Department of Surgery Boston University Chobanian & Avedisian School of Medicine/Boston Medical Center

### ANNUAL REPORT 2024

# The Power and Promise of Teamwork







Boston University Chobanian & Avedisian School of Medicine

## Introduction

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### The Department of Surgery

By the Numbers

**14** Clinical Divisions/Sections

67 Faculty

ACGME-Accredited Surgical Residency

CPME-Accredited Podiatric Surgery Residency

47 Interns and Residents

2 ACGME-Accredited Surgical Fellowships

5 Fellows

6,677 Operations\*

70,356 Outpatient Visits\*

\*July 1, 2023–June 30, 2024

### Message from the Chair



he Department of Surgery at Boston Medical Center (BMC) has been my home for almost 20 years. Since day one, I have felt a deep camaraderie with the faculty, trainees, and staff-the committed team—that powers our equity-led medical center. On countless occasions I have seen colleagues go above and beyond to take the best care of our patients. In my two decades at BMC and Boston University Chobanian & Avedisian School of Medicine (BUCASM), I have held a number of roles, and I am honored to accept a new one. As this report went to press in October 2024, I was named Surgeon-in-Chief at BMC and James Utley Professor and Chair of Surgery at BUCASM. Prior to my appointment, I served as interim Chief and Chair and am pleased to have the opportunity to share some of our department's many achievements over the

past year in this report.

October also saw another significant event, this one at the BMC level. On October 1, we officially welcomed St. Elizabeth's Medical Center and Good Samaritan Medical Center to the Boston Medical Center Health System. This is an exciting development, which expands our mission into the community. Many details are still being ironed out, as the acquisition of these two hospitals took place at an accelerated pace following the bankruptcy of their former owner, Steward Health Care.

We are working strategically and thoughtfully on multiple fronts to support priorities in patient care, research, and education, while ensuring that we foster an inclusive environment that respects and values all. For 150 years, we have served the residents of the city of Boston and beyond and are proud to continue this legacy, while focusing on advances that enable us to provide high-guality, compassionate care in the most efficient manner.

One highlight of the last year, featured in this report, occurred just prior to the academic year close. On June 29, 2024, the first patient in Massachusetts to receive a life-saving, prehospital whole blood transfusion was transported to BMC. In collaboration with the Canton Fire Department, we are excited to launch this very promising pilot program, spearheaded by trauma surgeon Crisanto Torres, MD, MPH. Research by Dr. Torres recently published in JAMA Surgery has strengthened the evidence base demonstrating the safety and efficacy of whole blood transfusion, which is increasingly becoming the standard of care for traumatic injury and acute blood loss.

Also in 2024, BMC was pleased to be recognized for high performance in Heart & Vascular Surgery, GI Surgery, and Lung Surgery in the U.S. News & World Report Best Hospitals rankings. The Department of Surgery has a wealth of talent to carry us forward, and we were happy to build on this through the recruitment of new faculty in several divisions. To meet ever-growing surgical volume, construction of five new operating rooms is underway and will be complete by next summer.

This report also highlights the dedicated faculty in the always bustling Division of Podiatric Surgery, as well as the strong multidisciplinary teamwork taking place in the surgical intensive care unit to reduce patient ventilator days. We also spotlight one of our distinguished alums, 2009 BMC General Surgery Residency graduate Cary Aarons, MD, MSEd, as well as our Surgery Internship Prep Course, which brings together more than 60 educators to prepare fourth-year medical students for their first year of residency.

Our patients inspire us every day, and our accomplishments are only possible because of the hard work and teamwork of our faculty, residents, and staff.

Alik Farber

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

The 2023–2024 Boston Medical Center general surgery chief residents, flanked by their co-residents and faculty



## Leadership



## The Department of Surgery

he 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 14 divisions and sections and includes more than 60 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. BMC operates 67 residency training programs, with more than 600 resident and fellowship positions.

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 Veterans Administration (VA) Boston Healthcare System, Cape Cod Hospital (Cape Cod Healthcare), and St. Elizabeth's Medical Center. These institutions are valued partners in teaching and training medical students and residents. Three other hospitals also actively participate in the third-year surgery clerkship: Berkshire Medical Center, MetroWest Medical Center, and Kaiser Permanente Santa Clara.



Alik Farber, MD, MBA

Boston University

Kevin T. Hart, MBA

Donald Hess, MD

Kelly Kenzik, PhD, MS

Associate Chair for Research

Sabrina Sanchez, MD, MPH

and Diversity

Senior Administrative Director

Associate Chair for Education

Program Director for Surgery Residency

Departments of Surgery and Urology

James Utley Professor and Chair of Surgery,

Surgeon-in-Chief, Boston Medical Center















Associate Chair for Faculty Development

## **Division and Section Leadership**

Tracey Dechert, MD





Noelle Saillant, MD Chief, Section of Surgical Critical Care



Alexandros Karavas, MD Interim Chief, Division of Cardiac Surgery



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



Chief, Division of General Surgery Chief, Section of Minimally Invasive and Weight Loss Surgery



Christopher Muratore, MD Chief, Section of Pediatric Surgery



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

Chief, Section of Acute Care and Trauma Surgery



Ewald Mendeszoon, DPM Chief, Division of Podiatric Surgery



Chief, Section of Surgical Oncology

Teviah Sachs, MD, MPH



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



Laurence Brinckerhoff, MD Chief, Division of Thoracic Surgery



Jeffrey Cooper, MD Chief, Division of Transplant Surgery



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

## Faculty

#### DEPARTMENT OF SURGERY FACULTY

Acute Care and Trauma Surgery/ Surgical Critical Care

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

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

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

Peter Burke, MD 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** 

Aaron Richman, MD Assistant Professor of Surgery, Boston University

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

Dane Scantling, DO 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 Division Chief Assistant Professor of Surgery, Boston University

Morgan Harloff, MD Assistant Professor of Surgery, Boston University

#### Colon and Rectal Surgery

Jennifer Davids, MD Section Chief Boston University

Olga Beresneva, MD Assistant Professor of Surgery, Boston University

Samantha Rivard, MD Boston University\*

#### Minimally Invasive and Weight Loss Surgery

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

Brian Carmine, MD Assistant Professor of Surgery, Boston University

Joshua Davies, MD Assistant Professor of Surgery, Boston University

Jacob Nudel, MD Boston University

Luise Pernar, MD, MHPE Boston University

Associate Professor of Surgery,

Assistant Professor of Surgery,

Assistant Professor of Surgery.

Associate Professor of Surgery,

**Pediatric Surgery** 

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

#### Plastic and Reconstructive Surgery

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

William Kelly Collins III, MD, MBA 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 Division 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

Hau Pham, DPM Research Director 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 Section Chief, Surgical Oncology Associate Professor of Surgery, Boston University

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

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

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

David McAneny, MD Chief Medical Officer, Boston Medical Center

#### **Thoracic Surgery**

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

Christopher Diaesu, MD Assistant Professor of Surgery, Boston University

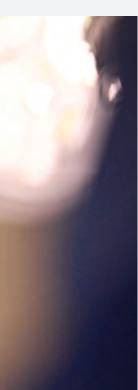
#### Transplant Surgery

Jeffrey Cooper, MD Division Chief Clinical Professor of Surgery, Boston University\*

Aman Kumar, MD Assistant Professor of Surgery, Boston University

Professor of Surgery, Boston University





#### Vascular and Endovascular Surgery

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

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

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

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

#### Surgical Research and Education

Erica Brotschi, MD Associate Professor of Surgery, **Boston University** 

Andrea Geisz, PhD, MS

Laszlo Tauber Assistant Professor of Surgery

Kelly Kenzik, PhD, MS Associate Chair for Research Associate Professor of Surgery, **Boston University** 

Marina Malikova, PhD, MSci, MA, MBA

Executive Director, Surgical Translational Research Assistant Professor of Surgery, Boston University

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

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

\* Recommended for

## Faculty

#### Emeritus

Robert Beazley, MD Professor Emeritus of Surgery, Boston University

Benedict Daly, MD 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

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)

Lawrence Novak, MD Surgery Residency Site Director

Stephen Brooks, MD Clinical Assistant Professor of Surgery, **Boston University** 

#### ROGER WILLIAMS MEDICAL CENTER

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

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

Sung Kwon, MD, MPH, MBA Associate Professor of Surgery, Boston University\*

Ponnandai Somasundar, MD Associate Professor of Surgery, Boston University

#### ST. ELIZABETH'S MEDICAL CENTER

Mark F. Conrad, MD, MMSc Interim Chair of Surgery Professor of Surgery, Boston University

Virginia Litle, MD Professor of Surgery, Boston University

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

#### **VETERANS AFFAIRS (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 Surgerv Assistant Professor of Surgery, Boston University Associate Director, Boston University Surgery Clerkship

#### **Cardiac Surgery**

Miguel Haime, 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

## **Faculty News**



presentation at the American College of Surgeons Clinical

executive council of the New England Society of Colon and Rectal Surgeons.



Laurence Brinckerhoff, MD. Chief of Thoracic Surgery, was chosen by the graduating chief residents to receive the Erwin F. Hirsch, MD, Teaching Award.



Chief of Colon and Rectal Surgery, was promoted to Senior Examiner for the American Board of Colon and Rectal Surgery, and was also selected to be

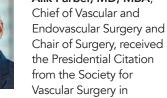
the Society for Surgery of the Alimentary Tract representative for the National Accreditation Program for Rectal Cancer.



#### Chief of Acute Care and Trauma Surgery, was elected Secretary of the Association for Surgical Education and gave grand rounds on social

responsibility in surgery for the Department of Surgery at the University of Pennsylvania.

