Vanderbilt Section of Surgical Sciences

S3 News

Summer/Fall 2020

MESSAGE FROM THE CHAIR

Extraordinary Times in Surgery

Dear Colleagues,

On March 16, 2020 we closed our operating rooms to non-emergent cases. Mid-October, therefore, marks more than 7 months of our efforts to continue to care for our surgical patients while simultaneously caring for a new and severely ill group of patients with COVID-19. Amidst these professional challenges, each of us wrestles with personal challenges brought on by the pandemic. We also better understand the role that race and socioeconomic status plays in the resources available to both patients and providers, and therefore the outcomes.

Although the task has been difficult, as a group we have significant accomplishments. We continue to provide world-class care to all of our patients. Our recent O:E data around surgical mortality continues to be much less than 1.0. We continue to care for large numbers of patient who require life-saving care whether they have cancer or pre-cancerous lesions, end-stage organ failure, functional disability, pain, or any of the many indications for which surgery can improve life. In fact, this will likely be the busiest year ever for the Section.

At the same time, we have supported each other and not allowed stress to produce behaviors or conduct that could undermine our patient-focused mission. We recognize that these formidable challenges must be addressed collectively.

As we move into the cooler months, increasing cases suggest we are heading into a second wave which may stress us even further. At the same time, we have studied and learned from the past.

We can say with confidence that we are in a much better place than we were 6 months ago:

- We have an improved understanding of how the virus is spread
- We have committed to achieving a better understanding how race and socioeconomic factors impact everyone in our community
- We have adequate PPE supplies to keep providers safe
- We have dedicated units and staffing plans to handle significant volume increases
- We recognize the steps Drs. Balser and Pinson have taken to support everyone and ensure the institution is on sound financial footing
- We have actively engaged with our government leaders and community to help guide policy
- We have contributed research, including drug development and clinical trials, for worldwide impact
- We have demonstrated respect for each other and commitment to our patients
- We have risen to our shared mission to innovate for our patients in performing the world's first heart-lung transplant for a patient with COVID-19 respiratory failure. Congratulations to all involved

Seth Karp, MD
Chair, Section of Surgical Sciences

We know whatever the future brings we will be ready, together.
Thank you for your extraordinary commitment to each other and to our patients.

We have created a website that is a collection of many of the communications that you have received from the institution and Section leadership, plus resource links specifically for Section employees. Find it on the Section website or ***click here****.*

Bacchetta named Associate Chair of the Department of Thoracic Surgery

Dr. Bacchetta

Matthew Bacchetta, MD, MBA, MA, associate professor of Thoracic Surgery, has been named associate chair of Vanderbilt University Medical Center's Department of Thoracic Surgery.

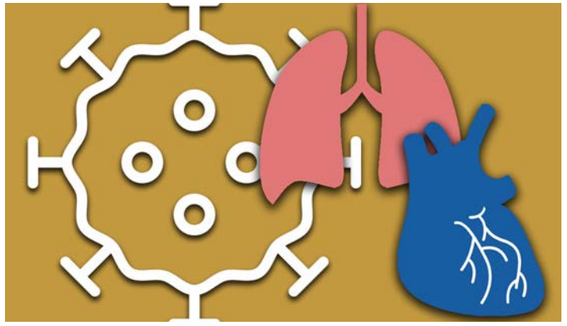
Bacchetta, an internationally renowned National Institutes of Health-funded investigator, joined the department in 2018. He was recruited to help expand both the pulmonary surgery program and the department's research. He will also serve as medical director of a new respiratory institute at VUMC that will be launched soon.

Bacchetta's research involves developing platforms for organ recovery, regeneration and replacement. Of note, he has been instrumental in developing a new technique called *ex vivo* lung perfusion (EVLP) that has the potential to increase the supply of donor lungs by rehabilitating organs previously considered too damaged for transplant. The first lung transplant using EVLP at VUMC was performed by Bacchetta in June. VUMC is one of the few medical centers in the United States that offer EVLP, and Vanderbilt is part of a clinical trial studying a more expanded use of the technique.

"The addition of the EVLP procedure is just one example of the truly transformational and lifesaving contributions Matt has made at the Medical Center since joining the department two years ago," said **Seth Karp, MD**, H. William Scott Jr. Professor and chair of the Section of Surgical Sciences and director of the Vanderbilt Transplant Center. "He has significantly expanded the breadth of our clinical innovations including our ECMO program in association with our colleagues from anesthesia, as well as our research enterprise. With his unique skillset and knowledge, he has enhanced an outstanding and expertly run department.

*"**Dr. Jon Nesbitt**, who has chaired Thoracic Surgery during the past four years of growth, is one of those exceptional leaders. He plans to step back from administration but continue to be active clinically in 2021." said Karp.*

Complete Story



COVID patient's heart-lung transplant is world's first

Vanderbilt University Medical Center has performed the world's first dual heart-lung transplant of a COVID-19 patient.

The complex procedure, completed on Sept. 24, is the first heart-lung transplant VUMC has performed since 2006.

The transplant patient, a young man, had cardiomyopathy before contracting COVID-19 in June, said **Ashish Shah, MD**, professor and chair of Cardiac Surgery, who performed the surgery along with **Matthew Bacchetta, MD, MBA, MA**, associate professor of Thoracic Surgery.

Cardiomyopathy is a disease of the heart tissue that can lead to heart failure.

Shah said the bout with COVID-19 seriously damaged the man's lungs and may have also further damaged his heart. By September, he was critically ill with advanced heart and lung disease, and was referred to VUMC from the University of Mississippi Medical Center by a former Vanderbilt trainee.

"He was slipping fast, in and out of the hospital and certainly by the time we operated on him, his heart was really done," Shah said.

Bacchetta and Shah performed the transplant using both lungs and the heart from the same donor, as is standard in dual organ transplants. The patient has since left intensive care and continues to recover at VUMC, where he is doing well.

Dual heart-lung transplantation is rarely performed in the United States and typically only at high volume transplant centers. Vanderbilt is the largest heart transplant program in the United States by volume and is a national destination for complex heart and lung procedures.

In this case, the transplanted heart and lungs were from a donor infected with hepatitis C virus.

Complete Story

Forbes named new chief of Division of Kidney & Pancreas Transplantation

Dr. Shaffer and Dr. Forbes

Earlier this year **Rachel Forbes, MD, MBA**, associate professor of Surgery, was appointed chief of the Division of Kidney & Pancreas Transplantation in the Department of Surgery at VUMC.

Forbes, who has served as the division's associate chief since January 2019, succeeds **David Shaffer, MD**, professor of Surgery, who has served as the division's leader since 2001.

Shaffer will remain on the faculty continuing his clinical duties, including kidney transplants, dialysis access, outpatient clinic and on-call rotation. He will also continue his clinical research related to novel immunosuppression strategies to minimize risk and improve post-transplant outcomes.

"I want to also acknowledge the remarkable contributions of Dr. Shaffer during his nearly two decades as chief of Division of Kidney & Pancreas Transplantation," **Seth Karp, MD,** chair of the Section of Surgical Sciences and director of the Transplant Center said. "Dr. Shaffer is the consummate surgeon and resident educator. He built a program nationally known for innovation and outstanding outcomes. In addition, he has driven enormous growth in kidney transplant at Vanderbilt from 69 transplants in 2001 to 268 in 2019. His vision, leadership and dedication are displayed not only in these remarkable numbers, but also in the quality of care provided by the kidney transplant team."

"I am excited to work with Dr. Rachel Forbes as the new division chief of Kidney & Pancreas transplantation," said **Carmen Solórzano, MD**, John L. Sawyers Chair in Surgical Sciences, professor and chair of Surgery. "She is a highly intelligent, technically gifted surgeon and educator who has innovative research ideas that will move the field forward. I met Dr. Forbes approximately 10 years ago when she was one of our chief surgical residents, and it has been so rewarding to see her develop into an excellent surgeon leader who I am sure will continue to be an example for so many."

Forbes, who was mentored by Shaffer to step into the chief's role, is a graduate of Vanderbilt University, where she completed both her undergraduate and medical degrees. She completed a general surgery residency at VUMC and transplant and surgical critical care fellowships at Wexner Medical Center at Ohio State University (OSU) in Columbus. She also earned an executive Master of Business Administration at OSU's Fisher College of Business before joining VUMC's Division of Kidney & Pancreas Transplantation in 2013.

Since December 2016, Forbes has served as surgical director of the Living Kidney Donor Program, where she has been instrumental in reorganizing and streamlining the donor evaluation workflow, resulting in a significant increase in living donor transplants. She has also led VUMC's paired donor exchange program since 2013, leading to additional living donor transplants.

Complete Story

Dr. Hoffman

Hoffman honored with O.H. Frazier Award for root cause transplant research

Congratulations to **Jordan Hoffman, MD**, assistant professor of Cardiac Surgery, this year's O.H. Frazier Award winner. The Society will be honoring Dr. Hoffman during the International Society for Heart and Lung Transplantation (ISHLT) annual conference this year in Canada; meanwhile they have announced their appreciation virtually. The ISHLT is a proud sponsor of this annual award and is excited to see what contributions Dr. Hoffman will contribute to the Mechanical Circulatory Support (MCS) field. This award will allow him to continue research to explore whether changes in the right coronary artery blood flow after left ventricular assist device (LVAD) implantation is a possible cause for the high rate of right ventricular failure seen in patients.

