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

ANNUAL REPORT 2022

The Future of Surgery





Introduction

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The Department of Surgery By the Numbers



ON THE COVER: The 2022–2023 General Surgery categorical interns.

Message from the Chair



he summer of 2022 marks the beginning of a new academic year, and for me, my five-year anniversary as Chair of Surgery at Boston University School of Medicine (BUSM) and Surgeon-in-Chief at Boston Medical Center (BMC). At the time I started, the chief residents who graduated this June were early in their training. Now I have the opportunity to watch our newest class of categorical interns, pictured on the cover,

traverse their training from day one to graduation.

Our six categorical and four preliminary general surgery interns reflect the changes taking place in the residency pipeline and the future face of surgery. For the first time, our intern class includes an active-duty member of the military. We are honored to participate in the military match, which will eventually increase the BMC Surgery graduating chief residents from five to six per year.

Dedication and excellence in teaching and mentoring led to Tejal Brahmbhatt, MD, Chief of Surgical Critical Care, being named BUSM 2022 Clinical Educator of the Year. BUSM has more than 1,900 fulltime faculty, so it is indeed an honor. Other department faculty play an active role in the evolution of surgical education assessment. Residency Director Donald Hess, MD, and Associate Program Director Luise Pernar, MD, MHPE, participate in the American Board of Surgery's Entrustable Professional Activities Project, focused on developing a more structured model to evaluate trainees' skills.

Within our residency and throughout the Department of Surgery, we seek to embody, rather than give superficial attention to, diversity, equity, and inclusion (DEI). Last November, we were honored to host renowned heart-lung transplant surgeon Robert Higgins, MD, MSHA, as our inaugural DEI visiting professor. Dr. Higgins, former Surgeon-in-Chief at the Johns Hopkins Hospital and the first Black physician to chair any department in the Johns Hopkins University School of Medicine, is now President of Brigham and Women's Hospital. We look forward to hosting Andrea Hayes, MD, Chair of Surgery at Howard University College of Medicine, as our second DEI visiting professor in November 2022.

Inclusion has been the focus of our Center for Transgender Medicine and Surgery (CTMS), highlighted in this report, since its founding in 2016. The CTMS was the first program of its kind in Boston. In service of the greater good for all patients, our surgeons helped train their colleagues at other local hospitals, which have subsequently opened their own centers.

This collegial spirit is just one of the many things that make BMC/ BUSM great and why I feel very lucky to have this job. I look forward to the next five years, with the fervent hope that the future does not hold another pandemic, but the sure knowledge that BMC can weather unexpected storms.

Jennih Try

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

Boston Medical Center

oston Medical Center (BMC) is a not-for-profit, 514-bed academic medical center. BMC is the largest safety-net hospital and busiest trauma and emergency services center in New England. Located in Boston's historic South End, BMC is the primary teaching hospital of the Boston University School of Medicine and was created by the 1996 merger of Boston City Hospital (founded in 1855) and Boston University Medical Center Hospital (founded in 1864). BMC operates 66 residency training programs, with 729 resident and fellowship positions.

A recognized leader in groundbreaking medical research, BMC is the 13th largest recipient of funding from the National Institutes of Health among independent hospitals. The hospital currently oversees more than 565 research and service projects separate from research activities at Boston University School of Medicine.

The Department of Surgery

he Department of Surgery has historic roots that extend back 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.

Among the surgeons who 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 Becker, and Gerard Doherty. In July 2017, Jennifer F. Tseng, MD, MPH, was recruited as Chair and James Utley Professor of Surgery at BUSM and Surgeon-in-Chief at Boston Medical Center (BMC).

The Department of Surgery comprises 14 divisions and sections, and includes 66 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, Cape Cod Hospital (Cape Cod Healthcare), and St. Elizabeth's Medical Center. These institutions are valued partners in teaching and training medical students and residents. Three other hospitals also actively participate in the third-year surgery clerkship: MetroWest Medical Center, Berkshire Medical Center, and Kaiser Permanente Santa Clara.

This report highlights a few of the many accomplishments and activities of our faculty, trainees, and alumni during the previous academic year (July 1, 2021, through June 30, 2022). We invite you to visit our website (bumc.bu.edu/surgery) and follow us on Twitter and Instagram (@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



Alik Farber, MD, MBA Associate Chair, Clinical Operations Associate Chief Medical Officer for Surgical Services, Boston Medical Center



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



Joanne Favuzza, DO Director, Surgery Clerkship



Kevin T. Hart, MBA Senior Administrative Director Departments of Surgery and Urology



David McAneny, MD Chief Medical Officer, Boston Medical Center Associate Dean for Clinical Affairs, Boston University School of Medicine Immediate Past Vice Chair of Surgery



Tracey Dechert, MD Chief, Section of Acute Care and Trauma Surgery



Tejal Brahmbhatt, MD Chief, Section of Surgical Critical Care

Niloo Edwards, MD Chief, Division of Cardiac Surgery



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

Christopher Muratore, MD Chief, Section of Pediatric Surgery





Hau Pham, DPM Chief, Division of Podiatry Surgery



Teviah Sachs, MD, MPH Chief, Section of Surgical Oncology



F. Thurston Drake, MD, MPH Chief, Section of Endocrine Surgery



Laurence Brinckerhoff, MD Chief, Division of Thoracic Surgery



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



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

Tracey Dechert, MD

Section Chief, Acute Care and Trauma Surgery Associate Professor of Surgery, Boston University School of Medicine

Tejal Brahmbhatt, MD

Section Chief, Surgical Critical Care Assistant Professor of Surgery, Boston University School of Medicine

Lisa Allee, MSW, LICSW

Assistant Professor of Surgery, Boston University School of Medicine

Peter Burke, MD

Professor of Surgery, Boston University School of Medicine

Abraham Jaffe, MD

Assistant Professor of Surgery, Boston University School of Medicine

Pei-Wen Lim, MD, MS

Assistant Professor of Surgery, Boston University School of Medicine

Aaron Richman, MD

Assistant Professor of Surgery, Boston University School of Medicine

Noelle Saillant, MD

Associate Professor of Surgery, Boston University School of Medicine*

Sabrina E. Sanchez, MD, MPH

Director of Faculty Development Assistant Professor of Surgery, Boston University School of Medicine

Dane Scantling, DO

Assistant Professor of Surgery, Boston University School of Medicine

Sheina Theodore, MD

Assistant Professor of Surgery, Boston University School of Medicine*

Crisanto Torres, MD, MPH

Assistant Professor of Surgery, Boston University School of Medicine*

Kathryn Twomey, MD

Assistant Professor of Surgery, Boston University School of Medicine

Cardiac Surgery

Niloo Edwards, MD

Division Chief Professor of Surgery, Boston University School of Medicine

Alexandros Karavas, MD

Associate Professor of Surgery, Boston University School of Medicine*

Colon and Rectal Surgery

Olga Beresneva, MD

Assistant Professor of Surgery, Boston University School of Medicine

Joanne Favuzza, DO

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

Joshua Davies, MD Assistant Professor of Surgery, Boston University School of Medicine

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

Pediatric Surgery

Christopher Muratore, MD Section Chief Professor of Surgery, Boston University School of Medicine*

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

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

Plastic and **Reconstructive Surgery**

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

Daniel Roh, MD, PhD Laszlo N. Tauber 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 Assistant Professor of Surgery, Boston University School of Medicine

Justin Ogbonna, DPM Assistant Professor of Surgery, Boston University School of Medicine

Elizabeth Sanders, DPM Assistant Professor of Surgery, Boston University School of Medicine

Wei Tseng, DPM Assistant Professor of Surgery, Boston University School of Medicine

Vitaliy Volansky, DPM Assistant Professor of Surgery, Boston University School of Medicine

Surgical Oncology and **Endocrine Surgery**

Teviah Sachs, MD, MPH Section Chief, Surgical Oncology Associate Professor of Surgery, Boston University School of Medicine

F. Thurston Drake, MD, MPH Section Chief, Endocrine Surgery Associate Professor of Surgery, Boston University School of Medicine

Michael R. Cassidy, MD Medical Director, Belkin Breast Health Center Assistant Professor of Surgery, Boston University School of Medicine

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

Andrea Merrill, MD 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

Laurence Brinckerhoff, MD Division Chief Clinical Professor of Surgery, Boston University School of Medicine*

Christopher Digesu, MD Assistant Professor of Surgery, Boston University School of Medicine*

Transplant Surgery

Jeffrey Cooper, MD Division Chief Associate Professor of Surgery, Boston University School of Medicine*

Sayeed Malek, MD Clinical Director of Transplant Surgery, Brigham and Women's Hospital Assistant Professor of Surgery, Harvard Medical School

Sarah Meade, DO Assistant Professor of Surgery, Boston University School of Medicine

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

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

Elizabeth King, MD Assistant Professor of Surgery and Radiology, Boston University School of Medicine

Jeffrey Siracuse, MD, MBA Associate Professor of Surgery and Radiology, Boston University School of Medicine

* Recommended fo

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

Kelly Kenzik, PhD, MS Associate Professor of Surgery, Boston University School of Medicine*

Marina Malikova, PhD, MSci, MA Executive Director, Surgical Translational Research Assistant Professor of Surgery, Boston University School of Medicine

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

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

Sing Chau Ng, MS Staff Biostatistician Administrative Director Surgical Outcomes Analysis & Research

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

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

Maureen Kavanah, MD Assistant Professor Emeritus of Surgery, Boston University School of Medicine

CAPE COD HOSPITAL (CAPE COD HEALTHCARE)

Lawrence Novak, MD Surgery Residency Program Director

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

ROGER WILLIAMS MEDICAL CENTER

N. Joseph Espat, MD, MS

Chair, 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 Associate Director, Boston University School of Medicine Surgery Clerkship

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

SAINT ELIZABETH'S MEDICAL CENTER

Claudius Conrad, MD, PhD, PhD Professor of Surgery, Boston University School of Medicine*

Mark F. Conrad, MD, MMSc Professor of Surgery, Boston University School of Medicine*

Richard B. Freeman, Jr., MD Professor of Surgery, Boston University School of Medicine



Eduardo Vega, MD

Assistant 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

Gentian Kristo, MD, MPH

Adjunct Clinical Instructor of Surgery, Boston University School of Medicine Director, Boston University Anesthesia/Surgery Internship