#### Alik Farber, MD, MBA,



the Presidential Citation from the Society for Vascular Surgery in recognition of his dedication to clinical

science and contributions made as coprincipal investigator of the BEST-CLI trial.

Alexandros Karavas, MD, interim Chief of Cardiac Surgery, moderated a session on novel approaches in endocarditis at the American College of

Cardiology Annual Meeting in Atlanta and co-authored papers published in the Journal of Cardiothoracic and Vascular Anesthesia, Journal of Cardiothoracic Surgery, and Chest Critical Care.



MSci, MA, MBA, Executive Director of Surgical Translational Research, became Vice President of the North American chapter of the

International Society of Pharmacovigilance (ISoP) and chaired the scientific committee for the chapter's annual meeting. In addition, Dr. Malikova was an invited speaker at the ISoP annual meeting in Bali. She also made podium presentations at the annual SCOPE Summit for Clinical Ops Executives in Orlando and at the SCOPE global summit in Barcelona. Dr. Malikova served as a mentor for two trainees who made poster presentations at a national meeting in 2023. And over the course of the year, she published eight peer-reviewed articles in leading journals, including Therapeutic Innovation & Regulatory Science, World Journal of Surgery, and Annals of Vascular Surgery.



David McAneny, MD, Endocrine Surgery and Chief Medical Officer of Boston Medical Center, was awarded the Nathan Smith Distinguished Service Award at the

annual meeting of the New England Surgical Society in 2023. In addition, Dr. McAneny was once again chosen to be included in the listing of America's Top Doctors.

**MHPE**, Minimally Invasive and Weight Loss Surgery, was appointed to the Fellowship Council Accreditation Committee. Dr. Pernar co-authored four papers, published in Journal of Surgical Education and JAMA Surgery, and also authored an invited commentary for JAMA Surgery. In addition, she was a guest on a Behind the Knife podcast entitled Surgical M&M: Can We Do Better?



research. Dr. Roh is co-principal & Dermatology.

bumc.bu.edu/surgery

Congress and has been appointed as an at-large member of the

Olga Beresneva, MD,

Surgery, gave a podium

Colon and Rectal

#### Luise Pernar, MD,

#### Daniel Roh, MD, PhD,

Plastic and Reconstructive Surgery, received a Paul B. Beeson Emerging Leaders Career Development Award in Aging from the National Institute on Aging (NIA) to support his research on wound healing and cellular senescence. In addition, he received a grant from the Hevolution Foundation, which has previously supported his investigator with Jeroen Eyckmans, PhD, Boston University Research Assistant Professor, on this grant to explore the impact of the extracellular matrix on impaired wound healing in aging. Dr. Roh also serves as a co-investigator on two new grants awarded by the National Institute of Arthritis and Musculoskeletal and Skin Diseases (NIAMS). He was invited to be a grant reviewer for study sections of NIAMS, NIA, and the Plastic Surgery Foundation. Dr. Roh was an invited speaker at the International Cell Senescence Association Conference in 2023 and published peer-reviewed articles in the Journal of Investigative Dermatology and Arthritis



Noelle Saillant, MD, Chief of Surgical Critical Care, received a grant from the Massachusetts Institute of Technology/ Department of Defense Combat Casualty Care

Research Program to further her research on using the Field Artificial Intelligence Triage tool to predict injuries created by gunshot wounds and develop a decision tree for treatment of these injuries in the field. Dr. Saillant also published seven peer-reviewed papers and co-authored three chapters.



Elizabeth Sanders, DPM, Podiatric Surgery, lectured both locally and nationally on diabetic foot care, limb salvage, and Achilles tendinopathy, and

authored an article published in Annals of Vascular Surgery. Dr. Sanders was selected to chair the Boston University Medical Group Engagement Committee.



Dane Scantling, DO, MPH, Acute Care and Trauma Surgery, received the C. James Carrico, MD, FACS, Faculty Research Fellowship for the Study of Trauma and

Critical Care from the American College of Surgeons (ACS) and became a fellow of the ACS. He also received an NIH Loan Repayment Program Health Disparities Award and funding from the Gillian Reny Stepping Strong Center for Trauma Innovation. In addition, Dr. Scantling served as co-chair of the Eastern Association for the Surgery of Trauma (EAST) Research-Scholarship Committee. Over the course of the year, he published 15 articles in JAMA Surgery and other high-impact journals and served as a mentor for residents and medical students who gave podium presentations at the ACS Clinical Congress and the EAST and American Association for the Surgery of Trauma annual meetings.



#### **Top Doctors**

Congratulations to the following Department of Surgery faculty members who were recognized in Boston magazine's 2024 Top Doctors issue.

Alik Farber, MD, MBA

Chair of Surgery and

Chief of Vascular and

Endovascular Surgery

Chief of Minimally Invasive

and Weight Loss Surgery;

Chief of General Surgery

Donald Hess, MD

Surgeon-in-Chief;

Laurence Brinckerhoff, MD Chief of Thoracic Surgery

Jennifer Davids, MD Chief of Colorectal Surgery

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

#### Jeffrey Kalish, MD Vascular and Endovascular Surgery

David McAneny, MD Endocrine Surgery and Chief Medical Officer. **Boston Medical Center** 

Jaromir Slama, MD Chief of Plastic and Reconstructive Surgery



Jeffrey Siracuse, MD, MBA, Vascular and Endovascular Surgery, was editor of a special issue of Annals of Vascular Surgery devoted to peripheral artery disease. Dr. Siracuse

was a visiting professor at McGill University and Beth Israel Deaconess Medical Center and gave multiple talks at national meetings, including the Society for Vascular Surgery and Society of Clinical Vascular Surgery annual meetings and the American College of Surgeons Clinical Congress. Dr. Siracuse was appointed Associate Chair for Quality and Patient Safety in the Department of Surgery at Boston Medical Center. In addition, he received an award from the Boston University Clinical Translational Science Institute to fund research on a soft robotic catheter for non-compressible torso hemorrhage. As site principal investigator at BMC for a clinical trial focused on stem cell treatment for no-option critical limb threatening ischemia, he began enrolling patients at BMC. Over the course of the year, Dr. Siracuse co-authored 30 peerreviewed articles.



Crisanto Torres MD, MPH, Acute Care and Trauma Surgery, gave two invited national talks and published 14 peerreviewed manuscripts, six as first or senior author, in

journals that included JAMA Surgery, Journal of the American College of Surgeons, and Journal of Trauma and Acute Care Surgery. Dr. Torres was first author of a paper in the Journal of Trauma and Acute Care Surgery that was selected as an "Editor's Choice Best of Surgical Critical Care" article.



Kathryn Twomey, MD, Acute Care and Trauma Surgery, was nominated and selected as a peer supporter through the **Boston Medical Center** Peer Support Program.

She is trained to provide emotional support for clinical and ancillary staff in the Departments of Surgery and Anesthesia facing work- or life-related stressors. In addition, she now serves as co-advisor for the Association of Women Surgeons chapter at the Boston University Chobanian & Avedisian School of Medicine.

## Vitaliy Volansky, DPM, Podiatric Surgery, was

Boston Medical Center site principal investigator for four industrysponsored clinical trials

and served as a mentor to trainees who made poster presentations at the Symposium on Advanced Wound Care in Las Vegas.

**Boston University Chobanian & Avedisian School** of Medicine Promotions



Michael Cassidy, MD Associate Professor of Surgery

> Donald Hess, MD Associate Professor of Surgery

## **New Faculty**



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

Dr. Daniel is a Boston native who received her undergraduate degree

from the Massachusetts College of Pharmacy and Health Sciences and earned a master's degree in biomedical science from Geisinger Commonwealth School of Medicine. She obtained her doctor of podiatric medicine degree from Barry University School of Podiatric Medicine in Miami. Dr. Daniel completed podiatric surgery residency at Boston Medical Center (BMC) and is board certified by the American Board of Podiatric Medicine. She was in private practice before being recruited back to BMC in 2024.



Morgan Harloff, MD Assistant Professor of Surgery, Boston University Cardiac Surgery

Dr. Harloff received his undergraduate degree in biology from the University

of Michigan and his medical degree in 2014 from Kaohsiung Medical University in Taiwan. In 2024, Dr. Harloff completed the six-year Cardiothoracic Surgery Integrated Residency Program at Brigham and Women's Hospital. During residency, he was the recipient of a Partners in Excellence Award in the category of Commitment to an Exceptional Patient Experience. Dr. Harloff has been very active in the research realm, with a significant focus on multiple aspects of valve replacement surgery. He has published 45 peer-reviewed articles in



top journals in his field.

Aman Kumar, MD Assistant Professor of Surgery, Boston University Transplant Surgery

Dr. Kumar received his medical degree from Grant Medical College in

Mumbai, India, and completed residency

Samantha Rivard, MD Assistant Professor of Surgery\* Colon and Rectal Surgery Dr. Rivard received her undergraduate degree from the University of Michigan and her medical degree from the Medical University of South Carolina. She went on to complete general surgery residency at the University of Michigan in 2023, followed by a colon and rectal surgery fellowship at the UMass Chan Medical School in 2024. During residency,



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at the affiliated Sir J.J. Group of Hospitals. In 2022, he completed his post-doctoral training as a transplant surgery fellow at the University of North Carolina (UNC) School of Medicine, and then became an attending surgeon at UNC performing liver, kidney, and pancreas transplants; laparoscopic donor nephrectomies; and hepato-pancreatobiliary surgeries. He has a special interest in total pancreatectomy and autologous islet cell transplant (TPAIT). Active in research, Dr. Kumar has participated in clinical trials looking at everything from vascular staples in donor surgeries to the use of social media in organ donor referrals. He has presented his research at multiple national and international meetings.

