Welcome to our newest additions to Section leadership

I am pleased to announce the appointment of two new members of the Section of Surgical Sciences: Dr. Jeffrey Upperman, Surgeon-in-Chief at Monroe Carell Jr. Children’s Hospital and Chair, Department of Pediatric Surgery, and Jessica McAllister, Chief Business Officer. Both are extraordinary additions to the Section. I know you will enjoy working with them and forging new relationships.

Karp names McAllister as new Section CBO

Jessica McAllister, MHA, has been tapped as Chief Business Officer for the Section of Surgical Sciences. McAllister was selected through a nationwide search coordinated through the Vanderbilt University School of Medicine Executive Office.

Prior to her current Vanderbilt University Medical Center roles as Associate Director for Strategy and Director of the Office of Healthcare Transformation for the Institute for Medicine and Public Health, McAllister was an Executive Director at Boston Children’s Hospital and Harvard Medical School, and the Chief Operating Officer of the BPNF Foundation at Harvard.

Her responsibilities have included oversight and direction for clinical and financial operations, institutional strategic planning, business development, and development of an international services division; forming strategic U.S. and global partnerships, concierge service offerings; managed care contracting; GME program administration; clinical, basic, and translational research program administration; external marketing and communication strategies; and community engagement efforts.

She is a sought-after speaker and consultant to academic medical centers and medical schools throughout the U.S., Europe, China and, the Middle East.

“Please join us in welcoming Jessica to the Section and supporting her as our new CBO,” said Seth Karp, MD, professor and chair of the Section of Surgical Sciences. “I am confident she will provide outstanding leadership in initiatives across the Section and medical center, and I look forward to working with her in this important leadership capacity.”

Upperman named Surgeon-in-Chief of Children’s Hospital and Chair of the Department of Pediatric Surgery

Jeffrey Upperman, MD, a national leader in pediatric trauma and disaster preparedness, has joined the Monroe Carell Jr. Children’s Hospital at Vanderbilt as surgeon-in-chief and chair of the Department of Pediatric Surgery.

“Dr. Upperman has a great combination of energy, leadership and national accomplishments in taking care of children,” said Seth Karp, MD, professor and chair of the Section of Surgical Sciences. “He has significant expertise in trauma and community engagement as well as an extensive research portfolio. We are excited to have him here to continue to grow and develop our clinical excellence in the care of children in Middle Tennessee and beyond.”

Upperman, who has published more than 180 peer-reviewed articles, 200 abstracts and 20 book chapters, focuses on sepsis, inflammation, trauma and disaster preparedness, and has received research funding support from the National Institutes of Health, the Robert Wood Johnson Foundation and the Department of Health and Human Services.

“At the Children’s Hospital, I see an absolute powerhouse of people, and the spirit and character of the people stand out for me. Children’s Hospital is uniquely positioned to be a juggernaut in children’s health care for the greater Southeast area. I am excited by the potential and the real possibilities,” Upperman said.

Complete Story Link
An optical imaging technology developed by Anita Mahadevan-Jansen, Orrin H. Ingram Professor of Biomedical Engineering, and her group - in partnership with medical device company Ai Biomed, has won a 2019 R&D 100 Award.

The discovery that the human parathyroid gland has intrinsic autofluorescence is an example of serendipity. In 2008, Mahadevan-Jansen had been studying Raman and fluorescence spectroscopy in patients with cancerous tumors. Trainee, Lisa White, MD (GSR 2011) saw the spectroscopy being used during her rotation in surgical oncology and endocrine surgery. She observed that parathyroids were very difficult to recognize and clearly identify so she suggested to Mahadevan-Jansen that she test Raman and fluorescence spectroscopy on the parathyroid and see if it could help identify the tissue from other tissue in the neck. The rest is history.

In early 2010, Carmen Solórzano, MD, professor and chair of the Department of Surgery, joined the team using the device as it was being tested in patients. She has been involved in the clinical testing of the early laboratory-based probe, the prototype, and subsequently on the testing of the now FDA-approved PTeye device.

