

Building a Healthier Future for All



Boston University School of Medicine



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The Department of Surgery
By the Numbers*

14	Clinical Divisions/Sections
44	Clinical Faculty (BMC)
1	ACGME-Accredited Surgical Residency
37	Interns and Residents
2	ACGME-Accredited Surgical Fellowships
4	Fellows
5	CPME-Accredited Podiatric Residency Residents
7,393	Operations
71,315	Outpatient Visits

* July 1, 2017 — June 30, 2018



Message from the Chair



It has been a little over a year since I had the honor of becoming Chair of the Department of Surgery. When my appointment became public, some of my fellow new chairs around the nation privately confided to me that my first year would be difficult, but advised me to persevere and persist and I would “get through it.” To some eyes, the fact that I happen to be female and nonwhite would make it even more challenging to

lead an important Department of Surgery at a historically significant hospital located in a tradition-rich city and region. Prepared as I was to meet the challenge, I was in for a very pleasant surprise. Since day one, colleagues throughout BUSM and BMC, especially my fellow surgeons, have been incredibly welcoming and supportive. This has enabled me — joined by a remarkably talented, dedicated, and hardworking team of faculty, trainees, and staff — to focus our collective efforts on what matters most: building a healthier future for all, which is the theme of this year’s annual report. As you will discover on the following pages, we are making considerable progress toward that goal. I understand better now why I did not face the hurdles my well-meaning colleagues suggested I might. This is a very special place that, since its founding in 1873, has been defined by diversity. In fact, we were born this way: One of BUSM’s founding institutions, New England Female Medical College, was the first medical school in the country to train women as physicians, including, in 1864, Rebecca Lee Crumpler, the first black female physician. This is also where, in 1890, Charles Eastman became the first Native American physician. Today, that legacy of diversity and inclusion lives on at BUSM/BMC and the Department of Surgery. Indeed, our department is widely considered a model of diversity — to quote Massachusetts Bay Colony governor John Winthrop, we are a “city on a hill,” to be emulated. Our faculty, trainees, and staff hail from all regions of the nation and the globe, and from all walks of life, reflecting the wonderful diversity of the world in which we live and the patients we care for. I am very proud to be among them.

I hope you will enjoy reading our annual report, and encourage you to keep abreast of our activities throughout the year on Twitter (@BMCSurgery). If you have comments to share with me or would like to receive future communications about the department, please contact us at surgery@bu.edu.

Jennifer F. Tseng, MD, MPH
*James Utley Professor and Chair of Surgery,
Boston University School of Medicine
Surgeon-in-Chief, Boston Medical Center*

Boston Medical Center

Boston Medical Center (BMC) is a private, not-for-profit, 567-bed, academic medical center. Located in Boston’s historic South End, BMC is the primary teaching hospital of the Boston University School of Medicine (BUSM) and was created by the 1996 merger of Boston City Hospital (founded in 1855) and Boston University Medical Center Hospital (founded in 1864). BMC is the largest and busiest provider of trauma and emergency services, and the largest safety-net hospital, in New England. BMC provides a full spectrum of pediatric and adult care services, from primary care and family medicine to advanced surgical and medical specialty care.



The Department of Surgery

The Department of Surgery has a long, proud history with roots that extend back more than 150 years. In 1873, Boston University School of Medicine opened its doors, combining the New England Female Medical College with the medical staff of the Massachusetts Homeopathic Hospital. Dr. Israel T. Talbot was the first chairman of the Department of Surgery while also serving as the first dean of Boston University School of Medicine. The modern history of the Department of Surgery at Boston University dates to 1946, when Dr. Reginald H. Smithwick was recruited from Massachusetts General Hospital to serve as Surgeon-in-Chief and Chairman of Surgery at Boston University School of Medicine (BUSM). Dr. Smithwick served in those positions for nearly 20 years. Among the surgeons who have led and contributed to the international stature of the Department of Surgery throughout the ensuing decades are Drs. Richard Egdaahl, John Mannick, Lester Williams, Peter Mozen, Robert Hobson, Edward Spatz, James Becker, and Gerard Doherty. In July 2017, Jennifer F. Tseng, MD, MPH, was recruited as Chair and Utley Professor of Surgery at Boston University School of Medicine and Surgeon-in-Chief at Boston Medical Center. The Department of Surgery comprises 14 divisions or sections and includes 44 full-time clinical faculty members at Boston Medical Center. A well-established relationship with Boston Children’s Hospital provides shared faculty in pediatric critical care and pediatric general surgery, as well as pediatric training for residents. The department also has 19 affiliated Boston University School of Medicine faculty members from Roger Williams Medical Center, the Veterans Administration (VA) Boston Healthcare System, and Cape Cod Hospital (Cape Cod Healthcare). The Department of Surgery has had a unique partnership with the Department of Surgery at the VA Boston Healthcare System, a relationship that extends back to the 1950s. The departments of Surgery at both hospitals are well-integrated, collaborating not only on the training of medical students,

residents, and fellows, but also on many research and clinical programs. Under the leadership of Kamal Itani, MD, Chief of Surgery, the VA Boston Healthcare System Department of Surgery is a valued partner of the Boston University School of Medicine/Boston Medical Center Department of Surgery. The department also has close ties to the Department of Surgery at Roger Williams Medical Center, led by Chairman N. Joseph Espat, MD, MS. Roger Williams Medical Center has a proud history of more than a century, and is the largest academic Comprehensive Cancer Center in Rhode Island. Offering a full range of specialty and subspecialty services, Roger Williams Medical Center performs approximately 7,300 inpatient and outpatient surgical procedures annually, and is a major source of teaching and training for Boston University School of Medicine/ Boston Medical Center. This annual report provides an overview of some of the clinical programs, research, and educational initiatives of the previous year (July 1, 2017 through June 30, 2018), and highlights some of the many accomplishments and activities of our faculty, trainees, and alumni. We invite you to visit our website and follow us on social media to keep abreast of our activities throughout the year.



Dr. Israel T. Talbot, the first chairman of the Department of Surgery.



Department Leadership



Jennifer F. Tseng, MD, MPH
*James Utley Professor and Chair of Surgery,
Boston University School of Medicine
Surgeon-in-Chief, Boston Medical Center*



David McAneny, MD
*Vice Chair of Surgery, Boston University
School of Medicine
Chief Surgical Officer, Boston Medical Center*



Cullen Carter, MD
Surgery Clerkship Director



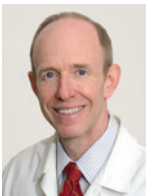
Tracey Dechert, MD
*Associate Chair, Faculty Development
and Diversity*



Alik Farber, MD
Associate Chair, Clinical Operations



Tony Godfrey, PhD
Associate Chair, Research



Donald Hess, MD
*Associate Chair, Education
Program Director, Surgery Residency*

Division and Section Leadership



Peter Burke, MD
Chief, Section of Acute Care and Trauma Surgery



Catherine Chen, MD, MPH
Chief, Section of Pediatric Surgery



Alik Farber, MD
Chief, Division of Vascular and Endovascular Surgery



Geoffrey Habershaw, DPM
Chief, Division of Podiatry Surgery



Jason F. Hall, MD, MPH
Chief, Section of Colon and Rectal Surgery



Donald Hess, MD
*Chief, Section of Minimally Invasive and
Weight Loss Surgery*



Karl Karlson, MD
Chief, Division of Cardiac Surgery



Virginia R. Litle, MD
Chief, Division of Thoracic Surgery



David McAneny, MD
*Chief, Division of General Surgery
Chief, Section of Surgical Endocrinology
Chief, Section of Surgical Oncology*



Matthew Nuhn, MD
Chief, Division of Transplant Surgery



Robert Schulze, MD, MBA
Chief, Section of Surgical Critical Care



Jaromir Slama, MD
Chief, Division of Plastic and Reconstructive Surgery

Faculty

DEPARTMENT OF
SURGERY FACULTY

Jennifer F. Tseng, MD, MPH
*James Utley Professor and
Chair of Surgery, Boston
University School of Medicine
Surgeon-in-Chief*

Acute Care and Trauma Surgery/
Surgical Critical Care

Peter Burke, MD
*Section Chief, Acute Care and
Trauma Surgery
Professor of Surgery, Boston
University School of Medicine*

Robert Schulze, MD, MBA
*Section Chief, Surgical Critical Care
Clinical Associate Professor of
Surgery, Boston University School
of Medicine**

Lisa Allee, MSW, LICSW
*Instructor of Surgery, Boston
University School of Medicine*

Tejal Brahmbhatt, MD
*Assistant Professor of Surgery,
Boston University School
of Medicine
Associate Director,
Surgery Clerkship*

Tracey Dechert, MD
*Assistant Professor of Surgery,
Boston University School
of Medicine*

Andrew Glantz, MD
*Associate Professor of Surgery,
Boston University School
of Medicine*

George Kasotakis, MD, MPH
*(through 8/2018)
Assistant Professor of Surgery,
Boston University School
of Medicine*

Aaron Richman, MD
*Assistant Professor of Surgery,
Boston University School
of Medicine**

Sabrina E. Sanchez, MD, MPH
*Assistant Professor of Surgery,
Boston University School
of Medicine*

Cardiac Surgery

Karl Karlson, MD
*Division Chief
Assistant Professor of Surgery,
Boston University School
of Medicine*

Nikola Dobrilovic, MD, MBA
*Associate Professor of Surgery,
Boston University School
of Medicine**

Colon and Rectal Surgery

Jason F. Hall, MD, MPH
*Section Chief
Associate Professor of Surgery,
Boston University School
of Medicine*

Angela Kuhnén, MD
*Assistant Professor of Surgery,
Boston University School
of Medicine*

Uma R. Phatak, MD
*Assistant Professor of Surgery,
Boston University School
of Medicine*

* Recommended for

Minimally Invasive and Weight Loss Sugery

Donald Hess, MD
Section Chief
Assistant Professor of Surgery,
Boston University School
of Medicine

Brian Carmine, MD
Assistant Professor of Surgery,
Boston University School
of Medicine

Cullen Carter, MD
Assistant Professor of Surgery,
Boston University School
of Medicine

Luise I. Pernar, MD
Assistant Professor of Surgery,
Boston University School
of Medicine

Pediatric Surgery

Catherine Chen, MD, MPH
Section Chief
Assistant Professor of Surgery,
Harvard Medical School

Thomas Hamilton, MD
Assistant Professor of Surgery,
Harvard Medical School

Konstantinos Papadakis, MD
Assistant Professor of Surgery,
Harvard Medical School

Jason Smithers, MD
Assistant Professor of Surgery,
Harvard Medical School

Jay Wilson, MD
Associate Professor of Surgery,
Harvard Medical School

Plastic and Reconstructive Surgery

Jaromir Slama, MD
Division Chief
Assistant Professor of Surgery,
Boston University School
of Medicine

Nilton Medina, MD
Assistant Professor of Surgery,
Boston University School
of Medicine

Smita Ramanadham, MD
Assistant Professor of Surgery,
Boston University School
of Medicine

Podiatry Surgery

Geoffrey Habershaw, DPM
Division Chief
Assistant Professor of Surgery,
Boston University School
of Medicine

Ewald Ray Mendeszoon Jr., DPM
Instructor of Surgery, Boston
University School of Medicine

David Negron, DPM, MBA
Instructor of Surgery, Boston
University School of Medicine

Justin Ogbonna, DPM
Instructor of Surgery, Boston
University School of Medicine

Hau Pham, DPM
Assistant Professor of Surgery,
Boston University School
of Medicine

Wei Tseng, DPM
Instructor of Surgery, Boston
University School of Medicine

Vitaliy Volansky, DPM
Instructor of Surgery, Boston
University School of Medicine

Surgical Endocrinology

David McAneny, MD
Section Chief
Professor of Surgery, Boston
University School of Medicine

F. Thurston Drake, MD, MPH
Laszlo N. Tauber Assistant
Professor of Surgery, Boston
University School of Medicine

Surgical Oncology

David McAneny, MD
Section Chief
Professor of Surgery, Boston
University School of Medicine

Michael R. Cassidy, MD
Assistant Professor of Surgery,
Boston University School
of Medicine

Maureen Kavanah, MD
Associate Professor of Surgery,
Boston University School
of Medicine

Teviah Sachs, MD, MPH
Assistant Professor of Surgery,
Boston University School
of Medicine

Jennifer F. Tseng, MD, MPH
James Utley Professor and Chair
of Surgery, Boston University
School of Medicine

Thoracic Surgery

Virginia R. Litle, MD
Division Chief
Professor of Surgery, Boston
University School of Medicine

Kei Suzuki, MD
Assistant Professor of Surgery,
Boston University School
of Medicine

Transplant Surgery

Matthew Nuhn, MD
Division Chief
Assistant Professor of Surgery,
Boston University School
of Medicine

Amitabh Gautam, MD
Assistant Professor of Surgery,
Boston University School
of Medicine

Vascular and Endovascular Surgery

Alik Farber, MD
Division Chief
Professor of Surgery, Boston
University School of Medicine

Douglas W. Jones, MD
Assistant Professor of Surgery,
Boston University School
of Medicine

Jeffrey Kalish, MD
Associate Professor of Surgery,
Boston University School
of Medicine

Jeffrey Siracuse, MD, RPVI
Associate Professor of Surgery,
Boston University School
of Medicine

Jonathan Woodson, MD
Professor of Surgery, Boston
University School of Medicine
Dr. Woodson is director of the
Boston University-wide Institute
for Health System Innovation and
Policy; Lars Anderson Professor
in Management and Professor
of the Practice, BU Questrom
School of Business; and Professor
of Health Law, Policy and
Management, BU School of
Public Health.

