

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

ANNUAL REPORT 2023

Teaming Up for Excellence



CONTENTS

Introduction	1
Faculty	3
Faculty News	7
Alumni Profile	11
Highlights	13
Of Note	19
Education	21
Resident News	23
Research	27

The Department of Surgery By the Numbers

14 Clinical Divisions/Sections

68 Faculty

1 ACGME-Accredited Surgical Residency

39 Interns and Residents

2 ACGME-Accredited Surgical Fellowships

5 Fellows

6 CPME-Accredited Podiatry
Surgery Residents

6,449 Operations*

66,484 Outpatient Visits*

* July 1, 2022–June 30, 2023

Message from the Chair



Jennifer Keith, RN, ADN, a nurse in the general surgery clinic and 15-year employee of the Department of Surgery, was the recipient of a 2023 Boston Medical Center (BMC) “Be Exceptional” award. A significant number of patients Jennifer sees in clinic post-surgery have recently experienced interpersonal violence, in the community or in their own homes. Among the many reasons she was chosen for the award was this: “She

is judgment free in her approach to patients and always makes them feel welcome, trusted, and comfortable while in her care.” In remaining true to our longstanding values as an institution, this is what we all strive for every day. Jennifer is emblematic of the care that is provided year in and year out by so many across our department.

This open and accepting attitude is prevalent at BMC and in the Department of Surgery, and extends to staff, faculty, and trainees. Our general surgery residency program has a well-deserved reputation for being a welcoming environment for LGBTQ+ residents, many of whom are active both within the institution and externally in making the house of surgery more welcoming. As an out lesbian and LGBTQ+ advocate, PGY3 Gordana Rasic, MD, MS, was appointed in 2022 to serve as the inaugural resident representative on the executive board of the Association of Out Surgeons and Allies. And within the department, a group of residents and faculty have founded Advancing Cultural Competency & Equity in Surgical Specialties (ACCESS), a new organization formed to recognize individuals from various backgrounds and extend the welcoming environment within the Department of Surgery.

We thrive on the energy and ideas from within our department and from the larger hospital and Boston University communities. To drive the strategic vision for surgical services going forward, a new role has been created. Ron Jones, CMPE, CPA, has joined BMC as the first Vice President of Surgical Services. He will work with clinical leadership across multiple departments to enhance patient care and operational efficiency.

We are committed to patient-centered clinical care for some of the most vulnerable and medically complex patients, as well as impactful research and comprehensive education and training. This report highlights our colon and rectal surgery team, helmed by our new Chief of Colon and Rectal Surgery, Jennifer Davids, MD, and basic research targeting pancreatitis triggers, which is being conducted by Andrea Geisz, PhD, MS. We also spotlight our surgical critical care and vascular surgery fellowship programs. Under the leadership of Jeffrey Siracuse, MD, MBA, the latter is growing from two to three fellows starting with the 2023–2024 academic year.

We look forward to the future with hope as we reflect with pride on the remarkable work of the whole surgery team over the last year.

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

Boston Medical Center

Boston Medical Center (BMC) is a not-for-profit, 514-bed academic medical center. BMC is the largest safety-net hospital and busiest trauma and emergency services center in New England. Located in Boston's historic South End, BMC is the primary teaching hospital of the Boston University Chobanian & Avedisian School of Medicine and was created by the 1996 merger of Boston City Hospital (founded in 1855) and Boston University Medical Center Hospital (founded in 1864). BMC operates 67 residency training programs, with more than 600 resident and fellowship positions.

A recognized leader in groundbreaking medical research, BMC is the 18th largest recipient of funding from the National Institutes of Health among independent hospitals. Our world-renowned researchers currently oversee 789 research projects, including laboratory-based research and clinical research programs.



The Department of Surgery

The Department of Surgery has historic roots that extend back 150 years. In 1873, Boston University School of Medicine (now Boston University Chobanian & Avedisian School of Medicine) opened its doors, combining the New England Female Medical College with the medical staff of the Massachusetts Homeopathic Hospital.

The modern history of the Department of Surgery at Boston University dates to 1946, when Dr. Reginald H. Smithwick

was recruited from Massachusetts General Hospital to serve as Surgeon-in-Chief and Chair of Surgery. Dr. Smithwick served in those positions for nearly 20 years.

Among the surgeons who have led and contributed to the international stature of the Department of Surgery throughout the ensuing decades are Drs. Richard Egdahl, John Mannick, Lester Williams, Peter Mozden, Robert Hobson, Edward Spatz, James Becker, and Gerard Doherty. In July 2017, Jennifer F. Tseng, MD, MPH,

was recruited as Chair and James Utley Professor of Surgery at Boston University and Surgeon-in-Chief at Boston Medical Center.

The Department of Surgery comprises 14 divisions and sections, and includes more than 60 faculty members. A well-established relationship with Boston Children's Hospital provides shared faculty in pediatric critical care and pediatric general surgery, as well as pediatric training for residents. The department also has affiliated faculty members from Roger Williams Medical Center, the Veterans Administration (VA) Boston Healthcare System, Cape Cod Hospital (Cape Cod Healthcare), and St. Elizabeth's Medical Center. These institutions are valued partners in teaching and training medical students and residents. Two other hospitals also actively participate in the third-year surgery clerkship: Berkshire Medical Center and Kaiser Permanente Santa Clara.

This report highlights a few of the many accomplishments and activities of our faculty, trainees, and alumni during the previous academic year (July 1, 2022, through June 30, 2023). We invite you to visit our website (bumc.bu.edu/surgery) and follow us on X (formerly Twitter) and Instagram (@BMCSurgery) to keep abreast of our activities throughout the year.



Department Leadership



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



Alik Farber, MD, MBA
Vice Chair of Surgery
Associate Chief Medical Officer for
Surgical Services, Boston Medical Center



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



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



Kelly Kenzik, PhD, MS
Associate Chair of Research



Sabrina Sanchez, MD, MPH
Associate Chair for Faculty Development
and Diversity

Division and Section Leadership



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



Noelle Saillant, MD
Chief, Section of Surgical Critical Care



Niloo Edwards, MD
Chief, Division of Cardiac Surgery



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



Donald Hess, MD
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

Faculty

DEPARTMENT OF SURGERY FACULTY

Jennifer F. Tseng, MD, MPH

James Utey Professor and Chair of Surgery, Boston University
Surgeon-in-Chief, Boston Medical Center

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

Niloo Edwards, MD

Division Chief
Professor of Surgery, Boston University

Alexandros Karavas, MD

Assistant Professor of Surgery, Boston University

Colon and Rectal Surgery

Jennifer Davids, MD

Section Chief
Associate Professor of Surgery, Boston University

Olga Beresneva, MD

Assistant Professor of Surgery, Boston University

Joanne Favuzza, DO

Clinical Associate Professor of Surgery, Boston University

Minimally Invasive and Weight Loss Surgery

Donald Hess, MD

Section Chief
Assistant Professor of Surgery, Boston University

Brian Carmine, MD

Assistant Professor of Surgery, Boston University

* Recommended for



Ewald Mendeszoon, Jr., DPM
Chief, Division of Podiatry Surgery



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



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



Laurence Brinckerhoff, MD
Chief, Division of Thoracic Surgery



Jeffrey Cooper, MD
Chief, Division of Transplant Surgery



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

Joshua Davies, MD

Assistant Professor of Surgery,
Boston University

Luise Pernar, MD, MHPE

Associate Professor of Surgery,
Boston University

Pediatric Surgery

Christopher Muratore, MD

Section Chief
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

Podiatry Surgery

Ewald Mendeszoon, Jr., DPM

Division Chief
Assistant Professor 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
Assistant Professor of Surgery,
Boston University

David McAneny, MD

Chief Medical Officer, Boston
Medical Center
Professor of Surgery,
Boston University

Andrea Merrill, MD

Assistant Professor of Surgery,
Boston University

Jennifer F. Tseng, MD, MPH

James Utley Professor
and Chair of Surgery,
Boston University

Thoracic Surgery

Laurence Brinckerhoff, MD

Division Chief
Clinical Professor of Surgery,
Boston University*

Christopher Digesu, MD

Assistant Professor of Surgery,
Boston University

Transplant Surgery

Jeffrey Cooper, MD

Division Chief
Associate Professor of Surgery,
Boston University*

Vascular and Endovascular Surgery

Alik Farber, MD, MBA

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*

Tony Godfrey, PhD

Professor of Surgery and
Computational Biomedicine,
Boston University

Kelly Kenzik, PhD, MS

Associate Professor of Surgery,
Boston University*

Marina Malikova, PhD, MSci, MA

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

Amy Rosen, PhD

Professor of Surgery,
Boston University

Pamela Rosenkranz, RN, BSN, MEd

Assistant Professor of Surgery,
Boston University

Sing Chau Ng, MS

Staff Biostatistician
Administrative Director,
Surgical Outcomes Analysis
& Research

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

Maureen Kavanah, MD

Assistant Professor Emeritus of
Surgery, Boston University

* Recommended for

BOSTON UNIVERSITY MEDICAL CAMPUS

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

Richard Freeman, Jr., MD
Professor of Surgery,
Boston University

CAPE COD HOSPITAL (CAPE COD HEALTHCARE)

Lawrence Novak, MD
Surgery Residency
Program 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 University
Associate Director, Boston
University Surgery Clerkship

Ponnandai Somasundar, MD
Associate Professor of Surgery,
Boston University

ST. ELIZABETH'S MEDICAL CENTER

Claudius Conrad, MD, PhD, PhD
Professor of Surgery,
Boston University

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

Eduardo Vega, MD
Assistant Professor of Surgery,
Boston University

VETERANS AFFAIRS (VA) BOSTON HEALTHCARE SYSTEM

General Surgery

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

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

Gentian Kristo, MD, MPH
Adjunct Clinical Instructor of
Surgery, Boston University
Director, Boston University
Anesthesia/Surgery Internship

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

Cardiac Surgery

Miguel Haime, MD
Assistant Professor of Surgery,
Boston University

Vascular Surgery

Sarah Carlson, MD
Assistant Professor of Surgery,
Boston University

James McPhee, MD
Associate 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



Jennifer Davids, MD, Chief of Colon and Rectal Surgery, was an invited speaker at the Harvard Advances and Controversies in Benign Colorectal Surgery

course and at the American Society of Colon and Rectal Surgeons (ASCRS) Young Surgeons Symposium in Seattle. She was selected as an associate editor of *Diseases of the Colon and Rectum* and became a member of the Boston Surgical Society. In addition, Dr. Davids authored an invited commentary for *JAMA Surgery* on surgery for diverticular disease and was lead author on an ASCRS Clinical Practice Guideline, as well as co-author of six other peer-reviewed manuscripts.