#### Jacob Nudel, MD

Assistant Professor of Surgery, Boston University Minimally Invasive and Weight Loss Surgery

Dr. Nudel received his undergraduate degree from Bates College, summa cum laude, and his medical degree from Harvard Medical School. He did his residency in general surgery at Boston Medical Center and completed a bariatric surgery fellowship at Lahey Hospital & Medical Center in 2024. Dr. Nudel's research interests include applying advanced computational models to optimizing obesity management, decisionmaking related to weight-loss surgery, and post-surgery adverse outcome prediction.

she spent two very productive years as a fellow in the University of Michigan's Center for Healthcare Outcomes and Policy, where she formed expertise in qualitative methodology. Her research interests include surgical resident education and improving care guality and guality of life of colorectal patients, especially rectal cancer patients and patients with ostomies. She has obtained grant funding from the American Society of Colon and Rectal Surgeons and Blue Cross Blue Shield of Michigan, with the latter supporting a statewide quality improvement project to decrease ileostomy readmissions due to dehydration. Dr. Rivard has published 29 papers in peer-reviewed journals.



Alaina Geary, MD, MHPE Assistant Professor of Surgery\* Department of Surgery

Dr. Geary, a 2024 graduate of the Boston Medical Center General Surgery Residency

Program, was selected as the 2024 physician fellow for the Boston Medical Center Ravin Davidoff Physician Executive Fellowship in Health Equity. Fellows work on projects and programs that specifically aim to reduce racial and ethnic inequities in health outcomes. Dr. Geary received her medical degree from Tufts University School of Medicine in 2016 and also earned a master's degree in health professions education (MHPE) at Boston University. During residency, she received the AAS/AASF (Association of Academic Surgery/ Association of Academic Surgery Foundation) Trainee Research Fellowship Award. Additionally, she was recognized in 2020 by the AAS for having the best manuscript by an AAS resident member.

\* Recommended for

# **Alumni Profile:** Cary Aarons, MD, MSEd

he initial career plans that Cary Aarons, MD, MSEd, made to become an engineer were short-lived. Early in his college career he pivoted to medicine and went on to graduate from Harvard University with a degree in biology. After earning his medical degree at Howard University College of Medicine, he entered the general surgery residency program at Boston Medical Center (BMC), graduating in 2009.

"BU was my first choice," says Dr. Aarons. "It provided the opportunity to work with an underserved community in a safetynet hospital. During residency, I felt like we were a close-knit team making a meaningful difference while working on the front lines in a busy hospital and trauma center." He remembers, "I was a sponge as an intern. Every rotation I did, I could see myself doing that particular thing, in large part because the faculty were so great in getting interns involved in clinical care and in the OR." He ultimately settled on colorectal surgery and completed a fellowship in the Department of Colon and Rectal Surgery at the Mayo Clinic in Rochester, Minn.

### Glimpsing the Future

It was during Dr. Aarons' time as administrative chief resident at BMC that he got his first insight into what education leadership would really look like as part of his career path. He credits James Petros, MD, General Surgery Residency Program Director at the time, for guiding and encouraging him to think seriously about incorporating education leadership into his future plans. In the 15 years since completing residency, surgical education and education leadership have become passions for Dr. Aarons. He says, "One of the things that has informed my research, career, and scholarly activity is understanding that the workforce that we have really should reflect and support the patients that we serve." Through his scholarship, invited lectures, and work on numerous committees of the American College of Surgeons (ACS), the Association for Surgical Education (ASE), the Association of Program Directors in Surgery, and other professional organizations, he has gained national recognition.

Dr. Aarons began his clinical practice in 2010 in the Division of Colon and Rectal Surgery at Hahnemann University Hospital in Philadelphia, where he was on the faculty of Drexel University College of Medicine. A year later, he joined the faculty at the Perelman School of Medicine at the University of Pennsylvania



(Penn), rising to Professor of Clinical Surgery in 2022. Today, he is a Professor of Surgery at NewYork-Presbyterian/Columbia University Irving Medical Center, after being recruited to Columbia in 2023. Dr. Aarons is Vice Chair of Education for the Department of Surgery and director of the general surgery residency program, as well as interim Chief of the Division of Colorectal Surgery.

During most of the 12 years he spent at Penn, he was intimately involved in medical student and trainee education in various capacities, serving first as the student clerkship director, followed by a year as associate director of the general surgery residency program, and finally five years as program director. In addition, while there, he earned a master's degree in medical education from the University of Pennsylvania Graduate School of Education.

### **Role Models**

"I think one of the real gems of my training at Boston Medical Center was Dr. Erwin Hirsch." The legendary Chief of Trauma Surgery for more than 30 years, Dr. Hirsch passed away in 2008 after a boating accident. "We all struggled to impress him all the time and to be like him. I remember when he passed tragically in my fourth year. He really was a giant in the field and to have had the opportunity to work with him for four years was really special to me and to my colleagues."

Other faculty members who come to mind when Dr. Aarons thinks about BMC are David McAneny, MD, and Jonathan Woodson, MD. "Dr. McAneny was just an impressive surgeon and an impressive human being, who taught us a lot about surgery but also academic surgery." Dr. McAneny is now Senior Vice President of Medical Affairs and Chief Medical Officer at BMC and a Professor of Surgery at Boston University Chobanian Cary Aarons, MD, MSEd, performs surgery with mentee & Avedisian School of Medicine. A highly regarded vascular Madison Grasty, MD. surgeon, Dr. Woodson went on to serve as Assistant Secretary for Health Affairs for the U.S. Department of Defense and is now President of the Uniformed Services University of the Health Sciences. Dr. Aarons says there weren't a lot of faculty of color during his residency, but "Dr. Woodson gave representation of what it looked like to be a person of color in academic surgery, and I vividly recall what a great leader he was."

### **Change Agent**

In his scholarly activity and practice in education leadership, Dr. Aarons has championed a more holistic approach to residency selection. He says, "We've seen that the field of

"I've worked really hard as a program director and in education leadership so that as a field we embrace meaningful change."

- Cary Aarons, MD, MSEd

surgery has lagged behind in terms of gender representation and in representation of those who are traditionally underrepresented in medicine, and I think this is an important and multifaceted problem to take on. Certainly, one approach is to be more thoughtful in how we make selections in the first place. I've worked really hard as a program director and in education

At Columbia, Dr. Aarons has a busy clinical practice and has hit leadership so that as a field we embrace meaningful change." the ground running in his new educational leadership roles. He is no stranger to New York City and still has family there, having During Dr. Aarons' time at Penn, employing a targeted outreach spent part of his childhood in the Bronx, after emigrating from plan and implementing changes in the resident selection process Jamaica at the age of 12. He says that the residency programs over a period of years proved successful. He was integral to and health systems are remarkably similar at both Columbia driving change, and during his tenure, the percentage of general and Penn, with a lot of the same benefits and challenges. surgery residents underrepresented in medicine increased significantly. A key component of the outreach efforts, in Looking back at his time at BMC, Dr. Aarons says that there collaboration with Penn's Alliance of Minority Physicians, was were some inherent challenges in terms of resources but there offering month-long visiting clerkships, inviting underrepresented was also a camaraderie among the residents, who took pride in students into the learning environment to ensure they would get serving the residents of Boston who count on BMC. "I couldn't a sense of the Penn community, while also providing mentorship be more proud to have trained there." for them going forward.



One of the most significant changes in the resident holistic selection process was expanding the pool of reviewers and blinding them to standard metrics. Dr. Aarons says, "They never saw photos, never saw grades, never saw USMLE scores. We tasked them explicitly with looking at criteria within the rest of the application that we thought resonated with the mission of the department." He adds, "I think it is just one way to address potential biases people may have. Metrics are important and are always considered in any holistic review process, but I don't think they paint the whole picture of who an applicant is or will be. Intentionally changing the narrative and changing the focus helped us to be a little more mission driven about what

we were looking for in an applicant." He notes that studies that have looked at employing a holistic versus a more traditional approach to recruitment have found there is no change in graduation rates, passing of specialty boards, and GPAs.

Testament to the impact that Dr. Aarons had while at Penn is the creation of the Cary B. Aarons Equity and Inclusion Award. The winner is selected by surgical residents and faculty and awarded annually to a member of the surgical housestaff or faculty who demonstrates commitment to creating an equitable and inclusive learning environment for surgical residents.

### **Familiar Territory**

## Highlight: Patient Care



Vitaliy Volansky, DPM, consults with a patient during a clinic visit.

# **On Firm Footing**

he Division of Podiatric Surgery at Boston Medical Center (BMC) was established 25 years ago by the late Geoffrey Habershaw, DPM. With more than 20,000 clinic visits annually, it is going strong. "We're running at full tilt because of the demand," says Ewald Mendeszoon, DPM, Chief of Podiatric Surgery and Assistant Professor of Surgery at Boston University Chobanian & Avedisian School of Medicine (BUCASM).

The six clinically active providers in the department see patients with bunions, hammertoes, plantar fasciitis, and all of the common conditions that can affect the foot and ankle. But a large part of their practice is dedicated to wound care for diabetic patients and those with peripheral vascular disease. Dr. Mendeszoon says, "Because of their multiple comorbidities, these patients can be more challenging, and we work

y closely with the vascular surgeons on C) limb preservation."

> In addition to providing excellent patient care, the division is home to a three-year podiatric surgery residency program, accredited by the Council on Podiatric Medical Education. The program accepts two new residents per year, for a total of six residents.

