Department of Surgery

ANNUAL REPORT 2025

United in Equitable Care

Boston University Chobanian & Avedisian School of Medicine

Boston Medical Center

CONTENTS

On the cover *(clockwise): Boston Medical Center, Boston Medical Center – South, and Boston Medical Center – Brighton*

The Department of Surgery
By the Numbers

11 Clinical Divisions

83 Faculty

1 ACGME-Accredited Surgical Residency

1 CPME-Accredited Podiatric Surgery Residency

41 Interns and Residents

2 ACGME-Accredited Surgical Fellowships

4 Fellows

6,959 Operations*

75,340 Outpatient Visits*

**July 1, 2024–June 30, 2025*

The 2024–2025 Boston Medical Center general surgery chief residents, flanked by their co-residents and faculty

Message from the Chair

The annual report presents an opportunity to reflect on the last academic year and to shine a light on the progress made in the Department of Surgery. As always, credit goes to our dedicated surgeons, advanced practice providers, nurses, researchers, and loyal members of our staff.

As I write this letter, it's been nearly a year since the Boston Medical Center Health System welcomed two new hospitals, which have been renamed Boston Medical Center – Brighton (BMC Brighton) and Boston Medical Center – South (BMC South). The integration of these hospitals is proceeding in a thoughtful and strategic way. We are now one department, the BMC Health System Department of Surgery, with numerous potential benefits for our patients as this rollout continues.

In my new role as Chief of Surgery for the BMC Health System, I am working closely with BMC Brighton Chief of Surgery Mark Conrad, MD, and BMC South Chief of Surgery Valentin Atanassov, MD, to optimize care across our three hospitals. Throughout our newly expanded department, we are committed to providing patient-centered care for a population that includes some of the most vulnerable and medically complex patients in the Greater Boston area while also conducting impactful research and emphasizing comprehensive education and training.

Highlights over the last year include the construction at the main campus of five new operating rooms and acquisition of a second da Vinci robot. I am happy to share that excellent surgical outcomes led to the Department of Surgery ranking at #42 for Cardiology, Heart & Vascular Surgery in the 2025–2026 *U.S. News & World Report* Best Hospitals listing. In addition, BMC Brighton was recognized in this year's listing as high performing in both aortic valve and heart bypass surgery. Further, the Division of Thoracic Surgery, alongside the pulmonology team at BMC, was recognized as high performing in Pulmonology and Lung Surgery.

This annual report spotlights our cardiac surgery team and a multidisciplinary initiative undertaken to ensure safe placement of central venous catheters by clinicians and trainees. A change in our approach to educating future physicians is the focus of an article centered on the surgery clerkship, which recently adopted a case-based format. In the research realm, the topic of the hour—artificial intelligence (AI)—is at the heart of a project featured in this report. Led by Executive Vice Chair of Surgery and Chief of Surgical Critical Care Noelle Saillant, MD, the Field Artificial Intelligence Program is a collaboration with MIT Lincoln Laboratory to determine how AI might improve triage of injured patients. And in our alumni spotlight, we feature Dr. Peggy Duggan, a 1996 graduate of the Boston Medical Center General Surgery Residency Program, who is now executive vice president, chief physician executive, and chief medical officer of Tampa General Hospital.

BMC is not just a safety-net hospital. While we maintain our critical mission of caring for the most disadvantaged, we are part of a health system that provides high-complexity, high-value, low-cost care. In the Department of Surgery, we have a great and growing team and are setting the bar high. My vision for the department is to become the best surgery department in the city of Boston—no small feat, I realize, in a city known for its outstanding medical community. I look forward to seeing what we will accomplish in the coming year.

Alik Farber

Alik Farber, MD, MBA
James Utley Professor and Chair of Surgery, Boston University
Chief of Surgery, Boston Medical Center Health System
Surgeon-in-Chief, Boston Medical Center

The Department of Surgery

The Department of Surgery has historic roots that extend back 150 years. In 1873, Boston University School of Medicine (now Boston University Chobanian & Avedisian School of Medicine) opened its doors, combining the New England Female Medical College with the medical staff of the Massachusetts Homeopathic Hospital. Since then, we have trained scores of surgeons and have made innumerable contributions in clinical care, education, and research.

Today, the department comprises 11 divisions and includes more than 80 faculty members who provide the full spectrum of adult and pediatric surgical care and teach our residents, fellows, and medical students at Boston Medical Center (BMC) and affiliated institutions. The largest safety-net hospital in New England, BMC is the primary teaching affiliate for the Chobanian & Avedisian School of Medicine. It is also the flagship of the BMC Health System, which, as of October 2024, includes two additional hospitals, Boston Medical Center – Brighton (BMC Brighton), in Brighton, Mass., and Boston Medical Center – South (BMC South), in Brockton, Mass.

A well-established relationship with Boston Children's Hospital provides shared faculty in pediatric critical care and pediatric surgery, as well as pediatric training for residents. The department also has affiliated faculty members from Roger Williams Medical Center, the VA Boston Healthcare System, and Cape Cod Hospital. 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: Berkshire Medical Center, MetroWest Medical Center, and Kaiser Permanente Santa Clara.

Department Leadership

Alik Farber, MD, MBA
James Utley Professor and Chair of Surgery, Boston University
Chief of Surgery, Boston Medical Center Health System
Surgeon-in-Chief, Boston Medical Center

Noelle Saillant, MD
Executive Vice Chair of Surgery

Jennifer Davids, MD
Vice Chair for Clinical Operations, Integrated Procedural Platform

F. Thurston Drake, MD, MPH
Vice Chair for Clinical Operations, Inpatient Services

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

Donald Hess, MD
Vice Chair for Education

Daniel Roh, MD, MPH
Vice Chair for Research

Sabrina Sanchez, MD, MPH
Vice Chair for Faculty Development and Equity

Jeffrey Siracuse, MD, MBA
Vice Chair for Quality and Patient Safety

Department Leadership

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

Noelle Saillant, MD
Chief, Surgical Critical Care

Alexandros Karavas, MD
Interim Chief, Division of Cardiac Surgery

Jennifer Davids, MD
Chief, Division of Colon and Rectal Surgery

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

Christopher Muratore, MD
Chief, Division of Pediatric Surgery

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

Ewald Mendeszoon, DPM
Chief, Division of Podiatric Surgery

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

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

Christopher Digesu, MD
Interim Chief, Division of Thoracic Surgery

Sayeed Malek, MD
Chief, Division of Transplant Surgery

Jeffrey Siracuse, MD, MBA
Chief, Division of Vascular and Endovascular Surgery

Michael Cassidy, MD
Chief, Section of Breast Surgery

Department of Surgery Faculty

Acute Care and Trauma Surgery

Tracey Dechert, MD
Chief
Associate Professor of Surgery, Boston University

Lisa Allee, MSW, LICSW
Assistant Professor of Surgery, Boston University

Peter Burke, MD
Professor of Surgery, Boston University

Edward Dussom, MD
BMC Brighton
*Assistant Professor of Surgery, Boston University**

Abraham Jaffe, MD
Assistant Professor of Surgery, Boston University

Megan Janeway, MD
Assistant Professor of Surgery, Boston University

Danby Kang, MD
Assistant Professor of Surgery, Boston University

Nam Kim, MD
BMC Brighton
Assistant Professor of Surgery, Boston University

Aaron Richman, MD
Assistant Professor of Surgery, Boston University

Noelle Saillant, MD
Chief, Surgical Critical Care
Associate Professor of Surgery, Boston University

Sabrina Sanchez, MD, MPH
Associate Professor of Surgery, Boston University

Dane Scantling, DO, MPH
Assistant Professor of Surgery, Boston University

Sheina Theodore, MD
Assistant Professor of Surgery, Boston University

Crisanto Torres, MD, MPH
Assistant Professor of Surgery, Boston University

Kathryn Twomey, MD
Assistant Professor of Surgery, Boston University

Cardiac Surgery

Alexandros Karavas, MD
Interim Chief
Assistant Professor of Surgery, Boston University

Arvind Agnihotri, MD
BMC Brighton
*Assistant Professor of Surgery, Boston University**

Morgan Harloff, MD
Assistant Professor of Surgery, Boston University

Stanley Tam, MD
Chief, BMC Brighton
*Assistant Professor of Surgery, Boston University**

Colon and Rectal Surgery

Jennifer Davids, MD
Chief
Associate Professor of Surgery, Boston University

Olga Beresneva, MD
Assistant Professor of Surgery, Boston University

John Friel, MD
BMC Brighton & BMC South
Assistant Professor of Surgery, Boston University

Samantha Rivard, MD
Assistant Professor of Surgery, Boston University

General Surgery

Valentin Atanassov, MD
Chief of Surgery, BMC South
*Assistant Professor of Surgery, Boston University**

Stephen Addington, MD
BMC South
Assistant Professor of Surgery, Boston University

Aaron Dezube, MD
BMC Brighton
Assistant Professor of Surgery, Boston University

Sara La Grange, MD
BMC South
*Assistant Professor of Surgery, Boston University**

Omid Salehi, MD
BMC Brighton
Assistant Professor of Surgery, Boston University

Minimally Invasive and Weight Loss Surgery

Donald Hess, MD
Chief
Associate Professor of Surgery, Boston University

Brian Carmine, MD
Clinical Associate Professor of Surgery, Boston University

Phil Cohen, MD
BMC South
*Assistant Professor of Surgery, Boston University**

Joshua Davies, MD
Assistant Professor of Surgery, Boston University

Jacob Nudel, MD
Assistant Professor of Surgery, Boston University

Nicole Pecquex, MD
BMC Brighton
Assistant Professor of Surgery, Boston University

Luise Pernar, MD, MHPE
Associate Professor of Surgery, Boston University

Pediatric Surgery

Christopher Muratore, MD
Chief
Clinical Professor of Surgery, Boston University

Plastic and Reconstructive Surgery

Jaromir Slama, MD
Chief
Assistant Professor of Surgery, Boston University

Jorge Lujan, MD
Assistant Professor of Surgery, Boston University

Daniel Roh, MD, PhD
Assistant Professor of Surgery, Boston University

Podiatric Surgery

Ewald Mendeszoon, DPM
Chief
Assistant Professor of Surgery, Boston University

Ashley Daniel, DPM, MBS
Instructor of Surgery, Boston University

Justin Ogbonna, DPM
Assistant Professor of Surgery, Boston University

Elizabeth Sanders, DPM
Assistant Professor of Surgery, Boston University

Wei Tseng, DPM
Assistant Professor of Surgery, Boston University

Vitaliy Volansky, DPM
Assistant Professor of Surgery, Boston University

Surgical Oncology and Endocrine Surgery

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

Michael Cassidy, MD
Chief, Section of Breast Surgery
Associate Professor of Surgery, Boston University

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

Alaina Geary, MD, MHPE
Assistant Professor of Surgery, Boston University

Top Doctors

Congratulations to the following Department of Surgery faculty members who were recognized in *Boston* magazine's 2025 Top Doctors issue.