Using an NIH grant, Vanderbilt is currently planning a clinical trial to evaluate the PTeye and its impact on the outcome of thyroid and parathyroid surgery. Now in its 57th year, the R&D 100 Awards honor 100 top innovations of the prior year, as selected by a panel of expert judges. The Center for Technology Transfer and Commercialization (CTTC) leads the submission on behalf of Vanderbilt University, which has now won an R&D 100 Award three years in a row. The Vanderbilt team, together with Ai Biomed under a commercial license from CTTC, developed a handheld system that enables safe, rapid localization of parathyroid tissue intraoperatively. The FDA approved the PTeye system for clinical use in 2018.

Launch of living donor liver transplant program to increase availability of organs

VUMC is launching a living liver donor transplant program, significantly increasing the number of available organs for life-saving transplants.

The program will allow relatives to donate part of their liver to their loved one. The resulting partial liver in the donor and recipient has the ability to regenerate to become a fully-functional organ, typically within six weeks. VUMC’s program was recently approved by the United Network for Organ Sharing, the organization that allocates donor organs.

Nationally as well as in Tennessee, some patients on the waitlist for a liver will die before receiving a transplant because of the limited supply, said Sophoclis Alexopoulos, MD, chief of Hepatobiliary Surgery and Liver Transplantation.

“A live donor liver transplant is one way to address the shortage of critically needed organs,” he said. “The reason why we perform a liver transplant is to save a life. You’re taking somebody who has end-stage liver disease and you’re giving them a healthy portion of liver, and many of the signs and symptoms of liver disease begin to immediately resolve. You’re giving somebody an opportunity to live.”

“Dr. Alexopoulos has built a team of extraordinary quality that will be able to help both adults and children in need of liver transplantation,” said Seth Karp, MD.

A living liver donation gives the recipient the opportunity to receive an organ sooner. People on the transplant list regularly wait months to years to receive an organ from a deceased donor. With a compatible living donor, a transplant patient may receive a live donor liver within weeks. Alexopoulos anticipates that eventually 10 to 15 percent of liver transplants performed at Vanderbilt will be from a living donor.

“It is important for Vanderbilt to be able to offer this life-saving service to the residents of Middle Tennessee,” said Seth Karp, MD, professor and chair of the Section of Surgical Sciences at VUMC and director of the Vanderbilt Transplant Center. “This is a natural next step for our liver transplant program, which is one of the largest in the country.”

Complete Story Link
Callie Thompson, MD, assistant professor of Surgery, has been named director of the Vanderbilt Burn Center, one of the largest burn centers in the United States.

Thompson joined the surgical faculty in the Division of Trauma and Surgical Critical Care in 2016, and has been an integral member of the Burn Center team, including serving as the interim director since early 2018.

“We are so pleased that Dr. Thompson agreed to take on the leadership of the Burn Center in a permanent role,” said Seth Karp, MD, chair of the Section of Surgical Sciences and H. William Scott Jr. Professor.

“She is a nationally known burn surgeon and has done a wonderful job as interim director in building the group and gaining consensus and teamwork. She has a remarkable vision for making the center one of the finest in the world, and we look forward to supporting her efforts.”

Thompson’s clinical interests include care of the traumatically injured patients and emergency general surgery. She is board certified in general surgery and in surgical critical care by the American Board of Surgery. Thompson is a member of the American Burn Association, the Eastern Association for the Surgery of Trauma, the American College of Surgeons, and the Association of Women Surgeons.

Her research focus is on inflammation and the host’s response to trauma and burn injury, as well as genetic variations and their associations with outcomes after traumatic injury including hypertrophic scarring, and patient-reported outcomes after burn injury.

Her research has been published in the New England Journal of Medicine, Burns, Critical Care Medicine, and the Journal of Burn Care and Research.

Geiger utilizes the new pre-habilitation clinic for high-risk patients facing surgery

Diagnosed with colon cancer, Melba Martin, 88, needed surgery to save her life, but her colorectal surgeon knew that her frailty and anemia, coupled with concerns about her heart, put Martin at high risk for developing complications both during and after surgery.

Martin told surgeon Timothy Geiger, MD, MMHC, chief of General Surgery, associate professor of Surgery, and medical director of the Surgery Patient Care Center, that she absolutely had to recover quickly so she wouldn’t miss watching her granddaughter Savanah ride her champion Tennessee Walking Horse in an upcoming show.