#### **Dedicated Team**

The podiatric surgery team is a tight group. Four surgeons completed part of their training here at BMC. Wei Tseng, DPM, was recruited to become an attending surgeon after completing her residency here in 2015. Elizabeth Sanders, DPM, and Ashley Daniel, DPM, MBS, also did their residencies at BMC, in 2017 and 2022, respectively. And Justin Ogbonna, DPM, completed a fellowship (no longer offered) at BMC in 2011. All are on the BUCASM faculty. Dr. Sanders, who returned to BMC in 2022 after fellowship and three years in private practice in Puerto Rico, says, "I love being in academia, and I truly appreciate the mission of BMC. Because we are treating such a diverse patient population, the pathology we see is a lot more varied and complex than in private practice." She points to an ancillary role that the podiatric surgery team takes on in the foot care they provide for diabetic patients. "We educate patients on disease prevention, including diet, exercise, and the importance of proper footwear. Many primary care physicians are overwhelmed They have 20 minutes to address all the ailments a patient may have, so if we can help in this way, we want to do it."

### **Mission Driven**

Of all the procedures Dr. Tseng does for patients, she says that wound care is her passion. "It is rewarding to heal

bumc.bu.edu/surgery

"I love being in academia, and I truly appreciate the mission of BMC. Because we are treating such a diverse patient population, the pathology we see is a lot more varied and complex than in private practice."

— Elizabeth Sanders, DPM

a patient and save a limb." One of the things she is most proud of is that BMC is a judgment-free zone. "We treat all patients, no matter their financial or social background. Those who want and need help are not turned away."

Each attending has a wound clinic session every week because the need is so great. Like Dr. Tseng, Vitaliy Volansky, DPM, who recently marked 10 years at BMC, is similarly passionate about wound care and says the dream is to have a full-fledged wound center. He says, "Diabetes is a socioeconomic problem. We see the patients who are most in need of medical care, with A1c levels through the roof and nonexistent blood flow."

Related to this, a concerning trend has emerged, according to Podiatric Surgery Research Director Hau Pham, DPM, Assistant Professor of Surgery at BUCASM, who has done research on amputation rates. He says that since 2018, the podiatric surgery team has seen a very significant increase in the number of toe amputations and a large increase in midfoot amputations as well. During an on-call week, Dr. Volansky says it is not uncommon to perform several amputations. With a dedicated wound center, which the hospital is exploring, he believes it might be possible to reduce the number of amputations by simplifying the logistics for patients, enabling them to see a podiatric surgeon, a vascular surgeon, and if needed, a plastic surgeon, in one visit.

### In the Wings

Minimally invasive bunion surgery is back. This approach was introduced several years ago when medical equipment manufacturers developed new instrumentation that made this option possible, but Dr. Mendeszoon says it never really took off in the U.S. However, in the U.K., it has been increasing in popularity and with a new generation of products on the market, it is slowly catching on here. Although skepticism remains among some podiatrists about its advantages over traditional bunionectomy, the products and



Chief of Podiatric Surgery Ewald Mendeszoon, DPM, and Elizabeth Sanders, DPM, plan for a surgical reconstruction with external fixation.

techniques are demonstrating promise. The BMC podiatric surgery team, which focuses heavily on education and continuing to advance the field with new and innovative procedures, is on track to introduce this minimally invasive option to patients in the future. Innovations continue in new products that aid in complex wound healing. BMC is an active site for clinical trials of several of these products, with Dr. Volansky serving as site principal investigator. Therapies recently evaluated range from a potentially promising treatment for soft tissue regeneration made from decellularized fish skin to harvesting a patient's own healthy skin, and shipping it overnight to a biomedical manufacturing facility to create an autologous heterogenous skin construct.

For 25 years, the Division of Podiatric Surgery has embodied the exceptional

and inclusive care that is at the core of BMC, and it shows no sign of slowing down in providing individualized, compassionate care for the next 25 and beyond.

# High Reliability on the Horizon

ospitals are increasingly embracing principles that the airline industry and other so-called high-reliability organizations (HROs) use to operate safely and efficiently despite complex challenges. The high-stress, high-stakes environment and massive resource utilization in the surgical critical care unit (SICU) make it a logical place to implement tenets associated with HROs.

At Boston Medical Center (BMC), the 28-bed SICU includes both surgical and neurocritical patients, as well as a small volume of cardiothoracic surgery patients. Over the last year, the SICU team has been engaged in a deep dive on quality and safety, collecting and quantifying monthly statistics as part of a larger multidisciplinary effort. Early results from one recently implemented initiative to reduce patient ventilator days look promising. Chief of Surgical Critical Care Noelle Saillant, MD, says, "We've drilled down to capture detailed

"The hope is that we're getting patients extubated earlier, out of the ICU earlier, and on their way to recovery," says Dr. Saillant, Associate Professor of Surgery at the Boston University Chobanian & Avedisian School of Medicine (BUCASM). "But we want to be sure we're not causing any unsafe intubations or more reintubations." Based on extensive planning, this ventilator management initiative was piloted in the medical ICU, with no increase in reintubation rates, before being implemented in the SICU.

#### **Critical Infrastructure**

At the heart of this initiative was work done in collaboration with IT to build infrastructure that provides detailed metrics. New dashboards were created by layering data from patients' medical records in Epic with quality data and processing it with analytics software. Dr. Saillant says, "We're pulling monthly stats on every patient who is intubated—

"So far, we've done at least 50% of our extubations before noon, and the goal is to get 100% before the day starts. We've seen that we are making a dent in our length of stay and ventilator days, which we hope will translate into decreased pneumonia risk."

#### - Noelle Saillant, MD

patient data to help guide decisions about extubation, and we're utilizing the respiratory therapy team during the overnight shift to safely extubate patients deemed clinically appropriate." This shift in timing means that patients can be monitored over the course of the day, and those who do well can be moved out of the SICU before nighttime.

how long they're intubated, reintubation rates, vent days, and ICU length of stay. We've never had this kind of data."

Typically, Dr. Saillant says that the results of spontaneous breathing trials (SBTs) conducted by the respiratory therapy team would not be available until midafternoon, with the breathing tubes of

patients deemed clinically appropriate not removed for an hour or longer. "As part of the pilot for this initiative, we made changes in extubation timing gradually, in hourly increments, and monitored the data."

A large multidisciplinary group—ICU directors, respiratory therapists, project managers, the Epic team, hospital and Surgery quality teams, and nursingworked together to create the new workflow. Under the current protocol, respiratory therapists conduct SBTs between midnight and 4 am, typically a low-volume time. Dr. Saillant says, "So far, we've done at least 50% of our extubations before noon, and the goal is to get 100% before the day starts. We've seen that we are making a dent in our length of stay and ventilator days, which we hope will translate into decreased pneumonia risk."

"Moving our SBTs to the early hours of the morning was certainly an adjustment for the night shift clinicians," says Director of Respiratory Care Services Nicholas Nuccio, MS, RRT-ACCS. "Fortunately, the positive results have been both satisfying and motivating for the respiratory therapists. We're excited about the future and look forward to further improving our process and its impact on patient outcomes."

#### **Righting the Ship**

The same expanded set of metrics was utilized when data from the American College of Surgeons Trauma Quality Improvement Project, which provides benchmarks for comparisons to other institutions, showed that BMC was out of range for deep vein thrombosis (DVT) and pulmonary emboli (PE), specifically for trauma patients, but largely in the SICU.

Pamela Rosenkranz, RN, BSN, MEd, Senior Director of Quality and Patient



(L to R) Nicholas Nuccio, Director of Respiratory Care Services; Robert Canelli, MD, Director of Anesthesia Critical Care; Andrisa Jefferson, Administrative Manager for Clinical Operations, Rehabilitative and Respiratory Care Services; and Noelle Saillant, MD, Chief of Surgical Critical Care

Safety for the Department of Surgery, and Sabine Clasen, RN, PhD, Senior Quality and Patient Safety Specialist, launched a root cause analysis. Dr. Saillant says, "They were extremely detailed in using a systematic analytical approach to identify contributing factors impacting every single patient. Working with trauma surgeon Crisanto Torres, they found multiple systems issues and dealt with all of them to fix the problems. Their work went hospital wide, and the pharmacy is in the final process of changing every order set for the hospital." Ms. Rosenkranz, Assistant Professor of Surgery at BUCASM, says, "For several years we have been working with trauma, ortho, and neurosurgery to develop an algorithm guideline that can be applied to all TACS [trauma and acute care surgery] multispecialty patients to

prevent VTEs. It is so exciting that this has been approved by the hospital antithrombotic task force and will be implemented with the overall goal of preventing VTEs."

#### **Balancing Act**

Members of the quality and SICU teams met with the orthopedic surgery and neurosurgery teams to come up with new anticoagulation guidelines, which are more aggressive in terms of starting heparin to prevent DVTs and Lovenox to prevent PE in orthopedic and braininjured patients. "Just like the breathing trials, we're really trying to get this perfect, Goldilocks scenario where the risk of brain bleed is minimized and the protection against DVT and PE is maximized," says Dr. Saillant. She adds,

"Every micro-decision you make affects something downstream and resource utilization. Just by shifting your heparin dosing schedule, you allow optimization of the operating room and minimize canceling of patients. Managing this is difficult. Patients need this medication, but if they're going to the OR, it increases the chance of bleeding. If they're not going because the OR gets busy, you're not putting them at risk because you're still giving the patient a medication they need."

Ensuring excellence in patient safety and quality of care requires a sustained, multidisciplinary effort. Dr. Saillant says, "An ICU is a valuable and expensive resource, so capitalizing on using it effectively and for good outcomes is a real responsibility. The goal is to make that happen."

