

IN THIS ISSUE

Shaping Surgical Leaders

Simulation and Robotic Labs Strengthen Learning Experience

Global Perspective: International Rotation Highlights

New Era of Innovation and Collaboration Gives Rise to Beneficial Hybrid Approaches

Research Spotlight on Jean Marie Ruddy, M.D.

...and more.

MESSAGE FROM THE CHAIRMAN



As we continue to strengthen and align our surgical leadership, Marc R. Katz, M.D., M.P.H. accepted the position of Chief of Cardiothoracic Surgery and is paving the way for collaborative, innovative and less invasive surgeries that will improve patient care in South Carolina.

Our scientific commitment continues to strengthen as well. New funding includes these recent notifications: Nancy DeMore, M.D., FACS, Department of Defense \$1.5M 2017 Breast Cancer Research Program (BCRP)

Breakthrough Funding Level 2 – Partnering PI Option Award, Mike Yost, Ph.D., PI for the \$20M MADE in SC Award, and Dave Taber, Ph.D., PI in a \$1.5M R18 study to improve medication adherence through pharmacy-led Telehealth from the US Department of Health & Human Services.

Our faculty are deeply committed to enhancing surgical resident education. In this issue we delve deep into the many ways our residency training provides an excellent clinical experience focused on compassionate care, a broad spectrum of research opportunities, and innovative training.

We realize the opportunity to educate the surgeons of the future is in harnessing the talent and energy of the current generation onto the solid foundations of the past. There is no better example that defines this exceptional foundation than Dr. Randy Bradham, who led an exemplary life of service to the surgical profession, the military, and the community-at-large.

We celebrated Dr. Bradham and his many contributions at the Distinguished Alumnus Luncheon in June, where he was presented the H. Biemann Othersen, Jr., MD Distinguished Alumnus Award.

Dr. Bradham's legacy of commitment to excellence and professionalism in surgical training and patient care continues through the establishment of the R. Randolph Bradham MD Endowment for the Enhancement of Surgical Education.

We highlight the important ways our residents are benefiting from this Endowment and how you, too, can support our efforts in preparing our residents to serve as the next era of surgical leaders, acting at all times with integrity and trust.

During this holiday season, my thoughts turn gratefully to those who have made our progress possible. I wish you and your loved ones a happy and healthy New Year.

Please stay in touch.

A handwritten signature in black ink, appearing to read 'Baliga'.

Prabhakar Baliga, MD, FACS

Fitts-Raja Professor of Surgery

Chairman, MUSC Department of Surgery



FALL 2017

SAVE THE DATES

DECEMBER 4, 2017

Southern Surgical Faculty
and Alumni Reception
Homestead, VA

FEBRUARY 1-3, 2018

International Chronic
Pancreatitis Symposium
Hyatt Place, Charleston, SC

FEBRUARY 10, 2018

Southeastern Surgical Faculty
and Alumni Reception
Tampa, FL

MARCH 13, 2018

Marion Anderson Lecture
MUSC Campus

MARCH 16, 2018

College of Medicine Alumni
Weekend & *Curtis P. Artz*
MUSC Surgical Society Reception

APRIL 10, 2018

Kredel-Springs Lecture
MUSC Campus

APRIL 26-28, 2018

47th Annual Postgraduate
Course in Surgery
Hyatt Place, Charleston, SC

MAY 21, 2018

2nd Chance Golf Invitational
and Celebration Reception
Seabrook Island, SC

CME COURSES

Up-to-date CME Course
information can be found at
www.musc.edu/surgery/events

COVER: Dr. Jean Marie Ruddy congratulates Surgery Research Day Basic Science award winners Kunal Patel, M.D. PGY-3, first place (right) and medical student Daniel Allen, second place.

NEWS & ANNOUNCEMENTS



Andrea Abbott, M.D. named consortium PI on an RO1 for a National Cancer Institute Community Oncology Research Program (NCI NCORP) grant and consortium PI on a Rapid Cycle PCORI grant.



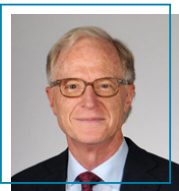
Katherine Morgan, M.D. honored with 2017 MUSC Foundation Outstanding Clinician Award.



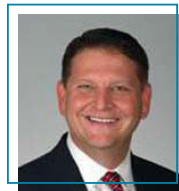
Satish Nadig, M.D., Ph.D. is co-editor of the new book “Technological Advances in Organ Transplantation.”



Michael Yost, Ph.D. named co-PI of a statewide group that has been awarded a \$20M grant from the National Science Foundation entitled: MADE in SC.



David B. Adams, M.D. named 2017 President of Southeastern Surgical Congress.



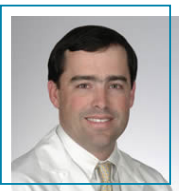
Bruce Crookes, M.D. named 2017 President of the Eastern Association for the Surgery of Trauma.



Nancy DeMore, M.D. selected to the Top 10 Medtech Women in the Southeast and named PI on the Department of Defense Breast Cancer Research Program (BCRP) Breakthrough Funding Level 2 – Partnering PI Option Award.



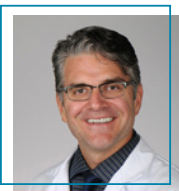
Rupak Mukherjee, Ph.D. received notification of a patent issued for a composition for modifying myocardial infarction expansion.



E. Ramsay Camp, M.D. selected as Hollings Cancer Center’s Junior Clinical Scholar.



David J. Taber, PharmD, M.S., received the 2017 Distinguished Investigator Award from the American College of Clinical Pharmacy, a VA Merit Award: Improving Transplant Medication Safety through a TEchnology and Pharmacist Intervention (ISTEP), and was named PI in an R18 study to improve medication adherence through pharmacy-led Telehealth from the US Department of Health & Human Services.



Derek DuBay, M.D. named consortium PI for the R-39 study entitled “Kidney Paired Donation: A Randomized Trial to increase Knowledge and Reduce Perceived Barriers” and site PI for an NIH RO1 entitled “Reducing disparities in living donation among African Americans.”

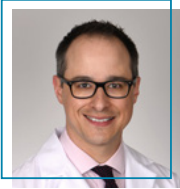
ANDREA ABBOTT M.D. EARNS CERTIFICATION FOR HIDDEN SCAR™ BREAST CANCER SURGERY



Dr. Andrea Abbott has been certified as a Hidden Scar Trained Surgeon for Hidden Scar™ Breast Cancer Surgery. Dr. Abbott is among the first in South Carolina to perform this advanced approach to breast cancer surgery that hides scars.