Transplant program reaches milestone 10,000th solid organ procedure

Vanderbilt surgeons have transplanted 5,664 kidneys, 2,384 livers, 1,380 hearts, and 572 lungs

Vanderbilt University Medical Center has completed its 10,000th organ transplant, a monumental achievement representing nearly 60 years of life-saving work.

VUMC passed the 10,000 mark overall in July, in the same year that the Vanderbilt Transplant Center celebrated its 30th anniversary. Since VUMC's first kidney transplant in 1962, Vanderbilt surgeons have transplanted 5,664 kidneys, 2,384 livers, 1,380 hearts and 572 lungs.

Vanderbilt's 10,000th transplant patient was Brian Bradley, 48, of the Birmingham, Alabama, area. Bradley received a kidney transplant on July 31, two-and-a-half years after first experiencing kidney failure.

Bradley remembers receiving the call that he got the lifesaving kidney. He later found out it was the 10,000th overall.

"That was the best feeling in the world," he said. "I was very pleased about getting a call and grateful that somebody had made the donation. Whoever did the donation is a lifesaver to me."

Bradley's transplant surgeon was **David Shaffer, MD**, professor of Surgery.

"Ten thousand transplants are a testament to the extraordinary organ transplant teams assembled at Vanderbilt," Shaffer said. "I am proud to be part of one of the oldest and now one of the largest kidney transplant programs in the country, enabling us to positively impact the lives of so many people such as Mr. Bradley."

Rachel Forbes, MD, MBA, associate professor of Surgery, and chief of the Division of Kidney and Pancreas Transplantation, added, "It could not be more fitting that this incredible 10,000th transplant was performed by Dr. David Shaffer, who himself has done more than 1,750 kidney transplants at VUMC — a legacy within a legacy."

The Vanderbilt Transplant Center's 30th anniversary celebration was held January 2020. Past directors are (left) **C. Wright Pinson, MBA, MD**, *former Senator Bill Frist, MD, and current director* **Seth Karp, MD**

Complete Story

Four heart transplants performed in whirlwind 48 hours

The Vanderbilt Transplant Center's cardiac surgeons transplanted four hearts in one 48-hour stretch in August, thanks to VUMC's perfusion and organ recovery teams traveling more than 4,000 miles across the country to obtain the donor organs.

Vanderbilt Transplant Center is the No. 1 heart transplant program by volume in the U.S., performing a record 118 heart transplants in 2019

"It was quite an amazing feat," said **Jordan Hoffman, MD**, assistant professor of Cardiac Surgery. "Many transplant centers don't have the ability to do something like this. There are very few in the country and around the world that can — maybe fewer than two to three centers."

Hoffman said the accomplishment reflects the work of the entire transplant team, including the coordinators who identify matching organs, the transplant committee that decides which patients get them, the recovery teams that pick them up and the surgeons who retrieve and implant them.

It also reflects VUMC's cutting-edge technologies. Donor organs can be preserved longer after retrieval with the TransMedics Organ Care System, which allows hearts to continue beating outside the body. VUMC is one of a select few centers nationwide using it in a clinical trial.

The TransMedics system, affectionately known as "Heart in a Box," can be used to preserve organs instead of the conventional method of putting donor organs on ice, particularly when organs must travel hours to VUMC. On ice, organs begin to deteriorate after about three hours and outcomes become progressively worse.

"We can, and have, traveled to any part of North America to get great hearts to critically ill patients and save lives," Hoffman said.

Complete Story

Neighborhood parade welcome homes kidney transplant patient Foster

It was a hot July day in Alabama, and Lee Foster had just returned home an hour before from Vanderbilt University Medical Center, where he underwent a kidney transplant. So why was his wife, Priscilla, telling him to hurry up and put on his Vanderbilt T-shirt and come outside?

"I said, 'What's going on?'" Lee remembered. "Just put your shirt on!" Priscilla said. "I had to comply," he said.

Lee Foster, seated, and his wife Priscilla wave to passers-by

Outside he found a chair, a mask, and his favorite tea chilling in a glass. He slipped on the mask and sat down.

"Then I look up," he said. "My neighbor is coming over there with a sign saying, 'We love you, Mr. Foster. Welcome. Congratulations.' I said, 'Well, thank you.' He had his two grandbabies and I said, 'well, they have something going on.'"

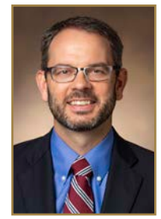
Lee said the transplant went smoothly. His surgeon was **Rachel Forbes, MD, MBA**, associate professor of Surgery, chief of the Division of Kidney and Pancreas Transplantation in the Department of Surgery.

"I couldn't be happier that even COVID-19 could not rain on Mr. Lee's parade after his kidney transplant," Forbes said. "What a great tribute from his family and community in honor of this gift of life."

Complete Story

Upperman taps colleague Wellons to help create local teams in anesthesia and nursing to innovate during COVID-19

Dr. Upperman



Dr. Wellons

At the beginning of the U.S. COVID-19 outbreak, surgeons at Monroe Carell Jr. Children's Hospital at Vanderbilt formed a task force to plan the reorganization of perioperative services in response to the virus. **Jeffrey Upperman, MD,** Surgeon-in-Chief and an expert in pediatric trauma and disaster preparedness, said from the onset the team heard his call to adopt a long-term view of the pandemic's impact and to embrace a spirit of innovation.

"I recognized very quickly that it was going to take months, if not years, to resolve the issues," Upperman said.

To help in planning, Upperman looked to colleague **Jay Wellons, MD**, **MSPH**, chief of the Division of Pediatric Neurosurgery at Children's Hospital. Wellons quickly partnered with local colleagues in anesthesia, surgery, and nursing to parse through the massive amounts of early data.

"It became clear early on that even though this was a disease that disproportionately affected adults, children could be asymptomatic carriers," said Wellons.

"We needed to develop ways to protect our healthcare workers that would reduce the chance of exposure and allow us to keep caring for the children."

Early in the U.S. pandemic, Wellons joined a national conference led by the team at Seattle Children's Hospital. The call led to a rapid collaboration with other pediatric surgery leaders nationally on guidelines for perioperative services. Wellons and a group of neurosurgery leaders published the guidelines in *JNS Pediatrics*.

At Children's Hospital in Seattle, they adopted new team structures designed to facilitate agile planning, data-based analysis and lowering barriers to innovation. The new system enabled rapid responses to the task force's recommendations, explained Barbara Shultz, MSN, RN, administrative director of Surgical Services.

Complete Story

Journal Link

Lovvorn notes pediatric trauma increase during COVID-19 quarantine

Study forthcoming on impacts of children staying home

During the first few weeks of the statewide stay-at-home order issued by Tennessee Gov. Bill Lee, physicians at Children's Hospital noticed an interesting pattern. As children were out of school and staying home, the hospital saw a higher volume of pediatric traumas, including ATV accidents, dirt bike accidents and pellet gunshot wounds.

The sheer volume, combined with the weekday time of the incidents, prompted **Harold Lovvorn III, MD**, associate professor of Pediatric Surgery and medical director of Pediatric Trauma at Children's Hospital, to further investigate and has led to an official study into the uptick.

"It was odd," Lovvorn said. "We were seeing summertime trauma volume that typically occurs during the weekends, but now it was during the middle of the week. As the numbers increased, we started to take more notice. Although we don't have any hard data to prove it, we are curious to evaluate if these are unintended consequences of the safer-at-home orders."

Dr. Lovvorn

Although only an observation at this point, the team has submitted an official request to study the trend.

"This time that we are living in is so unprecedented," Lovvorn said. "Families are stuck at home. Parents are juggling working, caring for families, teaching their children ... all from home. Adults are overwhelmed, working from home, multi-tasking and perhaps preoccupied."

"It's certainly a normal response to tell your children to go outside for a bit to get some fresh air, sunshine or exercise. But we will probably need to add a caveat to 'go outside and play.' "Maybe it's adding the tag 'and don't forget your helmet.' "

Complete Story

Dr. Karp

Vanderbilt Transplant Center sets monthly record

"Extraordinary effort" at any time but particularly during COVID-19

The Vanderbilt Transplant Center performed 73 transplants in May, setting a Medical Center record for the most transplants in a month. Sixteen of those were heart transplants — also a monthly record — cementing VUMC's status as the busiest heart transplant center in the country.

On the adult side, VUMC performed 28 kidney transplants, 18 liver transplants, 15 heart transplants and seven lung transplants. On the pediatric side, the Medical Center performed two kidney transplants, two liver transplants and one heart transplant.

VUMC continues to perform a record number of transplants despite the headwinds of the COVID-19 pandemic. Karp said that organ donation is down slightly in the region, but the Transplant Center team has been traveling farther to obtain organs and coordinating with other centers so organ availability is steady at VUMC.

"We're trying to procure organs locally for other centers and asking them to do the same for us," **Seth Karp, MD**, chair of the Section of Surgical Sciences and director of the Transplant Center said. "We're trying to cut down on the travel as best as we can."

The Medical Center's ability to test all patients for COVID-19 has also instilled confidence in the process of acquiring donor organs.

