

Department of Surgery
Boston University School of Medicine/Boston Medical Center

ANNUAL REPORT 2019

# Cultivating Leadership, Championing Equity and Excellence





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# The Department of Surgery By the Numbers\*

14 Clinical Divisions/Sections

58 Faculty

1 ACGME-Accredited Surgical Residency

33 Interns and Residents

2 ACGME-Accredited Surgical Fellowships

4 Fellows

6 CPME-Accredited Podiatric Residency Residents

6,847 Operations

72,579 Outpatient Visits

\* July 1, 2018—June 30, 2019

ON THE COVER: The 2018–2019 chief residents visit the hospital's rooftop farm, which provides produce to our therapeutic food pantry, inpatient meal services, and cafeterias (see page 21).

# Message from the Chair



my two years as Chair and Surgeon-in-Chief here at Boston University School of Medicine (BUSM) and Boston Medical

Center (BMC), I have asked many of the faculty and trainees how they see our Department of Surgery. "Tight-knit—like a family" is how one of the chief residents described the department during an early dinner at my house. Her sentiment resonated with me, and I have heard it repeated in countless variations since. Throughout my career, I have always been happiest when I felt I was part of a

family. Professionally, I feel at home at BMC, where I am privileged to represent and serve the brilliant, dynamic, committed people who have made BMC Surgery their working home.

In contrast, for many of our patients, a lack of stable housing and potentially unsafe home environments are among the social determinants of health that deeply impact their lives. As a result, their healthcare outcomes can suffer. At BMC and in the Department of Surgery, we are pioneering holistic approaches to care that can help our patients combat these underlying issues, while educating and advocating more broadly to address inequities in surgical care (see page 16).

We continue to foster and grow diversity within our family of trainees, faculty, and staff, and are also pleased to lead initiatives that promote a diverse bench and new connections within academic surgery. As I write this, our department, led by local arrangements chair and BMC trauma surgeon Tejal Brahmbhatt, MD, is preparing to host the annual meeting of the Society of Asian Academic Surgeons (SAAS) on our vibrant campus at the end of September. Of note, SAAS defines "Asian" in the broadest sense, and all who welcome diversity in academic surgery are invited. We look forward to welcoming surgeons from around the world to learn from our family at BUSM and BMC.

The annual report also highlights by way of example how BMC surgeons are changing the national landscape of chronic disease. In this report, we focus on vascular surgery research. The international, multi-specialty BEST-CLI trial is poised to answer pressing questions about how to treat patients with life-threatening chronic limb ischemia (CLI). BEST-CLI is one of 45 research projects currently underway in the Division of Vascular and Endovascular Surgery, which continues to make its mark as a powerhouse in scholarly activity (see page 17).

Our family extends well beyond our doors and continues to evolve through collaborations old and new (see page 19). Our friends and supporters, as well as our patients and trainees, continue to inspire all of us in our daily work. Providing compassionate, high-quality patient care, training the next generation of surgeons, and conducting impactful research is a team sport. This report reflects some of the noteworthy individual and collaborative efforts of our team—our collective family—over the last year. Please stay in touch!

Semme Trans

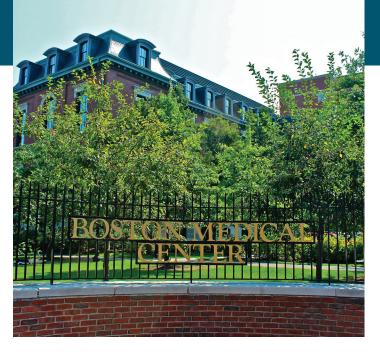
Jennifer F. Tseng, MD, MPH

James Utley Professor and Chair of Surgery,
Boston University School of Medicine
Surgeon-in-Chief, Boston Medical Center

#### **Boston Medical Center**

oston 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

he Department of Surgery has a long, proud history, with roots that extend back more than 150 years. In 1873, Boston University School of Medicine (BUSM) opened its doors, combining the New England Female Medical College with the medical staff of the Massachusetts Homeopathic Hospital.

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 Chair of Surgery at BUSM. Dr. Smithwick served in those positions for nearly 20 years.

have led and contributed to the international stature of the Department of Surgery throughout the ensuing decades are Drs. Richard Egdahl, John Mannick, Lester Williams, Peter Mozden, Robert Hobson, Edward Spatz, James

Among the surgeons who



Becker, and Gerard Doherty. In July 2017, Jennifer F. Tseng, MD, MPH, was recruited as Chair and Utley Professor of Surgery at BUSM and Surgeonin-Chief at Boston Medical Center (BMC). The Department of Surgery comprises 14 divisions, or sections, and includes 58 faculty members. 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 affiliated faculty members from Roger Williams Medical Center, the Veterans Administration (VA) Boston Healthcare System, and Cape Cod Hospital (Cape Cod Healthcare). The Departments of Surgery at the VA Boston Healthcare System and Roger Williams are valued partners in teaching and training medical students and residents (see page 19).

This annual report provides an overview of some of the clinical programs, research, and educational initiatives of the previous academic year (July 1, 2018 through June 30, 2019) and highlights a few of the many accomplishments and activities of our faculty, trainees, and alumni. We invite you to visit our website (bumc. bu.edu/surgery) and follow us on social media (@BMCSurgery) to keep abreast of our activities throughout the year.

# **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, MBA**Associate Chair, Clinical Operations



**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



**Tracey Dechert, MD** *Chief, Surgical Critical Care* 



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



**Hau Pham, 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



Robert Schulze, MD, MBA Surgical Finance Officer



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

**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

Abraham Jaffe, MD
Assistant Professor of Surgery,
Boston University School
of Medicine\*

**Pei-Win Lim, MD**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 Robert Schulze, MD, MBA
Clinical Associate Professor of

Clinical Associate Professor of Surgery, Boston University School of Medicine

Kathryn Twomey, MD Assistant Professor of Surgery, Boston University School of Medicine\*

#### Cardiac Surgery

**Karl Karlson, MD** *Division Chief* 

Division Chief Assistant Professor of Surgery, Boston University School of Medicine

Nikola Dobrilovic, MD, MBA Assistant 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

Joanne Favuzza, DO Assistant Professor of Surgery Boston University School of Medicine\*

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

# Minimally Invasive and Weight Loss Surgery

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

\*Recommended for

#### 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

#### Daniel Roh, MD, PhD

Assistant Professor of Surgery, Boston University School of Medicine\*

#### **Podiatry Surgery**

#### Hau Pham, DPM

Division Chief Assistant Professor of Surgery, Boston University School of Medicine

#### Ewald Ray Mendeszoon Jr., DPM

Instructor of Suraery, 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

#### 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

#### 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

#### Sayeed Khan Maleek, MD

Interim Director of Transplant Clinical Director of Transplant Surgery, Brigham and Women's Hospital Assistant Professor of Surgery. Harvard Medical School

#### Stefan Tullius, MD, PhD

Chief, Division of Transplant Surgery, Brigham and Women's Hospital Professor of Surgery, Harvard Medical School

#### Vascular and Endovascular Surgery

#### Alik Farber, MD, MBA

Division Chief Professor of Surgery and Radiology, 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 and Radiology, Boston University School of Medicine

#### Jeffrey Siracuse, MD

Associate Professor of Surgery and Radiology, 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, Boston University School of Public Health.

#### Surgical Research and Education

#### Erica Brotschi, MD

Associate Professor of Surgery, Boston University School of Medicine

#### Tony Godfrey, PhD

Professor of Surgery and Computational Biomedicine, Boston University School of Medicine

#### Marina Malikova, PhD, MSci, MA

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

#### Amitabh Gautam, MD

Assistant Professor Emeritus of Surgery, Boston University School of Medicine

#### Geoffrey Habershaw, DPM

Assistant Professor Emeritus of Surgery, Boston University School of Medicine

#### Maureen Kavanah, MD

Assistant Professor Emeritus of Surgery, Boston University School of Medicine

bumc.bu.edu/surgery

#### **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

#### 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

#### Hillary Mull, PhD

Research Assistant Professor, Boston University School of Medicine

#### Amy Rosen, PhD

Professor of Surgery, Boston University School of Medicine

\*Recommended for



#### **Chief Surgical Officer** DAVID MCANENY, MD

Vice Chair, Department of Surgery Division Chief, General Surgery Section Chief, Surgical Endocrinology and Surgical Oncology Professor of Surgery, Boston University School of Medicine

David McAneny was appointed as Boston Medical Center's first Chief Surgical Officer and assumed this important new position in 2019. In this role, Dr. McAneny, who has deep clinical expertise and a long and distinguished history at Boston Medical Center (BMC), is responsible for providing stewardship and oversight of the clinical interests of all who practice surgery at BMC. Among Dr. McAneny's many significant contributions to the BMC community are his leadership in the National Surgical Quality Improvement Program, guiding the institution in decreasing overall postoperative complication rates from the 10th (worst) decile to the 1st (best). Dr. McAneny's team has developed award-winning models for the prevention of postoperative venous thromboembolism events and pulmonary complications, spawning multiple publications and presentations by residents and faculty. The ICOUGH<sup>SM</sup> app, designed to help patients reduce pulmonary complications after surgery, recently won a Health Devices Achievement Award from the renowned ECRI Institute. Introduced at BMC in 2010, the ICOUGH program was developed in conjunction with Pamela Rosenkranz, RN, BSN, MEd, Director of Clinical Quality and Patient Safety in Surgery for BMC and Instructor of Surgery at Boston University School of Medicine.

Over the last year, Dr. McAneny published or has had papers accepted for publication in the following peer-reviewed journals: American Journal of Surgery, Journal of Gastrointestinal Surgery, Annals of Surgical Oncology, Surgery, World Journal of Surgery, and American Journal of Otolaryngology. Dr. McAneny made presentations at the American College of Surgeons Quality and Safety Conference and the Northeast Surgical Meeting, and was an invited lecturer for the Tennessee Surgical Quality Collaborative. Dr. McAneny was among those chosen for the listing of America's Top Doctors, America's Top Doctors for Cancer, and Boston's Top Doctors in Boston Magazine.

