents selected to attend a weeklong course in comparative physiology at Mount Desert Island Biological Laboratory on the Maine coast in August. Now in its sixth year, this unique educational and team-building experience was made possible by generous donor Ted Boylan. The top five ABSITE scorers are invited to participate.

Gabrielle Cervoni, MD
Alexander Chalphin, MD
Michelle Fakler, MD
Kathryn Stackhouse, MD
Alton Sutter, MD, PhD



Mark Callery, MD, Chief of General Surgery, accepts the Starkey Award from Amy Evenson, MD, Transplant Surgery.

* ABSITE: American Board of Surgery In-Service Training Exam

MAKING A DIFFERENCE

Remembering Sally Bernkopf Frank: A Profile in Dedication

For many years Sally Frank, the wife of the late renowned BIDMC surgeon Howard A. Frank, MD, made generous annual gifts to the fund established in 1987 in her husband and brother-in-law's names: The Howard A. Frank, MD, and Edward D. Frank, MD, Surgical Fellowship Fund.

Mrs. Frank, who passed away in 2015 at age 93, also remembered the BIDMC Department of Surgery, where her husband trained and practiced for 62 years, in her estate plans. Mrs. Frank's three adult children — John, Edward, and Anne [Greene] — and their spouses continued their mother's legacy of giving to the department when they requested donations to the fund in lieu of flowers when she passed away.

The Department of Surgery is very grateful to Mrs. Frank for her longstanding, loyal support. Here we offer a glimpse of this accomplished woman — a woman who lived life on her own terms while providing a loving home for her husband, children, and six grandchildren throughout her long and productive life.

(Editor's note: We appreciate the insights and stories about Mrs. Frank shared by her youngest son, John, and his wife, Diann, of California, and Stafford Cohen, MD, a retired BIDMC cardiologist who conducted a videotaped interview with Mrs. Frank in 2008 for his book on Dr. Frank's colleague and collaborator, Paul Zoll, MD.)

Sally Bernkopf was born in Boston in 1922, the only child of Max Bernkopf, a prominent attorney, and Selma Cohen Bernkopf, whose father was the first Jewish judge in Massachusetts. By her own account, she was “spoiled” and doted on by her parents.

Sally attended and graduated from Smith College, then returned home to Boston. In 1942, she met her future husband, Howard, then a young BIDMC surgeon eight years her senior who was treating her father. “I saw Howard and thought, he'd be just lovely for me,” recalled Mrs. Frank in the 2008 interview, a twinkle in her eye. The two were married in June 1943, when she was 21 years old.

While Dr. Frank was building his impressive career — which included co-developing a self-contained cardiac pacemaker and becoming the second surgeon in the world to implant one, developing peritoneal irrigation (dialysis), and conducting groundbreaking research on a diverse range of disorders — Mrs. Frank was busy raising their three children at the couple's home on Walnut Street in Brookline, chosen in part because of its close proximity to the hospital.

In an era when few mothers were employed outside the home, Mrs. Frank worked at Beth Israel



Sally Bernkopf Frank and Howard A. Frank, MD, with their granddaughter, Hannah, in 1987.

Hospital and later for more than 50 years at Boston Children's Hospital, where she was a grants administrator. In 1957, she was featured in a *Boston Globe* article: “Brookline Surgeon's Wife Enjoys Home, Family and Work at Hospital; She Has Her Cake and Eats It, Too!”

Despite her busy schedule, Mrs. Frank was devoted to her husband and children, who were her first priority. “She would work all day, make an early dinner for us kids and often a second meal for my father and her, and sit with him over a drink before their dinner to discuss their days,” recalls John Frank, adding that his mother was a fabulous cook.

She was also a loving, understanding mother. “Whenever I said, ‘I can't!’ she would gently remind me that indeed, I could,” recalls John. “She was always very supportive but never pressured us.” In large part due to her influence, the Frank children are

all very successful: John is vice chairman of a leading global asset management firm in Los Angeles; Edward, who goes by “Wigs,” is a former attorney who now teaches at an independent private school in Pennsylvania; and Anne is a professor at Wesleyan University in Connecticut.

