



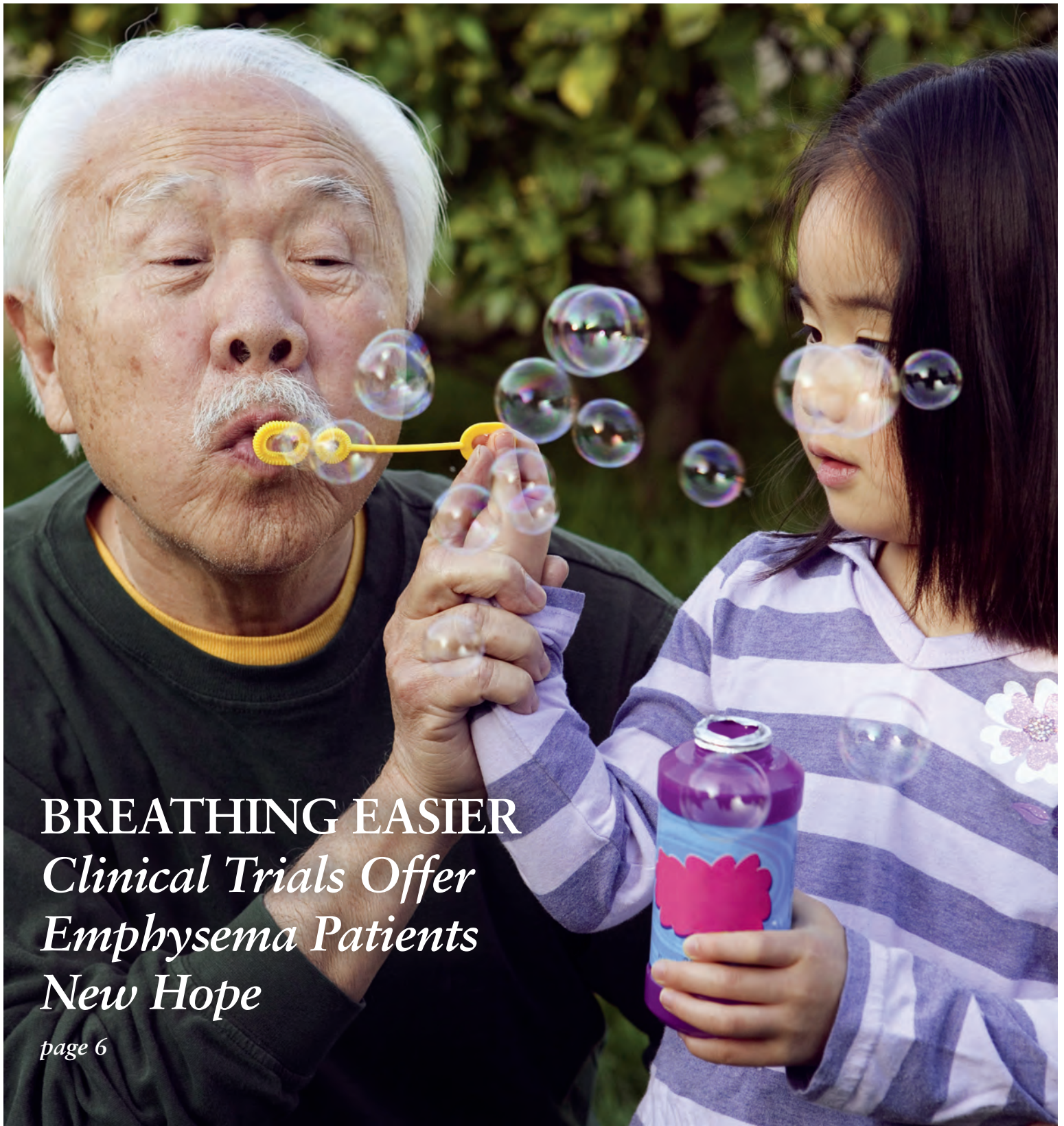
Beth Israel Deaconess
Medical Center



HARVARD MEDICAL SCHOOL
TEACHING HOSPITAL

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

INSIDE SURGERY



BREATHING EASIER
*Clinical Trials Offer
Emphysema Patients
New Hope*

page 6

IN THIS ISSUE

- | | |
|--|---|
| 3 ■ Save the Date
■ Project Survival | 11 ■ New Trainees Welcomed |
| 4 ■ Alumni Spotlight —
Paul Manson, MD | 12 ■ News Briefs |
| 6 ■ Helping Emphysema Patients
Breathe Easier | 17 ■ New Faculty |
| 8 ■ HMS Promotions
and Appointments | 18 ■ Innovative 3-D
Roadmap Technology |
| 9 ■ Named Professorship:
Christiane Ferran, MD, PhD | 21 ■ Graduation 2015 |
| 10 ■ Glycobiology Expert
Joins Department | 22 ■ Selected Faculty Publications |
| | 25 ■ Annual Teaching Awards |
| | 26 ■ Making a Difference |

Message from the Chairman

The Department of Surgery's mission statement (at right) comprises four core elements, one of which is to "improve health through innovation and discovery."

For us, these are not mere words. As several features in this issue of *Inside Surgery* convey, we are achieving our mission by collaborating with others around the globe to develop, refine, and evaluate innovative technologies and therapies that promise to significantly improve care for patients worldwide.

For example, we are the only hospital in the nation and one of just a few in the world to offer a pioneering real-time imaging technology — which we played a major role in developing — that gives vascular surgeons a dramatically enhanced view of the vasculature, making complex aneurysm repairs safer and available to more patients. We also are one of just a few hospitals nationwide evaluating several minimally invasive therapies for patients with late-stage emphysema, a particularly debilitating condition.

Innovation does not just happen. It requires knowledge, careful observation, imagination, and a willingness to break free from usual linear thinking patterns. It is enhanced by interacting with people who have different points of view, who stimulate the flow of new ideas. And it requires resisting the temptation to settle for the first, and often inferior, solution to a problem and digging deeper for a creative, better alternative.

The Department of Surgery fosters an environment where innovation is not only encouraged and supported but also celebrated. We do so because we believe that innovation is the key to achieving our mission of improving health and creating a brighter future for all.



Elliot Chaikof, MD, PhD



Beth Israel Deaconess
Medical Center



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The mission of the
Department of Surgery:

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

Chairman, Surgery

Elliot Chaikof, MD, PhD

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Director of Surgery Communications Editor/Writer

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Tel: 617-632-8384

bidmc.org/surgery

Save the Date

October 14

Surgical Grand Rounds

Distinguished Visiting Professor of Surgery
Stuart Altman, PhD, Brandeis University

"Experience of Massachusetts in Its Attempt
to Improve Quality of Care and Keep Spending
Growth in Line with State Income"

October 15, 6-9 PM

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/foodismedicine

October 28

Surgical Grand Rounds

Silen Visiting Professor of Surgery
Grace S. Rozycki, MD, MBA,
Indiana University

"The Use of Ultrasound in the Acute Setting:
Lessons Learned after Two Decades"

November 11

Surgical Grand Rounds

Goldwyn Visiting Professor
of Plastic Surgery

Scott Spear, MD, Georgetown University
"Advances in Breast Reconstruction"

February 3, 2016

Surgical Grand Rounds

Salzman Visiting Professor
of Vascular Surgery

Ronald M. Fairman, MD,
University of Pennsylvania

"Limb Failure Following EVAR:
Why is This Still a Problem?"

February 10, 2016

Surgical Grand Rounds

Starkey Visiting Professor of Surgery
Gerald Fried, MD, McGill University

"The Making of a Surgeon: Building on a
Foundation of Evidence-Based Research"

Surgical Grand Rounds are held from
8 to 9 a.m. in the Joslin Diabetes Center
Auditorium, One Joslin Place, Boston, MA.
For a listing of all 2015-2016 Surgical Grand
Rounds, go to: bidmc.org/surgery.



Members of Project Survival, the BIDMC Pancreatic Cancer Center, and patients treated at BIDMC were honored at Fenway Park in July prior to a Red Sox/Yankees game. From left: Lindsay McGregor, NP; A. James Moser, MD; Niven Narain, PhD, with his son, and pancreatic cancer survivors Mary Haskins, Paul Jodice, Susan Jo Caira, and Paula Mason.

Project Survival

Unique Collaboration Seeks Treatment Biomarker for Pancreatic Cancer

The search to discover and validate the first-ever clinical biomarker to diagnose and treat pancreatic cancer is the foundation of a new cross-sector collaboration called Project Survival. The Department of Surgery; the biopharmaceutical company Berg Health; and the Pancreatic Cancer Research Team (PCRT), which is managed by Cancer Research and Biostatistics (CRAB), announced recently they will work together to achieve this goal.

According to the National Cancer Institute, nearly 49,000 Americans were diagnosed with pancreatic cancer in 2014, a disease with an abysmal five-year survival rate of less than seven percent. "Pancreatic cancer is expected to become the second leading cause of cancer deaths in the United States within five years, surpassing both breast and colon cancer," says Department of Surgery faculty member A. James Moser, MD, the driving force behind Project Survival and leader of the research team for Project Survival at BIDMC.

"Finding a biomarker will bring real hope to patients with pancreatic cancer," says Dr. Moser. "We believe that our collaboration with Berg and the Pancreatic Cancer Research Team ushers in the dawn of precision medicine needed to beat this terrible disease."

Each organization brings enormous capabilities to Project Survival. The BIDMC Pancreatic Cancer Center is home to one of the nation's foremost academic clinical and translational research programs for pancreatic cancer. The PCRT is a 48-site, multinational network of cancer centers and scientists dedicated to curing pancreatic cancer. Berg is a Framingham (Mass.)-based company with pharmaceutical, diagnostics, health analytics, and biosystems divisions and a research focus on understanding how alterations in metabolism relate to the onset of diseases, including cancer.