#### **Faculty News**



TEJAL BRAHMBHATT,
MD, Acute Care and
Trauma Surgery/Surgical
Critical Care, received
the Erwin F. Hirsch
Resident Teaching Award
in recognition of his

outstanding contributions to the education of Boston Medical Center's (BMC's) surgical chief residents. Dr. Brahmbhatt made oral presentations at the American College of Surgeons Clinical Congress, the annual meeting of the Surgical Infection Society, and the Annual Academic Surgical Congress, where he also served as a moderator. Over the last year, Dr. Brahmbhatt had papers published or accepted for publication in the following journals: Journal of Surgical Research, Surgical Infections, Journal of Trauma and Acute Care Surgery, and American Journal of Emergency Medicine.



ABDUL SAIED CALVINO, MD, Roger Williams Medical Center, was recognized with the Latino Cancer Control Task Force Award for cancer education and prevention

focused on the Latino community in Rhode Island, and received the Centers for Disease Control and Prevention's Carol Friedman Award for his efforts to decrease barriers in order to increase colorectal screening among minority populations. As an invited speaker at the Partnership to Reduce Cancer in Rhode Island quarterly meeting, Dr. Calvino gave a presentation on "Disparities in Cancer Care Outcomes." He was inducted as a fellow of the American College of Surgeons (FACS) and became a member of the New England Surgical Society (NESS).



MICHAEL CASSIDY, MD, Surgical Oncology, gave a presentation at the Society of Surgical Oncology Annual Cancer Symposium and presented grand rounds at Boston

University School of Medicine on "Breaking Down the Silos: Leveraging Multidisciplinary Collaboration to Improve Breast Cancer Treatment and Outcomes." Dr. Cassidy was first author on papers published in *Annals of Surgery* and *The Breast Journal*.



N. JOSEPH ESPAT, MD, MS, Roger Williams Medical Center, gave the keynote address on "Colorectal Cancer Hepatic Metastases: The Spectrum

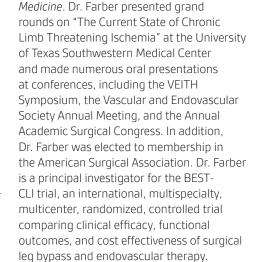
of Modern Treatment"

at the annual meeting of the University of Florida Department of Surgery's Woodward Society. As a visiting professor at the A.C. Camargo Cancer Center in São Paulo Brazil, Dr. Espat made a presentation on "Modification of the Barcelona Clinic Algorithm for Intermediate-Stage Hepatocellular Cancer: Clinical Implications."



ALIK FARBER, MD, MBA, Chief of Vascular and Endovascular Surgery, had numerous papers published over the course of the year. Collectively, under his guidance,

Division of Vascular and Endovascular Surgery faculty authored and published more than 30 papers in the following journals: Journal of Vascular Surgery, European Journal of Vascular and Endovascular Surgery, Annals of Vascular Surgery, Vascular Specialist, Vascular



Medicine, and Trends in Cardiovascular



**KAMAL ITANI, MD**, Chief of Surgery at the VA Boston Healthcare System, was a visiting professor in the Department of Surgery at Yale School of Medicine and received

the distinguished service award from the Association of VA Surgeons. In addition, Dr. Itani became an honorary fellow of the Brazilian College of Surgeons. Dr. Itani had numerous papers published and coauthored a chapter in the second edition of "Acute Care Surgery." Also of note, the VA Boston Department of Surgery research group received an award for best poster abstract at the Society for Healthcare Epidemiology of America Conference.



DOUGLAS JONES, MD, Vascular and Endovascular Surgery, was appointed Director of Surgical Education and Mentorship. In this role, he will codify

curricula for BMC rotating

residents and medical students and serve as an advisor to BMC research residents and categorical general surgery interns. In addition, Dr. Jones received the E.J. Wylie Traveling Fellowship from the Society for Vascular Surgery Foundation and was awarded the Vascular Study Group of New

England Quality Improvement Project Award for a project entitled "Reducing Postoperative Hospital Utilization through Improved Discharge Planning after Lower Extremity Revascularization." Over the course of the year, Dr. Jones gave two invited presentations and authored or coauthored more than 20 papers. In addition, Dr. Jones became a member of the Society for Vascular Surgery and the New England Society for Vascular Surgery.



JEFFREY KALISH, MD, gave an invited lecture on "Contemporary Innovations for Amputation: Osseointegration and Targeted Muscle Reinnervation" during

the 2019 State-of-the-Art in Vascular and Endovascular Surgery Course at Harvard Medical School. Dr. Kalish also co-authored a chapter on biologic grafts with **Alik Farber, MD, MBA**, in "Rutherford's Vascular Surgery and Endovascular Therapy."



STEVEN KATZ, MD, Roger Williams Medical Center, presented at the annual meetings of the Association of American Immunology and the Society for

Immunotherapy of Cancer. Dr. Katz had papers published or accepted for publication in *Cancer Gene Therapy, Vaccines*, and *Oncogene*.



VIRGINIA R. LITLE, MD, Thoracic Surgery, presented at national and international meetings and also served as a moderator, discussant, and panelist at surgical

conferences in the U.S., Canada, and Ireland. In the past year, Dr. Litle published in the following peer-reviewed journals: Annals of Thoracic Surgery, Journal of Thoracic and Cardiovascular Surgery, Clinical and Experimental Gastroenterology, Tumori, and Lung Cancer. Dr. Litle continued her editorial



**TEVIAH SACHS, MD, MPH**, has been named the Perlman Scholar for Pancreatic Cancer Research. Through the generosity of Marc and Claire Perlman, Dr. Sachs will have protected time to focus on conducting research on pancreatic cancer and related diseases.

duties for Annals of Thoracic Surgery and Pearson's "Textbook of Thoracic Surgery" and co-authored several textbook chapters with residents and junior faculty. Through social media, Dr. Litle moderated several Women in Thoracic Surgery/Association of Women Surgeons combined Twitter Chats, including "Global Surgery: What Is the Surgeon's Role?" In 2019, Dr. Litle was elected Treasurer of the Thoracic Surgery Foundation, the charitable arm of the Society of Thoracic Surgeons, and became a member of the newly established Wellness Committee of the American Association for Thoracic Surgery.



MARINA MALIKOVA, PhD, MSci, MA, Executive Director of Surgical Translational Research, was appointed an Assistant Professor of Surgery at Boston

University School of Medicine. Dr. Malikova gave oral and poster presentations at conferences in the U.S. and Europe, including the inaugural SCOPE Clinical Operations Executives Global Summit, the European Congress of Radiology, and the Annual Meeting of the International Society of Pharmacovigilance, which resulted in an invited review article submitted to Therapeutic Advances in Drug Safety. Over the course of the year, Dr. Malikova chaired several symposiums and moderated sessions focused on clinical research operations, contracts, and financial and regulatory aspects of clinical research, including "The Impact of New Regulations and Laws on Clinical Trial Negotiation and Budgeting Symposium," which she chaired at the 10th Annual Clinical Operations

Executives (SCOPE) Summit in Florida. Dr. Malikova had peer-reviewed papers published in World Journal of Surgery and Surgical Research, American Journal of Kidney Diseases, and Drug Safety and editorials published in Future Science OA and Pharmaceutical Outsourcing. During the course of the year, Dr. Malikova completed training and obtained certification in Clinical Safety and Pharmacovigilance from the Drug Information Association. Dr. Malikova joined the editorial board of World Journal of Surgery and Surgical Research and continues to serve on the editorial board of Surgical Case Reports and Reviews and as a panel reviewer for the National Institute of Allergy and Infectious Diseases.



Minimally Invasive and Weight Loss Surgery, was named Associate Program Director of the

LUISE PERNAR, MD.

was named Associate
Program Director of the
General Surgery Residency
Program. Over the

course of the year, Dr. Pernar was involved in multiple research projects in surgical education and outcomes after ventral hernia repair and bariatric surgery, working with several residents, including **Rumbidzayi** Nzara, MD, and Alaina Geary, MD. This work resulted in two oral presentations at the American College of Surgeons Clinical Congress, two poster presentations at the Society of American Gastrointestinal and Endoscopic Surgeons (SAGES) Annual Meeting, and both oral and poster presentations at Surgical Education Week, where Dr. Pernar again led a workshop on how to launch a resident-as-teacher program in a general surgery residency. Dr. Pernar had peer-reviewed papers



Boston University School of Medicine Promotions TRACY DECHERT, MD

Acute Care and Trauma Surgery/Surgical Critical Care Associate Professor of Surgery



#### **Top Docs**

Congratulations to the following Department of Surgery faculty members cited as "tops" in their specialties in *Boston* Magazine's 2019 "Top Docs" issue.

#### PETER BURKE, MD

Acute Care and Trauma Surgery

**CATHERINE CHEN, MD, MPH** *Pediatric Surgery* 

#### ALIK FARBER, MD, MBA

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

#### VIRGINIA LITLE, MD

Thoracic Surgery

#### DAVID McANENY, MD

General Surgery, Surgical
Endocrinology, Surgical Oncology

#### JAROMIR SLAMA, MD

Plastic and Reconstructive Surgery

published in *The American Journal of Surgery, Journal of Surgical Education*, and *Journal of the American Heart Association* and also authored a chapter on medical management of achalasia for "The SAGES Manual of Foregut Surgery."



**TEVIAH SACHS, MD, MPH**, Surgical Oncology,
gave an invited lecture
on "Advancing Surgical
Oncology at an Urban
Safety-Net Hospital"
at the Gastrointestinal

Surgery Gold Conference and published 11 peer-reviewed papers in journals including American Journal of Surgery, Annals of Surgical Oncology, Journal of Vascular Surgery, and Surgery. Dr. Sachs also authored or co-authored a clinical review and an invited commentary, as well as a book chapter with BMC resident Na Eun Kim, MD, in "Hepato-Pancreato-Biliary and Transplant Surgery: Practical Management of Dilemmas." Dr. Sachs was elected Vice Chair of the membership committee for the Association of Surgical Education for 2019–2020 and Chair for 2020–2021 and was appointed as a member of the program committee for the Society of Surgery of the Alimentary Tract.