Surgical Research

Tony Godfrey, PhD
Associate Chair of Research
Professor of Surgery and
Computational Biomedicine,
Boston University School
of Medicine

Marina Malikova, PhD, MSci, MA, CCRA, RAC
Executive Director, Surgical
Translational Research
Operations and Compliance

Amy Rosen, PhD
Professor of Surgery, Boston
University School of Medicine

Pamela Rosenkranz, RN, BSN, MEd
Instructor of Surgery, Boston
University School of Medicine

Sing Chau Ng, MS
Staff biostatistician
Administrative Director, SOAR

Emeritus

Robert Beazley, MD
Professor Emeritus of Surgery
Boston University School
of Medicine

Benedict Daly, MD
Professor Emeritus of Surgery
Boston University School
of Medicine

CAPE COD HOSPITAL (CAPE COD HEALTHCARE)

Lawrence Novak, MD
Surgery Residency
Program Director

Stephen Brooks, MD
Clinical Assistant Professor,
Boston University School
of Medicine

ROGER WILLIAMS MEDICAL CENTER

N. Joseph Espat, MD, MS
Chairman, Department of
Surgery, Roger Williams
Medical Center
Professor of Surgery, Boston
University School of Medicine

Abdul Saeid Calvino, MD
Assistant Professor of Surgery,
Boston University School
of Medicine
Assistant Director, Boston
University School of Medicine
Surgery Clerkship

Steven Katz, MD
Associate Professor of Surgery,
Boston University School
of Medicine

Ponnandai Somasundar, MD
Associate Professor of Surgery,
Boston University School
of Medicine

Ting Zhao, MD
Associate Professor of Surgery,
Boston University School
of Medicine

VETERANS AFFAIRS (VA) BOSTON HEALTHCARE SYSTEM

General Surgery

Kamal Itani, MD
Chief of Surgery, Veterans Affairs
Boston Healthcare System
Professor of Surgery, Boston
University School of Medicine

P. Marco Fisichella, MD, MBA
Associate Professor of Surgery,
Harvard Medical School

Jason S. Gold, MD
Associate Professor of Surgery,
Harvard Medical School

Patrick B. O’Neal, MD
Assistant Professor of Surgery,
Boston University School
of Medicine
Assistant Director, Boston
University School of Medicine
Surgery Clerkship

Vivian E. Sanchez, MD
Assistant Professor of Surgery,
Boston University School
of Medicine
Director, Boston University
Anesthesia/Surgery Internship

Cardiac Surgery

Miguel Haime, MD
Assistant Professor of Surgery,
Boston University School
of Medicine

Vascular Surgery

Sarah Carlson, MD
Assistant Professor of Surgery,
Boston University School
of Medicine

James McPhee, MD
Assistant Professor of Surgery,
Boston University School
of Medicine

Research

Qi Chen, MD, PhD
Assistant Professor, Boston
University School of Medicine

Hillary Mull, PhD
Research Assistant Professor,
Boston University School
of Medicine

Amy Rosen, PhD
Professor of Surgery, Boston
University School of Medicine

Jinghua Yang, PhD
Associate Professor, Boston
University School of Medicine



Faculty News



TEJAL BRAHMBHATT, MD, Acute Care and Trauma Surgery/Surgical Critical Care, was inducted as a Fellow of the American College of Surgeons (FACS) in

October 2017. During the previous year, Dr. Brahmhatt gave or participated in more than 10 oral presentations at conferences throughout the U.S. and Europe, including at the American College of Surgeons, the Eastern Association for the Surgery of Trauma, the Surgical Infection Society, the Radiological Society of North America, and the World Congress of Surgery. Dr. Brahmhatt co-authored a chapter in the gold standard textbook for adult fractures, "Rockwood and Wilkins' Fractures in Adults" 9th edition (Wolters Kluwer Health; in press), and had papers published or accepted for publication in the following peer-reviewed journals: *Journal of Trauma and Acute Care Surgery*, *American Journal of Emergency Medicine*, and *Insights of Biomedical Research*.

In addition, Dr. Brahmhatt was named local arrangements chair for the 2019 annual national conference of the Society of Asian Academic Surgeons, and became a member of the Graduate Surgical Education Committee of the Association for Surgical Education and the Emergency General Surgery Committee of the Eastern Association for the Surgery of Trauma.

Dr. Brahmhatt also is the site principal investigator of these multi-center studies: Prospective Observational Study of Temporary Vascular Shunts in Trauma, and Pelvic Angioembolization: A Prospective Multi-Institutional Study.



Boston University School of Medicine Promotions

JEFFREY SIRACUSE, MD, RPVI
Vascular and Endovascular Surgery
Associate Professor of Surgery
and Radiology



New Faculty

AARON RICHMAN, MD

Assistant Professor of Surgery,
Boston University School of Medicine*

Acute Care and Trauma Surgery/Surgical Critical Care

A graduate of the BUSM/BMC General Surgery Residency, Dr. Richman will join the Department of Surgery as a member of the faculty in October 2018. Dr. Richman graduated from the University of Colorado Boulder and received his medical degree from the University of California San Diego. After completing his general surgery residency in 2017, Dr. Richman did a fellowship in surgical critical care and trauma at the University of Colorado/Denver Health Medical Center.

Dr. Richman's main clinical interests are trauma and emergency general surgery. His primary research interests are surgical education, critical care ultrasound, and minimally invasive techniques in trauma.



ABDUL SAIED CALVINO, MD

Roger Williams Medical Center, was an invited speaker at the Rhode Island Department of Health 2018 Health Equity Summit last fall,

where he addressed "Decreasing racial cancer care disparities through population-centered interventions." In June, Dr. Calvino presented "Increasing cancer screenings: Closing the gap in health disparities" at a clinical forum organized by the American Cancer Society and the Rhode Island Department of Health. Dr. Calvino also gave oral presentations at the American College of Surgeons Clinical Congress and the Society of Surgical Oncology (SSO) annual meeting, as well as a poster presentation at the BU Health Equity Symposium (which received honorable mention) and the SSO.



CULLEN CARTER, MD

Minimally Invasive and Weight Loss Surgery and Surgery Clerkship Director, was a recipient of a 2018 Educator of the Year Award in

Clinical Sciences at BMC, presented by the Committee on Faculty Affairs of BU School of Medicine in May. The awards, which are presented annually, recognize BU School of Medicine educators who provide excellence in teaching and mentoring in the areas of pre-clinical sciences, clinical sciences, and graduate medical sciences.



TRACEY DECHERT, MD

Acute Care and Trauma Surgery/Surgical Critical Care, was inducted into the Boston University Medical Group (BUMG) Clinical Excellence

Society at the group's first annual awards event. Dr. Dechert is chair of the BUMG Education Committee, which developed and implemented the awards program.



F. THURSTON DRAKE, MD, MPH, Surgical Endocrinology, had five peer-reviewed papers published or accepted for publication as of press date. During the previous

year, he and his research colleagues gave eight poster presentations and three podium presentations at major national meetings. These included a podium presentation at the American Association of Endocrine Surgeons (AAES) annual meeting with **David McAneny, MD**, and resident co-author **Stephanie Talutis, MD, MS**, which presented the first data from the Collaborative Endocrine Surgery Quality Improvement Project (CESQIP), a national quality improvement initiative of the AAES. Dr. Drake also had posters selected for presentation at meetings of the New England Surgical Society, the American College of Surgeons 2018 Clinical Congress, and the American Thyroid Association.

With **Sabrina Sanchez, MD, MPH**, Dr. Drake is co-principal investigator at BUSM/BMC for the Comparing Outcomes of Drugs and Appendectomy (CODA) Trial (*see page 28*). Enrollment for this prospective, randomized trial with nearly 20 sites nationwide began at BMC in early 2018. In addition, Dr. Drake's team was awarded a two-year, BMC Patient Safety Award to implement and evaluate a pilot project to improve communication and evaluation of incidental adrenal gland findings with the goal of improving the management of a broad spectrum of incidental findings.

During the previous year, Dr. Drake was co-author (with Quan-Yang Duh, MD, of the University of California San Francisco) of a chapter on adrenal surgery in "Comprehensive General Surgical Oncology" (Decker). He was also accepted as a full member of the AAES, and was appointed to the Fellowship Committee, where he will spearhead a research project on the burdens of fellowship interviews for applicants, the findings of which are expected to be presented at the 2019 AAES annual meeting. In addition, Dr. Drake will be admitted as a Fellow of the American College of Surgeons this fall (2018).



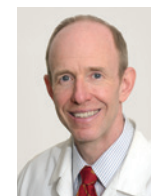
N. JOSEPH ESPAT, MD, MS, Chair of Surgery at Roger Williams Medical Center, presented at Grand Rounds at the University of Tennessee, Boston University, and the

University of Maryland during the previous year. He also was the keynote speaker at the Mexican chapter of the International Hepato-Pancreato-Biliary Association (IHPBA) annual meeting in Cancun.



ALIK FARBER, MD, Chief of Vascular and Endovascular Surgery, had numerous papers published, including one in the Clinical Practice

section of the *New England Journal of Medicine* on "Chronic Limb-threatening Ischemia" and another in the *Journal of Vascular Surgery* entitled "The BEST-CLI Trial Has Crossed the Halfway Mark — and Promises to be Worth the Wait." Dr. Farber reports that since September 2017, faculty in the Division of Vascular and Endovascular Surgery had 27 papers published, in press, or accepted for publication in the following journals: *New England Journal of Medicine*, *Journal of Vascular Surgery*, *Journal of Cardiovascular Surgery*, *Annals of Vascular Surgery*, *American Journal of Surgery*, *Stroke*, *Vascular and Endovascular Surgery*, and *Advances in Surgery*. Also during the previous year, Dr. Farber was inducted as a faculty member into Alpha Omega Alpha, the national medical honor society.



DONALD HESS, MD, Chief of Minimally Invasive and Weight Loss Surgery, was named Associate Chair for Education. In this role, Dr. Hess, who is also Program Director for the General

Surgery Residency Program, is responsible for the administration of the residency program as well as other educational initiatives in the department and BMC.