Patrick B. O'Neal, MD

Assistant Professor of Surgery, Boston University School of Medicine Associate Director, Boston

University School of Medicine Surgery Clerkship

Vivian E. Sanchez, MD

Assistant Professor of Surgery and Assistant Dean for Student Affairs, Boston University School of Medicine

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

Associate Professor of Surgery, Boston University School of Medicine

Research

Hillary Mull, PhD, MPP

Associate Professor of Surgery, Boston University School of Medicine

Amy Rosen, PhD

Professor of Surgery, Boston University School of Medicine

* Recommended for

Faculty News



Tejal Brahmbhatt, MD, Acute Care and Trauma Surgery/Surgical Critical Care, was promoted to Chief of Surgical Critical Care, Medical Director of the Surgical Intensive

Care Unit, and Program Director for the Surgical Critical Care Fellowship. Dr. Brahmbhatt was inducted into the Boston University chapter of Alpha Omega Alpha and was named as the Boston University School of Medicine 2022 Clinical Educator of the Year; he also received Boston Medical Center's Annual Exceptional Care Award. Over the course of the year, he gave grand rounds at South Shore Hospital; Texas Tech University Health Sciences Center; and Kaiser Permanente San Francisco. Dr. Brahmbhatt was an invited speaker at DIA Europe 2021 and the 2022 Society of Interventional Radiology Annual Scientific Meeting, as well as the United States Navy and Jordanian Royal Medical Services Trauma Surgery Subject Matter Expert Exchange. He was a moderator during the annual meeting of the American Association for the Surgery of Trauma and Clinical Congress of Acute Care Surgery and also served as a moderator for the 2022 Annual Academic Congress. Additionally, Dr. Brahmbhatt was a panelist during the Eastern Association for the Surgery of Trauma Scientific Assembly. Over the last year, he had papers published in the following journals: Journal of Surgical Education, Annals of Vascular Surgery,



Journal of Surgical Research, American Journal of Surgery, Annals of Thoracic Surgery, and Journal of Vascular Surgery.

Tracey Dechert, MD,

was promoted to Chief of Acute Care and Trauma Surgery at Boston Medical Center. Dr. Dechert was also appointed Chair of the American College of Surgeons Massachusetts Committee on

Trauma. Additionally, she participated in a panel discussion organized by the Women of Kuwait's Young Scalpels Bootcamp, which focused on surgeons as leaders as well as health advocacy and socially responsible surgeons.



F. Thurston Drake, MD, MPH, was promoted to Associate Professor of Surgery at Boston University School of Medicine and Chief of Endocrine Surgery. He

was invited to join the editorial board of the Journal of Surgical Research; an article in this journal co-authored by Dr. Drake on management of incidental radiographic findings was selected for the cover image of the January 2022 issue. As the

inaugural Beazley Scholar in Surgical Science, he directs the PGY1 Academic Elective for first-year residents, which provides a dedicated month focused on scholarly pursuits under one-on-one mentorship from a member of the faculty.



Niloo Edwards, MD, Chief of Cardiac Surgery, authored a chapter on valvular heart disease in the eighth edition of *Hazzard's* Geriatric Medicine

and Gerontology. He also co-authored papers in the following journals: Journal of Cardiac Surgery, Seminars in Thoracic and Cardiovascular Surgery, The American Journal of Surgery, Critical Care Explorations, and Journal of Thoracic and Cardiovascular Surgery.



Chief of Vascular and Endovascular Surgery, was designated as Associate Chief Medical Officer for Surgical Services at Boston

Medical Center. Dr. Farber was chosen as the Treasurer of the Massachusetts Chapter of the American College of Surgeons and was elected Secretary of the Society for Clinical Vascular Surgery. Over the course of the year, he published more than 25 articles in JAMA Surgery, Annals of Surgery, and other top-tier journals.



Donald Hess, MD, Chief of Minimally Invasive and Weight Loss Surgery, was senior author of a paper in Surgery for Obesity and Related Diseases that was selected by the American

Society for Metabolic & Bariatric Surgery as the article-read for category 1 CME credit. He also co-authored a well-received paper in The American Surgeon with Luise Pernar MD, MHPE, on creating a welcoming surgery residency training program for LGBTQ trainees.



Marina Malikova, PhD, MSci, MA, Executive Director of Surgical Translational Research, was an invited speaker for a Weill Cornell Medical College webinar focused

on investigational new drug applications and regulatory updates. She was also an invited speaker for Tufts University Center for the Study of Drug Development webinars that centered on pharmaceutical product development and clinical trial design. Additionally, Dr. Malikova was an invited speaker at an International Society of Pharmacovigilance (ISoP) Medical Devices Special Interest Group (SIG) meeting and the 13th Annual Clinical Operations Executives (SCOPE) Summit. Dr. Malikova published clinical reviews in Therapeutic Advances in Drug Safety and International Journal of Clinical Trials, and also authored two textbook chapters.



David McAneny, MD, was appointed Chief Medical Officer and Senior Vice President for Clinical Affairs at Boston Medical Center and the Associate Dean for

Clinical Affairs at Boston University School of Medicine. He is the current President of the Boston Surgical Society and was elected to the New England Surgical Society Executive Committee. In addition, Dr. McAneny chaired an international committee for the American Venous Forum to identify new risk factors for venous thromboembolism and to modify existing factors. Over the course of the year, he co-authored 11 publications in high-impact journals.



high-impact journals.



teacher program curriculum.

Boston University School of Medicine Promotions



F. Thurston Drake, MD, MPH Associate Professor of Surgery



Hillary Mull, PhD, MPP Associate Professor of Surgery

Andrea Merrill, MD,

Surgical Oncology, became a fellow of the American College of Surgeons. Dr. Merrill authored or co-authored articles published in Annals of Surgery, American Journal of Surgery, NEJM Evidence, and other

Luise Pernar, MD,

MHPE, Minimally Invasive and Weight Loss Surgery, completed the American College of Surgeons (ACS) Certificate in Applied Surgical Education Leadership (CASEL) program. She was involved in research projects that were presented at the Society of American Gastrointestinal and Endoscopic Surgeons Annual Meeting and Surgery Education Week. She was also co-author of 10 papers, which were published in JAMA Network Open, Journal of Surgical Education, American Journal of Surgery, Journal of Gastrointestinal Surgery, Obesity Surgery, Surgical Endoscopy, and American Surgeon. Dr. Pernar co-led a workshop on the use of storytelling in presenting research findings at Surgery Education Week. She was appointed to the Association of Surgical Education Development Committee and the Massachusetts Chapter of the ACS Program Committee. She was also selected to be part of the American Board of Surgery Entrustable Professional Activities (EPA) writing group. Dr. Pernar gave grand rounds for the University of Oklahoma, the VA Hospital network, the New England Endocrine Alliance, and Baystate Medical Center. She won the Tools of the Trade Workshop competition at the Association of Program Directors Annual Meeting for her resident-as-



Daniel Roh, MD, PhD,

Plastic and Reconstructive Surgery, received a grant from the American Federation for Aging Research that will focus on delineation of beneficial and

detrimental roles of senescent cells in impaired wound healing as individuals age. He was also selected as a National Institute on Aging Butler-Williams Scholar.



Pamela Rosenkranz, RN, BSN, MEd, Surgical Research and Education, co-authored articles published in the Journal of the American College of Surgeons and Current

Problems in Surgery, including an article focused on thrombosis prophylaxis in surgical patients using the Caprini Risk Score.



Elizabeth Sanders, DPM, Podiatry, gave a grand rounds lecture on limb salvage techniques to the general surgery residents at the University Teaching Hospital of Kigali (CHUK)

in Kigali, Rwanda, and co-authored a paper that was published in The Journal of Foot & Ankle Surgery.



Dane Scantling, DO, MPH, Acute Care and Trauma Surgery/Surgical Critical Care, won Best Manuscript (Modifiable factors related to firearm homicides: a broader

view of our lane) as well as the Cox Templeton Competition at the Eastern Association for the Surgery of Trauma Scientific Assembly. Dr. Scantling also made a presentation at the American Association for the Surgery of Trauma and co-authored 13 papers, several as first author, in JAMA Surgery and other high-impact journals.

Faculty News



Crisanto Torres MD, MPH, Acute Care and Trauma Surgery/ Surgical Critical Care, was honored for "Innovation in Education" by the

Society of Critical Care Program Directors for co-developing and codirecting a course in Health Care Equity in Critical Care while at The Johns Hopkins Hospital, prior to joining Boston Medical Center this year. Dr. Torres gave a talk to the Stanford University Critical Care Medicine Fellowship on health equity in critical care and was first author of two chapters in the 14th edition of Cameron's Current Surgical Therapy. He earned a Master of Public Health degree, graduating with high honors from the Johns Hopkins Bloomberg School of Public Health and was inducted into the Delta Omega Alpha honorary society for studies in public health.



Jennifer Tseng, MD, MPH, Surgical Oncology and Chair of Surgery, was installed as President of The Society for Surgery of the

Alimentary Tract (SSAT) at the SSAT annual meeting in May. She gave a keynote address at the International Hepato-Pancreato-Biliary Association Annual Meeting and at the Mexican Association of Surgery of the Digestive System Annual Meeting, and was also a Visiting Professor in the Department of Surgery at the Medical College of Wisconsin and at UCLA Harbor Medical Center, among other institutions.



Sam Lajoie, PA-C, (left) and Lauren Hartnett, PA-C, are the Lead Outpatient and Chief Inpatient Physician Assistants (PAs), respectively. Lajoie was promoted to Lead PA in 2022. He joined Boston Medical Center (BMC) in 2017 and oversees a group of 11 outpatient PAs. Cynthia Kiang, PA-C, is Chief PA for Cardiothoracic Surgery, and Katherine Mandicz, PA-C, serves as Lead PA for the Plastic Surgery team. Our BMC Surgery advanced practice providers are now eligible to apply for Boston University School of Medicine faculty positions in Medical Sciences & Education.