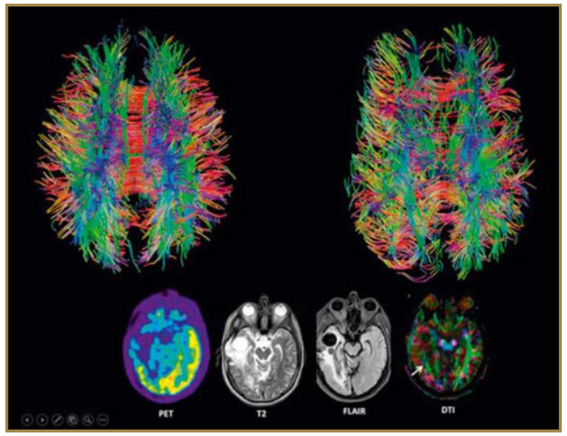
"We've been very careful about which organs we're taking," Karp said. "When COVID-19 first started and the ability to test was not as widespread, anybody with any suspicion of carrying the virus we would just not use as a donor. Now that we are testing everybody, we feel better that we can identify patients who don't have the virus and we can successfully use their organs."

Complete Story

Golinko and Bonfield lead new imaging research to clarify how craniosynostosis affects babies' neurodevelopment

Using DTI and fMRI shows differences in pre-surgery and post-surgery white matter tracts

Researchers at Children's Hospital, Arkansas Children's Hospital and Yale Craniofacial Center are using new imaging approaches to help clarify how craniosynostosis (CS) affects babies' neurodevelopment. Diffusion tensor series imaging (DTI) and functional MRI (fMRI) will allow the researchers to observe, as never before, very small changes in brain structure and function before and after surgery.



Michael Golinko, MD, chief of Pediatric Plastic Surgery and director of the Cleft & Craniofacial Program, and **Christopher Bonfield, MD**, director of Neurosurgery at the Pediatric Craniofacial Program, are leading the study at Children's Hospital.

"This study builds on Dr. Bonfield's rabbit model and is the first study in humans with craniosynostosis looking at pre-surgery and post-surgery white matter tracts, correlating those data to neurodevelopmental testing, and comparing them to age-matched controls," Golinko said.

"We hope these DTI studies will yield early biomarkers of brain abnormality."

Dr. Golinko

Dr. Bonfield

"One of the frustrations in explaining this surgery to parents is that we know shockingly little about what is going on in the child's brain," Golinko added. "We know that 10-15% of these children will develop high intracranial pressure, but by the time it is evidenced on a CT scan, the pressures have likely been longstanding. We hope these DTI studies will yield early biomarkers of brain abnormality."

The prevalence of elevated intracranial pressure in children with CS is as high as 20% in single-suture synostosis and up to 60% in multi-suture synostosis. The resulting abnormal cerebral blood flow in areas of skull constriction contributes to potential white matter injury.

"We know that craniosynostosis affects each child differently," Bonfield said. "The severity of the cosmetic appearance can vary significantly. Most patients undergo only one operation, but some require multiple surgeries and develop increased intracranial pressure."

Bonfield says most babies with CS undergo either minimally invasive endoscopic strip surgery between 10 weeks and five months of age or an open surgery between six and 12 months. Timing and procedure selection for each child are critical because their brains are rapidly growing, almost doubling in size over the first 12 months of life.

DTI tensor imaging works by delivering magnetic pulses in such a way that water molecules in the cell experience a random phase shift. This makes it possible to estimate the location, orientation, and anisotropy (the shift in water molecules) of the brain's white matter tracts. Golinko has watched the evolution of DTI and envisioned its application to CS.

Complete Story

VUMC ranks again among Becker's 100 Best Hospitals

Again this year, VUMC has been named as one of a Becker's Healthcare "100 great hospitals in America."

According to Becker's, the hospitals included on this year's list have been recognized nationally for excellence in clinical care, patient outcomes, and staff and physician satisfaction, and are institutions that are industry leaders that have achieved advanced accreditation and certification in several specialties.

The list also includes industry innovators that have sparked trends in healthcare technology, hospital management and patient satisfaction.

Becker's Healthcare selected this year's "100 great hospitals in America" for inclusion based on analysis of ranking and award agencies, including *U.S. News & World Report's* 2019-20 rankings, CareChex, Healthgrades, CMS star ratings, Leapfrog grades and IBM Watson Health top hospitals.

Complete Story

Patel study will use computerized cognitive rehab for ICU patients

First-of-its-kind research coincides with COVID-related increases in intensive care

VUMC will study adult survivors of medical and surgical intensive care at high risk for long-term cognitive impairment to see if computerized cognitive rehabilitation (CCR) is effective in improving cognition in ICU survivors who often have trouble doing complex tasks, maintaining their finances and staying employed.

The first-of-its-kind study, set to begin this winter, comes at a time when there is a larger-than-ever number of survivors of intensive care because of the worldwide COVID-19 pandemic.

The greatest indicator of whether someone will have cognitive deficits after an ICU stay is whether they have delirium (confusion) while in the ICU, said **Mayur Patel, MD, MPH**, associate professor of Surgery and principal investigator of the study along with Wes Ely, MD, MPH, Grant Liddle Professor of Medicine.

Millions of patients in intensive care units each year develop delirium during their hospitalization and often leave the hospital with cognitive deficits similar to those suffering from traumatic brain injury or mild Alzheimer's disease.

"One-third to one-half of ICU survivors have some level of cognitive impairment," Patel said. "They have difficulty managing finances, personal and social relationships, and maintaining employment. Of those who were previously employed, about half regain employment after surviving a critical illness event."

The study, Returning to Everyday Tasks Utilizing Rehabilitation Networks (RETURN) III, expands on two prior studies (RETURN I and II) of cognitive rehabilitation intervention.

Complete Story

Dr. Patel

Karp praises organ-sharing model that helps outlying centers retain vital access

As with every facet of patient care, the COVID-19 pandemic has had a profound impact on the U.S. practice of transplantation. According to the American Society of Transplant Surgeons (ASTS), deceased donation has declined, living donor transplants have been greatly curtailed and multiple programs have been suspended. Due to infection risk, ASTS strongly recommends against travel for both patients and organ transplant teams.

The Vanderbilt Transplant Center, a leading provider of organ transplantation in the Southeast, is collaborating with Tennessee Donor Services (TDS) in a model program to facilitate the organ procurement process for outside centers.

"When COVID-19 hit, surgical staff couldn't travel safely to retrieve organs," said **Seth Karp, MD**, H. William Scott Jr. Professor, chair of the Section of Surgical Sciences and director of the Transplant Center. "This program establishes a vital link to recipient centers by preparing and transporting organs to them."

The acquisition and spread of SARS-CoV-2, the virus that causes COVID-19, has been reported from both live and deceased donations. Transmission may be affected by several factors: epidemiology, incubation period, degree of viremia and viability of the virus in blood and organs.

Additionally, because organ transplant recipients require immunosuppression, patients may be more vulnerable to contracting the virus and may have more intense and prolonged viral shedding, potentially increasing the transmission risk.

"All transplant programs should assess risk based on their unique circumstances," Karp said. "The goal is to protect both patients and staff."

Complete Story

Sandvall reaps rewards helping children with hand, upper extremity issues

Brinkley Sandvall, MD, bonds quickly with her young patients — children who have acquired or congenital hand and upper extremity differences. After extensive training as a reconstructive hand surgeon, she runs the Hand and Upper Extremity Surgery program at Monroe Carell Jr. Children's Hospital at Vanderbilt.

"I feel like this is the greatest job — it's the intersection of what I can do, what I want to do and what I feel compelled to do," said Sandvall.

Sandvall, who is fellowship-trained in pediatric hand and upper surgery and reconstructive microsurgery, connected quickly with one patient - six-year old Toby Williams. Described by his mother as joyful, hilarious, quirky and brave, Sandvall and Toby met before his surgery to clean out a deep infection that came on rapidly in his left hand and worked its way down to the bone.

Dr. Sandvall

Adopted at age 4 from China, Toby is no stranger to Children's Hospital. He had surgery to repair a congenital heart defect about four months after he arrived in Nashville and was in the hospital's Pediatric Critical Care Unit for 11 months. The hand infection was a "crazy random thing that happened," said his mother, Amanda Williams, adding that a cause could never be pinpointed. "He's super complex. The infection was pretty drastic."

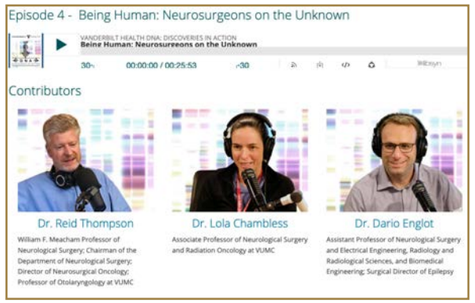
Sandvall, assistant professor of Plastic Surgery, came to VUMC in October 2019. A graduate of Baylor University and Baylor College of Medicine, she completed her residency training in plastic and reconstructive surgery at the University of Washington in Seattle and a hand and upper extremity fellowship with the Department of Orthopaedic Surgery at Washington University in St. Louis followed by a second fellowship in pediatric hand and microvascular surgery at The Royal Children's Hospital in Melbourne, Australia. She sees both adults and children at VUMC and Children's Hospital.