Christopher Digesu, MD, Thoracic Surgery, gave a talk entitled The LGBTQ Experience in CT Surgery and participated in a panel discussion during "The Voices of

Cardiothoracic Surgery: The State of DEI Today" webinar. Presented on the Advances in Surgery Channel, in alliance with the American College of Surgeons, the webinar had 32,000 viewers.



F. Thurston Drake, MD, MPH, Chief of Endocrine Surgery, was invited to serve as Chair of the American Thyroid Association Trainees and Career Advancement

Committee for a two-year term. His responsibilities include leading the program committee for the annual E. Chester Ridgway Trainee Conference in Washington, D.C., one of the premier educational experiences in thyroid care for endocrinology fellows, endocrine surgery fellows, and head/neck surgery trainees.



Alik Farber, MD, MBA, Chief of Vascular and Endovascular Surgery, was promoted to Vice Chair of the Department of Surgery and was named Treasurer of the

New England Society for Vascular Surgery. Dr. Farber delivered the Frank J. Veith Distinguished Lecture at the Society for Vascular Surgery Annual Meeting. Over the course of the year, he published 24 articles, including two in *The New England Journal of Medicine*.



Kelly Kenzik, PhD, MS, Surgical Research and Education, was named Associate Chair of Research. She is currently in the second year of a National Cancer Institute

(NCI) R37 award (Understanding Rural Mortality in Cancer: A Multi-Level Approach). Related to this, Dr. Kenzik and **Crisanto Torres, MD, MPH,** Acute Care and Trauma Surgery/Surgical Critical Care, were awarded funding for the NCI CURE Diversity Supplement to provide mentored training for Dr. Torres. He will examine rural factors influencing emergency surgery in cancer patients. During the academic year, Dr. Kenzik and her research team published the initial R37 manuscript in the *Journal of the National Cancer Institute*, examining the effect of urban/rural measurement issues on cancer mortality estimates.



Marina Malikova, PhD, MSci, MA, MBA, Executive Director of Surgical Translational Research, earned a Health Sector MBA, with honors, from the Boston University

Questrom School of Business. Over the course of the year, Dr. Malikova chaired a panel on precision medicine and

Boston University Chobanian & Avedisian School of Medicine Promotions



Joanne Favuzza, DO
Clinical Associate Professor of Surgery



Luise Pernar, MD, MHPE
Associate Professor of Surgery



Sabrina Sanchez, MD, MPH
Associate Professor of Surgery



Jeffrey Siracuse, MD, MBA
Professor of Surgery

diagnostics during DIA (Drug Information Association) Europe 2023 in Switzerland. She also moderated two international panels and chaired a panel at the 14th Annual SCOPE Clinical Operations Executives Summit in Florida. She was an invited speaker for a Weill Cornell Medical College webinar focused on updates to investigational new drug applications. Dr. Malikova also published peer-reviewed articles and critical reviews in *Kidney International Reports*, *Therapeutic Innovation and Regulatory Science*, *Frontiers in Drug Safety and Regulation*, and *Biomarker Insights*.



Andrea Merrill, MD, Surgical Oncology, was awarded a Boston Medical Center (BMC) Health Equity Accelerator Award and a Trefler Foundation grant to start a lymphedema screening program at BMC. Dr. Merrill served on a panel focused on ergonomics in surgery at the American Association of Endocrine Surgeons Annual Meeting and gave grand rounds for Baystate Medical Center and Wayne State University. She co-authored manuscripts in journals that included *JAMA Oncology*, *Annals of Surgery*, *Annals of Surgical Oncology*, and the *Journal of Surgical Education*. In addition, Dr. Merrill completed the Harvard Medical School Media and Medicine Certificate Program and became a member of the American Association of Endocrine Surgery and the Society of Surgical Ergonomics.



Luise Pernar, MD, MHPE, was promoted to Associate Professor of Surgery at Boston University Chobanian & Avedisian School of Medicine. Dr. Pernar was invited to participate in a Society of American Gastrointestinal and Endoscopic Surgeons panel on optimizing intraoperative teaching and an Advances in Surgery Channel panel on curriculum development in medical education. She

co-authored articles and commentaries published in *Journal of Surgical Education*, *JAMA Surgery*, *Surgical Endoscopy*, and *Surgery for Obesity and Related Diseases*. An article she previously published in *Mini-invasive Surgery* on gender disparities in weight loss surgery received the 2022 Best Paper Award.



Hau Pham, DPM, Research Director for Podiatry Surgery, was first author of a paper published in *Wound*, which focused on correct diagnosis of Charcot neuroarthropathy. He also led a team that made poster presentations at the American Podiatric Medical Association Annual Scientific Meeting in Orlando in 2022.



Daniel Roh, MD, PhD, Plastic and Reconstructive Surgery, was appointed Deputy Chief of Plastic Surgery and Ambulatory Medical Director for Clinical Operations in the Department of Surgery. He received a Hevolution/American Federation of Aging Research Award to support his work on targeting senescence in wound healing. In addition, Dr. Roh received the Kelmen Cohen Junior Investigator Award at the Innovations in Wound Healing Annual Meeting and was invited to join the grant review panel for the National Institute on Aging GEMSTAR (Grants for Early Medical/Surgical Specialists' Transition to Aging Research) study section.



Teviah Sachs, MD, MPH, Chief of Surgical Oncology, was awarded the Visiting Grand Rounds Professorship from The Society for Surgery of the Alimentary Tract (SSAT) at the annual meeting in Chicago. Dr. Sachs was an author or co-author of 24 manuscripts in peer-

reviewed journals, including *Annals of Surgery*, *Journal of the American College of Surgeons (JACS)*, *Journal of Surgical Education*, and *Annals of Surgical Oncology*. As senior author of a paper recently published in *JACS* (Delay and Disparity in Observed vs Predicted Incidence Rate of Screenable Cancer During the COVID-19 Pandemic), Dr. Sachs and first author **Kelsey Romatoski, MD**, Surgical Outcomes Analysis & Research fellow in the Department of Surgery, were interviewed for an ACS Research News highlight. Additionally, Dr. Sachs co-authored a chapter on diagnosis and management of gallbladder cancer.



Noelle Saillant, MD, Acute Care and Trauma Surgery/Surgical Critical Care, was appointed Chief of Surgical Critical Care and Director of the surgical intensive care unit, effective August 1, 2023. She has also been named Director of the Surgical Critical Care Fellowship.



Dane Scantling, DO, MPH, Acute Care and Trauma Surgery/Surgical Critical Care, edited a book on trauma care for medical students and co-authored 11 peer-reviewed papers in *JAMA Surgery*, *Annals of Surgery*, and other high-impact journals. Dr. Scantling gave three invited talks and moderated two national panels. In addition, over the course of the year, he served as senior mentor for medical students and residents who gave multiple institutional presentations as well as two national and two international podium presentations.

Faculty News



Jeffrey Siracuse, MD, MBA, Vascular and Endovascular Surgery, was promoted to Professor of Surgery at the Boston

University Chobanian & Avedisian School of Medicine. He was elected to serve a second term as Medical Director of the Vascular Study Group of New England (VSGNE) and established the inaugural VSGNE/New England Society for Vascular Surgery Research Fellowship Program. Dr. Siracuse was a co-author of *The New England Journal of Medicine* paper on results from the international BEST-CLI trial and co-authored more than 20 other peer-reviewed articles in *Journal of Vascular Surgery*, *Journal of the American College of Surgeons*, and other high-impact journals. He made podium presentations at the annual meetings of the Society for Vascular Surgery and the Society for Clinical Vascular Surgery, as well as the American College of Surgeons Clinical Congress. Dr. Siracuse also gave invited talks at Harvard Medical School and Northeastern University and was keynote speaker at Tufts University School of Medicine's Resident Research Day. In addition, he received vascular surgery education grants from Becton Dickinson and W.L. Gore.



Crisanto Torres MD, MPH, Acute Care and Trauma Surgery/ Surgical Critical Care, published seven peer-reviewed manuscripts, five as

first author, in journals that included *JAMA Surgery*, *Journal of the American College of Surgeons*, and *Journal of Trauma and Acute Care Surgery*. Dr. Torres and co-author Joseph Sakran, MD, MPH, MPA, were guests on a JAMA Network podcast, where they discussed their *JAMA Surgery* paper entitled Association of Whole Blood With Survival Among Patients Presenting With Severe Hemorrhage in US and Canadian Adult Civilian Trauma Centers. Their work was also featured on the Behind the Knife podcast. In addition, Dr. Torres received a National Cancer Institute CURE Diversity Supplement, and under the mentorship of Associate Chair of Research **Kelly Kenzik, PhD, MS**, will examine rural factors influencing emergency surgery in cancer patients. Dr. Torres was also selected to join the Association for Academic Surgery/ Society of University Surgeons JUMPSTART (Junior Underrepresented Mentorship and Promotion) Program.

New Faculty



William Kelly (KC) Collins III, MD, MBA
Assistant Professor of Surgery, Boston University*
Plastic and Reconstructive Surgery

Dr. Collins is a graduate of Tufts University School of Medicine. He completed residency in general surgery at Beth Israel Deaconess Medical Center, followed by the Harvard Plastic Surgery Residency at Mass General Brigham. Dr. Collins also holds an MBA from the MIT Sloan School of Management, with academic interests in healthcare delivery, health equity, and value-based care. Prior to joining BMC, Dr. Collins was an attending surgeon in the Department of Surgery at Baystate Health in Springfield and an Assistant Professor of Surgery at the UMASS Chan Medical School – Baystate.



Jennifer Davids, MD
Associate Professor of Surgery, Boston University
Colon and Rectal Surgery

Dr. Davids was named Chief of Colon and

Rectal Surgery in 2023. She received her medical degree from Yale University School of Medicine and completed general surgery residency at Brigham and Women's Hospital. This was followed by a fellowship in colon and rectal surgery at the UMass Chan Medical School. Prior to joining Boston Medical Center and Boston University, Dr. Davids was an attending surgeon in the Division of Colon and Rectal Surgery at UMass Memorial Medical Center, where she served as Director of the colon and rectal surgery fellowship program, and was Associate Professor of Surgery at the UMass Chan Medical School. Actively involved in research, she has co-authored more than 60 peer-reviewed papers in *JAMA Surgery*, *Annals of Surgery*, and other high-impact journals. In addition to the care of colorectal surgery patients, her research interests include gender equity in surgery.



Chair of Surgery Jennifer Tseng, MD, MPH, was selected as an honorary fellow of the Society of Black Academic Surgeons (SBAS). Dr. Tseng is pictured with SBAS President Andre Campbell, MD, Professor of Clinical Surgery at the University of California San Francisco and attending surgeon at Zuckerberg San Francisco General Hospital.