Arvind Agnihotri, MD
Cardiac Surgery

Brian Carmine, MD
Minimally Invasive and Weight Loss Surgery

Michael Cassidy, MD
Surgical Oncology

Mark Conrad, MD
Vascular Surgery

Jennifer Davids, MD
Colorectal Surgery

Tracey Dechert, MD
Acute Care and Trauma Surgery

F. Thurston Drake, MD, MPH
Endocrine Surgery

Alik Farber, MD, MBA
Vascular Surgery

Donald Hess, MD
Minimally Invasive and Weight Loss Surgery

Jeffrey Kalish, MD
Vascular and Endovascular Surgery

Sayeek Malek, MD
Transplant Surgery

David McAneny, MD
Endocrine Surgery

Christopher Muratore, MD
Pediatric Surgery

Nicole Pecquex, MD
Minimally Invasive and Weight Loss Surgery

Luise Pernar, MD, MHPE
Minimally Invasive and Weight Loss Surgery

Scott Prushik, MD
Vascular and Endovascular Surgery

Teviah Sachs, MD, MPH
Surgical Oncology

Jaromir Slama, MD
Plastic and Reconstructive Surgery

Stanley Tam, MD
Cardiac Surgery

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

Claire Miller, MD, MS
Assistant Professor of Surgery Boston University

Joseph Tobias, MD, MS
Assistant Professor of Surgery Boston University

Eduardo Vega, MD
BMC Brighton
Assistant Professor of Surgery, Boston University
Assistant Director, Boston University Surgery Clerkship

Thoracic Surgery

Christopher Digesu, MD
Interim Chief
Assistant Professor of Surgery, Boston University

Michael O'Connor, MD
BMC Brighton & BMC South
Assistant Professor of Surgery, Boston University

Transplant Surgery

Sayeed Malek, MD
Chief
*Clinical Associate Professor of Surgery, Boston University**

Aman Kumar, MD
Assistant Professor of Surgery, Boston University

Vascular and Endovascular Surgery

Jeffrey Siracuse, MD, MBA
Chief
Professor of Surgery and Radiology, Boston University

Alik Farber, MD, MBA
James Utley Chair of Surgery, Boston University
Surgeon-in-Chief, Boston Medical Center

* Recommended for

Vascular and Endovascular Surgery (continued)

Mark Conrad, MD
Chief of Surgery
BMC Brighton
Professor of Surgery,
Boston University

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

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

Mark Kulbaski, MD
BMC South
Assistant Professor of Surgery,
*Boston University**

Scott Prushik, MD
BMC Brighton
Assistant Professor of Surgery,
*Boston University**

Katie Shean, MD
BMC Brighton
Assistant Professor of Surgery,
Boston University

Stephanie Talutis, MD, MPH
Assistant Professor of Surgery,
Boston University

Surgical Research and Education

Andrea Geisz-Fremy, PhD, MS
Laszlo Tauber Assistant Professor
of Surgery,
Boston University

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

Vivian E. Sanchez, MD
Assistant Professor of Surgery and
Assistant Dean for Student Affairs,
Boston University

Emeritus

Robert Beazley, MD
Professor Emeritus of Surgery,
Boston University

Benedict Daly, MD
Professor Emeritus of Surgery,
Boston University

N. Joseph Espat, MD, MS
Professor Emeritus of Surgery,
Boston University

Amitabh Gautam, MD
Assistant Professor Emeritus of Surgery,
Boston University

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

Karl Karlson, MD
Assistant Professor Emeritus of Surgery,
Boston University

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

Hau Pham, DPM
Assistant Professor Emeritus of Surgery,
Boston University

John Polk, MD
Assistant Professor Emeritus of Surgery,
Boston University

Jennifer Tseng, MD, MPH
Professor Emeritus of Surgery,
Boston University

CAPE COD HOSPITAL (CAPE COD HEALTHCARE)

Stephen Brooks, MD
Assistant Professor of Surgery,
Boston University

Mark Loewen, MD
Surgery Residency Site Co-director

Mark Zapata, MD
Surgery Residency Site Co-director

ROGER WILLIAMS MEDICAL CENTER

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

Sung Kwon, MD, MPH, MBA
Associate Professor of Surgery,
Boston University
Assistant Director, Boston University
Surgery Clerkship

Ponnandai Somasundar, MD
Associate Professor of Surgery,
Boston University

VA BOSTON HEALTHCARE SYSTEM

General Surgery

Kamal Itani, MD
Chief of Surgery
Professor of Surgery,
Boston University

Gentian Kristo, MD, MPH
Chief of Acute Care Surgery
Adjunct Clinical Instructor of Surgery,
Boston University
Associate Chief of Surgery for Education
and Site Director,
General Surgery Program

Patrick B. O'Neal, MD
Chief of Endocrine Surgery
Assistant Professor of Surgery,
Boston University
Assistant Director, Boston University
Surgery Clerkship

Zeyad Sahli, MD, MBA
Assistant Professor of Surgery,
*Boston University**

Cardiac Surgery

Miguel Haime, MD
Assistant Professor of Surgery,
Boston University

Vascular Surgery

Amy Felsted, MD
Assistant Professor of Surgery,
*Boston University**

Alex Lin, MD
Assistant Professor of Surgery,
*Boston University**

Michelle Martin, MD
Assistant Professor of Surgery,
*Boston University**

Research

Hillary Mull, PhD, MPP
Associate Professor of Surgery,
Boston University

Amy Rosen, PhD
Professor of Surgery,
Boston University

* Recommended for

New Faculty

Sayeed Malek, MD
Chief of Transplant Surgery
Clinical Associate Professor of Surgery,
*Boston University**

Dr. Malek completed medical school in India, and came to the U.S. as a research fellow at Stony Brook University Hospital/SUNY in New York. He did his general surgery training at North Shore University Hospital/NYU School of Medicine, followed by a multi-organ transplant fellowship at the Thomas E. Starzl Transplantation Institute at the University of Pittsburgh Medical Center. He was then recruited in 2003 by the Geisinger Medical Center in Danville, Pennsylvania to establish a pancreas transplant program.

In 2006, Dr. Malek joined Brigham and Women's Hospital (BWH) as an attending surgeon in the Division of Transplant Surgery. Prior to joining Boston Medical Center, he was clinical director of transplant surgery and Assistant Professor of Surgery at Harvard Medical School. While at BWH, he performed the first pancreas transplant at the hospital and was instrumental in doubling the number of kidney transplants from both living and deceased donors. In addition, Dr. Malek was the physician lead for quality assessment and performance improvement, responsible for quality improvement initiatives for all of the hospital's transplant programs. He has served on many regional and national committees, including the American Society of Transplant Surgeons and the United Network of Organ Sharing, among other organizations, and as an ad hoc reviewer for several high-impact journals.

Claire Miller, MD, MS
Assistant Professor of Surgery,
Boston University
Surgical Oncology

Dr. Miller is a 2019 graduate of Albany Medical College. She completed her residency in general surgery at Temple University Hospital and recently completed a fellowship in breast surgical oncology at Memorial Sloan Kettering Cancer Center in New York. She also holds a master's degree in physiology from Case Western Reserve University. Dr. Miller's clinical and research interests include breast cancer in young women, the impact of environmental exposures on breast cancer development, and health equity.

Stephanie Talutis, MD, MPH
Assistant Professor of Surgery,
Boston University
Vascular and Endovascular Surgery

Dr. Talutis received her medical degree from New York Medical College and also holds a master's degree in public health from Boston University School of Public Health. She completed general surgery residency in 2021 at Boston Medical Center (BMC), where she received the Lester F. Williams Teaching Award and the Senior Resident Teaching Award. This was followed by a vascular and endovascular surgery fellowship at UCLA. Upon completion of her training, in 2023, Dr. Talutis joined Tufts Medical Center as an attending surgeon in the Department of Vascular Surgery and as an Assistant Professor of Surgery at Tufts University School of Medicine. In May 2025, she joined the Division of Vascular and Endovascular Surgery at BMC. Active in research, Dr. Talutis has co-authored 46 peer-reviewed articles, 16 as first author.

Joseph Tobias, MD, MS
Assistant Professor of Surgery,
Boston University
Endocrine Surgery

Dr. Tobias received his medical degree from Columbia University Vagelos College of Physicians and Surgeons, followed by general surgery residency at Oregon Health & Science University. He went on to complete his clinical training as a fellow in endocrine surgery at the University of Chicago, while also earning a master's degree in public health and completing a fellowship in clinical medical ethics at the University of Chicago's MacLean Center in 2025. During both residency and fellowship, he received awards for excellence in teaching.

* Recommended for

Division Highlights

Acute Care and Trauma Surgery

The Field Transfusion Paramedic Program, spearheaded by Crisanto Torres, MD, MPH, which brought prehospital whole blood transfusion to Massachusetts in 2024, has been very successful. Since its launch in June 2024, there have been more than 90 activations and more than 30 lives saved, and the program has recently been expanded. Research endeavors in the division include recent NIH funding from the National Institute on Minority Health and Health Disparities, awarded to Dane Scantling, DO, MPH, to investigate ways of improving access to trauma care for victims of gun violence. In addition, a new grant is supporting the creation of modules designed to educate clinicians about using extreme risk protection orders (red flag orders) to help keep patients and families safe.

Cardiac Surgery

U.S. News & World Report ranked Boston Medical Center (BMC) Cardiac Surgery among the nation's top 50 programs in its 2025–2026 Best Hospitals rankings. This achievement, placing Cardiology, Heart & Vascular Surgery at #42 on the annual list, is the result of true collaboration. The Division of Cardiac Surgery at BMC Brighton was also recognized on the most recent Best Hospitals list as high performing in aortic valve surgery and heart bypass surgery. In addition, excellent collaboration contributed to BMC being recognized by Castle Connolly as a Top Hospital in Coronary Artery Bypass Grafting Surgery for exceptional care and outstanding performance.

Colon and Rectal Surgery

BMC is currently the only institution in New England offering a niche technique called a Koch Pouch, which offers patients with ulcerative colitis and familial adenomatous polyposis an alternative to conventional surgical options.

Chief of Colon and Rectal Surgery Jennifer Davids, MD, and attending surgeon Olga Beresneva, MD, developed a curriculum and hands-on skills stations to create a new course, Medical Expert Training in Flexible Endoscopy for Surgical Residents. Held for the first time in March 2025, the inaugural course was attended by BMC surgery residents as well as residents from across Massachusetts and beyond. Also in 2025, Dr. Davids was inducted into the Boston University Medical Group Clinical Excellence Society.

Minimally Invasive and Weight Loss Surgery

To better meet the needs of patients, attending surgeon Joshua Davies, MD, is launching a comprehensive multidisciplinary abdominal wall reconstruction center at BMC. The center aims to individualize hernia care, with a focus on prehabilitation, post-operative care, and hernia surveillance, and will utilize advanced laparoscopic and robotic reconstructive techniques.

