SURGERY NEWS

THE MICHAEL E. DEBAKEY DEPARTMENT OF SURGERY

Baylor College of Medicine

2024 ISSUE 1

MICHAEL E. DEBAKEY DEPARTMENT OF SURGERY

Innovation Track First of It's Kind

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#DeBakeySurgeon



Billy Cohn, M.D., director of the Center for Device Innovation, and innovation track residents

New Innovation Track is First of it's Kind in the Nation

Carrying on the legacy of Dr. Michael E. DeBakey and today's great innovators, the Department of Surgery was pleased to inaugurate a first of its kind seven-year innovation residency that is designed to be a launching pad for future surgeon innovators. The NRMP-listed Innovation Track includes one of the ten categorical general surgery positions offered within our General Surgery Residency Program.

The Innovation Track is a collaboration with Texas Medical Center Innovation (TMCi) and offers two additional years to the general surgery curriculum focusing on teaching residents how to bring new devices and therapies to market. Residents work alongside other surgeon inventors, engineers, product designers and researchers to prototype, test and refine their ideas to ultimately bring them to clinical testing and commercialization. Trainees in the Innovation Track are immersed in the process of 3D printing, prototyping, funding, testing, patenting and other steps needed to bring intellectual property and other innovations from an idea to an FDA approved product that may improve patient care.

Innovation Track residents will spend the first specialty track year (their third post-graduate year) at the TMC Center for Design Innovation (CDI) where they will be exposed to intellectual property developments and commercialization strategies and their second year working on development projects of their choosing.

Alumni Update



Eric Silberfein, M.D., elected chair of the Michael E. DeBakey Surgical Advisory Committee

The Michael E. DeBakey Surgical Advisory Committee (MEDSAC), formed in 2022 with the consent of the Michael E. DeBakey International Surgical Society (MEDISS), has unanimously elected Eric Silberfein, M.D., (General Surgery Residency Program graduate class of 2008) as its new chair. Dr. Silberfein succeeds Scott LeMaire, M.D., who served as the inaugural chair of the committee and assisted tremendously in the transition of the MEDISS and its functions into the department under the auspices of this new committee.

The MEDSAC will be planning the 2025 Alumni Symposium and will enlist team class captains for each of our residency programs to support this event and continue to bring our alumni back home to share their amazing efforts nationwide and learn about the progress of our department. The department together with the MEDSAC is excited to also be hosting alumni receptions at a variety of national meetings. This year, the department hosted a joint department and alumni reception at the American College of Surgeons meeting in Boston together with the other "Baylors" - Baylor University Medical Center-Dallas and Baylor Scott & White Medical Center-Temple. Over one hundred alumni attended this great event.

Joseph Coselli, M.D., executive vice chair for the department, and Holly Shilstone, director of Advancement and Alumni Affairs, also continue to work in expanding endowments through outreach to foundations, grants and grateful patients. The department has a giving page to facilitate this collaboration with our amazing donors and alumni in continual support of our research, education, outreach and clinical mission areas.

For any inquiries and/or questions regarding alumni and advancement, please contact Holly Church Shilstone at surgeryalumni@bcm.edu.

RESEARCH UPDATE



Livia Eberlin, Ph.D., vice chair for research and associate professor of surgery

MasSpec Pen Allows for Real-time Tissue Identification During Surgery

As recently published in *JAMA Surgery*, Livia Eberlin, Ph.D., vice chair for research and associate professor of surgery and James Suliburk, M.D., associate professor and chief of endocrine surgery, continue to advance the application for the MasSpec Pen, a handheld probe they developed that offers rapid, real time analysis and discrimination of benign versus malignant tissue characteristics during surgery. Their published findings showed more than 90% accuracy for discriminating thyroid, parathyroid and lymph node tissues during surgery.

The pen is easy to use: The surgeon gently places the pen on the tissue, the pen deposits a droplet of sterile water at room temperature on the tissue surface and the water delicately extracts the small molecules. Then, a tube carries the water droplet to a mass spectrometer, an instrument that in real time reads the molecular composition of the droplet, which reveals the type of tissue it came from. "In the operating room, the MasSpec Pen can help surgeons identify the tissue that they are considering to resect before actually resecting it, to ensure that it was the right tissue and no tissue was removed unnecessarily," Suliburk said. "It is very intuitive to use and has immense potential for saving time during surgery."

Suliburk added that his belief is that this work is a wonderful example of how live tissue sensing can improve patient care. Suliburk and Eberlin's goal is to expand use of the MasSpec to a variety of different projects where live tissue identification could be very powerful.

This work was supported by the National Cancer Institute (R33CA229068-01), the Gordon and Betty Moore Foundation (GBMF8049) and the Welch Foundation (F-1895).

Original article by Ana Maria Rodriguez, Ph.D. was posted in From the Labs.

"This work is a wonderful example of how live tissue sensing can improve patient care. The goal is to expand its use to a variety of different projects where live tissue identification could be very powerful." - Livia Eberlin, Ph.D.