Continued on page 28 >

ALUMNI SPOTLIGHT

Paul Manson, MD, '76

Paul Manson, MD, former Chief of Plastic Surgery at Johns Hopkins Hospital for 20 years and Professor of Surgery at Johns Hopkins School of Medicine, believes in the adage that you should be careful what you wish for.

After graduating with highest distinction from Northwestern University Medical School in 1968, Dr. Manson interviewed at three of the most prestigious general surgery residency programs in the country, including the Fifth (Harvard) Surgical Service at New England Deaconess Hospital, the predecessor to the BIDMC General Surgery Residency Program. At the time, the “Fifth” was Dr. Manson’s third choice and he was disappointed when he was not accepted into the other two. But nearly five decades and one illustrious, remarkably productive career later, Dr. Manson believes that not getting his wish was one of the best things that ever happened to him.

“I look back on my residency training and realize how it made me the person I am today,” says Dr. Manson, a full-time member of the Johns Hopkins Hospital Department of Plastic Surgery. “I learned so much from faculty mentors like [then Chief] Dr. William McDermott, Dr. Judah Folkman, and Dr. Frank Wolfort, and also my fellow residents. I learned the importance of respecting patients and colleagues, to be honest about what works and what doesn’t and changing how you do things based on that, and working hard as a member of a team to achieve the best outcomes. It’s not about the facts or the technical details of surgery that stay with you from your residency training,” he says, “it’s the lessons about how to conduct your life. How lucky I was to have been accepted into that program!”

Medal for heroism

After his first year of residency, Dr. Manson served for nearly three years in the U.S. Army Medical Corps in Panama. During that time, he commanded the largest U.S. Army Health Clinic and received an Army Commendation medal for heroism after rescuing victims from a hospital following the 1972 earthquake

in Nicaragua that killed more than 7,000 people.

“It was total devastation, with buildings collapsing everywhere,” he recalls. “Somehow I managed to not get killed while getting patients out of that crumbling hospital.”

Following his discharge from the Army in 1973 at the rank of major, Dr. Manson did another year of a surgical fellowship in colorectal surgery at Lahey Clinic before completing his general surgery training in the Harvard Fifth. Influenced and impressed by plastic surgeon Dr. Wolfort, Dr. Manson decided to do his fellowship in plastic surgery at Johns Hopkins, where he has remained since completing the program in 1978. He was promoted to professor in 1987.

Highest honors

During his tenure at Johns Hopkins, Dr. Manson has held many senior leadership roles and received some of the hospital’s and medical school’s highest honors. In 2012, for instance, he was named a Distinguished Service Professor by the Johns Hopkins School of Medicine, one of only 26 individuals and the only division chair in the 122-year history of the institution to be so recognized. He also was Director of the Johns Hopkins-University of Maryland accredited Fellowship in Craniofacial Surgery for 10 years, and for 16 years was Director of the Johns Hopkins-University of Maryland Plastic Surgery Program.

During his early years at Johns Hopkins, Dr. Manson volunteered to cover nights for the plastic surgery service at the University of Maryland Shock Trauma Unit. It was there that he became interested in traumatic facial injuries and how to treat them to achieve the best possible result. “This became my quest,” says Dr. Manson.



At the time (the late 1970s and early 1980s), trauma patients with severe facial injuries were treated first for their other injuries and only later, using closed techniques, for the injuries to their faces. “But then, as now, with delayed treatment you can’t get a good result,” explains Dr. Manson, who pioneered the acute treatment of traumatic facial injuries. He also was among the first to recognize that open procedures to repair or replace bone, first using wires and later rigid fixation devices like plates and screws, were also critical to good outcomes.

Revolutionizing treatment

“Early, open anatomic reduction [repair or replacement] of bone revolutionized facial fracture treatment,” says Dr. Manson, whose classification of and algorithms for aesthetic reconstruction of facial defects from trauma and, later, cancer are now used by plastic surgeons worldwide. The fixation equipment and implants for facial and orbital fractures that Dr. Manson designed also had a far-reaching impact.

Widely sought after for his expertise, Dr. Manson lectures internationally and has held leadership roles in many professional organizations, including

serving as president of the American Association of Plastic Surgeons (AAPS), the American Society of Maxillofacial Surgeons, and the Association of Academic Chairmen in Plastic Surgery.

In addition, Dr. Manson has been president of and is still actively involved in the AO Foundation, a voluntary international society of 12,000 surgeons dedicated to excellence in the surgical management of trauma and disorders of the musculoskeletal system. Dr. Manson has also been editor of or served on the editorial boards of the leading plastic surgery journals, including *Plastic and Reconstructive Surgery*, *Annals of Plastic Surgery*, and the *Journal of Craniofacial Surgery*. He currently is editor of the *International Journal of Craniomaxillofacial Trauma & Reconstruction*. At last count, Dr. Manson has

authored more than 435 papers, 111 book chapters, and five books.

For his innumerable contributions to his field, Dr. Manson has received dozens of prestigious honors and awards. In 2006, for instance, he received the Clinician of the Year Award from the AAPS, and in 2014 the AAPS gave him its inaugural Lifetime Achievement Clinical Research Award.

Among his most treasured honors, however, is the inaugural **Robert Goldwyn** Mentor Award, which was presented by the American Council of Academic Plastic Surgeons in 2012 (the late Dr. Goldwyn, whom Dr. Manson knew well, was Chief of Plastic Surgery at Beth Israel Hospital from 1972 to 1996).

Facial reconstruction

Today, Dr. Manson’s busy clinical practice focuses largely on facial reconstruction of patients with significant facial skin cancers. “From treating trauma patients, I learned a lot about how to treat patients

with skin cancer,” he says — knowledge that he used to develop and refine algorithms now used by countless other plastic surgeons.

These days a typical patient of Dr. Manson’s might need a nose reconstructed or a large

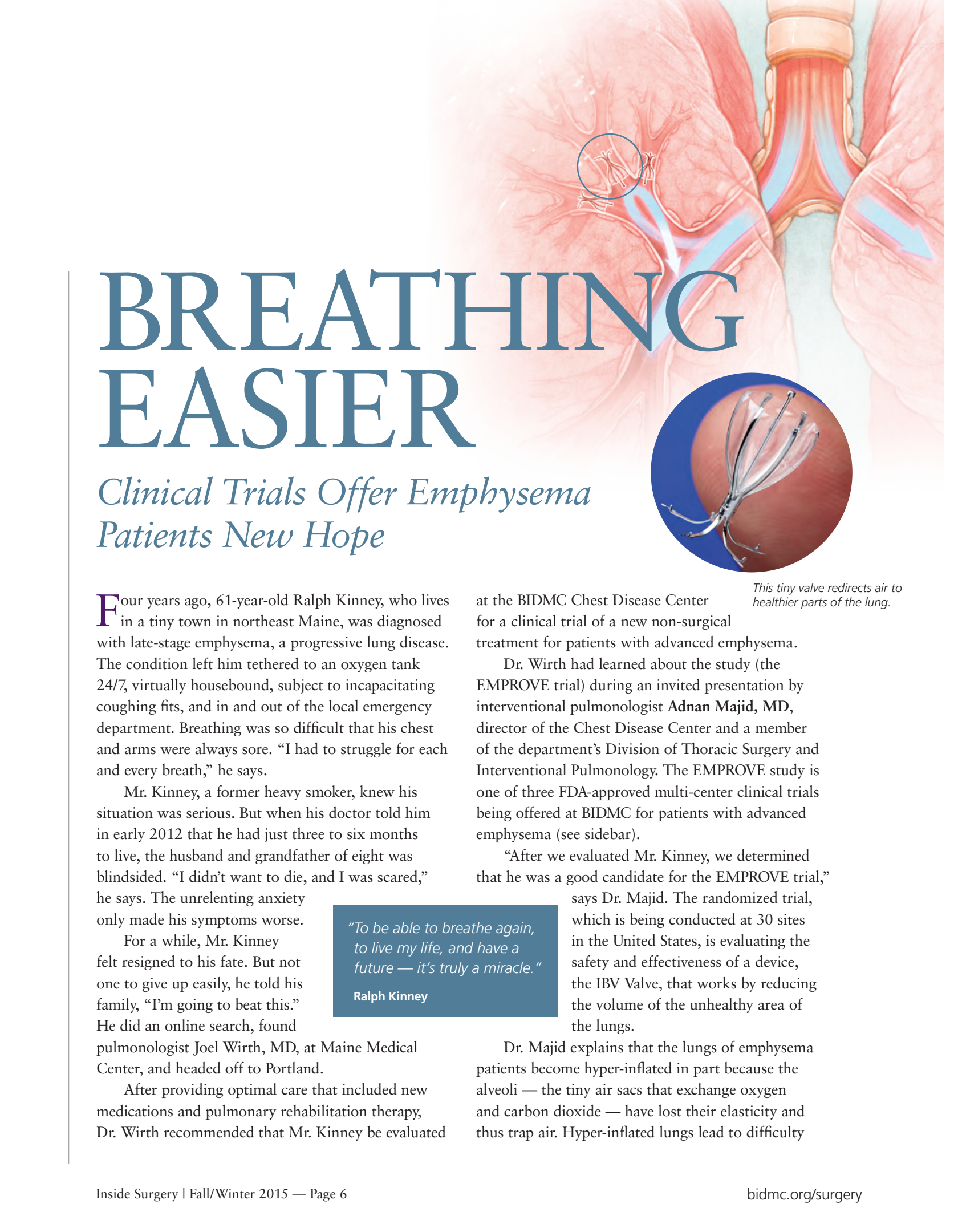
amount of facial tissue replaced as a result of cancer.