STEVEN KATZ, MD, Roger Williams Medical Center, presented at the American Association of Immunology and the annual meeting of the Society of Surgical Oncology during the

previous year. Dr. Katz had papers published or accepted for publication in the following journals: *Annals of Oncology*, *Journal of Vascular and Interventional Radiology*, *Journal of the National Comprehensive Cancer Network*, *Journal of Leukocyte Biology*, and the *Journal of Surgical Oncology*. Dr. Katz serves on several committees of the American Board of Surgery and is Associate Editor of *Oncogene*. In addition, he is the principal investigator of two clinical trials of CAR-T therapy for patients with metastatic liver cancer and myeloma.



ANGELA KUHNEN, MD

Colon and Rectal Surgery, was invited to design and moderate a new symposium at the 2018 American Society for

Colon and Rectal Surgeons (ASCRS) national meeting entitled "Pathogen or Partner? The Role of the Gut Microbiome in the Colorectal Surgical Patient." Dr. Kuhn was also a panel speaker in a symposium moderated by Colon and Rectal Surgery Chief **Jason Hall, MD, MPH**, on the "Difficulties Surrounding the Management of Diverticulitis."



LUISE PERNAR, MD

Minimally Invasive and Weight Loss Surgery, was appointed Director of Surgical Education. In this new role, Dr. Pernar collaborates

with department leadership, the Surgery Education Office, the Director of Surgical Simulation, BMC, BUSM, and the Boston University Medical Group to design and implement useful, innovative, and effective educational programs for faculty and trainees.



Top Docs

Congratulations to the following Department of Surgery faculty members cited as “tops” in their specialties in *Boston Magazine’s* 2017 “Top Docs” issue.

PETER BURKE, MD

Acute Care and Trauma Surgery

ALIK FARBER, MD

Vascular and Endovascular Surgery

JASON HALL, MD, MPH

Colon and Rectal Surgery

DONALD HESS, MD

Minimally Invasive and Weight Loss Surgery

JEFFREY KALISH, MD

Vascular and Endovascular Surgery

MAUREEN KAVANAH, MD

Surgical Oncology

VIRGINIA LITTE, MD

Thoracic Surgery

DAVID McANENY, MD

General Surgery, Surgical Endocrinology, Surgical Oncology

JAROMIR SLAMA, MD

Plastic and Reconstructive Surgery

Dr. Pernar and resident **Rumbidzayi Nzara, MD**, gave a poster presentation at the 2018 Society of American Gastrointestinal and Endoscopic Surgeons (SAGES) annual meeting on complications after open ventral hernia repair stratified by BMI. Research conducted by Dr. Pernar and resident **Alaina Geary, MD**, resulted in two oral presentations at this year’s Association for Surgical Education (ASE) annual meeting; both were on Resident-as-Teacher programs in general surgery training. In collaboration with **Donald Hess, MD**, Chief of Minimally Invasive and Weight Loss Surgery, Dr. Pernar also led a workshop at the ASE annual meeting on how to set up a Resident-as-Teacher program within a surgical residency. In addition, Dr. Pernar had a chapter published in “Shackelford’s Surgery of the Alimentary Tract,” 8th edition (Saunders Elsevier) and a chapter published in “Scientific American Medicine.”



MARINA MALIKOVA, PhD, MSc, MA, CCRA, RAC, Surgical Research, was appointed chair of the Clinical Trial Forecasting and Budgeting Symposium at the 9th Annual Clinical

Operations Executives (SCOPE) Summit in Florida, where she also gave two invited presentations. During the previous year, Dr. Malikova had eight papers published in seven peer-reviewed journals: *Future Science OA*, *Clinics in Surgery*, *Journal of Clinical Trials and Regulatory Affairs*, *Surgical Cases*, *World Journal of Surgery and Surgical Research*, and *Pharmaceutical Outsourcing Magazine*. Dr. Malikova also serves on the editorial board of *Surgical Case Reports and Reviews*, and is a panel reviewer for the National Institute of Allergy and Infectious Diseases (NIAID): NIAID Clinical Site Monitoring and Vaccine Research Center General Clinical Research Support Services.



TEVIAH SACHS, MD, MPH, Surgical Oncology, was named an Associate Program Director of the Surgery Residency Program.



JEFFREY SIRACUSE, MD, RPVI, Vascular and Endovascular Surgery, was among 10 BUSM faculty inducted into the Boston University Medical Group (BUMG) Clinical

Excellence Society at the group’s first annual awards event. During the previous year, Dr. Siracuse received an Early Career Faculty Research Award from the Vascular and Endovascular Surgery Society, where he serves on the Executive Council and chairs the Membership Development Committee. Dr. Siracuse was also selected as chair of the Appropriateness Committee of the Society for Vascular Surgery (SVS), and is a member of the SVS Guidelines on Popliteal Aneurysms Writing Committee.

During the previous year, Dr. Siracuse also became a reviewer for *JAMA Surgery* and was appointed to the editorial board of the journal *Vascular and Endovascular Surgery*. Dr. Siracuse gave 12 regional and national presentations, including at the SVS annual meeting plenary session; and had 25 papers published or accepted for publication in peer-reviewed journals, including the *Journal of Vascular Surgery*, *Annals of Vascular Surgery*, and the *Journal of the American Heart Association*.



PONNANDAI SOMASUNDAR, MD, MPH, Roger Williams Medical Center, gave two invited lectures in India during the previous year, and will be an abstract

reviewer for the upcoming International Society of Geriatric Oncology conference in the Netherlands. He also presented at conferences in the U.S., including the Rhode Island Cancer Summit and the Synergy

Interventional Oncology Conference, and at Grand Rounds at the University of Kansas. Dr. Somasundar had articles published in the following journals: *European Journal of Surgical Oncology*, *Hepatobiliary Surgery Nutrition*, *Tumor Journal*, and the *Journal of Leukocyte Biology*. Dr. Somasundar was recognized by peers in *Rhode Island Magazine* as a “Top Doctor.”



KEI SUZUKI, MD, Thoracic Surgery, received a research award from the Thoracic Surgery Foundation for his project “Utilization of nasal biomarkers as screening tools for lung cancer.” See article on page 14.



MAUREEN TEDESCO, MD, of Kaiser Permanente Santa Clara Medical Center (California), an Adjunct Clinical Assistant Professor of Surgery at BUSM, was named an Assistant

Director of the BUSM/BMC Surgery Clerkship in May.



JENNIFER TSENG, MD, MPH, Surgical Oncology and Chair of Surgery, was appointed Deputy Editor of *JAMA Surgery*, effective January 2018. Dr. Tseng was also asked to serve

as Councilor for the Boston Surgical Society and is the President-Elect of the Society of Asian Academic Surgeons.

In addition, the Society of Surgical Oncology (SSO) nominated Dr. Tseng to the SSO’s Executive Council, which serves as the governing body of the organization. SSO leaders are selected from among those whose careers have shown a devotion to advancing and promoting the science and treatment of cancer. If approved, Dr. Tseng will serve on the Executive Council from 2019 to 2022.



ALUMNI AND OTHER FRIENDS: PLEASE KEEP IN TOUCH!

Please send us your current/preferred contact information (e-mail and mailing address, please) so we can keep you informed about your fellow alumni and other news, and invite you to special alumni events. We will use this information only for items of interest, such as newsletters and invitations, and will not share it. In addition, please send us news and contact information about your current or former colleagues with a BU/BMC surgery connection, whether from medical school, residency, fellowship, or faculty years.

Reach us at: surgery@bu.edu.
And be sure to follow us on Twitter @BMCSurgery.



Richard J. Shemin, MD, is a 1974 graduate of the BU School of Medicine and former Chair of Cardiothoracic Surgery at BUSM/BMC. Dr. Shemin is now Chief of Cardiothoracic Surgery at UCLA Medical Center, and Executive Vice Chairman of its Department of Surgery.

Alumni Profile: Richard J. Shemin, MD, Class of 1974

Ever since he was a young boy growing up in Little Rock, Arkansas, Richard Shemin knew he wanted to be a doctor, and most likely a surgeon.

His inspiration was his father, Saul, a veterinarian and cattle rancher who sometimes let his eager and curious son help out under his watchful eye: once letting him set a dog's leg and another time assist in an operation on a cat. When his father told him, "You've got good hands," Richard, whose great uncle was also a doctor, knew he had found his calling in life.

Indeed, decades later, Dr. Shemin, one of the nation's top academic cardiac surgeons, Robert and Kelly Day Professor and Chief of Cardiothoracic Surgery at UCLA Medical Center, Executive Vice Chairman of the Department of Surgery, and Co-Director of the Cardiac Vascular Center, says, "I still wake up every day excited to go to work."

Highly selective program

After graduating from high school, Dr. Shemin was thrilled to be accepted to Boston University's six-year BA/MD program, from which he graduated, *cum laude*, in 1974. "This highly selective program enabled me to earn a liberal arts degree [he majored in philosophy

and religion, graduating *magna cum laude*] and be with classmates who were also academically strong and focused on a career in medicine," says Dr. Shemin. He was elected into the Phi Beta Kapa Society and, as a junior medical student, elected to Alpha Omega Alpha.

Dr. Shemin matched with his first choice of surgical residencies: the Harvard-affiliated Peter Bent Brigham Hospital in Boston. (In 1980, Peter Bent Brigham Hospital, Robert Breck Brigham Hospital, and Boston Hospital for Women merged to form Brigham and Women's Hospital.) He was the first BU School of Medicine graduate to be accepted into the elite surgical training program.

Prepared for success

"The education that BU School of Medicine provided — and still provides — was as good as or better than any other medical school in the country," says Dr. Shemin, who is also Program Director of the UCLA Cardiothoracic Surgery Residency Program at the David Geffen School of Medicine at UCLA. "BU School of Medicine's core values of humanism, compassion, and professionalism, as well as its emphasis on teamwork and communication skills, prepared its graduates then, as now, for success in today's complex healthcare environment."

During his residency, Dr. Shemin decided to specialize in cardiac surgery, which at the time was undergoing many exciting advances. He spent two years during his residency as a clinical associate in cardiac surgery at the National Heart, Lung, and Blood Institute, and following his graduation in 1980 from the Brigham, completed a fellowship in cardiothoracic surgery at New York University Medical Center. Acceptance into both programs was highly competitive.

Bringing heart transplantation to New England

In 1982, Dr. Shemin joined the faculty at Brigham and Women's Hospital, taking a year in 1983 to complete a heart transplantation fellowship at Stanford University. Dr. Shemin, who was Medical Director of the Cardiac Surgical ICU, convinced the leadership that Brigham and Women's should develop a program in heart transplantation. At the time, heart transplants were being done at only three hospitals nationwide, none of which was in New England. Dr. Shemin succeeded and, in 1984, he was part of the team that

"I support the BU School of Medicine because I am very grateful for the education I received there, which was second to none." — Richard J. Shemin, MD

performed the first successful heart transplant in New England.

Another highlight of Dr. Shemin's career was a case in 1983, which at the time received national media attention, involving a woman who was 30 weeks pregnant with a ruptured aorta who went into cardiac arrest. Neither she nor the baby were expected to survive. Dr. Shemin, who fortunately had chosen to assist with a number of cesarean sections during his surgical training, delivered the infant safely and then saved the mother.

"This was a situation where one patient near death went into the OR and two people came out alive," says Dr. Shemin, noting that he advises surgical trainees to learn as much as possible about all specialties during their training. "I tell them it will make them better doctors. You never know when the knowledge or surgical skills learned years before may make a difference in the life of a patient."

World-class cardiothoracic surgery service

In 1987, Dr. Shemin, then only 36, was recruited to BU School of Medicine as Professor and Chair of Cardiothoracic Surgery. During his 20-year career at BU, Dr. Shemin served in many senior leadership roles, including Vice Chair of Surgery and Co-Director of the Cardiovascular Center at Boston Medical Center, a center he was instrumental in creating. During his tenure, he built a world-class cardiothoracic surgery service that performed more than 1,000 operations a year with outcomes as good as or better than other top academic hospitals in the region. "We were a coveted training program internationally and a highly productive basic science and clinical research center," he says.