To provide high-quality bariatric care for adolescents, BMC has partnered with Boston Children's Hospital for more than a decade. Attending surgeon Brian Carmine, MD, is in his tenth year as director of the very successful Adolescent Bariatric Surgery Program at Boston Children's, which was just re-accredited.

Attending surgeon Luise Pernar, MD, MHPE, was appointed surgery clerkship director for the Boston University Chobanian & Avedisian School of Medicine and served as program chair for the 71st Massachusetts Chapter of the American College of Surgeons Annual Meeting. At the national level, Chief of Minimally Invasive and Weight Loss Surgery Donald Hess, MD, was appointed to the Board of Governors of the American College of Surgeons, representing the Association of Program Directors in Surgery.

Pediatric Surgery

Over the last few years, the volume of patients in need of pediatric surgery has increased tremendously. In addition to routine surgeries for appendicitis, hernias, and other common conditions, the pediatric surgery team provides surgical care for congenital conditions and traumatic injuries. The division serves a diverse patient population and has seen a marked increase in the number of children with congenital anomalies who initially received surgical care in other countries and now require multi-step surgeries to correct or complete this care. The pediatric surgery team routinely collaborates with colleagues across BMC and with clinicians at Boston Children's Hospital to provide patients and their families with the highest care and best possible outcomes.

Plastic and Reconstructive Surgery

Plastic surgeon Daniel Roh, MD, PhD, was appointed vice chair for research in the Department of Surgery. He received a new National Institute on Aging R61/R33 staged-innovation grant to explore whether chronic wound stress accelerates systemic aging and contributes to functional decline. Dr. Roh also delivered invited presentations at Johns Hopkins University, filed a U.S. patent application for novel fibrosis treatments, and served on numerous national and international grant review panels.

Attending surgeon Jorge Lujan, MD, has vastly expanded the division's service lines, including in the areas of facial cosmetic surgery, facial feminization surgery, cleft lip and palate care, and pediatric cranial vault surgery. He has completed over 70 cases in these specialized areas and led a budding multidisciplinary pediatric craniofacial surgery group in doing four craniosynostosis

The colorectal surgery team

reconstruction surgeries, a surgery never before performed at Boston Medical Center. In addition, Dr. Lujan was inducted into the Boston University Medical Group Clinical Excellence Society.

Podiatric Surgery

Faculty from the Division of Podiatric Surgery raised the division's profile with national and international presentations and awards. Internationally, Vitaliy Volansky, DPM, made a podium presentation at the Global Conference on Advanced Wound Care and Wound Management in London. Ashley Daniel, DPM, MBS, won third prize in the poster competition at the American Podiatric Medical Association (APMA) National Conference in Dallas. Faculty and podiatric surgery residents also made poster presentations at the Symposium in Advanced Wound Care, which took place in Texas, and at the APMA Region One Conference in Boston.

Justin Ogbonna, DPM, was appointed program director for the podiatric surgery residency program, and Elizabeth Sanders, DPM, was appointed assistant program director. Dr. Daniel was named clerkship director for the division. In addition, at the national level, Dr. Sanders was appointed as a site evaluator for the Council on Podiatric Medical Education and to the APMA National Research Committee.

Surgical Oncology

The Division of Surgical Oncology has been very productive clinically and academically. Chief of Endocrine Surgery F. Thurston Drake, MD, MPH, has spearheaded the creation of Boston Medical Center's (BMC's) first multidisciplinary incidentaloma clinic, bringing together experts to evaluate incidental findings in a timely, effective manner. In addition, Dr. Drake was one of three surgeons who were inducted into the Boston University Medical Group Clinical Excellence Society in 2025. And with the recent expansion of the Boston Medical Center Health System, Chief of Breast Surgery and Belkin Breast Health Center Medical Director Michael Cassidy, MD, continues to advance the integration of breast surgery across all three BMC campuses, strengthening a system-wide approach to care.

Thoracic Surgery

The Division of Thoracic Surgery, alongside the pulmonology team at BMC, was recently recognized as high performing in Pulmonology and Lung Surgery by *U.S. News & World Report*.

The expansion of the BMC Health System in fall 2024, which saw the welcoming of two new hospitals, BMC Brighton and BMC South, is benefiting patients at all three BMC hospitals, ensuring accessible and equitable care in the region. The thoracic surgery team recently completed the successful integration of services across all three institutions, offering patients the most advanced thoracic procedures, including complex robotic thoracic surgery, throughout the health system.

Transplant Surgery

For nearly 50 years, the BMC transplant surgery program has combined clinical expertise with intensive patient support and guidance to improve quality of life through successful kidney transplantation. BMC serves a complex patient population. Extensive translation services, educational materials, and hands-on patient navigation help guide kidney recipients through the daunting complexities of the organ acquisition process. To lead these efforts, the division has recruited a surgeon with more than 25 years of experience as the new chief of transplant surgery. In 2025, Sayeed Malek, MD, joined BMC from Mass General Brigham, where he previously served as clinical director of transplant surgery at Brigham and Women's Hospital.

Vascular and Endovascular Surgery

The Division of Vascular and Endovascular Surgery achieved national recognition in the most recent *U.S. News & World Report* Best Hospitals listing, which saw BMC ranked at #42 for Cardiology, Heart & Vascular Surgery.

Jeffrey Siracuse, MD, MBA, was appointed division chief, and Elizabeth King, MD, was appointed assistant program director for the vascular and endovascular surgery fellowship. Dr. King was also appointed associate program director for the BMC General Surgery Residency Program. And the division was happy to welcome BMC surgery residency graduate Stephanie Talutis, MD, MPH, back to the department as its newest faculty member.

Collectively, the division published more than 30 papers in high-impact journals.

Alumni Profile: Peggy Duggan, MD

Patients waiting for the elevator in the atrium of Boston's Brigham and Women's Faulkner Hospital are likely to notice a plaque. The elevator lobby is named in honor of Peggy Duggan, MD, a gift from a grateful patient. Faulkner Hospital, the same hospital where Dr. Duggan was born, was her professional home for 22 years—her entire career save two years shortly after residency—until an opportunity too good to pass up presented itself. In 2021, she accepted the job she holds now as the executive vice president, chief physician executive, and chief medical officer at Tampa General Hospital. The hospital is a primary teaching affiliate of the University of South Florida Morsani College of Medicine, where Dr. Duggan is an Assistant Professor of Surgery.

Dr. Duggan's transition to a full-time position in the C-suite has been a gradual one. In fact, she only stepped away completely from clinical practice in her specialty of breast surgery two years ago. She says, "I don't miss doing individual cases, but I do miss being a busy clinical doctor and the teamwork associated with that."

After completing the general surgery residency program at Boston Medical Center (BMC), the primary teaching affiliate for the Boston University Chobanian & Avedisian School of Medicine, in 1996, she went into private practice. She quickly found it wasn't for her and joined Faulkner Hospital as an attending surgeon in 1998. Dr. Duggan built a very busy surgical practice, eventually doing about 400 cases a year. She was still young in her career when she took on her first official administrative role as medical director for the Brigham and Women's Faulkner Hospital Breast Center, in 2002. When initially approached about the position, she admits she was wary. "Based on my experience with the person who previously held that job, I thought it seemed like a terrible job. What I really cared about was patient care, but I started to see that in this role, I could have an impact on patients I would never meet." She served as medical director for 15 years, nine as president of the breast center board, while maintaining an active clinical practice. During this time, to hone her management skills, she completed the year-long Brigham Leadership Program at Harvard Business School.

In 2013, Dr. Duggan was tapped to take on an additional role as chief medical officer (CMO) and vice president (VP) of medical affairs at Faulkner. In 2017, she stepped back from her position as medical director of the breast center, established in 1988 by the late noted breast surgeon and activist Susan Love, MD, but continued on as CMO and VP of medical affairs until her move to Tampa in 2021. The move to Florida from Faulkner, a community hospital with 170 beds, to Tampa General, an academic medical center with 1,000 beds, was in Dr. Duggan's words "a big, big jump." It also meant leaving Boston, her lifelong home for all but one year. In addition to completing residency at what was then called Boston City Hospital, she earned both her undergraduate and medical degrees from Boston University.

Excellent Launching Pad

From an early age, Dr. Duggan knew she wanted to be a doctor, and once she had the opportunity to spend time in the OR, it was clear that surgery was her calling. "The OR is fun, and I love the culture." She says that James Menzoian, MD, now retired but at the time BMC surgery residency director and chief of vascular surgery, saw her potential during her medical school days and was a great mentor. For residency, the BMC program was the only one she seriously considered.

Like many people who have trained in the BMC General Surgery Residency Program, several of Dr. Duggan's memories revolve around events in the trauma bay—the energy in that room and everything she learned there from legendary trauma surgeon Erwin Hirsch, MD, and others. One of the days she says she will never forget is the day a patient came in with a gunshot wound to the neck. "Intubation wasn't possible, so I had to do an emergency airway. You don't do them very often, but I had the training needed and had been drilled enough so that under duress, I could do the steps required to get it done."

According to Dr. Duggan, residents had a lot of operative experience by the time they completed residency, and she says, "When you walked out the door, you really felt you were ready to be a surgeon." She credits her general surgery training at BMC and the critical thinking skills she gained during her time as a house officer for preparing her for everything that's come after, including contributing to her success as an administrator.

Scaling Up

Of her move to Tampa, Dr. Duggan says, "It's been a phenomenal move for me. I love this place. I've built a team and have been able to move the needle on patient care. I have an opportunity here to have much more impact than I could ever have at the Brigham." One of the things she is most proud of is the role that she has played in prioritizing creation of a system to decrease mortality from sepsis. "At Tampa General, a lot of work went into developing and implementing an early warning system, and the hospital is now a top performer nationally when it comes to reducing deaths from sepsis." The hospital has achieved a 12.6% reduction in sepsis mortality, saving more than 200 lives annually. Dr. Duggan says that very smart and innovative physicians are the brains behind the new system, but she was integral to ensuring that the scaffolding essential to its success, including the 24-hour staffing required—initially an issue during the planning phase—was ultimately put in place.

Dr. Duggan in 2021 during her last operation at Faulkner Hospital

> "I continue to feel very fortunate that I was able to train in surgery, not a lot of people get to do that. I don't think I could have ever learned so much so fast in any other environment."
>
> **— Peggy Duggan, MD**

Strategic Impact

Other significant achievements during Dr. Duggan's four years at Tampa General include leading the hospital on its journey to become the first academic medical center and Level I trauma center in the country to achieve certification as a Collaborative High Reliability Organization®. She says, "This is probably the most important work I will do here because it changes the culture of accountability, reporting, and patient safety." She has also played a key role in the redesign of the hospital's ICU care. Changes implemented under her watch have brought new structure and a new staffing model that has driven quality improvements in the hospital's 210 ICU beds.