Mrs. Frank also loved and showed Afghan hounds, several of whom were U.S. and international champions. “We always had one, and usually more, Afghans to whom my mother was absolutely devoted,” says John, noting that his mother served as treasurer of the Afghan Hound Club of America and was known to turn a blind eye

when her pampered pets lounged on the couch.

But her husband always came first. “My mother’s fierce dedication to my father allowed him to focus on his career,” says John, “but he was as devoted to her as she was to him and always found time to be home for dinner, attend dog shows with her, and travel abroad.” John’s wife, Diann, describes her in-laws as “each other’s best friends — Sally doted on Howard and he on her.”

When Dr. Frank, while still actively engaged in teaching at Harvard Medical School, suffered a major stroke at 83 and was hospitalized for many weeks, Mrs. Frank never left his bedside. For

the next six years until his death in 2004 at age 89, Mrs. Frank personally took care of her husband, day and night. Says John, “My mother’s care of my father during those years, and indeed her entire life, was a profile in dedication.”

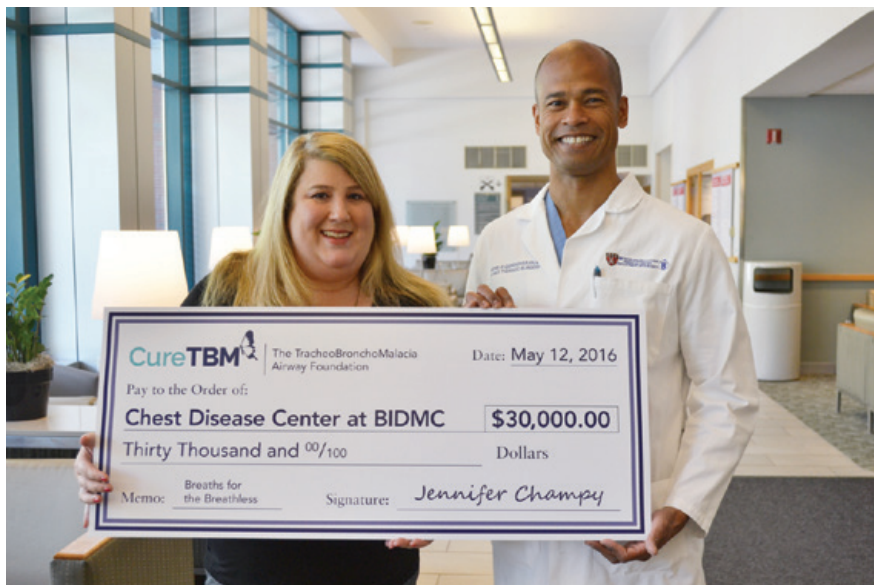


For information about supporting the Howard A. Frank, MD, and Edward D. Frank, MD, Surgical Fellowship Fund or other Department of Surgery programs, please contact Kevin Mitchell at kmmitch@bidmc.harvard.edu or call 617-632-8388.

Chest Disease Center Receives Gift for TBM Research

Former patient Jennifer Champy presented a \$30,000 check for the BIDMC Chest Disease Center to **Sidhu Gangadharan, MD**, Chief of Thoracic Surgery and Interventional Pulmonology, from Cure TBM. Several years ago Ms. Champy, of South Carolina, was successfully treated for tracheobronchomalacia (TBM) by thoracic surgeon Dr. Gangadharan and interventional pulmonologist **Adnan Majid, MD**, after being told by doctors elsewhere that there was nothing that could be done for her. To help others suffering from TBM, Ms. Champy founded the nonprofit **Cure TBM** to provide education, raise funds for research, and help improve patients’ quality of life.

The \$30,000 gift will help support a clinical trial evaluating the efficacy of stents in stabilizing the airway and reducing symptoms. “This is the first of what we hope will be many grants to BIDMC’s Chest Disease Center,” says Ms. Champy.



Jennifer Champy presents a check to Sidhu Gangadharan, MD, from Cure TBM.