#### JEFFREY SIRACUSE,

MD, was named Program Director for the Vascular and Endovascular Surgery Fellowship and appointed as an associate editor for Annals of Vascular Surgery

and to the editorial board of the *Journal of Vascular Surgery*. Through the Society for Vascular Surgery, Dr. Siracuse has been appointed as a section editor for VESAP5, (Vascular Education Self-Assessment Program) and Deputy Chair of the Appropriate Use Criteria Writing Committee for Claudication. In addition, Dr. Siracuse

was appointed Chair of the Vascular Study Group of New England's Research Advisory Council and served as a session moderator at both the American College of Surgeons Clinical Congress and the Society for Clinical Vascular Surgery Annual Meeting. Over the past year, Dr. Siracuse has given more than 20 oral presentations regionally and nationally and was an author or co-author of 30 peer-reviewed articles. As a co-investigator on an R01 grant from NIH/AHRQ, Dr. Siracuse is looking at advanced risk adjusters and predictive formulas for ICD-10—based risk adjustment.



JAROMIR SLAMA, MD, co-authored papers in three peer-reviewed journals, *PLoS One, Journal of Thoracic Disease*, and *Abdominal Radiology*.



PONNANDAI SOMASUNDAR, MD, MPH, Roger Williams Medical Center, gave an invited lecture in India on management of colorectal cancer liver metastases

as well as oral presentations at the International Society of Geriatric Oncology Conference in the Netherlands and at the Spectrum IO Annual Conference in Florida. Dr. Somasundar was again recognized by his peers as a "Top Doctor" in Rhode Island Magazine.



JENNIFER TSENG, MD, MPH, Surgical Oncology and Chair of Surgery, has been appointed as a director of The American Board of Surgery and will serve a six-year term.

#### **New Faculty**



DANIEL ROH, MD, PhD
Assistant Professor of
Surgery, Boston University
School of Medicine\*
Plastic Surgery

Dr. Roh received his MD and PhD from the University of Pittsburgh School of Medicine Medical Scientist Training Program and completed his training in the Harvard Plastic Surgery Residency Program. Dr. Roh, who has previously been funded by a National Institute on Aging grant, currently conducts research that focuses on the impact of aging and senescence on wound healing and tissue repair. Dr. Roh has published 19 peer-reviewed papers, 11 as first author, and is co-author of a chapter in "Plastic and Reconstructive Review — A Comprehensive Review."



JOANNE FAVUZZA, DO Assistant Professor of Surgery, Boston University School of Medicine\* Colorectal Surgery

Dr. Favuzza was recruited to Boston Medical Center from Rush University School of Medicine in Chicago, where she was an Assistant Professor of Surgery and Surgical Director of the Program for Abdominal and Pelvic Health at Rush University Medical Center, Dr. Favuzza received her DO from the University of New England College of Osteopathic Medicine. After her residency at Berkshire Medical Center in Pittsfield, Mass., Dr. Favuzza completed a colorectal fellowship at Case Western University Hospital. Dr. Favuzza has published 22 peer-reviewed papers in high-impact journals, including the Journal of the American College of Surgeons.



KATHRYN TWOMEY, MD
Assistant Professor of
Surgery, Boston University
School of Medicine\*
Acute Care and
Trauma Surgery/Surgical
Critical Care

Kathryn Twomey received her medical degree from the University of Medicine and Dentistry—Robert Wood Johnson School of Medicine and completed her general surgery residency at Boston Medical Center, where she was recognized for excellence in teaching and mentorship. Dr. Twomey completed her training as a Surgical Critical Care fellow at Brigham and Women's Hospital. Dr. Twomey has had papers published in a number of peer-reviewed journals, including *American Journal of Surgery* and *Journal of Vascular Surgery*.



ABRAHAM JAFFE, MD
Assistant Professor of
Surgery, Boston University
School of Medicine\*
General and Acute Care
Surgery

Dr. Jaffe received his medical degree from the University of Massachusetts (UMass) Medical School and completed his general surgery residency at UMass Memorial Medical Center. As a resident, Dr. Jaffe was elected into the Gold Humanism Honor Society in recognition of his commitment to teaching and to kind, compassionate treatment of patients, families, students, and colleagues. He also conducted traumarelated research in India as a Surgical Research Scholar in Global Surgery. While serving as Global Surgery Chief Resident, Dr. Jaffe coordinated global surgery mission trips to Honduras and Haiti.



PEI-WEN LIM, MD
Assistant Professor of
Surgery, Boston University
School of Medicine\*
General and Acute Care
Surgery

A graduate of Jefferson Medical College of Thomas Jefferson University, Dr. Lim did her residency at UMass Memorial Medical Center and competed her postdoctoral training there as a fellow in Advanced Minimally Invasive and Bariatric Surgery. Dr. Lim has been appointed to a number of committees focused on education and mentorship, including the Society of American Gastrointestinal and Endoscopic Surgeons' Fundamentals of Endoscopic Surgery (FES) and Fundamentals of Laparoscopic Surgery (FLS) Committees and its FLS Test Center Review Committee. In addition to numerous poster presentations at meetings across the U.S., Dr. Lim has authored or co-authored peer-reviewed articles in journals that include HPB and American Journal of Surgery.

\*Recommended for

# Alumni Profile: Jen Jen Yeh, MD

here comes a point when every aspiring surgeon must go from learning to doing. From simply reading about a procedure to actually holding the scalpel, making the cut, and improving a patient's life—right there on the operating table. For Jen Jen Yeh, MD, that point came during her general surgery residency at Boston Medical Center (BMC) from 1997 to 2003.

"Residency is always a seminal part of training to become a surgeon," says Dr. Yeh, now a professor in the Departments of Surgery and Pharmacology at the University of North Carolina (UNC) School of Medicine, Vice Chair of Research in the Department of Surgery, and Co-Director of Clinical Research at the UNC Lineberger Comprehensive Cancer Center.

"When you're a medical student, you have these aspirations, this very idealistic perspective of what you think surgery is about. But it's not until training that you really understand the complexities of how to be a surgeon."

#### Technical know-how from a compassionate place

Of course, would-be surgeons have choices when it comes to training programs. But at BMC and the Boston University School of Medicine (BUSM), there is something particularly enriching and immersive about the experience, which is what made Dr. Yeh excited to match with the program after medical school at Johns Hopkins.

"The technical training was really phenomenal at BMC, and it prepared me to tackle complex surgeries," she says. "I felt like I had a lot of autonomy to think about medicine, but most importantly, BMC taught me the philosophy of taking really good care of patients, and of being a really good doctor overall." Not only did she learn the fundamentals of good doctoring, she did so within the context of care equity. That is, treating and working with people from all walks of life, regardless of their circumstances.

"One of the things I really valued from my experience was the fact that BMC took care of patients from all social and economic statuses," she says. "And that trickled back to the way we all worked together. The staff truly acted as a team, and that really resonated with me."

#### Launchpad for success

Those lessons served as a lifelong launchpad for Dr. Yeh's future successes, which have been ample on both the scientific bench and at the bedside. In addition to running a medical practice that specializes in endocrine diseases and pancreatic cancers, she has devoted her career to finding new genomic-based approaches for one of oncology's deadliest and toughest-to-treat diseases: pancreatic cancer.



Jen Jen Yeh, MD, completed her surgical residency at Boston Medical Center in 2003. She is now a professor in the Departments of Surgery and Pharmacology at the University of North Carolina School of Medicine, and Vice Chair of Research in the Department of Surgery.

"I chose to focus on pancreatic cancer because I felt like it was an area in which we, as surgeons, were plateauing—not moving the needle far enough for our patients," she says. "I wanted to contribute to research by understanding the biology of pancreatic cancer and finding new ways to treat it, and I wanted to make a difference in the clinic by helping patients choose the best therapy for them."

Indeed, she's well on her way. Dr. Yeh's achievements include identifying new molecular subtypes of pancreatic cancer and helping develop a device to shrink pancreatic tumors via direct-to-tissue chemo infusion. You can find her work in the pages of *Nature Genetics and Science Translational Medicine*, among other journals. Just recently, she was named an Oliver Smithies Investigator (established in honor of the late Nobel Prize winner at UNC).

#### Phenomenal mentorship

Dr. Yeh's work amounts to quite an impressive CV, one made possible by a roster of esteemed physicians and mentors who encouraged, challenged, and defended her along the way. Chief among them—pun intended—was BMC's very own Bob Beazley, MD, FACS, now Assistant Dean of Student Affairs and an Emeritus Professor of Surgery. During Dr. Yeh's time at BMC, he was Chief of Surgical Oncology. "He continues to be a phenomenal mentor for me, and he's a great clinician, a great surgeon," she says. "He taught us the history behind surgery. I take everything I learned from him."

"The technical training was really phenomenal at BMC, and it prepared me to tackle complex surgeries. ... but most importantly, BMC taught me the philosophy of taking really good care of patients, and of being a really good doctor overall."

Jen Jen Yeh, MD

Others shaped Dr. Yeh's experience at BMC in equally unique ways—like David McAneny, MD (now BMC's Vice Chair of Surgery and Professor of Surgery at BUSM). "He was only a junior attending when I was there, so he probably started just a few years before I came, but seeing his relationship with Dr. Beazley was a great experience for me on how to mentor others. Now, looking back, it taught me how to encourage and promote young faculty."

In fact, it was Dr. McAneny, together with Chair of Surgery Jennifer Tseng, MD, MPH, who invited Dr. Yeh back to BMC as a visiting professor in November 2018, an invitation she enthusiastically accepted. "It was fabulous to be able to participate in the students' day and their education," she says. "There were even a couple of attendings who were interns when I was a chief resident. It was great to go back and share memories with a lot of people who are still there, and to meet new people, too."

#### Multidisciplinary problem solving

The ability to return to her residency alma mater some two decades later as a visiting professor really signifies the full-circle path of Dr. Yeh's work. Not only is she an esteemed clinician and scientist, she's also a teacher—one who is particularly committed to helping the next generation find their own way at the crossroads of science and medicine.

"Physician-scientists are really important, but fewer people are pursuing it because of the hurdles of balancing two careers," says Dr. Yeh, who organized a series of surgery—engineering speed dates at UNC to foster collaboration between researchers and physicians.

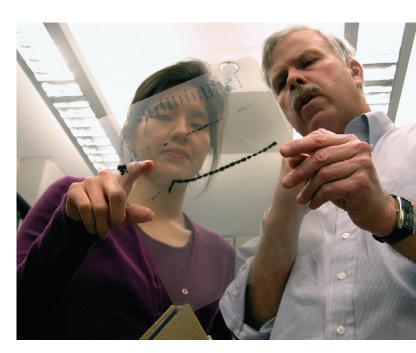
"But we, as clinicians, aren't the only people who can solve clinical problems," she adds. "There are a lot of people who have different experiences, so I think multidisciplinary approaches from out-of-the-box areas can be really exciting."