Although Dr. Shemin enjoyed his position at BU School of Medicine and considered Boston home, when he was recruited to lead the

Division of Cardiothoracic Surgery at UCLA Medical Center, one of the top academic hospitals in the nation, he could not resist. In 2007, Dr. Shemin and his wife, Susan — their three children now grown — moved to California to start a new chapter. Among many other accomplishments, Dr. Shemin brought minimally invasive and robotic cardiac surgery to UCLA and grew its heart transplantation program, now one of the busiest and most respected in the nation.

In addition to his busy schedule at UCLA, which includes patient care, research, teaching, and administrative responsibilities, Dr. Shemin holds leadership positions in many professional societies. He served as former Chair of the American Board of Thoracic Surgery and is currently a governor of the American College of Surgeons, representing cardiothoracic surgery.

Alumni awards among many honors

Dr. Shemin also serves on numerous editorial boards, including the prestigious *Journal of Thoracic and Cardiovascular Surgery* and *Circulation*. He has authored more than 370 articles and abstracts as well as 28 book chapters, and is frequently invited to lecture worldwide. Among his many honors, Dr. Shemin has received the BU School of Medicine and the BU College of Liberal Arts Alumni Achievement Award. A longtime generous supporter of the BU School of Medicine, he is a lifetime member of the Chester S. Keefer, MD Society.

Dr. Shemin considers BU School of Medicine the foundation upon which he built his illustrious career, which is why he recently established the Richard J. Shemin, MD, and Saul Shemin, DVM, Academic Surgical Award, which is given to outstanding BU School of Medicine students. "I support the BU School of Medicine because I am very grateful for the education I received there, which was second to none."



On Match Day 2018, Richard J. Shemin, MD (center), presented the inaugural Richard J. Shemin, MD, and Saul Shemin, DVM, Academic Surgical Award to (from left) graduating medical students Kevin Arndt and Matthew Peacock.

Nasal Biomarkers: A Potential New Tool for Lung Cancer Screening

Lung cancer is the leading cause of cancer deaths in both women and men in the United States, responsible for killing nearly 156,000 Americans in 2017 alone. The vast majority of lung cancers are caused by cigarette smoking, and the more and longer one smokes the greater the odds of developing the disease.

Unfortunately, at the time of diagnosis, almost seven in 10 patients have locally advanced or metastatic disease, when treatment is far less likely to be effective and the outlook is often bleak. Early diagnosis and treatment is therefore essential for improving patients' odds of beating lung cancer.

In 2011, the National Lung Screening Trial recommended that heavy smokers (30-plus pack years*) between the ages of 55 and 74 (later expanded to 80) undergo screening for lung cancer with low-dose computed tomography (CT). This recommendation was based on evidence that CT screening in this population reduced lung cancer deaths. In 2013, the United States Preventive Services Task Force also recommended these screening guidelines.

Arbitrary screening criteria

But CT screening is imperfect and not without risks. The lung cancer detection rate (yield) is very low — in the range of 0.6 to 3.7 percent — largely because the screening criteria are somewhat arbitrary. Moreover, it is estimated that approximately one cancer death is caused by radiation from imaging for every 2,500 patients screened.

Thoracic surgeon Kei Suzuki, MD, has long focused his research on lung cancer, first as a resident and later during his fellowship at Memorial Sloan Kettering Cancer Center in New York. When he joined the BUSM/BMC Surgery faculty in 2016, he was eager to

continue his research in this domain. Dr. Suzuki is especially grateful to Thoracic Surgery Chief **Virginia Litle, MD**, and Associate Chair of Research **Tony Godfrey, PhD**, for their support and mentorship of his research.

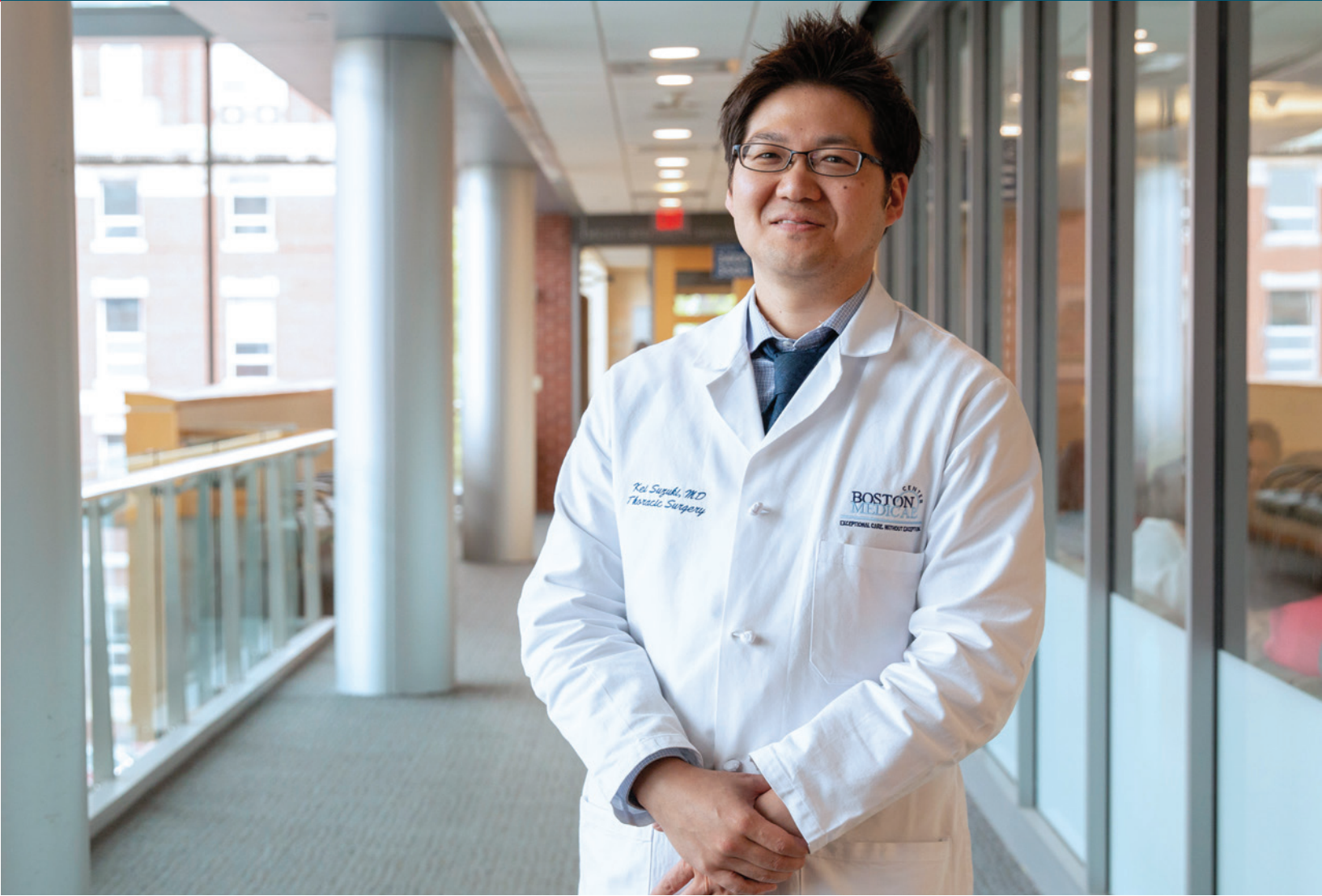
Sparing lower-risk patients

"We need a way to biologically identify individuals at high risk of developing lung cancer so that we screen them with CT while sparing people at lower risk from

unnecessary and potentially harmful scans," says Dr. Suzuki, who treats many patients with lung cancer. Such a biomarker would also be able to identify people who do not fit the current criteria, but nonetheless have a high risk of lung cancer and should also undergo screening.

As it turns out, BUSM/BMC is the ideal place for Dr. Suzuki to pursue this goal. Shortly after he arrived, he connected with pulmonologist and BUSM-BMC Cancer Center Director Avrum Spira, MD, chief of Computational Medicine in the Department

"In the ongoing battle against lung cancer we need a simple, non-radiation tool to help us identify patients at high risk so we are screening those most likely to benefit. We are hopeful that this research will bring us closer toward that goal." — Kei Suzuki, MD



Thoracic surgeon Kei Suzuki, MD

of Medicine. Dr. Spira's research focuses on genomic changes associated with smoking-related lung disease, and is based on the paradigm that smoking creates a "field of molecular injury" in epithelial cells that line the airway. These changes, Dr. Spira established, are also seen in the nasal lining.

Dr. Spira's work has led to a biomarker, now in clinical use, that distinguishes which patients who have had a suspicious lung nodule detected by CT are at high risk of lung cancer and should undergo further intervention, such as a biopsy. The biomarker cells are acquired via a bronchoscope from the patient's airway.

Research takes a new direction

With recent funding from the Thoracic Surgery Foundation, Dr. Suzuki is taking this research in a new direction. He is investigating whether genetic changes in the cells of the nasal lining, which could be easily acquired with a swab in a primary

care office setting, could be developed into a biomarker that will provide a simple way to determine which patients should undergo CT screening for lung cancer.

Initially Dr. Suzuki will evaluate the nasal genetic changes in patients who fit the current age and smoking history criteria. If this approach proves successful, it would later be evaluated in other individuals, including those who are younger and/or have a smoking history of fewer pack years, and developed into a biomarker.

"In the ongoing battle against lung cancer we need a simple, non-radiation tool to help us identify patients at high risk so we are screening those most likely to benefit," says Dr. Suzuki. "We are hopeful that this research will bring us closer toward that goal."

* Pack years are the number of packs of cigarettes smoked per day multiplied by the number of years the person has smoked.

Colon and Rectal Surgery Provides Leading-Edge Treatments

Every second and fourth Monday of the month, a multidisciplinary team of clinicians at Boston Medical Center gathers together to discuss the case of every patient who will undergo surgery for colorectal cancer, both before and after the patient’s operation. Regularly participating in this conference are, of course, BMC’s three colorectal surgeons: Chief **Jason Hall, MD, MPH**, **Angela Kuhn**en, MD, and **Uma Phatak, MD**. They are joined by others involved in colorectal cancer patients’ care, including specialists from medical oncology, radiation oncology, radiology, and pathology, as well as physician assistants. Established last year by Dr. Hall, who joined the Department of Surgery in 2016, this conference “ensures that each of our patients with cancer receives the best, most appropriate treatment in a well-coordinated manner,” says Dr. Hall.

“Our team is deeply committed to providing each and every patient with excellent care. There is nothing we find more rewarding than having a positive impact on our patients’ lives.” — **Jason Hall, MD, MPH**

This commitment to providing the best possible treatment extends to all patients who receive care from the Colon and Rectal Surgery team (*see sidebar*). Patients include people from nearby communities, many of whom who rely on BMC as their safety-net hospital. Others travel long distances for access to the excellent medical and surgical care for inflammatory bowel disease (IBD) offered at BMC’s Dempsey Center for Digestive Disorders, which is co-led by Dr. Hall and BMC gastroenterologist Francis Farraye, MD.

Cutting-edge treatments

Colon and Rectal Surgery provides the entire breadth of the most effective, cutting-edge surgical treatments, including minimally invasive and robotic surgery, for common and complex disorders of the colon and rectum. The types of conditions treated include colon and rectal cancer; IBD (Crohn’s disease and ulcerative colitis); familial adenomatous polyposis; diverticulitis; and hemorrhoids, fissures and fistulas. The division also excels at complex re-operations and offers screening colonoscopies. BMC is one of only a few hospitals in the region to offer transanal endoscopic microsurgery (TEMs) for selected patients with early-stage rectal cancer (with or without chemotherapy or radiation), and certain rectal polyps. This minimally invasive technique, which enables surgeons to visualize and remove tumors using a proctoscope inserted through the anus, avoids the need for an incision and its potential complications. Importantly, it also preserves the function of the rectum, thus avoiding the need for a permanent colostomy.