Masspec Pen

PRC

EDUCATION UPDATE



First year general surgery residents

New General Surgery Interns and New Robotics Training Program

The department welcomed first year residents this summer, including 10 general surgery categorical residents, three plastic surgery residents and one integrated vascular and one thoracic resident. Our new class arrives from leading medical schools across the nation, including the Icahn School of Medicine at Mount Sinai, Vanderbilt University and the University of Miami.

These and our other residents will benefit from a new robotics training program recently instituted and led by Derek Erstad, M.D., assistant professor in the Division of Surgical Oncology. This exciting new program includes multidimensional learning through virtual simulation, wet lab training and proctored teaching, with progressive complexity spanning all five residency years. This program will provide robotic training enabling residents to successfully apply robotic skills during their residency and in practice. Residents completing the training program will receive a certificate of completion that will enable them to apply for privileges in robotic surgery at their ultimate practice locations anywhere in the country.

General Surgery

Marissa Mason, M.D. University of Miami Jean Paul Soula, M.D. University of Alabama at Birmingham Chistopher Sylvester, M.D. Baylor College of Medicine Chioma Uche, M.D. The University of Texas at Rio Grande Harrison Kaplan, M.D. Icahn School of Medicine at Mount Sinai Dailen Alonso, M.D. Florida International University Emma Hills, M.D. Baylor College of Medicine Stephanie Keeling, M.D. Baylor College of Medicine Alexander Mina, M.D. Vanderbilt University Henry Soler, M.D. University of Miami

Plastic Surgery

John Bovil, M.D. Georgetown University Olivia Leonovicz, M.D. LSU Health Sciences Center, New Orleans Mariana Trevino, M.D. Texas Tech University

Vascular Surgery Hannah Oden-Brunson, M.D.

Baylor College of Medicine

Thoracic Surgery

Ryan Nowrouzi, M.D. Baylor College of Medicine



2023 T32 Fellows in Cardiothoracic Surgery Research Drs. Robert Seniors III, Travis Miles and Berra Koskulu

2023 Fellows Enter T32 Research Training Program

The department accepted three new fellows into its two-year T32 Research Training Program in Cardiovascular Surgery, which facilitates the successful advancement of translational investigators studying and seeking new therapies for cardiovascular diseases.

Funded by a T32 grant from the National Heart, Lung and Blood Institute (NHLBI), this program is led by Principal Investigator and Program Director Todd K. Rosengart, M.D., chair of the Department of Surgery, and Program Co-Directors Ravi Ghanta, M.D. and Hu Ying Shen, M.D., Ph.D. The program is founded on the idea that interdisciplinary collaborations between clinical investigators, bench scientists and diverse specialists are essential for translational research to have a tangible impact on clinical care. Berra Koskulu, Ph.D., a postdoctoral fellow at the University of Houston, will enter the Basic and Translational Research Track under the mentorship of Bradley McConnell., Ph.D. Dr. Koskulu will investigate novel treatment approaches for heart failure associated with cardiac conduction disease.

Travis Miles, M.D., joins our T32 program after completing two years of our general surgery residency. Dr. Miles will enter the Data Science and Health Services Research Track where he will study the clinical decisions systems to identify predictors of acute kidney injury after cardiac surgery under the mentorship of Ravi Ghanta, M.D., professor in the Division of Cardiothoracic Surgery.

Robert Seniors III, M.D., joins our T32 training program from The University of Texas Health Science Center at Houston, where he is a general surgery resident. Dr. Seniors will enter the Basic and Translational Research Track under the mentorship of Ying Shen, M.D., Ph.D., associate professor of surgery, investigating targetable pathways in aortic dissection and aneurysm.



2023 general surgery chief residents

2023 Graduation and Awards Ceremony

Forty-two residents and fellows graduated from the Department of Surgery at the end of this academic year, including 10 general surgery categorical residents, 16 general surgery preliminary residents, four thoracic surgery fellows, three surgical critical care fellows, three plastic surgery residents, two vascular surgery fellows and one graduate each in our integrated vascular surgery, global surgery, cardiovascular surgery, aortic surgery and pediatric surgery programs. The celebration for graduates was held at Hotel Zaza in June. The graduation program welcomed families and friends of the graduates, including classmates and other trainees and included faculty, resident and medical student awards.

General Surgery

Arsalan Amin, M.D. Vamsi Aribindi, M.D. Erin Bayley, M.D. Zachary Chizmar, M.D. Gabriel Glaun, M.D. Eithan Haim, M.D. Ndidi Okeke, M.D. Denny Scaria, M.D. Youmna Sherif, M.D. Megan Vu, M.D. Rodrigo Zea Vera, M.D.

Cardiovascular Surgery

Asmaa Rashid, M.D.

Aortic Surgery

Abraham Katz, , M.D.

Thoracic Surgery

Ahmed Ali, MBBCh Matthew Egyud, M.D. Chibueze Onyemkpa, MBBS Hoang-Vu Tran, M.D.

Vascular Surgery

Rocky Chang Browder, M.D. Jessica Rea, M.D.

Plastic Surgery

Luke Grome, M.D. Jordan Kaplan, M.D. Jeffrey Trost, Jr., M.D.