#### A guiding force

As a teacher, one focus for Dr. Yeh is helping trainees home in on and then achieve their goals. "For me, it's most important to figure out what people's interests are," Dr. Yeh says. "And then it's about providing a roadmap on how to get there. I'd like to think I have a lot to teach based on my own hurdles and experiences—and that I can make things a little easier on future researchers and physicians by being there to help them."

And of course, that perspective is thanks in no small part to Dr. Yeh's time at BMC.

"I don't think that I could have gotten the quality of training that I got at any other program, or had the supportive faculty and role models that I found at BMC," she adds. "I feel very fortunate to have trained there."



Dr. Yeh confers with Al Baldwin, PhD, Associate Director for Basic Research at the University of North Carolina Lineberger Comprehensive Cancer Center.



Chief of Acute Care and Trauma Surgery Peter Burke, MD, and Chief of Surgical Critical Care Tracey Dechert, MD

# Fighting the Disease of Trauma

hen Bostonians hear about a gunshot victim who was rushed to an unnamed hospital, chances are it was Boston Medical Center (BMC). Known for the skill of its clinicians in treating gunshot and stab wounds, BMC sees the highest percentage of penetrating trauma cases in the city, double that of any other Level 1 Trauma Center. BMC's reputation for providing excellent trauma care stretches well beyond these types of injuries and across generations. Many of those lucky enough to survive the 1942 Cocoanut Grove nightclub fire, the deadliest nightclub fire in U.S. history, were treated at BMC, then

called Boston City Hospital. More recently, BMC mobilized in April 2013 to treat dozens of victims of the Boston Marathon bombings.

Consistent with national trends, falls are the primary source of traumatic injury at BMC, but interpersonal violence comes in at a close second. "There's been an evolution in trauma care over the last seven or eight years to frame care in the context of social determinants," says Peter Burke, MD, Chief of Acute Care and Trauma Surgery at BMC and Professor of Surgery at Boston University School of Medicine (BUSM). "In

the past, we did nothing to deal with the psychological damage that violence does to the patient and the whole family—the secondary ripples." Through research and formal programs such as the Community Violence Response Team (CVRT), which provides counseling to survivors of violence and family members impacted by violence free of charge, Burke and his team have made it their mission to better understand why violence occurs, to look for ways to prevent it, and to support victims when it does. (See *Building Community Resilience* sidebar and *Crisis Intervention*, page 15.)

#### Treating the whole patient

"As trauma surgeons, we can all fix a gunshot wound to the aorta, but the thing that really makes BMC different from other trauma surgery services is our holistic approach to care," says Aaron Richman, MD, Assistant Professor of Surgery at BUSM. Dr. Richman did his residency at BMC and joined the staff in 2018 after completing a fellowship in Colorado. BMC's commitment to treating the whole patient—even stronger today than when Dr. Richman first started his residency—drew him back.

"We view trauma as a chronic disease," says Tracey Dechert, MD, Chief of Surgical Critical Care at BMC and Director of the Surgical Intensive Care Unit, a state-of-theart facility that has been reinvented and expanded over the last two years. "Treating the injury and performing surgery is just one little piece. Through CVRT, we have a formal program to address everything else and provide patients with supportive care. There's so much amazing work being done here in underserved populations." BMC's Socially Responsible Surgery™ (SRS) group, established in 2014, is the brainchild of Dr. Dechert, an Associate Professor of Surgery at BUSM. Recognizing surgery as an essential component of health, this group is focused on identifying opportunities for leadership, research, and collaboration in the training of surgeons committed to surgical equity (see page 16).

#### All hands on deck

Dr. Dechert was at home on April 15, 2013, following a long night at BMC, when calls and texts started coming in shortly before 3 pm. By the time she reached the hospital 30 minutes later, Boston EMS had already arrived with patients gravely injured by two bombs that rocked the finish line of the Boston Marathon. With Trauma



Trauma surgeon Tejal Brahmbhatt, MD

Surgery Chief Peter Burke attending a conference out of state, Dr. Dechert took charge of organizing the trauma surgery team, which worked with countless others, including Andrew Ulrich, MD, former Executive Vice Chair of the Department of Emergency Medicine. Dr. Ulrich directed and coordinated the immediate care of 28 patients, ranging in age from 5 to 78. The effort was intense but orderly, with 16 patients receiving emergency surgery within the first 18 hours. Dr. Dechert recalls, "We were running 11 operating rooms in three different buildings on the campus at the same time. But because we see mangled extremities on a regular basis, it really wasn't that different from what we do every day."

#### Intangible benefits

Every day—and night—is different. Trauma surgeon Tejal Brahmbhatt, MD, describes his work as a trauma surgeon this way: "Moments of calm interspersed with moments of pure terror." When multiple qunshot victims come in at once, "we work like a NASCAR pit crew," says Dr. Brahmbhatt, an Assistant Professor of Surgery at BUSM. "Who knows what trajectory a bullet might take? It's never the same operation, but our experience with penetrating trauma means the deck is stacked in favor of these patients." He adds "Caring for the underserved population BMC serves is very enriching in ways that are not tangible." It also provides a robust and invaluable experience for training in trauma surgery. "The pathology that trainees see is second to none," says Dr. Brahmbhatt.

"Working at BMC is the best kept secret in Boston," according to Dr. Burke. "The karma is great. We provide excellent care to patients who really need us, which adds great value to our lives."

#### **Building Community Resilience**

Boston Medical Center's (BMC's) faculty and staff are experts in trauma treatment, renowned for their culturally responsive and innovative approaches to care delivery. The newly launched Boston Trauma Institute (BTI) will formalize BMC's leadership in the field, with a goal of innovating, evaluating, and disseminating new models of care and support services for trauma survivors in Boston and beyond.

Under the direction of Peter Burke, MD, Chief of Trauma Surgery, a major focus of the BTI will be on translational research, examining how social determinants of trauma impact victims of violence and the development and implementation of initiatives to reduce recidivism and enhance care delivery for these patients and their families. The institute's first grant is funding a pilot study looking at the efficacy of BMC's psychosocial services for female victims of violent trauma.

Patients who receive excellent care in the OR at Boston Medical Center (BMC) also have the support of programs—and people—who are committed to serving them in times of crisis, advocating on their behalf, and conducting research aimed at increasing the odds that more people will live healthy, productive lives. Faculty, residents, students, and staff are playing a larger role in addressing issues at the heart of public health and in championing equitable care. Three examples of their work are highlighted here.

# **Crisis Intervention**

eveloped with an understanding of the complex reality that often goes hand in hand with interpersonal violence, the Community Violence Response Team (CVRT) is integral to Boston Medical Center's trauma service and one of the few programs of its kind in the U.S. Now almost 10 years old, CVRT addresses the immense need victims of violence and their families have for services. Free of charge, CVRT provides mental health services to all patients who present to the hospital with life-threatening interpersonal violence injuries, including high-level assaults, stab wounds, and gunshot wounds. Every patient with these injuries is assigned a mental health clinician who provides crisis intervention, counseling, and ongoing

therapeutic support at the bedside and upon discharge, to the patient as well as any family members or friends impacted by these acts of violence. CVRT also provides services to families affected by homicide.

Led by Director Lisa Allee, MSW, LICSW, an Instructor in Surgery at Boston University School of Medicine. CVRT served nearly 700 individuals in fiscal 2018 and added two new clinicians. "We are dedicated to providing consistent, trauma-informed and culturally sensitive therapeutic care to our community, says Allee. "We aim to lessen the burden of chronic violence exposure by providing a safe and nurturing space to begin the healing process and by helping victims develop skills to carry



Community Violence Response Team Director Lisa Allee (third from left) with members of her staff during a team building exercise.

them through both their physical and emotional recovery."

CVRT services are primarily funded through a Victims of Crime Act (VOCA) grant.

# **Socially Responsible Surgery Expands Its Reach**



he Socially Responsible Surgery<sup>™</sup> (SRS) group established at Boston Medical Center (BMC) five years

ago now has a trademarked name and its first chapter. Affiliated with UC Davis Medical Center in Sacramento, California, this new chapter was founded by Kara Kleber, MD, a surgery resident at the medical center and a graduate of Boston University School of Medicine (BUSM)

BUSM students were the driving force behind the creation of SRS in 2014. Under the mentorship of trauma surgeon Tracey Dechert, MD, Associate Professor of Surgery at BUSM, SRS has grown into a multifaceted platform for students, residents, and faculty to combine their interest in surgery with their passion for serving the underserved.

Because of SRS, curriculum on social determinants of health is now part of the curriculum for third-year medical students and residents.

#### Upping utilization

By establishing relationships with BMC service lines, SRS has made headway in ensuring faculty and staff are aware of key, often underutilized services. "Many of our physicians were not well informed about how to write a prescription for a patient to visit BMC's food pantry," says Megan Janeway, MD, a surgery resident and founding member of SRS who just completed a two-year research fellowship studying the social determinants of health in surgical patients. "Prior to our campaign, just one doctor wrote a prescription. After, 100 did."



After presenting grand rounds at UC Davis School of Medicine, BMC trauma surgeon Tracey Dechert, MD, (in mauve jacket) shakes hands with Chair of Surgery Diana Farmer, MD. Also pictured are BMC resident Megan Janeway, MD, (second from left) and UC Davis SRS founder Kara Kleber, MD, (to right of Dr. Dechert).

Through another recent project, SRS worked with the Department of Obstetrics and Gynecology to ensure pregnant patients thinking about or planning to undergo tubal ligation are consistently and clearly informed of a Medicaid requirement that paperwork be completed 30 days prior to delivery. At present, more than two dozen SRS-related projects are ongoing, including several prospective and retrospective studies. Over the last year, the group has also actively

advocated at the Massachusetts State House and elsewhere for migrants and other patient populations served by BMC every day.

Dr. Kleber believes UC Davis Medical Center, the only Level 1 Trauma Center and quaternary referral center north of San Francisco, is an ideal place for an SRS chapter. "We have a significant opportunity to play a role in positively influencing current discussions on surgical inequity in northern California and beyond."