According to Dr. Abbott, “Hidden scar surgery provides a woman the opportunity to preserve the natural look of her breast without a visible scar, while not compromising outcomes. At a time when patients can feel like they have very few choices, this procedure allows women to have control over their bodies.” ♦

NEW FACULTY



Barry Gibney, D.O.
Assistant Professor
Division of Cardiothoracic Surgery



Laura Hollinger, M.D.
Assistant Professor
Division of Pediatric Surgery



Mahsa Javid, M.D., Ph.D., FRCS
Assistant Professor
Division of Oncologic and
Endocrine Surgery



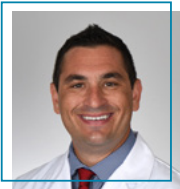
William Lancaster, M.D.
Assistant Professor
Division of GI & Laparoscopic Surgery



Angello Lin, M.D.
Clinical Assistant Professor
Division of Transplant Surgery



Lucian Lozonshi, M.D.
Professor
Division of Cardiothoracic Surgery



Mathew Wooster, M.D.
Assistant Professor
Division of Vascular Surgery



Sanford Zeigler, M.D.
Assistant Professor
Division of Cardiothoracic Surgery

HEART CENTER EARNS THREE-STAR RATING FOR CONGENITAL HEART SURGERY



Scott M. Bradley, M.D.
Professor
of Surgery

MUSC Children's Heart Center has once again earned a distinguished three-star rating from The Society of Thoracic Surgeons (STS) for its patient care and outcomes in congenital heart surgery and is proud to be ranked 11th in U.S. News & World Report's Best Children's Hospitals 2017-18 specialties rankings.

The three-star rating, which denotes the highest category of quality, places MUSC Children's Heart Center among the elite for pediatric heart surgery in the United States and Canada.



Mino N. Kavarana, M.D.
Associate Professor
of Surgery

According to Dr. Scott Bradley, head of the Pediatric Section in the Division of Cardiothoracic Surgery at MUSC, almost all centers that perform pediatric heart surgery in the U.S. participate in this Database.

"Dr. Kavarana and I are excited to see MUSC Children's Heart Center has once again earned a distinguished three-star rating," said Dr. Bradley. "Our entire pediatric cardiac team is pleased with our group's achievement." ♦

“OUR ENTIRE PEDIATRIC CARDIAC
TEAM IS PLEASED WITH
OUR GROUP'S ACHIEVEMENT.”

—SCOTT BRADLEY, M.D.

NEW ERA OF INNOVATION AND COLLABORATION GIVES RISE TO BENEFICIAL HYBRID APPROACHES

Dr. Prabhakar Baliga announced Dr. Marc R. Katz, Professor of Surgery, is appointed Chief of the Division of Cardiothoracic Surgery. Dr. Katz joined the Department in December, 2016 as Professor of Surgery. A nationally-renowned surgeon, during his career in adult cardiac surgery he performed the first combined heart-kidney transplant in the eastern U.S., the first left ventricular assist device in Virginia, and has been a pioneer in minimally invasive and robotic heart surgery.



Marc R. Katz, M.D., M.P.H. Chief of the Division of Cardiothoracic Surgery

that’s not common in other places,” comments Katz. “That’s our focus right now -- finding collaborative approaches to provide the highest quality of care through the least invasive means.”

“It’s a great opportunity for patients. It affords them options by experienced people who are not just learning it but who have been teaching it and doing it for years.”

In addition to growing in scope of services, the heart and vascular care team is growing in numbers.

His experience is paving the way for new, innovative, and collaborative procedures at MUSC. In May, he performed the first robotically-assisted mitral valve surgery in South Carolina.

He credits the foundation of the program, built by Dr. Fred Crawford, for creating the strong infrastructure that allowed for rapid progress in such a short period of time. But it’s more than being an innovator in minimally invasive procedures – it’s also being a collaborator with other leaders in the field.

At MUSC, he’s teamed up with Dr. Daniel Steinberg, a renowned interventional cardiologist, and Dr. Ravi Veeraswamy, a national leader in vascular surgery. Together they are developing hybrid approaches at MUSC.

“There are other places that do transcatheter valve replacements (TAVR) and transthoracic endovascular aortic replacement (TEVAR), but it’s more about how well the three of us work together

“WE ARE NOW ABLE TO OFFER PATIENTS A BREADTH OF OPTIONS: MEDICAL THERAPY, TRADITIONAL OPEN HEART SURGERY, ROBOTIC SURGERY AND TRANSCATHETER VALVE PROCEDURES. AND WE’RE DOING THINGS ESPECIALLY IN THE LAST TWO CATEGORIES THAT NOBODY ELSE IN THE REGION IS ABLE TO CURRENTLY OFFER.”

—MARC R. KATZ, M.D., M.P.H.

Lucian Lozonschi, M.D., Barry Gibney, D.O., and Sanford Zeigler, M.D., recently joined the Division of Cardiothoracic Surgery. Mathew Wooster, M.D., recently joined the Division of Vascular Surgery.

Dr. Lozonschi served as the Director of Heart Transplantation at the University of Wisconsin-Madison for over six years. He also led the TAVR and robotic program and invented the TENDYNE-TMVR valve.

Dr. Gibney completed his thoracic surgical residency at Brigham and Women’s Hospital, a teaching affiliate of Harvard Medical School.

Dr. Wooster received his medical degree from MUSC and attended the University of South Florida during his integrated vascular surgery residency.

Dr. Zeigler earned his medical degree from MUSC and completed his internship and residency training at Stanford University in its Integrated Cardiothoracic Surgery program. ♦



Ravi Veeraswamy, M.D. Chief of the Division of Vascular Surgery

ACADEMIC EXCELLENCE

The MUSC Department of Surgery creates an educational environment that attracts the country's best future surgeons and provides excellent medical student education. The scope of the program includes general surgery, and integrated programs in vascular, cardiothoracic and plastic surgery.

"We take great pride in our long history of resident and medical student education," said E. Douglas Norcross, M.D., Vice Chair of Education. "In the past 20 years, 98% of residents have received their fellowship of choice."

"Our graduates have gone on to surgical fellowships at some of the most prominent programs in the country, including Stanford, MD Anderson, Duke, Emory and Mayo Clinic," adds Christian Streck, M.D., General Surgery Education Program Director. "The preparation they receive allows them to hit the ground running when they enter fellowship or a community-based practice."