New Faculty



Clinical Professor of Surgery, Boston University School of Medicine*

Thoracic Surgery

named Chief of the Division of Thoracic Surgery in 2022. He is a graduate of Dartmouth Medical School and did his general surgery residency at the University of Virginia. Following a fellowship in cardiothoracic surgery at the University of Colorado, Dr. Brinckerhoff joined Tufts Medical Center as an attending surgeon and Tufts University School of Medicine as an Assistant Professor. In 2006, he was appointed Chief of Thoracic Surgery, and was later promoted to Associate Professor. He was appointed Surgery Clerkship Director for Tufts University School of Medicine in 2011, and was the recipient of the medical school's Excellence in Teaching Award on 10 occasions, as well as a host of other awards. These include the Leonard Tow Humanism in Medicine Award in 2015, given annually to one member of the faculty who excels in the delivery of care to patients and their families.



Christopher Digesu, MD Assistant Professor of

Surgery, Boston University School of Medicine* Thoracic Surgery

Dr. Digesu received his

medical degree from Columbia University College of Physicians and Surgeons and completed general surgery residency at Beth Israel Deaconess Medical Center (BIDMC), during which he also completed a research fellowship in surgical oncology at Brigham and Women's Hospital. He then completed a fellowship in cardiothoracic surgery at BIDMC in 2022. Dr. Digesu has honed his skills in clinical robotic thoracic surgery and completed the American Association for Thoracic Surgery (AATS) Robotics Fellowship, as

Laurence Brinckerhoff, MD

Dr. Brinckerhoff was



well as the prestigious AATS Leadership Academy. His research interests include clinical outcomes in patients with lung cancer and tracheobronchomalacia, as well as surgical health disparities. Dr. Digesu joined Boston Medical Center as an attending surgeon in September 2022.



Alexandros Karavas, MD Associate Professor of Surgery, Boston University School of Medicine*

Cardiac Surgery Dr. Karavas received his

medical degree from Humboldt University of Berlin – Charité in 1997. He did his internship in general surgery at Brigham and Women's Hospital and completed residency at St. Elizabeth's Medical Center in Brighton, Mass. This was followed by a fellowship in cardiothoracic surgery at Vanderbilt University Medical Center and a fellowship in aortic surgery at the Hospital of the University of Pennsylvania. Prior to joining Boston Medical Center, Dr. Karavas was a cardiothoracic surgeon in New York state, most recently with the Mohawk Valley Health System's Cardiac and Thoracic Surgery Group in Utica.





Associate Professor of Surgery, Boston University School of Medicine*

Surgical Research and Education

Dr. Kenzik received her doctoral degree in epidemiology from the University of Florida and also holds a master's degree in health behavior from the same institution. After receiving her PhD in 2013, she spent two years as a postdoctoral fellow at the University of Alabama at Birmingham (UAB). She then joined the UAB faculty as an Assistant Professor in the Division of Hematology and Oncology, where her research focused on understanding the impact of a cancer

Sheina Theodore, MD Assistant Professor of Surgery, Boston University School of Medicine* Acute Care and Trauma Surgery/Surgical



diagnosis on patient-reported outcomes and morbidity, mortality, and healthcare utilization in an aging cancer population. In January 2020, Dr. Kenzik became the inaugural Carter Visiting Scholar in Cancer Disparities at Boston Medical Center (BMC). She joined BMC as a research scientist in September 2022.

Noelle Saillant, MD

Associate Professor of Surgery, Boston University School of Medicine*

Acute Care and Trauma Surgery/Surgical Critical Care

Dr. Saillant received her medical degree from Boston University School of Medicine. She did her general surgery residency at Beth Israel Deaconess Medical Center (BIDMC) and completed a fellowship in trauma and surgical critical care at the Hospital of the University of Pennsylvania. She began her career as an attending surgeon at BIDMC before joining the Department of Surgery at Massachusetts General Hospital (MGH) in 2016. She won several awards for excellence in teaching from both MGH and Harvard Medical School, where she was a faculty member. Dr. Saillant's research focuses on traumatic injury, rib fixation, and coagulopathy, as well as surgical education. She has published more than 75 articles in peerreviewed journals and has presented her research nationally and internationally. Dr. Saillant joined Boston Medical Center as an attending surgeon in August 2022.

- Critical Care
- Dr. Theodore received her bachelor's degree, cum laude, from the City College

of New York, Sophie Davis School of Biomedical Education. She received her medical degree from Geisinger Commonwealth School of Medicine and went on to general surgery residency at Baystate Medical Center. Dr. Theodore completed a Surgical Critical Care fellowship at Boston Medical Center (BMC) in 2022 and will join BMC as an attending surgeon in fall 2022.



Crisanto Torres, MD, MPH Assistant Professor of Surgery, Boston University School of Medicine*

Acute Care and Trauma Surgery/Surgical Critical Care

Dr. Torres received his medical degree from the University of Tennessee Health Science Center and completed residency in general surgery at the University of Pittsburgh Medical Center in 2019. He went on to fellowships in surgical critical care medicine and in trauma and acute care surgery, both at The Johns Hopkins Hospital. Dr. Torres received a master's degree in public health, with a concentration in epidemiology and biostatistics, from the John Hopkins Bloomberg School of Public Health in 2022. While at Johns Hopkins, he served as Co-director for a new curriculum focused on healthcare equity in critical care. His research interests center on trauma outcomes, with specific interest in hemorrhage and hemorrhage control.



Alumni Profile: Elisha Brownson, MD

ost days, Elisha Brownson, MD, can be found at the Alaska Native Medical Center in Anchorage, where she is the Trauma Medical Director. But there are also times when she commutes to work on a plane. Surgeons in her team of 12 take turns visiting smaller Alaskan towns and villages. One of these is Utgiaġvik (formerly known as Barrow), 900 miles from Anchorage and the northernmost town in the United States.

Raised in Alaska, Dr. Brownson knew she would be returning to her home state upon completion of her surgery training. As a participant in a program

that paid her medical school tuition, she had a commitment to the state of Alaska to practice there for five years. After completing general surgery residency at Boston Medical Center (BMC) in 2015, she went on to a surgical critical care fellowship at Harborview Medical Center in Seattle, then on to Anchorage for her current job. She says she is very grateful that the attendings at BMC valued what she would be bringing back to Alaska and supported her, even tailoring some of her experiences with her future plans in mind.

The Alaska Native Medical Center, a Level II trauma center, is part of the

state's tribal health system and serves as a referral center for all tribal health facilities statewide. "My job description is very broad, and BMC was the best training I could have had for what I'm doing," says Dr. Brownson. "One of the great things about not having a lot of fellows is that the residents really gain senior skills." These included the great laparoscopy skills she learned from Donald Hess, MD, Chief of Minimally Invasive and Weight Loss Surgery. Similarly, endocrine surgeon and now Chief Medical Officer David McAneny, MD, was an excellent teacher in the realm of thyroid surgery, as was Maureen Kavanah, MD, (now retired) in surgical oncology.

One of a Kind

"I felt very confident in my operative trauma skills when I graduated from the program because of the volume and severity of cases and the amount of autonomy the trauma attendings gave us when we ran that service." Those attendings included Tracey Dechert, MD, Chief of Acute Care and Trauma Surgery (TACS), and Peter Burke, MD, who recently stepped down as TACS Chief. With such a solid foundation in trauma, she says she was able to finesse her skills to focus on burns as well as trauma policy and leadership during her fellowship at Harborview. She is now the only fellowship-trained surgeon with expertise in burns in the state of Alaska.

Dr. Brownson says, "I do mostly trauma and acute care surgery in my group, but I'm a general surgeon. I do screening colonoscopies, surgical oncology, and elective general surgery." Up to 60 percent of her patients are from outside Anchorage. In a typical scenario, a patient might be flown to the Alaska Native Medical Center to have their

gallbladder removed and flown back to their village a few days later.

"I love the trauma call, and the trauma team here extends beyond my hospital walls," says Dr. Brownson."It's working with the rural providers throughout the state and talking with them on the phone. I need to ask a lot of questions: 'Does the patient have access to running water? What kind of wound care can they do?'" In addition to her clinical responsibilities, she works on education and system training with rural providers.

Surgical Adaptation

One of the first calls that came in when Dr. Brownson was early in her career at the Alaska Native Medical Center was from a hospital 400 miles away with no general surgeon and a patient who had a stab wound to the abdomen. She told them to fly him down to her hospital, but quickly learned they were "weathered in," making that impossible. "I had to adapt. How do I manage a stab wound when I can't operate on the patient for a while?" She adds, "At BMC, a patient who has been stabbed might be in the trauma bay and in the OR within 30 minutes of being stabbed. The golden hour of trauma is not something that's always feasible here. There's a layer of complexity that is really fun and challenging."

"BMC's mission and philosophy were important to me in terms of where I knew I wanted to practice," says Dr. Brownson. "Our system at the Alaska Native Medical Center is different but the principles are the same, providing a high

standard of care to people who have limited access to care." All of her general surgery patients are Alaska Native people or American Indian, while approximately 10 percent of trauma patients are not. There are parallels in terms of late presentation of disease at both institutions as well as in the wide spectrum of cases. "At BMC, nothing was too out there. We just broke it down-what next, what next, what next." She remembers the pearl of her BMC experience as a junior resident was time spent in the SICU, learning from Janet Orf, NP, (recently retired after 24 years at BMC) and the other nurse practitioners and bedside nurses, who became like family.



The Alaska Native Medical Center trauma team on the way to Klawock, Alaska, for a rural trauma team development course.

Aligning Priorities

Placing importance on resident wellness and supporting residents' families became a priority for leadership during her time in the BMC residency program,

according to Dr. Brownson. "There was a culture shift. This wasn't the program I started in, but it was the program I graduated from." She had her first child during residency at BMC and says she experienced real support at that time and when her son became ill and required hospitalization. With the birth of twin girls earlier this year, Dr. Brownson is now the mother of five.

Four of Dr. Brownson's co-residents during her training are attendings at BMC and faculty members at Boston University School of Medicine (BUSM). Her Co-chief Resident Michael Cassidy, MD, is a surgical oncologist and Medical Director of the Belkin Breast Health Center and Kathryn (Van Orden) Twomey,

MD, and Aaron Richman, MD, are TACS attendings; both have appointments at BUSM as Assistant Professor of Surgery. Elizabeth King, MD, is an attending in the Division of Vascular and Endovascular Surgery and an Assistant Professor of Surgery and Radiology.