# **Exploring the Hidden Burden of Firearm Injuries**

Boston. Even though many lives are saved, researchers are now suggesting that firearm violence survivors have not dodged the metaphorical bullet. "From a healthcare economics standpoint, if someone is a survivor of firearm injury, you have ongoing care, long-term rehab, disability, and maybe significant mental health issues," says Miriam Neufeld, MD, a surgery and research resident at Boston Medical Center. Neufeld and **Sabrina Sanchez, MD, MPH**, a BMC trauma surgeon, are working with colleagues at the Boston University School of Public Health to explore gaps in our knowledge of firearm injuries and uncover the true public health impact of gun violence.

MC receives 80% of the bullet and knife injuries in

Firearm injuries could affect three times as many people each year as firearm deaths, but available data are not comprehensive. In fact, the Centers for Disease Control and Prevention considers

its own data unreliable. Even at the hospital level, gathering data is difficult. While hospital regulations are clear about how to code and report a traumatic death, they can be less clear about how to report traumatic injuries.

#### Knowledge gap

"We pat ourselves on the back because we save a life after a horrible gunshot wound, but what happens after they go home?" says Dr. Sanchez, an Assistant Professor of Surgery at Boston University School of Medicine. "We know a lot about 30-day outcomes for trauma, but that's where most of the research ends." While Dr. Sanchez notes that this gap in knowledge is typical of traumatic injuries, it's particularly acute for firearm injuries. Drs. Neufeld and Sanchez' study builds on previous research done by Boston University colleagues at the school of public health,

"We're just starting to talk about gun violence as a public health problem, and how you balance individual rights with the public good is fundamental to public health."

- Miriam Neufeld, MD

which analyzed a database of gun-related legislation from every state going back to the early 1990s. Three types of legislation were found to be particularly effective in reducing firearm deaths: universal background checks, ID laws, and ammunition checks. The new research drills down into data from states that have

seen dramatic changes in gun-related legislation. The goal is to determine specific laws that impact firearm injuries in order to identify effective, as opposed to "performative," qun legislation, which enables states to say they are addressing gun violence but with little net effect.

"We're just starting to talk about qun violence as a public health problem, and how you balance individual rights with the public good is fundamental to public health," says Dr. Neufeld. "Our research will help find what works, so we have a logical place to start the debate about how to find that balance."



BUSM/BMC Department of Surgery Annual Report 2019 bumc.bu.edu/surgery

# Giving It Our BEST

"Clinical outcomes, quality of life, and cost will

help our healthcare-delivery system decide which

strategy has the best value for patients with CLI."

limb threatening ischemia—also known as critical limb ischemia (CLI)—patients are at high risk for leg amputation and death. To address the atherosclerosis underlying CLI and achieve revascularization, patients typically face a choice between open bypass surgery or endovascular therapy using balloons or stents. But with little data to guide clinical decision-making, an evidence-based standard of care for CLI patients does not exist. The BEST-CLI trial, now nearly 85% enrolled, is designed to provide answers that can fill this significant void.

Funded by the National Heart, Lung and Blood Institute (NHLBI), the

hen peripheral arterial disease (PAD) progresses to chronic

Funded by the National Heart, Lung and Blood Institute (NHLBI), the BEST-CLI (Best Endovascular vs. Best Surgical Therapy in Patients with Critical Limb Ischemia) trial is an international, multispecialty, multicenter, randomized, controlled trial comparing clinical efficacy, functional outcomes, and cost effectiveness of surgical leg bypass and endovascular therapy. "BEST-CLI is a pragmatic, real-world trial, and one of only a few NIH-sponsored trials spearheaded by vascular surgeons," says Alik Farber, MD, MBA, Chief of the Division of Vascular and Endovascular Surgery at Boston Medical Center and a national BEST-CLI trial principal investigator (PI). Co-PIs are Matthew Menard, MD, Co-director of Endovascular Surgery at Brigham and Women's Hospital, and Kenneth Rosenfield, MD, Section Head for Vascular Medicine and Intervention at Massachusetts General Hospital.

BEST-CLI is just one of 45 research projects currently underway in BMC's Division of Vascular and Endovascular Surgery. Since

joining BMC in 2005, Dr. Farber, a Professor of Surgery and Radiology at Boston University School of Medicine, has led development of a multispecialty research collaborative based within the division. Over the course of the past year, multiple medical students, residents, and fellows were mentored on research projects that led to 33 manuscript publications and numerous podium and poster presentations. "Our academic productivity and mentorship are a testament to the leadership of our surgeons,

— Alik Farber, MD, MBA

Jeff Siracuse, Doug Jones, and Jeff Kalish, who work tirelessly to engage in academic pursuits while taking excellent care of our patients with vascular disease," says Dr. Farber.

#### Hamstrung by bias

Over the past decade, the prevalence of PAD has increased by 25% worldwide, largely driven by the epidemic of obesity and diabetes, as well as an aging population. PAD and CLI are the most common vascular conditions treated at BMC, according to Dr. Farber, and there is great variability across the U.S. and around the world in how patients with CLI are treated. "One of the most difficult barriers we've encountered in getting patients enrolled in this trial is treatment bias," says Dr. Farber. "Because good trials to support treatment strategy in PAD are sparse, each physician has a strong personal bias as to whether bypass or endovascular therapy is



best for any given patient with CLI. Investigators need to suspend their personal biases to randomize patients into the trial." Often challenging, this has required Drs. Farber, Menard, and Rosenfield to reach out to BEST-CLI site investigators through webinars, investigators meetings, and site visits to make the case for enrolling patients into the trial.

The first patient was enrolled at BMC in August of 2014. Currently, 930 investigators at 134 study sites in the U.S., Canada, Europe, and New Zealand are actively enrolling patients, with more than 1,760 patients randomized on the way to a goal of 2,100. Seventy-four percent of investigators are vascular surgeons, while

BEST-CLI

12% are interventional cardiologists and another 12% are interventional radiologists, with other specialties making up the remainder.

#### Comprehensive report card

When completed, BEST-CLI will answer many questions about how to treat patients with CLI. Physicians will have, for the first time ever, evidence-based guidance regarding which revascularization strategy should be offered first. The trial will provide longitudinally collected cost data for each treatment strategy, answering broader questions about value—the same questions that are increasingly important for healthcare management in the U.S. This broad analysis will assess the cost of the initial intervention as well as down-the-line complications, outpatient rehabilitation, and subsequent hospitalizations. "Clinical outcomes, quality of life, and cost will help our healthcare-delivery system decide which strategy has the best value for patients with CLI," says Dr. Farber. "The fact that more than \$7 billion is spent annually by Medicare on CLI is undoubtedly one of the primary reasons NHLBI chose to invest \$27 million into BEST-CLI. These are big questions that badly need evidence-based answers."



VA Boston Healthcare System surgeons (I to r) Vivian Sanchez, MD; Chief Kamal Itani, MD; and Patrick O'Neal, MD

# Partners in Education and Training

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bserving her first surgery—a laparotomy—at Roger Williams Medical Center in nearby Providence, Rhode Island, was awe inspiring for one third-year Boston

University medical student. Her reaction: "Wow! This is amazing." Roger Williams is one of several surgery clerkship sites available to Boston University medical students. Options range from Boston Medical Center in the heart of the city to Kaiser Permanente Santa Clara Medical Center, in California's Silicon Valley. Through affiliations with these and other institutions, Boston University School of Medicine (BUSM) and the Department of Surgery at Boston Medical Center (BMC) offer medical students and residents options that expand and enrich their experience.

For more than 15 years, BUSM students have been rotating through the Surgery service at Roger Williams Medical Center, a 220-bed general hospital and the largest academic Comprehensive Cancer Center in Rhode Island. "At Roger Williams, the traditional general surgery clerkship is possible," says N. Joseph Espat, MD, MS, Chair of Surgery at Roger Williams Medical Center and Professor of Surgery

at BUSM. "Students are exposed to the entire spectrum—from little to big, esophagus to colon—of what general surgery is." Perhaps more importantly, Dr. Espat says that medical students are exposed to the dedication and joy that the Roger Williams faculty brings to training the next generation of surgeons.

#### A five-decade partnership

Another longtime collaboration spans more than 50 years and incorporates both medical students and residents. The VA Boston Healthcare System Surgery service, comprising 12 divisions, welcomes as many as 48 students and more than 30 residents from BUSM/BMC each year. "As a referral center for all VAs in New England, the VA Boston has one of the most complex patient populations in the VA system and a very high patient volume," says Kamal Itani, MD, Chief of Surgery for the VA Boston Healthcare System and Professor of Surgery at BUSM. Dr. Itani points out that students and residents have exposure to procedures not typically offered at VA hospitals, including transcatheter aortic valve replacement (TAVAR), fenestrated endovascular aortic aneurysm repair, and several types of minimally invasive robotic surgery.

"The VA Boston is an integral part of surgical education at BMC, and we thrive on educating medical students and residents," says Vivian Sanchez, MD, Assistant Professor of Surgery at BUSM and site director for surgical residents at the VA Boston. The VA also welcomes anesthesia residents, who do their preliminary training there. While building their skillset before beginning the anesthesia residency program at BMC, "they learn what it's like to be surgeons for a year and to work with their colleagues at the opposite end of the table," says Dr. Sanchez.

#### From the Cape to California

Another affiliated teaching hospital and clinical site for residents for many years, Cape Cod Hospital in Hyannis, Massachusetts, performs more than 12,500 surgical procedures each year. For medical students, two other Massachusetts hospitals actively participate in the third-year surgery clerkship, MetroWest Medical Center in Framingham and more recently, Berkshire Medical Center in Pittsfield

"The VA Boston is an integral part of surgical education at BMC, and we thrive on educating medical students and residents."

- Vivian Sanchez, MD

The addition of Berkshire Medical Center and California's Kaiser Permanente Santa Clara Medical Center as clerkship sites has further strengthened the program, which has implemented a number of changes based on student feedback. "Medical students aren't learning in a box because Boston University does a good job of incorporating outside faculty in teaching students," says Patrick O'Neal, MD, Assistant Professor of Surgery at BUSM and assistant director of the surgery clerkship at the VA Boston. He adds, "The students really enjoy working with the veterans, and the experience provides perspective that is eye-opening for many."