Andrea Geisz, PhD, MS
*Laszlo Tauber Assistant
 Professor of Surgery,
 Boston University**
*Surgical Research and
 Education*

Dr. Geisz holds a PhD in molecular and cell biology from the University of Szeged Albert Szent-Gyorgyi Medical School in Hungary, and a master's degree in neurobiology and physiology from the University of Szeged. Prior to joining the Department of Surgery, she was on the faculty of the Boston University Henry M. Goldman School of Dental Medicine. Dr. Geisz' research is focused on inflammatory disorders of the pancreas, with her research currently supported by the National Institute of Diabetes and Digestive and Kidney Diseases. She has previously been the recipient of a Department of Defense Discovery Award, an American Pancreatic Association Young Investigator in Pancreatitis grant, and an American Gastroenterological Association Research Scholar Award.



Megan Janeway, MD
*Assistant Professor of
 Surgery, Boston University*
*Acute Care and Trauma
 Surgery/Surgical Critical
 Care*

Dr. Janeway is a graduate of the Boston University Chobanian & Avedisian School of Medicine (SOM), graduating cum laude. She is also a 2022 graduate of the Boston Medical Center (BMC) General Surgery Residency Program, and recently completed a surgical critical care fellowship in the Department of Surgery at the University of Michigan. During her residency at BMC, she inspired the formation of the Socially Responsible Surgery (SRS) group, which she co-founded with Acute Care and Trauma Surgery Chief **Tracey Dechert, MD**. Now a national organization, SRS has

spread across the country. She was also inducted into the Chobanian & Avedisian SOM chapter of the Gold Humanism Honor Society and won the Arnold P. Gold Foundation Humanism and Excellence in Teaching Award during residency. In addition, she received the Grant Rodkey, MD, Award for Scholarship, Humanism, Professionalism, Leadership and Technical Excellence from the VA Boston Healthcare System.



Danby Kang, MD
*Assistant Professor of
 Surgery, Boston University**
*Acute Care and Trauma
 Surgery/Surgical Critical
 Care*

Dr. Kang received her medical degree from Texas Tech University Health and Sciences Center and did her general surgery residency at Rush University Medical Center in Chicago. She recently completed a two-year fellowship in acute care surgery and surgical critical care at the University of Pittsburgh Medical Center. Dr. Kang's interests include community-based interventions for violence reduction. She has published manuscripts in *JAMA Surgery* and other high-impact journals.



Jorge Lujan, MD
*Assistant Professor of
 Surgery, Boston University**
*Plastic and Reconstructive
 Surgery*

Dr. Lujan received his medical degree from the School of Medicine at the Monterrey Institute of Technology and Higher Education in Mexico. This was followed by a research fellowship at Harvard University. He went on to complete the integrated plastic surgery residency at UMass Memorial Health, where he received several awards and honors during residency, including induction into the UMass Chan Medical School chapter of Alpha Omega Alpha and

the Gold Humanism Honor Society. Dr. Lujan completed his postdoctoral training with a fellowship in adult and pediatric craniofacial surgery at Stanford University in 2023. He has published 25 papers in peer-reviewed journals on translational science in wound healing, tissue engineering, adipose tissue for regenerative medicine, and reconstructive surgical techniques.

* Recommended for

Alumni Profile: Daniel Chu, MD, MSPH

Daniel Chu, MD, MSPH, may be a decade out from general surgery residency at Boston Medical Center (BMC) and the Boston University Chobanian & Avedisian School of Medicine, but the voices of the attendings who trained him still echo in his head, urging him to be “precise, intentional, and as perfect as possible” while operating.

After finishing residency in 2013, Dr. Chu went on to a colorectal fellowship at the Mayo Clinic, before joining the Department of Surgery at the University of Alabama Birmingham (UAB) in 2014. Over the last nine years as an attending surgeon at UAB, he has been appointed to a number of leadership roles and has established a thriving health services research group. He also earned a master’s degree from the UAB School of Public Health.

UAB Hospital, the flagship of the UAB system, is a 1,200-bed facility and the only Level 1 trauma center in the state of Alabama. “In many ways, UAB is like BMC, but magnified,” says Dr. Chu. “It’s a safety-net hospital for the entire region, but unlike BMC, it’s the largest hospital in town and in the state.”

Promoted to Associate Professor with tenure at the Heersink School of Medicine in 2018, Dr. Chu was named Vice Chair of Health Services Research three years later. In 2022, he became the inaugural Selwyn M. Vickers, MD, Endowed Chair and earlier this year was appointed Associate Director of the Division of Gastrointestinal Surgery. For his dedication to the Department of Surgery’s tripartite mission, he received the UAB Heersink School of Medicine Professional Excellence Award in 2021 and the Mark H. Deierhoi Faculty Mentor of the Year Award in 2023.

Time Flies

Growing up in Cary, North Carolina, Dr. Chu had an early interest in science and research and set his sights on becoming a pediatrician and researcher. As an undergrad at Yale University, where he majored in molecular, cellular, and developmental biology, he spent summers in a Yale School of Medicine lab focused on pediatric infectious diseases. When he started medical school at The Johns Hopkins School of Medicine, pediatrics was still front and center in his plans. “I did surgery early during third year to get it out of the way, but fell in love with it,” says Dr. Chu, who was also heavily influenced by the time he spent on the Halsted service, the trauma service at Hopkins.



“It was hectic and crazy and I loved the pace of it. That service changed my outlook on what I wanted to do.” It gradually became clear that surgery cases were what really interested him. “I felt at home in the OR. Time just went away. I would look up and it would be three or six hours later. I was so engrossed by what was going on.”

“I entered BU thinking I would be a trauma surgeon or a pediatric surgeon,” says Dr. Chu. “Colorectal was totally not on my radar, but from my first year, I had a lot of exposure because Dr. [James] Becker, who was Chair of Surgery, and Dr. [Steven] Sentovich, Chief of Colorectal, did a lot of J pouches and anorectal procedures. Surgeries could be big or small, the whole gamut, and there was an opportunity for endoscopy too. It was a mix of everything, which I found interesting, and I really liked taking care of these patients.” During a two-year research fellowship at BMC, he worked in the lab of Dr. Becker and Dr. Arthur Stucchi, pioneers in Seprafilm and adhesion research. In this basic science lab, the research centered on developing new barriers to prevent adhesions from forming. Based on this work, Dr. Chu earned several research awards at surgical association meetings as well as numerous other awards during residency, ranging from “best intern” to teaching awards and recognition for providing high-quality, compassionate care.

Basic Training

Dr. Chu, who was the administrative chief resident during his final year, left BU and BMC feeling that he was well prepared

to handle anything. He says, “My time at BU was the best thing that could have happened to me in terms of residency programs. I’ve always felt that BU was like the Marines. You’re on the front lines. Who’s going to get their feet wet and muddy? You deal with the worst cases with limited resources. We didn’t wait for transport. We constantly moved patients to Radiology ourselves.” At times, there were also social issues to deal with. He recalls finding clothing so that patients could leave the hospital. “It was humbling. BU kept me incredibly grounded and that’s something I still carry with me.”

An indelible memory from Dr. Chu’s time in residency is April 15, 2013, the day of the Boston Marathon bombings. He was on vacation that week, but was in Boston and headed to the hospital, where he scrubbed in on cases to help. “It was total chaos, but controlled. ED, Surgery, Anesthesia, Nursing—everyone working together and putting all of our skills to the test. It was truly stunning and inspiring to see.” He adds, “I remember one particular case like night and day. We were able to save the leg and life of the patient, who had been severely injured by shrapnel. Across Boston, no one who made it to the hospital died. It speaks to the medical care in Boston and across all of the hospitals.”

Focus on Enhanced Recovery Programs

Dr. Chu is a champion of enhanced recovery programs (ERPs) across the UAB Hospital system and beyond. He chairs the Alabama Hospital Association Enhanced Recovery Program Quality Committee and has successfully led efforts to increase the number of ERPs in place across the state.

ERPs are also a major focus of Dr. Chu’s research, which has been funded by the NIH, the American Cancer Society, and the Society for Surgery of the Alimentary Tract, as well as other organizations. He has shown that ERPs mitigate racial disparities in surgical outcomes and offer a pragmatic way to address surgical disparities. An NIH R01 grant awarded in 2023 will provide \$2.5 million in funding over the next five years to adapt existing ERPs to the contextual needs of low-health-literacy populations. This study will employ VISACT, a novel multilevel strategy that uses visual aids and other strategies to address the needs of surgical patients with low health literacy. VISACT was developed under a previous NIH K23 Career Development Award Dr. Chu received in 2019.

Paying It Forward

At UAB, Dr. Chu has made his mark as a teacher and mentor—a favorite part of his job—actively guiding dozens of students, residents, and fellows. Their success is reflected in presentations at national meetings and a strong record of publications, many first-authored with Dr. Chu as senior. He has

published more than 80 peer-reviewed articles and numerous chapters, in addition to editing a book on enhanced recovery. Through his research, invited presentations, and roles in professional societies, Dr. Chu continues to gain national—and international—recognition. He is the Secretary of the Society of Asian Academic Surgeons and serves as an associate editor of the *Journal of Surgical Research* and on the editorial board of the *American Journal of Surgery*.

Dr. Chu says, “At BU, you’re in the trenches during residency. I love that about BU. There were a lot of little things that really added up. I came away with technical confidence, clinical experience, and a perspective on working with people that has helped me here at UAB and in life. I really cannot thank BMC enough for all that it has made me.”



Dr. Daniel Chu is Associate Director of the Division of Gastrointestinal Surgery at UAB.



Dr. Jennifer Davids, performs a minimally invasive procedure with surgery resident Dr. Priyanka Chugh.

Championing Patient-Centered Colorectal Care

With the recruitment of Jennifer Davids, MD, as Chief of Colon and Rectal Surgery, the Section of Colon and Rectal Surgery now consists of all women surgeons. Dr. Davids joins Boston Medical Center (BMC) colorectal surgeons Olga Beresneva, MD, and Joanne Favuzza, DO. “I am very grateful to have the opportunity to lead a fantastic all-female team and join a department led by an exceptional female Chair,” says Dr. Davids, Associate Professor of Surgery at the Chobanian & Avedisian School of Medicine (SOM). “We are living proof of the evolving gender ratios in surgery, where more women are entering surgery and also rising in the ranks to leadership positions.”

Dr. Davids comes to BMC after a decade at UMass Memorial Medical Center in Worcester, Mass., where she was

Director of the colon and rectal surgery fellowship, the same program she graduated from in 2013, after completing general surgery residency at Brigham and Women’s Hospital. She was also Associate Professor of Surgery at the UMass Chan Medical School.

“I was very drawn to the focused mission of BMC as a safety-net hospital,” says Dr. Davids. “BMC stands out for its innovative and comprehensive approach to patient care for those who often don’t have the same resources as others who seek care at Boston hospitals.” She acknowledges the importance of meeting the needs of the BMC patient population to the extent possible. “We take for granted that major diagnoses such as rectal cancer and Crohn’s are substantial health challenges, but many of our BMC patients are facing pervasive

issues that are far more immediate, such as being unhoused and food insecurity. One of the biggest challenges and opportunities is coming together as a team to get patients the basic services they need so they can thrive in our care.”