Surgical Critical Care

Elizabeth Gilliam, M.D. Roshini Ramwani, DO Sonal Walia, M.D.

Pediatric Surgery

Ross Beckman, M.D.

Preliminary Resident Graduates

Sydnee Brown, M.D. Samiya Diawara, M.D. Colleen Driscoll, M.D. Lamees El Nihum, M.D. Madeline Flanagan, M.D. Elizabeth Harper, M.D. Connor Johnson, M.D. Austin Kinley, M.D. Kenneth Livingston, M.D. Khuong Nguyen, M.D. Dayal Rajagopalan, M.D. Rishabh Shah, M.D. Rohit Thota, M.D. Jennifer Welch, M.D.

2023 Graduation Awards

Outstanding Chief Award Zachary Chizmar, M.D.

Outstanding Intern Award Bennett Hartley, M.D.

Gene Guinn Faculty Award 2022-2023 Christine O'Mahony, M.D.

Chief General Surgery Residents Award to Faculty N. Thao N. Galvan, M.D., M.P.H. and Catherine Seger, M.D.

Charles H. McCollum Academic Achievement Award Christopher Ryan, M.D.

George P. Noon Professionalism Award Christy Y. Chai, M.D.

Michael E. DeBakey Distinguished Service Award Bryan Burt, M.D.

Outstanding VA Chief Resident Award Rodrigo Zea Vera, M.D.

Outstanding Student in Surgery Deeksha Bidare

Vascular Surgery Faculty Teaching Award Zachary Pallister, M.D.

Thoracic Surgery Faculty Teaching Award Marc Moon, M.D.

Thoracic Surgery Resident Scholar Award Ahmed Ali, M.D.

HEALTHCARE UPDATE

Gabriel Loor, M.D., surgical director, Lung Transplant Program, Baylor St. Luke's Medical Center

Over 100 Ex Vivo Lung Perfusion Cases Performed

Baylor St. Luke's Medical Center's (BSLMC) Ex Vivo Lung Perfusion Program has recently passed the benchmark of having performed over 100 ex vivo lung perfusion (EVLP) cases since its inception in 2018. Gabriel Loor, M.D., surgical director of the Lung Transplant Program at BSLMC, led the first "breathing lung transplantation" using EVLP in 2014 in the Midwest and the first in Texas in 2018. Dr. Loor is a pioneer in this space, having played a key role in FDA approval of the Organ Care System (OCS) Lung device.

The EVLP machine is designed to keep donor lungs functioning and "breathing" in human-like conditions from the time of the donor procurement all the way to the transplant surgery. The device maintains the organ in its own physiologic state with blood, oxygen, nutrients and a sophisticated monitoring system that continually assesses the organ as it travels from donor to the recipient.

Typically, lungs transported in a standard ice cooler are implanted within six hours. But at BSLMC, cases are performed with preservation times ranging from six hours to 18 hours. Another benefit offered by using the OCS Lung machine is that our surgeons can accept donor offers from anywhere in the continental United States and better manage logistics so that complex recipient operations can occur in the day rather than in the middle of the night.

In addition to OCS Lung machine, the transplant team is exploring other technologies for organ preservation such as the Lung Guard (Paragonix), which cools the transplant organ without the potentially harmful effects of the ice normally used as a cooling preservative.

100 Robotic-Assisted Esophagectomies

Shawn Groth, M.D., associate professor and interim chief of the David J. Sugarbaker Division of Thoracic Surgery, performed his 100th robot-assisted minimally invasive esophagectomy in July. This extraordinary accomplishment is not just a personal triumph for Dr. Groth, it signifies an evolution in the field of esophageal surgery and underscores the experience and expertise of Baylor surgeons. "This milestone highlights the strength of the robotic cardiothoracic surgery team at Baylor St. Luke's Medical Center, allowing us to perform a high volume of complex cardiac and thoracic operations through less invasive techniques," says Dr. Groth. Dr. Groth is one of less than 10 surgeons in the U.S. to reach this milestone.

An esophagectomy is a surgical procedure in which a portion of the esophagus is removed and (typically) reconstructed with the stomach. It is performed for cancer and some benign disorders, such as severe scarring of the esophagus or achalasia. Traditionally, esophageal surgery was performed through large "open" incisions in the chest, abdomen and/or neck. Though effective, these surgeries often required a prolonged recovery period, and are associated with significant discomfort, and complications.

Recognizing the need for a more patient-centric approach which offers operations that are safer and more easily tolerated, visionary surgeons at Baylor like Dr. Groth have dedicated themselves to perfecting less invasive surgical techniques.

"There's an abundance of data in the literature supporting the benefits of minimally invasive esophagectomy traditional 'open' over esophagectomies, including less pain, lower complication rates, less blood loss, shorter hospital stays, faster recovery and a better quality-of-life," says Dr. Groth. "A robotic approach allows us to perform complex operations, such as esophagectomy, with a great deal of precision and ensures patients receive the highest standards of oncology care, including a thorough lymph node evaluation, resecting the tumor with negative margins and optimizing longterm survival."