"The level of commitment from the faculty at all of the affiliated hospitals is fantastic," says Cullen Carter, MD, BUSM/BMC Surgery

Clerkship Director. In addition to instructing and guiding students while onsite at Roger Williams and the VA Boston, faculty from both institutions teach medical students on the university's campus on Fridays. Research mentorship is also possible and encouraged at the VA Boston, home to several clinical trials and a very active medical research program, for residents as well as students (who can spend a summer doing research).

Thanks to its size, at Roger Williams, there's an opportunity for more personalized education. And thanks to its size, BMC offers students the opportunity to see the unusual cases typical at a major urban medical center. Through collaboration across sites, both students and residents gain exposure to diverse healthcare needs and teams.







Lindsay Allen supervised production of more than 5,600 pounds of produce in 2018.

# **Nourishing Our Community**

oston Medical Center (BMC) has transformed the roof of its power plant into a farm that grows more than 25 different crops and makes honey from two beehives. Since its creation in 2017, the farm has supplied fresh produce for the hospital's therapeutic food pantry, inpatient meal services, and cafeterias. Approximately 16% of BMC patients are food insecure. Physicians can write prescriptions for patients to visit the pantry twice a month.

During the 2018 growing season, 5,688 pounds of tomatoes, peppers, greens, and many other vegetables were produced between April and November. A similar yield is expected when the 2019 season wraps up. The farm relies on farm manager—aka

farmer—Lindsay Allen, a part-time assistant, a beekeeper, and hospital volunteers.
Allen describes the bees, which provide pollination benefits to the farm and to plants in the neighborhood as "the unsung heroes of the food system."

"This initiative supports our mission to address social determinants of health by improving access to healthy fruits and vegetables, and is a perfect example of BMC's dedication to sustainability and green efforts," says David Maffeo, BMC's Senior Director of Support Services. It was Maffeo and Robert Biggio, Senior Vice President of Facilities and Support Services, who had the vision to transform the 7,000-square-foot space into a farm. Maffeo worked with Boston-based Higher Ground Farm to find

the right growing system, and another local business, Recover Green Roofs, designed and installed it.

Some of the harvest makes its way to BMC's Teaching Kitchen, where Culinary Nutrition Manager Tracey Burg hosts free public classes using these fresh, seasonal ingredients. The sessions range from diagnosis-specific classes for people with diabetes and other common conditions to basics like making healthy dinners on a budget.

A 2019 article about the farm in the *American Journal of Public Health* concluded, "This novel model can be replicated by other organizations aiming to alleviate food insecurity, encourage healthy eating, and promote environmental sustainability."

# Dr. Tseng Walks the Walk

Held last fall, the seventh annual Catwalk for Boston Medical Center Cancer Care raised more than \$450,000 for BMC cancer patients and their families. This fun event celebrates cancer survivorship. Fifteen cancer patients were the stars of the show, and four staff—including Chair of Surgery Jennifer Tseng, MD—played supporting roles on the runway. A lively crowd cheered on the models as they showcased beautiful ensembles by eight local designers and stylists



# **Surgery Education Office**

#### **SURGERY RESIDENCY PROGRAM**

Donald Hess, MD
Associate Chair for Education,
Program Director
Luise Pernar, MD
Associate Program Director

Teviah Sachs, MD, MPH Associate Program Director

Lana Ketlere, Residency Program Coordinator

#### SURGERY FELLOWSHIP PROGRAMS

Surgical Critical Care Fellowship
Tracey Dechert, MD, Program Director
Vascular and Endovascular Surgery Fellowship
Jeffrey Siracuse, MD, Program Director

#### **SURGICAL EDUCATION**

Douglas Jones, MD, Director

#### **PODIATRY RESIDENCY PROGRAM**

Hau Pham, DPM, *Program Director*David Negron, DPM, MBA, *Associate Program Director* 

#### **SURGERY CLERKSHIP**

Cullen Carter, MD, *Director*Tejal Brahmbhatt, MD, *Associate Director*Abdul Saied Calvino, MD, *Assistant Director, Roger Williams Medical Center*Patrick B. O'Neal, MD, *Assistant Director,* 

Veterans Affairs (VA) Boston Healthcare System
Melanie Gainsbury, 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

he 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 25).

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.

#### 2019 Surgery Residency Graduates

#### Olga Beresneva, MD

Colorectal Surgery Fellowship, Lahey Hospital and Medical Center

#### Christopher Graham, MD

Surgical Critical Care Fellowship, Hospital of the University of Pennsylvania

#### Elica Inagaki, MD

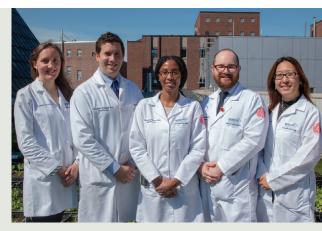
Vascular Surgery Fellowship, University of Pittsburgh Medical Center

#### Andrew McChesney, MD

Vascular Surgery Fellowship, Eastern Virginia Medical College

#### Rumbidzayi Nzara, MD

Minimally Invasive and Bariatric Surgery Fellowship, University of Maryland



2019 Surgery Residency graduates (from left): Olga Beresneva, Christopher Graham, Rumbidzayi Nzara, Andrew McChesney, and Elica Inagaki.

#### **Current Residents**

#### PGY1 Categorical

Brendin Bealieu-Jones. MD Geisel School of Medicine at Dartmouth

Priyanka Chugh, MD

Cooper Medical School of Rowan University

Maha Haggani, MD

Albert Einstein College of Medicine

Brenda Lin. MD

Keck School of Medicine of the University of Southern California

Gordana Rasic, MD

Eastern Virginia Medical School

#### Preliminary

Breyen Coffin, MD

Albert Einstein College of Medicine

Hai Hoang, MD

Wayne State University School of Medicine

Aaron Maybury, MD

Boston University School of Medicine

Kathryn Rosenthal, MD

Drexel University College of Medicine

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#### Anne Sailer, MD

Chicago Medical School at Rosalind Franklin University of Medicine & Science

Robert Walker, MD

Howard University College of Medicine

#### PGY 2

#### Categorical Nicole Cimbak, MD

Sidney Kimmel Medical College at Thomas Jefferson University

Loreski Collado, MD

Cooper Medical School of Rowan University

Allan Stolarksi. MD

Albany Medical College

Spencer Wilson, MD

University of North Carolina School of Medicine

Mark Zapata, MD

Medical College of Georgia at Augusta University

#### Preliminary

**Carolina Torres** Perez-Iglesias, MD

Universidad Peruana Cayetano Heredia Facultad de Medicina Alberto Hurtado

# PGY3

#### Categorical Sherif Alv. MD

Boston University School of Medicine

Nkiruka Arinze. MD

Vanderbilt University School of Medicine

Rebecca Hasley, MD

Drexel University College of Medicine

Megan Janeway, MD

Boston University School of Medicine

Olivia Humbarger, MD

Boston University School of Medicine

Lenee Plauche, MD

Boston University School of Medicine

#### PGY4

#### 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

#### PGY5

#### 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 Hachev, MD, MPH

The Warren Alpert Medical School at Brown University

Jian Zheng, MD

USF Health Morsani College of Medicine

#### **Current Fellows**

Surgical Critical Care Fellowship Jonathan Eldor, MD Tiffany Pinchinat, MD

Vascular and Endovascular Surgery Fellowship

Daniel Alfson, MD Brad Oriel, MD

#### **Current Podiatry Residents**

#### Lya Basha, DPM

Barry University School of Podiatric Medicine

#### Ashley Daniel, DPM

Barry University School of Podiatric Medicine

#### Samuel Caine, DPM

California School of Podiatric Medicine at Samuel Merritt University

#### PGY2

#### Daniel Reubens, DPM

Western University of Health Sciences College of Podiatric Medicine

#### PGY3

#### Maria Bolla, DPM

New York College of Podiatric Medicine

Heidi Fuller. DPM Des Moines University

**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

institutions, providing residents with a wealth of opportunities to

pursue their interests, develop as academic surgeons, and make

Center and other schools at Boston University, as well as other

The Warren Alpert Medical

Alik Farber, MD, MBA:

presentation, treatment, and

Na Eun Kim, MD

Rutgers Robert Wood Johnson Medical School

significant contributions.

Alaina Geary, MD

Research Mentor:

Luise Pernar, MD

of Medicine

Tufts University School

Area of Research: Building a

specific to general surgery

residents and suitable for

publication and national

dissemination. (Site: Boston

University School of Medicine).

Resident-as-Teacher program

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

School of Brown University Research Mentors:

Jeffrey Siracuse, MD **Area of Research:** Study of institutional, provider, and patient-related factors associated with disparities in critical limb ischemia

outcomes among a diverse, lowincome, 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:

Sabrina Sanchez, MD, MPH: Michael Siegel, MD, MPH (Boston University School of Public Health)

**Area of Research:** Examining firearm policy and injury prevention, as well as exploring the mental health and social ramifications of violent trauma. (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).

#### Michael Poulson, MD

Georgetown University School of Medicine

Research Mentor:

of Public Health).

Tracev Dechert, MD Area of Research: The role of social determinants of health, racial segregation, and racism on urban firearm injuries and other violent crimes. (Site: Boston University School of Medicine/School

#### **Visiting Professors**

The Department of Surgery was honored to welcome these surgical leaders as visiting professors during the 2018–2019 academic year.