And this year, the Division of Plastic and Reconstructive Surgery achieved a new milestone – an integrated, six-year residency program, fully accredited by the Accreditation Council on Graduate Medical Education. The integrated plastic surgery program introduces plastic surgery training earlier into the resident's career, starting at the intern level. "The program draws a high caliber of medical students," said M. Lance Tavana, M.D., Plastic Surgery Residency Program Director. "This year we received over 230 applications for one residency spot." ♦



SHAPING SURGICAL LEADERS

The new generation of surgical learners is poised to move the field into the next era and require unique and innovative methods to do so. As surgical educators, our faculty rise to the challenge, recognizing it is not merely a requirement that we oblige but both a responsibility and a privilege. To that end, our residency training provides an excellent clinical experience, a broad spectrum of research opportunities, and innovative training. ♦

“MY MENTORS AT MUSC, LIKE NANCY DEMORE, M.D., WERE TOP NOTCH. DR. DEMORE REALLY SET THE BAR HIGH FOR ME – JUST WATCHING HER INTERACT WITH PATIENTS WAS REMARKABLE.”

**—VIVIAN BEA, M.D.,
A 2016 ALUMNA WHO COMPLETED
HER BREAST SURGERY FELLOWSHIP
AT MD ANDERSON THIS SUMMER.**

UNIQUE LEARNING OPPORTUNITIES

In addition to plenty of time in the OR and clinic, resident education includes Surgery Research Day, a state of the art simulation lab, daVinci Xi robotic training, a Named Lectureship Series, an ACGME-approved International Rotation, and rotations at McLeod Regional Medical Center in Florence, Trident Hospital in North Charleston and Roper Hospital in downtown Charleston. Other resident education opportunities include participating in the city-wide journal club and presenting at regional and national meetings. ♦

SURGERY RESEARCH DAY HIGHLIGHTS RESIDENT RESEARCH

Dr. Jean Marie Ruddy, Assistant Professor of Surgery, leads the efforts to coordinate Surgery Research Day, designed to showcase and celebrate the exceptional research work in which our resident and student investigators participate. As a young MUSC surgical resident, Dr. Ruddy spent two years in the Cardiovascular Research Lab under the mentorship of Dr. John Ikonomidis and Dr. Jeffrey Jones. In 2009 and 2010, Dr. Ruddy was a Surgery Research Day Award Winner.

“Coordinating Surgery Research Day over the past couple of years has been a great opportunity to not only learn about the fascinating projects pursued by our colleagues, but also to provide meaningful recognition to our hard-working residents,” said Dr. Ruddy. “Ideally, these successes will reinforce and expand the culture of academic investigation in the Department of Surgery at MUSC.”

Each year, eight students present their

work to three guest judges, who select the top two presentations in both Basic and Clinical Science, with the goal to stimulate the students to pursue additional research endeavors.

Surgery Research Day is also an opportunity for faculty and residents to stay abreast of the latest data and research during the Eric R. Frykberg, M.D. Lecture, a named lecture in memory of Dr. Frykberg, an MUSC Surgical alumnus who built a brilliant and productive career that made the practice of surgery safer, better, and smarter.

This year, Dr. Harvey Pass, MUSC Cardiothoracic Surgery Residency Class of 1982, Stephen E. Banner Professor of Thoracic Oncology in the Department of Cardiothoracic Surgery and Vice Chair for Research for the Department of Cardiothoracic Surgery at the NYU Langone Medical Center, presented his research on biomarker signatures for lung cancer and mesothelioma. Dr. Harvey Pass is a renowned thoracic surgeon who

is a leader in mesothelioma research.

After the lecture, Dr. Pass served as guest judge for Research Day. “I was very impressed with the quality of the research,” said Dr. Pass. “I’ve participated in many resident research presentation sessions, and this was by far one of the best programs.”

Two MUSC faculty also served as judges. Jeffrey Jones, Ph.D., Associate Professor of Surgery in the Division of Cardiothoracic Surgery and Katherine Morgan, M.D., Professor of Surgery and Chief in the Division of GI Surgery.

Once the scores were tallied, the winners were announced. In the Clinical Science category, Administrative Chief Resident Ashley Hink, M.D. PGY-5 and Integrated Vascular Surgery Resident, Matthew Gibson, M.D. PGY-5 tied for first place. In the Basic Science category, Kunal Patel, M.D., PGY-3 received the first-place award and first-year medical student Daniel Allen took second. ♦



Faculty and residents mingle during the Surgery Research Day.



Left to right: Kunal Patel, M.D., Jeffrey Jones, Ph.D., Katherine Morgan, M.D., Harvey Pass, M.D., Jean Marie Ruddy, M.D., Ashley Hink, M.D., Matthew Gibson, M.D. Missing: Daniel Allen

A ROBOTIC REVOLUTION



Dr. Rana Pullatt guides 2017 Chief Resident Jessica Taylor, M.D., on operating the da Vinci Xi surgical system.

For fourth and fifth year residents, the da Vinci Porcine Lab provides exposure to the new Xi technology, allowing participants to actively utilize the advanced energy and stapling devices on live tissue and experience first-hand the integrated table motion that is now possible with the da Vinci Xi surgical system.

“The MUSC Department of Surgery is one of the few programs that offer a structured Robotic Surgery Curriculum, which culminates in the graduating chief residents obtaining a certification attesting to Robotic Surgery competence,” said Dr. Rana Pullatt, Director of Robotic Surgery.

“Thanks to simulation training efforts by Drs. Abbott & Pullatt as well as time on the MIS service with Dr. Pullatt, I had great exposure to complex laparoscopic and robotic surgery which has aided my transition into fellowship.” Crystal Johnson-Mann, M.D., 2017 Chief Resident and now a Minimally Invasive Surgery Fellow at the University of Virginia. ♦

SIMULATION AND ROBOTIC LABS STRENGTHEN LEARNING EXPERIENCE

Every Tuesday morning a small group of surgical residents gather in the 11,000 square foot dedicated Simulation Center to hone their technical and cognitive skills. According to Dr. Andrea Abbott, Director of Simulation Training and Associate Program Director for the General Surgery Residency Program, the small groups allow for individualized attention, strengthening the learning experience. The Center provides mannequin-based scenarios where residents can train on trauma, intubation, and ultrasound technique in addition to laparoscopic, endoscopic and robotic procedures.

The Fundamentals of Laparoscopic Surgery (FLS) is a web-based education module that incorporates a hands-on skills training

component and assessment tool designed to teach the physiology, fundamental knowledge and technical skills. The residents also learn the Fundamentals of Endoscopic Surgery (FES). Both FLS and FES certification are required to sit for the Board.

This year, new software was purchased to provide a comprehensive solution to learning and training in Flexible Endoscopic Skills, for both Surgery and Gastroenterology.