As a 2019 graduate of the BMC General Surgery Residency Program, Dr. Beresneva knows the BMC patient population well. During residency, she was drawn to the technical aspects of colorectal surgery and to the variety of cases involved. She was recruited back to BMC after completing a colon and rectal surgery fellowship at Lahey Hospital and Medical Center in 2020. She says, “It is profoundly satisfying to cure someone with cancer. Patients come in scared after the diagnosis of colorectal cancer, which is often very treatable and curable. They are very appreciative, and it is fulfilling to build a relationship with them during the five-year follow-up period.”

Leveraging Technology

Competing priorities can lead to missed appointments and the need to delay or repeat colonoscopies. Last year, the colorectal surgery team, under the leadership of Dr. Favuzza, who served as Interim Chief of Colon and Rectal Surgery, and Pamela Rosenkranz, RN, BSN, MEd, Director of Clinical Quality and Patient Safety in Surgery, launched a quality improvement project that incorporated a more intensive pre-procedural protocol. It included a detailed review of bowel preparations and repeated telephone reminders in patients’ primary languages about upcoming colonoscopies. This project led to a 20 percent increase in the number of patients who went on to have their colonoscopies successfully completed as scheduled. This work will be presented as a quick shot presentation during the 2023 American College of Surgeons Clinical Congress.

Another focus is communicating well-established Enhanced Recovery After

Surgery (ERAS) protocols through texts and short educational videos delivered via smartphones in patients' native languages. The team is implementing a new app and plans to study outcomes.

ERAS, as well as perioperative patient education, has been a long-term interest for Dr. Favuzza, Clinical Associate Professor of Surgery at the Chobanian & Avedisian SOM. She says, "I am passionate about teaching patients about what to expect before, during, and after any surgery, whether it's a major colon cancer resection or a hemorrhoidectomy. "My hope is that our ERAS educational text messaging will become an easily accessible resource and guide that will reduce patients' stress."

Progress in Rectal Cancer and IBD

Some of the most promising developments in treating colorectal disease involve management of patients with rectal cancer. Dr. Davids says, "Now, as we see some tumors resolving entirely with chemotherapy and radiation, the discussion is shifting to 'Do we need the surgery at all?' It's a very exciting time to be a colorectal surgeon and to be engaged in these multidisciplinary discussions with our colleagues in radiation oncology and medical oncology." But, she adds, "It is critical that surgeons are at the center of this collaboration to help make these important decisions, which involve shared decision-making with patients."

One important consideration for patients whose tumors completely resolve with chemoradiotherapy is whether they will be able to commit to an intensive regimen of surveillance visits, including endoscopy, blood work, office visits, and imaging every three to six months designed to detect an early recurrence—a substantial challenge for many BMC patients.

For patients with rectal cancer who do require surgery, the robotic approach

offers 3D visualization and fine dissection with articulated instruments. Robotic surgery is a significant area of interest for Dr. Beresneva, Assistant Professor of Surgery at the Chobanian & Avedisian SOM. She says, "The pelvis is a narrow space and careful dissection of rectal tumors is challenging, regardless of the surgical approach. Robotics allows for precise dissections along the deep curvature of the pelvis without big incisions. It empowers us to do big resections without big scars." Based on the high quality of care provided at BMC, the multidisciplinary colorectal cancer team recently applied for accreditation from the American College of Surgeons' National Accreditation Program for Rectal Cancer.

In the realm of Crohn's and other inflammatory bowel diseases (IBDs), clinical care is directly complementary to research efforts at BMC. Dr. Davids says, "We have such a rich patient population here that lends itself to assessing outcomes and comparing trends to national data sets. We are

currently evaluating our outcomes in IBD, comparing complication and readmission rates and looking at targeted ways to improve the care we deliver to patients with multiple social determinants of health."

Future Inspiration

When it comes to educating the next generation of physicians and ensuring students gain insight into the practice of surgery, the colorectal surgery team is all in. Dr. Favuzza says, "I enjoy teaching and sharing my love of colorectal surgery. I went into colorectal surgery because I love the variety. One day I'm doing colonoscopies. Another, I could be taking out a cancer. It keeps me constantly stimulated and excited to come to work every day. I hope I can impart my excitement about colorectal surgery to residents and medical students on our service." She adds, "We have such amazing residents. And we're fortunate to have phenomenal APPs [advanced practice providers]. I feel so lucky to be a surgeon and teacher here at BMC."



(L to R) Drs. Joanne Favuzza, Jennifer Davids, and Olga Beresneva

Pursuing the Mystery of Pancreatitis

Although pancreatitis was first described centuries ago, it remains poorly understood, coming on seemingly out of nowhere in both adults and children. An initial acute attack can be followed by recurrent acute episodes and eventual progression to chronic disease. Development and progression are often promoted by environmental factors such as alcohol abuse and smoking, as well as genetic risk factors. There remains no specific therapy or cure, with surgery typically reserved for only a small subset of patients.

Andrea Geisz, PhD, MS, proposed as the new Laszlo Tauber Assistant Professor of Surgery at the Boston University Chobanian & Avedisian School of Medicine (SOM), is one of the researchers working on unpacking some of the mysteries surrounding pancreatitis. The Tauber professorship, a three-year opportunity for an early-career faculty member, was established in memory of Laszlo Tauber, MD, a distinguished surgeon and philanthropist, who donated generously to the Chobanian & Avedisian SOM.

According to the National Pancreatic Foundation, there are approximately 220,000 new cases of acute pancreatitis in the U.S. each year. Data indicate that the risk of recurrence after the initial pancreatitis attack is roughly 10 to 30 percent, while 10 percent of patients with a single episode and 26 percent of patients with recurrent acute attacks will progress to chronic disease. This includes patients diagnosed with hereditary pancreatitis, which typically has an early onset.



Dr. Andrea Geisz

Unraveling Mechanisms

Dr. Geisz has been interested in inflammatory disorders of the pancreas since her days as a PhD student in the Department of Gastroenterology at the University of Szeged Albert Szent-Gyorgyi Medical School in Hungary. She says, “I have always found the digestive processes to be fascinating, with many pathomechanisms still unexplained. Unfortunately, pancreatitis is a debilitating disease with potentially lethal side effects and no specific therapy thus far. Despite the increasing number of emerging options on how acute and chronic pancreatitis could be prevented or treated, the unavailability of preclinical test models delays transition into clinical trials.”

Dr. Geisz joined the Department of Surgery in 2023, but she has been engaged in research on the Boston University Medical Campus for a decade, since taking a postdoctoral fellowship

in the lab of her mentor, Mikos Sahin-Toth, MD, PhD. Now at the David Geffen School of Medicine at UCLA, Dr. Sahin-Toth is a leading pancreatic disease researcher who focuses on genetic risk factors in chronic pancreatitis.

Prior to joining the Department of Surgery, Dr. Geisz’ lab was in Boston University’s Henry M. Goldman School of Dental Medicine, where Dr. Sahin-Toth’s lab had also been. Dr. Geisz says that the move to the Department of Surgery was a logical one. “I now have the opportunity to be part of a translational research program, working with surgeon-scientists who are greatly invested in the disease I’m targeting.”

Modeling Progress

Prior to Dr. Sahin-Toth’s departure from Boston University in 2019, Dr. Geisz worked closely with him on assessing the functional impact of digestive enzyme mutations associated with pancreatitis.

These *in vitro* studies ultimately led to development of a novel mouse model of chronic pancreatitis, an important achievement. Their success was documented in a paper published in *Nature Communications* in 2018.

"The purpose for generating this model was not only to understand the pathomechanisms of pancreatitis, but also to create a preclinical tool for testing therapeutics," explains Dr. Geisz. "We picked a mutation homologous to one found in hereditary pancreatitis in humans and introduced it into the mouse trypsinogen, with a slight modification. It's a great model not only because it proved that the trypsin-dependent pathway is a valid one for pancreatitis, but also because the mouse develops pancreatitis spontaneously, and its phenotype mimics the human situation." Dr. Geisz continues to collaborate with Dr. Sahin-Toth and says that they have shared this mouse model with other research groups.

Searching for Relevance

Over the last few years, Dr. Geisz has developed her own path as an independent researcher, with the support of a Department of Defense Discovery Award in 2019 and, in 2020, an American Pancreatic Association Young Investigator in Pancreatitis grant as well as an American Gastroenterological Association Research Scholar award. Her research is centered on mechanisms underlying the trigger for pancreatitis—premature activation within the pancreas of trypsinogen to trypsin, the main digestive enzyme. Her ongoing work is currently supported by a five-year R01 grant awarded in 2023 by the National Institute of Diabetes and Digestive and Kidney Diseases.

More recently, Dr. Geisz has built on her initial work by creating additional genetically engineered mouse models to investigate two established trypsinogen activation mechanisms:

autoactivation (in which trypsin is generated from trypsinogen through a self-amplifying mechanism), and trypsinogen activation by the lysosomal protease cathepsin B. These mechanisms have been the subject of hundreds of studies, yet their relevance to human pancreatitis remains controversial.

Specifically, Dr. Geisz has focused on exploring the extent to which each mechanism contributes to pancreatitis onset and severity. To tackle this issue, she developed novel mouse strains carrying trypsinogen mutations that block autoactivation but preserve or increase sensitivity to cathepsin B-induced activation. Results from this work were published in *Gastroenterology* in 2023. This study found that in the absence of trypsinogen autoactivation, cathepsin B induced significant trypsinogen activation; however, cathepsin B-elicited trypsin activity was not required for pancreatitis onset and did not determine disease severity in the widely used secretagogue-induced experimental model. In an accompanying editorial, the authors drew this conclusion, "These results strengthened the cathepsin B-centered paradigm of trypsinogen activation, but at the same time

indicate that cathepsin B-promoted trypsin activity is a marker rather than a pathogenic driver in the development of pancreatitis. Building on this knowledge, we need to refocus our efforts on tackling trypsinogen autoactivation because that is the relevant disease pathomechanism. In addition, it seems likely that trypsin has a specific target that has not been identified yet."

Future Focus

With the help of her new R01 grant and support from the Department of Surgery, Dr. Geisz hopes to make progress in understanding the mysterious downstream mechanisms by which trypsin promotes inflammation. Future research will also focus on understanding the link between hereditary pancreatitis and pancreatic cancer development.

Oncogenic KRAS mutations are the most common drivers of pancreatic cancer, while other known risk factors include environmental factors such as smoking and diet. High cancer risk has been observed in particular in patients with hereditary pancreatitis, with an estimated cumulative risk of 40 percent by the age of 70. Dr. Geisz says, "We plan to

"The findings of this new study offer a fundamental change in understanding the role of cathepsin B-mediated intrapancreatic trypsinogen activation."

— Andrea Geisz, PhD, MS

questioned the centrality of this pathway in pancreatitis pathogenesis."