“These people’s lives are potentially devastated,” he says. “If I can achieve a good aesthetic result so my patients can go out in public and no one will know anything has been done, it gives me enormous satisfaction. Of all my roles, helping patients through their problems is my favorite.”

At this stage of his career, someone less dedicated than Dr. Manson might be thinking about what to do when he eventually retires. “Everyone’s on me now to get a hobby, but I’m hoping to defer that as long as possible,” he quips, only half in jest. For now, Dr. Manson is happiest doing what he has always done: seeking innovative ways to continually improve the care of people whose faces have been disfigured by illness and injury.

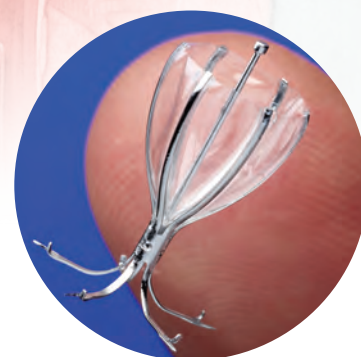
“It’s not the...technical details that stay with you from your residency training. It’s the lessons about how to conduct your life.”

Paul Manson, MD



BREATHING EASIER

Clinical Trials Offer Emphysema Patients New Hope



This tiny valve redirects air to healthier parts of the lung.

Four years ago, 61-year-old Ralph Kinney, who lives in a tiny town in northeast Maine, was diagnosed with late-stage emphysema, a progressive lung disease. The condition left him tethered to an oxygen tank 24/7, virtually housebound, subject to incapacitating coughing fits, and in and out of the local emergency department. Breathing was so difficult that his chest and arms were always sore. “I had to struggle for each and every breath,” he says.

Mr. Kinney, a former heavy smoker, knew his situation was serious. But when his doctor told him in early 2012 that he had just three to six months to live, the husband and grandfather of eight was blindsided. “I didn’t want to die, and I was scared,” he says. The unrelenting anxiety only made his symptoms worse.

For a while, Mr. Kinney felt resigned to his fate. But not one to give up easily, he told his family, “I’m going to beat this.” He did an online search, found pulmonologist Joel Wirth, MD, at Maine Medical Center, and headed off to Portland.

After providing optimal care that included new medications and pulmonary rehabilitation therapy, Dr. Wirth recommended that Mr. Kinney be evaluated

at the BIDMC Chest Disease Center for a clinical trial of a new non-surgical treatment for patients with advanced emphysema.

Dr. Wirth had learned about the study (the EMPROVE trial) during an invited presentation by interventional pulmonologist **Adnan Majid, MD**, director of the Chest Disease Center and a member of the department’s Division of Thoracic Surgery and Interventional Pulmonology. The EMPROVE study is one of three FDA-approved multi-center clinical trials being offered at BIDMC for patients with advanced emphysema (see sidebar).

“After we evaluated Mr. Kinney, we determined that he was a good candidate for the EMPROVE trial,” says Dr. Majid. The randomized trial, which is being conducted at 30 sites in the United States, is evaluating the safety and effectiveness of a device, the IBV Valve, that works by reducing the volume of the unhealthy area of the lungs.

Dr. Majid explains that the lungs of emphysema patients become hyper-inflated in part because the alveoli — the tiny air sacs that exchange oxygen and carbon dioxide — have lost their elasticity and thus trap air. Hyper-inflated lungs lead to difficulty

“To be able to breathe again, to live my life, and have a future — it’s truly a miracle.”

Ralph Kinney



Danielle Duffey

Members of Mr. Kinney's care team included (from left): Adnan Majid, MD, Meghan Fashjian, NP, Aisha Aloma, MD, MPH, and Erik Folch, MD.

with breathing in several ways: they prevent normal expansion of the healthy parts of the lungs, push down the diaphragm (breathing muscle), and increase intrathoracic pressure, leading to lower cardiac output.

The IBV Valve is a small, umbrella-shaped, one-way valve made of nitinol and polyurethane that is deployed into selected airways of a lung via a bronchoscope inserted through the patient's mouth. The device is currently approved only for use in one lung.

The valve, which expands and contracts with breathing, prevents air from entering the diseased areas of the lung but allows any trapped air and excretions to flow out. By redirecting air to healthier parts of the lung, the valves (more than one are placed) reduce hyper-inflation. The procedure is done under general anesthesia and the patient stays in the hospital overnight.

Mr. Kinney underwent the hour-long procedure, during which nine valves were placed in his upper left lung lobe, in March 2014. "I was thrilled to get into the treatment group," says Mr. Kinney, who was the first patient on the East coast to undergo the procedure (BIDMC has treated five patients thus far). "After meeting Dr. Majid and his wonderful team [including Erik Folch, MD, Aisha Aloma, MD, MPH, and Meghan Fashjian, NP], I had complete trust in them. I figured this was my chance."

The potential benefits of this treatment include a reduction in lung volume and improvements in pulmonary function, exercise capacity, and quality of life. Mr. Kinney experienced all four. Dr. Majid, who will follow Mr. Kinney for five years as part of the study protocol, says that in addition to a greatly improved quality of life, Mr. Kinney's lung function tests have improved significantly and his lung volume has been

reduced. "He is doing extremely well," says Dr. Majid, as are the other four patients in the trial.

Today, Mr. Kinney is a new man. He happily mows his three acres of property, cheers on his grandchildren at their soccer games, and even went hunting last fall with his eldest grandson. He uses oxygen only when sleeping at night. "Life is good!" he says.

Most amazing, says Mr. Kinney, is that he doesn't even have to think about his breathing any more — it just happens, like it does for most people, while he's going about his life. "I realize I'm not cured and I'll never run a marathon. But to be able to breathe again, to live my life, and have a future — it's truly a miracle."



Ralph Kinney can once again enjoy time with his grandchildren.

The BIDMC Chest Disease Center is participating in two other trials of non-surgical lung-volume reduction options for patients with advanced emphysema: the LIBERATE study (which is evaluating another type of valve) and the RENEW study (which is evaluating coils). BIDMC is the only hospital in New England to participate in all three trials, offering eligible emphysema patients the widest array of non-surgical options.



For more information about clinical trials and services for patients with emphysema and other lung diseases, please visit our website: [bidmc.org/surgery>chest disease center](http://bidmc.org/surgery>chest+disease+center).

To make a referral or appointment, call 617-632-8252.

HARVARD MEDICAL SCHOOL

Promotions and Appointments

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

APPOINTED AS: PROFESSOR OF SURGERY



Robert Fisher, MD

Robert Fisher, MD, is Chief of the Division of Transplant Surgery in the Department of Surgery and Director of the BIDMC Transplant Institute. Before joining BIDMC in 2014, Dr. Fisher was the H. M. Lee Professor of Surgery at the Medical College of Virginia of Virginia Commonwealth University, where among other roles he served as Director of the Liver Transplant Program and Director of Transplant Research at the Hume-Lee Transplant Center.

Dr. Fisher received his medical degree from Baylor College of Medicine and completed a residency in general surgery at Case Western Reserve University Medical Center in Ohio. He was a member of the United States Naval Medical Corps, in which he served as 7th fleet surgeon attached to the super-carrier USS Forrestal. After completing a fellowship in Adult and Pediatric Solid Organ Transplant Surgery at the University of Cincinnati and Children's Hospitals, Dr. Fisher joined the Medical College of Virginia, where he was a member of the faculty for more than two decades before coming to BIDMC.

As a National Institutes of Health (NIH)-funded investigator for some 17 years, Dr. Fisher has pursued research in the areas of hepatocyte transplantation for liver failure, as well as living donor liver transplantation and the treatment of liver cancer. Dr. Fisher currently is principal investigator of the NIH-funded Adult-to-Adult Living Donor Liver Transplantation study.

Dr. Fisher has published more than 200 peer-reviewed publications and holds leadership positions in numerous professional societies.

PROMOTED TO: ASSISTANT PROFESSOR OF OTOLARYNGOLOGY AND LARYNGOLOGY



Selena Heman-Ackah, MD, PhD, MBA

Selena Heman-Ackah, MD, PhD, MBA, is Director of Otolaryngology, Neurotology, and Audiology in the Division of Otolaryngology-Head and Neck Surgery. She is also Director of the Harvard Medical School (HMS) Otolaryngology Clerkship at BIDMC.

Dr. Heman-Ackah received her medical degree from the University of Cincinnati College of Medicine in Ohio, where she also earned her MBA. She completed a two-year Neurotology fellowship at New York University and her Otolaryngology residency at the University of Minnesota in Minneapolis, from which she also recently earned her doctorate.

Dr. Heman-Ackah's clinical interests include chronic ear disease, otosclerosis, facial paralysis, and tumors of the ear and skull base, but she is especially passionate about acquired and congenital hearing loss. An expert with broad experience in cochlear implantation in adults and children, Dr. Heman-Ackah founded the BIDMC Cochlear Implantation Program in 2014.

Dr. Heman-Ackah conducts basic and clinical research focused primarily on the prevention and treatment of hearing loss. She is the principal investigator of a basic science investigation aimed at developing gene therapy for the treatment of genetic forms of congenital hearing loss, which is funded by a grant from the HMS Office for Diversity Inclusion and Community Partnership. Her clinical research includes a multi-institutional project evaluating noise exposure on long-term otologic health and outcomes research in complex cochlear implantation cases.