While the setting where she practices now can be quite different than the urban environment where she trained, Dr. Brownson has very successfully applied and adapted what she learned to working with providers who often have very limited resources. It is obviously

a great job for Dr. Brownson, but when hiring junior partners, she tells them, "If you want a job where things are routine and you feel comfortable, this is not the job for you!"

Highlight: Patient Care

"We've worked hard to break down the silos and enhance our breast cancer team communication."

- Michael Cassidy, MD



Michael Cassidy, MD, and Naomi Ko, MD, MPH

Evolution in Breast Cancer Care

oston Medical Center (BMC) B delivers comprehensive breast care, including multidisciplinary cancer care, through its Belkin Breast Health Center, named for local philanthropists Steve and Joan Belkin. The couple donated \$2.5 million to develop a welcoming place for patients when the center opened in 2006. Approximately 220 patients are diagnosed with breast cancer at BMC each year.

The Belkin Center is made up of a closeknit group of clinicians, led by Medical Director Michael Cassidy, MD. "Our size allows us to be big enough to offer an extremely expert level of care, but small enough so that patients never feel like they are on a conveyor belt," says Dr. Cassidy, one of two surgical oncologists who primarily treat breast cancer patients. Dr. Cassidy's practice also includes complex melanoma, sarcoma, and gastric cancer patients. A 2015 graduate of the BMC Surgery

Residency Program and before that, Boston University School of Medicine (BUSM), he knows the patient population the center serves well. Following a fellowship in complex general surgical oncology at the Memorial Sloan Kettering Cancer Center, he returned to BMC in 2017 to join the surgical oncology team. Surgical oncologist Andrea Merrill, MD, who specializes in breast and endocrine surgery, was recruited in 2020 to complete the breast surgery team.

Tweaking the Model

"The surgical oncologists who were my mentors during my training at BMC were dedicated teachers and role models," says Dr. Cassidy. When presented with the opportunity to assume a leadership role in the breast cancer program, he saw it as a chance to work with an interdisciplinary team to re-examine the BMC cancer care model. He says, "The treatment decisions in breast cancer are so nuanced now, you

need a multidisciplinary team from the day of diagnosis to provide the best, most personalized care. The traditional model of the oncology specialties practicing in silos, seeing patients on different dates and in different locations. needs to be reimagined as a diseasebased rather than specialty-based program. We've worked hard to break down those silos and enhance our breast cancer team communication."

Today, BMC's breast oncology clinic is aligned, well coordinated, and consolidated. Patients have timely visits with surgical and medical oncologists, integrated with genetics and breast imaging, all in the same location. Since implementing the multidisciplinary approach to care three years ago, the time from diagnosis to treatment has improved dramatically.

Prior to being named Medical Director in January 2020, Dr. Cassidy, an Assistant Professor of Surgery at BUSM, was already

working closely with medical oncologist Naomi Ko, MD, MPH, Co-director of the BMC breast cancer program, to make multidisciplinary care a reality. Dr. Ko says, "At BMC, we have a shared model. It's not surgery- or medical oncologydominant." Dr. Ko adds, "When we join forces, it's synergistic. The best patient care, education, and science are borne out of good teamwork—and it's more fun." Dr. Ko says of Dr. Cassidy, "He wants every patient to feel like they have had the red carpet rolled out for them, and that's the level of care he provides." The multidisciplinary clinic has expanded to now include medical oncologists Lauren Oshry, MD, and Jose Acevedo MD, in addition to a dedicated group of expert nurse practitioners, physician assistants, and genetics counselors.

Dr. Cassidy notes the level of progress made in breast cancer care just since he started his training. "Patients have a lot of options in treatment and in reconstruction, and we can often de-escalate from more aggressive treatment." He ticks down a list of improvements in the BMC breast cancer surgery program, including wire-free localization techniques, intraoperative specimen imaging and margin assessment, and a growing nipple-sparing mastectomy program.

All In for Patients

Dr. Ko has been part of the BMC/ BUSM community since 2010. She did a fellowship in hematology/oncology at BMC before joining the staff as an attending physician and the BUSM faculty as an Assistant Professor of Medicine in 2013. She says, "We are all here because we are committed to being at BMC. We are dogged and

relentless about fulfilling the BMC motto of 'Exceptional care without exception.'" Dr. Merrill echoes this sentiment. "A lot of our patients are a little scared about navigating the medical system, especially if they don't speak English. I think we do a really good job with our interpreter services of making patients feel welcome and in understanding some of the

woman who has breast cancer."

limitations in resources they may have. Some patients feel like they are a burden if they call to ask questions, but we really try to put them at ease and get them the care they need and deserve."

"Things change very quickly in multidisciplinary cancer care," says Dr. Cassidy. "At BMC, we are all fellowship-trained and up to date on the latest research and trials. We offer the same expert care as the other hospitals in the city, and I believe we do it with an even more personalized patient experience."

Focused Recruitment

"We've been wildly successful in enrolling our patients in cancer treatment clinical trials," says Dr. Ko, who is currently involved in multiple trials but says she is strategic in participation based on the BMC

"We pride ourselves on not treating breast cancer. We treat the — Naomi Ko, MD, MPH

patient population. Her research has a translational focus, and she is dedicated to ameliorating disparities in breast cancer care in the clinical setting and in research. She is co-PI of an R01 grant funded by the National Cancer Institute that is focused on teasing out why triple-negative breast cancer is more deadly in Black women. For this study, Black patients are asked to donate biopsy specimens for sequencing. "It's hard to enroll Black patients because of their mistreatment over the years and mistrust of the healthcare system and research. But without this tissue, everything we do is based on genomic sequencing of tissue from white patients." She adds, "Finally, there's attention being paid to Black lives. At BMC, we have been on the right side of history, and I'm proud of that."

Multifaceted Opportunity

Three years ago, after championing the idea with multiple departments, Dr. Cassidy created an interdisciplinary fourth-year medical student elective anchored specifically to breast cancer care. He says, "It enables students to see the continuity of breast cancer care, with exposure to everything from breast imaging, radiation oncology, medical oncology, and surgery to pathology and genetics."

Through this elective, future physicians can get a well-rounded overview of a patient's journey and the BMC approach to breast cancer care. Dr. Ko says, "We pride ourselves on not treating breast cancer. We treat the woman who has breast cancer." Dr. Merrill adds, "We are a passionate group of clinicians all working together really well to take great care of the patients we treat."

Idea Optimization

here will never be a shortage of good research questions to explore. In the Department of Surgery at Boston Medical Center (BMC), many of the questions revolve around disparities in health outcomes. One essential key to research success is determining whether a question can be turned into a feasible research plan. With experience in both realms, Kelly Kenzik, PhD, MS, is bringing a wealth of expertise in health services research design and methodology to the department, while also reaping the benefits of the rich environment at BMC for her own disparities-related research.

Dr. Kenzik is not new to BMC. For the past two and a half years, she has been the inaugural Carter Visiting Scholar in Cancer Disparities, but as of September 2022, she has officially joined the Department of Surgery and will be a member of the Boston University School of Medicine (BUSM) faculty. In her capacity as a visiting scholar, Dr. Kenzik has worked closely with surgery residents engaged in research, both one-on-one and through educational seminars, as well as with faculty. She has been an integral member of the Surgical Outcomes Analysis & Research (SOAR) initiative within the department, which serves as the hub for research.



Kelly Kenzik, PhD, MS

"One of the biggest draws for me in joining BMC is the opportunity to study the groups that need it the most and see where I can make the biggest impact," says Dr. Kenzik. Previously, she was an Associate Professor in the Division of Hematology and Oncology at the University of Alabama at Birmingham (UAB). She received her doctoral degree in epidemiology from the University of Florida and also holds a master's degree in health behavior from the same institution. At BMC, she will apply her background and expertise in epidemiology, methodology, and large administrative databases. In her new role as a full-time research scientist, she will also collaborate with the research group at Boston University's Slone Epidemiology Center.

Distilling the Data

"The surgery residents and faculty have wonderful ideas and great research questions," says Dr. Kenzik. "But their time is limited, and their training is different than mine. My goal is to help them bring their ideas to fruition, maximize the data they have, and operationalize papers using this data." She adds, "I'm going down a new pathway at BMC that is different from what I was doing at UAB. In helping the residents run their analyses and models, I'm mentoring and teaching in a unique way. Until I became a visiting scholar, I didn't realize that I would like doing this as much as I do."

Not all of Dr. Kenzik's mentorship work has been focused on cancer. She "One of the biggest draws for me in joining BMC is the opportunity to study the groups that need it the most and see where I can make the biggest impact."

had a very successful collaboration with general surgery resident Michael Poulson, MD, whose research under an NIH T32 training grant looked at the role of social determinants of health, racial segregation, and racism on urban firearm injuries and other violent crimes, and resulted in several published papers and presentations.

Dr. Kenzik's own research has centered on using advanced methodology to examine healthcare utilization and costs among individuals diagnosed with cancer, focusing on disparities in outcomes associated with patient-level and geographic factors. She is currently the principal investigator (PI) of an American Cancer Society (ACS) Mentored Research Scholar Grant (MRSG) and is also the PI of a recently received National Cancer Institute (NCI) R37 award, which provides funding for up to seven years.

Under the ACS MRSG award, Dr. Kenzik is examining the long-term trajectories of healthcare use and multi-morbidity among the rapidly expanding older cancer survivor population. Additionally, through an analysis of survey and electronic medical records data, she has focused on financial hardship and financial toxicity after diagnosis and its

impact on healthcare utilization for chronic conditions. Dr. Kenzik notes, "There is a perception that once someone is on Medicare, we don't have to worry about them financially, but that does not appear to be the case. This is something that has largely been ignored, and it hits harder in areas where there are greater disparities."

Rural Versus Urban

While cancer mortality rates have been declining overall, this has not been true for the nearly 20 percent of the population that resides in rural areas. With support from the NCI R37 award, Dr. Kenzik will capitalize on existing data and linkages to examine the underlying causes of rural versus urban disparities in mortality among cancer patients. She says, "I chose publicly available SEER [Surveillance, Epidemiology, and End Results] data that I will link to 16 other data sets to take a bigpicture, multilevel look at cancer mortality across urban and rural environments. This will pull in all of the socioeconomic,

physical, built environment, and utilization data that is available at the county level and create a map to identify factors contributing to mortality differences."