Grasberger Research Symposium Lecture and Visiting Professorship

#### Caprice Greenberg, MD, MPH

Professor (Tenure) of Surgery and Morgridge Distinguished Chair in Health Services Research, University of Wisconsin School of Medicine and Public Health

#### Jacob Greenberg, MD, EdM

Associate Professor of Surgery, University of Wisconsin School **Boston Medical Center Visiting** Professorship in Vascular Surgery (Fall 2018)

#### M. Ashraf Mansour, MD

Professor of Surgery and Chair, Department of Surgery, West Michigan State University College of Human Medicine Vice President and Academic Chair of

Surgery, Spectrum Health Medical Group

bumc.bu.edu/surgery

Attending Vascular Surgeon, Spectrum Health's Butterworth and Blodgett Hospitals

**Boston Medical Center Visiting** Professorship in Vascular Surgery (Spring 2019)

#### Sean P. Roddy, MD

Surgery, Albany Medical College Chief, Division of Vascular Surgery, Ellis Hospital

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

#### Deborah Kuhls, MD

Professor of Trauma and Critical Care, Department of Surgery, University of Nevada, Las Vegas School of Medicine Peter J. Mozden Visiting Professorship in Surgical Oncology

#### Jen Jen Yeh, MD

Professor, Division of Surgical Oncology, Department of Surgery; Professor, Department of Pharmacology; Vice Chair of Research, Department of Surgery, University of North Carolina School of Medicine

of Medicine and Public Health

Professor of Surgery, Department of

Medical Director, Karmody Vascular Laboratory, Albany Medical Center Hospital

BUSM/BMC Department of Surgery Annual Report 2019

#### **Resident News**



MAUNIL BHATT, MD, presented grand rounds at the University of Massachusetts Medical School on "The Design and Implementation of an Esophageal

Cancer Screening Program and Trauma System in Rural India" and made podium presentations at the American Association for the Surgery of Trauma Meeting in San Diego and the International Society for Diseases of the Esophagus Conference in Vienna. Dr. Bhatt also had a paper published in *The Annals of Thoracic Surgery*.



MATTHEW EGYUD, MD, and KRISTA HACHEY, MD, MPH, were selected

by third-year medical students for the annual senior resident teaching award. "He went out of his way to involve us without being asked—even on busy days, which I appreciated because as medical students it's really easy to feel in the way," said one student

about Dr. Egyud. Another student said of Dr. Hachey: "She was one of the kindest residents I have ever worked with. I thought to myself, 'I hope I'm like that when I'm a resident.'"



REBECCA HASLEY, MD, received the Surgical Critical Care Award, which is presented to the junior resident who has excelled in the management of critically ill surgical patients.



**ALAINA GEARY, MD**, was named Boston Medical Center SOAR (Surgical Outcomes Analysis & Research) Administrative Resident. Dr. Geary will direct the department's residency education efforts, including a twice-monthly research conference.



**CURTIS HON, MD**, was selected by third-year medical students for the annual junior teaching award. One student said, "I learned much more on my colorectal rotation

than I would have otherwise—all due to Dr. Hon." Another said, "What makes him stand out is that he is able to involve the medical students and delegate tasks appropriately. It made my on-call shifts very stimulating. Teamwork comes very naturally to Dr. Hon."



CHRISTOPHER GRAHAM, MD, received the Lester F. Williams, Jr. Teaching Award, established in honor of Dr. Williams, a former Chief of the Department of Surgery at

teacher of medical students. Each year, Boston University's third-year medical students nominate a graduating chief surgical resident who best exemplifies Dr. Williams' dedication to teaching. One medical student said, "Chris Graham perfectly embodies all the qualities of a good teacher and role model. He forced students to think through patient issues and fostered a great learning environment." From another, "Dr. Graham was born to teach!"

Boston Medical Center, and a pre-eminent



**NA EUN KIM, MD**, was first author on a paper published in *Annals* of *Surgery* about the underutilization of retired surgeons as mentors, and a poster on "Benefits

and Risks of Venous Thromboembolism Prophylaxis in Patients Undergoing Breast Surgery" was accepted as a Poster of Distinction by the New England Surgical Society. In addition, as vice president of residents and trainees for the Global Surgery Student Alliance, Dr. Kim helped create the first global surgery database, providing a resource of potential global surgery opportunities and collaborations, ranging from research and advocacy to policy and on-the-ground endeavors.



SCOTT LEVIN, MD,

was first author of four papers published or in press in the following journals: Journal of Vascular Surgery, Trends in Cardiovascular Medicine,

and Annals of Vascular Surgery. Dr. Levin made oral presentations at the Vascular Annual Meeting, the Society of Clinical Vascular Surgery 47th Annual Symposium, and the Vascular Surgery Group of New England Spring Meeting. In addition, Dr. Levin was a finalist in the New England Society of Vascular Surgery (NESVS) Deterling & Darling Award Competitions for two abstracts, which he will present

at the NESVS annual meeting. Dr. Levin also received second prize in the poster presentation competition at the Program for Advanced Limb Preservation.



JUAN MUNOZ, MD, a preliminary PGY2 resident, had papers published or accepted for publication in *Tumori*, Journal of Cardiovascular Surgery, and Annals of

Thoracic Surgery. Dr. Munoz is currently a PGY3 resident at the University of Alabama at Birmingham School of Medicine.



ANDREW MCCHESNEY, MD, received the Senior Mentorship Award. Based on nominations by general surgery first-year residents, this award is presented to the senior

resident who has contributed to resident education and development by combining leadership, empathy, and integrity within his or her practice.



MIRIAM NEUFELD,
MD, was the inaugural
recipient of the Boston
Trauma Institute pilot
grant. Dr. Neufeld is
studying the utilization
and efficacy of

psychosocial services for female victims of violent trauma under the mentorship of trauma surgeon **Sabrina Sanchez**, **MD**, **MPH**; **Lisa Allee**, **MSW**, **LICSW**, and Michael Siegel, MD, MPH (Boston University School of Public Health). Dr. Neufeld presented at the American College of Surgeons Clinical Congress and had two papers accepted for publication in *American Journal of Public Health* and *Journal of Surgery*.



JACOB NUDEL, MD, gave a podium presentation entitled "Artificial Intelligence and Machine Learning Models Predict Gastrointestinal Leak after Bariatric Surgery" at

the American College of Surgeons Quality and Safety Conference.



michael Poulson, MD, was named the Resident and Associate Society Liaison Representative to the American College of Surgeons Legislative Committee for a three-

year term and will also serve as the Advocacy Chair for the Center for Health Equity, Diversity, and Inclusion at Boston Medical Center.



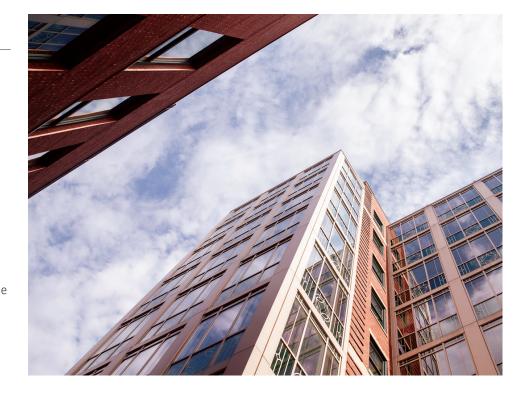
ALLAN STOLARSKI, MD, together with fellow BMC residents Olga Beresneva, MD, and Benjamin Nelson, MD, took first place as the

Top Gun Surgery team during the American College of Surgeons Massachusetts Chapter Meeting. Dr. Stolarski made a podium presentation at the Association for Surgical Education Meeting and an e-poster presentation at the Society of American Gastrointestinal and Endoscopic Surgeons Annual Meeting.



SPENCER WILSON, MD, made a poster presentation on "Implementation of a Quality Improvement Project for Frail Surgical Geriatric Patients in

an Urban Safety-Net Hospital" at the American College of Surgeons Quality and Safety Conference.



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.

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.

#### **Surgery Research Council**

The research council was created to oversee ongoing research and stimulate work in new areas of interest. Members meet on a regular basis and provide advice, quidance, and mentorship to faculty and residents in the department who are engaged in research.

- Alaina Geary, MD (resident member)
- Tony Godfrey, PhD
- Donald Hess, MD (ex officio)
- Douglas Jones, MD
- Kelly Kenzik, MS, PhD (quest faculty) University of Alabama at Birmingham
- Marina Malikova, PhD, MSci, MA
- Amy Rosen, PhD
- Teviah Sachs. MD. MPH
- Jeffrey Siracuse, MD
- Jennifer Tseng, MD, MPH (ex officio)
- Christina Wee, MD, MPH (quest faculty) Beth Israel Deaconess Medical Center: Associate Professor of Medicine, Harvard Medical School

#### **Selected Grants**

#### **NEW**

**High-Performance Operating Room Team** (HPT) Pilot with Planned Adoption of HPT Construct Across all Surgery Specialties at **Boston Medical Center** 

Principal Investigator: Pamela Rosenkranz, RN, BSN, MEd

Sponsor: 2019 HealthTrust Innovation Grant

Grant amount: \$50.000

Reducing Postoperative Hospital Utilization through Improved Discharge Planning After Lower Extremity Revascularization

Principal Investigator: Douglas Jones, MD Sponsor: Vascular Study Group of New England Quality Improvement Project Award **Grant amount:** \$10,000

E.J. Wylie Traveling Fellowship

Principal Investigator: **Douglas Jones, MD** Sponsor: Society for Vascular Surgery

**Foundation** 

**Grant amount:** \$12,000

Custom Assays for Personalized, **Longitudinal Monitoring of Circulating** Tumor DNA Using PIPSenSeg

Principal Investigator: Tony Godfrey, PhD BU Co-Investigator: Anand Devaiah, MD Sponsor: National Institutes of Health/ National Cancer Institute

**Grant amount:** \$299,241

#### **ONGOING**

Prognostic Immune Score for Stage I Lung Adenocarcinoma

Principal Investigator: Kei Suzuki, MD 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

**Development of Diagnostic and Prognostic** Tests for Esophageal Adenocarcinoma Principal Investigator: Tony Godfrey, PhD BU Co-Investigator: Virginia R. Litle, MD Sponsor: National Institutes of Health/ National Cancer Institute

**Grant amount:** \$2,456,723

# Office of Surgical **Translational** Research

The Office of Surgical Translational Research: Operations and Compliance in the Department of Surgery is led by Assistant Professor of Surgery Marina Malikova, PhD, MSci, MA, and is responsible for clinical trials and basic biomedical research operations. macro-management of research programs, and providing guidance and oversight to the 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 and budget development, and post-award financial management. In addition, the office is responsible for developing and implementing adequate systems and procedures to ensure research quality control and compliance and efficient dayto-day research operations that meet the needs of the Department of Surgery.

# FOR MORE INFORMATION ABOUT OUR RESEARCH ACTIVITIES.

# Selected Clinical **Research Projects**

There are 150 open clinical research protocols in the Department of Surgery managed by dedicated teams of researchers in state-ofthe-art facilities within Boston University School of Medicine/ Boston Medical Center. The chart at right indicates the range of research conducted in the department.