One thing Dr. Duggan was sorry to have to give up in making the switch to an administrative role was teaching. She was Assistant Professor of Surgery at Harvard Medical School before leaving Faulkner Hospital. She says, "July 1 was always my favorite time of year. Everyone's excited and enthusiastic and very engaged in training the residents. I enjoyed nothing more than new interns in the OR and guiding them through how to start working technically."

In looking back, she says, "I continue to feel very fortunate that I was able to train in surgery, not a lot of people get to do that. I don't think I could have ever learned so much so fast in any other environment."

Drs. Alexandros Karavas (left) and Morgan Harloff

At the Heart of Expanded Care

Most cases the cardiac surgery team at Boston Medical Center (BMC) sees are routine, while others require highly strategic, multidisciplinary teamwork. Such was the case that began when a 35-year-old woman five days postpartum called EMS after passing out at home. While being transported to BMC South in Brockton, Mass., she went into cardiac arrest and subsequently received chest compressions for approximately one hour in the emergency department. Despite the long period of CPR, the cardiac surgery team at BMC's main campus accepted her for ECMO (extracorporeal membrane oxygenation) consideration. She was MedFlighted to Boston, and after three hours of CPR was placed on ECMO. Happily, she had a strong recovery and was discharged 12 days later.

This patient's story illustrates the level of collaboration among clinicians from multiple disciplines at BMC and BMC South, a 224-bed community hospital. Members of the obstetrics, maternal-fetal medicine, neurocritical care, acute care and trauma surgery, and pulmonology teams all played a part in saving this patient.

ECMO was relatively new to BMC when Interim Chief of Cardiac Surgery Alexandros Karavas, MD, arrived in 2022, after 10 years in private practice in upstate New York. Now it is used routinely, with more than 100 patients treated with this technology over the last few years. ECMO provides a safety net for patients who decompensate, and allows for extremely sick patients who would previously have been transferred to other centers to be cared for at BMC. Dr. Karavas, Assistant Professor of Surgery at the Boston University Chobanian & Avedisian School of Medicine (SOM), says that BMC has become one of the high-volume ECMO centers in Boston and is part of the Extracorporeal Life Support Organization, an international nonprofit devoted to innovation and the advancement of this field.

Adapting to Current Needs

Morgan Harloff, MD, is the second member of the cardiac surgery team. Dr. Harloff joined the BMC Division of Cardiac Surgery in 2024, after completing the cardiothoracic surgery integrated residency program at Brigham and Women's Hospital. He is Assistant Professor of Surgery at the Chobanian & Avedisian SOM.

The team continues to see an increase in the volume and acuity of patients. Dr. Karavas says, "We have established major aortic surgery, including total aortic arch replacement and valve-sparing aortic root repairs. We now offer multi-arterial coronary artery bypass grafting, especially beneficial for younger patients." He adds, "We have been performing complex mitral valve repairs, but also collaborating with our cardiologists for less invasive procedures, such as transcatheter valve replacements and repairs." And BMC patients with advanced heart failure or cardiogenic shock can now be managed with the Impella® 5.5 percutaneous left ventricular assist device, a temporary heart pump that improves blood flow and supports the heart's function.

"We have established major aortic surgery, including total aortic arch replacement and valve-sparing aortic root repairs. We now offer multi-arterial coronary artery bypass grafting, especially beneficial for younger patients."

— Alexandros Karavas, MD

U.S. News Top 50

Excellent outcomes and collaboration are at the heart of BMC ranking at #42 for Cardiology, Heart & Vascular Surgery in the 2025–2026 *U.S. News & World Report* Best Hospitals listing. The care provided to a patient who recently underwent transcatheter aortic valve replacement and whose medical condition required clinicians to use an alternative access approach for the procedure is emblematic of the teamwork and multidisciplinary care that benefits all BMC patients. Chief of Vascular Surgery Jeffrey Siracuse, MD, MBA, established transaortic access before interventional cardiologists Ashvin Pande, MD (director of invasive cardiology at BMC), and Sumon Roy, MD, teamed with Dr. Harloff to complete the procedure. Dr. Harloff has a special interest in valve replacement and completed a structural heart disease and endovascular cardiac surgery fellowship during his training.

Essential Care

"Because of the patient population we serve," Dr. Karavas says, "we see the majority of endocarditis cases in Boston." Increasingly, the cardiac surgery team is using the AngioVac thrombectomy system to treat patients with infective endocarditis. Dr. Harloff says, "The AngioVac allows us to debride and potentially extract the infection that's on the heart valve without having to open the patient's chest. It's not a perfect solution, but it allows us to temporize the patient's situation and correct the infection in the bloodstream to get them healthier so that they can better tolerate open heart surgery."

BMC South does not offer cardiac surgery, but BMC Brighton, a 291-bed teaching hospital in Brighton, Mass., has a strong cardiac surgery program and two experienced cardiac surgeons. Chief of Cardiac Surgery Stanley Tam, MD, and Arvind Agnihotri, MD, provide cutting-edge care for patients there. The hospital was recognized by *U.S. News & World Report* in the 2025–2026 rankings as high performing in both aortic valve and heart bypass surgery.

Dr. Karavas says, "The culture we have here at BMC is really great. Our collaboration with the cardiologists, the perfusionists, and the intensivists in the surgical intensive care unit is excellent. We look forward to expanding this collaboration to our recently aligned institutions, BMC South and BMC Brighton, to achieve a greater impact in the communities we serve."

Left to right: Drs. Sumon Roy, Jeffrey Siracuse, Morgan Harloff, and Ashvin Pande

Focus on CVC Competency

The name says it all: central *venous* catheter (CVC). An essential tool in patient care, more than five million CVCs are placed each year in the U.S., the vast majority without the mechanical complications of arterial puncture, pneumothorax, or hematoma. However, when these complications do occur, they can be quite serious.

"We had been seeing an increase in the number of mechanical central line placement complications," says Jeffrey Siracuse, MD, MBA, chief of vascular and endovascular surgery at Boston Medical Center (BMC) and vice chair for quality and patient safety in the Department of Surgery. "If you dilate the carotid artery or place the catheter into it, you need to call vascular surgery. In removing it, there's a risk of bleeding and removal can sometimes require a major operation. In rare cases you may have to open the chest to remove the catheter."

Concerned about the rate of arterial placements, in 2021, Dr. Siracuse and Alik Farber, MD, MBA, now chair of the Department of Surgery and surgeon-in-chief at BMC, teamed up to address the problem. They brought together a multidisciplinary working group of clinical leaders to create an education and credentialing program for providers across the hospital who place CVCs, tagging it the "Safe Central Venous Catheter Placement Initiative."

Tiered Protocol

With catheters placed by physicians from multiple specialties, the logistics were complicated. "We wanted to make sure the program we created would lead to fewer mechanical CVC complications without making the process unreasonably burdensome," says Dr. Siracuse, who is Professor of Surgery and Radiology at the Boston University Chobanian & Avedisian School of Medicine (SOM).

Chief of Vascular and Endovascular Surgery Dr. Jeffrey Siracuse guides resident Dr. Emily Belding during a central venous catheter placement session in the simulation center.

Two years after planning began, a protocol that is producing the hoped-for results was introduced. Nearly 200 attending physicians and advanced practice providers (APPs), as well as a large number of trainees, have now completed the program and have been credentialed to place CVCs. Dr. Siracuse says, "Since putting the protocol into effect, we have seen a drastic reduction in CVCs placed into arteries."

The tiered protocol has three main components: an online education video with an embedded test, guided training in the Solomont Simulation Center, and bedside proctoring. All clinicians and trainees fall into one of three levels (see chart on page 16).

Clinicians in Level 1 are the most experienced in CVC placement and are only required to view the video and pass the test in order to be credentialed. Clinicians in Level 2 have an added requirement: training in the simulation center. Finally, Level 3 consists of clinicians and trainees with very limited or no experience with CVC insertion, necessitating proctored supervision of initial CVC placements. Dr. Siracuse says that the majority of clinicians fall into the second category. Everyone must be recertified every two years.

Group Effort

Dr. Siracuse credits multiple people across BMC with recognizing the need for this program and helping to bring it to fruition. Key to the program's success was getting buy-in from hospital leadership to fund the project, and Dr. Siracuse says that David McAneny, MD, chief medical officer and senior vice president of medical affairs at BMC, was fully on board. Dr. McAneny, who previously led the Department of Surgery Quality and Patient Safety team, says, "I am proud of this program and am

Senior Quality and Patient Safety Specialist Dr. Sabine Clasen was instrumental in ensuring that multiple aspects of the Safe Central Venous Catheter Placement Initiative were successfully completed.

confident that it has already prevented serious complications. Drs. Farber and Siracuse and their team studied the literature and our previous practices and designed a thoughtful, practical program to educate clinicians with various levels of training and technical proficiency." Dr. McAneny, who is also Professor of Surgery and associate dean for clinical affairs at the Chobanian & Avedisian SOM, emphasized that the investigators "applied the same rigor to this clinical challenge that they use for scholarly efforts."

Another person who was essential to getting the initiative off the ground was Sabine Clasen, PhD, MSN, RN, senior quality and patient safety specialist in the Department of Surgery, who brought deep expertise to the project and was essential in driving it forward. Dr. Clasen says, "One of the central tenets of quality and patient safety is standardization. It was a major achievement to reach consensus and develop a protocol for CVC placement that everyone can now follow." She adds, "Because of the complexity and the fact that it was hospital wide, it was the most challenging project that I have ever worked on in terms of implementation."

Chief of Anesthesiology Rafael Ortega, MD, also played a key role in the project by creating the video everyone must watch. Dr. Ortega, Professor of Anesthesiology at the Chobanian & Avedisian SOM, is executive editor for the Videos in Clinical Anesthesia section of *Anesthesia and Analgesia*. Bariatric surgeon Brian Carmine, Clinical Associate Professor of Surgery at the Chobanian & Avedisian SOM, and associate director of the Solomont Simulation Center at BMC, has also been instrumental in the success of the program, providing training in the center and ongoing proctored supervision for those who must fulfill this criteria in order to be credentialed.

Dr. Siracuse says that the ultimate goal of this initiative and many others ongoing at BMC is to make it the safest hospital in the Boston area.

CVC CREDENTIALING PROGRAM

Levels	MDs and APPs	Trainees	Required Training
LEVEL 1	Privileged in one of the following specialties: • Interventional Radiology • Interventional Cardiology • Cardiac Anesthesiology • Cardiac Surgery • Vascular Surgery • Electrophysiology **OR** Placed or directly supervised a minimum of 20 CVC placements or central venous cannulations per year	Successfully placed >10 CVCs over a two-year period = exempt from simulation center and proctoring requirement with program director approval	Online Video
LEVEL 2	Placed or directly supervised a minimum of 4 CVC placements or central venous cannulations at BMC (or a prior institution) per year during the past 3 years on average	N/A	• Online Video • Simulation Center
LEVEL 3	Any MD/APP not in Level 1 or Level 2	Any trainee not in Level 1	• Online Video • Simulation Center • Hospital-Based Proctoring *(5 successful insertions)*

Left to right: Drs. Kevin Brady, Noelle Saillant, Brian Telfer, and Charlene Ong

AI Assist

When the U.S. government's Defense Health Agency (DHA) identifies a problem that is not being addressed by industry or academia, they often turn to the human health and performance team at MIT Lincoln Laboratory, a federally funded R&D center focused on building operational prototypes that can then be transitioned to production by industry.