## Highlight: Research



Crisanto Torres, MD, MPH, and Canton EMS Coordinator Leo Reardon during a dry run

# Wholly Invested Removing barriers to prehospital whole blood transfusion

uring the early morning hours D of June 29, 2024, a 35-year-old man was involved in a serious car crash in Braintree, about 12 miles south of Boston, and was transported to Boston Medical Center (BMC) via ambulance. But this was no routine transport. While in the ambulance, the patient received a whole blood transfusion that helped to save his lifethe first-ever prehospital whole blood transfusion in Massachusetts. As of early September, 11 other severely injured patients have received whole blood transfusions in an ambulance.

The new Field Transfusion Paramedic Program is a partnership between BMC and the fire department in Canton, Mass., another community south of Boston.

Trauma surgeon Crisanto Torres, MD, MPH, Assistant Professor of Surgery at Boston University Chobanian & Avedisian School of Medicine, is leading the program at BMC. He worked very closely with Canton Fire over a twoyear period on protocol planning and securing approvals, as well as training paramedics to do transfusions. After the Massachusetts Department of Public Health gave the green light to a one-year pilot, the program went live in the spring of 2024.

### Standard of Care

Whole blood is the standard of care in the military when treating wounded soldiers. Its use has gained traction across the U.S. in civilian trauma centers, with approximately 30% of centers now using it but only about 1% of emergency medical services (EMS) employing whole blood in the prehospital setting.

Prehospital blood programs have been pioneered in Louisiana and Texas, and recently introduced by EMS in Washington, D.C. The city of San Antonio has a well-established program that began in 2018, with more than 2,000 patients now having received whole blood transfusions en route to a hospital. The BMC-Canton partnership is only the second in New England, joining a program based in Hartford, Conn

"With the support of Dr. Torres and the trauma surgeons at BMC, we are creating a survival bridge from the point of trauma to the trauma center," says Michael

Valkanas, MD, EMS Medical Director for Canton Fire. He believes that before long paramedics doing transfusions will become completely normal, just as paramedics obtaining a prehospital 12-lead ECG did in the 1990s.

#### **Multiple Benefits**

At least two units of whole blood are kept at the ready in the trauma bay at BMC, and are frequently needed. Dr. Torres says, "Study after study has shown the survival benefit associated with whole blood. These studies have also identified another benefit, the need for less blood product because whole blood stops bleeding more robustly than blood component therapy."

Through his own research, Dr. Torres has bolstered the evidence underlying the safety and efficacy of whole blood transfusion. In a retrospective cohort study that included more than 2,700 patients with severe hemorrhage at Level I and Level II trauma centers in the U.S. and Canada, Dr. Torres and colleagues found that patients who received whole blood as an adjunct to traditional component-based therapy had better survival rates at 24 hours and at 30 days than those who received component therapy alone. The study, published in 2023 in JAMA Surgery, also found that survival curves for the two groups separated within five hours of emergency department (ED) arrival and initiation of whole blood transfusion, suggesting that whole blood is associated with an early effect in blunting trauma-induced coagulopathy.

Another study led by Dr. Torres and published in JAMA Surgery in 2024, illustrates the importance of starting whole blood transfusion as quickly as possible upon arrival in the ED. He says, "There was a decrease in survival probability for each minute delay in whole blood transfusion, but the most pronounced reduction in probability of survival was seen after 14 minutes." Dr. Torres predicts that as more evidence emerges, whole blood will eventually become the standard of care for patients with severe hemorrhage. A multicenter

randomized trial is currently underway comparing whole blood and component therapy for trauma patients who present to the ED with severe bleeding.

### **On Call**

Canton Fire received federal and state grants to start the pilot program, which includes participation from 25 surrounding towns. One capital cost was purchasing a new vehicle equipped with a special cooler to store the lowtiter group O whole blood, which is supplied by the BMC blood bank. Blood Bank Director Reggie R. Thomasson, MD, says, "When whole blood units are not transfused and the expiration date is approaching, we have a system in place so that Canton Fire returns those units to our blood bank. In order to minimize product waste, we can further process the whole blood to make red cell components to be used for hospitalbased transfusions."

When contacted by an EMS service, Canton Fire can respond to calls up to 30 minutes away and if needed, can intercept an ambulance from another EMS service that is on the way to the hospital. As has already happened, the specialized truck and ambulance meet up for a brief stop so a paramedic can

jump on the ambulance with the blood and a mobile transfuser.

Canton Fire EMS Coordinator Leo Reardon, who is directing the Field Transfusion Paramedic Program, says, "Doing a transfusion is not a complicated procedure, with very low risk of a

transfusion reaction, and whole blood can make a tremendous difference in saving a patient's life in the prehospital space." He adds, "The forward-thinking nature of both the trauma surgeons and the blood bank at BMC has been essential to making this game-changing program a reality."

### Improving Access

Boston has five Level I trauma centers. But south of the city and all the way to Cape Cod, there are no Level I centers and just one Level II and one Level III center. Some of the communities south of Boston are home to economically disadvantaged populations faced with inequities in health care, including access to trauma care. Dr. Torres says, "This program is helping to address the inequities in trauma center access and quality of care with blood, a temporizing intervention, so that someone can survive at the scene and survive transport to the hospital for a definitive intervention that will give them a fighting chance."

Canton Fire has been a proponent of instituting a whole blood field program for several years, even before meeting Dr. Torres, who was equally invested in building such a program.

"Study after study has shown the survival benefit associated with whole blood. These studies have also identified another benefit, the need for less blood product because whole blood stops bleeding more robustly than blood component therapy."

- Crisanto Torres, MD, MPH

Together, they hope that they can demonstrate the lifesaving benefits of prehospital whole blood transfusion and work to educate and train other EMS providers across the state interested is starting their own programs.

# **Surgery Internship Prep Course** Marks 12 Years

anielle Eble, MD, is now in D her last year of a plastic and reconstructive surgery residency at the University of Washington, but in July of 2019, she had just begun her intern year, when one of her patients suffered a STEMI. She had to run the initial rapid response alone. As a newly minted graduate of the Boston University Chobanian & Avedisian School of Medicine (BUCASM), she had recently completed the Department of Surgery's "bootcamp" for fourth-year students going into general surgery and subspecialties. In a note she sent at the time to express her thanks for the course. she wrote:

Without the bootcamp course, I would not have been remotely prepared to manage the acute phase of her MI quickly, calmly, and appropriately. As such, I wanted to take this opportunity to thank you and all of the Department of Surgery faculty, staff, and residents who contribute to the bootcamp course each year. It was, without question, the

most valuable and applicable experience of my medical school career and, just two weeks into intern year, it has already helped me to play a small role in saving a patient's life.

Basic life support (BLS) is just one of the many skills covered in the Surgery Internship Prep Course, as it is officially and aptly known now. Students attain BLS and advanced cardiac life support (ACLS) certification during the popular month-long course. Since its inception in 2013, it has now been offered 12 times. A true collaborative effort across departments, in 2024, 60 faculty and residents from Boston University and Boston Medical Center (BMC) participated, as well as members of the broader Boston medical community.

For course director Alik Farber, MD, MBA, Chair of Surgery and Surgeonin-Chief at BMC, who also created the course, it is a labor of love. He says, "Bootcamp is not about lecturing students. It's about engaging them in a special way in order to impart concrete

skills and knowledge that they will really need. The goal is to help them excel as interns."

#### **Dynamic Curriculum**

When the Surgery Internship Prep Course launched in 2013, BUCASM was one of 15 schools participating in the National Preparatory Surgery Curriculum Initiative pilot program, a collaboration among the American College of Surgeons (ACS), the Association of Program Directors in Surgery (APDS), and the Association for Surgical Education (ASE). At BUCASM, customized modules were added to the required core content, much of which was based on a template developed at the University of Michigan, one of the first institutions to offer a course of this kind. The pilot ended in 2016, but the ACS/APDS/ASE collaboration continues under the auspices of the Resident Prep Curriculum, with Boston University and more than 100 other medical schools now participating in this project.

Medical students practice their laparoscopic surgery skills during the annual Surgery Internship Prep Course in 2024.





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Since its inception, the core components of the Surgery Internship Prep Course have essentially stayed the same, but the course has expanded, evolved, and pivoted when necessary. The Boston Marathon bombings took place in April 2013 as the first-ever course was underway, and during COVID, the mock surgery modules had to be discontinued for a time because of difficulty in obtaining lightly embalmed cadavers.

The emphasis of this learning experience remains on high-fidelity simulation and skills acquisition, including suturing, placing chest tubes and central lines, and inserting nasogastric tubes. Wound management and the use of laparoscopic instruments are also covered, along with a mix of classroom modules. There are sections dedicated to quality, risk management, ethics, and time management. The course is dynamic, so new topics—What Senior Residents Wish Interns Knew—have been added while others have been retired and additional changes made each year based on student feedback. Dr. Farber, Professor of Surgery and Radiology at BUCASM, says, "Through pre- and post-course surveys gauging anxiety levels and confidence, we know that the course lowers the former and increases the latter."

#### Rites of Passage

In reflecting on the month she spent in surgery bootcamp in 2021, BUCASM graduate Alexandra Forsyth, MD, had this to say about the course: "The bootcamp gave me a framework to use from Day 1 for approaching patients on the floor, starting with receiving the page from nursing. I remember early on during intern year, I got a page about a patient with shortness of breath after a bypass. I was able to recall an approach and differential discussed during the course for my initial workup and management that I could bring to my seniors." Now



a PGY4 vascular surgery resident at the UMass Chan Medical School, Dr. Forsyth adds, "I have come a long way since bootcamp. Every year builds on the last, and to do well anywhere in medicine, you need a strong foundation. I am extremely grateful that I came out of BU

with a strong foundation, and surgical bootcamp was a large part of the base I had when I entered internship."