Christiane Ferran, MD, PhD, Named Lewis Thomas Professor of Surgery

Christiane Ferran, MD, PhD, has been named the Lewis Thomas Professor of Surgery at Harvard Medical School (HMS). Dr. Ferran, a member of the Division of Vascular and Endovascular Surgery, the Division of Nephrology, the Center for Vascular Biology Research, and the Transplant Institute at BIDMC, has been a Professor of Surgery at HMS since 2009.

Dr. Ferran conducts basic research focusing largely on the many roles of the molecule A20 — in liver regeneration and repair as well as a wide range of conditions that include vascular diseases, diabetes, organ transplantation, cancer, and eye diseases. Her novel discoveries, several of which are being evaluated for clinical implementation, could lead to new diagnostic and therapeutic options for patients with these conditions.

"The Lewis Thomas Professorship is an enormous honor of which Dr. Ferran is justly meritorious. Her studies...will have important clinical applications for years to come."

Anthony Monaco, MD
Director *Emeritus*, BIDMC Transplant Institute

Dr. Ferran's investigations of A20, which reach back more than 20 years to her seminal discovery of its potent anti-inflammatory function, triggered a dynamic field of scientific inquiry that has generated nearly 1,000 scholarly papers. She is the author of more

than 110 publications and the recently published book, *The Multiple Therapeutic Targets of A20*. Dr. Ferran is also very active in training and mentoring the next generation of academic surgeons and scientists, and serves in a leadership role on many influential committees at BIDMC and HMS. Says **Frank LoGerfo, MD**, the former Chief of Vascular Surgery, "This extraordinary scientist is also the most energetic, inspiring, and admired mentor of surgery residents in our NIH research training program."

The Lewis Thomas Professorship was established in 1995 by Sandoz Technology (now Novartis) to honor Lewis Thomas, MD (1913-1993). A graduate of the HMS class of 1937, Dr. Thomas was an immunologist, educator, administrator, and champion of funding for basic

research. He served as president and chief executive officer of Memorial Sloan Kettering Cancer Center and also dean of the medical schools of New York University and Yale

University. Dr. Thomas was perhaps best known as a gifted writer whose work includes *The Lives of a Cell*, for which he received a National Book Award.

The first incumbent of the Lewis Thomas Professorship was Dr. Ferran's mentor, the late **Fritz**



Bach, MD (1934-2011), a pioneer in transplant immunology and former Director of the Sandoz Center for Immunobiology in the BIDMC Division of Transplant Surgery. In 1998, Dr. Bach was awarded the Medawar Prize by the Transplantation Society, the highest award for outstanding contributions to the field of organ transplantation.

"The Lewis Thomas Professorship is an enormous honor of which Dr. Ferran is justly meritorious. Her studies of the biological functions of the A20 molecule collectively represent a quintessential example of important, high-impact basic science/translational medicine research that will have important clinical applications for years to come," says **Anthony Monaco, MD**, Director *Emeritus* of the BIDMC Transplant Institute. "Dr. Ferran is the most deserving Harvard scientist to hold her former mentor's Lewis Thomas Professorship," notes **Robert Fisher, MD**, Chief of the Division of Transplant Surgery and Director of the BIDMC Transplant Institute. "The translation of Dr. Ferran's basic science of A20 into clinical medicine, which is just around the corner, will be a transformative leap forward."

Richard Cummings, PhD, Joins Department as Vice Chair of Basic and Translational Research

*Noted scientist is an international leader
in the field of glycobiology*



Richard Cummings, PhD, was recently recruited to the Department of Surgery as Vice Chair of Basic and Translational Research. In addition, he serves as Chair of the Research Council of the Department of Surgery and as Associate Director of the department's Center for Drug Discovery and Translational Research.

Dr. Cummings came to BIDMC from Emory University School of Medicine, where he was Chair of the Department of Biochemistry. Dr. Cummings is one of the country's leading biological chemists, with broad and deep expertise in a wide range of areas in the biomedical sciences.

He is most recognized as an international leader in the field of glycobiology. This is a relatively new area that is rapidly gaining interest due to the recent explosion of information about the roles of glycans, or sugars, in all aspects of biology, health, and disease, which has led to the development of new drugs, diagnostics, and vaccines.

Dr. Cummings is widely considered a leader in this field. He is Chair of the Consortium for Functional Glycomics, a worldwide group of more than 500 principal investigators, as well as Director of the National Center for Functional

Glycomics, which is funded by the National Institutes of Health. During its first year, this center has established collaborations with more than 100 investigators from across the United States and abroad.

Dr. Cummings brings to BIDMC many technological tools that did not previously exist at Harvard or in Boston but are critical for the analysis of glycan structure and its biological function. His work impacts many areas relevant to surgery: cancer biology, innate and adaptive immunity, thrombosis and hemostasis, nutrition, and infectious diseases.

In addition to being a superb investigator of fundamental biological and biomedical problems, Dr. Cummings has extensive translational research experience. He has developed new drugs and identified new diagnostic reagents and biomarkers, and founded two biotechnology companies. He was the co-founder and prior president and chief scientific officer of Selexys Pharmaceuticals Corporation, a biopharmaceutical company with a pipeline of therapeutics for the treatment of inflammatory diseases. Selexys currently has a drug, SelG1, in phase 2 clinical trials for the treatment of sickle cell disease.

HMS, through a formal process

that included a review by the deans of Academic and Clinical Affairs, Faculty Affairs, and Graduate Studies, gave provisional approval for the formation of a Center for Glycosciences at HMS, which will be directed by Dr. Cummings with its core base of operations at BIDMC.

The center will galvanize a diverse group of investigators from BIDMC and across all HMS-affiliated institutions in the field of glycoscience in areas as varied as surgery, transplantation, cardiovascular biology, pathology, immunology, infectious disease, cancer, and hematology. The center will also raise awareness in the research community of the far-reaching roles that glycomics play in health and disease, and drive the development of new diagnostic tools and therapies. In so doing, the center will establish BIDMC and HMS as leaders in the glycosciences and will coordinate efforts around the world to define the human glycome.

"We are so pleased to welcome Dr. Cummings, an individual of immense talent and integrity, to Boston," says Department of Surgery Chairman **Elliot Chaikof, MD, PhD**. "His presence will enrich our department and the greater BIDMC and Harvard communities."

Department Welcomes New Trainees

In June, the Department of Surgery hosted the 2015-2016 new General Surgery interns and upper-level residents to the BIDMC community at a reception at the Harvard Club in Boston. At the event, chief residents and faculty members welcomed the new trainees to the department and to BIDMC.

CATEGORICAL INTERNS

Oluseyi "Seyi" Akintorin, MD
Tufts University School of Medicine

Gabrielle Cervoni, MD
University of Florida College of Medicine

Alexander Chalphin, MD
Sidney Kimmel Medical College at
Thomas Jefferson University



Intern Chiedozie Uwandu, MD, and his guest.

Michael Dombek, MD
Boston University School of Medicine

Michelle Fakler, MD
Case Western Reserve University School
of Medicine

Mark Kashtan, MD
Medical College of Wisconsin

Kathryn Stackhouse, MD
Cleveland Clinic Lerner College of
Medicine of Case Western Reserve
University

Alton Sutter, MD
Medical University of South Carolina
College of Medicine

Chiedozie Uwandu, MD
Johns Hopkins University School of
Medicine

INTEGRATED VASCULAR SURGERY (0-5) INTERN

Kirsten Dansey, MD
University of South Florida Health
Morsani College of Medicine

PRELIMINARY INTERNS

Allen Feng, MD
Johns Hopkins University
School of Medicine

Kobi Fogel, MD
Florida International University Herbert
Wertheim College of Medicine

Huzifa Haj-Ibrahim, MD
Beirut Arab University

Fei Lian, MD
Emory University School of Medicine

Aidin Masoudi, MD
Shahid Beheshti University of
Medical Sciences

Polina Osler, MD
Harvard Medical School

Jonathan Pastrana Del Valle, MD
Ponce School of Medicine and
Health Sciences

Roopalakshmi Sharadanant, MD
University of North Dakota School
of Medicine and Health Sciences

Mike Tran, MD
West Virginia University
School of Medicine



From left: Interns Fei Lian, MD, and Alexander Chalphin, MD, with Daniel Jones, MD, a Department of Surgery Vice Chair.

Vivek Venugopal, MD
University of Massachusetts
Medical School

NEW UPPER-LEVEL RESIDENTS (PGY 4)

Oliver Chow, MD
Mount Sinai School of Medicine

Omar Karim, MD
University of Maryland School of
Medicine

John McCallum, MD
Northwestern University Feinberg School
of Medicine



From left: General Surgery Residency Program Director Tara Kent, MD, MS, with intern Oluseyi "Seyi" Akintorin, MD.

PODIATRY INTERNS

Michael Lundborg, DPM
Temple University School
of Podiatric Medicine

Raymond Murano, DPM
Kent State University College
of Podiatric Medicine

FELLOWS

**Aesthetic and Reconstructive
Plastic Surgery**

Ginger Xu, MD
University of California, San Francisco

**Aesthetic and Reconstructive
Breast Surgery**

Michelle Lee, MD
Case Western Reserve University

Cardiothoracic Surgery

Antonio Lassaletta, MD
Harvard University (BIDMC)

Hand and Microvascular Surgery

Salah Aldekhayel, MD
McGill University

Interventional Pulmonology

Jose Cardenas, MD
Hofstra University

George Cheng, MD, PhD
Harvard University

Christopher Manley, MD
Tufts University

Minimally Invasive Surgery

John Paul Sanders, MD
Uniformed Services University
of the Health Sciences

Surgical Critical Care

Heath Walden, MD
Hofstra University

Vascular and Endovascular Surgery

Douglas Jones, MD
Cornell University

NEWS BRIEFS



In June, the Committee for the Arts & Humanities at HMS, a self-organized group that has been active since 2010, received approval as an official program from Harvard Medical School (HMS). According to BIDMC-affiliated breast surgeon, author, and associate co-director of the committee **Susan Pories, MD**, the program will establish a center for the arts and humanities at HMS. Activities will include an artist-in-residence program, workshops in the arts, theatrical productions, and trips to artistic events.