MAKING A DIFFERENCE

Xu Center Collaboration: Chinese Surgeons Visit BIDMC

Surgeons from TEDA International Cardiovascular Hospital in China visited BIDMC in May as part of a collaboration between the hospital and the Rongxiang Xu, MD, Center for Regenerative Therapeutics at BIDMC. The surgeons were joined by members of the National Rongxiang Xu Foundation and guests from MEBO International, which was founded by the late Rongxiang Xu, MD, a pioneer in regenerative therapies. The Rongxiang Xu, MD, Center for Regenerative Therapeutics at BIDMC was formed in early 2016 with a generous endowment fund established by the National Rongxiang Xu Foundation.

During the visit, the surgeons observed surgical cases, spent time in vascular and podiatry clinics and research labs, and participated in discussions with faculty members, including Xu Center Director **Aristidis Veves, MD, DSc**, **Raul J. Guzman, MD**, Vascular and Endovascular Surgery; **John Giurini, DPM**, and **Barry Rosenblum, DPM**, Podiatry; and Surgery Chairman **Elliot Chaikof, MD, PhD**.



From left: Dongcai Hu, MD, MEBO International; Ping Zhang, MD, TEDA International Cardiovascular Hospital; Xiaocheng Liu, MD, TEDA International Cardiovascular Hospital; Aristidis Veves, MD, DSc, BIDMC; Vicki Christodoulou, MS, JD, National Rongxiang Xu Foundation; Jinyong Fang, MEBO International; and Irene Huang, National Rongxiang Xu Foundation.

During a visit to China in January, Dr. Veves signed a Memorandum of Understanding with leaders of TEDA International to collaborate on the establishment of diabetic foot clinics in China, where approximately ten percent of the population is affected by diabetes.

The Xu Center's first symposium, "The Diabetic Lower Extremity Symposium: From Innovation to Therapy," is Friday, November 4. For details and to register, go to: DLESymposium.com.

Palm Beach 2016 Focuses on Cancer

In early 2016, guests gathered at the Florida home of **Roberta and Stephen R. Weiner**, longstanding members of the BIDMC community after whom the Department of Surgery is named, to take part in the medical center's annual Palm Beach event.

This year's event showcased the current landscape of cancer care and research, and highlighted the work of BIDMC experts who are developing more effective, personalized treatment options and leading landmark biomedical studies to tackle this pervasive disease.

Moderated by former WCVB-TV anchors Natalie Jacobson and Susan Wornick, the program featured BIDMC cancer specialists **Mark Callery, MD**, Chief of General Surgery, **Mary Jane Houlihan, MD**, Surgical Oncology, **Pier Paolo Pandolfi, MD, PhD**, **Manuel Hidalgo, MD, PhD**, and **David McDermott, MD**. BIDMC President and CEO **Kevin Tabb, MD**, provided an update on BIDMC's recent activities and accomplishments.



Longtime BIDMC and Department of Surgery friends and supporters Robert and Cynthia Lepofsky were among many who attended the Palm Beach event.

HARVARD MEDICAL SCHOOL

Promotions

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

PROMOTED TO: ASSOCIATE PROFESSOR OF NEUROSURGERY



Ekkehard Kasper, MD, PhD

Dr. Kasper, who joined BIDMC in 2005, is Co-Director of the Brain Tumor Center, Co-Director of the CyberKnife Center, and Director of Neurosurgical Oncology in the BIDMC Cancer Center. He also is Director of the Neurosurgical Oncology Fellowship Program at BIDMC.

Dr. Kasper's major clinical and research interests focus on brain tumors, stereotactic radiosurgery, and functional disorders.

Dr. Kasper's research focuses on the evaluation of different treatment regimens for central nervous system tumors and the basic mechanisms of cell physiology and mechanisms regulating aggression in autism. Dr. Kasper serves as an associate editor of *Neurosurgery* and associate chief editor of *Surgical Neurology International*. He is a leading member of numerous neurosurgical societies around the world.