As part of this study, Dr. Kenzik will also link data from the Reasons for

Geographic and Racial Differences in Stroke (REGARDS) national cohort of approximately 30,000 individuals tracked for stroke outcomes to state-level cancer registry data. The REGARDS cohort provides granular information on rural individuals and has never been linked fully to cancer data. Dr. Kenzik plans to link it to the newly developed Virtual Pooled Registry Cancer Linkage System, which efficiently connects researchers with multiple U.S. state cancer registries without the need to approach registries individually. Findings from this study will inform interventions to address systemic disparities in mortality experienced by rural patients with cancer.

In the coming year, Dr. Kenzik says that she is looking forward to facilitating grant submissions in the Department of Surgery. "I see amazing opportunities for multi-PI grants that pair my strength as a methodologist with that of the clinicians in the department." She adds, "There is substantial clinical and

"There is substantial clinical and research talent in the Department of Surgery and at BMC and BUSM. I will hopefully be another pair of boots on the ground helping to accelerate research progress."

> research talent in the Department of Surgery and at BMC and BUSM. I will hopefully be another pair of boots on the ground helping to accelerate research progress."



The 2022–2023 General Surgery residents kick off the year with a team-building event.

Shaping the Future

he Boston Medical Center (BMC) General Surgery Residency Program has traditionally matched five categorical residents each year. With the 2022–2023 academic year, that is changing. The intern class will now have six residents, with the additional spot reserved for an active-duty military resident chosen through the military match.

The first military resident to join the program is Colten Yahn, MD. He says, "I was not expecting to have an opportunity to be here at BMC. I received an Air Force scholarship for medical school and originally planned on pursuing a military hospital for residency training. When I learned that BMC would be offering an active-duty residency spot

to a USAF applicant this year, it almost seemed too good to be true. It has allowed me to remain active duty while affording me the opportunity to train at an extremely busy, academically minded program."

Change Catalysts

"The Department of Surgery has been expanding, and there are a number of divisions that have increased interest and opportunities in education," explains Donald Hess, MD, Residency Program Director and Assistant Professor of Surgery at Boston University School of Medicine (BUSM). "We've seen a big change in volume, but until now, the number of residents has remained the same. In bariatric surgery, 10 years ago

we were doing 200 cases per year. Now we're doing 500 per year. And a decade ago, colorectal surgery was part of the minimally invasive surgery service, but now it is its own rotation with a chief resident." A hospital addition currently under construction will include five new state-of-the-art operating rooms and more inpatient beds to address the increased volume.

New Face of Surgery

In addition to increasing the size of the categorical intern class, the face of the program has also changed. More than half of BMC general surgery residents are now women and one-third are from groups underrepresented in medicine.

The BMC program receives well over 1,500 applications each year, a number that continues to increase. The applicant selection process has become less focused on numerical data and much more holistic, with minimal screening based on grades or scores. Use of the Altus Suite, a multi-part assessment of personal characteristics, values, and priorities, adds another dimension to the selection process. "The changes to our selection and recruitment processes have resulted in alignment between ranked candidates and our department's and institution's mission and allowed us to match a diverse group of residents," says Associate Program Director Luise Pernar, MD, MHPE, Assistant Professor of Surgery at BUSM.

Social Determinants of Health

One of the draws for applicants to our residency program is the department's focus on social determinants of health and the associated impact on care and outcomes. Dr. Hess says, "The idea of training in a safety-net hospital



Graduated independence with absolute attention to patient care is a hallmark of our program. Pictured: PGY3 Andrea Alonso, MD, and PGY1 Abdimajid Mohamed, MD.

has become very important to many people. There's a lot of momentum around residents choosing a hospital like Boston Medical Center." BMC was recently named as a top hospital for social responsibility, and the Department of Surgery is home to the Socially Responsible Surgery (SRS) group, a multifaceted platform for BUSM students and BMC residents to combine their

interest in surgery with their passion for serving the underserved. The BMC SRS group is the founding member of a coalition of similar groups at other medical centers that will soon number 19.

resident mentorship elective, during which residents complete a scholarly project.

Inclusive Environment

What makes the BMC residency stand out in addition to excellent clinical training, focus on the whole patient, and opportunities for research, is the training environment. This is particularly evident in the large number of lesbian,

"The idea of training in a safety-net hospital has become very important to many people. There's a lot of momentum around residents choosing a hospital like Boston Medical Center."

- Donald Hess, MD

Social determinants of health also inform some of the research undertaken during residency. Recently, residents have spent their academic development time doing research on the impact of racial and residential segregation and its impact on access to health care and health outcomes. Opportunities and experiences open to residents have expanded significantly over the last eight years, with support for a wide variety of endeavors beyond the traditional "wet lab." This includes disparities and education research, as well as international work in India and Africa. One resident, working with a group from Stanford, is currently in Addis Ababa, where she is focusing on quality initiatives to reduce surgical site infections. The department supports all residents doing research, including those who do not take dedicated time off for academic development. This includes an intern research rotation as well as a senior

gay, bisexual, and queer-identifying residents in the program. As society has changed, so too has the number of residents and applicants who reveal their LGBTQ status. However data show that LGTBQ applicants are less likely to apply to general surgery programs than to other specialties. The BMC General Surgery Residency Program has developed a reputation for being very welcoming to LGBTQ residents, with one-third now identifying as LGBTQ.

A paper by Dr. Hess and Dr. Pernar, published in The American Surgeon in 2022, provides an overview of the impact LGBTQ status in surgery residencies has on students and trainees. It also summarizes the culture of the BMC residency, BMC, and BUSM, which has contributed to success in recruiting residents who identify as LGBTQ.

Although a lot has changed in the residency, the foundation of the training program remains the same—a busy Level 1 trauma center, a diverse patient population, a wide range of surgical experiences, and a dedicated faculty.



Ahead of the Curve

September 20, 2016, a team at Boston Medical Center (BMC) performed a neovaginoplasty for a transgender woman—a first at a Boston hospital. With the launch of its Center for Transgender Medicine and Surgery (CTMS) that year, the hospital was on the cutting edge of care.

Chief of Plastic Surgery Jaromir Slama, MD, and Vice Chair of Urology Robert Oates, MD, performed the surgery. Since then, they have done hundreds of cases together. Dr. Oates' interest in gender fluidity goes all the way back to his undergraduate days at The Johns Hopkins University, where he took a course on gender identity disorder. Boston University School of Medicine (BUSM) has offered a fourth-year transgender medicine elective for many years.

Although nascent conversations about initiating a formal transgender center at BMC were taking place as early as 10 years ago, surgery of this type was not covered by any private or federal insurance. Everything changed when MassHealth (the state's Medicaid program) and Medicare began covering it in 2014. That ruling immediately jump-started the initiative at BMC to create a unique, comprehensive center.

Plastic surgeon Jaromir Slama, MD, and nurse liaison Pamela Klein, RN, MSN

Dr. Slama notes that interest in surgical confirmation really expanded after Caitlyn Jenner came out as a transgender woman in 2015 and then underwent gender confirmation surgery in 2017.

Changemakers

The CTMS is a multidisciplinary program that offers a variety of services for adult and pediatric individuals who identify as transgender or gender non-conforming. Endocrinologist Joshua Safer, MD, now Executive Director of the Mount Sinai Center for Transgender Medicine and Surgery, was a driving force behind the BMC center's formation and was its first Director. Dr. Slama, Assistant Professor of Surgery at BUSM, says, "Dr. Safer had quietly been taking care of transgender patients for decades at BMC." When hospital leadership was approached to get their buy-in for creating the virtual transgender center, Dr. Oates, Professor of Urology at BUSM, says, "The institution really stepped up. They recognized that this was an underserved population and wanted to help."

To increase capacity and meet the demand, Ricardo Munarriz, MD, Professor of Urology and Director of the Center for Sexual Medicine at Boston University, trained to provide transgender surgery a few years after the CTMS opened and operates with Dr. Slama three times per month. "Dr. Munarriz is a great surgeon who adds a lot of value, and he has come up with some creative ideas that have improved the surgery overall," says Dr. Oates.

Genital Remodeling

Drs. Slama, Oates, and Munarriz are all experienced surgeons. Dr. Slama has been at BMC for 15 years and Dr. Oates and Dr. Munarriz for more than 30 years and 20 years, respectively. To learn the steps involved in the surgery, Dr. Slama and Dr. Oates connected with clinicians at academic medical centers in Michigan and Maryland who were performing transgender surgery.

Over time, the surgery has evolved from being focused solely on neovaginoplasty, with changes driven by the patients themselves. "Patients have more options now," says Dr. Slama. "Not everyone wants a vagina. For example, some patients want nullification to create a smooth perineum, while others want penile preservation in addition to vaginoplasty." "Genital remodeling," a term coined by a patient and her sister, encapsulates the outcome of a "no-depth vaginoplasty," where the resultant appearance and function are the same as in neovaginoplasty but without the vaginal canal. Some patients seek out this surgery specifically. For others, a more intensive neovaginoplasty is deemed too much of a medical/surgical risk, and they are happy to at least be able to look in the mirror and see their desired anatomy and wear the clothes they want to wear.

The Greater Good

In 2016, the closest medical centers offering neovaginoplasty were in Philadelphia and Montreal. Now they are just up the street, with Massachusetts General Hospital (MGH), Brigham and Women's Hospital, Beth Israel Deaconess Medical Center, and Boston Children's Hospital all offering it.

In fact, the BMC team helped to train the MGH and Children's teams. "I've been asked why I would teach my 'competition,'" says Dr. Oates. "The answer is simple. There are so many patients who need this care. There's a huge reservoir of patients—in their 30s, 40s, 50s and up—who have felt that they were in the wrong body their whole life. It is beneficial to the patient population at large to have more programs to address this need. Dr. Slama and I wanted to help ensure, as best we could through teaching of

other surgeons, optimal surgical outcomes for each and every transgender patient in the spirit of collaboration and not competition." Currently, the BMC team does more than 70 neovaginoplasties and genital remodeling surgeries per year, with a wait time of 18 to 24 months. A neovaginoplasty is typically a five-hour procedure. The penile skin, glans, and tissue from the scrotum are used to create fully functioning female genitalia. "This means aesthetically functional and sexually functional as well," says Dr. Slama. "They should be able to have intercourse and experience orgasm."