Shawn Groth, M.D., interim chief of the David J. Sugarbaker Division of Thoracic Surgery





Drs. Ronald Cotton, Alexander Schutz and Alexis Shafii with patient Walter Pinkney

Baylor Surgeons Perform First Multi-Organ Transplant Involving the Heart in VA System

"The heart transplant and kidney transplant teams here at the hospital have been stupendous with what they've done for me" - Patient Walter Pinkney Three department surgeons working at the Michael E. DeBakey VA Medical Center (MEDVAMC) in July performed the first multi-organ transplant involving the heart ever to be performed in the VA hospital system. Simultaneous liver and kidney transplants have previously been performed at the MEDVAMC, but this was the first time a heart transplant had been included in a multi-organ transplant procedure.



Since the launch of the MEDVAMC program in 2022, department faculty working at the MEDVAMC have performed a remarkable total of six heart transplants and six ventricular assist device (VAD) implants.

Alexander Schutz, M.D., and Alexis Shafii, M.D., performed the heart transplant and Ronald Cotton, M.D., performed the kidney transplant.

"We are one of only two VAs performing heart transplants within the VA hospital and system," says Dr. Schutz. "A multi-organ transplant is a less commonly performed procedure but allows veterans who may have previously been turned down for heart transplant because of their kidney function an opportunity to add years to their life. I am glad to have been a part of another great multi-collaborative effort to bring advanced heart failure interventions to the VA and to the veterans."

Air Force Veteran Walter Pinkney was the recipient of a simultaneous heart and kidney transplant and is beyond grateful to receive the organs and to the transplant center for making it possible. "The heart transplant and kidney transplant teams here at the hospital have been stupendous with what they've done for me," he said. "These people have bent over backwards to take care of me and get what I need. I believe this is the best staff in the whole VA." Pinkey was diagnosed with heart problems and discharged from the Air Force in 1984. "I had a lot of problems throughout the years and was diagnosed with congestive heart failure and in 2014, I had to have a pacemaker and defibrillator put in." In 2021, Pinkney had a stroke and his doctors recommended a heart transplant.

"Unfortunately, heart issues can have a negative impact on the kidneys and without a new kidney, Pinkey would be dependent on dialysis, which can lead to reduced life expectancy," explains Dr. Cotton. So, the team decided to do both a heart and kidney transplant at the same time.

With three successful heart transplants previously done at the MEDVAMC, the team was confident in their capability to perform a kidney and heart transplant at the same time.

"These surgeons and my colleagues are outstanding physicians," says Dr. Shafii. "Not only are they skilled in their craft, but they are caring and kind humans daily share these skills with their patients. I am proud to work alongside them and help prolong and improve lives of patients through transplantation."

Launched in 2014, the kidney transplant program at the MEDVAMC has completed approximately about 180 transplants. The program is this year on course for the highest volume of transplants performed in a single calendar year.



LEADERSHIP UPDATE



Livia Eberlin, Ph.D., has been named vice chair for research (replacing M.D.) Scott LeMaire, with and will work department researchers to build department-wide translational research efforts in this role. Dr. Eberlin will direct the Office of Surgical

Research, help direct the general surgery residency research and innovation tracks, and work with the department faculty to create new research and educational opportunities.

Dr. Eberlin's research program centers around the development and application of mass spectrometry technologies in health-related research, with a particular focus on disease detection and diagnosis to improve patient care and clinical outcomes. She and her team have developed the MasSpec Pen which utilizes mass spectrometry in the operating room, enabling in vivo molecular measurements of the dynamic metabolic information that can help stratify disease and guide treatment decisions for patients in real time.



William "Chris" Pederson, M.D., has been named chief of a newly unified adultpediatric Division of Plastic Surgery at Baylor College of Medicine. Dr. Pederson joined Texas Children's Hospital January in 2016, further expanding the highly specialized, multidisciplinary care offered to children.

adolescents and families who seek treatment at Texas Children's Hospital.

Pederson's clinical interests include the management of vascular problems in the upper extremity, nerve injury and repair including brachial plexus, Volkmann's ischemic contracture, facial paralysis and microsurgical reconstruction of complex extremity defects.



Octavio Pajaro, M.D., Ph.D., joins the Department as chief of cardiothoracic surgery at the Michael E. DeBakey VA Medical Center and professor of surgery in the Division of Cardiothoracic Surgery and the Division of Cardiothoracic Transplantation and

Circulatory Support at Baylor College of Medicine.

Dr. Pajaro graduated from Harvard University in biochemical sciences and then attended Albert Einstein College of Medicine where he received a master's degree, an M.D. and then a Ph.D in Biophysics and Physiology. He completed his general surgery residency at Johns Hopkins Hospital during which he spent his research years as a postgraduate at John Radcliffe Hospital, Oxford University, as a Fulbright Scholar. He also completed his cardiothoracic surgery fellowship at Johns Hopkins Hospital.



Sebastian Winocour, M.D., MSc, has been named associate chief of the Division of Plastic Surgery at Baylor College of Medicine. He is a boardcertified, fellowshiptrained plastic surgeon who specializes in breast cancer reconstruction and aesthetic surgery. He

uses advanced techniques in breast reconstruction surgery to help cancer patients achieve their aesthetic goals and restore their emotional well-being.