Toby Williams

The children under her care have a wide range of issues including congenital differences, burns, tumors, neuromuscular disorders, vascular anomalies, and traumatic injuries from accidents or playing sports. She also sees families before children are born, when a congenital difference is noted on an ultrasound.

Complete Story

Chambless, Englot and Thompson discuss where imagination lives in the brain on Vanderbilt Health "DNA": Episode 4



The brain is an uncharted frontier teeming with mystery and allure about what gives each person the individual attributes that make them who they are. There's more than can be known in this generation.

"Let me tell you this. When you do a brain surgery operation, and you're looking at the brain—brains kind of look the same. I mean, they're very beautiful. The brain is incredibly beautiful. But you don't know what religion that person is. You don't know what race they are, what sexual orientation they are. Do you know there's this substance that weighs about three pounds that sits in our cranium that allows us to be human and also allows us to be different? Because no two people are the same. And so somehow, what if we understood the brain in a way that allowed us to appreciate diversity and people? That would be pretty great. I think about it all the time," said **Reid Thompson, MD**, William F. Meacham Professor of Neurological Surgery and chair of the Department of Neurological Surgery (4:12).

Click here to listen to the discussion

Curci study shows doxycycline ineffective at shrinking aortic aneurysms

Patients with a vascular condition called abdominal aortic aneurysm did not benefit from taking the common antibiotic doxycycline for two years to shrink the aneurysm when compared to those who took a placebo, according to a VUMC study published this week in the *Journal of the American Medical Association*.

"This trial will provide critical material for improved biologic understanding of aneurysm disease. For example, detailed study of the circulating proteins or other markers in blood might help us better understand why aneurysms grow and allow us to look for more effective drugs," said Curci.

Abdominal aortic aneurysm is a swelling or ballooning that occurs in the major blood vessel that supplies blood from the heart to the lower half of the body. It affects about 3% of older Americans, most commonly men and smokers.

The condition can cause fatal internal bleeding if the aneurysm grows large enough to burst. Small aneurysms frequently cause no symptoms and are often detected when an abdominal ultrasound or CT scan is performed for other reasons.

Doctors have traditionally monitored the aneurysm growth and sometimes opt to prescribe doxycycline in an effort to forestall surgery in higher-risk patients, a practice that was based on earlier research suggesting that certain antibiotics reduce inflammation that contributes to aneurysm growth.

The study findings could lead doctors to stop prescribing doxycycline as a way to prevent small aneurysms from growing larger and bursting, said **John Curci, MD**, associate professor of Surgery in the Division of Vascular Surgery.

"Taking doxycycline to prevent or slow the growth of small abdominal aortic aneurysms is not advised or helpful, even though it reduced circulating markers of inflammation," said Curci, whose study expertise was bio-banking and bio-specimen analysis with Vanderbilt serving as the Biomarker Core Lab.

Complete Story

Journal Link

Jackson, Lovvorn team up to study tracking if COVID-19 can spread during minimally invasive surgery

Physician-scientists at VUMC are investigating whether SARS-CoV-2, the virus that causes COVID-19, can be spread through aerosolized emissions (microscopic droplets and particles) during minimally invasive surgery in children.

Recent studies suggest that many children infected with SARS-CoV-2 virus do not show symptoms of COVID-19. If correct, they pose a significant risk of spreading the virus while undergoing common minimally invasive surgical procedures such as removal of lung nodes, hernia repair and laparoscopic appendectomy.

Yet no report to date has described the transmission of respiratory viruses, including SARS-CoV-2, in aerosolized surgical emissions during operations performed on patients of any age, said **Harold "Bo" Lovvorn III, MD**, associate professor of Pediatric Surgery and medical director of Pediatric Trauma at Children's Hospital.

Supported by a $15,000 grant from the Society of American Gastrointestinal and Endoscopic Surgeons (SAGES), the study is the first to examine whether SARS-CoV-2 viral particles can be detected in surgical emissions and whether they remain structurally intact and capable of infecting others.

The findings from this study, which can be applied to adults undergoing surgery, will be of immediate value to surgeons seeking to further shield their teams, other healthcare providers and hospitalized patients from COVID-19, said Lovvorn, who is the study's co-principal investigator with Natasha Halasa, MD, MPH, associate professor of Pediatrics.

Gretchen Jackson, MD, PhD, associate professor of Pediatric Surgery and a member of SAGES, sponsored the grant. Zaid Haddadin, MD, postdoctoral research fellow in the Division of Pediatric Infectious Diseases, is also participating in the study.

Complete Story

Exoscope offers dramatic surgical precision

Multiple camera views and big-screen displays improve visualization for the entire neurosurgical team

Neurosurgeons at VUMC are finding the benefits of their new exoscope extend far beyond improved surgical accuracy. The 3D views reduce surgeon fatigue and provide a more comprehensive picture of the brain for the entire operating team.

"Exoscopes offer dramatically improved visualization over traditional operating microscopes. Over the past several years the technology has become a mainstay for precision surgery," said **Peter Morone, MD, MSCI,** assistant professor of Neurological Surgery.

"The exoscope allows you to be safer and more efficient as a surgeon," he said. "We're using it for brain tumors, vascular neurosurgery and even some spine surgeries."

For precision procedures such as brain tumor resections, the latest exoscopes serve as moveable, telescoping microscopes that can more readily assume different positions over the course of a surgery. A surgeon can use controls on the exoscope to manipulate its position and generate a flexible, 3D picture with far greater detail, says Morone.

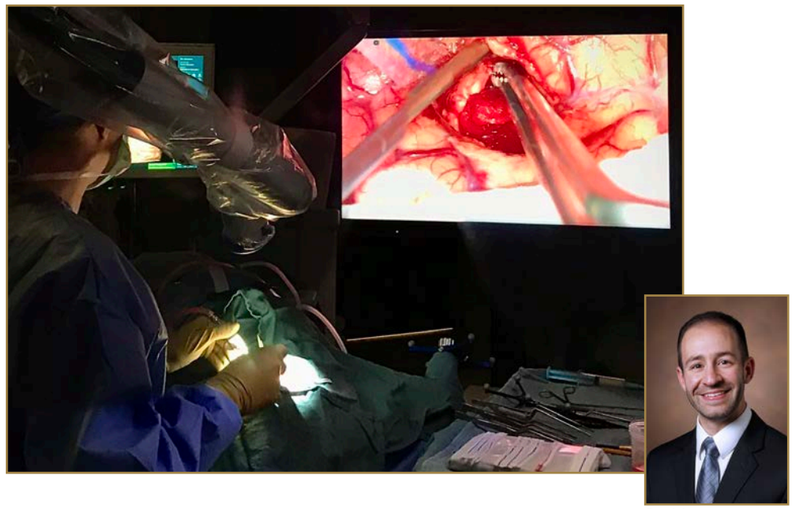
"It allows you to look at different angles in the brain that you wouldn't be able to look at with the microscope. It allows you to see a more expansive view," he added.

The Olympus exoscope used at Vanderbilt also minimizes the need to look through an eyepiece, instead leveraging a high-resolution camera connected to a large, 55-inch screen.

"Everyone in the OR is standing side-by-side looking at the exact same thing," Morone explained. "It's tremendously beneficial for a teaching institution."

The setup also aids efficiency. "If there's bleeding, the anesthesiologist can see exactly where and what I'm talking about. Surgical assistants know exactly what instrument is needed. Circulating nurses, scrub assistants, fellows, everyone can see what is going on the whole time."

Complete Story



Dr. Morone

Terhune, Nettles and Brown talk about how Unconscious Bias affects the decisions we make

Episode 3 - The Lenses We Wear: Unconscious Bias

Dr. Arie Nettles

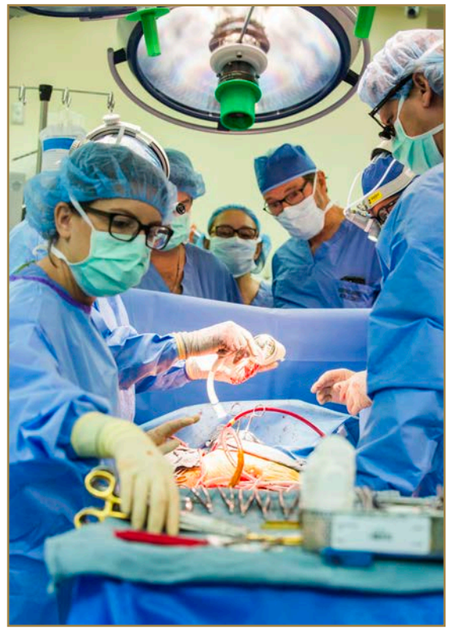
Dr. Kyla Terhune

Dr. Nancy Brown

Click here to listen to the discussion

Ventricular assist device program hits major milestone

Shah: Patients and families part of "a greater" journey



Steven Chastain was driving home from work when his heart went dangerously out of rhythm and he lost consciousness.

"I woke up in a guard rail," said Chastain, 29, who lives near Knoxville, Tennessee.

Chastain received a ventricular assist device (VAD) at Vanderbilt Heart and Vascular Institute (VHVI) to keep his heart in rhythm, a temporary solution while he waits for a permanent one — a heart transplant. The VAD is an implantable, mechanical support system that pumps blood through his body when his heart is too sick to do it.

VHVI's cardiac surgery and heart failure teams recently celebrated a milestone — implanting the 500th adult patient with a VAD. The first LVAS (left ventricular assist system) at VUMC was implanted in 1986, according to Vanderbilt archives.