PROMOTED TO: ASSISTANT PROFESSOR OF SURGERY



Miguel Alonso Alonso, MD

Dr. Alonso Alonso is Director of the Laboratory of Bariatric and Nutritional Neuroscience in the Center for the Study of Nutrition Medicine in the Department of Surgery. He joined the department in 2014.

Dr. Alonso Alonso's research focuses on the neurocognitive basis of human eating behavior and obesity, using an integrative approach that bridges neurology, neuropsychology, and cognitive neuroscience. He is engaged in the development of innovative methodologies and interventions, particularly neurotechnologies, for the treatment of obesity. Dr. Alonso Alonso is currently leading two clinical trials related to the use of transcranial direct current stimulation (tDCS) to enhance eating control in obese individuals.

PROMOTED TO: ASSISTANT PROFESSOR OF OTOLARYNGOLOGY



David Caradonna, MD, DMD

Dr. Caradonna has been a member of the Division of Otolaryngology/Head and Neck Surgery since 1999. A busy clinician who also is dedicated to teaching surgery trainees and mentoring junior faculty, Dr. Caradonna has received numerous teaching awards. He is also the BIDMC Site Director of the HMS

Combined Residency Program in Otolaryngology. His main clinical interests are rhinology/sinus disorders, endoscopic skull base surgery, and sleep medicine. Dr. Caradonna has held numerous leadership roles at BIDMC; conducts clinical research; and is a Fellow of the American College of Surgeons, the American Academy of Otolaryngology, and the American Rhinological Society.

PROMOTED TO: ASSISTANT PROFESSOR OF SURGERY



Matthew Iorio, MD

Dr. Iorio is a member of the Division of Plastic and Reconstructive Surgery, and has a dual appointment in the Division of Hand Surgery in the Department of Orthopaedics. Dr. Iorio provides surgical care for patients with hand, wrist, and upper-extremity injuries, and performs reconstructive microsurgery and post-traumatic

upper and lower limb salvage and reconstruction. His main clinical interests are hand and wrist surgery, reconstructive microsurgery, Dupuytren's disease, wrist fractures, and fracture malunions. His research interests include vascularized bone transfers, microvascular surgery, infected fracture nonunions, and limb salvage.

Department Welcomes New Trainees

In June, the Department of Surgery welcomed the 2016-2017 new interns and upper-level residents to the BIDMC community at a reception at the Harvard Club of Boston. At the event, chief residents and faculty members welcomed the new trainees to the department and to BIDMC.



From left: Chief resident Victor Chien, MD, with PGY-1 residents Miguel Perez Vioria, MD, and Benjamin Scott, MD.

CATEGORICAL INTERNS

Donna Marie Alvino, MD
Harvard Medical School

Jane Cheng, MD
Wayne State University
School of Medicine

Kayla Isbell, MD
University of Alabama School of Medicine

Daniel Kent, MD
Albany Medical College

Stefanie Lazow, MD
Weill Cornell Medical College

Asish Misra, MD
University of Michigan Medical School

Benjamin Scott, MD
Sidney Kimmel Medical College at
Thomas Jefferson University

Claire Sokas, MD
Sidney Kimmel Medical College at
Thomas Jefferson University

Lumeng (Jenny) Yu, MD
Rutgers Robert Wood Johnson
Medical School

INTEGRATED VASCULAR SURGERY (0-5) INTERN

Jennifer Li, MD
Icahn School of Medicine at Mount Sinai

PRELIMINARY INTERNS

Eran Brauner, MD
Technion Israel Institute of Technology

Michael Hong Jr., MD
Jacobs School of Medicine and
Biomedical Sciences

Alessandra Storino Gonzalez, MD
Universidad de Los Andes

Hillary Kim, MD
Catholic University of Korea

Jennine Putnick, MD
Albany Medical College

Jose Santiago, MD
Texas Tech University Health Sciences
Center Paul L. Foster School of Medicine

Miguel Perez Vioria, MD
Universidad Central de Venezuela –
Luis Razetti

NEW UPPER-LEVEL RESIDENTS (PGY 4)