Max Zhu, MD, is a 2024 BUCASM graduate and a PGY1 vascular surgery resident at the University of Rochester, who recently took the Surgery Internship Prep Course. He says, "It was one of the most useful courses in medical school and prepared me for surgery internship. I specifically remember learning how to

Seven BUCASM students completed the first Surgery Internship Prep Course in 2013.

approach home meds prior to surgery. It also served as useful practice for technical skills such as suturing. And anatomy lab week not only helped us review clinically relevant anatomy but also common approaches for OR positioning, incisions, and exposure."

"I have come a long way since bootcamp. Every year builds on the last, and to do well anywhere in medicine, you need a strong foundation. I am extremely grateful that I came out of BU with a strong foundation, and surgical bootcamp was a large part of the base I had when I entered internship."

#### - Alexandra Forsyth, MD

He adds, "The course provided an environment where I was able to ask questions and address misconceptions prior to practice and also gave me tips for a successful career even beyond intern year."

"Over the years, we've heard from many students who've taken the course," says Dr. Farber, "and it is extremely gratifying to know that the course has been so valuable."

## **Surgery Education Office**

#### SURGERY RESIDENCY PROGRAM

Donald Hess, MD Associate Chair for Education Program Director

Luise Pernar, MD, MHPE Associate Director

Aaron Richman, MD Associate Director

Lana Ketlere Residency Program Coordinator

Grace Catanzaro Residency Program Support Coordinator

#### SURGERY FELLOWSHIP PROGRAMS

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

#### PODIATRIC SURGERY **RESIDENCY PROGRAM**

Ewald Mendeszoon, DPM Director Justin Ogbonna, DPM Associate Director

#### SURGERY CLERKSHIP

Jeffrey Cooper, MD, Director

Sheina Theodore, MD, Associate Director

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

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

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

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

Michael DiSiena, DO, Assistant Director, Berkshire Medical Center

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

Lorenzo Bucci, MD, Assistant Director MetroWest Medical Center

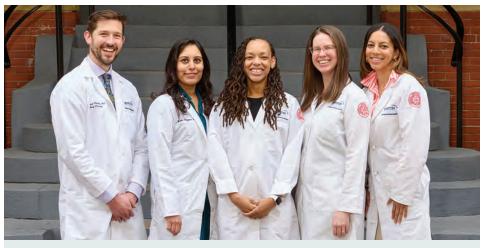
#### SURGERY RESIDENCY PROGRAM

he Boston University General Surgery Residency Program provides residents with the range and depth of surgical experience and academic exposure required to develop superior surgical skills and an ability to make informed, independent judgments. The five-year program, which is accredited by the Accreditation Council for Graduate Medical Education, 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, the focus of the program is the education of general surgery residents.

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



(L to R) Michael Poulson, MD, MPH; Maha Haggani, MD; Alaina Geary, MD, MHPE; Gillian Goddard, MD; Loreski Collado, MD

### 2024 Surgery Residency Graduates

Loreski Collado, MD

Endocrine Surgery Fellowship Emory University School of Medicine

Alaina Geary, MD, MHPE Physician Fellow, Ravin Davidoff Executive Fellowship in Health Equity Boston Medical Center

### CURRENT RESIDENTS (2024–2025 Academic Year)

PGY2

Categorical

Life Sciences

Daniel Counihan, MD

The University of Toledo

College of Medicine and

Josue Bryant Estrella, MD

Drexel University College

Phoebe Otchere, MD

Northeast Ohio Medical

Rebecca Reardon-Lochbaum, MD

Western Michigan University

Homer Stryker M.D. School

University of South Carolina

Lawson Traylor, MD

Kiyah Anderson, MD

University of Tennessee

Health Science Center

College of Medicine

Emily Gervais, MD

of Vermont

University of Colorado

School of Medicine

Dylan Kaye, MD

of Medicine

University

of Medicine

PGY3

#### PGY1

### Categorical

Joseph Dao, MD

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

#### Preliminary

Granville Baxa, MD Medical University of South Carolina College of Medicine

Michael Ferraton, MD Boston University Chobanian & Avedisian School of Medicine

Mason Merriel, MD Boston University Chobanian & Avedisian School of Medicine

Tina Phan, MD Tufts University School of Medicine

David Posawatz, MD Tufts University School of Medicine

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

Robert Larner, M.D., College

of Medicine at the University

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

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Gillian Goddard, MD

Maha Haqqani, MD

Columbia/Cornell

Intestinal Failure Fellowship

Vascular Surgery Fellowship

Michael Poulson, MD, MPH Surgical Critical Care Fellowship University of Chicago Medicine

NewYork-Presbyterian Hospital -

Cincinnati Children's Hospital

#### PGY4

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

#### PGY5

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

> Louis Kester, MD Drexel University College of Medicine

Brenda Lin, MD Keck School of Medicine of the University of Southern California Olivia Sacks, MD Geisel School of Medicine at Dartmouth

Allan Stolarski, MD Albany Medical College

Spencer Wilson, MD University of North Carolina School of Medicine

#### **RESEARCH RESIDENTS**

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

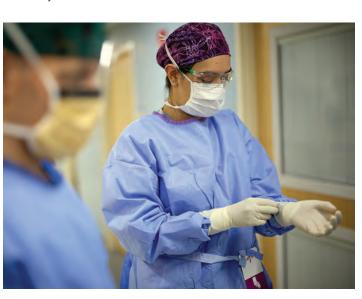
Khu Aten Maaneb de Macedo, MD University of Minnesota Medical School

Abdimajid Mohamed, MD Tufts University School of Medicine

Sara Myers, MD Case Western Reserve University School of Medicine

Ashlee Seldomridge, MD West Virginia University School of Medicine

Sophia Smith, MD, MS Tulane University School of Medicine



### **CURRENT FELLOWS**

Surgical Critical Care Fellowship Edward-Michael Dussom, MD Sunhee Kim, MD

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

### **CURRENT PODIATRIC** SURGERY RESIDENTS

#### PGY1

Joshua Choi, DPM Temple University School of Podiatric Medicine

Rafael Moradian, DPM

Western University of Health Sciences College of Podiatric Medicine

#### PGY2

Alyssa Miyasato, DPM

Western University of Health Sciences College of Podiatric Medicine

Subin Siby, DPM Temple University School of Podiatric Medicine

#### PGY3

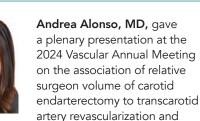
Marall Abbaszadeh, DPM Dr. William M. Scholl College of Podiatric Medicine

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

### **Resident News**

Marall Abbaszadeh, DPM, gave oral and poster presentations at the American Podiatric Medical Association Region One Conference in 2023.





perioperative outcomes. Dr. Alonso was awarded a scholarship from the New England Society of Vascular Surgery to attend the organization's 51st annual meeting, where she will present her study on long-term outcomes in patients suffering stroke following carotid artery stenting. She also had three poster presentations accepted and was first author of a paper published in the Journal of Vascular Surgery. In addition, she received a patient safety grant from the Boston Medical Center Resident/Fellow Quality Improvement Council to focus on improving rates of supervised exercise therapy for intermittent claudication.



Priyanka Chugh, MD, MS, completed her second year as a research fellow at Boston Children's Hospital. Dr. Chugh was awarded the Society of University Surgeons Resident

Research Award to fund her project "Medication and Nutrition Adherence in Adolescents and Young Adults with Intestinal Failure." In addition, she received the Society for Surgery of the Alimentary Tract Writers Workshop Scholarship. Over the course of the year, she gave presentations at the annual meetings of the Association for Surgical Education, the American Academy of Pediatrics, the Society of Asian Academic Surgeons (SAAS), and at the American College of Surgeons Clinical Congress. Dr. Chugh was a panelist on webcasts sponsored by SAAS and the Association of Women Surgeons. She authored or co-authored papers published in the Journal of Pediatric Surgery, Academic Medicine, Vascular and Endovascular Surgery, Journal of Surgical Research, The American Journal of Surgery, and Global Surgical Education and was recognized as a top reviewer for the latter.

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



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

Louis Kester, MD, matched to the surgical critical care fellowship at the University of Michigan.

Anna Kobzeva-Herzog, MD, completed her second year as the Quality Improvement and Research Surgical Fellow at Boston Medical Center (BMC) and received several awards over the course of the year.

These included a Best Abstract Award at the American College of Surgeons Quality and Safety Conference and at the New England Surgical Society Annual Meeting, first place for her brief podium presentation on the sustained success of a postoperative venous thromboembolism protocol at BMC. Dr. Kobzeva-Herzog also made oral presentations at the Eastern Association for the Surgery of Trauma Annual Scientific Assembly and at the American College of Surgeons Clinical Congress Scientific Forum. She was first author of a paper published in the Journal of Trauma and Acute Care Surgery that was selected by the editors as the "Best of Surgical Critical Care." In addition to this manuscript, she co-authored nine papers that were published in Annals of Vascular Surgery, Journal of Vascular Surgery, and The American Journal of Surgery.

Brenda Lin, MD, matched to the vascular surgery fellowship at Boston Medical Center.





Alyssa Miyasato, DPM, gave a poster presentation at the American Podiatric Medical Association Region One Conference in 2023.



Maia Nofal, MD, MPH, completed the second year of her academic development time, launching a multicenter study at four hospitals in Rwanda to implement

surgical infection prevention and antibiotic stewardship practices. Dr. Nofal gave oral presentations at the College of Surgeons of East, Central, and Southern Africa and at the Academic Surgical Congress. She also gave a talk at the University of Global Health Equity in Rwanda to graduate students in the Global Health Delivery program. In addition, she co-authored papers in JAMA Surgery, British Journal of Surgery, and Surgical Infections.