A lot of work needs to happen both before surgery as well as after it. Presurgery, permanent hair removal from the scrotum and penile shaft is necessary since this tissue is used to create the vagina. Nurse liaison Pamela Klein, RN, MSN, who has been part of the CTMS



Urologists Robert Oates, MD, (left) and Ricardo Munarriz, MD

from the beginning, works extensively with patients before and after surgery. "Patients need a lot of support," says Klein, whose involvement in genderaffirming care dates back to the early '90s in San Francisco. Following surgery, she sees patients to take care of post-op tasks and says one of her most important roles is providing education and guidance for patients in how to use a dilator diligently—initially three times a day and then ongoing. Klein notes, "One of the changes in clinical practice that came about from a patient is the use of pelvic floor physical therapy." She says it has been very helpful for patients. In fact, she co-developed a multi-day course dedicated to this, which she has helped present in several U.S. cities.

Gender-Affirming Team

Dr. Slama and plastic surgeon Daniel Roh, MD, PhD, Laszlo Tauber Assistant Professor of Surgery at BUSM, perform "top" surgery for transgender men and

nonbinary individuals and breast augmentation for transgender women. Dr. Roh says that these surgeries constitute approximately 15 to 20 percent of his practice. Shannon Bell, MD, Assistant Professor of Obstetrics & Gynecology, cares for transmale patients who seek hysterectomies and other gynecological procedures. Mandy Coles, MD, MPH, Clinical Associate Professor of Pediatrics, leads CTMS' gender-affirming care for younger patients.

Dr. Slama says, "I wish that transgender care didn't create

the interest that it does. I wish it was viewed as everyday, normal, and boring." Dr. Oates predicts that eventually every academic program will have a transgender medicine surgical service. "We were way ahead of the curve."

Surgery Education Office

SURGERY RESIDENCY PROGRAM

Donald Hess, MD Associate Chair for Education Director

Luise Pernar, MD, MHPE Associate Director

Aaron Richman, MD Associate Director Lana Ketlere, Residency Program Coordinator

SURGERY FELLOWSHIP PROGRAMS

Surgical Critical Care Fellowship Tejal Brahmbhatt, MD, Director Robert Canelli, MD, Deputy Director Vascular and Endovascular Surgery Fellowship Jeffrey Siracuse, MD, MBA, Director

PODIATRY SURGERY **RESIDENCY PROGRAM**

Ewald Mendeszoon, Jr., DPM Program Director

Justin Ogbonna, DPM Associate Program Director

SURGERY CLERKSHIP

Joanne Favuzza, DO, Director

Jeffrey Cooper, MD, Associate Director

Abdul Saied Calvino, MD, Associate Director, Roger Williams Medical Center

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

Elliot Brill, MD. Associate Director. Kaiser Permanente Santa Clara

Michael DiSiena, DO, Associate Director, Berkshire Medical Center

Yagnik Pandya, MD, Associate Director, MetroWest Medical Center

Eduardo Vega, MD, Associate Director, St. Elizabeth's Medical Center

SURGERY RESIDENCY PROGRAM

he Boston University General Surgery Residency Program provides residents with the range and depth of surgical experience and academic exposure required to develop superior surgical skills and an ability to make informed, independent judgments. The five-year program, which is accredited by the Accreditation Council for Graduate Medical Education (ACGME), is committed to preparing future generations of highly skilled surgeons.

The surgery residency program is based at Boston University Medical Center, a modern 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, the Boston University Goldman School of Dental Medicine, the National Emerging Infectious Diseases Laboratories, as well as Boston Medical Center.

Through exposure to a large, diverse patient population, residents gain broad and deep experience in complex open and minimally invasive surgery. With very few fellowship programs, the focus of the program is the education of general surgery residents.

Residents interested in careers in academic surgery develop the necessary skills in surgical research through a broad range of training opportunities designed to maximize academic development.

2022 Surgery Residency Graduates

Sherif Aly, MD Advanced Minimally Invasive Surgery Fellowship Brigham and Women's Hospital

Nkiruka Arinze, MD Vascular Surgery Fellowship Emory University School of Medicine

Olivia Duhaime, MD General Surgery, Charlton Memorial Hospital Fall River, Mass.

Megan Janeway, MD Surgical Critical Care Fellowship University of Michigan

Na Eun Kim, MD Endocrine Surgery Fellowship UCLA Health

Leneé Plauché, MD General Surgery Dallas, Texas



Clockwise from center top: Sherif Aly, MD; Leneé Plauché, MD; Na Eun Kim, MD; Olivia Duhaime, MD; Nkiruka Arinze, MD; and Megan Janeway, MD

CURRENT RESIDENTS (2022–2023 Academic Year)

PGY2

Categorical

at Dartmouth

of Medicine

of Medicine

Preliminary

Sara Myers, MD

Julia Danford, MD

Heba Elassar, MD

Geisel School of Medicine

Oakland University William

Sophia Foroushani, MD

Tulane University School

Case Western Reserve

Ashlee Seldomridge, MD

PGY1

Categorical

Kiyah Anderson, MD University of Tennessee Health Science Center College of Medicine

Emily Eakin, MD Robert Larner, M.D., College of Medicine at the University of Vermont

Khuaten Maaneb de Macedo, MD University of Minnesota Medical School

Jeffrey Melvin, MD Albert Einstein College of Medicine

Abdimajid Mohamed, MD Tufts University School of Medicine

Stephen Dalton-Petillo, MD Eastern Virginia Medical School

Colten Yahn, MD Eastern Virginia Medical School

Preliminary

Brandon Caldwell, MD Northwestern University, the Feinberg School of Medicine

Alivah Gaines, MD Boston University School of Medicine

Jessica Shi, MD Boston University School of Medicine

Noreen Siddigi, MD Boston University School of Medicine

PGY3 Andrea Alonso, MD

Boston University School of Medicine

Carlos Fairen Oro, MD University of Valencia Faculty of Medicine and Dentistry (PGY1-2: The Johns Hopkins Hospital)

Louis Kester, MD Drexel University College of Medicine

Olivia Sacks, MD Geisel School of Medicine at Dartmouth

Allan Stolarski, MD Albany Medical College

Spencer Wilson, MD University of North Carolina School of Medicine

PGY4

Loreski Collado, MD Cooper Medical School of Rowan University

Alaina Geary, MD Tufts University School of Medicine

Beaumont School of Medicine Gillian Goddard, MD University of Texas Medical School at Houston

> Maha Haqqani, MD Albert Einstein College of Medicine

Michael Poulson, MD University School of Medicine Georgetown University School of Medicine West Virginia University School

PGY5

Rebecca Hasley, MD Drexel University College of Medicine

Scott Levin, MD Warren Alpert Medical School of Brown University

Miriam Neufeld, MD Indiana University School of Medicine

Jacob Nudel, MD Harvard Medical School

Mark Zapata, MD Medical College of Georgia at Augusta University



Spencer Wilson, MD, in Dubai for the venous-lymphatic World International Network (vWIN) meeting.

CURRENT FELLOWS

Surgical Critical Care Fellowship Sruti Golthi, DO Tony Xia, MD

Vascular and Endovascular Surgery Fellowship Omar El-Shazly, MD Emmanuel Nwachuku, MD

CURRENT PODIATRY SURGERY RESIDENTS

PGY1

Marall Abbaszadeh, DPM Dr. William M. Scholl College of Podiatric Medicine

Christian Costales, DPM California School of Podiatric Medicine at Samuel Merritt University

PGY2

David Coker, DPM

Des Moines University College of Podiatric Medicine and Surgery

Anna-Kay Thompson, DPM Barry University School of Podiatric Medicine

Residents on Research

Residents have the option to spend one to three years conducting research, typically after their second or third year, to pursue their academic development. Often this research is done in collaboration with other departments at Boston Medical Center and other schools at Boston University. In addition, residents may choose to conduct research with faculty from other institutions, providing them with a wealth of opportunities to pursue their interests, develop as academic surgeons, and make significant contributions.

Brendin Beaulieu-Jones, MD, MBA

Site: Beth Israel Deaconess Medical Center/ Harvard Medical School

Research Mentor: Gabriel Brat, MD, MPH, MSc **Area of research:** Dr. Beaulieu-Jones is utilizing large-scale database and machine learning models to inform clinical decision-making and surgical planning in order to improve surgical outcomes and optimize patient care. He is also pursuing a master's degree in biomedical informatics at Harvard Medical School.

Priyanka Chugh, MD

Site: Boston Children's Hospital

Research Mentor: Tom Jaksic, MD, PhD, and Biren Modi, MD, MPH

Area of research: Dr. Chugh is evaluating outcomes for children with short bowel syndrome at Boston Children's Hospital in collaboration with the Center for Advanced Intestinal Rehabilitation. She currently serves as Junior Resident Research Director of the Surgical Outcomes Analysis & Research (SOAR) initiative at Boston Medical Center.

Nicole Cimbak, MD

Site: Boston Children's Hospital

Research Mentor: Christopher Weldon, MD, PhD **Area of Research:** Dr. Cimbak is currently enrolled in a three-year fellowship program based at Boston Children's Hospital and has completed the first year as a surgical critical care fellow. During the latter two years, she will participate in a variety of clinical outcomes research projects centered around pediatric congenital diaphragmatic hernia and nutrition in critically ill children.

Anna Kobzeva-Herzog, MD

Site: Boston University School of Medicine *Research Mentors:* Aaron P. Richman, MD; Sabrina E. Sanchez, MD, MPH; Alik Farber, MD, MBA; Jeffrey J. Siracuse, MD, MBA; and Pamela Rosenkranz, RN, BSN, MEd Area of Research: Dr. Kobzeva-Herzog serves as a Quality Improvement Research Fellow in the Department of Surgery. In this role, she aims to lead a multidisciplinary project to reduce the rate of breakthrough VTE despite proper chemoprophylaxis in the general surgery and trauma patient population.