Mansher Singh, MD
All India Institute of Medical Sciences

PODIATRY INTERNS

Hayley Ebersbacher, DPM
Kent State University College of
Podiatric Medicine

Derek Ley, DPM
Samuel Merritt University of
Podiatric Medicine

FELLOWS

**Aesthetic and Reconstructive
Plastic Surgery**

Emile Brown, MD
Johns Hopkins University

**Aesthetic and Reconstructive
Breast Surgery**

Justin B. Cohen, MD, MHS
Washington University

Bariatric Surgery

Emilie B. D. Fitzpatrick, MD
Harbor-UCLA Medical Center

Brian Minh Nguyen, MD
Tulane University

Breast Surgery

Sarah Kimball, MD
University of Hawaii

Cardiothoracic Surgery

Mark Maxfield, MD
Columbia University

Hand/Microvascular Surgery

Arriyan Samandar Dowlathshahi, MD
University of Massachusetts

Interventional Pulmonology

Marianne Barry, MD
Tufts University

Yaron Gesthalter, MD
Boston University

Fayez Kheir, MD
Tulane University

Surgical Critical Care

Charles Parson, MD
University of Vermont

Elizabeth Sullivan, MD
University of Massachusetts

Vascular Surgery

Ruby Lo, MD, MPH
Harvard University



From left: PGY-1 residents Alessandra Storino Gonzalez, MD, and Jennine Putnick, MD, with faculty member Mary Jane Houlihan, MD.

Congratulations to Our 2016 Graduates

Graduating residents and fellows were joined by faculty, family, and friends to receive their diplomas and celebrate their accomplishments at the Department of Surgery graduation dinner on June 19. More than 200 guests attended the event at the Boston Harbor Hotel. Our heartfelt congratulations to the graduates.

GENERAL SURGERY

Rachel Beard, MD

Fellow, Hepatopancreaticobiliary Surgery
University of Pittsburgh Medical Center
Pittsburgh, PA

Sarah Carlson, MD

Fellow, Vascular Surgery
Dartmouth-Hitchcock Medical Center
Hanover, NH

Roger Eduardo, MD

Fellow, Advanced Gastrointestinal and
Bariatric Minimally Invasive Surgery
Cleveland Clinic Hospital
Weston, FL

Tovy Kamine, MD

Fellow, Cardiothoracic Surgery
Yale School of Medicine
New Haven, CT

Ruby Lo, MD, MPH

Fellow, Vascular Surgery
Beth Israel Deaconess Medical Center
Boston, MA

Bharath Nath, MD, PhD

Fellow, Pediatric Surgery
Boston Children's Hospital
Boston, MA

Caroline Park, MD, MPH

Fellow, Trauma/Surgical Critical Care
Keck School of Medicine of the University
of Southern California
Los Angeles, CA



At the graduation dinner, Elliot Chaikof, MD, PhD (far left), and Tara Kent, MD, MS (far right), posed with recent General Surgery Residency Program graduates (from left): Ruby Lo, MD, MPH, Bharath Nath, MD, PhD, Caroline Park, MD, MPH, Roger Eduardo, MD, Rachel Beard, MD, Ashraf Sabe, MD, Sarah Carlson, MD, and Tovy Kamine, MD.

Ashraf Sabe, MD

Fellow, Cardiothoracic Surgery
Brigham and Women's Hospital
Boston, MA

PODIATRY

Shawn Braunagel, DPM

Billings Clinic
Billings, MT

Michelle Allen Morse, DPM

Multispecialty Group Practice
Quincy, MA

FELLOWS

Aesthetic and Reconstructive Plastic Surgery

Ginger Xu, MD

Attending, Kaiser Permanente
San Francisco, CA

Aesthetic and Reconstructive Breast Surgery

Michelle Lee, MD

Attending, DuPage Medical Group
Chicago, IL

Cardiothoracic Surgery

Jennifer Wilson, MD

Attending, Thoracic Surgery
Beth Israel Deaconess Medical Center and
Cambridge Health Alliance
Boston, MA