Dr. Winocour is a leading researcher in field of plastic surgery and has authored over 100 manuscripts, including contributions to high impact journals, abstracts at major scientific conferences and book chapters. He serves as a manuscript reviewer for the leading plastic surgery journals, including *Plastic* & Reconstructive Surgery, Aesthetic Surgery Journal and Aesthetic Plastic Surgery. His research interests focus on breast reconstruction, aesthetic surgery, business leadership and resident education.



R. Taylor Ripley, M.D., professor associate of surgery in the David J. Sugarbaker Division of Thoracic Surgery, has been appointed director of clinical trials for the Office Surgical of Research. Under the supervision of our vice chair for research, he will provide leadership

and oversight for the clinical trials programs, manage communication of these programs, manage department clinical trials resources, facilitate clinical research seminars and related department programs and support other efforts relevant to the successful growth and expansion of our broader clinical research efforts.

Dr. Ripley is also the director of the Mesothelioma Treatment Center. He is a nationally recognized, board-certified thoracic surgeon and expert in mesothelioma and thoracic surgical oncology. In addition to mesothelioma, he focuses on chest wall tumors, lung cancer, esophageal cancer, and thymoma / thymic carcinoma.



Ying Shen, M.D., Ph.D., has been appointed director of basic and translational research in the Office of Surgical Research. Under the supervision of the vice chair for research, she will provide leadership and oversight of our basic and translational research programs, supporting the

science and training of our faculty and trainees, managing department laboratory space and resources and facilitating research science seminars and related department programs. Dr. Ying Shen's research focuses on vascular diseases. One of her main interests is in the molecular mechanisms of aortic aneurysms and dissections. During the past few years, she has developed several projects investigating the signaling pathways that control aortic destruction, healing, and remodeling. She has also established mouse models of aortic aneurysms and dissections and used various techniques to evaluate the aortic structure and function.



Catherine Seger, M.D., assistant professor in the Division of Trauma and Critical Care Surgery, has been named trauma medical director at Ben Taub Hospital. In her new role, she will bring a strong clinical presence, devotion to patients and passion for gun violence

prevention. Dr. Seger succeeds Dr. Chad Wilson, under whose leadership our trauma program thrived, earning multi-year recognition as one of the highestquality trauma programs in the U.S. as assessed by the American College of Surgery Trauma Quality Improvement Program (TQIP).



Hyun Sung Lee, M.D., Ph.D., associate professor in the David J. Sugarbaker Division of General Thoracic Surgery, has been named director of the Systems Onco-Immunology Lab with responsibilities for overseeing immunology research across the department.

Dr. Lee's expertise is in translational research in thoracic oncology and immuno-oncology to bridge advancing science with critical clinical needs. His overarching goals are to identify potential therapeutic targets to overcome resistance to checkpoint immunotherapy and to investigate the cellular mechanism of tumor immunity and autoimmunity after immunotherapy by applying "comprehensive and integrated systems immunology" approaches.

NEW FACULTY



Tamer Mohamed, Ph.D., professor associate Division in the of Cardiothoracic Surgery, is a highly regarded and well published researcher in regenerative medicine and myocardial regenerative science specifically. He will serve as director of our Laboratory for Cardiac

Regeneration founded by our chair Dr. Todd Rosengart.

Dr. Mohamed received his bachelor's and master's in biochemistry from Zagazig University and a Ph.D. from the University of Manchester. Dr. Mohamed's post-doctoral training at the prestigious Gladstone Institute in San Francisco focused on cardiac regeneration. His work on the direct cardiac reprogramming approach was the nucleus for a start-up company (Tenaya Therapeutics), where he was the first scientist recruited to the company. He holds multiple patents related to this work.

Following his tenure at Tenaya, Dr. Mohamed transitioned back into academia to start discovery programs for heart failure therapy, mainly focusing on understanding the regulation of cardiomyocyte proliferation. His laboratory recently achieved a significant milestone by developing a groundbreaking system for long-term culture of human and pig heart slices. This new technology effectively demonstrated the efficacy of new cardiac regenerative therapies in pre-clinical models using primary pig and human heart tissues.



Pabel Miah, M.D., assistant professor of surgery in the Division of Surgical Oncology, is a surgical oncologist who specializes in all aspects of breast oncologic procedures including nipple sparing mastectomies, hidden scar surgeries, breast

conservation surgeries, lymphatic mapping and preservation, oncoplastic surgeries, image guided biopsies and axillary dissections. His research focuses on optimizing breast imaging for high-risk patients, genetic susceptibility, and minimizing recurrence.

Dr. Miah went to medical school at the Via College of Osteopathic Medicine in Blacksburg, VA., following which he completed his general surgery residency at Garnet Health Medical Center in Middletown, NY. Miah completed further training at the renowned breast surgery fellowship program at New York University, where he published numerous abstracts, manuscripts and gave multiple lectures.

Dr. Miah will have a Baylor Medicine outpatient practice in The Woodlands and will be performing surgeries at Baylor St. Luke's in The Woodlands.