Brenda Lin, MD

Site: VA Boston Healthcare System

Research Mentor: James McPhee, MD

Area of Research: Dr. Lin serves as VA Chief Resident in the Quality and Patient Safety Program. She currently focuses on learning and teaching quality improvement and patient safety principles through identification of adverse events and other issues. She will also be performing root cause analyses and healthcare failure mode effect analyses to develop system-based solutions.

Maia Nofal, MD, MPH

Site: Global Engagement at Stanford University *Research Mentor:* Thomas Weiser, MD

Area of Research: Dr. Nofal serves as a researcher in the NIH Fogarty-funded Global Health Equity Scholars Program and will be focused on quality improvement initiatives to reduce surgical site infections in Ethiopia. In addition, she will be partnering with Lifebox, a charitable organization that focuses on safe surgical and anesthesia care worldwide.

Gordana Rasic, MD, MS

Site: Boston University School of Medicine *Research Mentors:* Tony E. Godfrey, PhD, and Teviah Sachs, MD, MPH

Area of Research: Dr. Rasic is evaluating the utility of circulating tumor DNA in peri-operative surveillance for persistent and/or recurrent oncologic disease, specifically in head and neck cancer. She will also be working with the Surgical Outcomes Analysis & Research (SOAR) initiative to utilize national health databases to investigate factors contributing to healthcare disparities in hepatopancreatobiliary cancers.

Resident News

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Andrea Alonso, MD, received the Surgical Critical Care Award, presented to the junior resident who has excelled in management of critically ill surgical patients.



Brendin Beaulieu-Jones, MD, MBA, made a presentation at the Society of Surgical Oncology Annual Meeting in March and published four papers in the

following journals: Surgery, Regional Anesthesia and Pain Medicine, Substance Abuse, and Pediatric Emergency Care.



Loreski Collado, MD, gave grand rounds at the VA Boston HealthCare System on quality and patient safety from a chief resident perspective. Dr. Collado was a participant in a candlelight

session (Group mentorship: Anticipating the logistical and emotional needs of medical students applying for surgical residency) at the Association of Surgical Education Annual Conference in May. She also co-authored two publications in the American Journal of Surgery.



Sophia Foroushani, MD, was selected by third-year medical students for the annual Junior Medical Student Teaching Award.



Gillian Goddard, MD, was selected by third-year medical students for the annual Senior Medical Student Teaching Award.

was inducted into the Robert Russell, MD Chapter of the Gold Humanism Honor Society and was also one of six Boston Medical Center residents to receive the Arnold P. Gold Foundation Humanism & Excellence in Teaching Award. She co-authored five publications in peer-reviewed journals and one book chapter and presented her work at the Association for Surgical Education (ASE) and New England Society for Colon and Rectal Surgeons annual conferences. Dr. Rasic has also committed time to advocating for diversity, equity, and inclusion (DEI) efforts in surgical residency programs. She served on the #HeForShe Committee of the Association of Women Surgeons (AWS), where she co-directed a national webinar series exploring challenges in diverse mentoring relationships. From this work,



Scott Levin, MD, MS,

was co-author of five papers, four as first author, in the Journal of Vascular Surgery and Annals of Vascular Surgery. He delivered three oral presentations, including a plenary talk at the Society for Vascular Surgery Annual Meeting, as well as talks at the New England Society for Vascular Surgery and Academic Surgical Congress. Dr. Levin matched into plastic surgery fellowship at the University of California, Davis, and he successfully passed the American Board of Surgery qualifying exam after PGY-4. Additionally, he received an NIH LRP renewal award for his research and was a 2022 Boston Medical Center Service Award honoree.

Jacob Nudel, MD,

matched to the Lahey Hospital and Medical Center bariatric surgery fellowship and also co-authored papers in Annals of Surgery, Shock, and Transplantation Direct.

Gordana Rasic, MD, MS,

she was first-author of a publication and was invited to serve as a panelist during a discussion of mentoring across diversity at the Association of Program Directors in Surgery (APDS) National Conference, and on a panel on allyship at the AWS Mid-Atlantic Regional Conference. She now serves as an ad hoc member of the APDS DEI Committee. She is currently leading a multi-institutional study evaluating the impact of an online curriculum on cultural diversity awareness of mentors through AWS. In addition, she became a member of the ASE DEI Task Force and is working on a national survey contextualizing residentfocused DEI efforts within U.S. surgery residency programs.



Allan Stolarski, MD, MS, completed two years of academic development time, with support from an NIH T32 training grant (Immunobiology of Trauma) in 2022. This work

led to multiple podium presentations at the Eastern Association for the Surgery of Trauma and American Association for the Surgery of Trauma conferences. Over the last year, he published seven journal articles, nearly all as first author, in JAMA Surgery, Shock, The Journal of Trauma and Acute Care Surgery, and other high-impact journals.



Spencer Wilson, MD, was an invited speaker and a panelist at the venous-lymphatic World International Network (vWIN) meeting in Dubai in February. As a "young

generation representative" at vWIN, he made a presentation on Boston Medical Center's use of the Caprini Risk Score and participated in the venous thrombosis consensus discussions. Dr. Wilson was a member of the scientific writing group for vWIN's scientific consensus document, which has been submitted to the International Journal of Angiology.

Visiting Professors

In addition to multiple eminent grand rounds speakers, the Department of Surgery was honored to welcome these surgical leaders as named visiting professors during the 2021–2022 academic year.



Grasberger Research Symposium Lecture and Visiting Professorship

Julie Ann Sosa, MD, MA Chair, Department of Surgery Leon Goldman, MD, Distinguished Professor of Surgery Professor, Department of Medicine UCSE School of Medicine



Sanziana A. Roman, MD Professor of Surgery Dean's Diversity Leader for Leadership, Equity, and Inclusion UCSF School of Medicine



25

Smithwick Visiting Professorship in Vascular Surgery

Gilbert R. Upchurch, Jr., MD Edward M. Copeland, III and Ann & Ira Horowitz Chair University of Florida Department of Surgery







Peter J. Mozden, MD, Visiting Professorship in Surgical Oncology

Giles F. Whalen, MD Professor of Surgery Executive Vice Chair, Department of Surgery University of Massachusetts Medical School Chief, Division of Surgical Oncology and Endocrine Surgery

Inaugural Diversity, Equity & Inclusion Lecture and Visiting Professorship

Robert S.D. Higgins, MD, MSHA* Professor of Surgery Associate Dean for Diversity and Inclusion

Johns Hopkins University School of Medicine Surgeon-in-Chief, The Johns Hopkins Hospital

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

Eileen Bulger, MD Professor of Surgery

- Division of Trauma, Burn, and Critical Care Surgery
- Chief of Trauma for Harborview Medical Center, University of Washington Chair, American College of Surgeons Committee on Trauma

*As of December 2021, Dr. Higgins is President of Brigham and Women's Hospital.

Inaugural DEI visiting professor Robert S.D. Higgins, MD, MSHA, with 2021-2022 BMC Surgery chief residents

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, guidance, and mentorship to faculty and residents in the department who are engaged in research.

- Priyanka Chugh, MD (resident member)
- F. Thurston Drake, MD, MPH
- Tony Godfrey, PhD
- Donald Hess, MD (ex officio)
- Kelly Kenzik, PhD, MS
- Marina Malikova, PhD, MSci, MA
- Gordana Rasic, MD, MS (resident member)
- Daniel Roh, MD, PhD
- Teviah Sachs, MD, MPH
- Jeffrey Siracuse, MD, MBA
- Jennifer Tseng, MD, MPH (ex officio)

Selected Grants

NEW

Principal Investigators: Tony Godfrey, PhD, and Daniel Remick, MD Sponsor: National Institutes of Health/ National Institute of General Medical Sciences **Grant amount:** \$1,254,240

Delineation of Beneficial and Detrimental Roles of Senescent Cells in Impaired Wound Healing of Aging Principal Investigator: Daniel Roh, MD, PhD Sponsor: American Federation for Aging Research Grant amount: \$123,250

ONGOING

Contribution of Cellular Senescence to Delayed Wound Healing

Principal Investigator: Daniel Roh, MD, PhD Sponsor: Boston Claude D. Pepper Older Americans Independence Center REC Award **Grant amount:** \$75,600

Role of Senescence in the Impaired Wound Healing of Aging

Principal Investigator: Daniel Roh, MD, PhD Sponsor: National Institutes of Health/ National Institute on Aging Grant amount: \$330.000

Community Violence Response Team

Principal Investigator: Lisa Allee, MSW, LICSW Sponsor: Massachusetts Office for Victim Assistance Grant amount: \$2,020,880

Immunobiology of Trauma

Understanding the Patient-Centered Outcomes for One-stage and Two-stage **Brachial Basilic Arteriovenous Fistula:** A Pilot Trial

Principal Investigator: Jeffrey Siracuse, MD, MBA Sponsor: American Society of Diagnostic and Interventional Nephrology **Grant amount:** \$25,000

Development of Diagnostic and Prognostic Tests for Esophageal Adenocarcinoma

Principal Investigator: Tony Godfrey, PhD Sponsor: National Institutes of Health/ National Cancer Institute **Grant amount:** \$2,456,723

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

Principal Investigator: Tony Godfrey, PhD Boston University Co-Investigators: Anand Devaiah, MD; Gregory Grillone, MD; Robert Pistey, MD Sponsor: National Institutes of Health/ National Cancer Institute Grant amount: \$759,836

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

Selected Clinical Research Projects

There are 101 open clinical research protocols in the Department of Surgery managed by dedicated teams of researchers in state-of-the-art facilities within Boston University School of Medicine/Boston Medical Center.

Selected Clinical Trials Currently Open for Enrollment

SECTION OF ACUTE CARE AND TRAUMA SURGERY A Randomized, Double-Blind, Placebo-Controlled Proof-of-Concept Study to Assess the Safety and Efficacy of Elezanumab in Acute Traumatic Cervical Spinal Cord Injury Principal Investigator: Tejal Brahmbhatt, MD

Sponsor: AbbVie

DIVISION OF GENERAL SURGERY, SECTIONS OF SURGICAL ONCOLOGY AND ENDOCRINE SURGERY Comparison of Outcomes of Antibiotic Drugs and Appendectomy (CODA) Trial BMC Site Co-Principal Investigator: F. Thurston Drake, MD, MPH BMC Site Co-Principal Investigator: Sabrina Sanchez, MD, MPH Sponsor: Patient-Centered Outcomes Research Institute (PCORI)

DIVISION OF VASCULAR AND ENDOVASCULAR SURGERY

Percutaneous Deep Vein Arterialization for the Treatment of Late-Stage Chronic Limb-Threatening Ischemia (PROMISE II Trial) Principal Investigator: Alik Farber, MD, MBA Sponsor: LimFlow, Inc

Natural Progression of High-Risk Chronic Limb-Threatening Ischemia. CLariTI Study Principal Investigator: Alik Farber, MD, MBA Sponsor: LimFlow, Inc.