Wanting the best possible outcome for his patient, he referred Martin to VUMC’s new High-Risk Surgical Encounter (Hi-RiSE) Clinic, where surgical patients at higher risk of developing complications are comprehensively evaluated and interventions are efficiently coordinated and completed in the weeks leading up to surgery.

At the clinic, a team of anesthesiologists provide personalized preoperative prehabilitation, or care that proactively addresses health issues before patients ever reach the operating room. This can include treating anemia; providing smoking cessation therapy and counseling; coordinating nutritional supplementation; or a variety of other therapies based upon specific patient needs.

“If you want to run a marathon, you wouldn’t just get up and do it tomorrow, right? You would train for it,” said Matthew McEvoy, MD, chief of Perioperative Consult Services. “The stress of surgery isn’t something that occurs just on the day of surgery. There’s at least a four- to six-week recovery period after major surgery.”
The Vanderbilt Transplant Center recently celebrated its 6,000th kidney transplant.

The kidney transplant program is the center’s longest-tenured program, dating back 57 years. In 2018, Vanderbilt performed 227 kidney transplants, nine of which were pediatric kidney transplants.

“This achievement is a testament to the strong leadership, dedication of every individual associated with the program and the generosity of the donors,” said Seth Karp, MD, H. William Scott Jr. Professor, chair of the Section of Surgical Sciences and director of the Vanderbilt Transplant Center. “Each one of the 6,000 transplants represent a life-changing event, and we are fortunate to be able to serve our community to such a significant degree over a prolonged period of time.”

Vanderbilt performed its first kidney transplant on October 3, 1962, when a kidney from a deceased child was transplanted into an adult with renal failure. The occasion was the first organ transplant in Nashville and one of the first in the South.

“The Vanderbilt kidney transplant program is one of the oldest and, now, one of the largest kidney transplant programs in the country,” said David Shaffer, MD, professor of Surgery and chief of the Division of Kidney and Pancreas Transplantation. “This milestone of surpassing 6,000 kidney transplants is a testament to the extraordinary dedication and commitment of our multidisciplinary team at Vanderbilt. It’s also a testament to the gift of living donors and deceased donor families that allow us to help so many people with kidney failure.”

“Although we are celebrating 6,000 kidney transplants, innumerable lives have been impacted — not only for these recipients but also for so many donors, as well as all of these pairs’ loved ones,” said Rachel Forbes, MD, MBA, associate professor of Surgery and associate chief of the Division of Kidney and Pancreas Transplantation.

Vanderbilt Heart and Vascular Institute is now offering a new procedure called TCAR for patients with carotid atherosclerosis disease that reduces stroke risk for many high-risk patients during interventions for extracranial carotid disease.

The TCAR procedure, or Trans Carotid Artery Revascularization, is a combined or hybrid procedure using a small incision in the neck to safely insert a sheath (tube) into the carotid artery to facilitate placement of a stent. From there, surgeons place a small tubular medical device in the artery that reverses the direction of blood flow and captures and filters any plaque that becomes dislodged during the stenting procedure, preventing the plaque from reaching the brain and causing a stroke.

“This open plaque removal is a great procedure with great results for most patients,” said John Curci, MD, associate professor of Surgery. “Alternatives have been needed for those patients who are at high risk of complications for that procedure.”

For several decades, carotid stenting in those high-risk patients was accomplished by going through the groin arteries and placing a stent while using filters to capture debris released during the procedure to expand blood flow to treat the carotid narrowing, said Patrick Stone, MD, professor of Surgery.
It’s well established that chronic inflammation can lead to colon cancer, but the molecular mechanisms behind this association aren’t fully understood. Research at VUMC into the role that the signaling protein SMAD4 plays in this process has received funding from the National Cancer Institute (NCI).

The co-principal investigators of the $2.17 million grant are Anna Means, PhD, research associate professor of Surgery and Cell and Developmental Biology, and R. Daniel Beauchamp, MD, the John Clinton Foshee Distinguished Professor of Surgery and professor of Cell and Developmental Biology. They and colleagues linked loss of SMAD4 to inflammation-driven carcinogenesis in the colon in a study published last year in the journal *Cellular and Molecular Gastroenterology and Hepatology*.