"Each one of the 500 patients and families is part of a greater journey in advanced heart disease," said **Ashish Shah, MD**, professor and chair of Cardiac Surgery. "The highs have been high, and lows have been low. However, our devotion as a team to these vulnerable patients grows with each case. These devices continue to evolve and provide hope. Importantly, Vanderbilt will continue to be a leader toward a better future for patients with advanced heart disease."

Vanderbilt Heart's life-saving VAD program offers a spectrum of devices to serve two populations of end-stage heart failure patients whose medical management is failing. Some patients use it as a bridge to stay alive until a heart transplant. For others, it's a destination therapy to serve them for the rest of their lives.

Complete Story

Heart allocation still shaken by 2018 UNOS reforms

Dr. Shah

In a recent editorial published in the *Journal of the American College of Cardiology*, two experts from Vanderbilt Heart and Vascular Institute offer a framework for interpreting current challenges facing the U.S. heart transplant allocation system.

Lynne Stevenson, MD, director of the Cardiomyopathy Program, and **Ashish Shah, MD**, professor and chair of Cardiac Surgery, cite the 2018 national United Network for Organ Sharing (UNOS) policy overhaul designed to clarify eligibility criteria, account for newer cardiac devices and decrease mortality. They argue that even with increased patient stratification in the new system, additional considerations are necessary.

"Unlike allocation schemes for other organs, the new system did not embrace the view of utility: measuring benefit as a function of both waitlist and post-transplant outcomes," they said.

Last year, 4,717 patients were accepted to the U.S. heart transplant waitlist, but only 3,552 transplants were performed.

Several efforts are underway to help expand the donor pool. New antiviral treatments have allowed some hepatitis C-exposed hearts to recover and be transplanted, with promising patient survival rates.

"But these examples have not erased the arithmetic mismatch," Stevenson said. "Unless this is corrected, allocation inequities cannot be solved by spelling out more layers of priority."

Complete Story

Journal Link

Dr. Berkman

Dr. Sivaganesan

Berkman, Wright and Sivaganesan lead research in opioid-free spine surgery

Opioid-free elective spine surgery is both feasible and effective, according to a study recently published in *The Spine Journal* by VUMC researchers **Richard A. Berkman, MD**, assistant professor of Neurological Surgery; **Amanda H. Wright, MPAS**, physician assistant in Neurological Surgery, and **Ahilan Sivaganesan, MD**, a chief resident in Neurological Surgery.

"This is the first study to examine the complete elimination of opioids in spine surgery," Berkman said. "The fallacy has been that patients' postoperative pain must be managed with opioid analgesics. That thinking needs to change."

The researchers developed a comprehensive program for opioid-free pain control after elective spine surgery, which they applied to 244 consecutive patients who had elective spine surgery with Berkman between January 2018 and July 2019. One-third of the patients underwent lumbar fusions.

In lieu of opioids, a multi-modal pain management protocol including ketoroloac, acetaminophen, cyclobenzaprine, gabapentin, judicious use of ice packs, and early ambulation was used.

The study included two phases: a preliminary period of opioid-minimization followed by a period in which complete opioid elimination was the goal. In the preliminary period, 47% of patients took no opioids in the first month after discharge. During the elimination period, 88% of patients took no opioids whatsoever, while experiencing satisfactory pain relief.

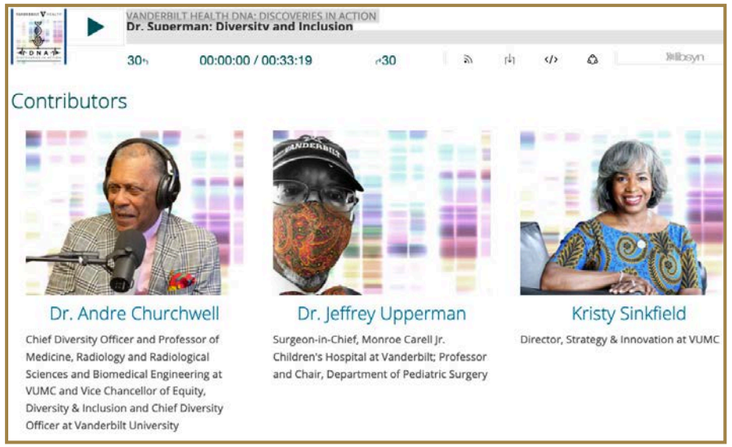
"Notably, of the 23 patients who were successfully weaned off opioids prior to surgery, 21 (91.3%) did not take a single opioid after leaving the recovery room," the authors wrote.

Complete Story

Journal Link

Upperman, Churchwell and Sinkfield discuss their experiences with racism

Vanderbilt Health DNA: Episode 8: Dr. Superman - Diversity & Inclusion



The dialogue in Dr. Superman, Episode 8, is a tiny sliver of the discussions and reflections happening publicly and privately – and on the streets – all over the country as the deaths of George Floyd and Breonna Taylor and the unequal brunt of COVID-19 throw a harsh light onto generations-old divisions in the U.S.

Click here to listen to the 17 minute discussion

Forbes/Shaffer team transplant kidney in Alabama police officer who had arrested the donor many times

Jocelynn James couldn't explain it, but she knew it was right. She had to give her kidney to Terrell Potter, the police officer who had arrested her multiple times for incidents relating to her substance use disorder.

Jocelynn James donated a kidney to police officer Terrell Potter

The last time was nearly a decade ago. James had since become sober and started her own ministry in Franklin County, Alabama, called the Place of Grace, to help women like her.

But at this quiet midnight moment, James was scrolling through Facebook on her phone and saw a plea from Potter's daughter, April. He needed a kidney, and James' Christian belief informed her that she had the one he needed.

"I still can't tell you what the post says because I never read it fully," she said. "I just saw that the man needed a kidney and the Holy Spirit spoke to me and said, 'you have that man's kidney.' It was that simple. And I threw my phone down and I was like, 'God, I don't have time to give a man a kidney. I literally work 78 hours a week.'"

She tried to talk herself out of it, but couldn't. James came forward to Potter's daughter.

"She said 'I got your dad's kidney,'" Potter recalled. 'How do I go about being tested?' My daughter kind of coordinated everything. She lives in Nashville, so she got it all lined up."

James' kidney was tested for compatibility at Vanderbilt University Medical Center. Sure enough, a perfect match.

"They thought he (Potter) was my father when they called to tell me," James said. "They said 'you and your dad are a perfect match.' I said 'He's not my dad. I'm not even kin to him.'

Potter and James came to Vanderbilt in July 2020 for their transplant, where they were under the care of their surgeon team, ***David Shaffer, MD****, professor of Surgery, and* ***Rachel Forbes, MD, MBA****, associate professor of Surgery and chief of the Division of Kidney and Pancreas Transplantation in the Department of Surgery.*

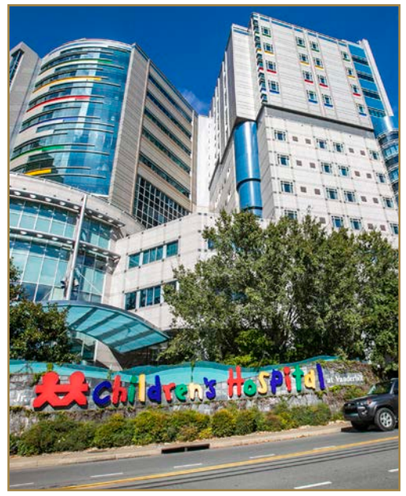
"What an inspirational donor pair," Forbes said, "a beautiful story of the recovery of Ms. James and the gift of recovery she was able to give Mr. Potter through living kidney donation.

Complete Story

Monroe Carell Jr. Children's Hospital at Vanderbilt earns top honors from *U.S. News & World Report*

Monroe Carell Jr. Children's Hospital at Vanderbilt has once again earned the distinction of being named a top pediatric facility in *U.S. News & World Report's* annual Best Children's Hospitals rankings. This marks the 14th year that Children's Hospital has made the list.

In the newly released 2020-2021 report, Children's Hospital continued to achieve a maximum 10 out of 10 nationally ranked pediatric specialty programs, with four of those being in the top 20 in the nation, including Pediatric Urology in the top 5.



Complete Story


Blair Wheeler

Plastic surgery team repair nerve damage, ending arm tremors for young college student

When Blair Wheeler banged her elbow on the court floor as she dived for a ball during a high school volleyball game, she had no idea that split second would completely change her life.

The dive caused the development of an odd tremor in her right hand and a tingling and weakness in her arm that brought an abrupt end to playing sports and forced the academically gifted Franklin High School freshman to require assistance in the classroom. For the next three years, she saw numerous specialists who couldn't pin down a diagnosis. Meanwhile, Wheeler became a regular at physical and occupational therapy.

"Through multiple tests — MRIs of my spinal cord and brain, nerve conduction studies, EEGs to see if it might be seizure related — they just couldn't determine why my hand was shaking," Wheeler said. "Since no one could find a definitive answer, instead of continuing to try to address it medically, it turned into 'How do we help you deal with this?' And of course, I had to be right-handed."


Dr. Sandvall


Dr. Hill

Wheeler's now begun her freshman year at Samford University in Birmingham, Alabama, on a fast-track, six-year program to earn her Doctorate of Physical Therapy degree.