According to Dr. Geisz, "The findings of this new study offer a fundamental change in understanding the role of cathepsin B-mediated intrapancreatic trypsinogen activation. Our observations

generate a novel mouse model that will carry pancreas-specific oncogenic KRAS mutations and a hereditary pancreatitis-associated trypsinogen mutation. The Department of Surgery will serve as an excellent and nurturing environment to pursue this exciting new line of research."

Finalizing Surgical Training

The Department of Surgery is home to two ACGME-accredited fellowships, a one-year surgical critical care (SCC) fellowship and a two-year vascular surgery fellowship. Central to both is Boston Medical Center's mission of providing consistently excellent and accessible health care to all.

For 2023 SCC fellowship graduate Tony Xia, MD, Boston Medical Center (BMC) rose to the top of the list when he was choosing a fellowship because "it has the busiest emergency department in Boston. But what really caught my eye was BMC's mission, serving the underserved and the commitment to equity." Dr. Xia is joining St. Luke's Hospital in New Bedford, Mass., where he will be one of six trauma surgeons working in the hospital's recently opened Level II trauma center.

"Our SCC fellowship has been organized in a way to highlight the patient population we care for," says Tejal Brahmbhatt, MD, who served as SCC Fellowship Director for the 2022–2023 academic year and was previously Fellowship Deputy Director. "All SCC fellowships are based around taking care of critically ill patients, but our fellows are trained so that they are very effective in taking care of patients within the scope of social determinants of health."

With the recent departure of Dr. Brahmbhatt to take on a new clinical role in California, Noelle Saillant, MD, has been appointed SCC Fellowship Director, Chief of Surgical Critical Care, and Director of the surgical intensive care unit (SICU). BMC's 28-bed multidisciplinary SICU encompasses the Departments of Surgery, Anesthesiology, and Neurology and averages 1,500 admissions per year. To enhance the skill set of the SCC fellows, a robust ultrasound curriculum has been incorporated early in the fellowship year, ensuring fellows graduate competent in point-of-care ultrasound.

Guided Autonomy

Just over 30 years old, the SCC fellowship matches two fellows per year. The other 2023 graduate, Sruti Golthi, DO, is headed to Geisinger Health in Pennsylvania and will be one of eight trauma/critical care surgeons and an Assistant Professor of Surgery at Geisinger Commonwealth Medical School. She says, "I feel ready to be an attending. The fellowship provided a very



Surgical critical care fellows Drs. Tony Xia (left) and Sruti Golthi

robust critical care experience, with complicated patients and procedures. I had a good balance of autonomy coupled with mentorship from the attendings."

After completing BMC's SCC fellowship in 2022, Sheina Theodore, MD, stayed on to become an attending surgeon in the Sections of Acute Care and Trauma Surgery and Surgical Critical Care at BMC and is now Assistant Professor of Surgery at the Boston University Chobanian & Avedisian School of Medicine (SOM). She describes the fellowship as a true gem for someone looking to polish their skills. Dr. Theodore says, "I truly enjoyed my fellowship year. Dedicated faculty helped to solidify my critical care knowledge and management skills while emphasizing caring for the patient as a whole."

"My time at BMC really influenced me to seek a place with a similar mission," says SCC 2021 fellowship graduate Hamza Durrani, MBBS, now an attending surgeon at Loma Linda University Medical Center and Assistant Professor of Surgery at Loma Linda University School of Medicine. He says, "The structure of the fellowship provided a perfect blend of autonomy and supervision in the trauma bays, operating room, and in the ICU, where we worked with both anesthesia and surgical attendings on a daily basis. It prepared me well for my current job, and I will always be grateful for my time at BMC."

Fellowship Expansion

Since it began in 1999, the vascular surgery fellowship has also had two fellows, but this is changing with the 2023–2024 academic year. The program will now have three fellows and

going forward will match an additional fellow every other year. Traditionally, vascular surgery fellows have spent just over a third of their time at the VA Boston Healthcare System, but with the recent addition of a third clinical site, St. Elizabeth's Medical Center, their time will now be evenly divided among the three hospitals. St. Elizabeth's, a 308-bed community hospital in Boston's Brighton neighborhood, has been a clinical and academic affiliate of the Boston University Chobanian & Avedisian SOM since 2021.

"We continue to innovate with minimally invasive surgery, yet at the same time provide exposure to complex open surgery, which is getting hard to find in many fellowship programs," says Jeffrey Siracuse, MD, MBA, who has been Vascular Surgery Fellowship Director for the last five years. "At BMC, the fellows see the full range of vascular surgery cases—a lot of acute cases and infrapopliteal peripheral arterial disease. At the VA, they see a lot of patients with aortic aneurysmal and occlusive disease and have the opportunity to perform complex open and endovascular operations. St. Elizabeth's will provide a good hybrid model as a very busy high-acuity practice."

Dr. Siracuse says that graduates of the program are generally split between those who chose private practice and those who opt for a career in academic medicine. Omar El-Shazly, MD, a 2023 vascular fellowship graduate chose the latter and is joining the vascular surgery faculty at the Medical College of Georgia. "I love teaching residents and medical students," says Dr. El-Shazly. "The fellowship was a very positive experience that provided exposure to a variety of different pathologies. I'm very appreciative of the amount of operative experience I got and of the time that faculty invested in me during my two years at BMC."

Springboard for Success

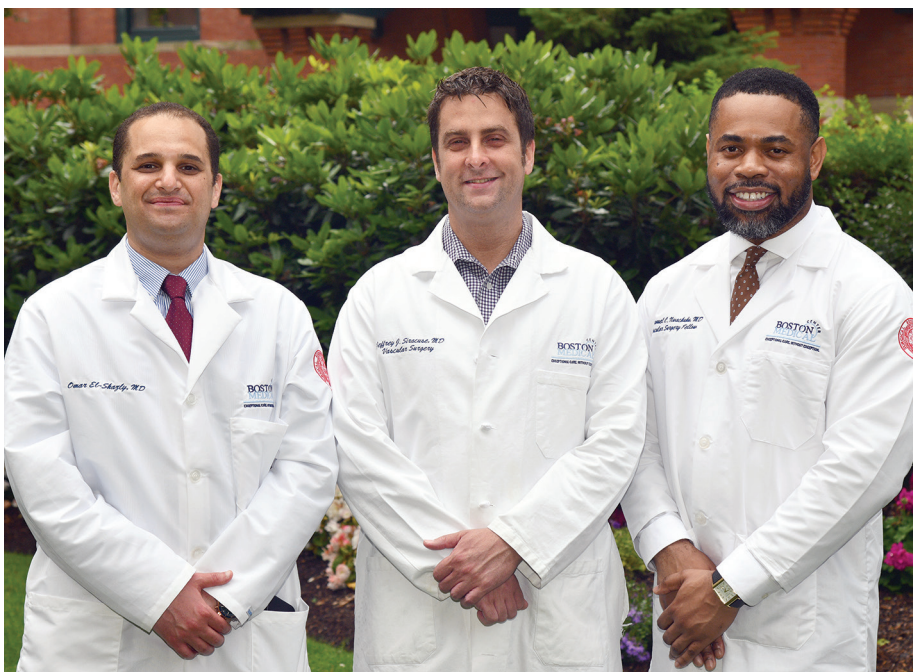
Tze-Woei Tan, MBBS, MPH, a 2012 graduate of the vascular surgery fellowship, also chose the academic surgery path. Now an Associate Professor of Clinical Surgery at the Keck School of Medicine of USC, he is an avid surgeon-researcher and Director of the Limb Salvage Research Program. He says, "While at BMC, I had the privilege of caring for many patients who were poor and without health insurance or access to the most basic medical care. I noted the disparate risk of major amputation above the ankle due to complications from diabetes and PAD [peripheral artery disease] among racial and ethnic minorities and those

from low socioeconomic backgrounds. These experiences led me to pursue patient-oriented and health disparities research." During his fellowship, Dr. Tan had 11 peer-reviewed publications, eight as first author, and made presentations at several regional and national meetings, receiving awards along the way.

Vascular surgery fellow Emmanuel Nwachuku, MD, who has just completed the first year of the fellowship and spent the last few months of the academic year at the VA, is appreciative of the level of respect afforded by faculty at the VA and BMC. He says, "I was looking for a program with high volume and where I would feel supported, and I have that here. We have great mentors at BMC and at the VA. When it comes to planning the cases at the VA, we sit down to review images and come up with a plan together and talk about any potential problems."

Dr. Siracuse says that applications for the vascular surgery fellowship have risen dramatically over the last several years and notes that it is typical for at least one general surgery residency graduate each year to go into vascular surgery after leaving BMC.

Dr. El-Shazly says, "The days are long, but the years are short," a sentiment that most likely sums up the experience of all graduates of the BMC Surgery fellowships.



Vascular surgery fellows Drs. Omar El-Shazly (left) and Emmanuel Nwachuku (right) with fellowship director Dr. Jeffrey Siracuse

Prioritizing Global Pediatric Surgery Delivery

Pediatric surgeon and 2011 Boston Medical Center (BMC) General Surgery Residency graduate Neema Kaseje, MD, MPH, has devoted her considerable skills to advancing global health equity. Since leaving BMC, Dr. Kaseje has partnered with Doctors Without Borders and other humanitarian groups as part of teams focused on building and scaling pediatric surgical care systems, along the way making inroads in improving care in Liberia, Congo, Haiti, and Nicaragua.



Dr. Kaseje is committed to improving access to pediatric surgical care.

For the last few years, Dr. Kaseje has worked in Kenya at the Kakuma refugee camp. Originally established in 1992 for people fleeing war in Sudan, the camp is now home to some 40,000 children. She has worked with the NGO Kids Operating Room to oversee the creation and opening of a pediatric operating room, thought to be the first facility of its kind in a refugee camp. In addition, she has trained healthcare workers and led an integrated community- and health systems-based Covid-19 health intervention in Siaya, Kenya.

Dr. Kaseje was in Boston last fall and at the invitation of endocrine surgeon and 2022 Boston Surgical Society President David McAneny, MD, BMC Chief Medical Officer, gave a presentation on her work in Africa at the society's fall meeting. While in Boston, she shared some of her experiences during the Department of Surgery's Diversity, Equity & Inclusion (DEI) Visiting Professor Day on November 4, when the department welcomed pediatric surgeon Andrea Hayes Dixon,



Dr. Neema Kaseje and General Surgery Residency Director Dr. Donald Hess

MD, Dean of Howard University College of Medicine and Chair of Surgery, as DEI visiting professor.

Dr. Kaseje was born in Boston and grew up in Geneva, Switzerland, and Kisumu, Kenya. She earned both her undergraduate and medical degrees from Boston University and a master's degree in public health from the Harvard T.H. Chan School of Public Health. In 2018, she received a doctorate in public health from the London School of Hygiene and Tropical Medicine.