Jin-Rong (Joseph) Zhou, PhD, Director of the Nutrition/ Metabolism Laboratory, was elected as the chair-elect for the Diet and Cancer Research Interest Section of the American Society of Nutrition. He also received a two-year grant from the Allen Foundation for studying the effect of maternal nutrition on the risk of autism in offspring.



Allen Hamdan, MD, Vascular and Endovascular Surgery and a Department of Surgery Vice Chair, was named Chairman of the Board of Advisors of the Greater Boston Food Bank (GBFB). The GBFB is the largest hunger-relief organization in New England and among the largest food banks in the country. For the past two years, Dr. Hamdan has been the organizing force behind the annual “Food is Medicine” fundraising event at the GBFB, which has raised nearly \$95,000 (close to 300,000 meals) to help feed hungry families. Food is Medicine is sponsored by the Department of Surgery’s Committee on Social Responsibility in partnership with BIDMC and many others within and outside the medical center. The third annual Food is Medicine gala is October 15 (see “Save the Date” on page 3).



Mary Jane Houlihan, MD, Surgical Oncology, was nominated for the 2015 Harvard Medical School Charles McCabe Faculty Prize for Excellence in Teaching (Years III and IV). Awarded since 1982, the prize is one of HMS’s most important commendations for outstanding teaching accomplishments. The prizes were awarded at the Daniel D. Federman Teaching Awards Celebration at HMS.



Jonathan Critchlow, MD, General Surgery (right), received the Layton F. Rikkers Master Clinician Award from the Society for Surgery of the Alimentary Tract (SSAT) at the SSAT’s annual meeting in May. This prestigious award is presented annually to a member of the SSAT who exemplifies excellence in clinical surgery.



Mark Callery, MD, Chief of General Surgery, was the 2015 Visiting Professor at the 46th annual Kate and Dr. Harvey Cushing Lecture at North Shore University Hospital in New York. Dr. Callery presented on “Technical Considerations in Cholecystectomy.”



Inside Surgery received an “Award for Publication Excellence” in the 27th Annual APEX Awards, an annual national competition for corporate and nonprofit publishers, editors, writers, and designers. APEX awards are based on excellence in graphic design, editorial content, and overall communications excellence.

Following a site visit, the Carl J. Shapiro Simulation and Skills Center (SASC) was recently awarded three-year reaccreditation as a Comprehensive Education Institute by the Accreditation Review Committee of the American College of Surgeons (ACS). SASC Co-Directors are **Daniel Jones, MD**, a Vice Chair in the Department of Surgery, and John Pawlowski, MD, Department of Anesthesia, Critical

Care, and Pain Medicine. In 2006, the SASC became the first in New England to receive ACS accreditation as a Level 1 facility for simulation-based skills training. The SASC opened 10 years ago.



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Accredited Education Institute



Neurosurgeon **Christopher Ogilvy, MD**, Director of the BIDMC Brain Aneurysm Institute, was selected to present the prestigious Raymond P. Donaghy lectureship at the annual meeting of the American Association of Neurological Surgeons (AANS) in May. Dr.

Ogilvy presented to the Joint Section of Cerebrovascular Surgery on the risks and efficacy of endovascular and surgical treatment of intracranial aneurysms. The lectureship honors individuals in neurovascular surgery who have helped advance the field and are leaders in the treatment of neurovascular disease.



Charles Cook, MD, Chief of Acute Care Surgery, Trauma, and Surgical Critical Care



(left), and **Richard Whyte, MD, MBA**, Vice Chair for Quality, Safety, and Clinical Affairs, were elected fellows of the American Surgical Association.



Bernard Lee, MD, MPH, MBA, Chief of Plastic and Reconstructive Surgery (top left), was named Chair of the Plastic Surgery Executive Committee (PSEC), which oversees the Harvard Combined Plastic Surgery Residency Training Program. **Samuel Lin, MD, MBA**, was named Associate Program Director of the PSEC. Also, Dr. Lee was one of two outstanding alumni of the Isenberg School of Management at UMass Amherst to be recognized with an Isenberg Business Leadership Award in



June. Dr. Lee completed his MBA at Isenberg in 2011 and currently serves on the UMass Amherst Alumni Association Board of Directors.



Marc Schermerhorn, MD, Chief of Vascular and Endovascular Surgery, was named the first recipient of the Department of Surgery Award for Excellence in Clinical Research Mentorship. In addition to mentoring residents, medical students, and fellows,

Dr. Schermerhorn is co-director of two department programs that provide mentorship and resources to trainees and faculty conducting clinical research: Surgical Outcomes Analysis & Research (SOAR) and the Clinical Scholarship Program. In his nomination, **Frank LoGerfo, MD**, the former Chief of Vascular Surgery, cited Dr. Schermerhorn's "steadfast commitment to fostering clinical research by our residents."

Continued on page 14 >

NEWS BRIEFS

< Continued from page 13



Ashraf Sabe, MD, and Rachel Beard, MD, were selected as the Administrative Chief

Residents for

the academic year 2015-2016. Drs. Sabe and Beard were chosen by both residents and faculty for their clinical performance, professionalism, maturity, hard work, and dedication to the General Surgery Residency Program.



Harvard Medical School (HMS) students selected residents **Kathleen Weiss, MD**, and **Bijan Teja, MD, MBA**, to receive an Outstanding Resident Teaching Award. Drs. Weiss and Teja, who worked with HMS third-year students during their Surgery rotations at BIDMC, were acknowledged at a teaching awards ceremony at BIDMC in June.



Residents and faculty raised more than \$1,300 for the charity Save the Children in a spinning class competition at the end of the academic year. The funds raised from the resident-led event enabled the residents to “adopt” a five-year-old Nepalese boy and

to donate nearly \$1,000 to the organization’s Nepal Earthquake Children’s Relief Fund. Thirty-seven faculty and trainees participated in the “Resident vs. Attending Spin Class for Charity,” which was organized by 2015 General Surgery Residency graduate **Yue-Yung Hu, MD, MPH**.



Resident **Ammara A. Watkins, MD**, was invited to participate in the 2015 American Society of Clinical Oncology/American Association for Cancer Research “Workshop on Methods in Clinical Cancer Research” held in Colorado in July. Dr.

Watkins’s protocol (“Phase 2 Study of Pancreatic Enzyme Replacement [Zenpep] on Completion Rates of Adjuvant Therapy Among Subjects with Resectable Pancreatic Ductal Adenocarcinoma”) was highly rated by the faculty members of this unique program.



Leena Pradhan-Nabzyk, PhD, MBA, Vascular and Endovascular Surgery, and **Samuel**

Lin, MD, MBA, Plastic and Reconstructive Surgery, graduated from the Massachusetts Institute of Technology Sloan School of Management in June.



Resident **Prathima Nandivada, MD**, received the top award for her basic research on VEGF therapy for congenital diaphragmatic hernia at the annual Dr. M. Judah Folkman Research Day at Boston Children’s Hospital (BCH). Dr. Nandivada’s

abstract was selected from among more than 120 submitted from basic science and clinical research trainees and instructors throughout BCH; she was among 12 invited to give an oral presentation. Dr. Nandivada is doing her research elective at BCH in the laboratory of **Mark Puder, MD, PhD**, an alumnus of the BIDMC General Surgery Residency Program.



The Fourth Annual Harvard Surgery Research Day was held in May at Harvard Medical School. BIDMC Surgery trainees who were selected to give oral abstract presentations from among hundreds who submitted abstracts were:

Lindsay Bliss, MD (mentor: **Jennifer Tseng, MD, MPH**, Surgical Oncology); **Alessandra Mele, MD** (mentor: **Christiane Ferran, MD, PhD**, Vascular and Endovascular Surgery); **Prathima Nandivada, MD** (mentor: alumnus **Mark Puder, MD, PhD**), and **Peter Soden, MD** (mentor: **Marc Schermerhorn, MD**, Vascular and Endovascular Surgery). Dr. Nandivada won second prize for “best basic science oral presentation.” This year’s BIDMC organizing committee members were Dr. Ferran and **Raul Guzman, MD**, Vascular and Endovascular Surgery.



Anurag Das, MD, Urology, recently became a member of the American Urological Association (AUA) Coding and Reimbursement Committee, after having completed a two-year term on the AUA Health Care Policy Council. Dr. Das also attended

the weeklong Leadership Program for Health Policy and Management at Brandeis University in June.



Research on a novel approach for patients with vitreomacular traction (VMT) being conducted by **Jorge Arroyo, MD, MPH**, Ophthalmology, was recently voted a “hot topic” at the Association for Research in Vision and Ophthalmology conference

in Denver. Dr. Arroyo was invited to present on this research (“Pneumatic Vitreolysis with C3F8 Gas for Symptomatic Vitreomacular Traction: A Case Series and Meta-Analysis of the Literature”) at the American Society of Retina Specialists meeting and the Retina Society this year.



Ajith Thomas, MD, Neurosurgery, is principal investigator of an industry-sponsored clinical research investigation to evaluate the safety and effectiveness of the Stryker Neurovascular Neuroform

Atlas Stent System in patients with wide-neck, saccular intracranial aneurysms. The study co-investigator is BIDMC neurosurgeon **Christopher Ogilvy, MD**.