They showed a complete loss of SMAD4 occurred in almost half of colitis-associated cancers.

“This grant examines the role of transforming growth factor beta (TGF beta) signaling through a key transcription factor protein called SMAD4,” Beauchamp said. “What we found was that induced loss of the SMAD4 protein in colonic epithelial cells in mice resulted in increased inflammatory gene expression in those epithelial cells and an associated increase in inflammatory cell infiltration into the colonic stroma around the colonic glands.

The grant, which is for a five-year period, supports research that could possibly lead to prevention measures for some colorectal cancers, especially for patients at higher risk.

**Beauchamp lab additional research:**
**Chronic pancreatitis can lead to PDAC**

Chronic pancreatitis (CP) is a predisposing condition for pancreatic ductal adenocarcinoma (PDAC), the most common and deadly cancer of the pancreas. However, the link between CP and PDAC is not known.

To explore this connection, Anna Means, PhD, R. Daniel Beauchamp, MD, and colleagues used a mouse model in which a pancreatic duct obstruction was induced in conjunction with an activating mutation in the *KRAS* oncogene, as is commonly seen in human disease.

Reporting in the journal *Cellular and Molecular Gastroenterology and Hepatology*, the researchers found that CP promoted *KRAS*-initiated cancer in the ductal cells of the pancreas but not in the acinar cells which synthesize, store and secrete digestive pro-enzymes.

While acinar cells upregulate the tumor suppressor gene p53 and its target gene p21, thereby resisting neoplastic changes, ductal cells lack a p53/p21 response and become proliferative after obstructive CP, thereby contributing to PDAC progression.

**Pearson celebrates year two for undergraduate Master's Program in Biomedical Sciences**

Dr. Scott Pearson, (back row with tie) and Dr. James Patton (on Pearson’s left) co-direct the Master’s Program in Biomedical Sciences

Scott Pearson, MD, Professor of Surgery and Center for Medicine, Health & Society, with colleague James Patton, MD, professor of Biological Sciences, are seeing the fruits of their Master’s Program in Biomedical Sciences. Created two years ago, the program prepares students for a broad array of health professional careers. Pearson is also core faculty member of the Center for Biomedical Ethics and Society at VUMC while Patton directs the Vanderbilt University Interdisciplinary Graduate Program.
A dramatic improvement in health following Richard Barbour’s double lung transplant at VUMC was remarkable to witness, recalls his wife, Elizabeth “Betsy” Barbour. After years of declining health due to debilitating chronic obstructive pulmonary disease (COPD), Betsy said that after the transplant, the color returned to Richard’s cheeks, he began to breathe easily without oxygen and over time became active and involved. “I can’t imagine anything that I’ll ever see in my lifetime that would be more amazing than that,” said Betsy, who, with her family, is establishing an endowment in Richard’s name through a gift plan.

Richard lived five and one-half years after his transplant. He died at age 53. But Betsy doesn’t see his death as a failure. Instead, his transplant allowed him to live life to the fullest. “He got to do all the things he couldn’t do before his transplant. We traveled and had lots of great visits with our family across the country. Richard did things with his friends, went to hear music and enjoyed food. He invited people over for dinner and enjoyed cooking for them. He made the most of the time he was given. I know that Richard’s transplant will always be the greatest miracle I’ve ever witnessed. And not even his passing changes that experience.”

Those who participated in Richard’s care included Eric Grogan, MD, MPH, associate professor of Thoracic Surgery and chief of Thoracic Surgery, Veterans Affairs Medical Center (VAMC), Ivan Robbins, MD, Ciara Shaver, MD, PhD, and Jennifer Gray, PharmD. “I can’t say enough about the amazing community of physicians, nurses, pharmacists and the administrative team at Vanderbilt,” Betsy said. “You get to know them, and they get to know you. It’s not like you have the surgery and you’re left hanging. They walk through it with you afterward, enabling you to be successful.”