Christine Yin, M.D., assistant professor of surgery in the Division of Plastic Surgery, is a plastic surgeon specializing in hands and the upper extremities.

She has been published in six peer-reviewed journals, including *Annals of Plastic*

Surgery, Plastic and Reconstruction Surgery-Global Open and the Journal of Surgical Oncology, with two being first author. She has also presented 11 lectures and presentations. Dr. Yin graduated with honors from the University of California at Berkeley with a bachelor's degree in chemistry. She then attended medical school at the Keck School of Medicine at the University of Southern California and continued with an integrated plastic surgery residency. She then went to Nassau University Medical Center for another integrated plastic surgery residency and finally Baylor College of Medicine for a hand and upper extremity fellowship.

Dr. Yin will be practicing at Baylor Medicine, Ben Taub Hospital and the Michael E. DeBakey VA Medical Center.



Tyler L. Coye, D.P.M., assistant professor in the Division of Vascular Surgery and Endovascular Therapy, is a podiatric surgeon specializing in diabetic limb salvage.

His clinical and research interests focus on

diabetic limb preservation, including medical and surgical management of lower extremity ulcerations and infections. He has delivered numerous presentations, published several academic articles and won multiple research awards related to his areas of expertise.

Dr. Coye earned his bachelor's degree in mathematics from Alfred University, graduating cum laude and with honors. He earned his doctorate in podiatric medicine and surgery from Temple University. He completed his surgical residency at Rochester General Hospital in Rochester, NY. Following residency, Dr. Coye completed rigorous fellowship training in diabetic limb salvage at the University of Texas Southwestern. He trained as a member of the diabetic limb salvage team at both Parkland Memorial Hospital and Clements University Hospital and received extensive medical and surgical training in lower extremity limb preservation and management of all aspects of foot and ankle complications.



Lucas Dvoracek, M.D., assistant professor of surgery, is a plastic surgeon in the Division of Plastic Surgery who will be specializing craniofacial and in reconstructive surgery in adults and children.

Dr. Dvoracek is co-

inventor on two patents, is a co-recipient of a \$100,000 PinCh Grant from the University of Pittsburgh and he has published articles in 19 peer-reviewed journals, with eight as first author.

Dr. Dvoracek graduated from West Liberty University with a major in biology and a minor in business administration. He completed his medical degree at Washington University in St. Louis School of Medicine and completed the integrated plastic surgery residency at the University of Pittsburgh Medical Center (UPMC) followed by a fellowship in pediatric plastic surgery and craniofacial surgery at UPMC.

Dr. Dvoracek will be practicing at Ben Taub Hospital and Texas Children's Hospital.



Daniel Bonville, D.O., associate professor of surgery in the Division of Trauma and Acute Care Surgery, provides clinical care at the Michael E. DeBakey VA Medical Center and is also developing an academic program in the areas of acute care surgery and surgery critical care.

Dr. Bonville received his bachelor's degree in biology from New York University in 1993. He went on to earn his Doctor of Osteopathic Medicine from New York College of Osteopathic Medicine in 1998. His subsequent training includes a surgery residency at the Brooklyn Hospital Center, an advanced laparoscopy fellowship at Wilford Hall Medical Center, and a trauma/critical care fellowship at the University of Texas Health Science Center at San Antonio.

In the OR Light



Ramiro Fernandez, M.D. Assistant Professor of Surgery Division of Thoracic Surgery Director, Summer Surgery Program

Where are you from? Houston, TX

What made you decide to go into medicine?

From an early age, I was drawn to science. I had a science teacher early on that instilled in me a passion for biology and human physiology. From that point on, I had an insatiable drive to learn about the marvels of the human body and began to envision a career in medicine. Later in high school, I spent a summer shadowing a pediatric surgeon and that experience cemented my desire to become a surgeon. Ultimately, I wanted to dedicate my life to improving people's wellbeing while contributing meaningfully to society in a career that challenged me every day.

What made you choose surgery and how will you choose your specialty?

In medical school I enjoyed all my clinical rotations, but I was drawn to surgery. I found incredible surgeon mentors and out of all the faculty I met, I aspired to be like them. Surgery represented a challenging and fulfilling career that was the right fit for me. How I ended up as a thoracic surgeon is a bit of a longer story. Suffice it to say it was largely a result of serendipity and caring mentors that ushered me into their field and guided me along.

What do you like most about your job?

I love having the opportunity to help my patients feel better. Whether I am resecting a cancer, repairing a massive hiatal hernia, or doing a lung transplant, helping relieve my patients' disabling symptoms and allowing them to achieve their goals is the most rewarding aspect of the job for me. After they recover from surgery and return to the office with a renewed sense of hope and lease on life--that makes it all worth it.

Is there anything you would tell someone thinking about going into medicine?

Follow your dreams and your heart but embrace chance and serendipity, for they may lead you down a path you did not envision. Work very hard and take advantage of every opportunity that presents itself, while turning to your mentors to guide you on your journey.

What do you like to do when you're not working?