The software was funded by the generous support of donors to the R. Randolph Bradham MD Endowment for the Enhancement of Surgical Education. ♦



IN THE LOUPES

“ I RECENTLY RECEIVED MY LOUPES AND IT WAS INCREDIBLE HOW A WHOLE NEW DEPTH OF DEFINITION WAS REVEALED THAT MADE OPERATING MORE FUN AND EDUCATIONAL. ”

—DENISE GARCIA, M.D. PGY-2

As residents enter their second year of surgical training, the focus turns to developing more advanced technical skills in general surgery. These more complex and specialized procedures often require magnification using binocular loupes.

Quality, custom made loupes are a costly but necessary part of the second year of residency. On average, quality loupes cost about \$1200.

For the past three years the *Curtis P. Artz* MUSC Surgical Society has provided loupes to all second-year residents. Funding is made possible through the generous supporters of the MUSC Surgical Resident Research and Education Fund.

In addition to funding the loupes, the Society arranges for the industry representative to meet with the residents on campus for selection and customization of their loupes, reducing their stress both financially and logistically. ♦



Left to Right: Chase Arbra, M.D., Starr Friedman, M.D., Kevin Tyler, M.D., Prabhakar Baliga, M.D., Chairman



Jane Kilkenny, M.D., Nicholas Ward, M.D., Benjamin White, M.D., and Doris Kim, M.D. select their loupes

A REINVIGORATED JOURNAL CLUB CREATES NEW OPPORTUNITIES



“ THE JOURNAL CLUB HAS SIGNIFICANTLY IMPROVED IN THE PAST COUPLE OF YEARS. WE NOW HAVE A BETTER ENVIRONMENT FOR LEARNING AND TEAM BUILDING THAT WAS NOT THERE BEFORE. ”

—KEVIN TYLER, M.D., PGY-4.

The Department of Surgery’s Journal Club has morphed into a city-wide gathering, where surgeons from the region are invited to attend. The new structure allows residents and faculty the opportunity to network with other doctors in the community in venues more welcoming, creating a team building atmosphere among the attendees.

Pamela Sloat, Development Coordinator for the Department of Surgery, worked with the MUSC Compliance Team and industry representatives to identify the best practices for this expansion. The new model includes an independent volunteer who is neither connected to MUSC nor industry, to plan the city-wide meetings.

“Thanks to Pam’s efforts, we now have a much more engaged group during Journal Club,” notes Christian Streck, M.D., Director of the General Surgery Education Program at MUSC. “The faculty and residents look forward to these meetings, which are now held at restaurants around the city.”

This past September, the *Curtis P. Artz* MUSC Surgical Society hosted the Journal Club at Prohibition Restaurant on King Street to discuss current issues in transplantation. The more social aspect of the newly reorganized Journal Club hasn’t gone unnoticed by the residents. ♦

GLOBAL PERSPECTIVE



Worldwide, as fewer people are dying of malnutrition and communicable diseases, new challenges arise for the approximately five billion people who are without access to timely, safe, affordable surgery. The lack of surgical care can lead to acute, life-threatening complications. Surgically treatable conditions – such as complications in childbirth, injuries, intra-abdominal injuries and symptomatic hernias – contribute to premature deaths or ill health in the poorest of the world’s population.

An ACGME approved international rotation for MUSC general surgery residents to travel to Cameroon, West Africa was established to prepare surgical trainees to meet these challenges of the modern era of global medicine. This one-month international elective rotation is designed not only to expose the residents to the diversity and intensity of surgical disease in resource-poor areas of the world but also to better their understanding of some of the active ways they can affect change.

“Our elective rotation is purposefully located in a teaching institution,” said Christian Streck, Program Director, MUSC General Surgery Resident Education. “Mbingo Baptist Hospital has a surgical residency program, training African surgeons to work in their own countries. The opportunity to meet and work with these residents is invaluable to our U.S. residents as they learn how they can make a difference in this rapidly changing and interconnected world.”

2017-18 Chief Residents Ashley Hink, M.D., and Rohan Kambeyanda, M.D. were selected for the 2016 inaugural year. The residents gained exposure to diseases and treatment approaches not typically seen in the U.S., and learned how to carefully utilize scarce resources to provide effective surgical care. According to Dr. Kambeyanda, the international rotation does so much for breaking down barriers of understanding access of care in resource poor areas of the world.

“It was profound how not only illness affects the rural population in developing countries but also how healthcare molds them. These are farm people – any injury or trauma can ruin them economically,” he comments. “Having access to a hospital is critical to their survival in so many ways. They bring their own caregivers, sell farm animals to pay for care, some traveling for days from other countries just to receive essential care.”

Dr. Hink adds, “Seeing surgery in a low resource setting really helped me become more adaptable. We learned how to make things work with fewer resources, a valuable skill in trauma and disaster settings.”

By working side-by-side with other trainees, they were able to impart their knowledge and make a difference. “They are good surgeons, but needed help with peri-operative care.” comments

“ I’M HUMBLED TO HAVE THE GLOBAL EDUCATION FUND AT MUSC BE A PART OF MY LEGACY. ”

—WILLIAM RAMBO, M.D.

Dr. Hink. “We could provide that for them. And by doing so, we developed better leadership skills with a broader view of the developing world.”

“Moving forward, if we can continue to send our residents to Mbingo, we can establish educational programs, projects and outreach to empower their medical providers, which will help advance their standard of care,” she adds.

While recognizing the value of the program, it is not without challenges to a young resident. Both spoke about the added finances needed for this rotation – ranging from air fare, that often runs into the thousands of dollars, to vaccinations they are required to receive, to room and board during the rotation. The costs can add up quickly and external funding helps.

Dr. James Brown, Chief of Surgery and Surgical Residency Program Director at Mbingo Baptist Hospital works with and trains the residents during their international rotation. He concurs that the best use of funds is to offset the costs of American surgical residents attending the international rotation.

At MUSC, The William Rambo, MD Global Education Fund, named in honor of Dr. William Rambo, an MUSC surgeon who mentored Dr. Brown during medical school in the 1970’s, is newly established with this purpose in mind.

“Until I met Dr. Rambo, I wasn’t so sure Surgery was the right calling for me,” said Brown. “As soon as I spent time on Dr. Rambo’s rotation and witnessed his servant attitude and truly compassionate care, I knew that he was the type of surgeon I wanted to emulate.” The son of healthcare missionaries, Dr. William Rambo spent a lifetime committed to medical excellence along with a stalwart Christian faith. Upon retiring from MUSC, Dr. Rambo and his wife, Lydia Engelhardt, M.D., decided to embark on a journey of healthcare mission work. Since 1999, they have made over 38 trips, serving in 18 hospitals in 11 countries overseas.