Thanks to tenacious Vanderbilt University Medical Center doctors who suspected an unusual presentation of a not-so-unusual problem, her hand has stopped shaking and her arm is steadily getting stronger.

Brinkley Sandvall, MD*, assistant professor of Plastic Surgery and director of the Hand and Upper Extremity program at Children's Hospital had a suspicion that the median nerve, the main nerve along the front of the forearm that fires muscles for the hand's coarse movement, was involved despite nerve studies that didn't prove that. She called on colleague* ***Brad Hill, MD****, assistant professor of Plastic Surgery, for another opinion.*

Complete Story

After bladder cancer and then a rare bacteria in her heart, Murray thanks Shah and Chang

Mary Beth Ballard Murray credits Vanderbilt doctors for saving her life on two different occasions — for two unrelated conditions.

And VUMC is the reason that she was able to have her two sons, she said, one after each illness.

"Vanderbilt will always be a place that we hold dear for everything they have done for us," – Mary Beth Ballard Murray.

In February 2014, Murray was diagnosed with bladder cancer at 28 years old. Sam Chang, MD, the Patricia and Rodes Hart Professor of Urologic Surgery, successfully treated her and she has been cancer free since October 2014. Her successful treatment and continued cancer-free status led to her and her husband, Chris, welcoming their son, Beckett, in July 2017.

Later that year, **Ashish Shah, MD**, the Alfred Blalock Director and chair of Cardiac Surgery, performed an unrelated life-saving operation on the mitral valve in Murray's heart. She had once again been diagnosed with an extremely rare condition without having any of the risk factors.


Mary Beth Ballard Murray with her husband Chris and her sons, Beckett and Hayes

In April 2020, Murray and her husband had their second son, Hayes. Her two young boys are a testament to her health, she said.

"I'm really grateful," said Murray, 34. "Vanderbilt is simply amazing. I have two beautiful sons. My health is great and thank you to Dr. Shah and Dr. Chang for basically fixing me and allowing me the gift to grow my family — two different times after pretty serious medical events."

Complete Story

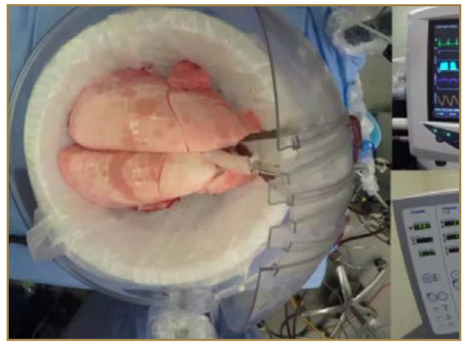
Bacchetta study finds advanced EVLP could extend the lung transplant window

Through a novel combination of *ex vivo* lung perfusion (EVLP) and cross-circulation, researchers at VUMC and Columbia University are working to radically increase the pool of viable donor organs.

"Today, only one in five donor lungs are actually usable," said **Matthew Bacchetta, MD, MBA, MA**, associate professor of Thoracic Surgery, Surgical Director of the Vanderbilt Lung Institute and co-author on the group's latest research in *Nature Medicine*. "We're trying to find ways to improve the durability and range of interventional capabilities of organ support systems."

While the number of lung transplants performed annually in the United States has risen, an estimated 10-16% of patients approved for transplant die waiting for a match.

Today's clinical EVLP systems can support lungs for up to six hours. This short window leaves little time for interventions that could optimize lungs for a particular recipient. On a practical level, transplant teams are unable to provide extensive pharmacotherapy, immunomodulation or regenerative therapy that might lower acute rejection rates - currently steady at 17%.



In the Bacchetta surgical research lab, unhealthy test lungs are returned to healthly viable lungs for transplant

"We need a way to maintain these organs for an extended period of time," Bacchetta said. "A lung that can't be used for transplant on the day we collect it may just need more time to recover. If I can keep that organ alive and functional in a homeostatic environment, then we can increase the odds it will recover to a normal level of function and we can transplant it."

To extend the transplant window, Bacchetta helped develop an EVLP extracorporeal cross-circulation technique that connects lungs awaiting transplant to the recipient's circulatory system.

Complete Story

Journal Link

Related Stories

Bacchetta team uses rehab technique may help increase donor lung supply ***Complete Story***

Multidisciplinary team studies novel technique for recovering injured lungs for transplants ***Complete Story***

VUMC one of six centers where "donation after cardiac death" gains momentum

The heart donor pool has grown due to the ability to safely use hearts from hepatitis C+ donors. Now, mounting successes in donation after cardiac death (DCD) heart transplants could further narrow the gap between supply and demand, increasing overall heart transplantation volume by over 20%.

In 2019, surgeons began using the TransMedics Organ Care System™ in DCD procedures. Vanderbilt Heart and Vascular Institute is one of six sites recruiting for a clinical trial to evaluate the system's utility in reanimating DCD hearts and identifying hearts that are good candidates for transplant.

Since December 2019, six of seven adults at Vanderbilt are recovering well after receiving DCD hearts. Four have been discharged home. "We saw no test results in these patients that deviated far from the mean of our other transplant patients," said **Ashish Shah, MD**, professor and chair of Cardiac Surgery. "Importantly, these are hearts that would never have been used without the DCD option. It truly is a new frontier in heart

transplantation."

"Historically, heart donors had to meet the strict criteria of brain death. Viable hearts have been discarded even as other organs were harvested from the same donor," Shah said.

For a DCD transplant, a donor's heart can be used if they died naturally or from cardiac arrest after life support was discontinued, and if they did not die from cardiovascular disease.

Complete Story

The American College of Surgeons has accredited VUMC as a Comprehensive Accredited Education Institute

Vanderbilt University Medical Center has been accredited as a Comprehensive Accredited Education Institute (AEI) by the American College of Surgeons (ACS).

The five-year accreditation recognizes VUMC's commitment to addressing the educational needs of a broad spectrum of learners and advances the science of simulation-based surgical education.

AEIs provide learners an opportunity to learn and practice new skills and receive immediate feedback without compromising patient safety. AEIs also conduct innovative research to advance simulation-based surgical education.

The AEI accreditation program is a voluntary peer-review process. As a Comprehensive AEI, VUMC has been recognized as providing a focused program that educates four learner groups, develops original curricula, offers a broad spectrum of education programs and has the resources and physical space necessary to conduct its educational activities. The institute is also dedicated to the advancement of the field through research and scholarly activities.

The accreditation is recognition of VUMC's commitment to educational excellence, said **Kyla Terhune, MD, MBA**, associate professor of Surgery, Vice President for Educational Affairs for VUMC and associate dean for Graduate Medical Education for Vanderbilt University School of Medicine.

"**Cathy Wilson** and Arna Banerjee did a bulk of the work in the accreditation process, and we are thankful for their efforts. It's nice to now have formal recognition of what has always been a consistent priority here at VUMC — excellence in education," Terhune said.

The ACS is a scientific and educational organization of surgeons that was founded in 1913 to raise the standards of surgical practice and to improve the quality of care for surgical patients. It has more than 82,000 members and is the largest organization of surgeons in the world. For more information, visit www.facs.org.

Complete Story

AMERICAN COLLEGE OF SURGEONS • DIVISION OF EDUCATION
ACCREDITED EDUCATION INSTITUTES®
ENHANCING PATIENT SAFETY THROUGH SIMULATION
Accredited Education Institute

VUMC Earns Program Accreditation by the AAALAC International for the next 3 years

Vanderbilt University Medical Center has been awarded program accreditation by the American Association for Accreditation of Laboratory Animal Care (AAALAC) International. The accreditation process includes an extensive internal review conducted by the institution applying for accreditation. During this review, the institution creates a comprehensive document called a "Program Description" which describes all aspects of the animal care and use program (policies, animal housing and management, veterinary care, and facilities). The Program Description is then submitted to AAALAC.

Next, the AAALAC evaluators (members of AAALAC's Council on Accreditation) review the Program Description and conduct their own comprehensive on-site assessment. The site visitors' report is then reviewed by the entire Council on Accreditation and accreditation status is determined. If deficiencies are found, they are outlined in a letter and the institution is given a period of time to correct them. Once the deficiencies are corrected, accreditation is awarded. The entire process is completely confidential.

After an institution earns accreditation, it must be re-evaluated every three years in order to maintain its accredited status. Currently more than 1,000 organizations in 49 countries have earned AAALAC accreditation.

Accreditation benefits an institution and the animals in its care in many ways. And each time a new organization becomes accredited, it helps to raise the global benchmark for animal well-being in science.

Bacchetta inducted into AIMBE College of Fellows

Highest professional honor recognizes life-saving organ transplant work

Matthew Bacchetta, MD, MBA, MA, associate professor of Thoracic Surgery and adjunct associate professor of Biomedical Engineering, has been inducted to the College of Fellows of the American Institute for Medical and Biological Engineering (AIMBE).

Bacchetta, a lung transplant surgeon with an extensive engineering background, came to VUMC in 2018 to be surgical director of a new respiratory institute that will be launched soon.

Election to the AIMBE College of Fellows is among the highest professional distinctions awarded to a medical and biological engineer.

The college is comprised of the top 2% of medical and biological engineers. College membership honors those who have made outstanding contributions to "engineering and medicine research, practice or education" and to "the pioneering of new and developing fields of technology, making major advancements in traditional fields of medical and biological engineering, or developing/implementing innovative approaches to bioengineering education."