Dr. Kaseje is the Founding Director of the Surgical Systems Research Group, based in Kisumu, Kenya, and was named a Young Global Leader by the World Economic Forum in 2017. She has co-authored papers on her work in *The Lancet*, *The BMJ*, and other journals.

SRS Chapters Spreading Across U.S.

Since its founding nine years ago at the Chobanian & Avedisian School of Medicine/ Boston Medical Center (BMC), the Socially Responsible Surgery (SRS) group has expanded to more than 20 chapters across the country. Interest continues to grow, and the organization is quickly expanding and receiving international attention.

SRS was founded by Chief of Acute Care and Trauma Surgery Tracey Dechert, MD, and Megan Janeway, MD, then a general surgery resident and now an attending surgeon at BMC. The organization was formed to empower medical students, residents, and faculty to combine their interest in surgery with their passion for serving the underserved.

"There is a global spotlight now on issues related to social determinants of health in surgical patients," says trauma surgeon and surgical intensivist Sheina Theodore, MD, SRS National Outreach Chair. "Other institutions have been doing similar work and now there is a sense of community under the umbrella of SRS." SRS's first national meeting will take place in October 2023.



New Resident Award Established

Thanks to the generosity of Pericles J. Chrysoheris, MD, FACS, a 2008 graduate of the Boston Medical Center General Surgery Residency Program, the Department of Surgery has instituted the Chrysoheris Award. It will be presented annually to a senior resident who exhibits characteristics that include effective and empathetic communication with patients and exemplary professionalism toward colleagues. The award also recognizes independent preparation for the operating room and safe and skilled operative performance. Co-administrative Chief Resident Loreski Collado, MD, was the inaugural recipient in June 2023.

Dr. Chrysoheris is the director of the 1st Department of General Surgery at the Hygeia Hospital in Athens, Greece. Following residency, he completed a one-year critical care and acute care surgery fellowship at Massachusetts General Hospital, before returning to Greece, where he spent two years as a clinical fellow in the Department of Minimally Invasive Surgery at Athens Medical Center. His special interests include minimally invasive complex abdominal wall reconstruction.

Dr. Chrysoheris has co-authored numerous publications, primarily focused on minimally invasive hernia surgery and



Dr. Pericles J. Chrysoheris

minimally invasive colorectal surgery. He is a fellow of the American College of Surgeons and a member of the Society of American Gastrointestinal and Endoscopic Surgeons, as well as several other professional organizations.



Adrienne Haslet and Dr. Jeffrey Kalish at Boston Medical Center in 2023

Decade-Long Bond

April 15, 2023 marked the 10-year anniversary of the Boston Marathon bombings. Boston Medical Center (BMC) received 23 of the patients who were injured after two bombs went off. One of those patients was Adrienne Haslet, at the time a 32-year-old professional ballroom dancer, who was seriously injured and lost her left leg below the knee. Her surgeon that day was Jeffrey Kalish, MD, attending surgeon in the Division of Vascular and Endovascular Surgery and Associate Professor of Surgery and Radiology at the Boston University Chobanian & Avedisian School of Medicine. Since then, Adrienne has developed a bond with Dr. Kalish.

In addition to the injuries she suffered in the bombing, Adrienne was hit by a car in 2019 while crossing the street in a crosswalk and once again was treated

at BMC. In a *Boston Globe* interview shortly before the anniversary, Adrienne remembered calling Dr. Kalish that night, "I said, in no uncertain terms loudly: 'Get to the hospital right now! I've been in a car wreck. No one else is touching me but you.'"

After getting a Covid vaccine at BMC in April 2021 and a visit with Dr. Kalish, Adrienne wrote this on X: "...Thank you Boston Medical Center for being there through it all, for saving my life not once but twice, after that terrorist and after that reckless driver. There is no one I'd rather see and thank on this day than my BFF Superman Surgeon Dr. Kalish, who was bedside through it all."

Adrienne has become a running enthusiast and has now completed the Boston Marathon twice.

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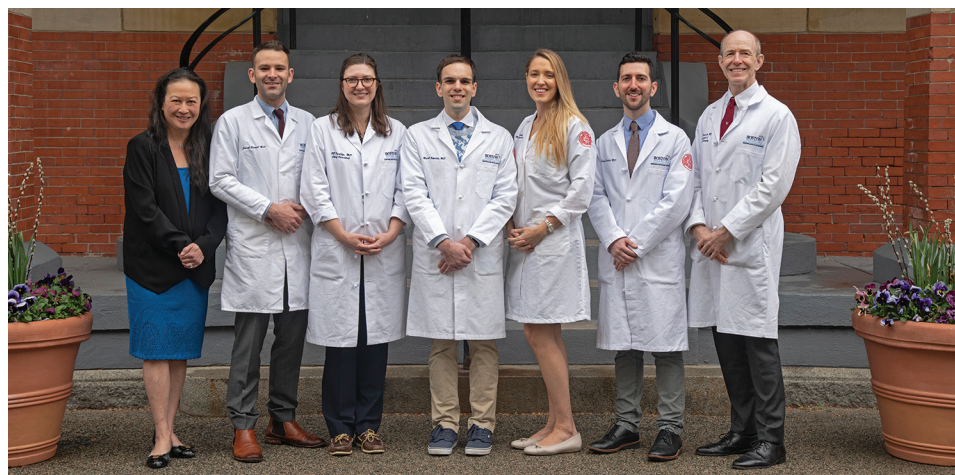
SURGERY RESIDENCY PROGRAM

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

The surgery residency program is based at 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) Surgery Chair Dr. Jennifer Tseng with graduates Drs. Jacob Nudel, Rebecca Hasley, Mark Zapata, Miriam Neufeld, and Scott Levin and General Surgery Residency Program Director Dr. Donald Hess.

2023 Surgery Residency Graduates

Rebecca Hasley, MD, MPH

*Surgical Critical Care Fellowship
University of Michigan*

Scott Levin, MD, MSc

*Plastic and Reconstructive Surgery Fellowship
University of California, Davis*

Miriam Neufeld, MD, MPH

*Surgical Critical Care Fellowship
University of Miami Health System*

Jacob Nudel, MD

*Bariatric Surgery Fellowship
Lahey Hospital and Medical Center*

Mark Zapata, MD

*Private Practice, Cape Cod Hospital
Hyannis, Mass.*

CURRENT RESIDENTS (2023–2024 Academic Year)

PGY1

Categorical

Daniel Counihan, MD

The University of Toledo
College of Medicine and
Life Sciences

Annika Divakar, MD

Northwestern University
Feinberg School of Medicine

Josue Bryant Estrella, MD

University of Colorado
School of Medicine

Dylan Kaye, MD

Drexel University College
of Medicine

Phoebe Otchere, MD

Northeast Ohio Medical
University

Rebecca Reardon-Lochbaum, MD

Western Michigan University
Homer Stryker M.D. School
of Medicine

Preliminary

Christina Agudelo, MD, MA

State University of New York
Downstate Medical Center
College of Medicine

Zhuoyan Lu, MD

Geisel School of Medicine
at Dartmouth

Luis Rendon, MD

Boston University Chobanian &
Avedisian School of Medicine

Lawson Traylor, MD

University of South Carolina
School of Medicine Greenville

PGY2

Kiyah Anderson, MD

University of Tennessee
Health Science Center
College of Medicine

Emily Eakin, MD

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

Khuaten Maaneb

de Macedo, MD
University of Minnesota
Medical School

Jeffrey Melvin, MD

Albert Einstein College
of Medicine

Abdimajid Mohamed, MD

Tufts University School
of Medicine

Colten Yahn, MD

Eastern Virginia Medical School

PGY3

Brendin Beaulieu-Jones, MD, MBA, MBI

Geisel School of Medicine at
Dartmouth

Stephen Dalton-Petillo, MD

Eastern Virginia Medical School

Heba Elassar, MD

Oakland University William
Beaumont School of Medicine

Sara Myers, MD

Case Western Reserve
University School of Medicine

Gordana Rasic, MD, MS

Eastern Virginia Medical School

Ashlee Seldomridge, MD

West Virginia University School
of Medicine

PGY4

Carlos Fairen Oro, MD

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

PGY5

Loreski Collado, MD

Cooper Medical School of
Rowan University

Alaina Geary, MD

Tufts University School
of Medicine

Gillian Goddard, MD

University of Texas Medical
School at Houston

Maha Haqqani, MD

Albert Einstein College
of Medicine

Michael Poulson, MD, MPH

Georgetown University School
of Medicine



Administrative Chief Residents Drs. Loreski Collado (left) and Michael Poulson will make a presentation at the 2023 American College of Surgeons Clinical Congress on resident unionization.

CURRENT FELLOWS

Surgical Critical Care Fellowship

Da Eun Cha, MD
Christina Klecker, MD

Vascular and Endovascular Surgery Fellowship

Olivia D'Angelo, MD
Alex Lin, MD
Emmanuel Nwachuku, MD

CURRENT PODIATRY SURGERY RESIDENTS

PGY1

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

Subin Siby, DPM
Temple University School of Podiatric Medicine

PGY2

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

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

PGY3

David Coker, DPM
Des Moines University College of Podiatric Medicine and Surgery

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

Resident News



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



Brendin Beaulieu-Jones, MD, MBA, MBI, completed the National Library of Medicine Biomedical Informatics Research Training Program and earned a master's degree in biomedical informatics from Harvard Medical School. Over the past two years, during his research fellowship, Dr. Beaulieu-Jones has published 19 papers, including nine as first author, in journals that include *Journal of the American College of Surgeons*, *Journal of Surgical Education*, and *Annals of Surgery*. In addition, during the last academic year, he made oral presentations at several national and regional conferences, including the American College of Surgeons Clinical Congress, Society of Asian Academic Surgeons Annual Meeting, American Medical Informatics Association Annual Symposium, Academic Surgical Congress, and the New England Surgical Society Annual Meeting.



Priyanka Chugh, MD, MS, won first place in the 2023 Boston Surgical Society Case of the Year competition and was elected as a resident member of the Society of Asian Academic Surgeons Communications Committee. Dr. Chugh made podium presentations at the annual meetings of the American Pediatric Surgical Association and the Association of Program Directors in Surgery. Together with BMC general surgery resident **Gordana Rasic, MD, MS,** she co-developed a curriculum on cross-mentorship for the Association of Women Surgeons. Additionally, Dr. Chugh was one of a small group of residents who founded Advancing Cultural Competency & Equity in Surgical Specialties, a new organization that brings together trainees, faculty, and others to extend the welcoming environment within the Department of Surgery.



Loreski Collado, MD, matched to the Emory Endocrine Surgery Fellowship Program and was the inaugural recipient of the Chrysoheris Award, named for 2008 BMC General Surgery Residency graduate Pericles Chrysoheris, MD. The award recognizes a senior resident who displays maturity and exemplary professionalism and care.