To begin work on one such project with the DHA Combat Casualty Care Research Program, MIT Lincoln Laboratory joined forces with Noelle Saillant, MD, executive vice chair of surgery and chief of surgical critical care at Boston Medical Center (BMC) and Associate Professor of Surgery at the Boston University Chobanian & Avedisian School of Medicine (SOM). For nearly five years, she has been working with her MIT collaborators on the human health and performance team to investigate how artificial intelligence (AI) can improve triage of injured patients.

The first project was a proof-of-principle looking at civilian patients with gunshot wounds to the torso. This study showed that an AI model could significantly improve accuracy when predicting level of care likely to be required using contextual inputs available in the field (e.g., injury location on the body, injury type, vital signs). Based on these promising initial results, the DHA posed two questions: Does the AI approach perform as well for military casualties? And does it perform as well for additional injury types?

Decision Support

The answer to both questions was yes, and over the last few years, a good deal of progress has been made. An algorithm and a prototype of a smartphone-based app have been developed, and predictive capabilities span transfusion requirements, procedures, major operations, internal injuries, and associated resources, which include ICU and ventilator needs. The next steps include teaming with other organizations currently working in this triage space to perform clinical testing of the app, potentially slated to begin in 2026.

Dr. Saillant's co-principal investigator on the project is Brian Telfer, PhD, senior staff in the human health and performance team at MIT Lincoln Laboratory. He says, "The point of the app is to provide an instant prediction of what will be needed: Is the patient going to require major surgery? The idea is to eliminate the need to wait for the patient to arrive in the emergency department to potentially sort through summaries of multiple patients coming in from the field." Information from the app could be used to provide decision support and initiate pre-staging of blood, surgeons, and operating rooms. Dr. Saillant says, "Using this app, we could actually predict how many units of blood a patient is going to need. We could activate the massive transfusion protocol before a patient even arrives, which could save a lot of lives."

> "We're getting wonderful feedback on the baseline app from Dr. Saillant and the BMC clinical team. The partnership has been really fantastic and has been critical to the success of the project."
>
> **— Kevin Brady, PhD**

One of the keys to the project is getting clinically meaningful information into the system with as little physical interaction as possible. Dr. Telfer says, "It could be a touch screen with a figure of the body or potentially an audio interface, where the medic or EMT speaks into the phone and the app then translates this input into contextual information." Dr. Saillant has also been working closely with lead engineer Kevin Brady, PhD, technical staff at MIT Lincoln Laboratory. Dr. Brady says, "We're getting wonderful feedback on the baseline app from Dr. Saillant and the BMC clinical team. The partnership has been really fantastic and has been critical to the success of the project." On the BMC side, surgery residents have been part of the team that has worked with Dr. Saillant. Allan Stolarski, MD, worked on the project before graduating from the BMC General Surgery Residency Program in 2025, and PGY2 Emanuele Lagazzi, MD, is currently involved in advancing this research.

Bridging the Communication Gap

While acknowledging that developing a shared language that allows clinicians and engineers to analyze data together can be labor intensive, Dr. Saillant says, "There's a tremendous need for clinicians to interface with data scientists to bring in AI technology." She points out that hospitals are already collecting massive amounts of patient data, but because it's being done in silos, it's not being leveraged to maximum effect. "We have to figure out how to standardize so that when we capture data from someone in the ED, we can learn from the data signatures and train AI in decision-making and clinical acumen. We need to get our hospital research teams fitted for all of the data that we are going to need to move into this new era."

One challenge with bringing trauma care and clinical scenarios in line with AI is determining the "source of truth." Dr. Saillant says, "In trauma, every day, we make decisions about who is alive and who's not going to survive, when to do a thoracotomy and when not to." As an example of this dilemma, she references decisions related to massive transfusion protocol activation and points to a study she did in which she asked trauma surgeons and members of the blood bank if they thought someone who received 100 units of blood would survive. The consensus was that a patient who needed more than 50 units would not survive, but the study found that among patients who received 50 to 100 units of blood, 50% had neurologically meaningful survival. She says, "If I build into an algorithm the fact that someone has a high probability of death, I could be losing people who are salvageable. It will become a self-fulfilling prophecy."

On the other hand, AI could potentially prevent a clinical error. Dr. Saillant says, "If a trauma patient comes in with low blood pressure, the clinician might suspect bleeding and start giving blood, but it could actually be because of a spinal cord injury. Depending on its source of truth, AI might be able to correctly predict this."

Broader Applications

The work with MIT Lincoln Laboratory is focused on trauma, but there is overlap with another project at BMC and the Chobanian & Avedisian SOM. Clinicians are pairing up with Boston University engineers and data scientists to put together an internal research proposal to create a clinical lab focused on integrating AI into patient care. For this project, Dr. Saillant is working with clinical neurointensivist and researcher Charlene Ong, MD, MPHS, Assistant Professor of Neurology at the Chobanian & Avedisian SOM. One area of interest for Dr. Ong is the use of machine learning to optimize ICU outcomes. She sees promise in using AI to track and flag subtle signs of neurologic deterioration before they become catastrophic, and she wonders, "How much data are we leaving on the table and not actually leveraging when there are life-or-death questions and situations?" Drs. Saillant and Ong hope that AI will ultimately eliminate some level of clinical guesswork and empower clinicians.

Bridging Theory and Practice

The case-based clerkship

The Department of Surgery has innovative programs for medical students that start in the first year and run all the way through the fourth year, with the surgery clerkship serving as the cornerstone of student engagement.

On Friday mornings, the surgery clerkship didactic sessions bring together Boston University Chobanian & Avedisian School of Medicine (SOM) students from across the state and across the country. Students have options for where they do their surgery clerkship. Most will be in Greater Boston, at Boston Medical Center (BMC), BMC Brighton, or at the VA Boston Healthcare System. Others will do their clerkships elsewhere in Massachusetts, at MetroWest Medical Center in Framingham or Berkshire Medical Center in Pittsfield and join the Friday session by Zoom. Still others Zoom in from Roger Williams Medical Center in Providence, Rhode Island, or Kaiser Permanente Santa Clara Medical Center in California's Silicon Valley.

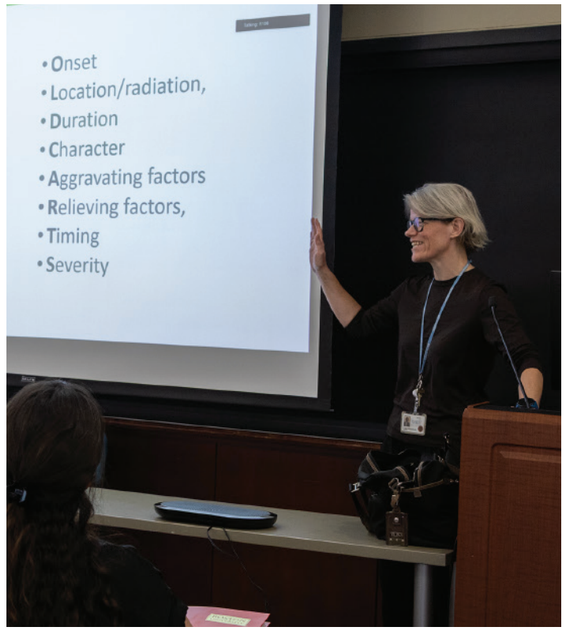
In keeping with current trends in medical education and feedback from students, the format for these sessions was changed from a traditional lecture to a case-based format during the 2024–2025 academic year under the leadership of former Clerkship Director Jeffrey Cooper, MD, and Associate Clerkship Director Sheina Theodore, MD.

The clerkship is now under the direction of Luise Pernar, MD, MHPE, who was appointed to this new role in 2025. An attending surgeon in the Division of Minimally Invasive and Weight Loss Surgery at BMC and Associate Professor of Surgery at the Chobanian & Avedisian SOM, Dr. Pernar previously served for six years as associate director of the BMC General Surgery Residency Program.

Differential Diagnosis

Faculty members from across the Department of Surgery participate in the six didactic sessions that take place during the clerkship. On a recent Friday, the first case involved a patient who presented to the emergency department with symptoms suggestive of a small bowel obstruction. Dr. Pernar says, "We provide students with findings from the physical exam as well as imaging findings and ask them to come up with a differential diagnosis. Based on this, we ask the students what they would like to do to work up and manage the patient and then let the scenario play out, with discussion of all of the nuances."

Since assuming her new role, Dr. Pernar has engaged more faculty to participate in the didactics and has added one new graded component. Students now choose from a list of 32 topics to create a 12- to 15-minute oral presentation, which



Clerkship Director Dr. Luise Pernar conducts a didactic session.

is then uploaded to a platform where students can access each other's presentations. Students can then use the presentations to prepare for the shelf exam they take at the end of the clerkship. Dr. Pernar says, "It gives them an incentive to delve deeper into a topic on their own time, and the topics are ones we don't normally cover in the didactics and bear emphasizing."

OSCE Pilot

Dr. Pernar works closely with Dr. Theodore, an attending surgeon in the Division of Acute Care and Trauma Surgery and Assistant Professor of Surgery at the Chobanian & Avedisian SOM. As associate director, Dr. Theodore's responsibilities include overseeing the objective structured clinical examination (OSCE) and leading two didactic sessions, one focused on trauma care and, new this year, a session focused on trauma-informed care. She credits the Chobanian & Avedisian SOM for including trauma-informed care in the curriculum during the first and second years of medical school, noting that this is not the case everywhere. She says that the didactic session serves as a refresher.

Advancing trauma-informed care and educating others about it is a passion for Dr. Theodore. She recently completed the year-long Boston University Medical Group Clinician Educator Leadership Program, and under the primary mentorship of BMC's Community Violence Response Team Director Lisa Allee, Assistant Professor of Surgery at the Chobanian & Avedisian SOM, she focused on developing a trauma-informed-care OSCE that is being piloted this academic year. It is a mandatory part of the curriculum, and the hope is to include the underlying principles as part of the graded OSCE in the next academic year. She says, "This curriculum isn't just about assessing clinical skill, it's about teaching future physicians to recognize the unseen wounds patients carry. By integrating trauma-informed care into OSCEs, we're preparing students to treat the whole person, not just the diagnosis."

Dr. Sheina Theodore developed an objective structured clinical examination focused on trauma-informed care.