After Richard’s transplant, the Barbours became connected to others who were waiting for transplants at Vanderbilt. Before his death, Richard had supported the Vanderbilt Lung Transplant Patient Assistance Fund. Before Richard died, Betsy began to think about ways to continue that support. She knew there would be donations given upon his death, and she asked him if he wanted the donations to go to the assistance fund. He said yes.

**Couple’s transplant journey continues by helping others**

*Betsy Barbour and her late husband, Richard, created a fund to help support Vanderbilt’s Lung Transplant Patient Assistance Program*

**Below:**
Betsy Barbour, center, with members of her husband Richard’s care team. From left are Eric Grogan, MD, MPH, Jennifer Gray, PharmD, Ivan Robbins, MD, and Ciara Shaver, MD, PhD (photo by Nathan Morgan)

**Join your colleagues, alumni and patients in giving back**

There are many ways to join our community of supporters — from making an outright gift to making a gift through your will. To learn more about how to help further our mission, contact VUMC Development at giving@vumc.org or 615-936-0230.
Goldenring part of team to study undiagnosed congenital diarrheas in infants

Researchers and pediatric gastroenterologists at four institutions, including VUMC, were recently awarded a five-year, $9.4 million federal grant to tackle undiagnosed congenital diarrheas caused by a single gene mutation.

The National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK) awarded the funding for the Pediatric Congenital Diarrhea and Enteropathy (PediCODE) Consortium and Repository, which will consist of Vanderbilt — including the Departments of Surgery, Pediatrics, Cell and Developmental Biology, the Epithelial Biology Center and Children’s Hospital — the University of California Los Angeles Department of Pediatrics, The Hospital for Sick Kids in Toronto, and Boston Children’s Hospital.

With an estimated 50 percent of all congenital diarrheas having no known etiology, PediCODE brings together a multidisciplinary group of physician-scientists with expertise in cell biology and genetic disorders. They are working to characterize the clinical and pathophysiological features of these diarrheas and develop a clinical database and biorepository of disease-specific cells, tissues and other primary patient materials.

James Goldenring, MD, PhD, Paul W. Sanger Professor of Experimental Surgery, will serve as Vanderbilt’s principal site investigator and consortium co-principal investigator. Vanderbilt collaborators include Sari Acra, MD, MPH, chief of the Division of Pediatric Gastroenterology, Hepatology and Nutrition; Hernan Correa, MD, associate professor of Pediatric Pathology at Children’s Hospital; Joseph Roland, PhD, research associate professor of Surgery and managing director of the Digital Histology Shared Resource; and Matt Tyska, PhD, professor of Cell and Developmental Biology.

Complete Story Link

Thompson part of miracle cure team helping a debilitated man

VUMC physicians, including Reid Thompson, MD, William F. Meacham Professor and chair of the Department of Neurological Surgery, are praising the miraculous turnaround for a Nashville man who was diagnosed with a rare tumor.

David Covington struggled to walk, stand, and, at times, get out of bed. For nearly two years, he didn’t have an explanation as to why. “I definitely thought for a while that I was crazy. It was really hard to not know what was happening,” said Covington.

The Nashville school teacher said what started as general muscle weakness progressed over time. He experienced dozens of tiny fractures that kept him in pain, and eventually had to use a walker to teach while sitting on a stool. He went from doctor to doctor, underwent several rounds of physical therapy, but didn’t see any improvement.

Then, he was referred to endocrinologist Kathryn Dahir at VUMC.

“The accumulation of pain and disability and fractures was really the red flag that something unusual was happening. And that’s when you dig a little bit deeper to see what’s going on,” said Dahir.

She suspected Covington had an especially rare disorder known as “Tumor-Induced Osteomalacia” or TIO. For those with TIO, the tumor ultimately prevents bones from being able to regenerate. After additional scans, Dahir noticed something suspicious: a small dot at the back of his brain.

Thompson agreed with Dahir that it could be the tumor responsible for Covington’s symptoms.

“You know, in medicine, it’s really rare that you have an opportunity to actually cure someone. But with this small, super rare tumor, if you remove it, you have a chance to cure them,” said Thompson.

After surgery, Covington began undergoing physical therapy and was able to walk in just a few weeks. Today, Covington stands in front of his classroom with ease.