Alaina Geary, MD, MHPE, was selected as the 2024 physician fellow for the Boston Medical Center Ravin Davidoff Executive Fellowship in Health Equity. Fellows work on projects and programs that specifically aim to reduce racial and ethnic inequities in health outcomes.



Maha Haqqani, MD, matched to the vascular surgery fellowship at New York-Presbyterian Hospital/Columbia University Irving Medical Center and Weill Cornell Medical Center.



Anna Kobzeva-Herzog, MD, received a Boston Medical Center Quality and Patient Safety Grant to create an educational video for nurses caring for patients with gastrostomy tubes. She was also co-author of four papers, published in the *Journal of Vascular Surgery*, *Annals of Vascular Surgery*, and *Journal of Vascular Surgery*, *Cases and Innovative Techniques*. Dr. Kobzeva-Herzog gave oral presentations at the New England Surgical Society's Annual Surgical Resident and Fellow Research Presentation Day and had a poster presentation at the American Society of Breast Surgeons Annual Meeting.



Brenda Lin, MD, who served as Chief Resident of Quality and Safety at the VA Boston Healthcare System during her academic development time, was

awarded the Association of VA Surgeons (AVAS) Diversity, Equity, and Inclusion Traveling Award to attend the annual AVAS conference.



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



Maia Nofal, MD, completed the first year of her research residency as a Fogarty Fellow in Ethiopia, where she launched a pilot program to reduce unnecessary

postoperative antibiotics. Over the course of the year, she presented preliminary results of the CLEAN-CS clinical trial, which aims to reduce infections after Cesarean section, at the Ethiopia Society for Obstetricians and Gynecologists. Dr. Nofal also gave oral presentations at the College of Surgeons of East, Central and Southern Africa Conference in Namibia and the World Congress of the International Society of Surgeons in Austria. An abstract she co-authored on the effects of postoperative antibiotic prophylaxis in low- and middle-income countries was chosen as a Top 10 abstract at the Surgical Infection Society Annual Meeting. In addition, Dr. Nofal was invited to the NIH in 2023 for the Fogarty LAUNCH Orientation, where she served on a panel and offered lessons learned from the field about her work in Ethiopia. She will spend the second year of her research fellowship in East Africa. With funding from a seed grant through the Stanford Center for Innovation in Global

Health and Stanford Surgery, she will conduct an “antibiotic timeout” study, focused on reducing unnecessary perioperative antibiotic use in Ethiopia and Rwanda.



Michael Poulson, MD, MPH, received the Arnold P. Gold Foundation Humanism and Excellence in Teaching Award. Dr. Poulson was

nominated for this award by Boston University Chobanian & Avedisian School of Medicine students and was one of only six BMC residents so honored. He was first author of papers published in the *Journal of Trauma and Acute Care Surgery* and the *Journal of the National Medical Association*, and made a poster presentation at the 2022 National Research Conference on Firearm Injury Prevention in Washington, D.C.



Gordana Rasic, MD, MS, won the 11th annual Massachusetts Chapter of the American College of Surgeons (ACS) Resident Essay Competition and a

scholarship to attend the ACS Leadership & Advocacy Summit in Washington, D.C. In addition, Dr. Rasic received the Recognition of Excellence Coin from the Association for Surgical Education (ASE) for her work on the ASE Surgical Education Research Committee and on diversity, equity, and inclusion research in surgical education. She continued to serve on the Association of Women Surgeons’ #HeForShe Committee and participated in a panel discussion as part of the group’s ongoing interview series. She also served as a resident/fellow representative on the executive council of the Association of Out Surgeons and Allies. Over the course of the year, Dr. Rasic authored 29 publications, 15 as first author, in peer-reviewed journals and gave grand rounds for the Department of Surgery at Boston Medical Center.



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

Surgery resident Dr. Maia Nofal made presentations at the College of Surgeons of East, Central and Southern Africa Conference in Namibia.



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 Medical Center

Research Mentor: Jeffrey Siracuse, MD, MBA

Area of research: During her academic development time, Dr. Alonso plans to obtain a master's degree in population health research through the Boston University Chobanian & Avedisian School of Medicine, funded by the Primary Care Fellowship. With her mentor, Dr. Jeffrey Siracuse, she will work on projects evaluating a diverse array of issues in vascular surgery, with a particular focus on disease screening and social disparities of health. This includes evaluating long-term outcomes following revascularization procedures for intermittent claudication and carotid stenosis. She will also be working to improve outcomes for patients with advanced cardiovascular diseases at Boston Medical Center via structured multidisciplinary meetings spanning several relevant departments.

Priyanka Chugh, MD, MS

Site: Boston Children's Hospital

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

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

Nicole Cimbak, MD

Site: Boston Children's Hospital

Research Mentor: Christopher Weldon, MD, PhD

Area of Research: Dr. Cimbak is currently enrolled in a three-year fellowship program based at Boston Children's Hospital. The first year of the fellowship was spent as a surgical critical care fellow. During the past year and this, her final year of the fellowship program, she is participating in a variety of clinical outcomes research projects centered around pediatric anorectal anomalies and nutrition in critically ill children.

Anna Kobzeva-Herzog, MD

Site: Boston University Chobanian & Avedisian School of Medicine

Research Mentors: Aaron Richman, MD; Sabrina Sanchez, MD, MPH; Alik Farber, MD, MBA; Jeffrey Siracuse, MD, MBA; and Pamela Rosenkranz, RN, BSN, MEd

Area of Research: Dr. Kobzeva-Herzog serves as a quality improvement research fellow in the Department of Surgery. In this role, she focuses on improving the quality of surgical care through both research efforts and institution-wide quality improvement programs. This includes multidisciplinary projects to reduce the frequency of gastrostomy tube dislodgments, standardization of venous thromboembolism (VTE) prophylaxis regimens for polytrauma patients, and reduction in the rate of breakthrough VTE despite proper chemoprophylaxis in the general surgery and trauma patient population.

Maia Nofal, MD, MPH

Site: Global Engagement at Stanford University

Research Mentor: Thomas Weiser, MD

Area of Research: Dr. Nofal serves as a researcher in the NIH Fogarty-funded Global Health Equity Scholars Program and Stanford Surgery's global engagement group. Her work focuses on quality improvement initiatives to reduce surgical site infections in Sub-Saharan Africa in partnership with Lifebox, a charitable organization that advocates for safe surgical and anesthesia care worldwide. In her second year of research, she is piloting a program to reduce unnecessary postoperative antibiotic use at five hospitals in Ethiopia and Rwanda.

Sophia Smith, MD

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 use of a text-based check-in system to improve follow-up and identify high-risk patients for intervention prior to an ED visit or readmission. She is additionally interested in surgical education and plans to work on medical student engagement, with a specific focus on early mentorship for surgical specialties. Dr. Smith currently serves as the Surgical Outcomes Analysis & Research (SOAR) Junior 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 2022–2023 academic year.



Grasberger Research Symposium Lecture and Visiting Professorship

Thomas K. Varghese, Jr., MD, MS, MBA, FACS
Chief Value Officer & Associate Chief Medical Quality Officer, Huntsman Cancer Institute
Chief of General Thoracic Surgery, University of Utah
Professor of Surgery, University of Utah School of Medicine



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

Timothy M. Pawlik, MD, PhD, MPH, MTS, MBA
Professor and Chair, Department of Surgery
The Urban Meyer III & Shelley Meyer Chair for Cancer Research
Professor of Surgery, Oncology, and Health Services Management and Policy
Surgeon-in-Chief, The Ohio State University Wexner Medical Center



Smithwick Visiting Professorship in Vascular Surgery

Maarit Venermo, MD, PhD
Head of Department – Vascular Surgery, HUCH Abdominal Centre, Helsinki University Hospital
Professor of Vascular Surgery, University of Helsinki
ESVS Secretary General



Diversity, Equity & Inclusion Lecture and Visiting Professorship

Andrea Hayes Dixon, MD, FACS
Dean, Chair of Surgery, and Professor of Surgery
Howard University College of Medicine



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

Sharmila Dissanaik, MD, FACS, FCCM
Peter C. Canizaro Chair and University Distinguished Professor of Surgery, Texas Tech University Health Sciences Center
Chief of Surgery, University Medical Center

DEI visiting professor Dr. Andrea Hayes Dixon with surgery residents



Selected Grants

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

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

NEW

Community Engagement and Education in Boston-area Community Health Centers

Principal Investigator:

Andrea Merrill, MD

Sponsor: Massachusetts General Hospital/Trefler Foundation

Grant amount: \$30,000

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

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: \$1,396,924

Understanding Rural Mortality Disparities in Cancer: A Multi-level Approach (R37 Supplement with Candidate Crisanto Torres, MD, MPH)

Principal Investigator:

Kelly Kenzik, PhD, MS

Sponsor: National Institutes of Health/National Cancer Institute

Grant amount: \$423,009

Health Care Utilization and Associated Costs Among Older Cancer Survivors

Principal Investigator:

Kelly Kenzik, PhD, MS

Sponsor: American Cancer Society

Grant amount: \$163,651

BEST-CLI Data Analysis and Publications Core

Principal Investigator:

Alik Farber, MD, MBA

Sponsor: Brigham and Women's Hospital/Novo Nordisk Foundation

Grant amount: \$1,107,933

Targeting Senescence to Improve Wound Healing in Aging

Principal Investigator:

Daniel Roh, MD, PhD

Sponsor: Revolution Foundation/American Federation for Aging Research

Grant amount: \$373,000

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: \$1,815,000

Vascular Surgery Educational Program

Principal Investigator:

Jeffrey Siracuse, MD, MBA

Sponsor: Becton Dickinson

Grant amount: \$10,000

ONGOING

Immunobiology of Trauma

Principal Investigators:

Daniel Remick, MD; **Tony Godfrey, PhD**

Sponsor: National Institutes of Health/National Institute of General Medical Sciences

Grant amount: \$1,254,240

Delineation of Beneficial and Detrimental Roles of Senescent Cells in Impaired Wound Healing of Aging

Principal Investigator:

Daniel Roh, MD, PhD

Sponsor: American Federation for Aging Research

Grant amount: \$123,250

Community Violence Response Team

Principal Investigator:

Lisa Allee, MSW, LICSW

Sponsor: Massachusetts Office for Victim Assistance

Grant amount: \$757,850

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

Principal Investigator:

Jeffrey Siracuse, MD, MBA

Sponsor: American Society of Diagnostic and Interventional Nephrology

Grant amount: \$25,000

Development of Diagnostic and Prognostic Tests for Esophageal Adenocarcinoma

Principal Investigator:

Tony Godfrey, PhD

Sponsor: National Institutes of Health/National Cancer Institute

Grant amount: \$2,456,723

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

Principal Investigator:

Tony Godfrey, PhD

Boston University Co-Investigators: Anand Devaiah, MD; Gregory Grillone, MD; Robert Pistey, MD