> "We need to continue educating everyone about the importance of student evaluations so that the students really get feedback on their performance clinically. Part of my role is to make sure that faculty take care of the medical students, both in teaching them and also in evaluating them."
>
> **— Luise Pernar, MD, MHPE**

Residents as Educators

Dr. Pernar has been actively engaged in mentorship and surgical education research throughout her career, and is a past recipient of the Linnea Hauge, PhD, Promising Educational Scholar Award, given by the Association for Surgical Education. She has developed a resident-as-teacher curriculum that is freely available to anyone and has been shared widely outside of BMC/Boston University. She says, "The residents have such an important impact on the students' learning, so what we need to keep working on is making sure that the residents are good educators. We've had the resident-as-teacher program at BMC for many years, and it certainly does seem to work."

Equally important is providing students with detailed feedback, as Dr. Pernar points out. She says, "We need to continue educating everyone about the importance of student evaluations so that the students really get feedback on their performance clinically. Part of my role is to make sure that faculty take care of the medical students, both in teaching them and also in evaluating them." To this end, she worked with Pamela Rosenkranz, RN, BSN, MEd, senior director of quality and patient safety for the Department of Surgery, on adding a teaching orientation for new faculty hires. However, Dr. Pernar also strongly believes that medical students, as adult learners, should advocate for their own educational needs. "It's hard to demystify every single rotation, even though our clerkship instructions are very detailed. I do encourage students to be proactive about their education and to ask whomever they are working with for expectations."

According to Dr. Theodore, the person who deserves a lot of the credit for keeping the clerkship running smoothly year in and year out is Program Coordinator Lana Ketlere, who also serves as program coordinator for the BMC General Surgery Residency. She says "Lana is the anchor and the glue for the clerkship and always manages to stay on top of everything!"

Surgery Education Office

SURGERY RESIDENCY PROGRAM

Donald Hess, MD
Vice Chair for Education
Program Director

Megan Janeway, MD
Associate Program Director

Elizabeth King, MD
Associate Program Director

Lana Ketlere
Residency Program Coordinator

SURGERY FELLOWSHIP PROGRAMS

Surgical Critical Care Fellowship

Aaron Richman, MD, *Director*

Robert Canelli, MD, *Deputy Director*

Vascular and Endovascular Surgery Fellowship

Jeffrey Siracuse, MD, MBA, *Director*

Elizabeth King, MD, *Assistant Director*

PODIATRIC SURGERY RESIDENCY PROGRAM

Justin Ogbonna, DPM
Director

Elizabeth Sanders, DPM
Assistant Director

SURGERY CLERKSHIP

Luise Pernar, MD, MHPE, *Director*

Sheina Theodore, MD, *Associate Director*

Abdul Saied Calvino, MD, *Assistant Director, Roger Williams Medical Center*

Michael DiSiena, DO, *Assistant Director, Berkshire Medical Center*

Sung Kwon, MD, MPH, MBA
Assistant Director, Roger Williams Medical Center

Shay Mansoor, MD, *Assistant Director, Kaiser Permanente Santa Clara*

Patrick B. O'Neal, MD, *Assistant Director, VA Boston Healthcare System*

Yagnik Pandya, MD, *Assistant Director MetroWest Medical Center*

Eduardo Vega, MD, *Assistant Director, Boston Medical Center – Brighton*

Lana Ketlere
Clerkship Program Coordinator

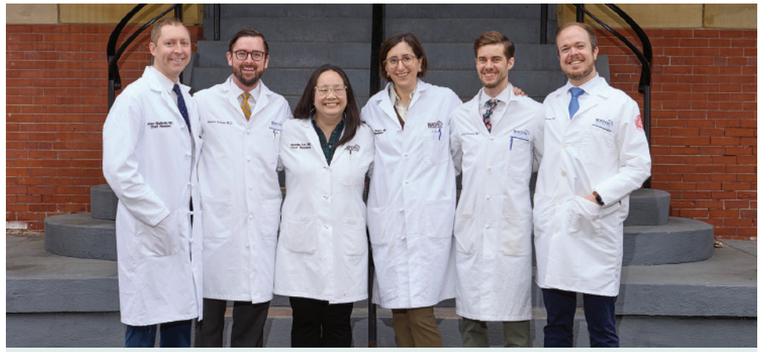
SURGERY RESIDENCY PROGRAM

The Boston Medical Center 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, is committed to preparing future generations of highly skilled surgeons.

The surgery residency program is based at the Boston University Medical Campus, a modern medical complex located in the heart of Boston's South End. The campus includes the Boston University Chobanian & Avedisian School of Medicine, the Boston University School of Public Health, the Henry M. Goldman School of Dental Medicine, and 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, their experience is heightened.

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.



Left to right: Allan Stolarski, MD; Spencer Wilson, MD; Brenda Lin, MD; Olivia Sacks, MD; Louis Kester, MD; Carlos Fairen Oro, MD

2025 Surgery Residency Graduates

Carlos Fairen Oro, MD
Colorectal Surgery Fellowship
UMass Chan Medical School

Louis Kester, MD
Surgical Critical Care Fellowship
University of Michigan

Brenda Lin, MD
Vascular Surgery Fellowship
Boston Medical Center

Olivia Sacks, MD
Colorectal Surgery Fellowship
Lahey Hospital and Medical Center

Allan Stolarski, MD
Surgical Critical Care Fellowship
Hospital of the University of Pennsylvania

Spencer Wilson, MD
Surgical Critical Care Fellowship
Johns Hopkins Hospital

CURRENT RESIDENTS (2025–2026 Academic Year)

PGY1

Categorical

Taylor Glassman, MD
Rutgers, Robert Wood Johnson Medical School–Piscataway

Omar Karim, MD
The Warren Alpert Medical School of Brown University

David Posawatz, MD
Tufts University School of Medicine

Julia Ryan, MD
George Washington University School of Medicine and Health Sciences

Izaak Tobin, MD
Lewis Katz School of Medicine at Temple University

Thomas Ueland, MD
Vanderbilt University School of Medicine

Preliminary

Ryan Healy, MD
Boston University Chobanian & Avedisian School of Medicine

Alexander Neamtu, MD
UMass Chan Medical School

Laken Smothers, MD
Tufts University School of Medicine

Sameep Vakharia, MD
Drexel University College of Medicine

YooJin Yoon, MD
University of Colorado School of Medicine

PGY2

Joseph Dao, MD, MEd
Pennsylvania State University College of Medicine

Deborah Dele-Oni, DO
Kansas City University College of Osteopathic Medicine

Laurynn Garcia, MD
Baylor College of Medicine

Emanuele Lagazzi, MD
University of Genoa Faculty of Medicine and Surgery

Jessica Lee, MD
Geisel School of Medicine at Dartmouth

Shirline Wee, MD
Creighton University School of Medicine

PGY3

Josue Estrella, MD
University of Colorado School of Medicine

Dylan Kaye, MD
Drexel University College of Medicine

Phoebe Otchere, MD
Northeast Ohio Medical University

Sophia Smith, MD, MS
Tulane University School of Medicine

Lawson Traylor, MD
University of South Carolina School of Medicine, Greenville

PGY4

Andrea Alonso, MD
Boston University Chobanian & Avedisian School of Medicine

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

Anna Kobzeva-Herzog, MD
Boston University Chobanian & Avedisian School of Medicine

Jeffrey Melvin, MD
Albert Einstein College of Medicine

Maia Nofal, MD
Boston University Chobanian & Avedisian School of Medicine

Colten Yahn, MD
Eastern Virginia Medical School

PGY5

Brendin Beaulieu-Jones, MD, MBA, MBI
Geisel School of Medicine at Dartmouth

Priyanka Chugh, MD, MS
Cooper Medical School of Rowan University

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

Stephen Dalton-Petillo, MD
Eastern Virginia Medical School

Heba Elassar, MD
Oakland University William Beaumont School of Medicine

Gordana Rasic, MD, MS
Eastern Virginia Medical School

RESEARCH RESIDENTS

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

Daniel Counihan, MD, MS
The University of Toledo College of Medicine and Life Sciences

Khuaten Maaneb de Macedo, MD
University of Minnesota Medical School

Abdimajid Mohamed, MD
Tufts University School of Medicine

Sara Myers, MD
Case Western Reserve University School of Medicine

Rebecca Reardon-Lochbaum, MD
Western Michigan University Homer Stryker M.D. School of Medicine

Ashlee Seldomridge, MD
West Virginia University School of Medicine

CURRENT FELLOWS

Surgical Critical Care Fellowship
Michael Szymanski, MD

Vascular and Endovascular Surgery Fellowship
Brenda Lin, MD
Evan Merle, MD
Carolyn Song, MD

CURRENT PODIATRIC SURGERY RESIDENTS

PGY1

Qi Chu, DPM
Western University of Health Sciences College of Podiatric Medicine

Maral Jonloo, DPM
Midwestern University Arizona College of Podiatric Medicine

PGY2

Joshua Choi, DPM
Temple University School of Podiatric Medicine

Rafael Moradian, DPM
Western University of Health Sciences College of Podiatric Medicine

PGY3

Alyssa Miyasato, DPM
Western University of Health Sciences College of Podiatric Medicine

Subin Siby, DPM
Temple University School of Podiatric Medicine

Resident News

Andrea Alonso, MD, gave podium presentations at the 2025 Vascular Annual Meeting as well as at the annual meetings of the Vascular and Endovascular Society, the Eastern Vascular Society, and the New England Society for Vascular Surgery. Dr. Alonso also had first-author publications in the *Journal of Vascular Surgery* and *Annals of Vascular Surgery*.

Brendin Beaulieu-Jones, MD, MBA, MBI, published seven papers in 2025, including first-author publications in *Annals of Surgery, Injury, Journal of Surgical Education,* and *Healthcare*. Dr. Beaulieu-Jones was awarded one of the 2025 American Association for the Surgery of Trauma "20forTwenty" Annual Meeting Scholarships. He was also selected to renew his position on the editorial board of the *Journal of the American Medical Informatics Association*.

Priyanka Chugh, MD, MS, matched to the pediatric surgery fellowship at British Columbia Children's Hospital in Vancouver.

Nicole Cimbak, MD, matched to the Northwestern Medicine pediatric surgery fellowship at Ann & Robert H. Lurie Children's Hospital of Chicago.

Stephen Dalton-Petillo, MD, matched to the vascular surgery fellowship at Albany Medical Center.

Joseph Dao, MD, MEd, received an Outstanding Trainee Poster Award from the American Thyroid Association for a poster he presented at the organization's annual meeting and co-authored a peer-reviewed paper in *Surgery*.

Heba Elassar, MD, matched to the MedStarHealth Georgetown/Washington Hospital Breast Surgical Oncology Fellowship.

Jessica Lee, MD, was selected by third-year medical students to receive the Junior Resident Teaching Award.