Complete Story Link
Idrees, Bailey build life-saving HIPEC program for patients with little hope

Ron Duncan kept Googling his cancer diagnosis and coming up with the same answer: death. Having just gotten the news from his primary care provider, he wanted to know what his options were with peritoneal carcinomatosis, a cancer that had originated in his appendix then spread throughout his abdominal cavity. His only inkling that something might have been amiss was pain in his lower abdomen, pain he figured was a hernia from strenuous athletic activity. He was 53 and in the prime of his life, a successful business executive who played multiple sports.

“I’ll never forget misspelling peritoneal carcinomatosis and Google correcting me and throwing up a page that said: you’re going to die, there’s no way you are going to live, you have terminal cancer, nobody lives, and you are going to die — all the way down the page,” Duncan said. “I sat there gripped with fear, not even believing it.”

That was six years ago. These days, Duncan is back playing softball doubleheaders. A highly specialized cancer treatment that entails combining surgery with chemotherapy saved his life. The Brentwood, Tennessee, man underwent hyperthermic intraperitoneal chemoperfusion (HIPEC) surgery and had portions or complete removal of six diseased organs before having his abdominal cavity irrigated with heated chemotherapy.

Duncan had his appendix, spleen, gallbladder and omentum taken out along with portions of his small intestine and large intestine. He also had tumors excised from his liver. The heated chemotherapy destroyed any remaining microscopic cancer cells.

Duncan sent a message on the sixth anniversary of his “cancer-cleaning, awesome surgery” to thank Kamran Idrees, MD, MSCI, MMHC, director of Pancreas and GI Surgical Oncology and director of the Peritoneal Surface Malignancy Program at Vanderbilt-Ingram Cancer Center (VICC). Idrees, who started the HIPEC program at VICC, is a highly skilled surgeon who had completed two fellowships, including one at University of Pittsburgh Medical Center, home to one of the premier HIPEC procedures training programs, under the tutelage of David Bartlett, MD.

He worked with Bartlett from July 2009 to June 2011. After completing his fellowship, Idrees came to VICC in August 2012 to establish the HIPEC program. He and a colleague, Christina Bailey, MD, MSCI, who joined the program in 2015, have performed more than 100 HIPEC surgeries at Vanderbilt. It’s a surgical procedure that isn’t widely available.

Complete Story Link
Patient's allergy symptoms reveal critical heart transplant need

Tricia Burgess thought it was her seasonal allergies acting up again. She walked into the emergency department at a Knoxville hospital to find out why she was having difficulty breathing. The diagnosis: She had end-stage heart failure and was given less than a year to live.

The news was hard to accept for Burgess, at the time an otherwise healthy 39-year-old nurse from Jefferson City, Tennessee, whose only medications were over-the-counter allergy drugs. It set her on a journey that ended up with a heart transplant at VUMC just 24 days later, about 12 hours after she was placed on the transplant list.

“I didn’t even know I was sick,” Burgess said. “I’m thankful that Vanderbilt saved my life.”

Burgess was suffering from severe heart failure. She essentially didn’t get enough blood supply through her severely diseased coronary arteries to sustain the function of the heart muscle.

After several days of testing at Vanderbilt, the news was grim. Tarek Absi, MD, an assistant professor of Cardiac Surgery, informed Burgess that her heart was too fragile for bypass surgery. Her only hope was to receive a heart transplant or left ventricular assist device (LVAD), a pump for patients with end-stage heart failure.

After receiving a battery of tests to confirm she was a candidate for these therapies, Burgess was placed on the heart transplant list at about 4 p.m. that day and soon after, she got the call — a heart matching her A-positive blood type was found. At 4 a.m. the next morning, she was in an operating room undergoing transplant.

Good fortune was with Burgess and another factor — the availability of hepatitis C-positive hearts, such as the one that Burgess received. Vanderbilt has led the way among heart transplant centers in using these hearts, because hepatitis C is a virus that can now be cured using newer drugs that are well tolerated by transplant patients.