“I’m humbled to have the Global Education Fund at MUSC be a part of my legacy,” said Dr. Rambo.

At Mbingo, trainees come from all areas of Africa. Once their five-year program is completed, the new African surgeons return home to care for their community. According to Dr. Brown, both the quality of care and scope of care has improved across Africa as a result. He notes that while the priority is providing training to the African population, having U.S. residents on a surgical rotation really helps.

Dr. Brown says having American residents attend the international rotation benefits both the African and American trainees but in different ways. The African trainees learn more

innovative ways to care for patients, while the state-side trainees have an opportunity to strengthen their hands-on care. “In Africa, without all of the advances in technology at our disposal, we rely on the physical exam to tell us what to do next,” he explains. “By strengthening the visual exam process we practice daily, the American residents leave our program as more well-rounded trainees.”

“They come to work and work hard,” he notes. “As awareness of an increased need for global surgery rises, the program continues to grow and become more competitive.”

Dr. Brown’s relationships with both MUSC and Dr. Rambo remain steadfast. “We plan to not only continue to partner with MUSC as an affiliate program – but to see the program grow and flourish.” ♦



James Brown, M.D. reconnects at MUSC with his mentor and long-time friend William Rambo, M.D. during a trip back to the U.S.

“ I’M CONFIDENT THAT FUNDING OF THIS PROGRAM WILL NOT ONLY INCREASE THE STANDARD OF CARE IN RESOURCE-POOR AREAS, BUT WILL AMPLIFY THE RESIDENT EDUCATION EXPERIENCE AT MUSC. ”

–WILLIAM RAMBO, M.D.

To support The William Rambo, MD Global Education Fund
visit <https://connect2.musc.edu/surgery>

REGIONAL, NATIONAL, & INTERNATIONAL OPPORTUNITIES OFFER GROWTH

Presentations are an effective and important way for residents to discuss their findings at regional and national and international conferences. In 2016 – 17, several residents had the opportunity to present their research. Here is a sampling:

Ashley Hink, M.D. PG-Y 5, Resident Winner for the 2017 Oriens Essay Award for Careers in Trauma and Acute Care Surgery, gave an oral presentation of her award-winning essay at the 2017 EAST Oriens Award Session held during the 30th EAST Annual Scientific Assembly, in Hollywood, Florida.

Kunal Patel, M.D., PGY-3, gave an oral presentation on his abstract “Complement inhibition in brain dead donors mitigates post-lung transplantation inflammation and injury in a murine model” at the 10th Aegean Complement Therapeutics Conference held in Crete, Greece.

Tahlia Weis, M.D., who graduated in May from the integrated vascular surgery residency program, presented her paper “The Current Risk-Benefit Outlook for Endovascular vs. Open Surgical Bifurcated Aortoiliac Arterial Reconstruction Therapy for Aortoiliac Occlusive Disease” at the 2017 Vascular and Endovascular Surgery Society Annual Meeting in Steamboat Springs, CO.

Three plastic surgery residents presented their research during Plastic Surgery – The Meeting, the annual meeting for the American Society of Plastic Surgeons (ASPS), in Orlando, Florida. The annual meeting is the premier educational and networking event for plastic and reconstructive surgeons.

- **Craig Moores, M.D.**, PGY-7, Plastic Surgery Resident presented “Free Microvascular Transfer of the Proximal Fibular Epiphysis to Reconstruct the Lateral Malleolus in a Pediatric Patient: A Case Report and Review of the Literature”
- **Adeyemi Ogunleye, M.D.**, PGY-8, Chief Plastic Surgery Resident, presented “Robotic-Assisted Deep Inferior Epigastric Artery Perforator (DIEP) Flap for Breast Reconstruction”

- **Kiandra Scott, M.D.**, PGY-2, Plastic Surgery Integrated Resident, presented “The Effects of Obesity on the Complication Rates after Breast Reduction.”

And our residents aren’t just getting noticed for their research. Their thoughts and opinions are reaching national audiences, as well.

- **Dr. Patel’s** Resident and Associate Society of the American College of Surgeons Symposium essay submission was awarded second place. It is published in the November 2017 issue of the American College of Surgeons Bulletin. The topic of this year’s Resident and Associate Society Symposium was Reframing Surgical Leadership in 2017: Surgeon-Scientist or Surgeon-Advocate?
- **Crystal Johnson-Mann, M.D.**, MUSC Surgical Alumna Class of 2017, had the opportunity to attend the ACS Leadership and Advocacy Summit last year. She offers an inside look at the Summit from a first-timer’s perspective in the article on the ACS website entitled “Reflections of a First Timer to the ACS Leadership and Advocacy Summit.”
- **Tahlia Weis, M.D.**, MUSC Surgical Alumna Class of 2017, was interviewed for the Residents’ Corner section of the April 2017 Issue of Vascular Specialist, the official publication of the Society for Vascular Surgery. Her article “Interview with a graduating categorical vascular surgery resident: Risks/benefits of 5-year training” expresses her experiences in the MUSC integrated vascular surgery program, the value of her mentors, and how the integrated program allowed her to grow and bond with her colleagues in both the Cardiothoracic and General Surgery programs. ♦

DISTINGUISHED ALUMNUS LUNCHEON HONORS R. RANDOLPH BRADHAM, M.D.



Mrs. Helen Bradham shares a laugh with Dr. Biemann Othersen.



MUSC President David Cole toasts Dr. Randy Bradham.



Department of Surgery Chairman Dr. Prabhakar Baliga expresses his gratitude to Dr. Bradham for his many contributions to our country, to MUSC and to surgical education.



Dr. Bradham catches up with his good friend, Mr. Thomas Waring.

Family, friends and colleagues gathered to celebrate Dr. R. Randolph Bradham's many contributions to our country, the field of surgery, and surgical education at the *Curtis P. Artz* MUSC Surgical Society Distinguished Alumnus Luncheon on June 12, 2017.

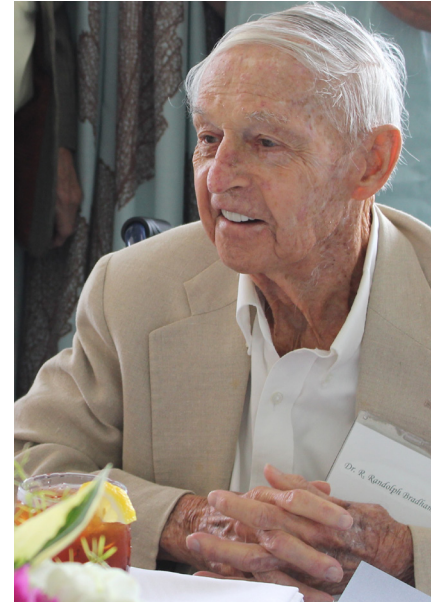
R. Randolph Bradham, M.D. served as MUSC's second full-time Chairman of the Department of Surgery, providing leadership during a critical time. Dr. Bradham's focus was to not only build a clinical department that set the standard for others, but to also build an exemplary surgical education program.