Khuaten Maaneb de Macedo, MD, won the Massachusetts Chapter of the American College of Surgeons (ACS) Resident Advocate Leadership Essay Competition and received a grant to attend the ACS Leadership and Advocacy Summit in Washington, D.C. She also made two presentations at the ACS Quality and Safety Conference. Dr. Maaneb de Macedo was awarded second place for her podium presentation, "The impact of language proficiency on decision-making for immediate breast reconstruction after mastectomy," at the 2025 New England Surgical Society (NESS) Resident and Fellow Research Day, and was subsequently awarded best podium presentation at the NESS annual meeting. She also received a travel grant to attend the 2025 Cabo Verdean American Medical Society Mission Trip; she assisted in cases and gave an invited talk during the academic symposia. In addition, she received a patient safety grant from the Boston Medical Center Resident/Fellow Quality Improvement (QI) Council to continue research on general surgery readmissions through a QI lens.

Anna Kobzeva-Herzog, MD, made three oral abstract presentations and co-authored eight papers in journals that included *Journal of Vascular Surgery, Annals of Vascular Surgery,* and *Injury,* as well as a first-author publication in *American Journal of Surgery*. In addition, Dr. Kobzeva-Herzog co-authored a self-published guide, "Research Manual for Resident Physicians and Medical Students." She was also an invited presenter for webinars by the Association of Women Surgeons and the American Society of Breast Surgeons.

Sara Myers, MD, won first place for her podium presentation at the New England Society of Colon and Rectal Surgeons Annual Meeting in April. The project she presented was entitled "Acute care and colorectal surgeon views on management of emergency department patients with surgical conditions," a collaborative effort by members of the Colon and Rectal Surgery and the Acute Care and Trauma Surgery teams. She was also the winner of the poster competition at the 2025 Harvard Medical School/ Massachusetts General Brigham Colorectal Conference. In addition, Dr. Myers made podium presentations at the annual meetings of the American Society of Colon and Rectal Surgeons and the Society of American Gastrointestinal and Endoscopic Surgeons, as well as at the New England Surgical Society Resident and Fellow Research Day. She also made a poster presentation at the Society of Surgical Oncology Annual Meeting and co-authored an invited commentary in *JAMA Surgery*.

Maia Nofal, MD, MPH, was selected by third-year medical students to receive the Senior Resident Teaching Award.

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

Gordana Rasic, MD, MS, matched to the complex general surgical oncology fellowship at the Medical College of Wisconsin. She also received the Chrysoheris Award, given annually to a senior resident who displays maturity and exemplary professionalism and care.

Ashlee Seldomridge, MD, completed the first year of her two-year fellowship at the MD Anderson Cancer Center. During year one, she completed the Institute for Data Science in Oncology Fellowship Program. Dr. Seldomridge received an Advanced Cancer Therapies (ACT) 2025 Travel Grant Award from the Appendix Cancer Pseudomyxoma Peritonei Research Foundation for a presentation she made at the Society of Surgical Oncology ACT Conference. She also published three peer-reviewed articles, two as first author in *Surgical Oncology Clinics of North America* and *Surgical Oncology Insights*.

Sophia Smith, MD, MS, gave a podium presentation at the New England Surgical Society Annual Meeting and co-authored a chapter in the 16th edition of *Current Diagnosis and Treatment: Surgery*. Dr. Smith also co-authored 13 peer-reviewed publications, seven as first author, in the following journals: *Journal of the American College of Surgeons, Surgery, American Journal of Surgery, Journal of Surgical Research, Trauma Surgery & Acute Care Open*, and *Journal of Surgical Education*.

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.

Kiyah Anderson, MD

Site: VA Boston Healthcare System

Research Mentor: Daniel Weiner, MD

Area of research: Dr. Anderson serves as chief resident in quality and patient safety at the VA Boston Healthcare System. This nationally recognized training program equips physicians with the skills necessary to safeguard and prevent unintended harm from occurring during healthcare delivery. During this one-year program, Dr. Anderson is focusing on learning, applying, and teaching quality improvement and patient safety principles.

Daniel Counihan, MD, MS

Site: Boston University Chobanian & Avedisian School of Medicine

Research Mentors: Danby Kang, MD; Sabrina Sanchez, MD, MPH

Area of research: Dr. Counihan's research focuses on trauma outcomes and resource utilization. He is examining the resources provided to trauma patients through Boston Medical Center, the community, and the state to assess utilization, effectiveness, and potential gaps. Additionally, he is working on a quality improvement project aimed at developing educational materials for trauma teams focused on opioid tapering at discharge to minimize post-discharge healthcare utilization for these patients.

Khuaten Maaneb de Macedo, MD

Site: Boston University Chobanian & Avedisian School of Medicine

Research Mentors: Jeffrey Siracuse, MD, MBA; Pamela Rosenkranz, RN, BSN, MEd; David McAneny, MD; and Megan Janeway, MD

Area of research: Dr. Maaneb de Macedo is the quality improvement fellow for the Department of Surgery. Her work, supported by an NIH T32 training grant, focuses on improving the quality of surgical care through both research efforts and institution-wide quality improvement initiatives. She leads several multidisciplinary projects to: reduce the risk of breakthrough VTE; ensure adequate nutrition in critical illness; assess how language barriers impact the quality of patient care; better understand the social determinants of health that impact our patient population, with a focus on immigrant populations; and find ways our healthcare community can better serve the underserved.

Abdimajid Mohamed, MD

Site: Boston Children's Hospital

Research Mentor: Benjamin Zendejas, MD, MSc

Area of research: Dr. Mohamed's research primarily focuses on collaborating with the Esophageal and Airway Treatment (EAT) team at Boston Children's Hospital, a multidisciplinary team of pediatric specialists. His work centers on innovative endoscopic approaches to manage esophageal atresia and related strictures, exploring surgical techniques to improve long-term perioperative care, and enhancing outcomes and quality of life for affected children.

Sara Myers, MD

Site: Boston University Chobanian & Avedisian School of Medicine

Research Mentor: Jennifer Davids, MD

Area of research: Dr. Myers is researching geospatial disparities in access to colorectal surgical care at the local and national levels. She is investigating factors associated with urgent and elective presentation for colorectal cancer and financial burden among urban and rural colorectal cancer patients undergoing surgery, and is also exploring healthcare resource differences in urban areas associated with colorectal cancer surgery outcomes.

Rebecca Reardon-Lochbaum, MD

Site: Boston University Chobanian & Avedisian School of Medicine

Research Mentors: Andrea Geisz-Fremy, PhD; Teviah Sachs, MD, MPH

Area of Research: Dr. Reardon-Lochbaum is interested in improving early detection of pancreatic cancer and addressing the socioeconomic disparities related to the morbidity and mortality of the disease. She is engaged in basic research aimed at characterizing the genetic and biomolecular underpinnings of pancreatic cancer, with the goal of identifying early biomarkers that can be utilized for more efficacious screening and detection.

Ashlee Seldomridge, MD

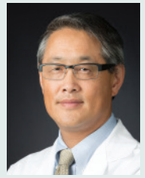
Site: MD Anderson Cancer Center

Research Mentors: Beth Helmink, MD, PhD; Ashley Holder, MD; and Jennifer Wargo, MD

Area of Research: Dr. Seldomridge is involved in basic and translational research. She is focusing on targeted therapy, immunotherapy, and the impact of the gut and tumor microbiome in melanoma, appendiceal cancer, and peritoneal dissemination of cancer. She is also interested in information and data science in oncology and computational modeling for discovery, development, and optimization of precision medicine.

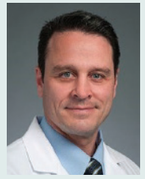
Visiting Professors

The Department of Surgery was honored to welcome these surgical leaders as named visiting professors during the 2024–2025 academic year.



Grasberger Research Symposium Lecture and Visiting Professorship

Herbert Chen, MD
Chair, Department of Surgery
University of Alabama at Birmingham (UAB)
Surgeon-in-Chief, UAB Hospital and Health System
Senior Associate Dean for Academic Affairs, UAB Heersink School of Medicine



Smithwick Visiting Professorship in Vascular Surgery – Fall 2024

Benjamin W. Starnes MD, FACS, DFSVS
Alexander Whitehill Clowes, MD, Endowed Chair in Vascular Surgery
Professor of Surgery, Division of Vascular Surgery
University of Washington School of Medicine

Smithwick Visiting Professorship in Vascular Surgery – Spring 2025

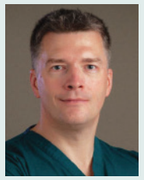
Melina Kibbe, MD, FACS, FAHA
President
University of Texas Health Science Center at Houston

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

E. Shelley Hwang, MD, MPH, MBA
Mary and Deryl Hart Distinguished Professor of Surgery
Vice Chair of Research, Department of Surgery, Duke University
Leader, Breast Oncology Disease Group, Duke Cancer Institute

Health Equity Day

Michaela West, MD, PhD
Trauma Research Chair, North Memorial Health
Professor of Surgery, University of Minnesota
Emeritus Professor, University of California, San Francisco



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

Morgan McMonagle, MB, BCh, BAO, MD, FRCSI, FACS
Vascular and Trauma Surgeon
University Hospital, Waterford, Ireland
St. Mary's Hospital, London, UK

Mozden Visiting Professor Dr. E. Shelley Hwang with surgery residents

Selected Grants

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 Chobanian & Avedisian School of Medicine as well as the Schools of Engineering, Public Health, and Business enhance projects in the clinical, health services, and education research arenas.

NEW

Improving Access to Trauma Care for Victims of Firearm Violence
Principal Investigator:
Dane Scantling, DO, MPH
Sponsor: National Institute on Minority Health and Health Disparities

Stress-Induced Aging: Investigating Chronic Wound Stress as a Catalyst for Systemic Aging and Functional Decline
Principal Investigator:
Daniel Roh, MD, PhD
Sponsor: National Institute on Aging

ONGOING

Targeting Extracellular Matrix-Senescence Crosstalk as a Novel Approach to Improve Tissue Repair in Aging
Principal Investigators:
Daniel Roh, MD, PhD
Jeroen E.G. Eyckmans, PhD
Sponsor: Hevolution Foundation

Improving Access to Trauma Care for Boston Victims of Firearm Violence
Principal Investigator:
Dane Scantling, DO, MPH
Sponsor: American College of Surgeons

Field Artificial Intelligence Triage
Principal Investigators:
Noelle Saillant, MD
Brian Telfer, PhD
Sponsor: Massachusetts Institute of Technology/DoD Combat Casualty Care Research Program

Text-Messaging-Based Quality Improvement Intervention to Increase Colonoscopy Completion Rates in a Safety-Net Hospital
Principal Investigator:
Jennifer Davids, MD
Sponsor: American Society of Colon and Rectal Surgeons

Targeting Senescence to Improve Wound Healing in Aging
Principal Investigator:
Daniel Roh, MD, PhD
Sponsor: National Institute on Aging

BEST-CLI Data Analysis and Publications Core
Principal Investigator:
Alik Farber, MD, MBA
Sponsor: Novo Nordisk Foundation

Mechanism of Trypsin Activation in Pancreatitis
Principal Investigator:
Andrea Geisz, PhD, MS
Sponsor: National Institute of Diabetes and Digestive and Kidney Diseases

Impact of Biological, Clinical, and Social Determinants on Trauma and Trauma Outcomes
Principal Investigators:
Alik Farber, MD, MBA
Vipul Chitalia, MD, PhD
Sponsor: National Institute of General Medical Sciences

Community Violence Response Team
Principal Investigator:
Lisa Allee, MSW, LICSW
Sponsor: Massachusetts Office for Victim Assistance

Selected Clinical Research Projects

There are 105 open clinical research protocols in the Department of Surgery, managed by dedicated teams of researchers in state-of-the-art facilities within the Boston University Chobanian & Avedisian School of Medicine/Boston Medical Center.