Bichell welcomes perfusionist to manage pediatric blood quality

Isaac Chinnappan, MS, CCP, LCP, a senior cardiopulmonary perfusionist at Monroe Carell Jr. Children’s Hospital at Vanderbilt, has become one of nine certified perfusionists in the country to receive the Patient Blood Management Specialist certification.

The International Board of Blood Management in conjunction with the American Society of Extracorporeal Technology introduced the new certification in January.

Chinnappan was recently inducted as a fellow of the American Academy of Cardiovascular Perfusion, a distinction given to a select group of perfusion professionals. In the past 45 years, 130 perfusionists have received the recognition, which honors contributions to enhancing perfusion techniques, new findings in perfusion clinical practice, presentations and publications.

“Blood conservation is a key to shorter hospital stay and better outcomes overall,” said David Bichell, MD, William S. Stoney Jr. Professor of Cardiac and Thoracic Surgery and chief of Pediatric Cardiac Surgery at Children’s Hospital. “We welcome his expertise in keeping us at the cutting edge of blood conservation. This is an honor and we look forward to the innovations he will bring to our team.”

The recognition highlights Chinnappan’s expertise in the areas of data collection, quality reporting and quality improvement projects as they relate to perioperative transfusion.
Surgeons Hooks, Perdikis see twin sisters through breast cancer together

People ask, “What’s it like to be an identical twin?” In Pam Simmons’ case, it feels normal to have someone who looks and sounds like me. We share something else too: cancer. In 2016, when genetic testing had become much more affordable and commonplace, my sister Randy Bieniek tested BRCA2 gene positive.

Randy apologetically broke the news to me. Being an identical twin, I knew I’d test positive too. In the spring of 2017, I ordered an at-home saliva test via Color Genomics. My report indicated I had greatly increased odds of developing breast cancer as well as ovarian cancer. Life then threw me a curve. During a self-exam in the shower, all felt fine. Then I raised my arm and checked all the way up to my clavicle bone. I felt a very small lump. The later biopsy and MRI revealed a stage 1, aggressive 1.3 cm tumor.

One of my first appointments was with my Vanderbilt oncologist, Ingrid Mayer, MD, MSCI. Seven weeks later in a six-hour surgery, Mary Hooks MD, MBA, associate professor of Surgery removed the cancer and breast tissue, and plastic surgeon Galen Perdikis MD, chair and professor of Plastic Surgery, placed expanders to begin my reconstruction and later completed my silicone implant exchange surgery.

I’m now even more like my twin. I count my blessings every day that genetic testing put me on a path of heightened awareness, which likely saved my life.

Shinall study finds no “low-risk” procedures among frail patients

Even a minor surgery such as a laparoscopic gallbladder removal can prove to be a high-risk and even fatal procedure for frail patients, according to new research published in *JAMA Surgery*.

A team of researchers from leading U.S. academic medical centers and VA medical centers examined the records of 432,828 patients who underwent a non-cardiac surgical procedure. They found that patients who were classified as frail or very frail had substantially higher mortality rates after surgeries with low and moderate operative stress, with up to 43 percent dying after moderate stress procedures such as a laparoscopic cholecystectomy (minimally invasive gallbladder removal).

“It’s been established that frailty is a strong predictor of complications and death related to surgery, but what we learned in this study is that frail patients have alarmingly high rates of postoperative death, no matter how minor the surgical procedure,” said lead author Myrick “Ricky” Shinall Jr., MD, PhD, assistant professor and surgeon at VUMC. “A laparoscopic cholecystectomy is one of the most common operations I do as a general surgeon, and this has really given me pause to think that for frail to very frail patients — about 10 percent of our sample — this is a big deal. Our data indicate that there are no ‘low-risk’ procedures among frail patients.”

In layman’s terms, frailty is a vulnerability to becoming sick from even minor stress when the body has lost the ability to recover.
Broucek, Duke provide robot-assisted hernia repair that eases recovery

Keith Sanford runs out of fingers when he counts his past surgeries, including a kidney and pancreas transplant, so when his VUMC surgeon gave him the option of having an abdominal hernia repaired with a minimally invasive, robot-assisted procedure, he agreed.

“She told me it was a way to avoid having another large incision,” he said. “After I had the surgery, there was a lot less pain and discomfort. I didn’t even think about taking any kind of pain medication afterward.