Hand/Microvascular Surgery

Salah Aldekhayel, MD

Attending, King Saudi Bin Abdulaziz
University for Health Sciences
Riyadh, Saudi Arabia

Minimally Invasive Surgery

John Paul Sanders, MD

Attending, William Beaumont Army
Medical Center
El Paso, TX

Surgical Critical Care

Heath Walden, MD

Attending, Acute Care Surgery
Maimonides Medical Center
Brooklyn, NY

Vascular Surgery

Fahad Shuja, MD

Clinical Effectiveness Program
Harvard T.H. Chan School of Public Health
Boston, MA

Harvard Medical School Center for Glycoscience

Harvard Medical School (HMS) recently approved the proposal to establish the HMS Center for Glycoscience. Based in the Department of Surgery, it is one of fewer than a dozen HMS centers.

The mission of the HMS Center for Glycoscience, which will serve as the epicenter of translational research for clinicians and investigators from around the world, is to improve human health by deciphering the biological role of glycans, or sugars, in health and disease.

In addition to its great promise, glycobiology research has already led to many important applications in clinical practice.

The center's director is Richard Cummings, PhD, an international leader in the rapidly emerging field of glycobiology and Vice Chair of Basic and Translational Research in the BIDMC Department of Surgery. Dr. Cummings also serves as Chair of the Consortium for Functional Glycomics, an international group of some 600 investigators, and Director of the NIH-funded [National Center for Functional Glycomics](#), which also resides in the Department of Surgery.

Glycobiology involves the study of the structure, biology,

evolution, and function of glycans — chemically linked chains of sugars, or carbohydrates. Glycans are widely prevalent throughout nature and are present in all cells, connective tissue, and bodily fluids. They play an essential role in how cells work and, therefore, virtually all aspects of health and disease as well as development.

According to Dr. Cummings, the center will lead highly collaborative, interdisciplinary glycobiology research and translate this knowledge into the prevention, detection, and cure of a host of

diseases. In addition to its great promise, glycobiology research has already led to many important applications in clinical practice (see [Inside Surgery, Spring/Summer 2016](#), page 20).

The center will also provide education (see [page 12](#)) and training in glycobiology, as well as access to the technologies and resources critical for progress in this field. Additionally, the center will engage junior investigators with an interest in glycobiology and assist them with their career development.

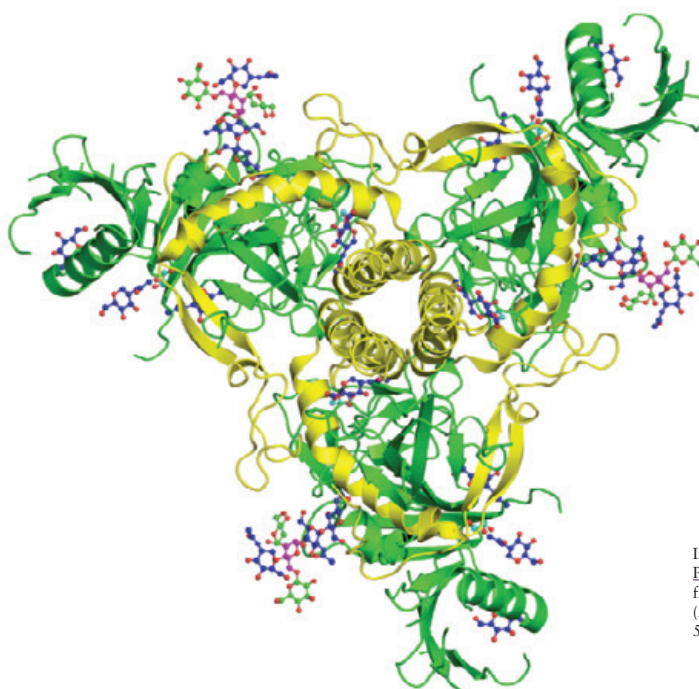


Image from
[Protein Data Bank](#);
from Zhao et al
(2016) *Nature*
535(7610):169-72.

The crystal structure of the Ebola virus glycoprotein, showing the carbohydrates attached to the protein.