Selected Clinical Trials

Currently Open for Enrollment

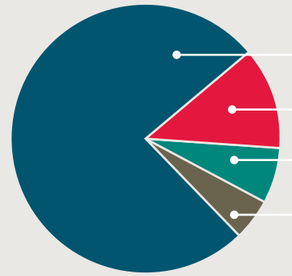
DIVISION OF VASCULAR AND ENDOVASCULAR SURGERY

Phase 1/2 Open-Label & Double-Blind Randomized Placebo-Controlled Study to Assess the Feasibility of BGC101 in the Treatment of PAD with CLI
Principal Investigator:
Jeffrey Siracuse, MD, MBA
Sponsor: BioGenCell Ltd.

A Prospective, Global, Multicenter, Single-Arm Post-Approval Study Investigating the Clinical Use and Safety of the LUTONIX Drug-Coated Balloon PTA Catheter for the Treatment of Dysfunctional AV Fistulae (Lutonix AV PAS)
Principal Investigator:
Elizabeth King-Paulson, MD
Sponsor: Bard, Inc.

A Phase 3 Randomized Study to Compare the Efficacy and Safety of the Humacyte Human Acellular Vessel (HAV) with that of an Autogenous Arteriovenous Fistula (AVF) in Female Patients with End-Stage Renal Disease Requiring Hemodialysis
Principal Investigator:
Jeffrey Siracuse, MD, MBA
Sponsor: Humacyte Global, Inc.

DEPARTMENT OF SURGERY PORTFOLIO OF CLINICAL RESEARCH PROJECTS (N=105), FY 2025



- 80 Investigator-initiated studies
- 13 Industry-sponsored trials
- 7 Federally sponsored studies
- 5 Nongovernmental organizations, foundations

A Prospective, Multi-Center, Non-Randomized, SinGle-Arm Study of the BDTM Low ProfILe Vascular Covered Stent in PerIpheral ArTerY Disease (AGILITY)
Principal Investigator:
Jeffrey Siracuse, MD, MBA
Sponsor: Bard Peripheral Vascular, Inc.

DIVISION OF COLON AND RECTAL SURGERY

The Comparison of Surgery and Medicine on the Impact of Diverticulitis (COSMID) Trial
Principal Investigator:
Jennifer Davids, MD
Sponsor: George Washington University

DIVISION OF PODIATRIC SURGERY

A Prospective, Multicenter, Randomized, Controlled Trial of Non-healing Diabetic Foot Ulcers Treated with Standard Care with or without BR-AM
Principal Investigator:
Vitaliy Volansky, DPM
Sponsor: BioStem Technologies, Inc.

A Randomized Post-Market Study Assessing Complete Wound Healing by Comparing Surgenex® PelloGraft in Treating Diabetic Foot Ulcers (DFU) and SanoGraft® in Treating Venous Leg Ulcers (VLU) to SOC Treatment
Principal Investigator:
Vitaliy Volansky, DPM
Sponsor: Surgenex

Publications

Research conducted by faculty, residents, and fellows in the Department of Surgery is published widely in leading journals and textbooks. These papers represent a small sample of those published during the 2024–2025 academic year.

Selected Papers

A Multicenter Assessment of the Accuracy of Claims Data in Appendicitis Research. **Beaulieu-Jones BR**, Laudon AD, Duraiswamy S, Yang F, Chen E, Flum DR, Lerner K, Evans H, Charboneau A, Simianu VV, Thompson L, Azar F, Valdes V, Narsule C, **Sanchez SE, Drake FT**. Ann Surg. 2025 Mar 05.

Nononcologic Resection and Survival in High-Risk Appendiceal Cancer: A National Cancer Database Study. **Chung SH**, Schroter SM, **Romatoski KS, Kobzeva-Herzog AJ, Davids JS**, Tseng JF, Kenzik K, **Sachs TE**. J Surg Res. 2025 Jul; 311:296-305.

Adjusting for Population Differences in the National Cancer Database to Better Represent United States Cancer Cases: A Reference Tool for Researchers. **Murillo A, Romatoski KS, Chung SH, Davis ES, Sawhney VS**, Kenzik K, **Ng SC**, Tseng JF, **Sachs TE**. Ann Surg Oncol. 2025 Apr 18.

Antiproliferative Endovascular Drug Technology Is Associated with Fewer Major Reinterventions after Femoropopliteal Interventions for Chronic Limb-threatening Ischemia. **Siracuse JJ**, Kaufman JA, **Farber A**, Menard MT, Rosenfield K, Conte MS, Schanzer A, Powell RJ, Venermo M, Doros G, Faries P, Strong MB, Dake MD. J Vasc Surg. 2025 May 29. Epub ahead of print.

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Bypass After Failed Endovascular Intervention Is Associated with an Increased Risk of Above Ankle Amputation Among Patients with Chronic Limb Threatening Ischaemia in a Randomised Trial Population. **Farber A**, Menard MT, Conte MS, Rosenfield K, Hicks CW, Doros G, Strong MB, Houlind K, Kolh P, **Siracuse JJ**. Eur J Vasc Endovasc Surg. 2025 Jul;70(1):107-113. Epub 2025 Apr 4.

Evaluating the Management of Intermittent Claudication Before and After Publication of the Society of Vascular Surgery's Appropriate Use Criteria. **Alonso A, Kobzeva-Herzog A, Dalton-Petillo S,** Haqqani M, **Farber A, King EG**, Hicks CW, Malas M, Garg K, Osborne N, Simons JP, **Siracuse JJ**. J Vasc Surg. 2025 Aug;82(2):526-533.e3. Epub 2025 Jan 27.

Peripheral Vascular Emboli in Patients with Infective Endocarditis Are Common. Sung E, Awtry EH, Koh DJ, McNamara T, Kang H, **Farber A, King E, Kalish J, Alonso A, Siracuse JJ**. J Vasc Surg. 2025 Jun;81(6):1450-1455. Epub 2025 Jan 10.

Prosthetic Conduits Have Worse Outcomes Compared with Great Saphenous Vein Conduits in Femoropopliteal and Infrapopliteal Bypass in Patients with Chronic Limb-threatening Ischemia. **Farber A**, Menard MT, Conte MS, Rosenfield K, Schermerhorn M, Schanzer A, Powell RJ, Chaar CIO, Hicks CW, Doros G, Strong MB, Leers SA, Motaganahalli R, Stangenberg L, **Siracuse JJ**. J Vasc Surg. 2025 Feb;81(2):408-416.e2. Epub 2024 Sep 23.

A New Look at a Tenacious Problem – Resident Work-Hour Violations. **Pernar LI**. JAMA Surg. 2025 Feb 1;160(2):208-209.

Mining for Gold: A Mixed-Methods Study on Personal Statements in General Surgery Residency Applications. **Rasic G, Beaulieu-Jones BR, Richman AP, Hess DT, Pernar LI**. J Surg Res. 2024 Oct;302:850-856. Epub 2024 Sep 9.

Transitioning from Race-Specific to Race-Neutral Reference Equations for Pulmonary Function Test Interpretation at a Large, Safety Net Hospital System. Wu A, Nguyen T, Do H, Chen F, Marquez H, Zolla J, Cohen R, Mattie K, **Digesu CS**, Merritt J, Nuccio N, Wilson KC, Ieong M, Kearney LE. CHEST. 2025; 7(23):S0012.

Screening Recommendations Among Adults Aged 45 to 49 Years. **Myers S, Davis ES, Sacks OA**, Franks JA, **Davids JS**, Kenzik KM. Disparities in Uptake of the 2021 US Preventive Services Task Force Colorectal Cancer Screening Recommendations Among Adults Aged 45 to 49 Years. Dis Colon Rectum. 2025 Aug 1;68(8): 1010-1016. Epub 2025 Apr 29.

Venous Thromboembolism Prophylaxis Practice Patterns, Outcomes, and Risk Stratification after Surgery for Inflammatory Bowel Disease: A National Surgical Quality Improvement Program IBD Collaborative Study. Holubar SD, Eisenstein S, Bordeianou L, Chapman W, Crowell K, **Davids JS**, Hrabe J, Justiniano C, Kapadia MR, Kin C, Krane M, Lee E, Olortegui K, Poylin V, Saraidaridis JT, Scow JS, Plietz M; NSQIP IBD Collaborative. Dis Colon Rectum. 2025 Jun 13. Epub ahead of print.

LASER Focus on Long-Term Outcomes for Diverticular Disease. **Myers S, Davids JS**. JAMA Surg. 2025 Jun 1;160(6):622-623.

Outcomes of Emergency General Surgery Admissions in Patients Experiencing Homelessness: A Matched Cohort Study. **Smith SM, Beaulieu-Jones BR, Nofal MR, Kobzeva-Herzog AJ**, Ha EJ, **Kang H, Dechert TA, Sanchez SE, Janeway MG**. Surgery. 2024 Dec;176(6):1703-1710. Epub 2024 Sep 19.

Advancing Cultural Competency and Equity in Surgical Specialties (ACCESS): A Model for a Combined Resident and Faculty DEI Initiative. **Chugh PV, Seldomridge AN, Kester L, Rasic G, Theodore S**, **Sanchez SE, Dechert T, Digesu CS**. J Surg Educ. 2024 Dec;81(12):103287. Epub 2024 Oct 1.

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Targeting the Epigenome Reduces Keloid Fibroblast Cell Proliferation, Migration and Invasion. Almier N, Leibowitz K, Gower AC, To S, Keller MR, Connizzo BK, **Roh DS**, Alani RM, Collard M. J Invest Dermatol. 2025 Feb; 145(2):411-422.e7

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Advances in Designer Materials for Chronic Wound Healing. Vasan A, Kim S, Davis E, **Roh DS**, Eyckmans J. Adv Wound Care (New Rochelle). 2025 Apr 30. Epub ahead of print.

Shaping the Future

The tripartite mission of patient care, education, and research is strong in the Department of Surgery. Our innovative educational initiatives and award-winning resident-as-teacher curriculum prepare future surgeons to practice in a changing world.

Please consider making a gift to the Department of Surgery.

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For more information about supporting the Department of Surgery, contact the Boston Medical Center Development Office at 617-638-8990 or philanthropy@bmc.org.

Alumni and other friends: Please keep in touch!

Reach us at: surgery@bu.edu

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Boston University Chobanian & Avedisian School of Medicine

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