- The Colon and Rectal Surgery Team**
- Jason Hall, MD, MPH
Chief
 - Angela Kuhn
en, MD - Uma Phatak, MD
 - Sandy Falcon, PA-C
 - Daniel Kent, PA-C
 - Samuel Lajoie, PA-C
 - Veronica Frett
 - Humu Marah
 - Latoya Moorer
 - Natasha Sanchez-Lopez



Jason Hall, MD, MPH, Chief of Colon and Rectal Surgery

Dr. Hall notes that in complex cases, at Boston Medical Center it is common for two attending colorectal surgeons to participate in an operation to ensure the best possible outcome. Indeed, outcomes achieved by the section reflect a consistently high quality of care. The latest quarterly data (as of press time) from the National Surgical Quality Improvement Program (NSQIP), a voluntary program of the American College of Surgeons that provides data on a range of post-operative outcomes, indicates that the section’s outcomes were outstanding.

Research on enhanced recovery

Faculty in the section are also engaged in research, with a particular focus on enhanced recovery following colorectal surgery. One project is looking at the role of certain adjuvant medications to encourage return to bowel function after surgery. Another is evaluating the use of transversus abdominis plane (TAP) blocks to improve pain control following surgery, based on the knowledge

that better pain control on the first post-operative day results in faster recovery and shorter length of stay.

Several other projects are investigating some of the social determinants of outcomes, including the effect of patients’ primary languages on readmissions. The section is also the first to participate in a department-wide project to create standardized discharge instructions in several languages (Spanish, Portuguese, and Haitian Creole) for non-English-speaking surgical patients, with the goal of reducing preventable readmissions or Emergency Department visits and improving patient satisfaction (*see article, page 20*).

“Our team is deeply committed to providing each and every patient with excellent care,” says Dr. Hall. “There is nothing we find more rewarding than having a positive impact on our patients’ lives.”

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Investigations Seek to Understand and Reduce Inequities in Surgical Care

Surgical skill obviously plays an important role in the outcomes of patients being treated for a serious disease like cancer. But long before many patients are on the operating table, the cards may already be stacked against them by virtue of their race, ethnicity, socioeconomic status, insurance coverage, country of origin, primary language, and the distance they must travel for tertiary-level treatment.

Understanding the root causes of inequities in surgical care with the goal of reducing or eliminating them has long been a major priority of the Department of Surgery. As part of an urban safety-net hospital serving a racially/ethnically diverse and largely economically disadvantaged patient population, the Department of Surgery is especially well-positioned to conduct research aimed at understanding disparities in surgical care and implementing and evaluating measures to address them.

This important work is enhanced by the existence of SOAR (Surgical Outcomes Analysis & Research), a research initiative founded years ago by Surgery Chair **Jennifer Tseng, MD, MPH**, with a mandate to investigate and promulgate best practices and eradicate disparities in all aspects of surgery.

In collaboration with Dr. Tseng and other faculty at Boston Medical Center and Johns Hopkins Medical Center, surgical oncologist **Teviah Sachs, MD, MPH**, is engaged in numerous research projects looking at disparities in the surgical care of patients with gastric (stomach) cancer and cancers of the pancreas and liver.

Need for early diagnosis of gastric cancer

While the incidence of and mortality from gastric cancer has decreased in the U.S. and other developed nations during the past century, the disease remains a major cause of death around with world. For U.S. hospitals that treat large immigrant populations,

“The goal of our research is to identify where we can make improvements to ensure that all patients, regardless of their race or ethnicity, birthplace, or circumstances, have equal access to the best surgical care resulting in the best possible outcomes.” — **Teviah Sachs, MD, MPH**

it is imperative to know how to identify and manage patients at risk of gastric cancer to ensure that they receive the best possible care.

With this goal in mind, Dr. Sachs conducted a retrospective study aimed at identifying the presentation and survival of gastric cancer patients treated between 2004 and 2017 at Boston Medical Center. Of the 249 patients, 40 percent were African-American, most were



Research collaborators (from left) **Teviah Sachs, MD, MPH**, **Susanna de Geus, MD, PhD**, **Jennifer Tseng, MD, MPH**, **Rodney Bruno, BS**, and **Sing Chau Ng, MS**. Other collaborators (not pictured) are **Ryan Morgan, BS**, **Michael Cassidy, MD**, and **David McAneny, MD**.

born outside the U.S. or Canada (predominantly the Caribbean, Africa, and Central America/Mexico), lived in poorer neighborhoods, and were insured through federal programs.

Among the many other findings of this research, which will be published in the *Journal of Gastrointestinal Surgery*, was that the patient’s stage of cancer at presentation was the strongest predictor of survival. Unfortunately, the research found that patients of Hispanic ethnicity, individuals born in regions such as Central America, and those living in the most impoverished communities frequently present with later stage disease — often too late for surgical intervention or a chance at cure. Other authors of the paper were Dr. Tseng, **Ryan Morgan, BS**, **Michael Cassidy, MD**, **Susanna de Geus, MD, PhD**, and **David McAneny, MD**.

“These findings focus attention on the importance of early diagnosis, as patients with early-stage gastric cancer can benefit from surgical intervention,” says Dr. Sachs, adding that prevention programs aimed at reducing risk factors, as well as targeted screening of high-risk populations in the U.S., would help improve survival. Dr. Sachs has submitted proposals for grants to continue work in this area.

Collaboration with Johns Hopkins

Another area of investigation Dr. Sachs is pursuing involves disparities in hepato-pancreato-biliary (HPB) cancer surgery. He recently teamed up with faculty of the Department of Surgery at Johns Hopkins Hospital, where he did his fellowship, to conduct a study on disparities in HPB surgery.

This retrospective observational study, which is currently under IRB review, will investigate how racial/ethnic, socioeconomic, and insurance status impact the treatment and outcomes of patients with benign or malignant tumors originating from the pancreas or liver. The co-principal investigator is Christopher Wolfgang, MD, PhD, Director of Hepatobiliary and Pancreatic Surgery at Johns Hopkins; other members of the research team are research fellows Heidi Overton, MD, at Johns Hopkins, and Dr. de Geus at BUSM/BMC, along with Dr. Tseng and biostatistician and SOAR Administrative Director **Sing Chau Ng, MS**.

“The goal of this and other research we are engaged in is to identify where we can make improvements to ensure that all patients, regardless of their race or ethnicity, birthplace, or economic circumstances, have equal access to the best surgical care resulting in the best possible outcomes,” says Dr. Sachs.

Resident's Research Focuses on Quality and Safety

“The Department of Surgery treats about 1,300 non-English-speaking patients a year, so it is important that we evaluate whether we are addressing their needs to ensure the best possible outcomes.” — **Stephanie Talutis, MD, MPH**

It is always a special day when a patient goes home from the hospital following surgery. But recovering from an operation safely at home requires strict adherence to written post-operative discharge instructions on everything from wound care and medications to when to seek medical attention. Not following these instructions can lead to readmissions and potentially serious harm to the patient.

But what if the patient does not understand the discharge instructions because he is not proficient in English? This is an important question at Boston Medical Center, where nearly one-third of patients speak a primary language other than English.

Stephanie Talutis, MD, MPH, is a resident who recently completed her second year of dedicated research time under the mentorship of

David McAneny, MD, Vice Chair of Surgery and Chief Surgical Officer.

Dr. Talutis has focused much of her research on projects aimed at improving quality and patient safety, with a particular focus on the issues affecting non-English-speaking patients at BMC. “The Department of Surgery alone treats about 1,300 non-English-speaking patients a year, so it

is important that we evaluate whether we are addressing their needs to ensure the best possible outcomes,” says Dr. Talutis.

Effect of primary language

One research project instigated by Dr. Talutis evaluated the effect of primary language on readmission after colorectal surgery at BMC. “We hypothesized that patients whose primary language was not English were readmitted more frequently,” says Dr. Talutis.

In fact, her research, a retrospective review that compared the outcomes of nearly 600 patients, 25 percent of whom were non-English speakers, found that this was not the case. However, among patients who were readmitted to the hospital, non-English speakers were readmitted sooner than their English-speaking counterparts. This work led to a poster presentation at the American Society of Colon and Rectal Surgeons national scientific meeting in May, and a podium presentation at the New England Society of Colon and Rectal Surgeons in June.

Standardized multilingual instructions

Another of Dr. Talutis’s projects, which is still ongoing, aims to improve quality and safety through the creation of standardized multilingual discharge instructions for surgical patients. Supported by a two-year BMC Patient Safety grant, this work is being conducted in collaboration with co-principal investigators **Pamela Rosenkranz, RN, BSN, MEd**, and Dr. McAneny.

This project was borne out of a recognition that written discharge instructions in the Department of Surgery were not standardized — even within a division — and were also not available in the languages most commonly spoken by BMC’s non-English speaking



Surgery resident Stephanie Talutis, MD, MPH

patient populations. Dr. Talutis notes that not having standardized instructions leads to confusion among care providers, and the lack of multilingual discharge instructions can potentially harm patients.

In 2014, for example, a Spanish-speaking BMC surgical patient delayed contacting his doctor about symptoms he was experiencing after leaving the hospital because he did not understand his discharge instructions, and suffered complications as a result. “Fortunately, he was not permanently harmed, but this was entirely preventable,” says Dr. Talutis, noting that this is likely just one of many incidents in which patients whose primary language is not English may have been put at risk.

Spanish, Portuguese, and Haitian Creole

This multi-faceted project involves developing standardized discharge instructions for the most commonly performed operations for seven surgical divisions, starting with Colon and Rectal Surgery. A multidisciplinary team was formed to provide input. Once approved by the division chief, the discharge instructions, which will be written at a fifth-grade reading level and accompanied by images,

will be translated into Spanish, Portuguese, and Haitian Creole, the languages most commonly spoken by BMC’s non-English speaking patient population.

A plan is in place for educating faculty, residents, and other providers about the new instructions and the materials will be put in the electronic medical record and shared drive for easy access. Dr. Talutis says the anticipated outcomes of this initiative are to reduce preventable Emergency Department visits and hospital readmissions and improve patients’ experiences, all of which will be evaluated over time.

“Everyone in the department appreciates the need for these steps to improve patient safety and quality, and is very excited to see them coming to fruition,” says Dr. Talutis, who will continue her involvement in the project during her clinical training. Dr. Talutis hopes that in the future additional funding will become available to translate the discharge instructions into additional languages, and that this initiative will be adopted by other BMC departments and perhaps other medical centers nationwide.



Stephanie Talutis, MD, MPH, with faculty members David McAneny, MD (left), and Thurston Drake, MD, MPH, at the 2018 American Association of Endocrine Surgeons annual meeting, where she gave a poster presentation.

Surgery Education Office

SURGERY RESIDENCY PROGRAM

Donald Hess, MD,
*Associate Chair for Education,
Program Director*

Tracey Dechert, MD,
Associate Program Director

Teviah Sachs, MD, MPH,
Associate Program Director

Lana Ketlere, *Residency Program Coordinator*

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Robert Schulze, MD, MBA, *Program Director*

Vascular and Endovascular Surgery Fellowship

Alik Farber, MD, *Program Director*

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Roger Williams Medical Center*

Patrick B. O'Neal, MD, *Assistant Director,
Veterans Affairs (VA) Boston Healthcare System*

Maureen Tedesco, MD, *Assistant Director,
Kaiser Permanente*

SURGERY RESIDENCY PROGRAM VIDEO

Learn about the unique opportunities offered by the Boston University School of Medicine Surgery Residency Program by watching our informative online video. Go to: bumc.bu.edu/surgery/training/residency.

SURGERY RESIDENCY PROGRAM

The department offers a highly competitive, five-year Accreditation Council for Graduate Medical Education (ACGME)-accredited Surgery Residency Program. Led by Donald Hess, MD, the program provides residents with the range and depth of experience and academic exposure to develop superior surgical skills and to make mature, informed, independent judgments. Graduates of the program are well-prepared to become outstanding general surgeons or surgical specialists. The majority of residents pursue additional fellowship training after graduation, and many have gone on to assume leadership positions in academic surgery.