Erik Folch, MD, Thoracic Surgery/Interventional Pulmonology, is co-national lead investigator of the NAVIGATE study to assess the real-world impact of the SuperDimension Navigation System. Seventy-five centers around the world will enroll 2,500 patients in this observational study to confirm the safety and diagnostic effectiveness of Electromagnetic Navigation Bronchoscopy (ENB) procedures for peripheral lung nodules. ENB procedures provide a minimally invasive way to access difficult-to-reach areas of the lungs.



James Rodrigue, PhD, Transplant Surgery and Vice Chair of Clinical Research, participated in the Symposium on Surgical Disparities Research, which was co-sponsored by the NIH’s National Institute on Minority Health and Health Disparities in

collaboration with the American College of Surgeons. The invitation-only event convened a group of 35 preeminent experts with the objective of establishing a national research agenda on disparities in surgical care, outcomes, and treatment. Dr. Rodrigue was also chosen to serve as an at-large member of the Organ Procurement and Transplantation Network (OPTN)/United Network for Organ Sharing (UNOS) Vascularized Composite Allograft Transplantation Committee. The OPTN seeks to increase the number of transplants and also promotes equitable organ allocation, access to transplantation, and patient and living-donor safety.

Continued on page 16 >

NEWS BRIEFS

< Continued from page 15



More than 500 people participated in the 14th annual Arterial Challenge sponsored by the Brain Aneurysm Foundation. Some of the proceeds from the fundraising event were donated to support research underway in the BIDMC Brain Aneurysm Institute, which is led by neurosurgeons Christopher Ogilvy, MD (back row, seventh from left), and Ajith Thomas, MD (third from right).

The 14th annual Arterial Challenge to support brain aneurysm awareness and research was held at Fenway Park in April. The event, which is sponsored by the nonprofit Brain Aneurysm Foundation, included a walk and presentations by survivors, family members, and BIDMC Brain Aneurysm Institute leaders **Christopher Ogilvy, MD**, **Ajith Thomas, MD**, and **Deidre Buckley, RN, NP**, Neurosurgery. The Brain Aneurysm

Foundation was founded in 1994 by Dr. Ogilvy and Ms. Buckley to provide information and resources to patients and families, and also raise funds for brain aneurysm research. This year's Arterial Challenge raised more than \$47,000, a portion of which went to support research in the BIDMC Brain Aneurysm Institute. For more information, visit: bafound.org.

Trainees in the Division of Vascular and Endovascular Surgery received numerous honors at recent society meetings. At the annual Society for Clinical Vascular Surgery meeting in Florida, vascular fellow **Lars Stangenberg, MD, PhD**, won the Karmody Award for the best poster-podium presentation, and research fellow **Sara Zettervall, MD**, was a runner-up. Research assistant **Jeremy Darling** won the Peter Samuels award for the best paper, and his abstract (based on the Wound, Ischemia, and foot Infection “WIFI” risk-stratification system), was cited as one



of the most important studies of the year. At the annual Society for Vascular Surgery meeting in Chicago, Mr. Darling, resident **John (“Jack”) McCallum, MD** (at left), and Dutch medical student and former research assistant **Eleonora Karthaus**

made podium presentations, and Dr. McCallum received second prize in the poster competition.



The Department of Surgery and the Joseph M. Koufman Foundation awarded educational grants to three surgical nurses (above, from left, holding frames): **Elizabeth Berkowitz, RN**, Perioperative Services; **Yuriy Kotsur, RN, CNP**, Inpatient Services; and **Jodi Mechaber-Di Fiori, RN, CNP**, Ambulatory Surgical Practice, Urology. This 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 with the award recipients are (far left) Clinton Koufman, MD, and (far right) his grandson, Steven Leckie, MD.



Alumnus **R. Clement Darling III, MD**, a 1989 graduate of the BIDMC General Surgery Residency Program and Chief of Vascular Surgery at Albany Medical Center Hospital, was elected vice president of the Society for Vascular Surgery (SVS) at the SVS annual meeting in

June. After serving one year each as vice president and then president-elect, Dr. Darling will become president of the 4,500-member SVS in 2017.



Photo courtesy of Society for Vascular Surgery

Marc Schermerhorn, MD, Chief of Vascular and Endovascular Surgery (left), was awarded a seed grant from the Society for Vascular Surgery (SVS) for a Patient-Centered Outcomes Research Institute (PCORI) grant application at the SVS annual meeting. The seed grant facilitates clinical and comparative effectiveness research directed at solving high-impact questions in the care of patients with vascular diseases. Above, Dr. Schermerhorn accepts the award from SVS president Peter Lawrence, MD.

IN MEMORIAM: Carl S. Sloane



The Department of Surgery and the entire BIDMC community mourns the death of BIDMC Director *Emeritus* Carl S. Sloane, who passed away on July 28 following a brief illness. Mr. Sloane was a former Chair of the Board of Directors at BIDMC, and a tremendous friend to the medical center and the Department of Surgery.

Following an illustrious 30-year career in management consulting, Mr. Sloane served as the Ernest L. Arbuckle Professor of Business Administration at the Harvard University Graduate School of Business Administration until his retirement to Professor *Emeritus* in 2000.

During Mr. Sloane's tenure on the BIDMC board, the medical center underwent a dramatic financial turnaround as well as the successful merger of Beth Israel Hospital and New England Deaconess Hospital. Over the many years of his involvement with BIDMC, Mr. Sloane served on virtually every committee and advisory board, where his counsel and perspective were invaluable.

Mr. Sloane is survived by his wife, Toby, and his children Lisa, Rachel, and Todd and their families.

New Faculty



Noelle Saillant, MD

Division: Acute Care Surgery, Trauma, and Surgical Critical Care

Medical School: Boston University School of Medicine

Residency: General Surgery, Beth Israel Deaconess Medical Center

Fellowship: Trauma and Surgical Critical Care, Hospital of the University of Pennsylvania, Philadelphia, PA

Clinical Interests: resuscitation science, transfusion, operative management of traumatic injuries and surgical emergencies

Research Interests: trauma-induced coagulopathy, platelets, resuscitation

Phone: 617-632-9922

PICTURE PERFECT

BIDMC Plays a Leading Role in Development of Innovative 3-D Roadmap Technology



Marc Schermerhorn, MD, has been collaborating for years with engineers in the Netherlands to develop and refine a novel image-fusion technology.

Prior to the early 1990s, patients with an abdominal aortic aneurysm (AAA) that required surgical repair had to undergo a major operation involving a large incision, a long hospitalization and recovery period, pain, and the potential complications of open surgery.

The subsequent advent and widespread adoption of

endovascular AAA repair — a minimally invasive procedure during which the aneurysm is repaired via small incisions or tiny punctures in the groin — has meant that many patients can forgo most of the downsides of open surgery.

Today, more than 75 percent of patients nationwide undergo endovascular aneurysm repair (EVAR) for infrarenal AAAs.

Thanks to advances in the design and delivery of the grafts used to repair aneurysms and the growing proficiency of vascular surgeons in minimally invasive approaches, endovascular aneurysm repairs of increasing complexity are now being performed by experienced surgeons at major medical centers like BIDMC. This not only makes surgery easier on patients; it also

makes treatment an option for individuals who previously would not have been considered for open surgical repair because of advanced age or existing co-morbidities.

Certainly no one recommends turning back the clock 25 years to when all AAA repairs were done with an open procedure. But open surgical aneurysm repair has one big advantage over EVAR — while in the operating room, the surgeon has a direct view of the patient's vasculature.

Most surgeons performing EVAR today have to rely on a two-dimensional image created by fluoroscopy (real-time X-ray imaging) and a three-dimensional image created pre-operatively. During the procedure, the surgeon must mentally merge these two images to know precisely where he or she is working in the patient's anatomy. This is akin to having

"This technology offers so many advantages that I consider it indispensable and use it on all aortic interventions now."

Marc Schermerhorn, MD

GPS in your car that shows just the major highways, alongside a detailed paper map, and having to continually compare them to navigate to your destination.

For the past several years, **Marc Schermerhorn, MD**, Chief of Vascular and Endovascular Surgery, has been collaborating with engineers at Philips Healthcare in the Netherlands to develop and refine a far better option — a novel image-fusion technology called "VesselNavigator." Currently, VesselNavigator is in use only at BIDMC and a few hospitals in Europe, where it became commercially available last spring. In the United States, it is awaiting FDA approval.

VesselNavigator performs the mental gymnastics formerly

required of the surgeon: It fuses 3-D vascular anatomical information from a pre-operative CTA (or MRA) with the intra-operative live X-ray image, thus creating a continuous 3-D roadmap to guide surgeons through the patient's vasculature during the entire procedure. The 3-D roadmap can be rotated at any angle and follows the movement of the X-ray beam and the table on which the patient lies. This gives surgeons unique views of the anatomy in real time so they can precisely execute even the most complex aneurysm repairs.

Dr. Schermerhorn and his colleagues conducted a study at BIDMC, which will be published in an upcoming edition of the *Journal of Vascular Surgery**, that compared 16 patients who underwent EVAR for infrarenal AAA with VesselNavigator

Continued on page 20 >



Vascular fellow Lars Stangenberg, MD, PhD, begins the process for image fusion.



Hilary Bennett

Using VesselNavigator, vascular surgeon Marc Schermerhorn, MD (right), performs an AAA repair with vascular fellows (from left) Lars Stangenberg, MD, PhD, and Fahad Shuja, MD.