Bacchetta was recognized for his "seminal contributions to the fields of organ transplantation and organ regeneration and engineering."

Dr. Bacchetta

His research has focused on the use of mechanical circulatory devices to support patients with advanced lung and heart disease and the development of devices to support organ recovery and regeneration.

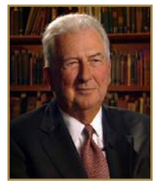
"Dr. Bacchetta has made extraordinary contributions to biomedical science leading to breakthroughs that have real clinical impact and save lives," said **Seth Karp, MD**, H. William Scott Jr. Professor and chair of the Section of Surgical Sciences and director of the Vanderbilt Transplant Center. "This election is recognition and validation of his important work."

AIMBE fellows are employed in academia, industry, clinical practice and government and represent 34 countries. They include three Nobel Prize laureates, 18 fellows having received the Presidential Medal of Science and/or Technology and Innovation, and 173 also inducted into the National Academy of Engineering, 84 inducted into the National Academy of Medicine and 37 into the National Academy of Sciences.

Complete Story

Former Cardiac and Thoracic Surgery leader Bender mourned

Harvey W. Bender Jr., MD, professor of Cardiac and Thoracic Surgery, *Emeritus*, died in September. He was 86.



Dr. Bender

Dr. Bender was head of Cardiac and Thoracic Surgery at Vanderbilt for more than a quarter century, from 1971 to 1997 — first as division chief, and then, in 1975, as chair of the newly formed Department of Cardiac and Thoracic Surgery.

"Dr. Bender was a pivotal figure in the growth and development of Thoracic Surgery at Vanderbilt," said **Walter Merrill, MD**, professor of Cardiac Surgery, who worked alongside Dr. Bender for many years. "He would frequently say that he was recruited here about the time that Dr. Gottlieb Friesinger and Dr. Thomas Graham were brought on board to help them lead in the evolution of cardiac care at Vanderbilt.

"He was particularly instrumental in the increased activity in children's heart surgery and in the development of the heart and lung transplantation programs. He played a very important role in the education of both general and thoracic surgical residents at Vanderbilt. One of his key teachings was that the individual surgeon, whether that surgeon was an attending or resident physician, was totally responsible for every aspect of a given patient's care, including results that were less than optimal."

Dr. Bender was a native of Corpus Christi, Texas, and grew up in Humble, Texas, a small town near Houston. His original career ambition was to become a veterinarian, and, toward that end, he began classes at Texas A&M's School of Veterinary Medicine.

As he told the story in an interview, after he had attended a funeral and he already had on a suit and as he passed by Baylor College of Medicine, he made an impulsive decision.

"I'll just stop in there and see what it takes to become a doctor."

Complete Story

Congratulate your colleagues on their Years of Service at VUMC and in the Section

45 YEARS OF SERVICE

Martina Hailey

40 YEARS OF SERVICE

Samuel McKenna

30 YEARS OF SERVICE

Eric Howard
Walter Morgan
J. Kelly Wright

25 YEARS OF SERVICE

Irene Feurer
Tanya Hambrick
Marina Mailyan

20 YEARS OF SERVICE

Alonda Pollins
Anna Prestwich

15 YEARS OF SERVICE

Abbes Belkhiri
Lola Chambless
Angela Hatchett
Aundra "Keo" Sparks

10 YEARS OF SERVICE

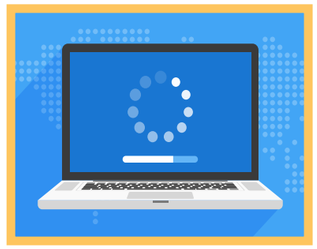
Joseph Bianchi
Isaac Chinnappan
Steven Eskind
Melinda Flatt
C. Louis Garrard
Timothy Geiger
Jun Hong
Mary Beth Isbell
Marla Link
Stacy Lytle
William McMaster
Ryan Raburn
Richard Redmond
Katherine Sibler
Carmen Solórzano
LaManda Watson

5 YEARS OF SERVICE

Chetan Aher
Christina Bailey
Adrian Barbul
Megan Bergfeld
Christopher Bonfield
Tequila Brown
Rohan Chitale
Sheila Dunn
Amy Engevik
Matthew Fusco
Ashley Johnson
Rondi Kauffmann
Mark Kelley
Barrett Raburn
Ashish Shah
Raeshell Sweeting

Section IT Fall Updates 2020

Make time to allow us to update your vital operating systems and software



Many of you will be contacted by Sam Warren, Section IT Support member, about your Section computers needing updates. These updates include the operating system itself, along with Office, as well as a few other items. We would like to schedule these updates.

Updating the operating system can take up to four hours along with driver updates. Replacing Office 2016 with Microsoft 365 takes much less time, but the initial user activation should be coordinated afterwards. These are not urgent updates, but need to be done in the next few months.

Are you going on vacation or planning some time off? If so, please contact Sam Warren (sam.warren@vumc.org) and he will take a look at your system and form a plan with you. If the updates are done while you are gone and not using your computer, it will be less disruptive and be the most efficient use of time.

As always, it is best to restart your system at the end of each day to keep it running smoothly.

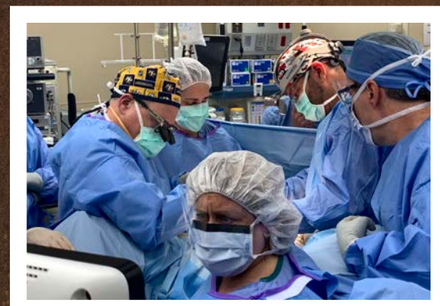
Box Drive, is the new replacement upgrade to Box Sync, upgrade today!

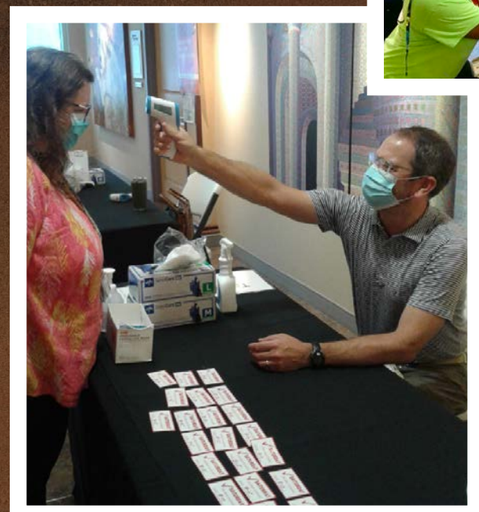
- You can **browse** files on Box Drive like they are on your system.
- It has selective sync so you can **replicate** the folders you need locally so you can use them when you are not connected to the Internet.
- Box Drive stores **previous versions** of your files so you can restore them if you make a mistake in your document.
- It **eliminates the need to use VUMC MFA** every time you want to access your files on Box.
- It's a great way to **protect your files** in case your drive crashes, is lost or stolen.

Box Drive Downloads

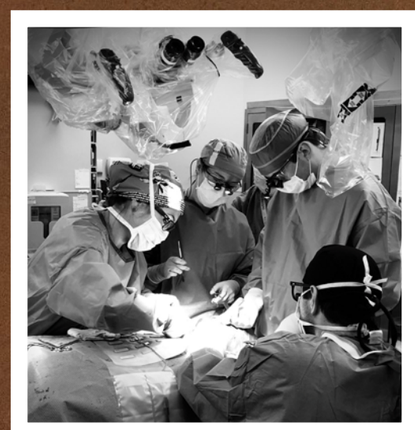
Working in the days of COVID-19

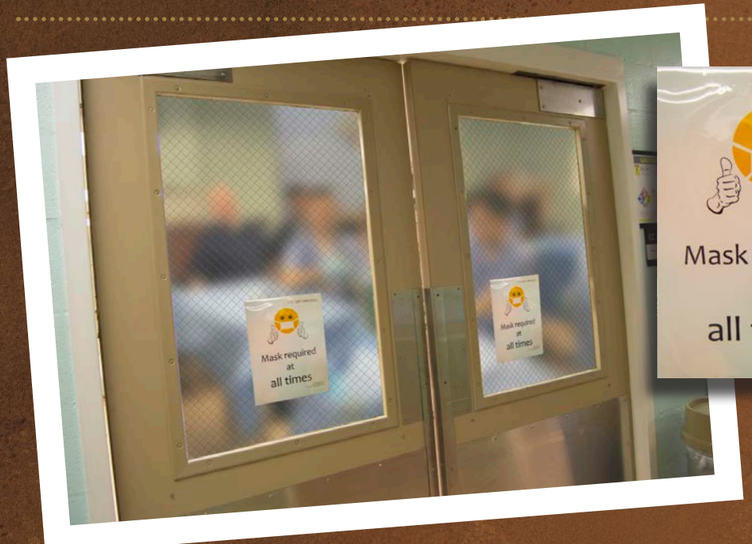
Pediatric Neurosurgery keeping it safe



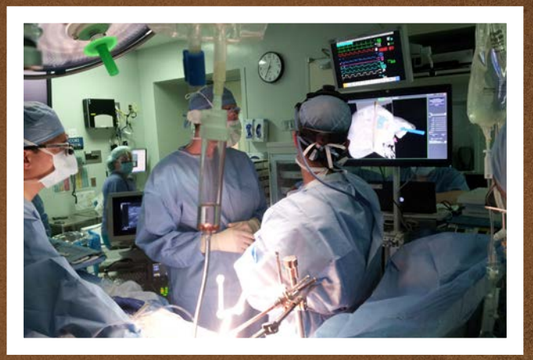


OMFS and Dentistry stay on track with surgery and resident training





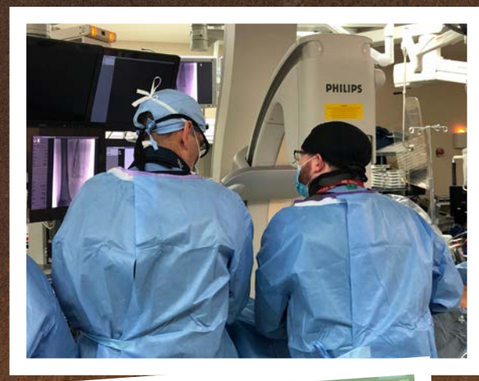
Light Laboratory is obligated to keep everyone safe. Our new signage communicates our "New way of Life"