The Surgery Residency Program is based at Boston University Medical Center, a modern, vibrant medical complex located in the heart of Boston's South End. The medical center includes Boston University School of Medicine, the Boston University School of Public Health, and the Boston University Goldman School of Dental Medicine, as well as Boston Medical Center.

Our program leads to American Board of Surgery Certification within an environment designed to encourage clinical and basic scientific research experience. Residents interested in careers in academic surgery are encouraged to develop the necessary skills in research, education, and/or administration through a broad range of research fellowship opportunities. Clinical research is also encouraged among residents during their clinical years of training. In fact, most residents have contributed to at least one paper being published in a peer-reviewed journal by graduation, and many have given award-winning presentations (*see Resident News, page 26*).

The principal goal of our program is clinical excellence. We believe that exposure to a large, diverse patient population and broad experience in complex open and minimally invasive surgery are essential elements in the training of outstanding surgeons.

The department also has a unique program that links Boston University School of Medicine students who are interested in surgical research with resident mentors, who connect the students with faculty members conducting research in the students' areas of interest. This program provides residents with mentoring experience and has led to numerous award-winning presentations by medical students.

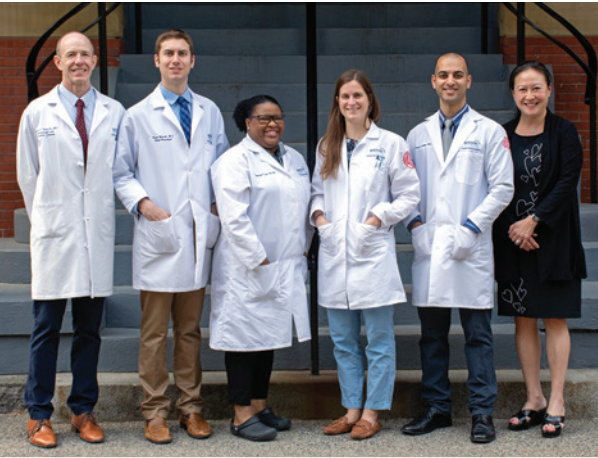
2018 Surgery Residency Graduates

Ryan Macht, MD, MS
Bariatric and Minimally Invasive Surgery Fellowship, University of California San Francisco

Feroze Sidhwa, MD
Surgical Critical Care Fellowship, Cooper University Hospital

Kathryn Van Orden, MD
Surgical Critical Care Fellowship, Brigham and Women's Hospital

Kimberly Zamor, MD, MS
Vascular Surgery Fellowship, Dartmouth-Hitchcock Medical Center



2018 Surgery Residency graduates (from left): Drs. Macht, Zamor, Van Orden, and Sidhwa, with Surgery Residency Program Director Donald Hess, MD (far left), and Surgery Chair Jennifer Tseng, MD, MPH (far right).

Current Residents

PGY1

Categorical

Nicole Cimbak, MD
Sidney Kimmel Medical College at Thomas Jefferson University

Loreski Collado, MD
Cooper Medical School of Rowan University

Allan Stolarski, MD
Albany Medical College

Spencer Wilson, MD
University of North Carolina at Chapel Hill School of Medicine

Mark Zapata, MD
Medical College of Georgia at Augusta University

Preliminary

William Biche, MD
Yale School of Medicine

Kenneth Briley, MD
Tulane University School of Medicine

Curtis Hon, MD
Boston University School of Medicine

Patrick Mota, MD
St. George's University School of Medicine

PGY 2

Categorical

Sherif Aly, MD
Boston University School of Medicine

Rebecca Hasley, MD
Drexel University College of Medicine

Olivia Humbarger, MD
Boston University School of Medicine

Lenee Plauche, MD
Boston University School of Medicine

Michael Poulson, MD
Georgetown University School of Medicine

Preliminary

Juan Munoz, MD
Pontificia Universidad Javeriana Bogotá Facultad de Medicina

PGY3

Aldana Blanco, MD
Universidad de Buenos Aires Facultad de Medicina

Andrea Madiedo, MD
University of Miami Leonard M. Miller School of Medicine

Benjamin Nelson, MD
Boston University School of Medicine

Praveen Sridhar, MD
Boston University School of Medicine

Stephanie Talutis, MD, MPH
New York Medical College

PGY4

Maunil Bhatt, MD
Virginia Commonwealth University School of Medicine

Joshua Davies, MD
Pennsylvania State University College of Medicine

Matthew Egyud, MD
Boston University School of Medicine

Krista Hachey, MD, MPH
The Warren Alpert Medical School at Brown University

Jian Zheng, MD
USF Health Morsani College of Medicine

PGY5

Olga Beresneva, MD
Drexel University College of Medicine

Christopher Graham, MD
SUNY Downstate Medical Center College of Medicine

Elica Inagaki, MD
Medical College of Wisconsin

Andrew McChesney, MD
University of Iowa Roy J. and Lucille A. Carver College of Medicine

Rumbidzayi Nzara, MD
University of Minnesota Medical School

Visiting Professors

The Department of Surgery was honored to welcome the following surgical leaders as Visiting Professors during the previous year.

Grasberger Research Symposium Lecture and Visiting Professorship
Mary T. Hawn, MD, MPH

Professor and Chair of Surgery, Stanford School of Medicine

Boston Medical Center Visiting Professorship in Vascular Surgery (Fall 2017)
Thomas Forbes, MD

Professor of Surgery and Chair, Division of Vascular Surgery, University of Toronto

Boston Medical Center Visiting Professorship in Vascular Surgery (Spring 2018)
Richard F. Neville, MD

Associate Director, INOVA Heart and Vascular Institute Vice-Chairman, Department of Surgery; Director of Vascular Services

Clinical Professor of Surgery, George Washington University

George H. Clowes, Jr. MD, Trauma Lecture and Visiting Professorship
John B. Holcomb, MD

Director, Center for Translational Injury Research Chief, Division of Acute Care Surgery; Vice Chair, Department of Surgery Professor of Surgery, University of Texas Medical School at Houston

Peter J. Mozden Visiting Professorship in Surgical Oncology
Vernon K. Sondak, MD

Chair, Cutaneous Oncology, H. Lee Moffitt Cancer Center and Research Institute Professor of Oncologic Sciences and Surgery, University of South Florida Morsani College of Medicine

Residents on Research

Residents have the option to spend two years conducting laboratory or translational research, typically after their second year, to pursue their academic development. Often this research is done in collaboration with other departments at Boston Medical Center and other schools at Boston University, as well as other institutions, providing residents with a wealth of opportunities to pursue their interests, develop as academic surgeons, and make significant contributions.

Nkiruka Arinze, MD

Vanderbilt University School of Medicine

Research Mentors: Alik Farber, MD, Vipul Chitalia, MD, PhD (Department of Medicine)

Area of Research: Determining the role of newly defined mediators of uremic toxicity in patients with chronic kidney disease and peripheral artery disease (*Site:* Boston University School of Medicine).

Alaina Geary, MD

Tufts University School of Medicine

Research Mentor: Luise Pernar, MD

Area of Research: Building a Resident-as-Teacher program specific to general surgery residents and suitable for publication and national dissemination. (*Site:* Boston University School of Medicine).

Megan Janeway, MD

Boston University School of Medicine

Research Mentor: Tracey Dechert, MD

Area of Research: Surgical outcomes and quality improvement as they relate to socioeconomic disparities and social determinants of health of the Boston Medical Center patient population (*Site:* Boston University School of Medicine).

Na Eun Kim, MD

Rutgers Robert Wood Johnson Medical School

Research Mentors: Sabrina Sanchez, MD, MPH, Andrew Leather, MD (King's College London)

Area of Research: Factors for delayed emergency surgical care in Puebla, Mexico (*Sites:* Boston University School of Medicine, King's College London, Centro de Salud, Puebla Mexico)

Scott Levin, MD

The Warren Alpert Medical School of Brown University

Research Mentors: Alik Farber, MD, Jeffrey Siracuse, MD
Area of Research: Study of institutional, provider, and patient-related factors associated with disparities in critical limb ischemia presentation, treatment, and outcomes among a diverse, low-income, multilingual population at a single academic, urban safety-net hospital (*Site:* Boston University School of Medicine).

Miriam Neufeld, MD

Indiana University School of Medicine

Research Mentors: Chaitan Narsule, MD, Michael Siegel, MD (BU School of Public Health)

Area of Research: Examining firearm-related injury among children and the presence, implementation, or relaxation of relevant gun legislation. (*Site:* Boston University School of Medicine).

Jacob Nudel, MD

Harvard Medical School

Research Mentors: Donald Hess, MD, Amy Rosen, PhD, Chin Hur, MD (Massachusetts General Hospital)

Area of Research: Computational approaches to surgical decision making (*Sites:* Boston University School of Medicine,

Massachusetts General Hospital Institute for Technology Assessment).

Current Fellows

Surgical Critical Care Fellowship

Tara Dinitto, MD

Jeannette Zhang, MD

Vascular and Endovascular

Surgery Fellowship

Scott Hardouin, MD

Brad Oriel, MD

Current Podiatry Residents

PGY1

Ankit Desai, DPM

Dr. William M. Scholl College of Podiatric Medicine at the Rosalind Franklin University of Medicine and Science

Daniel Reubens, DPM

Western University of Health Sciences College of Podiatric Medicine

PGY2

Maria Bolla, DPM

New York College of Podiatric Medicine

Heidi Fuller, DPM

Des Moines University

PGY3

Amy Wong, DPM

Western University



SRS members participated in the 2018 "March for Our Lives" against gun violence.

says Dr. Janeway, who is now in the first year of her research fellowship, focusing on the impact of socioeconomic factors on surgical outcomes.

During the previous year, six SRS members attended the national meeting of the Association for Surgical Education in Austin, Texas, giving five presentations that sparked a great deal of interest. The presenters were residents **Ryan Macht, MD, MS** ("Improving Nutrition in Perioperative Patients"), **Michael Poulson, MD** ("Advocacy and Policy Training Program for Residents and Medical Students"), **Megan Janeway, MD** ("Socially Responsible Surgery: A Model Organization for Implementing Socially Responsible Practice in Training Programs" and "The Service Learning Project: A Unique Model for Patient Education and Advocacy Training in Early Medical Education") and **Praveen Sridhar, MD** ("Holidays are for Patients, Too: Using a Pulpotomy to Serve Patients and Engage Medical Students").

Advocacy Program

Last year also marked the development of the SRS Advocacy Program, led by Dr. Poulson, which hosts monthly advocacy roundtables to educate residents and medical students about advocacy and political policy work. Advocacy activities organized by SRS included participation in events such as the anti-gun violence "March for Our Lives" in 2018 and the annual Mother's Day Walk for Peace, and co-organizing the first annual Health Equity Symposium at Boston Medical Center.

As members of the Advocacy Program, Drs. Janeway and Poulson both received grants to attend the American College of Surgeons Leadership and Advocacy Summit in Washington, DC in May. There, they met with Senators Edward Markey and Elizabeth Warren and Representatives William Keating, Catherine Clark, Seth Moulton, and

"Socially responsible surgery is becoming an increasingly important part of the national conversation about reducing disparities in care, and we are proud to be at the forefront of this movement."

— Megan Janeway, MD

Mike Capuano to discuss issues of importance such as gun violence research, the opioid crisis, and trauma system preparedness.

Service projects and research

Two of SRS's service projects also made significant headway in the previous year. Now in its third year, the SRS Service Learning Project provides first-year medical students on the Acute Care/Trauma Surgery service with the opportunity to address inpatients' unmet needs by helping them understand their procedures and screening them for social determinants of health. Another project integrates food insecurity screening on surgical services, leading to improved patient access to nutrition resources during the perioperative period.