DEPARTMENT OF SURGERY PORTFOLIO OF CLINICAL RESEARCH PROJECTS (N=101), FY 2022



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

A Comparative Evaluation of a Marine Polysaccharide Dressing and Carboxymethylcellulose Dressing on Subjects with Lower Extremity Venous Ulcers Principal Investigator:

Alik Farber, MD, MBA Sponsor: Medline

Effects of Semaglutid on Functional Capacity in Patients with Type 2 Diabetes and Peripheral Arterial Disease Principal Investigator: Elizabeth King, MD Sponsor: Novonordisk

DIVISION OF PODIATRY SURGERY

A Multi-Center, Prospective, Randomized, Controlled, Blinded Assessor Trial, Comparing the Safety and Efficacy of ActiGraft[™] to Standard of Care in Patients with Chronic Neuropathic Diabetic Foot Ulcers Principal Investigator: Hau Pham, DPM Sponsor: RedDress Ltd.

SECTION OF MINIMALLY INVASIVE AND WEIGHT LOSS SURGERY A Double-Blind, Randomized, Placebo-Controlled Study to Assess the Safety, Tolerability, and Pharmacodynamics of SYNB8802 in Healthy Volunteers and in Patients with Enteric Hyperoxaluria

Principal Investigator: Donald Hess, MD Principal Investigator: Madhusmita Misra, MD Sponsor: Synlogic

SECTION OF COLON AND RECTAL SURGERY

A Phase III, Randomized, Double Blind, Parallel Group, Placebo-Controlled, International, Multicentre Study to Assess Efficacy and Safety of Cx601, Adult Allogeneic Expanded Adipose-Derived Stem Cells (Easc), for the Treatment of Complex Perianal Fistula(s) in Patients with Crohn's Disease Over a Period of 24 Weeks and a Follow-Up Period Up to 52 Weeks. ADMIRE-CD II Study

Principal Investigator: Olga Beresneva, MD Sponsor: TiGenix

The Comparison of Surgery and Medicine on the Impact of Diverticulitis (COSMID) Trial Principal Investigator:

Joanne Favuzza, DO Sponsor: George Washington University

Publications

Research conducted by faculty and trainees of the Department of Surgery is published widely in leading journals and textbooks. During the 2021–2022 academic year, the department had more than 165 articles published in peer-reviewed journals and 12 published books or book chapters.

Selected Papers

Multidisciplinary Project to Prevent Postoperative Urinary Tract Infection. **Spencer B Wilson**, Shamsh P Shaikh, **Pam Rosenkranz**, Ingrid Rush, Padma Kandadai, David S Wang, **David McAneny**. J Am Coll Surg. 2022 Jun 1;234(6):1101-1109.

Post-traumatic Growth Among General Surgery Residents During the COVID-19 Pandemic: Emerging Stronger in the Face of Adversity. **Gordana Rasic, Andrea Alonso**, Katherine He, **Priyanka Chugh, Olivia Sacks, Loreski Collado**, Edward Whang, and **Gentian Kristo**. Am J Surg. 2022 Apr; 223(4): 823-824.

Patient Factors Associated With Appendectomy Within 30 Days of Initiating Antibiotic Treatment for Appendicitis. CODA Collaborative (F. Thurston Drake). JAMA Surg. 2022 Mar 1:157(3):e216900.

The Persistence of Poverty and Its Impact on Cancer Diagnosis, Treatment and Survival. Marianna V Papageorge, Alison P Woods, Susanna W L de Geus, Sing Chau Ng, David McAneny, Jennifer F Tseng, Kelly M Kenzik, Teviah E Sachs. Ann Surg. 2022 Jul 6.

A Rising Tide Lifts All Boats: Impact of Combined Volume of Complex Cancer Operations on Surgical Outcomes in a Low-Volume Setting. **de Geus SW, Papageorge MV, Woods AP, Wilson S, Ng SC, Merrill A, Cassidy M, McAneny D, Tseng JF, Sachs TE**. J Am Coll Surg . 2022 Jun 1;234(6):981-988.

Unplanned Shunting Is Associated with Higher Stroke Risk After Eversion Carotid Endarterectomy. Levin SR, King EG, Farber A, Cheng TW, Rybin D, Siracuse JJ. Ann Vasc Surg. 2022 Jul 5.

Modern Treatment of Asymptomatic Carotid Stenosis – The Importance of Both Medical Therapy and Carotid Endarterectomy. **Farber A**. JAMA Surg. 2022 Jun 8.

Tryptophan Metabolites Suppress the Wnt Pathway and Promote Adverse Limb Events in Chronic Kidney Disease. **Arinze NV**, Yin W, Lotfollahzadeh S, Napoleon MA, Richards S, Walker JA, Belghasem M, Ravid JD, Hassan Kamel M, Whelan SA, Lee N, **Siracuse JJ**, Anderson S, **Farber A**, Sherr D, Francis J, Hamburg NM, Rahimi N, Chitalia VC. J Clin Invest. 2022 Jan 4;132(1):e142260.

Nailing the Coffin on Biological Mesh in Contaminated Ventral Hernias. **Stolarski AE**, **Itani KMF**. JAMA Surg. 2022 Apr 1;157(4):302.

Colorectal ERAS: Years Later. **Favuzza J, Madiedo AM, Schultz K, Rasic G**, Phatak UR, **Hall J**. J Gastrointest Surg. 2022 Jan 19.

Early Metabolic Support for Critically III Trauma Patients: A Prospective Randomized Controlled Trial. **Allan E Stolarski**, Lorraine Young, Janice Weinberg, Jiyoun Kim, Elizabeth Lusczek, Daniel G Remick, Bruce Bistrian, **Peter Burke**. J Trauma Acute Care Surg. 2022 Feb 1;92(2):255-265.

The Impact of Income and Social Mobility on Colorectal Cancer Outcomes and Treatment: A Cross-sectional Study. **Poulson M, Madiedo A**, Cornell E, **Kenzik K, Allee L, Dechert T, Hall J**. Ann Surg. 2022 Mar 1;275(3):546-550.

Citizenship and Social Responsibility in Surgery: A Review. Janeway M, Wilson S, Sanchez SE, Arora TK, Dechert T. JAMA Surg. 2022 Jun 1;157(6):532-539.

Social Vulnerability and COVID-19: Changes in Trauma Activations at a Safety-Net Hospital. **Neufeld MY**, Jang H, Caron E, Golz R, **Brahmbhatt TS, Sanchez SE**. J Surg Res. 2022 Aug;276:100-109.

Defining Sepsis Phenotypes – Two Murine Models of Sepsis and Machine Learning. **Stolarski AE**, Kim J, **Nudel J**, Gunn S, Remick DG. Shock. 2022 Jun 1;57(6):268-273.

Incidental Adrenal Masses: Adherence to Guidelines and Methods to Improve Initial Follow-Up: A Systematic Review. Timothy Feeney, **Andrea Madiedo**, Philip E Knapp, Avneesh Gupta, **David McAneny**, **Frederick Thurston Drake**. J Surg Res. 2022 Jan;269:18-27.

Percutaneous Radial Artery Access for Peripheral Vascular Interventions Is a Safe Alternative for Upper Extremity Access. Levin SR, Carlson SJ, Farber A, Kalish JA, King EG, Martin MC, McPhee JT, Patel VI, Rybin D, Siracuse JJ. J Vasc Surg. 2022 Jul;76(1):174-179.e2.

The U.S. Preventive Services Task Force Abdominal Aortic Aneurysm Screening Guidelines Negligibly Impacted Repair Rates in Male Never-Smokers and Female Smokers. **Levin SR, Farber A**, Goodney PP, Schermerhorn ML, Eslami MH, Patel VI, Garg K, McGinigle KL, **Siracuse JJ**. Ann Vasc Surg. 2022 May;82:87-95.

Participation in a Chronic Limb Threatening Ischemia Randomized Trial Is Inversely Correlated With Regional Amputation Rate in Limb Threatening Ischemia Patients. **Siracuse JJ**, Goodney PP, Menard MT, Rosenfield K, Van Over M, Hamza TH, Eid M, Villarreal MF, Strong MB, **Farber A**. Ann Surg. 2021 Oct 1;274(4):621-626.

Teaching Assistant Cases in General Surgery Training – A Literature Review. **Alaina D Geary**, Hilary Sanfey, Loretto Glynn, **Luise I Pernar**. Am J Surg. 2022 Jun;223(6): 1088-1093.

Structuring Research Rotations to Facilitate Surgery Residents' Academic Productivity. Luise I Pernar, Teviah E Sachs, Jennifer F Tseng, Donald T Hess. J Surg Educ. Jan-Feb 2022;79(1):31-34.

Redlining, Structural Racism, and Lung Cancer Screening Disparities. **Poulson MR, Kenzik KM**, Singh S, Pavesi F, Steiling K, Litle VR, Suzuki K. J Thorac Cardiovasc Surg. 2022 Jun;163(6):1920-1930.e2.

Implementation of a Frailty Assessment and Targeted Care Interventions and Its Association with Reduced Postoperative Complications in Elderly Surgical Patients. **Spencer Wilson**, Evan Sutherland, Alina Razak, Mollie O'Brien, Callie Ding, Thien Nguyen, **Pam Rosenkranz, Sabrina E Sanchez**. J Am Coll Surg. 2021 Dec;233(6): 764-775.e1.

An Educational Framework for Teaching Assistant Cases. **Luise I Pernar, Alaina Geary**. Am J Surg. 2021 Dec;222(6):1189-1190.



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

85 East Concord Street, Suite 3000 Boston, MA 02118

Phone: 617.638.8609 E-mail: surgery@bu.edu Website: bumc.bu.edu/surgery



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