Sponsor: National Institutes of Health/National Cancer Institute

Grant amount: \$759,836

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

Principal Investigator:

Pamela Rosenkranz, RN, BSN, MEd

Sponsor: 2019 HealthTrust Innovation Grant

Grant amount: \$50,000

Selected Clinical Research Projects

There are 110 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

SECTION OF ACUTE CARE AND TRAUMA SURGERY

A Prospective, Multicenter, Randomized, Double-Blind, Placebo-Controlled, Large, Simple Trial Evaluating the Use of BE1116 (4-Factor Prothrombin Complex Concentrate [Kcentra® Beriplex®]) to Improve Survival in Patients with Traumatic Injury and Acute Major Bleeding

Principal Investigator:

Aaron Richman, MD

Sponsor: CSL Behring

DIVISION OF GENERAL SURGERY, SECTIONS OF SURGICAL ONCOLOGY AND ENDOCRINE SURGERY

Comparison of Outcomes of Antibiotic Drugs and Appendectomy (CODA) Trial

BMC Site Co-Principal Investigator:

F. Thurston Drake, MD, MPH

BMC Site Co-Principal Investigator:

Sabrina Sanchez, MD, MPH

Sponsor: Patient-Centered Outcomes Research Institute (PCORI)

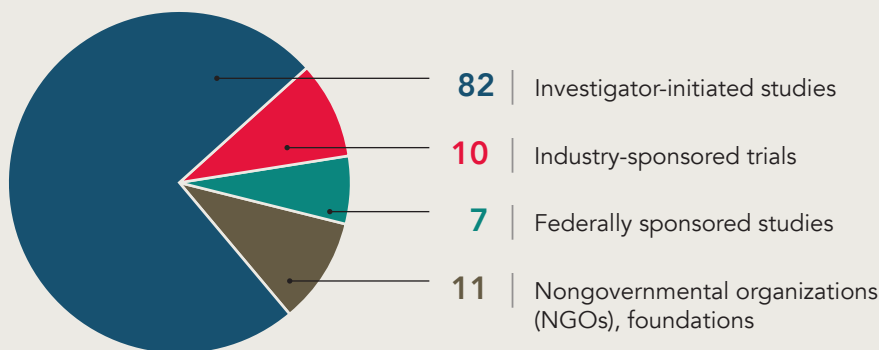
Community Engagement and Education in Boston-area Community Health Centers

Principal Investigator:

Andrea Merrill, MD

Sponsor: Trefler Foundation, sub award with Massachusetts General Hospital

DEPARTMENT OF SURGERY PORTFOLIO OF CLINICAL RESEARCH PROJECTS (N=110), FY 2023



DIVISION OF VASCULAR AND ENDOVASCULAR SURGERY

Percutaneous Deep Vein Arterialization for the Treatment of Late-Stage Chronic Limb-Threatening Ischemia (PROMISE II Trial)

Principal Investigator:

Alik Farber, MD, MBA

Sponsor: LimFlow, Inc.

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

Principal Investigator:

Alik Farber, MD, MBA

Sponsor: Medline

Effects of Semaglutid on Functional Capacity in Patients with Type 2 Diabetes and Peripheral Arterial Disease

Principal Investigator:

Elizabeth King, MD

Sponsor: Novo Nordisk

DIVISION OF PODIATRY SURGERY

Assessment of Wound Closure Comparing Synthetic Hybrid-Scale Fiber Matrix with Lyophilized Acellular Fish Skin in Treating Diabetic Foot Ulcers (DFU) and with Living Cellular Skin Substitute in Treating Venous Leg Ulcers (VLU)

Principal Investigator:

Vitaliy Volansky, DPM

Sponsor: Acera Surgical

Multi-Center, Prospective, Randomized Controlled Trial Evaluating SkinTE® in the Treatment of Wagner 2 DFUs. Closure Obtained with Vascularized Epithelial Regeneration for DFUs with SkinTE®

Principal Investigator:

Vitaliy Volansky, DPM

Sponsor: PolarityTE MD, Inc.

A Prospective, Multicenter, Interventional, Non-Comparator, Open-Label Study to Demonstrate the Efficacy, Performance and Safety of ConvaFoam Silicone, ConvaFoam Border and ConvaFoam Non-Adhesive Dressings in the Management of Surgical and Traumatic Wounds

Principal Investigator:

Vitaliy Volansky, DPM

Sponsor: Convatech

SECTION OF COLON AND RECTAL SURGERY

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

Principal Investigator:

Joanne Favuzza, DO

Sponsor: George Washington University

Publications

Research conducted by faculty and trainees of the Department of Surgery is published widely in leading journals and textbooks. During the 2022–2023 academic year, the department had more than 190 articles published in peer-reviewed journals and 14 published books or book chapters.

Selected Papers

Hemodialysis Access Outcomes for Patients with Unstable Housing. **Eric Sung, Scott R Levin, Rohith Kariveda, Alik Farber, Elizabeth G King, Thomas W Cheng, Jeffrey J Siracuse.** J Am Coll Surg. 2023 Jan 1;236(1):118-124. Epub 2022 Dec 15.

Brachiocephalic and Radiocephalic Arteriovenous Fistulas in Patients with Tunneled Dialysis Catheters Have Similar Outcomes. **Plauche L, Farber A, King EG, Levin SR, Cheng TW, Rybin D, Siracuse JJ.** Ann Vasc Surg. 2023 May 11;50890-5096(23)00253-4. Online ahead of print.

Transcatheter Arterialization of Deep Veins in Chronic Limb-Threatening Ischemia. Shishebor MH, Powell RJ, Montero-Baker MF, Dua A, Martinez-Trabal JL, Bunte MC, Lee AC, Mugglin AS, Mills JL, **Farber A, Clair DG.** N Engl J Med. 2023 Mar 30;388(13):1171-1180.

Relationship Between Wifl Stage and Quality of Life at Revascularization in the BEST-CLI Trial. **Siracuse JJ, Rowe VL, Menard MT, Rosenfield K, Conte MS, Powell R, Clavijo LC, Giles KA, Hamza TH, Van Over M, Cziraky M, White CJ, Strong MB, Farber AJ.** Vasc Surg. 2023 Apr;77(4):1099-1106.e4. Epub 2022 Nov 23.

Surgery or Endovascular Therapy for Chronic Limb-Threatening Ischemia. **Farber A, Menard MT, Conte MS, Kaufman JA, Powell RJ, Choudhry NK, Hamza TH, Assmann SF, Creager MA, Cziraky MJ, Dake MD, Jaff MR, Reid D, Siami FS, Sopko G, White CJ, van Over M, Strong MB, Villarreal MF, McKean M, Azene E, Azarbal A, Barleben A, Chew DK, Clavijo LC, Douville Y, Findeiss L, Garg N, Gasper W, Giles KA, Goodney PP, Hawkins BM, Herman CR, Kalish JA, Koopmann MC, Laskowski IA, Mena-Hurtado C, Motaganahalli R, Rowe VL, Schanzer A, Schneider PA, Siracuse JJ, Venermo M, Rosenfield K.** N Engl J Med. 2022 Dec 22;387(25):2305-2316. Epub 2022 Nov 7.

Transcatheter Arterialization of Deep Veins in Chronic Limb-Threatening Ischemia. Shishebor MH, Powell RJ, Montero-Baker MF, Dua A, Martinez-Trabal JL, Bunte MC, Lee AC, Mugglin AS, Mills JL, **Farber A, Clair DG** for Promise II Investigators. N Engl J Med. 2023 Mar 30;388(13):1171-1180.

Practical Guide to Ethical Considerations in Clinical Trials in Surgery. Pawlik TM, Schwartz TA, **Itani KMF.** JAMA Surg. 2023 Feb 1;158(2):204-205.

History Repeats Itself: Impact of Mental Illness on Violent Reinjury and Hospital Reencounters Among Female Victims of Interpersonal Violence. **Neufeld MY, Plaitano E, Janeway MG, Munzert T, Scantling D, Allee L, Sanchez SE.** J Trauma Acute Care Surg. 2023 Apr 17. Online ahead of print.

Historic Redlining, Social Mobility, and Firearm Violence. **Poulson MR, Neufeld MY, LaRaja A, Allee L, Kenzik KM, Dechert T.** J Trauma Acute Care Surg. 2023 Feb 1;94(2):312-319. Epub 2022 Aug 5.

ASO Visual Abstract: The Impact of the COVID-19 Pandemic on Hepatocellular Carcinoma Time to Treatment Initiation: A National Cancer Database Study. **Rasic G, Beaulieu-Jones BR, Chung SH, Romatoski KS, Kenzik K, Ng SC, Tseng JF, Sachs TE.** Ann Surg Oncol. 2023 Jul;30(7):4262-4263.

Defining Rurality: An Evaluation of Rural Definitions and the Impact on Survival Estimates. Franks JA, Davis ES, Bhatia S, **Kenzik KM.** J Natl Cancer Inst. 2023 May 8;115(5):530-538.

Persistent Child Poverty and Mortality in a Cohort of Children with Cancer in Alabama. Hoppmann AL, Dai C, Daves M, Imran H, Whelan K, **Kenzik K, Bhatia S.** Cancer Epidemiol Biomarkers Prev. 2023 Mar 6;32(3):380-386.

The Effect of Medicare and Screening Guidelines on Colorectal Cancer Outcomes. **Poulson MR, Geary A, Papageorge M, Laraja A, Sacks O, Hall J, Kenzik KM.** J Natl Med Assoc. 2023 Feb;115(1):90-98. Epub 2022 Dec 5.

Surveillance Patterns for Hepatocellular Carcinoma Among Screening-Eligible Patients in the Medicare Population. **Papageorge MV, de Geus SWL, Woods AP, Ng SC, Lee S, McAneny D, Tseng JF, Kenzik KM, Sachs TE.** Ann Surg Oncol. 2022 Dec;29(13):8424-8431. Epub 2022 Sep 4.

Assessment of Hospitalizations and Emergency Department Visits After Chimeric Antigen Receptor T-Cell Therapy Among Commercially Insured Patients. **Kenzik KM, Johnson PC, Bhatia R, Bhatia S.** JAMA Oncol. 2022 Jul 1;8(7):1068-1070.

Venous-thromboembolism and Associated Health Care Utilization in Elderly Patients with Diffuse Large B Cell Lymphoma. Gangaraju R, Davis ES, Bhatia S, **Kenzik KM.** Cancer. 2022 Jun 15;128(12):2348-2357. Epub 2022 Apr 1.

Pushing the Envelope for Active Surveillance. **Merrill AL, Dedhia PH.** JAMA Oncol. 2022 Sep 15. Online ahead of print.

A Nationwide Propensity Score Analysis Comparing Ablation and Resection for Hepatocellular Carcinoma. **Rasic G, de Geus SWL, Beaulieu-Jones B, Kasumova GG, Kent TS, Ng SC, McAneny D, Tseng JF, Sachs TE.**

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