#### **Selected Clinical Trials** Currently Open for Enrollment

#### **DIVISION OF TRAUMA SURGERY AND** CRITICAL CARE

Early and Adequate Protein Feeding Post-Traumatic Injury

Principal Investigator: Peter Burke, MD Sponsor: NIH/National Institute of Diabetes and Digestive and Kidney Diseases

#### **DIVISION OF GENERAL SURGERY,** SECTION OF SURGICAL ONCOLOGY AND **ENDOCRINE SURGERY**

Comparison of Outcomes of Antibiotic Drugs and Appendectomy (CODA) Trial Principal Investigator: Thurston Drake, MD Co-Investigator: Sabrina Sanchez, MD, MPH Sponsor: Patient-Centered Outcomes Research Institute (PCORI)

#### **DIVISION OF VASCULAR AND ENDOVASCULAR SURGERY**

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

Executive Chair: Alik Farber, MD, MBA Sponsor: NIH/National Heart, Lung and **Blood Institute** 

#### DEPARTMENT OF SURGERY PORTFOLIO OF CLINICAL RESEARCH PROJECTS (N=150), FY 2019



#### **Standard Versus Negative Pressure** Vacuum Dressings (PICO) in Lower-Extremity Bypass Patients (PICO-LEB) Principal Investigator:

#### Jeffrey Siracuse, MD

Sponsor: Smith and Nephew

**Predicting the Safety and Effectiveness** of Inferior Vena Cava Filters (PRESERVE) Principal Investigator: **Jeffrey Kalish**, **MD** Sponsor: HealthCore (formerly New England Research Institute)

A multi-center prospective study to evaluate the safety and effectiveness of the VasQ external support for arteriovenous fistula

Principal Investigator: Alik Farber, MD, MBA Sponsor: Laminate Inc.

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

**DIVISION OF PODIATRY SURGERY** 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 Sponsor: Integra Life Sciences Corporation

#### SECTION OF MINIMALLY INVASIVE AND WEIGHT LOSS SURGERY Bone Metabolism in Adolescents

**Undergoing Bariatric Surgery** Site Principal Investigator:

# Brian Carmine, MD

Principal Investigator:

#### Madhusmita Misra. MD

Sponsor: National Institute of Diabetes and Digestive and Kidney Diseases

PLEASE VISIT OUR WEBSITE: BUMC.BU.EDU/SURGERY (SURGICAL RESEARCH).

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#### **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 160 articles published in peer-reviewed journals and 19 published books or book chapters.

#### **Selected Papers**

Chronic Limb-Threatening Ischemia. Farber A. N Engl J Med. 2018

Venous Thromboembolism Events After Thoracic Surgery: Global Steps Toward Prevention. Van Haren RM, Litle VR. J Thorac Dis. 2018

Neoadjuvant Therapy Affects Margins and Margins Affect All: Perioperative and Survival Outcomes in Resected Pancreatic Adenocarcinoma. deGeus SWL, Kasumova GG, **Sachs TE**, Ng SC, Kent TS, Moser AJ, Vahrmeijer AL, Callery MP, **Tseng JF**. HPB, 2018

**Detection of Circulating Tumor** DNA in Plasma: A Potential Biomarker for Esophageal Adenocarcinoma **Egyud M,** Tejani M, Pennathur A, Luketich J, Sridhar P, Yamada E, Ståhlberg A, Filges S, Krzyzanowski P, Jackson J, Kalatskaya I, Jiao W, Nielsen G, Zhou Z, **Litle V**, Stein L, **Godfrey T**. Ann Thorac Surg. 2019

Plasma Circulating Tumor DNA as a Potential Tool for Disease Monitoring in Head and Neck Cancer. Egyud M, Sridhar P, Devaiah A, Yamada E, Saunders **S**, Ståhlberg A, Filges S, Krzyzanowski P, Kalatskaya I, Jiao W, Stein LD, Jalisi S, **Godfrey TE**. Head Neck. 2019

Resident-as-Teacher Programs in General Surgery Residency: Context and Characterization. Geary A, Hess DT, Pernar LIM. Am J Surg. 2019

Comparison of Risk-Standardized Readmission Rates of Surgical Patients at Safety-Net and Non-Safety-Net Hospitals Using Agency for Healthcare Research and Quality and American Hospital Association Data. Talutis SD, Chen Q, Wang N, Rosen AK. JAMA Surq. 2019

(Anatomic) Territory: Evaluating the Impact of Surgeon Operative Mix on Patient Outcomes After Pancreaticoduodenectomy. Hachev K. Morgan R. Rosen A. Rao SR, McAneny D, Tseng J. Doherty G, **Sachs T**. Ann Surg Oncol. 2018

Quality Comes with the

Tumor Lysis Syndrome After Bilobectomy for Typical Carcinoid Tumor of the Lung. Shin TH, **Inagaki E**, Ganta T, Hartshorn K, Litle VR, Suzuki K. Ann Thorac Surq. 2019

Impact of Race. Insurance Status, and Primary Language on Presentation. Treatment. and Outcomes of Patients with Pancreatic Adenocarcinoma at a Safety-Net Hospital. **Sridhar** P. Misir P. Kwak H. deGeus SW. Drake FT, Cassidy MR, McAneny DA, Tseng JF, Sachs TE. J Am Coll Surg. 2019

Differences in Patient Selection and Outcomes Based on Abdominal Aortic Aneurysm Diameter Thresholds in the Vascular Quality Initiative. Jones DW, Deery SE, Schneider DB, Rybin DV, **Siracuse JJ, Farber** A. Schermerhorn ML. J Vasc Surg. 2019



Broad Variation in Prosthetic Conduit Use for Femoral-popliteal Bypass Is Not Justified on the Basis of Contemporary Outcomes Favoring Autologous Great Saphenous Vein. **Humbarger O**, Siracuse JJ, Rybin D, Stone DH, Goodney PP, Schermerhorn ML, Farber A, Jones DW. J Vasc Surg. 2019

Educator and Trainee Perspectives Cohort with Long-term, on the Need for a "Real World" Curriculum in General Surgery. **Sridhar P, Sanchez SE**, DiPasco PJ. Novak L. **Dechert T. Brahmbhatt TS**. J Surg Res. 2019

A Comparison of Alcohol Positive and Alcohol Negative Trauma Patients Requiring an Emergency Laparotomy, Benson C. Weinberg J. Narsule CK, Brahmbhatt TS. Am J Emerg Med. 2018

Settling the Controversy— Appendectomy as the Criterion for Appendicitis Diagnosis. Kristo G, Itani KMF. JAMA Surg. 2018

Risk Assessment of Significant Upper Extremity Arteriovenous Graft Infection in the Vascular Ouality Initiative. Levin SR, Farber A, Cheng TW, Arinze N, Jones **DW, Kalish JA**, Rybin D, **Siracuse JJ**. J Vasc Surg. 2019

The Association of Primary Language With Emergency General Surgery Outcomes Using a Statewide Database. Feeney T, Sanchez SE, Tripodis Y, Brahmbhatt TS. Schulze R. Burke P, Dechert T, Drake FT. J Surg Res. 2019

Laparoscopic Adrenalectomy for Metastatic Disease: Retrospective Comprehensive Follow-up Drake FT, Beninato T, Xiong MX, Shah N, Kluijfhout WP, Suh I, Gosnell JE. Shen WT. Duh OY. Surgery. 2019

Socioeconomic Status Affects Access to Ambulatory Cholecystectomy. Megan Janeway MD, Amy Rosen PhD, Gregory Patts, Eric Jones, **Lisa** Allee, Karen Lasser MD, MPH, Tracey Dechert MD, FACS. Journal of the American College of Surgeons (JACS). 2019

Perioperative Outcomes after Lower Extremity Bypass and Peripheral Vascular Interventions in Patients with Morbid Obesity and Superobesity. Arinze N, Farber A, Levin SR, Cheng TW, Jones DW, Patel VI, Rybin D, Doros G, **Siracuse JJ**. J Vasc Surg. 2019



# Help Us Build a Healthier Future for All

Philanthropic gifts can make a significant difference in the lives of those we serve through patient care, research, and education. Our goal is to build a healthier future for all.

We need your support to help fund:

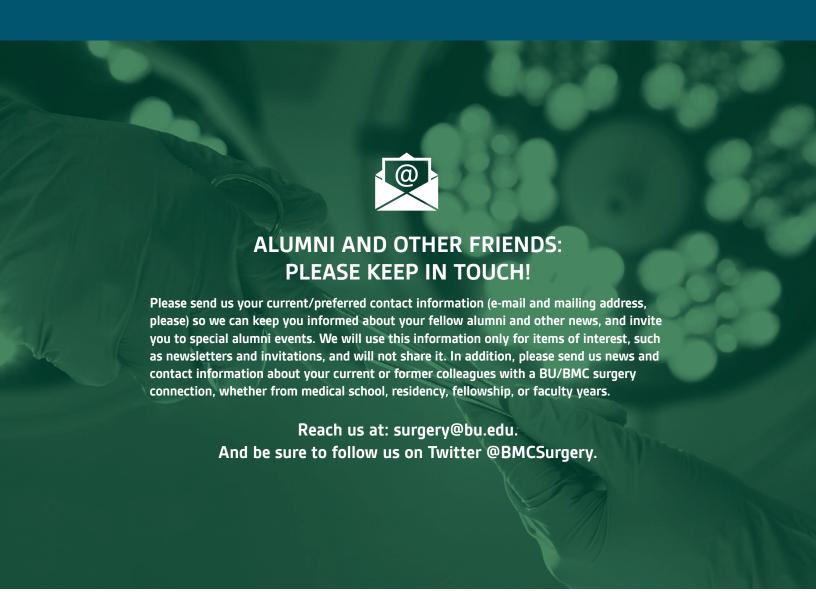
- Clinical services that meet the needs of all our patients, including those who are underserved
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- Innovative educational initiatives to prepare surgeons for a rapidly changing world
- Research and initiatives to understand and reduce disparities in surgical care

#### Please support us by making a gift to the Department of Surgery.

Use the enclosed postage-paid envelope to mail your gift, or give online at: development.bmc.org. When giving online, please select the "Department of Surgery" to make sure your gift is directed to us.

For more information about supporting the Department of Surgery, contact the Boston Medical Center Development Office at 617-383-8990 or development.bmc.org.

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