In the previous year, SRS also expanded its research program, which now includes five residents and 20 medical students working on more than 15 unique projects. One, for example, is focused on assessing whether there are disparities in post-hospitalization care placement based on injury type and social determinants of health. Others are evaluating patients' experiences within the referral system for elective surgery and how to improve access to early surgical intervention for gallbladder disease.

SRS also secured several grants from multiple sources for pilot projects and the development of existing projects. In addition, members of SRS gave 14 regional and national podium and poster presentations at meetings throughout the nation.

"Socially responsible surgery is becoming an increasingly important part of the national conversation about reducing disparities in care, and we are proud to be at the forefront of this movement," says Dr. Janeway.

MORE INFORMATION ABOUT SRS IS AVAILABLE ON OUR WEBSITE.

Socially Responsible Surgery Group Has a Productive Year

Recognizing social responsibility as a core value of surgical practice and an essential component of health, in 2014 the Department of Surgery launched its Socially Responsible Surgery (SRS) group under the leadership of trauma surgeon **Tracey Dechert, MD**.

Through its innovative work in the areas of education, research, advocacy, and service, SRS has expanded in size and scope to become an influential national leader in the domain of socially responsible surgery. In addition to Dr. Dechert, the group's other faculty advisors are **Sabrina Sanchez, MD, MPH, Angela Kuhn, MD,**

and **Lisa Allee, MSW, LICSW**.

According to SRS resident **Megan Janeway, MD**, a founding member of SRS, last year was an especially busy and productive year for the group, which now includes some 60 residents and medical students, including residents from other institutions.

Many successes

"We have had many successes in the past year, with lots of momentum and interest from many other surgery programs around the country, who have approached us and want to learn from us,"

Resident News



NKIRUKA ARINZE, MD, will present an abstract at the New England Society for Vascular

Surgery in October entitled “Outcomes after Open and Endovascular Treatment of Infrainguinal Occlusive Disease in Morbid and Super Obese Patients.” Dr. Arinze’s research mentor is **Alik Farber, MD.**



OLGA BERESNEVA, MD, gave a poster presentation on the “Utility of Flexible Upper

Endoscopy in Early Postoperative Period after RYGB” during Obesity Week 2017. At the American Society of Colon and Rectal Surgeons annual meeting in 2018, Dr. Beresneva gave a poster presentation on the “Influence of Obesity on Surgery for Diverticulitis.” She also gave a podium presentation on this topic at the New England Society of Colon and Rectal Surgeons in June 2018.

CHRISTOPHER GRAHAM, MD,



was chosen as a finalist in the national American College of Surgeons Committee

on Trauma (ACS-COT) Resident Research Competition (in basic science research) for “Histone Deacetylase 7 and Lung Inflammation in Acute Respiratory Distress Syndrome,” with **George Kasotakis, MD,** serving as principal investigator and resident mentor. This research also received first prize at the regional (New England) and state (Massachusetts) ACS-COT Resident Research competitions.



ALAINA GEARY, MD, presented two abstracts at the Association for Surgical

Education annual meeting in May: “Teaching Attitudes and Resident-as-Teacher Programs in General Surgery Residency Programs” and “The Surgical Resident as Teacher: A Review of Published Curricula.” Dr. Geary’s research mentor is **Luise Pernar, MD.**

MATTHEW EGYUD, MD, and **KRISTA HACHEY, MD, MPH,**



were selected by third-year medical students for the annual senior resident teaching award. “His teaching extended outside the realm of academics and into the



social aspect of patient care; I learned so many interesting lessons over a short span of time with him,” said a student about Dr. Egyud. Said another student about Dr. Hachey, “Her passion for her work is palpable and makes her teaching all the more effective.”



Third-year medical students selected **REBECCA HASLEY, MD,** for the

annual junior teaching award. Students described Dr. Hasley as “incredibly proactive about teaching, approachable, kind, and made us feel comfortable asking questions every day.”



OLIVIA HUMBARGER, MD, will present an abstract at the New England Society for

Vascular Surgery in October entitled “Broad Variation in Prosthetic Conduit Utilization for Femoral-Popliteal Bypass is Not Justified Based on Contemporary Outcomes Favoring Autologous Great Saphenous Vein.”



ELICA INAGAKI, MD, matched to the fellowship program in Vascular Surgery at

the University of Pittsburgh Medical Center (UPMC).



SCOTT LEVIN, MD, received a two-year BU Medical Center Primary Care Academic Fellowship

funded by a Health Resources & Services Administration National Research Service Award T32 training grant. As the inaugural surgery fellow in the program, Dr. Levin will pursue a Masters of Health Services and Systems Research at the BU School of Public Health and conduct research in health disparities in vascular surgery with mentors **Alik Farber, MD,** and **Jeffrey Siracuse, MD.** Dr. Levin gave a poster presentation

at the Society for Vascular Surgery 2018 annual meeting, and had a manuscript accepted for publication in the *Journal of Learning through the Arts.*



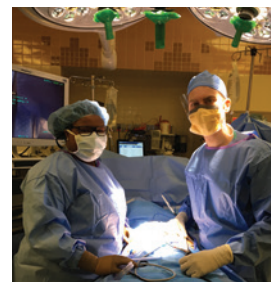
ANDREW MCCHESENEY, MD, matched to the fellowship program in vascular

surgery at Eastern Virginia Medical College.



RUMBIDZAYI NZARA, MD, gave a poster presentation at the 2018 Society of American

Gastrointestinal and Endoscopic Surgeons (SAGES) annual meeting on complications after open ventral hernia repair stratified by BMI. Following her graduation in 2019, Dr. Nzara will be doing a fellowship in minimally invasive and bariatric surgery at the University of Maryland.



2018 Surgery Residency Program graduates **Kimberly Zamor, MD, MS,** and **Ryan Macht, MD, MS.**



MICHAEL POULSON, MD, was named Director of Advocacy and Policy

for BMC’s Socially Responsible Surgery group (see article, page 24). Dr. Poulson presented at the Association for Surgical Education meeting in Austin, Texas on “Advocacy and Policy Training Program for Residents and Medical Students.” He also received a grant to attend the American College of Surgeons Leadership and Advocacy Summit in Washington, DC, where he and research resident **Megan Janeway, MD,** met with legislators to discuss increasing funding for gun violence research, solutions for the opioid epidemic, and trauma system preparedness. In addition, the BUSM class of 2019 nominated Dr. Poulson to be inducted into the BUSM Robert Russell, MD Chapter of the Gold Humanism Honor Society. The class of 2019 also selected Dr. Poulson to receive the Arnold P. Gold Foundation Humanism and Excellence in Teaching Award, which reflects his teaching and compassionate treatment of patients, families, students, and colleagues.



Third-year medical students selected **FEROZE SIDHWA, MD,** for

the annual Lester Williams teaching award, which is given to a graduating chief resident. The students also voted to have Dr. Sidhwa receive two other honors: the Arnold P. Gold Foundation Humanism and Excellence in Teaching Award, and induction into the BUSM Robert Russell, MD Chapter of the Gold Humanism Honor Society. Said one student about Dr. Sidhwa, “He was not only knowledgeable, but also generous with his time. He made the OR a comfortable place to learn, and made you feel like you matter.”



STEPHANIE TALUTIS, MD, MPH, received the Grasberger Research Award for

the best poster presentation at this year’s Grasberger Research Symposium. Her poster was entitled “The Use of a Discharge Readiness Assessment to Identify Barriers to Discharge in a Safety Net Hospital.” Dr. Talutis is the co-principal investigator of a BMC Patient Safety Grant, “Creation of Standardized Multilingual Discharge Instructions for Surgical Patients” (see page 20) and is participating in a second BMC Patient Safety Grant on the “Management of Adrenal Incidentalomas” (PI:

F. Thurston Drake, MD, MPH. During the previous year, Dr. Talutis also presented 13 posters and gave 10 podium presentations, including one at the 2018 American Association of Endocrine Surgeons (AAES) annual meeting in North Carolina. Her presentation, entitled “Postoperative Hematoma Evacuation after Thyroid and Parathyroid Surgery: An Analysis of the CESQIP Database,” was the first presentation of the Collaborative Endocrine Surgery Quality Improvement Program (CESQIP) data at a national meeting. This work was also accepted for publication in *Surgery.*

In addition, Dr. Talutis had three papers accepted for publication and contributed to a book chapter in “Essential Principles in Patient Safety: An Illustrated Manual for the Health Care Team” (publication pending) with **David McAneny, MD,** and **Pamela Rosenkranz, RN, BSN, MEd.**



JIAN ZHENG, MD, had three papers published in collaboration with her research

colleagues at Memorial Sloan Kettering Cancer Center, where she completed a surgical oncology clinical research fellowship in June 2017. The papers were published in the *Journal of the American College of Surgeons*, *HPB*, and *Annals of Surgical Oncology.*

Research underway in the Department of Surgery reflects a major commitment to advancing knowledge and improving patient care and outcomes. The department’s faculty and trainees are engaged in all aspects of research, from explorations at the basic science level to translating discoveries into treatments that improve human health.

Ongoing work in the department includes basic and translational research in diverse areas that include the following:

- Cancer biomarkers
- Clinical outcomes
- Comparative effectiveness
- Global surgery and access to surgical care
- Health care disparities
- Health services
- Nutritional needs of trauma and critically ill patients
- Pathophysiology of acute respiratory distress syndrome (ARDS)
- Prisoners’ access to medical care
- Quality improvement
- Surgical education
- Venous thromboembolism prevention and risk assessment
- Violence- and accident-related injury and epidemiology

Collaborations with colleagues at the Boston University schools of medicine, engineering, public health, and business enhance projects in the clinical, health services, and education research arenas. Our investigators also increasingly collaborate on projects with researchers at other academic institutions around the region and the nation.

Selected Grants

Early and Adequate Protein Feeding Post-Traumatic Injury
Principal Investigator: **Peter Burke, MD**
Sponsor: National Institutes of Health/ National Institute of Diabetes and Digestive and Kidney Diseases
Grant amount: \$478,500

Bone Metabolism in Adolescents Undergoing Bariatric Surgery
Site Principal Investigator: **Brian Carmine, MD**
Sponsor: National Institutes of Health/ National Institute of Diabetes and Digestive and Kidney Diseases (subcontract through Massachusetts General Hospital, PI: Madhusmita Misra, MD)
Grant amount: \$67,153

The Comparison of Outcomes of Antibiotic Drugs and Appendectomy (CODA) Trial
Principal Investigators: **F. Thurston Drake, MD, MPH; Sabrina Sanchez, MD, MPH**
Sponsor: Patient-Centered Outcomes Research Institute (subcontract through the University of Washington, Seattle, PI: David R. Flum, MD, MPH)
Grant amount: \$236,500 (est.)

Development of Diagnostic and Prognostic Tests for Esophageal Adenocarcinoma
Principal Investigator: **Tony Godfrey, PhD**
Co-Investigators: **Virginia R. Litle, MD, Lincoln Stein, MD, PhD, James Luketich, MD, Arjun Pennathur, MD, Zhongren Zhou, MD, PhD**
Sponsor: National Institutes of Health/ National Cancer Institute
Grant amount: \$2,456,723

Creation of Standardized Multilingual Discharge Instructions for Surgical Patients
Principal Investigator: **Pamela Rosenkranz, RN, BSN, MEd**
Sponsor: Boston Medical Center Patient Safety Grant
Grant amount: \$50,000

Prognostic Immune Score for Stage I Lung Adenocarcinoma
Principal Investigator: **Kei Suzuki, MD**
Co-Investigator (on CHEST Foundation study): **Tony Godfrey, PhD** (Mentor)
Sponsors: CHEST Foundation; Boston University Clinical and Translational Science Institute
Grant amounts: \$80,000 (CHEST Foundation: \$60,000; Boston University Clinical and Translational Science Institute: \$20,000)

Utilization of Nasal Biomarkers as Screening Tools for Lung Cancer
Principal Investigator: **Kei Suzuki, MD**
Sponsor: The Thoracic Surgery Foundation
Grant amount: \$80,000

Office of Surgical Translational Research

The Office of Surgical Translational Research: Operations and Compliance in the Department of Surgery, led by Marina Malikova, PhD, MSci, MA, CCRA, RAC, is responsible for clinical trials and basic biomedical research operations, macro-management of research programs, and providing guidance and oversight to project managers, research coordinators, and laboratory staff. The office also provides assistance to investigators with protocol and informed consent writing, regulatory submissions, clinical trial agreements, budget development, and post-award financial management. In addition, the office develops and implements systems and procedures to ensure research quality control and compliance as well as efficient day-to-day research operations.