< Continued from page 19

with 16 patients who underwent the same procedure with conventional imaging.

Their study showed for the first time that, compared to conventional imaging, VesselNavigator offered four important benefits: It significantly reduced radiation dose for patients and providers, reduced fluoroscopy time, minimized the dose of contrast dye (which can cause serious side effects), and shortened procedure time. These benefits are particularly important as growing numbers of patients with more complex conditions that require lengthier procedures are deemed eligible for treatment.

“This technology offers so many advantages that I consider it indispensable and use it on all aortic interventions now,” says Dr. Schermerhorn. The system was designed to be intuitive and is relatively easy to master, he adds.

While VesselNavigator has proven in early studies to be beneficial for straightforward AAA repairs, Dr. Schermerhorn says that its greatest value will likely be in the treatment of more complex interventions. These include procedures such as aneurysm repair in

locations that require fenestrated or branched grafts, repair of thoracic aneurysms and dissections, repair of complex endoleaks, and carotid artery stenting, all of which are now being performed at BIDMC using VesselNavigator.

As this innovative new technology is put into use around the world, Dr. Schermerhorn looks forward to conducting multi-center research studies to evaluate VesselNavigator in higher complexity procedures and to helping train other vascular surgeons in its use. He also continues to collaborate with Philips Healthcare to develop other new technologies aimed at making vascular interventions better and safer for patients worldwide.



For more information about endovascular surgery at BIDMC, please visit our website: bidmc.org/surgery>vascular and endovascular surgery.

To make a referral or appointment, call 617-632-9959.

**Stangenberg L, Shuja F, Carelsen B, Thijs E, Wyers MC, Schermerhorn ML. A Novel Tool for 3D Roadmapping Reduces Radiation Exposure and Contrast Dose in Complex Endovascular Interventions. J Vasc Surg 2015; in press.*

Congratulations to 2015 Graduates

On the evening of June 21, graduating residents and fellows were joined by faculty, family, and friends to receive their diplomas and celebrate their accomplishments. More than 200 guests attended the graduation dinner at the Boston Harbor Hotel, which overlooks Boston Harbor. Speaking at the event were department Chairman **Elliot Chaikof, MD, PhD**, and **Tara Kent, MD, MS**, Program Director of the General Surgery Residency Program.

We offer our heartfelt congratulations to the graduates and wish them continued success in their future endeavors.

GENERAL SURGERY

Scott Atay, MD

Fellow, Cardiothoracic Surgery
The University of Texas MD Anderson Cancer Center, Houston, TX

Jeff Chang, MD, MS

Fellow, Plastic and Reconstructive Surgery
Stanford University, Stanford, CA

Erica Fallon, MD

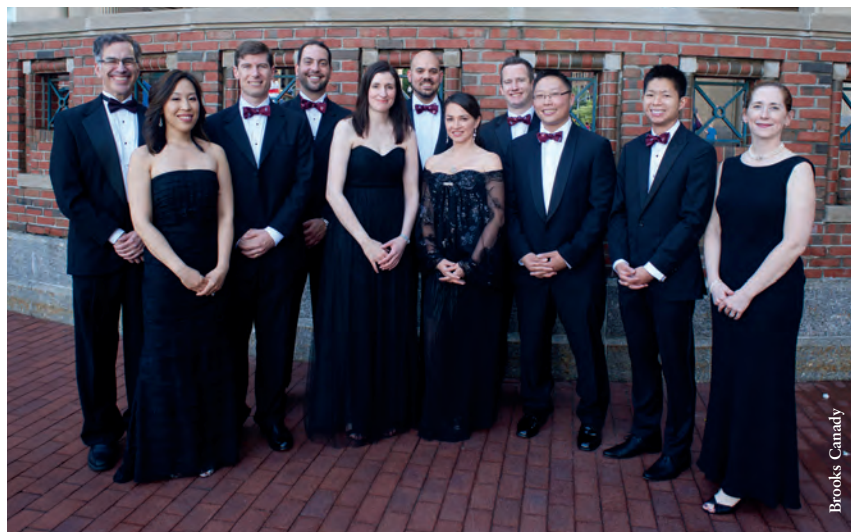
Fellow, Pediatric Surgery
The Hospital for Sick Children
University of Toronto, Canada

Denis Gilmore, MD

Fellow, Cardiothoracic Surgery
Vanderbilt University Medical Center
Nashville, TN

Yue-Yung Hu, MD, MPH

Fellow, Pediatric Surgery
University of Connecticut School of Medicine, Hartford, CT



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): **Yue-Yung Hu, MD, MPH**, **Clayton Peterson, MD**, **Antonio Lassaletta, MD**, **Erica Fallon, MD**, **Scott Atay, MD**, **Claudia Lozano-Guzman, MD**, **Denis Gilmore, MD**, **Andy Lee, MD**, and **Jeff Chang, MD, MS**.

Antonio Lassaletta, MD

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

Andy Lee, MD

Fellow, Vascular Surgery
Stanford University, Stanford, CA

Claudia Lozano-Guzman, MD

Fellow, Surgical Critical Care
Thomas Jefferson University
Philadelphia, PA

Clayton Peterson, MD

General Surgery Practice
Berkshire Medical Center, Pittsfield, MA.

PODIATRY

Emily Pugh, DPM

Fellow, Limb Deformity Correction
Rubin Institute for Advanced Orthopedics
Sinai Hospital, Baltimore, MD

Marc Spiegel, DPM

Private Practice, Needham, MA

FELLOWS

Aesthetic and Reconstructive
Plastic Surgery

Nyama Sillah, MD

Private Practice, Milwaukee, WI

Aesthetic and Reconstructive
Breast Surgery

Olivia Ho, MD

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

Cardiothoracic Surgery

Shelby Stewart, MD

Fellow, Minimally Invasive Thoracic Surgery
Brigham and Women's Hospital
Boston, MA

Hand and Microvascular Surgery

Kevin Cheung, MD

Pediatric Plastic Surgery
Children's Hospital of Eastern Ontario
University of Ottawa, Canada

Minimally Invasive Surgery

Steven Henriques, MD

Private Practice, Miami, FL

Surgical Critical Care

Sean Monaghan, MD

Assistant Professor of Surgery
Alpert Medical School of Brown University
Providence, RI

Vascular and Endovascular Surgery

Lars Stangenberg, MD, PhD

Attending Vascular Surgeon, Basel,
Switzerland



Selected Faculty Publications

Acute Care Surgery, Trauma, and Surgical Critical Care

Chen Y, **Bao Y, Zhang J**, Woehrle T, Sumi Y, Ledderose S, **Li X, Ledderose C, Junger WG**. Inhibition of neutrophils by hypertonic saline involves pannexin-1, CD39, CD73, and other ectonucleotidases. *Shock* 2015; in press.

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Curran T, Poylin V, Kane R, Harris A, Goldsmith JD, **Nagle D**. Case report of a traumatic rectal neuroma. *Gastroenterol Rep (Oxf)* 2015; in press.

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General Surgery

Acton RD, **Jones DB**, Liscum KR, Sachdeva AK. ACS and ASE develop simulation-based surgical skills curriculum for medical students. *Bull Am Coll Surg* 2015;100(4):35-9.

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Olasky J, Sankaranarayanan G, Seymour NE, Magee JH, Enquobahrie A, Lin MC, Aggarwal R, Brunt LM, Schwaartzberg SD, Cao CG, De S, **Jones DB**. Identifying opportunities for virtual reality simulation in surgical education: A review of the proceedings from the Innovation, Design, and Emerging Alliances in Surgery (IDEAS) conference: VR Surgery. *Surg Innov* 2015; in press.

Sahin-Efe A, Polyzos SA, Dincer F, Zaichenko L, McGovern R, **Schneider B**, Mantzoros CS. Intracellular leptin signaling following effective weight loss. *Metabolism* 2015; in press.

Stefanidis D, Sevdalis N, Paige J, Zevin B, Aggarwal R, Grantcharov T, **Jones DB**; Association for Surgical Education Simulation Committee. Simulation in surgery: What's needed next? *Ann Surg* 2015;261(5):846-53.

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Ogilvy CS, Chua MH, Fusco MR, **Griessener CJ**, Harrigan MR, Sonig A, Siddiqui AH, Levy EI, Snyder K, Avery M, Mitha A, Shores J, Hoh BL, **Thomas AJ**. Validation of a system to predict recanalization after endovascular treatment of intracranial aneurysms. *Neurosurgery* 2015; in press.

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Continued on page 24 >

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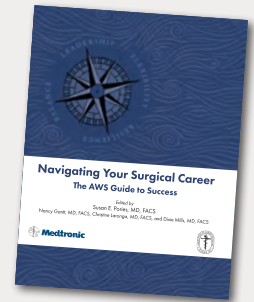
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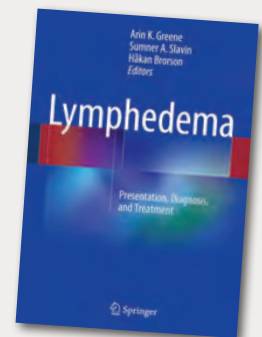
The Bookshelf

Books by our faculty

Susan Pories, MD, Nancy Gantt, MD, Christine Laronga, MD, and **Dixie Mills, MD**, authors. *Navigating Your Surgical Career: The AWS Guide to Success*. Contributors include **Tara Kent, MD, MS**. Published by the Association of Women Surgeons, 2015.



Arin K. Greene, MD, **Sumner A. Slavin, MD**, Kakan Brorson, MD, PhD, Editors. *Lymphedema: Presentation, Diagnosis, and Treatment*. Published by Springer International Publishing, 2015.