Olivia Sacks, MD, received an American Society of Colon and Rectal Surgeons Health Equity Grant to design and implement a novel smartphone-based

patient education program to improve health literacy and preparedness for colonoscopy at Boston Medical Center (BMC). Videos and text-message instructions will be translated into the most common languages spoken by BMC patients. Dr. Sacks also co-authored a review article on management of diverticulitis and an invited commentary, both published in JAMA Surgery.







Sophia Smith, MD, gave podium presentations at the Academic Surgical Congress and the American Association for the Surgery of Trauma Annual Meeting, where she also made a poster presentation. Dr. Smith co-authored eight articles, five as first author, in the following journals: Journal of the American College of Surgeons, Surgery, Journal of Surgical Research, and International Journal of

#### Allan Stolarski, MD,

matched to the trauma and surgical critical care fellowship at the University of Pennsylvania. Dr. Stolarski won first place for his paper in the

associate member category at the American Association for the Surgery of Trauma Annual Meeting and second place for his presentation.



Spencer Wilson, MD, matched to the surgical critical care fellowship at Johns Hopkins Hospital. Over the course of the year, Dr. Wilson co-chaired a panel on

climate change and surgery at the Association of Surgical Education Annual Meeting and made a poster presentation at the American College of Surgeons Clinical Congress. He was selected by third-year medical students to receive the Senior Resident Teaching Award.

> Surgery resident Anna Kobzeva-Herzog, MD, and mentor David McAneny, MD, at the American College of Surgeons Quality and Safety Conference, where she received a "best abstract" award.

### **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.

#### Andrea Alonso, MD

Site: Boston University Chobanian & Avedisian School of Medicine

Research Mentors: Jeffrey Siracuse, MD, MBA and Marc LaRochelle, MD, MPH

Area of research: Dr. Alonso is obtaining a master's degree in population health research, with a focus on epidemiology, through the Boston University Chobanian & Avedisian School of Medicine. With her primary mentor, Dr. Jeffrey Siracuse, she is working on projects evaluating a diverse array of topics in vascular surgery, focusing on social disparities of health, carotid artery disease, chronic limbthreatening ischemia, and intermittent claudication. Her projects include studies evaluating vascular disease and surgical practice patterns in the U.S., as well as short- and long-term outcomes for vulnerable populations, including patients with health disparities, trauma patients, and elderly patients. She is also working on multidisciplinary quality improvement projects to improve exercise therapy rates for intermittent claudication at Boston Medical Center.

Khu Aten 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 and Research Surgical Fellow. She focuses on improving the quality of surgical care through both research efforts and Boston Medical Center-wide quality improvement programs. In this role, she aims to lead several multidisciplinary projects to: standardize VTE prophylaxis; reduce the risk of breakthrough VTE, assess how

language barriers impact the quality of patient care; understand better the social determinants of health that impact our patient population, with a focus on immigrant populations; and work to find ways our healthcare community can better serve the underserved. Dr. Maaneb de Macedo currently serves as the Junior Administrative Research Resident.

#### Abdimajid Mohamed, MD

Site: Boston Children's Hospital **Research Mentor:** Benjamin Zendejas, MD, MSc

Area of research: During his academic development time, Dr. Mohamed will primarily focus on collaborating with the multidisciplinary Esophageal and Airway Treatment (EAT) team at Boston Children's Hospital. His research 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 guality of life for affected children.

#### Sara Myers, MD

Site: Boston University Chobanian & Avedisian School of Medicine

Research Mentors: Kelly Kenzik PhD, MS, and Jennifer Davids, MD

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

#### 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.

#### Sophia Smith, MD, MS

Site: Boston University Chobanian & Avedisian School of Medicine

Research Mentor: Sabrina Sanchez, MD. MPH

Area of Research: Dr. Smith is interested in trauma outcomes and reducing healthcare system waste and inefficiencies. Her primary research project is a multistage, retrospective evaluation of loss to follow-up, emergency department (ED) utilization, and readmissions after traumatic injury, including identification of high-risk patients for intervention prior to an ED visit or readmission. Dr. Smith currently serves as the Senior Administrative Research Resident.

### **Visiting Professors**

In addition to multiple eminent grand rounds speakers, the Department of Surgery was honored to welcome these surgical leaders as named visiting professors during the 2023–2024 academic year.



#### **Grasberger Research Symposium Lecture** and Visiting Professorship

Shimul A. Shah, MD, MHCM, FACS

James and Catherine Orr Endowed Chair of Liver Transplantation Division Chief of Transplantation Vice Chair for Health Services Research Professor of Surgery, University of Cincinnati School of Medicine

#### Smithwick Visiting Professorship in Vascular Surgery – Fall 2023

#### Vincent L. Rowe MD, FACS

Wiley Barker Professor of Surgery, David Geffer School of Medicine at UCLA Chief, Division of Vascular and Endovascular Surgery, Gonda Venous Center



Chair/Chief, Division of Vascular Surgery John Denstedt Chair of Surgical Simulation Schulich School of Medicine & Dentistry at Western University, London, Ontario, Canada



#### Peter J. Mozden, MD, Visiting Professorship in Surgical Oncology Atilla Nakeeb, MD

Chair, Division of General Surgery Chief of Surgical Oncology Lahey Hospital & Medical Center



#### Diversity, Equity & Inclusion Lecture and Visiting Professorship

Selwyn O. Rogers, Jr., MD, MPH Dr. James E. Bowman, Jr. Professor in the Biological Sciences, University of Chicago

Chief of Trauma and Acute Care Surgery and Founding Director, Trauma Center, University of

- Chicago Hospitals Executive Vice President, Community Health
- Engagement



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

Ajai K. Malhotra, MD, FACS Professor of Surgery, Robert Larner, M.D. College of Medicine, University of Vermont



Chief of Surgical Oncology Teviah Sachs, MD, presents Mozden Visiting Professor Attila Nakeeb, MD, with a "Beazley bowl" made by Professor of Surgery Emeritus Robert Beazley, MD.

## **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

#### Targeting Extracellular Matrix-Senescence Crosstalk as a Novel Approach to Improve Tissue Repair in Aging

Principal Investigators: Daniel Roh, MD, PhD; Jeroen E.G. Evckmans, PhD Sponsor: Hevolution Foundation Grant amount: \$2,000,000

Improving Access to Trauma Care for **Boston Victims of Firearm Violence** 

Principal Investigator: Dane Scantling, DO Sponsor: American College of Surgeons **Grant amount:** \$80,000

#### Field Artificial Intelligence Triage

Principal Investigators: Noelle Saillant, MD; Brian Telfer, PhD Sponsor: Massachusetts Institute of Technology/DoD Combat Casualty Care **Research Program Grant amount:** \$650,000

#### **Text-Messaging-Based Quality** Improvement Intervention to Increase Colonoscopy Completion Rates in a Safety-Net Hospital

Principal Investigator: Olivia Sacks, MD (Jennifer Davids, MD, faculty mentor) Sponsor: American Society of Colon and Rectal Surgeons **Grant amount:** \$20,000

#### Vascular Surgery Research Training Program

Principal Investigator: Jeffrey Siracuse, MD, MBA Sponsor: W. L. Gore & Associates Grant amount: \$20,000

#### ONGOING

#### Targeting Senescence to Improve Wound Healing in Aging Principal Investigator: Daniel Roh, MD, PhD Sponsor: National Institutes of Health/ National Institute on Aging Grant amount: \$1,215,000

### **Targeting Senescence to Improve** Wound Healing in Aging

Principal Investigator: Daniel Roh, MD, PhD Sponsor: Hevolution Foundation/ American Federation for Aging Research Grant amount: \$373,000

#### Understanding Rural Mortality **Disparities in Cancer: A Multi-level** Approach

Principal Investigator: Kelly Kenzik, PhD, MS Sponsor: National Institutes of Health/ National Cancer Institute **Grant amount:** \$1,381,999

#### **Understanding Rural Mortality Disparities in Cancer: A Multi-level**

Approach (R37 Supplement with Crisanto Torres, MD, MPH) Principal Investigator: Kelly Kenzik, PhD, MS Sponsor: National Institutes of Health/ National Cancer Institute Grant amount: \$423,009

#### **BEST-CLI Data Analysis and Publications Core**

Principal Investigator: Alik Farber, MD, MBA Sponsor: Novo Nordisk Foundation Grant amount: \$1,107,933

#### Mechanism of Trypsin Activation in Pancreatitis

#### Principal Investigator: Andrea Geisz, PhD, MS

Sponsor: National Institutes of Health/ National Institute of Diabetes and Digestive and Kidney Diseases Grant amount: \$1,800,480

#### Impact of Biological, Clinical, and Social Determinants on Trauma and Trauma Outcomes

Principal Investigators: Daniel Remick, MD; Kelly Kenzik, PhD, MS Sponsor: National Institutes of Health/ National Institute of General Medical Sciences Grant amount: \$1,254,240

#### **Community Violence Response Team**

Principal Investigator: Lisa Allee, MSW, LICSW Sponsor: Massachusetts Office for Victim Assistance Grant amount: \$757,850

## **Selected Clinical Research Projects**

There are 113 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 GENERAL SURGERY,** SECTION OF ENDOCRINE SURGERY

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

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

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.

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

### SECTION 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

### DEPARTMENT OF SURGERY PORTFOLIO OF CLINICAL RESEARCH PROJECTS (N=113), FY 2024



80	Investigator-initiated studies
14	Industry-sponsored trials
11	Federally sponsored studies
8	Nongovernmental organizatio

#### A Study to Evaluate the Safety and Effectiveness of the Standard of Care Diversion, Diverting Ileostomy, Following Low Anterior Resection Principal Investigator: Jennifer Davids, MD

ns

Sponsor: SafeHeal, Inc.