FOR MORE INFORMATION ABOUT OUR RESEARCH ACTIVITIES, PLEASE VISIT OUR WEBSITE: BUMC.BU.EDU/SURGERY (SURGICAL RESEARCH).

Clinical Research Projects

As of press time, there are 162 active clinical research projects in the Department of Surgery. The chart at right indicates the wide range of research conducted in the department.

Clinical Trials
Currently Open for Enrollment

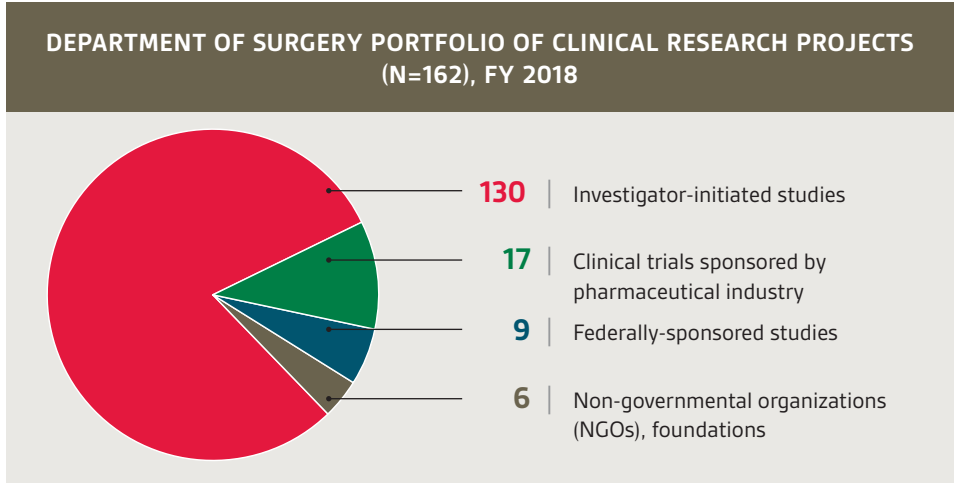
Early and Adequate Protein Feeding Post-Traumatic Injury
Principal Investigator: **Peter Burke, MD,** Acute Care and Trauma Surgery/Surgical Critical Care
Sponsor: National Institutes of Health/ National Institute of Diabetes and Digestive and Kidney Diseases

Comparison of Outcomes of Antibiotic Drugs and Appendectomy (CODA) Trial
Principal Investigators: **Thurston Drake, MD, MPH,** Surgical Endocrinology; **Sabrina Sanchez, MD, MPH,** Acute Care and Trauma Surgery/Surgical Critical Care
Sponsor: Patient-Centered Outcomes Research Institute (PCORI)

A Multi-Center Prospective Study to Evaluate the Safety and Effectiveness of the Vasq External Support for Arteriovenous Fistula
Principal Investigator: **Alik Farber, MD,** Vascular and Endovascular Surgery
Sponsor: Laminate, Inc.

Bovine Versus Porcine Acellular Dermal Matrix for Abdominal Wall Herniorrhaphy or Bridging
Principal Investigator: **George Kasotakis, MD, MPH,** Acute Care and Trauma Surgery/ Surgical Critical Care
Sponsor: Integra Life Sciences

truFreeze® Spray Cryotherapy Patient Registry
Principal Investigator: **Virginia R. Litle, MD,** Thoracic Surgery
Sponsor: CSA Medical



A Randomized, Multicenter, Controlled Trial to Compare Best Endovascular Versus Best Surgical Therapy in Patients with Critical Limb Ischemia
BMC Site Principal Investigator: **Jeffrey Kalish, MD,** Vascular and Endovascular Surgery
Executive Chair: **Alik Farber, MD,** Vascular and Endovascular Surgery
Sponsor: National Institutes of Health/ National Heart, Lung, and Blood Institute

Prospective, Multi-Center, Randomized, Controlled Trial Evaluating the Use of PriMatrix Dermal Repair Scaffold for the Management of Diabetic Foot Ulcers
Principal Investigator: **Hau Pham, DPM,** Podiatry Surgery
Sponsor: Integra Life Sciences

Standard Versus Negative Pressure Vaccum Dressings in Lower-Extremity Bypass Patients
Principal Investigator: **Jeffrey Siracuse, MD,** Vascular and Endovascular Surgery
Sponsor: Smith and Nephew, Inc.

Parallel-Group, Placebo-Controlled Randomized Study Investigating the Effect of Intravenous Iso-osmolar Iodinated Contrast Material Iodixanol (Visipaque Injection 320 mgI/mL) on Renal Function in Adults with Chronic Kidney Disease Stage III or Stage IV Who Have Undergone Endovascular Aneurysm Repair
Principal Investigator: **Jeffrey Siracuse, MD,** Vascular and Endovascular Surgery
Sponsor: General Electric

A Phase 1 Multi-Center, Randomized, Double-Blind, Placebo-Controlled, Dose-Escalation Study of Vonapanitase Administered Following Angioplasty of a Distal Popliteal, Tibial, or Peroneal Artery in Patients with Peripheral Artery Disease
Principal Investigator: **Jeffrey Siracuse, MD,** Vascular and Endovascular Surgery
Sponsor: Proteon

Perioperative Nutritional Optimization in Patients with Critical Limb Ischemia
Principal Investigator: **Jeffrey Siracuse, MD,** Vascular and Endovascular Surgery
Sponsor: Vascular & Endovascular Surgery Society

A Randomized Phase III Study of Sublobar Resection Versus Stereotactic Ablative Radiotherapy in High-Risk Patients with Stage I Non-Small Cell Lung Cancer
Principal Investigator: **Kei Suzuki, MD,** Thoracic Surgery
Sponsor: Jolt Coalition

Prognostic Immune Markers in Lung Adenocarcinoma
Principal Investigator: **Kei Suzuki, MD,** Thoracic Surgery
Sponsor: Chest Foundation

Publications

Research conducted by faculty and trainees of the Department of Surgery is published widely in leading journals and textbooks. During the previous academic year, the department had 153 articles published in peer-reviewed journals and 22 published books or book chapters.

Selected Publications

Arinze N, Farber A, Sachs T, Patts G, Kalish J, Kuhn A, Kasotakis G, Siracuse JJ. The effect of statin use and intensity on stroke and myocardial infarction after carotid endarterectomy. *J Vasc Surg* 2018; Apr 20 (Epub ahead of print).

Cassidy MR, Stempel M, Zabor E, Mehrara B, Gemignani M. Does response to neoadjuvant chemotherapy impact breast reconstruction? *Breast J* 2018; Jan 8 (Epub ahead of print).

Chan S, **Sridhar P,** Kirchner R, Lock YJ, Herbert Z, Buonamici S, Smith P, Lieberman J, Petrocca F. Basal-A triple-negative breast cancer cells selectively rely on RNA splicing for survival. *Mol Cancer Ther* 2017; Dec; 16(12):2849-2861.

de Geus SWL, Kasumova GG, Eskander MF, **Ng SC,** Kent TS, Moser AJ, Vahrmeijer AL, Callery MP, **Tseng JF.** Is neoadjuvant therapy sufficient in resected pancreatic cancer patients? A national study. *Gastrointest Surg* 2018; Feb; 22(2):214-225.

de Geus SWL, Eskander MF, Kasumova GG, **Ng SC,** Kent TS, Mancias JD, Callery MP, Mahadevan A, **Tseng JF.** Stereotactic body radiotherapy for unresected pancreatic cancer: A nationwide review. *Cancer* 2017; Nov 1; 123(21):4158-4167.

Eslami MH, Reitz KM, Rybin DV, Doros G, **Farber A.** Improved access to health care in Massachusetts after 2006 Massachusetts Healthcare Reform Law is associated with a significant decrease in mortality among vascular surgery patients. *J Vasc Surg* 2018; Mar 31 (Epub ahead of print).

Eslami MH, Rybin DV, Doros G, **Siracuse JJ, Farber A.** External validation of Vascular Study Group of New England risk predictive model of mortality after elective abdominal aorta aneurysm repair in the Vascular Quality Initiative and comparison against established models. *J Vasc Surg* 2018; Jan; 67(1):143-150.

Kasotakis G, Galvan MD, Osathanugrah P, Dharia N, Bufe L, Breed Z, Mizgerd JP, Remick DG. Timing of valproic acid in acute lung injury: Prevention is the best therapy? *J Surg Res* 2017; Dec; 220:206-212.

Little VR. Imaging and scopes? It’s bloody time for another branch in the decision tree. *J Thorac Cardiovasc Surg* 2018; May; 55(5):2243-2244.

Muñoz-Largacha JA, Gower AC, **Sridhar P,** Deshpande A, O’Hara CJ, Yamada E, **Godfrey TE,** Fernando HC, **Little VR.** miRNA profiling of primary lung and head and neck squamous cell carcinomas: Addressing a diagnostic dilemma. *J Thorac Cardiovasc Surg* 2017; Aug; 154(2):714-727.



Muñoz-Largacha JA, Steiling KA, Kathuria H, Charlot M, Fitzgerald C, **Suzuki K, Little VR.** Initial surgical experience following implementation of lung cancer screening at an urban safety net hospital. *J Thorac Cardiovasc Surg* 2018; Feb 9 (Epub ahead of print).

Sterbling HM, **Rosen AK, Hachey KJ,** Vellanki NS, Hewes PD, Rao SR, Pinjic E, Fernando HC, **Little VR.** Caprini Risk Model decreases venous thromboembolism rates in thoracic surgery cancer patients. *Ann Thorac Surg* 2018; Mar; 105(3):879-885.

Talutis SD, Drake FT. Comparative effectiveness of surgery versus antibiotics in acute appendicitis: A systematic review. *J Comp Eff Res* 2017; Jul; 6(5):471-482.

Talutis SD, Drake FT, Sachs T, Rao SR, **McAneny D.** Postoperative hematoma evacuation after thyroid and parathyroid surgery: An analysis of the CESQIP database. *Surgery* 2018 (accepted for publication).

Tan TW, Eslami M, Rybin D, Doros G, Zhang WW, **Farber A.** Outcomes of endovascular and open surgical repair of ruptured abdominal aortic aneurysms in elderly patients. *J Vasc Surg* 2017; Jul; 66(1):64-70.

Van Orden K, Farber A, Schermerhorn ML, Goodney PP, **Kalish JA, Jones DW,** Rybin D, **Siracuse JJ;** Vascular Quality Initiative. Local anesthesia for percutaneous endovascular abdominal aortic aneurysm repair is associated with fewer pulmonary complications. *J Vasc Surg* 2018; Mar 27 (Epub ahead of print).

Zuriaga MA, Fuster JJ, Farb MG, MacLauchlan S, Bretón-Romero R, Karki S, **Hess DT,** Apovian CM, Hamburg NM, Gokce N, Walsh K. Activation of non-canonical WNT signaling in human visceral adipose tissue contributes to local and systemic inflammation. *Sci Rep* 2017; Dec 11; 7(1):17326.



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- research and initiatives to understand and reduce disparities in surgical care

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Writer/Editor: Hilary F. Bennett
Highlights Photography: Matthew Morris, BMC
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**Boston University School of Medicine/Boston Medical Center
Department of Surgery**


88 East Newton Street, Collamore-C500
Boston, MA 02118


Phone: 617.638.8609

E-mail: surgery@bu.edu

Website: bumc.bu.edu/surgery

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