I aim to spend as much time as I can with my family. I have two young children (five year-old boy and three year-old girl) and I want to be as present as I can at this stage. If I get a little time for myself, I like to read for fun; my favorite author is Steinbeck, but I also have a taste for biographies and memoirs.



Jorge Portuondo, M.D. Executive Chief General Surgery Resident

Where are you from? Miami, FL

What made you decide to go into medicine?

Initially, I wanted to go into finance as a college student, but always found myself most inspired by the physicians in my life. Ultimately, I listened to that inspiration and enrolled in medical school.

What made you choose surgery and how will you choose your specialty?

To me, general surgery was the most interesting fusion of a medical and surgical career. Next year I will begin my fellowship in surgical oncology at MD Anderson. In my mind, there is no better balance of complex pathophysiology, collaborative patient care, longitudinal patient relationships and advanced surgical practice and I'm fired up to get started.

What do you like most about your job?

Working with my colleagues to tangibly make an impact on a person's clinical course, quality of life or longevity. The combination of all of the above is as fulfilling as anything a career can hope to offer.

Is there anything you would tell someone thinking about going into medicine?

Understand that while you may feel that your career sacrifices in medicine are unique, they are a) worth it and b) matched by a set of sacrifices that may not be immediately apparent but definitely present in every other career. The unique privilege and trust afforded to you by society for the earnest pursuit of medical practice is difficult to truly appreciate and it is a tremendous honor.

What do you like to do when you're not working?

I spend a lot of time with my two young children, mostly building magnet tile rocket ships, reading books and watching the same movies on repeat. I don't necessarily like running but I do it anyway, and whenever my wife and I get some help at night we like to explore different restaurants around Houston.





Rebecca Grubb Associate Administrator Department of Surgery

Where are you from? Houston, TX

Where did you go to school?

Vanderbilt University for Undergrad and MPH from UT School of Public Health Houston

What made you choose your career?

I fell into my career. Initially I thought I wanted to be a doctor, but I did not enjoy the prerequisite classes. I started working at Baylor right out of college while I got my masters, and the rest is history.

What do you like most about your job?

I love getting to work with all the different people, whether it be patients, employees, or physicians. I also love the variety. I never know what my day will look like and there is always some new challenge to try and tackle.

Is there anything you would tell someone thinking about going into your profession?

Try as many things as you can when you are starting out because you will learn a lot. There are things that I have learned along the way that might not directly impact my day to day, but help give me a better understanding of the whole patient care process.

What do you like to do when you're not working? Prior to having a baby at the end of 2022, I loved to run and travel. Since Lauren was born life is a little different so we have been going for walks, singing songs, and working on rolling over!



PATIENT STORY

Surgery Patient Gives Back to Hospital Where Her Life was Saved - Twice

Minnie Booker, a Houston native, says she is forever grateful for the Baylor Medicine surgeons and Baylor St. Luke's Medical Center for saving her life—twice.

Booker says she had trouble breathing just from walking in 2018. She would walk to the bathroom while at work and have to sit and wait for 20 minutes just to catch her breath before going back to her desk. She finally went to the doctor to see what was happening. "I went to the doctor because of my difficulty breathing," Booker remembers. "He sent me to the ER and they immediately took me back for a cath." Booker underwent a successful coronary angioplasty and soon thereafter was exercising and had lost 47 pounds walking as much as five miles a day.

A recurrent episode of shortness of breath during an exercise class a year later led her to think it must be her heart again, but after consulting with her cardiologist and having tests done, she found out she had a mass in her chest. Dr. Shawn Groth, associate professor and interim chief of the David J. Sugarbaker Division of Thoracic Surgery, later removed what proved to be a non-cancerous chest tumor and she has done well ever since.

During her recovery, Booker was given a pillow. She thought, "I need to find out if I can donate pillows. I was going to buy some pillows but then decided to do more than that."



Grateful patient Minnie Booker and Alfredia Lee, first lady of Greater Vision Church, donate heart pillows for surgery patients

Booker ended up organizing a project that produced over 100 heart pillows for Baylor surgery patients. Enlisting the help of WOW Women's Ministry of Greater Vision Church, a women's group at her church, she gathered donations to buy fabric and recruited volunteers to sew the heart pillows.

"I created the project because I wanted to give back something to these extraordinary surgeons who saved my life twice and just spread as much love as I can" - Patient Minnie Booker

She donated the pillows to Baylor St. Luke's Medical Center but hopes to grow the efforts into a nonprofit and take pillows to Texas Children's Hospital, Houston Methodist Hospital and Memorial Hermann.

"I created the project because I wanted to give back something to these extraordinary surgeons who saved my life twice and just spread as much love as I can," Booker says.

Honors and Awards



Carolyn Chen, Ethan D'Silva, Laurynn Garcia, Srinithya Gillipelli, Anna Jang and Bhavesh Sayal - 2023 Michael E. DeBakey Department of Surgery American College of Surgeons Travel Scholarship to support their travel to the clinical congress in Boston this October.

Swathi Balaji, Ph.D. - \$1.6 million NIH R01 grant for the project "Differential changes in energy metabolism in response to mechanical tension give rise to human scaring heterogeneity."