Dr. Bradham's leadership, passion and tenacity during such tumultuous times resulted in something so remarkable that it transformed the Department of Surgery at MUSC. His legacy continues with the establishment of the R. Randolph Bradham MD Endowment for the Enhancement of Surgical Education, honoring his commitment to excellence and professionalism in surgical training and patient care.

Dr. Biemann Othersen, Chairman of the *Curtis P. Artz* MUSC Surgical Society, presented the H. Biemann Othersen, Jr., MD Distinguished Alumnus award to Dr. Bradham, along with a toast to recognize his leadership, his fortitude and his life-long commitment to surgical excellence, compassionate care and resident education.

"I want to thank you very much for this award," Dr. Bradham said. Adding, with a chuckle, "I hope my high school teacher – who told me I'd never amount to anything – is listening."

His daughter, Elizabeth, thanked MUSC for recognizing his contributions and bestowing this honor upon him. ♦



R. Randolph Bradham M.D.

“The rapid advances in science and technology, the focus on patient safety and outcomes, and less time to do more, create challenges for today’s residency programs. The R. Randolph Bradham, MD Endowment for the Enhancement of Surgical Education is a transformational investment that will forever impact the education of surgeons and – most importantly – the care of countless future patients.”

—Prabhakar Baliga, M.D.
Chairman of the Department of Surgery



Dr. Baliga and Dr. Othersen enjoy a moment with Dr. and Mrs. Bradham.

CATCHING UP WITH VIVIAN BEA, M.D. MUSC SURGICAL ALUMNA, CLASS OF 2016

After completing her Breast Surgery Fellowship at MD Anderson, Vivian Bea, M.D. joined the MD Anderson Cancer Center at Cooper. “At MD Anderson, I trained with some of the best minds in the world. During my fellowship, every day was a pearl,” says Dr. Bea. “One of their missions at MD Anderson is to take this specialty training and use it out in the community — that’s why I thought the Breast Care Center at Cooper was such a good fit for me.”

MD Anderson Cooper Health Care System is one of the busiest sister locations at MD Anderson. Faculty from MD Anderson Houston visit every month providing a robust support and training network, allowing Dr. Bea to continue to tap into their world-class resources. An added benefit, the Health Care System is a hybrid approach to health care and she will serve on the faculty at Cooper University Medical School, where she plans to engage in resident and medical student education and continue her disparities in breast cancer research.

Dr. Bea feels fortunate for her MD Anderson training and attributes much of her success during her fellowship year to her surgical residency at MUSC. “Towards the end of my fellowship year, I was continually recognized for my excellent patient care. It was then I realized a strong foundation in surgical training is equally important to advanced intensive training,” she comments.

“Residents learn from what they see during daily interactions in the clinic, with team members, and with the health care system. For me, my mentors at MUSC, like Nancy DeMore, M.D., were top notch. Dr. DeMore really set the bar high



DR. BEA FEELS FORTUNATE FOR HER MD ANDERSON TRAINING AND ATTRIBUTES MUCH OF HER SUCCESS DURING HER FELLOWSHIP YEAR TO HER SURGICAL RESIDENCY AT MUSC.



“THIS SIMPLE ACT THAT DR. OTHERSEN TEACHES DURING HIS ‘BEE HIVE’ SESSIONS INSTILLS COMPASSION IN HIS TRAINEES. IT IS THE FOUNDATION OF THE EXCELLENT PATIENT CARE I WAS RECOGNIZED FOR DURING MY FELLOWSHIP AND CONTINUES WITH ME EVERY DAY IN MY SURGICAL PRACTICE.”

—VIVIAN BEA, M.D.
MUSC SURGICAL ALUMNA

for me — just watching her interact with patients was remarkable.”

“This year at MD Anderson, I quickly realized how the first few years of surgical education were so important. One of the lessons I learned very early on was from Dr. Othersen’s ‘Bee Hive’ Session. He would ask us “When you go into a patient’s room, what do you do?” He would then instruct us: “You introduce yourself, you wash your hands, and you *sit and listen to your patient.*”

According to Dr. Bea, the sitting part is so important. To the patient, you are telling them that the time you have right now is exclusively theirs. As the physician, you are connecting with the patient in a different way -- you are more present. “This simple act that Dr. Othersen teaches during his ‘Bee Hive’ sessions instills compassion in his trainees,” she comments. “It is the foundation of the excellent patient care I was recognized for during my fellowship, and continues with me every day in my surgical practice.” ♦

CELEBRATING 50 YEARS OF MEMBERSHIP AT ACS RECEPTION

Receptions are just one of the many ways the *Curtis P. Artz* MUSC Surgical Society helps connect our alumni, faculty and residents. Each year, the Society hosts numerous alumni events.

Prabhakar Baliga, M.D., FACS and H. Biemann Othersen, Jr. M.D., in conjunction with the South Carolina Chapter of the

American College of Surgeons (ACS), hosted one such reception this October at the San Diego Wine and Culinary Center, just steps away from the Convention Center.

More than 50 attendees reconnected with colleagues and friends – new and old – while enjoying selected wines and hors d'oeuvres.

Always a much anticipated reception, the highlight of the night came when Dr. Baliga announced the ACS's recognition of Dr. Othersen for his 50 year anniversary as an ACS member.

"Recognizing Dr. Othersen's 50 years in the ACS is a wonderful tribute to his grateful spirit and tireless support of the

surgical profession and resident education," said Dr. Baliga.

"It is through his leadership as Chairman of the *Curtis P. Artz* MUSC Surgical Society that we are able to cultivate an enduring relationship with our surgical residents, faculty and alumni." ♦



PEDIATRIC TRANSPLANT PICNIC STRENGTHENS BONDS, INSPIRES HOPE

The opportunity for children who experienced transplantation to meet kids just like themselves took place at a Halloween-inspired picnic on Saturday, October 28, at the James Island County Park. The picnic was filled with plenty of treats for the little ones, including a bounce castle, arts and crafts, and syringe painting. Families spent time reconnecting with their care team and had the opportunity to share stories with others facing similar challenges. The highlight of the day came during the inspirational talks.