From Our Archives

This photograph from our archives shows a surgical procedure underway in the operating theatre of the Fifth (Harvard) Surgical Service, with **Herbert L. Burrell, MD** (standing, far right), observing. Dr. Burrell (1856-1910) was the second Chairman of the Fifth Surgical Service, the predecessor of BIDMC's Department of Surgery. Among many other accomplishments, Dr. Burrell served as President of the American Medical Association and established the Society of Military Surgeons. He succeeded **David Williams Cheever, MD** (1831-1915), who led the Fifth Surgical Service from 1864 to 1885.

To receive a complimentary copy of our publication *BIDMC Surgery at 150*, which recounts our department's history since its founding, please send an e-mail to: surgerycommunications@bidmc.harvard.edu or call 617-632-8384. You may also view and download a PDF of *BIDMC Surgery at 150* from the Department of Surgery website home page: bidmc.org/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 2015 ABSITE

Meredith Baker, MD

Highest Senior-Level Resident on the 2015 ABSITE

Scott Atay, MD

Residents scoring above the 90th percentile on the 2015 ABSITE

Scott Atay, MD

Meredith Baker, MD

Daniel Wong, MD

RESIDENT TEACHER AWARD

Scott Atay, MD

Voted by residents as the senior resident who best exemplifies teaching to other residents.

ISAAC O. MEHREZ, MD, AWARD

Courtney Barrows, 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."



The new 2015-2016 Chief Residents with Elliot Chaikof, MD, PhD (left), and Tara Kent, MD, MS (right), are (from left): Tovy Kamine, MD, Ruby Lo, MD, Barath Nath, MD, Sarah Carlson, MD, Rachel Beard, MD, Caroline Park, MD, Ashraf Sabe, MD, and Roger Eduardo, MD.

GEORGE W.B. STARKEY AWARD

Stephen Odom, 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

Sidhu Gangadharan, MD

Voted by residents as the faculty member who best exemplifies humanism in teaching.

JOHN L. ROWBOTHAM AWARD

Sidhu Gangadharan, MD

Voted by residents as the faculty member who best exemplifies excellence in teaching.



Sidhu Gangadharan, MD, Chief of Thoracic Surgery and Interventional Pulmonology, was the recipient of two teaching awards: the Harold Bengloff Award and the John L. Rowbotham Award.

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 fifth year, this unique educational and team-building experience was made possible by donor Ted Boylan. The top five ABSITE scorers are invited to participate.

Seema Anandalwar, MD

Daniel Buitrago, MD

Nicholas Swerdlow, MD

Sarah Tracy, MD

Daniel Wong, MD



Stephen Odom, MD, Acute Care Surgery, Trauma, and Surgical Critical Care, received the George W. B. Starkey Award.

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

MAKING A DIFFERENCE

Grateful Family Raises \$14,000 for BIDMC

In early 2014, Linda Monaco, a retired schoolteacher from Quincy, went to her primary care physician about the symptoms of a bad cold. Assuming it was nothing serious, Mrs. Monaco was surprised but not particularly worried when an X-ray taken to screen for pneumonia showed a suspicious mass on her right lung.

But surprise turned quickly to disbelief when a CT scan and subsequent PET scan done several days later brought bad news: she had lung cancer. “I’ve always been very healthy and I’ve never smoked,” says Mrs. Monaco, who is married and has three adult children. “The diagnosis was a complete shock.”

Mrs. Monaco was referred to thoracic surgeon **Sidhu Gangadharan, MD**, Chief of the Division of Thoracic Surgery and Interventional Pulmonology. Dr. Gangadharan explained to Mrs.

Monaco that she had early (stage 1) lung cancer and that treatment would require the removal of the lower lobe of her right lung (a lobectomy). “Dr. Gangadharan was so reassuring, I knew I was in very good hands,” says Mrs. Monaco.

Fortunately Mrs. Monaco was a candidate for a video-assisted thoracic surgery (VATS) lobectomy. This is a minimally invasive approach that requires just four small incisions — the largest about 1.5 inches — compared to a six- to seven-inch incision with the open surgical approach. In addition to a shorter hospitalization, patients undergoing VATS lobectomy experience less pain, fewer complications, and a faster return to normal activities, and have the same outcomes as those undergoing open procedures.

Dr. Gangadharan and fellow thoracic surgeon **Michael Kent, MD**, are nationally recognized experts



Hilary Bennett

Linda Monaco was treated for early-stage lung cancer with a minimally invasive treatment called VATS lobectomy.

in VATS lobectomy. Nationwide, only about 25 to 40 percent of lobectomies are performed minimally invasively. At BIDMC, 80 to 90 percent of lobectomies are done this way, making it one of the most experienced centers for this procedure in the nation.

Mrs. Monaco underwent her surgery in early April 2014. She was out of the hospital in three days and in just three weeks was en route to Belgium with her husband, who works as a business consultant there.

Even before her operation, Mrs. Monaco felt a need to do something to take control of her situation and, at the same time, express her gratitude to her caregivers. So she sent an e-mail to her family and friends asking them to donate to the Thoracic Surgery Education, Research, and Program Development Fund rather than send flowers and fruit arrangements. “After all, there is only so much fruit you can



Marissa Monaco at the finish line of the 2015 Boston Marathon. She joined “Team BIDMC” to show support for her mother and raise funds for BIDMC.

"I received exceptional care by an exceptional doctor in one of the best hospitals in the world. My family and I are so grateful, and hope that the funds we helped raise will make a difference."

Linda Monaco

eat!" she jokes. The fund helps support initiatives such as the annual lung cancer symposium, a patient-education program led by Dr. Gangadharan.

At last count, Mrs. Monaco's appeal has generated more than \$1,500 in donations to the fund. On top of that, her daughter, Marissa, participated in the 2015 "Team BIDMC" Boston Marathon team to show support for her mother. Marissa, who lives in Seattle, has raised more than \$12,500 for the BIDMC Cancer Center, bringing the family's total donations to BIDMC to \$14,000. Mrs. Monaco notes proudly that

her daughter was the third-leading fundraiser for the 2015 BIDMC team.

Mrs. Monaco undergoes regular screenings and has no evidence of cancer. She feels terrific and hardly notices the effects of losing a lobe of a lung, walking many miles each week and traveling abroad frequently. "I received exceptional care by an exceptional doctor in one of the best hospitals in the world," she says. "My family and I are so grateful, and hope that the funds we helped raise will make a difference."



To learn how you can support the Thoracic Surgery Education, Research, and Program Development Fund or other Department of Surgery initiatives, please contact Michele Urbancic at murbanci@bidmc.harvard.edu or 617-632-8388 or visit our website.



PROFESSORSHIP HONORS DR. WILLIAM SILEN

The William Silen, MD, Endowed Visiting Professorship honors Dr. Silen, the renowned former Surgeon-in-Chief of Beth Israel Hospital. The professorship will provide the Department of Surgery with the resources to host a surgical leader at BIDMC each year (see "Save the Date" on page 3).

The Department of Surgery invites alumni and other friends to support this professorship with a gift of any amount. To make a gift, please use the enclosed envelope (indicating that your gift is for the "Silen Fund") or contact Michele Urbancic at murbanci@bidmc.harvard.edu or 617-632-8388.

Thank you to the following donors for their very generous support. We will acknowledge donors whose gifts were received after August 25 in our next issue of *Inside Surgery*.

Founding Contributors: \$100,000

Muriel and Norman* Leventhal
Toby and Carl* Sloane

Platinum: \$20,000+

Peter Mowschenson, MD
Sumner A. Slavin, MD

**deceased*

Gold: \$10,000 - \$19,999

Jeffrey Matthews, MD,
and Joan Matthews, MD
Donald Morris, MD

Silver: \$5,000 - \$9,999

Nancy and Michael Cahalane, MD

Bronze: \$1,000 - \$4,999

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Phyllis and Leon Goldman, MD
Grace H. Jeon, MD

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“Our partnership is taking a true precision-medicine approach to understanding and treating pancreatic cancer,” says Niven Narain, PhD, a co-founder, president, and chief technology officer of Berg. The company will employ its powerful artificial intelligence-based Interrogative Biology platform to discover biomarkers that detect this silent disease earlier. The biomarkers would also be used to tailor drug treatment based on the patient’s responses (so-called theranostic markers, which identify patients who would benefit from a particular therapy), rather than the current approach, which Dr. Moser describes as “trial and error.”

Together, the BIDMC Pancreatic Cancer Center and PCRT will design clinical trials and provide both

healthy and treated pancreatic tissue, bio-fluids, and treatment results from patients for analysis using Berg’s platform, which can generate an abundance of data points per sample. CRAB will provide guidance and infrastructure to coordinate the samples and clinical data needed to discover and validate the biomarkers.

“Finding a biomarker will bring real hope to patients with pancreatic cancer.”

A. James Moser, MD

In addition, Berg’s lead cancer drug, BPM 31510, will be introduced in phase 2 clinical trials for patients with metastatic pancreatic cancer at PCRT sites around the world,

including BIDMC. One of the first cancer drugs to be guided by artificial intelligence, BPM 31510 works by reprogramming the metabolism of cancer cells and, in the process, promotes cell death.



The BIDMC Pancreatic Cancer Center is a high-volume, internationally renowned program that provides multidisciplinary, state-of-the-art care to patients with complex pancreatic cancers and rare pancreatic conditions. Department of Surgery team members are Mark Callery, MD, Tara Kent, MD, MS, A. James Moser, MD, and Jennifer Tseng, MD, MPH.

To make a referral or appointment, call 617-667-PANC (7262).