Paige Brlecic, M.D. - Clifford Van Meter Award for the best scientific paper at the Southern Thoracic Surgical Association annual meeting for her paper "Socioeconomic Status Impacts Readmission after Valve Replacement for Infective Endocarditis."

E. Ramsay Camp, M.D. - \$3.2 million NIH grant for "Defining the role of tumoral MHC Class I Expression in Mediating Colorectal Cancer Racial Disparities" and \$125,000 grant from the National Pancreatic Cancer Foundation to support general research.

E. Ramsay Camp, M.D., and Hyun Sung Lee, M.D., Ph.D. - Bench to Bedside Research pilot awarded by the Dan L Duncan Comprehensive Cancer Center for "Targeting Cell Cycle Alterations to Enhance FOLFIRINOX for Pancreatic Cancer."

Nilesh Chitnis, Ph.D. - American Society of Transplantation Transplant Diagnostic Community of Practice Travel Award for project "Detecting Chimerism following Lung Transplant with Graft vs. Host Disease." Rachel W. Davis, M.D. - Humanitarian Award from Baylor College of Medicine.

Rachel DeHoog, Ph.D. - Tumor Markers and Cancer Diagnostics Division Abstract Award by the American Association for Clinical Chemistry (AACC) Tumor Markers and Cancer Diagnostics Division and Distinguished Abstract Award by the AACC Academy for her abstract "Preoperative Classification of Thyroid Nodules by Desorption Electrospray Ionization Mass Spectrometry Imaging of Fine Needle Aspiration Biopsies."

Livia Eberlin, Ph.D. - Top 25 innovator and trailblazer over the last decade Analytical Scientist Power List.

Derek Erstad, M.D. - \$50,000 grant from Michael E. DeBakey Veterans Affairs Medical Center for project "Characterizing Microvascular Invasion in Hepatocellular Carcinoma to Optimize Surgical Margins."

Ramiro Fernandez, M.D. - Advancing Clinical Excellence Grant from Baylor College of Medicine and Baylor St. Luke's Medical Center for his project "Enhancing patient mobilization in the postoperative period." Andy Espinoza, M.D. - \$120,000 NIH grant for project "Defining Protein Signature of Vascular Invasion in Hepatoblastoma."

Graci Finco, Ph.D., CPO - Board of Directors for The Orthotic and Prosthetic Foundation for Education and Research.

Jaymie Henry, M.D., M.P.H. - Outstanding Young Thomasian Physician Award from the University of Santo Tomas Faculty of Medicine and Surgery.

Hyun Sung Lee, M.D., Ph.D. - \$675,000 grant from the Helis Medical Research Foundation for project "Unraveling NK-like CD8 T Cell Dynamics for Advancing Precision Immunotherapy."

Atif Iqbal, M.D. - Professional Educator Appreciation and Recognition (PEAR) Award and Power of Professionalism (POP) award from Baylor College of Medicine.

Lubna Khan, M.D. - Operation Giving Back Resident Scholarship from the American College of Surgeons.

Yanming Li, Ph.D. - American Heart Association Council on Arteriosclerosis, Thrombosis and Vascular Biology Scientific Sessions Travel Grant for Early Career Investigators Award to show her abstract "Dynamic Phenotypic Transition Of Smooth Muscle Cells During Human Ascending Thoracic Aortic Disease Progression: From Compensation In Aortic Aneurysm To Decompensation In Aortic Dissection."

Keziah Liebenberg - Clinical Translational Science Division Abstract Award for outstanding research in translational medicine by the American Association for Clinical Chemistry Clinical Translational Science Division for her abstract "Performance of the MasSpec Pen for intraoperative margin evaluation during breast conserving surgeries." Nandan Kumar Mondal, Ph.D. - 2023 Michael E. DeBakey Department of Surgery Faculty Research Grant for his project "Prognostic Biomarkers of Infection in Heart Failure Patients with Mechanical Circulatory Support: Novel Application of Machine learning (ML) technology."

Bijan Najafi, Ph.D., Ph.D. - \$2.8 million NIH grant for the study "A Multi-Modal Wearable Sensor for Early Detection of Cognitive Decline and Remote Monitoring of Cognitive-Motor Decline Over Time."

Latresha Parker - Power of Professionalism (POP) award from Baylor College of Medicine.

William "Chris" Pederson, M.D. - elected a fellow of the American Surgical Association.

R. Taylor Ripley, M.D. - \$75,000 grant from The DeGregorio Family Foundation.

Alastair Thompson, M.D. - Sir Peter Freyer Medal at the Sir Peter Freyer Memorial Lecture and Surgical Symposium in September.

Sanjeev Vasudevan, M.D. - \$675,000 from the Helis Medical Research Foundation for his project, "Predicting chemoresistance and establishing targeted combination therapy for high-risk pediatric liver cancer."

Ashley Waldon, PA-C - Professional Educator Appreciation and Recognition (PEAR) Award.

Feibi Zheng, M.D., M.B.A. - Power of Professionalism (POP) award from Baylor College of Medicine.

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