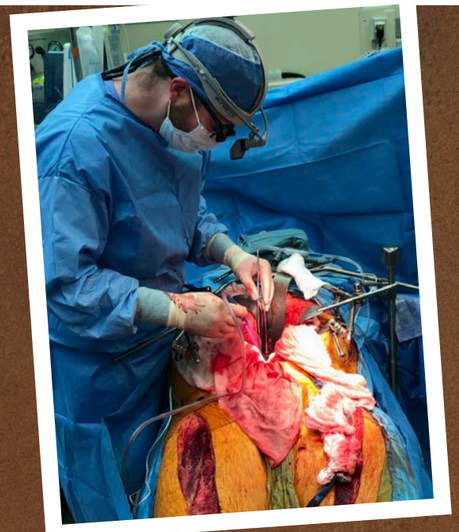


Hepatobiliary Surgery & Liver Transplant - left) Residents & Attendings working as One. Right) Using new navigation modality developed at VUMC.

Working in the days of COVID-19

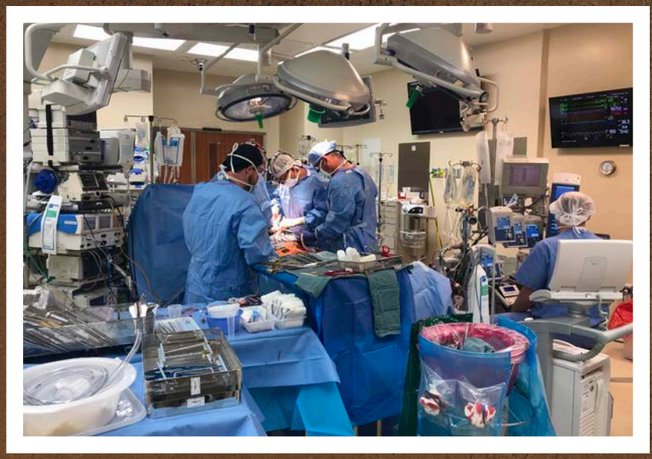
Plastic surgery faculty and residents working in concert. Education is not cancelled during COVID. Residents practice their hands-on didactics while wearing appropriate PPE and limiting the amount of residents in one room during their facial fracture plating workshop.



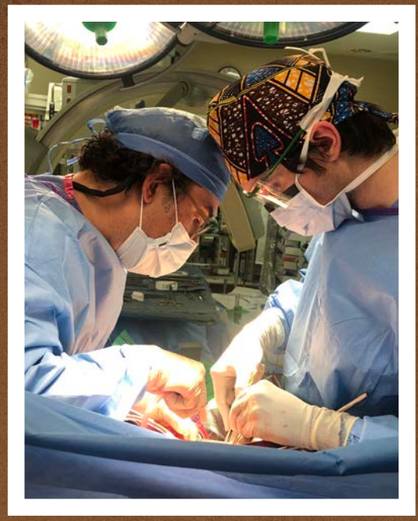


Vascular faculty and fellows

Cardiac Surgery



Adult Neurosurgery training

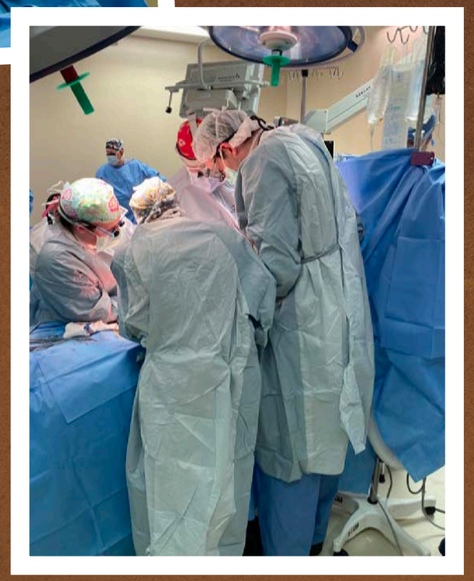


Trauma and Emergency Surgery

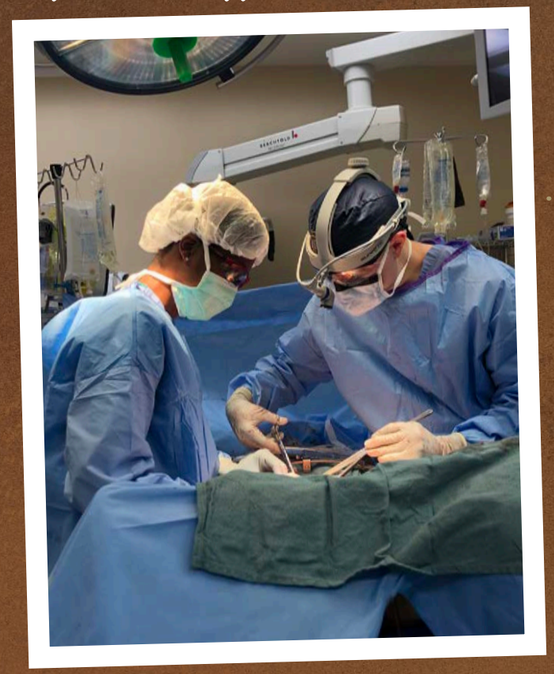
Working in the days of COVID-19

In Thoracic Surgery COVID has dramatically impacted our lives in so many unexpected ways. Despite this, our commitment to excellence and the education of our trainees is stronger than ever! No matter the changes going on in the world, our camaraderie in the OR always prevails!

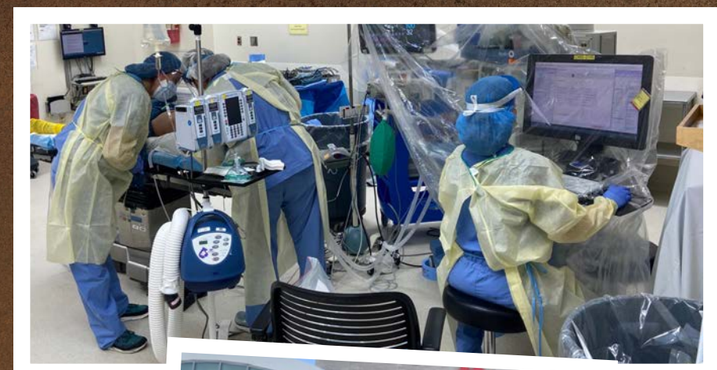
Trainees working on lung transplant



Surgical Oncology



Pediatric Surgery



Kidney Transplant in process

Department and Division New Faculty and Promotions

New Faculty

DEPARTMENT OF CARDIAC SURGERY

Assistant Professor of Cardiac Surgery
William McMaster, Jr., MD

DEPARTMENT OF SURGERY

DIVISION OF GENERAL SURGERY

Assistant Professor of Surgery
Joel (Trey) Bradley, III, MD
Jessica Ardila-Gatas, MD
Aimal Khan, MD
Christopher Menzel, MD

DIVISION OF SURGICAL ONCOLOGY & ENDOCRINE SURGERY

Assistant Professor of Surgery
Deepa Magge, MD

DIVISION OF TRAUMA & SURGICAL CRITICAL CARE

Assistant Professor of Surgery
Ronnie Mubang, MD
Jill Streams, MD

DIVISION OF VASCULAR SURGERY

Assistant Professor of Surgery
Christine Deyholos, MD

DEPARTMENT OF NEUROLOGICAL SURGERY

Assistant Professor of Neurological Surgery
Sarah Bick, MD
Michael Dewan, MD, MSCI

Faculty Promotions

DEPARTMENT OF SURGERY

DIVISION OF SURGICAL RESEARCH

Assistant Professor of Surgery
Izumi Kaji, PhD, RD

DIVISION OF GENERAL SURGERY

Assistant Professor of Surgery
Christopher Menzel, MD

DIVISION OF TRAUMA & SURGICAL CRITICAL CARE

Assistant Professor of Surgery
Ronnie Mubang, MD

DEPARTMENT OF PLASTIC SURGERY

Associate Professor of Plastic Surgery
Brian Drolet, MD

DEPARTMENT OF THORACIC SURGERY

Associate Professor of Thoracic Surgery
Stephen Deppen, MD