### **Publications**

Research conducted by faculty, residents, and fellows in the Department of Surgery is published widely in leading journals and textbooks. During the 2023–2024 academic year, the department had more than 165 articles published in peer-reviewed journals and five published books or book chapters.

#### **Selected Papers**

Association of Race, Ethnicity, Language, and Insurance with Time to Treatment Initiation Among Women with Breast Cancer at an Urban, Academic, Safety-Net Hospital. Beaulieu-Jones BR, Ha EJ, Fefferman A, Wang J, Chung SH, Tseng JF, Merrill A, Sachs TE, Ko NY, Cassidy MR. Ann Surg Oncol. 2024 Mar; 31(3):1608-1614.

Trends in Access to Minimally Invasive Pancreaticoduodenectomy for Pancreatic Cancers. Seldomridge AN, Rasic G, Papageorge MV, Ng SC, de Geus SWL, Woods AP, McAneny D, Tseng JF, Sachs TE. HPB (Oxford). 2024 Mar; 26(3):333-343.

Delay and Disparity in Observed vs Predicted Incidence Rate of Screenable Cancer During the COVID-19 Pandemic. Romatoski KS, Chung SH, Kenzik K, Rasic G, Ng SC, Tseng JF, Sachs TE. J Am Coll Surg. 2023 Sep 01; 237(3):420-430.

Limited English Proficiency and Graves' Disease at an Urban Safety-Net Hospital. Annesi CA, Woods AP, Kim NE, Pearce EN, Merrill AL, McAneny D, Drake FT. J Surg Res. 2024 Apr:296:56-65. Epub 2024 Jan 13.

Assessing Time to Removal of Tunneled Dialysis Catheters after Arteriovenous Access Creation. Kobzeva-Herzog AJ, Levin SR, Young S, McNamara TE, Alonso AG, Farber A, King EG, Siracuse JJ. Ann Vasc Surg. 2024 May:102:35-41. Epub 2024 Feb 2.

BEST-CLI International Collaborative: Planning a Better Future for Patients with Chronic Limb-Threatening Ischaemia Globally. Farber A, Menard MT, Bonaca MP, Bradbury A, Conte MS, Debus ES, Eldrup N, Goodney P, Gupta PC, Hinchliffe RJ, Houlind KC, Kolh P, Kum SWC, Nordanstig J, Parikh SA, Patel MR, Patrone L, Sillesen H, Strong MB, Varcoe RL, Vega de Ceniga M, Venermo MA, Rosenfield K. Br J Surg. 2024 Jan 31;111(2).

Investigator Attitudes on Equipoise and Practice Patterns in the BEST-CLI Trial. J Vasc Surg. 2024. Farber A, Siracuse JJ, Giles K, Jones DW, Laskowski IA, Powell RJ, Rosenfield K, Strong MB, White CJ, Doros G, Menard MT. Apr;79(4):865-874. Epub 2023 Dec 5.

Outcomes of Lower Extremity Revascularization in Octogenarians and Nonagenarians for Intermittent Claudication. Haqqani MH, Kester LP, Lin B, Farber A, King EG, Cheng TW, Alonso A, Garg K, Eslami MH, Rybin D, Siracuse JJ. J Vasc Surg. 2023 Dec;78(6):1479-1488.e2. Epub 2023 Oct 6.

Perioperative Complications Following Open or Endovascular Revascularization for Chronic

Limb-Threatening Ischemia in the BEST-CLI Trial. Siracuse JJ, Farber A, Menard MT, Conte MS, Kaufman JA, Jaff M, Kiang SC, Ochoa Chaar CI, Osborne N, Singh N, Tan TW, Guzman RJ, Strong MB, Hamza TH, Doros G, Rosenfield K. Randomized Controlled Trial. J Vasc Surg. 2023 Oct;78(4):1012-1020.e2. Epub 2023 Jun 14.

Timing to First Whole Blood Transfusion and Survival Following Severe Hemorrhage in Trauma Patients. Torres CM, Kenzik KM, Saillant NN, Scantling DR, Sanchez SE, Brahmbhatt TS, **Dechert TA**, Sakran JV. Comment JAMA Surg. 2024 Apr 1;159(4): 374-381.

Social Determinants of Health Associated with the Need for Urgent Versus Elective Cholecystectomy at an Urban, Safety-Net Hospital. Myers S, Kenzik K, Allee L, Dechert T. Theodore S. Jaffe A. Sanchez SE. Surg Infect (Larchmt). 2024 Mar;25(2):101-108. Epub 2024 Feb 1.

Death by the Minute: Inequities in Trauma Care for Victims of Firearm Violence. Poulson M. Jav J. Kenzik K. Torres C. Sanchez SE. Saillant N. Holena D, Galea S, Scantling D. J Trauma Acute Care Surg. 2024 Apr 1;96(4):589-595. Epub 2023 Nov 23.

Prospective Study of a System-Wide Adrenal Incidentaloma Quality Improvement Initiative. Woods AP, Feeney T, Gupta A, Knapp PE, McAneny D, Drake FT. J Am Coll Surg. 2024 May 1;238(5):961-970. Epub 2024 Apr 17.

Familiarity, Communication, and Entrustment in the Operating Room. Pernar LI. JAMA Surg. 2024 Mar 1;159(3):285-286.

Management of Penetrating Cardiac Injury and Tricuspid Regurgitation with Extracorporeal-Membrane Oxygenation (ECMO): A Case Report. Karavas AN, Olia K, Scantling D, Nudel J. Kriegel J. Edwards NM. Case Reports. J Cardiothorac Surg. 2024 Feb 6;19(1):64.

The Evaluation and Management of Intestinal Ischemia. Theodore S, Xia T, Saillant N. Review NEJM Evid. 2024 Apr;3(4):EVIDra2400057. Epub 2024 Mar 26.

Disparities in Rectal Cancer Care–What Are We Missing? Sacks OA, Davids JS. JAMA Surg. 2023 Nov 1;158(11):1203.

Genetic Ablation of the C-Type Lectin Receptor CLEC2D Increases Peritonitis Mortality, Inflammation and Physiology Without Diminishing Organ Injury. Stolarski AE, Lai JJ, Kim J, Rock KL, Remick D. Shock. 2024 Jun 11. Online ahead of print.

Invited Commentary: Impact of Preoperative Weight Loss on 30-Day Complication Rate after Bariatric Surgery. Hess DT. J Am Coll Surg. 2024 Jun 01; 238(6):999-1000.

Sustained Success of a Caprini Postoperative Venous Thromboembolism Prevention Protocol Over One Decade. Anna J Kobzeva-Herzog, Akshay Ravandur, Spencer B Wilson, Pamela Rosenkranz, Stephanie D Talutis, Ryan Macht, Michael R Cassidy, Jeffrey J Siracuse, David McAneny. Am J Surg. 2024 May 28:115783. Online ahead of print.

Higher Stroke Risk After Carotid Endarterectomy Associated with Surgeons Who Perform Transcarotid Revascularization for the Majority of Interventions. Alonso A, Ribyn D, Kobzeva-Herzog A, Yahn C, Farber A, King EG, Hicks C, Eslami MH, Patel VI, Rybin D, Siracuse JJ. J Vasc Surg. 2024 Jun 19:S0741-5214(24)01214-X. Online ahead of print.

Comparing Healthcare Needs in Extremely Low Birth Weight Infants with NEC and Spontaneous Intestinal Perforation. Chugh PV, Nes E, Culbreath K, Keefe G, Edwards EM, Morrow KA, Ehret D, Soll RF, Modi BP, Horbar JD, Jaksic T. J Pediatr Surg. 2024 Mar 16. Online ahead of print.

Scheduled Follow-Up and Association with Emergency Department Use and Readmission after Trauma. Sophia M Smith, Xuewei Zhao, Kelly Kenzik, Cara Michael, Kendall Jenkins, Sabrina E Sanchez. J Am Coll Surg. 2024 Apr 17. Online ahead of print.

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Characterization of Cardiovascular Serious Adverse Events after Bypass or Endovascular Revascularization for Limb-Threatening Ischemia in the BEST-CLI Trial. Siracuse JJ, Menard MT, Rosenfield K, Conte MS, MD, Powell RJ, MD, Hamburg N, Doros D, Strong MB, Farber A. J Vasc Surg. 2024 Apr 16:S0741-5214(24)00987-X. Online ahead of print.

Quality of Life in Patients With Chronic Limb-Threatening Ischemia Treated With Revascularization. Menard TM, Farber A, Powell RJ, Rosenfield K, Conte MS, Hamza TH. Kauffman JA. Cziraky MJ. Creager MA. Dake MD, Jaff MR, Reid D, Sopko G, White CJ, Strong MB, van Over M, Chisci E, Goodney PP, Gray B, Kayssi A, Siracuse JJ, Choudhry NK. Circulation. 2024 Apr 16;149(16):1241-1253. Epub 2024 Apr 10.



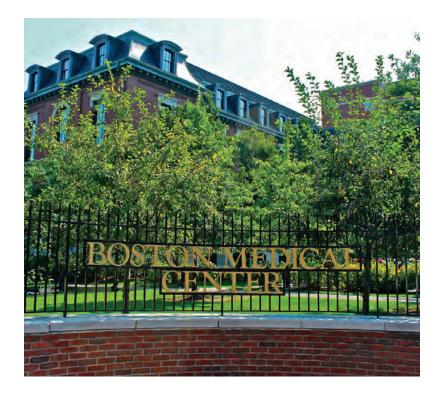
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# Shaping the Future



## Alumni and other friends: Please keep in touch!

Reach us at: surgery@bu.edu

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