Dr. Prabhakar Baliga provided a somber look into what it was like back in 1992 when he joined MUSC to start the pediatric liver transplant program. He said the situation was really grave for children in South Carolina who needed a liver transplant as there was no program here and they were required to go to Omaha, Nebraska for transplantation.

“Can you imagine the amount of hardship that put on the child and family during an already incredibly stressful time?” he asks the crowd. Just three months after he was brought in to start the program, he met Jill Rush, a thirteen-year-old girl who was in end-stage liver disease.

“Jill Rush took the bold step to have the courage to be the first pediatric liver transplant in South Carolina, providing the foundation to build the program into what it is today,” said Dr. Baliga.

Jill thanked Dr. Baliga for coming into her life at just the right time and recognized the 25 years of progress in transplantation. “I’m very grateful Dr. Baliga came here when he did,” said Jill. “I’m also grateful to those who chose to be donors, allowing Dr. Baliga to find the perfect liver for me,” she said.

“Transplant is such an amazing field – one of the few fields that really exemplify man’s humanity to man,” said transplant surgeon and Director of the Pediatric Transplant Program at MUSC, Satish Nadig, M.D., Ph.D. “Every day we go to work and do our job because someone was generous enough to donate an organ to save a life.”



Children, faculty and staff celebrate life at the MUSC Children’s Transplant Picnic on October 28, 2017.

Others spoke too. 17-year-old Will Swygert, who received a liver in 2016, and 15-year-old Mac Massie, who received a kidney in 2017 through a donor chain, spoke about how grateful they are. Both told the crowd how much improved their lives are now, inspiring hope to those new to the challenges of pediatric transplantation. ♦



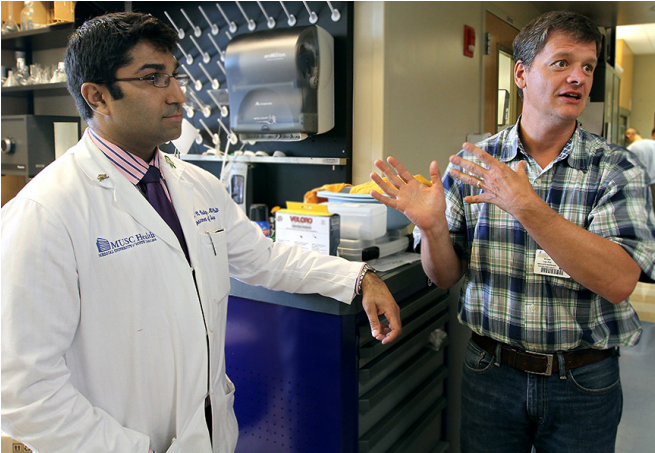
Left Photo: Mac Massey, kidney recipient as a result of a living donor kidney chain, and his transplant surgeon, Dr. Satish Nadig



Right Photo: Former patients Will Swygert and Jill Rush with Dr. Prabhakar Baliga and Dr. Satish Nadig

MADE IN SC

Staff Reporter, MUSC News Center



Dr. Satish Nadig and Dr. Michael Yost collaborate on research to help transplant patients have better outcomes.

NSF GRANT ESTABLISHES NEW RESEARCH INITIATIVE IN REGENERATIVE HEALING.

A team of researchers from 10 universities across the state, including some from the Medical University of South Carolina, has received a \$20 million, five-year grant from the National Science Foundation's Established Program to Stimulate Competitive Research (EPSCoR). The money will help establish a new initiative: Materials Assembly and Design Excellence in South Carolina, or MADE in SC.

Michael Yost, Ph.D., Vice Chairman of Surgery for Research, is one of the co-principal investigators for MADE in SC. Biomaterials are crucial in the advancement of regenerative healing, one of the most exciting waves of the future for medicine, he said.

Yost said MUSC will receive about \$2 million from the grant over five years. "This award provides a lot of resources that will be matched with state funds to create the infrastructure and knowledge base to be competitive in advanced materials worldwide." ♦

To read the full article visit musc.edu/news



SPOTLIGHT ON JEAN RUDDY, M.D.

After residency, she completed a Vascular Surgery Fellowship at Emory University and returned to MUSC to join the Division of Vascular Surgery in 2014.

There are daily opportunities for vascular surgeons to improve a patient's quality of life and they are frequently intervening to save both life and limb, but according to Dr. Ruddy, one of the most complex things vascular surgeons treat is abdominal aortic aneurysms.

Abdominal aortic aneurysms are most prevalent in men who have smoked, occur in approximately 7% of the American population, and may be asymptomatic until they rupture. Typically, surgeons do not see these patients until they are in the advanced stages of the disease.

"That's why there's been a national imperative to increase screening programs," said Ruddy. "Overall these have been effective in identifying patients with small aortic aneurysms. Unfortunately, there is no medical therapy currently available to alter the course of this disease. Therefore, patients fall into a process of serial imaging over years until their aneurysm grows large enough to warrant surgical intervention."

Although technology has improved a surgeon's ability to treat this disease with stents, Dr. Ruddy is far more interested to see what she can do to prevent these patients from needing surgery at all.

"The question I ask is, 'What can we do to have a meaningful medical intervention and help

these patients' live longer, healthier lives without the need for surgery?' I am primarily interested in tension related changes in the aorta, and -- more specifically -- how that relates to vascular inflammation and the development of abdominal aortic aneurysm disease."

Her research focuses on how one specific co-morbidity – hypertension – places patients at risk for abdominal aortic aneurysm disease and, more importantly, once that process has been initiated -- how can we intervene to stop it.

By following this line of inquiry, she hopes to identify specific molecular targets for pharmaceutical engineering and therefore identify opportunities to slow the growth of abdominal aortic aneurysms. ♦

Dr. Jean Marie Ruddy, Assistant Professor of Surgery, became interested in vascular surgery as a fourth year medical student at Jefferson Medical College in Philadelphia, PA. During residency, she completed two years of research in the MUSC Cardiothoracic Surgery Research Laboratory, and in 2008 she was awarded the American Heart Association's Vivien Thomas Young Investigator Award which acknowledges the accomplishments of early career investigators.

NANCY DEMORE, M.D. RECEIVES \$1.5M FUNDING FROM DEPARTMENT OF DEFENSE



Nancy DeMore, M.D.

Nancy DeMore, M.D., FACS received notification from the Department of Defense office of the Congressionally Directed Medical Research Programs (CDMRP) that she is recipient of the 2017 Breast Cancer Research Program (BCRP) Breakthrough Funding Level 2 – Partnering PI Option Award, entitled “Development of Novel Molecularly Targeted Therapy to Secreted Frizzled-Related Protein 2 for Breast Cancer.”

Dr. DeMore and Anne Marie Broome, Ph.D. are PIs for this prestigious award, of which only 4.3% of the applicants receive funding. The total amount is \$1.5M for the three-year grant.

The BCRP challenges the scientific community to design research that will address the urgency of ending breast cancer. Specifically, the BCRP seeks to accelerate high-impact research with clinical relevance, encourage innovation and stimulate creativity, and facilitate productive collaborations.

DeMore’s research is focused on secreted frizzled related protein 2 (SFRP2), which is found to be upregulated in tumor vessels. Dr. DeMore’s team conducted experiments that showed SFRP2 is a novel angiogenesis factor and is expressed in a wide variety of human malignancies, which was published in “Cancer Research” in 2009.

The team subsequently elucidated the mechanism for SFRP2 induced angiogenesis. Further research demonstrated proof of principle that antagonizing SFRP2 is a therapeutic strategy to inhibited tumor growth.

“Our goal is to complete toxicology studies and get into clinical trials,” DeMore said. “This funding propels us towards the development of new therapies for the treatment and potential cure for patients with metastatic breast cancer.” ♦



Anne Marie Broome, Ph.D.

DAVID J. TABER, PharmD, M.S. RECEIVES TWO PRESTIGIOUS AWARDS

David J. Taber, PharmD, M.S., Associate Professor of Surgery, was named the PI in R18 study entitled “Improving Transplant Med Safety through Pharmacist-Led, mHealth Based” from the US Department of Health & Human Services, Agency for Healthcare Research and Quality (AHRQ) Amount Awarded: \$1,492,135

The primary purpose of the Transplant Medication Safety through a Pharmacist-Empowered, Patient-Centered, mHealth-Based Intervention (TRANSAFE Rx) study is to demonstrate significant reductions in medication safety issues leading to reduced healthcare

resource utilization in kidney transplantation through a pharmacist led, mHealth-enabled, intervention.

Dr. Taber was also the recipient of a VA Merit Award entitled “Improving Transplant Medication Safety through a TEchnology and Pharmacist Intervention (ISTEP).” This study is a 24-month, prospective, multicenter, cluster-randomized controlled clinical trial at 10 sites, randomizing 5 sites to standard clinical care and 5 to standard care and the technology-enabled pharmacist intervention. The total amount of the award is \$942,157. ♦



SAME GAIN, LESS PAIN

By Kimberly McGhee

For stage 1 nonsmall cell lung cancer (NSCLC), lobectomy is the preferred treatment with optimal oncologic outcomes for most patients.^{1,2} Five-year survival rates range from 45 to 65 percent in those undergoing a lobectomy,² but only about six percent in those who go untreated.³

Traditionally, lobectomy has been performed with a thoracotomy, which requires a large incision in the chest and the use of a rib spreader to gain visual and physical access to the chest cavity. The use of a rib spreader can result in rib fractures, which are very painful and require several weeks to heal, delaying recovery.

When performed by an appropriately trained surgeon in a high volume center, video-assisted thoroscopic surgery (VATS) achieves oncologic outcomes as good as those obtained with thoracotomy in patients with stage 1 NSCLC,⁴ with decreased pain, reduced hospital length of stay, more rapid return to function and fewer complications.⁵ For patients with stage 1 NSCLC who have no anatomic or surgical contraindications, the National Comprehensive Cancer Network guidelines recommend VATS as standard of care.⁵

“More than 95 percent of our surgical cases for stage 1 lung cancers are performed with VATS,” says Chadrick E. Denlinger, M.D., Associate Professor of Surgery and Section Head of



Thoracic Surgery. “That is on par with most major medical centers across the country.”

VATS uses an endoscopic camera inserted through a 2-cm “port” to visualize the surgical field and special instruments to perform the lobectomy through one or two additional 5-8-cm ports. Surgeons watch a monitor displaying the endoscopic images to guide them as they perform surgery through the small ports. Because

a rib spreader is not required and incision sizes are much smaller, patients experience less pain and can resume normal activities much sooner than after a thoracotomy.

“A FAIR AMOUNT OF THE PAIN FROM THORACIC SURGERY COMES FROM SPREADING THE RIBS, WHICH WE DON’T DO WITH VATS.”
—CHADRICK E. DENLINGER, M.D.

“Patients recognize that the incisions are much smaller and the postoperative pain is significantly less,” says Denlinger. “A fair amount of the pain from thoracic surgery comes from spreading the ribs, which we don’t do with VATS.”

The ideal patient for VATS has a smaller, more peripheral tumor. However, patients with more central tumors and those who require reconstruction of the bronchus or pulmonary artery are better served by a thoracotomy.

The bottom line, according to Denlinger, is that VATS resection is the standard of care for stage 1 NSCLC. ♦

To read the full article visit muschealth.org/pn

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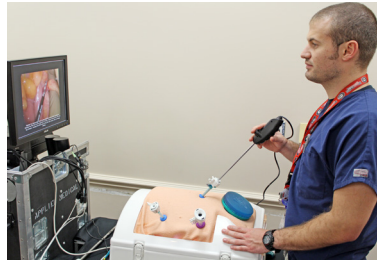
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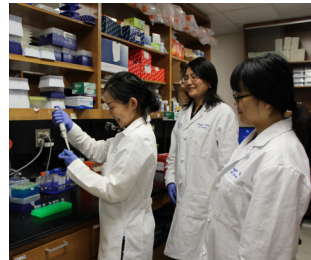
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RESEARCH



Progress towards treatment of Chronic Pancreatitis.

TARGETED DRUG NANOTHERAPY

research decreasing the toxicity associated with transplant-related immunosuppressive medications while simultaneously improving long term transplant outcomes.

ANNOUNCING THE ESTABLISHMENT OF TWO NEW DEPARTMENT OF SURGERY ENDOWED CHAIRS

An Endowed Chair is the highest academic award that we bestow on a faculty member, and it lasts as long as the University exists. Thus, it honors both the donor and the accomplished recipient by helping the next generation of surgical leaders achieve their full potential.

- **The David B. Adams MD Endowed Chair in GI and Laparoscopy Surgery** is named in honor of David B. Adams, M.D. and – once fully funded - will be held by the Division Chief of GI and Laparoscopic Surgery.
- **The Elliott-Robison Endowed Chair in Vascular Surgery** honors Bruce M Elliott, M.D. and Jacob Robison, M.D. for their numerous contributions that have improved care of patients with vascular diseases - not only in South Carolina - but regionally and nationally. When the funding goal is reached, the chair will be held by the Division Chief of Vascular Surgery.