VUMC is the only medical provider in Tennessee offering a robot-assisted, enhanced-view, totally extraperitoneal (eTEP) hernia repair, a minimally invasive procedure that replicates a traditional abdominal hernia repair that is performed with a large, open incision.

“We’re not changing how hernia repair is done; the addition of the robot allows us to do the same surgery, just through smaller incisions,” said Meredith Duke, MD, assistant professor of Surgery, one of three Vanderbilt surgeons who currently perform the procedure. “The robot also provides 10 times the magnification and three-dimensional visualization so we can see the arteries, nerves — all the things that we’re trying to protect — very well.”

At VUMC, each individual with a hernia is evaluated to determine if their specific case is suitable for a robot-assisted procedure, said Joseph Broucek, MD, assistant professor of Surgery. Vanderbilt Health surgeons perform around 10 robot-assisted hernia repairs each month.

In addition to Duke, and Broucek, and Richard Pierce, MD, PhD, both assistant professor of Surgery, also perform the minimally-invasive, robot-assisted hernia repairs. All VUMC surgeons who perform robot-assisted surgeries have received specialized training, such as a fellowship, in order to use the robots during procedures.

Naftel uses ROSA technology to pinpoint seizure areas

Daniel Lookabaugh, a 20-year-old electrical engineering student, has never driven a car because of violent seizures, and at one point last year had to put his schooling on hold.

His seizures began about age three. They became more frequent as he got older, then became so intense he would dislocate his shoulder and jaw. He has epilepsy, a condition of recurring seizures.

“About two years ago, my seizures became more violent and that’s when my jaw and shoulder started popping out,” Lookabaugh said. “It gets annoying, and I hate that I have to depend on other people.”

In the span of one month in December 2018, he suffered six severe seizures, requiring hospitalization at Monroe Carell Jr. Children’s Hospital at Vanderbilt each time to have neurological care as well as intervention from Pediatric Orthopaedics to reset his jaw and shoulder.

With the help of new technology, a device known as the ROSA (Robotic Stereotactic Assistance) Robot, Lookabaugh’s doctors, pediatric neurologist Kevin Ess, MD, PhD, and pediatric neurosurgeon Robert Naftel, MD, associate professor of Neurological Surgery, believe he will get the chance to be able to drive and will miss a lot less school.

The ROSA is a robot that assists in inserting EEG electrodes into patients’ heads, helping neurosurgeons precisely identify seizure hotspots safely, effectively and efficiently. Using the device, they can pinpoint the precise location seizures start — all without having to perform a craniotomy, removal of the skull, by monitoring his brain activity.

Doctors with the Epilepsy Program at Children’s Hospital are able to use this technology as another tool in their diagnostics arsenal for pediatric patients. The robot was first purchased by VUMC, an acquisition championed by Peter Konrad, MD, PhD, professor of Neurological Surgery, with a second one subsequently acquired for pediatrics.

Complete Story Link
Bonfield tackles surgical complexity while making patient connections

As a child in Western Pennsylvania, Chris Bonfield, MD, loved playing with Transformers and other toys that could be taken apart and reassembled. He liked tinkering with structures and science. Foreshadowing his career in his high school yearbook, Bonfield wrote he'd be a neurosurgeon, although he's certain today that his younger self didn't fully understand what that meant.

In fact, neurosurgery isn’t as clear cut as it seems. While some neurosurgeons treat brain tumors, epilepsy and hydrocephalus (water on the brain), others, like Bonfield, specialize in areas such as the bones of the skull and the spine.

Bonfield, director of Pediatric NeuroSpine and Neurosurgery Craniofacial Programs, treats about 200 pediatric cases and 80 adult cases a year and tackles craniofacial surgery, pediatric spinal deformity and scoliosis correction as well as complex spine reconstructions in adults.

Early in medical school, he realized he liked the science and surgery of the spine and brain, but the field is so rigorous that students are advised to explore other areas before committing. While on rotation in his fourth year at University of Pittsburgh School of Medicine, he reaffirmed his path.

“The layperson hearing ‘neurosurgery’ thinks you’re slicing into brains all the time, and yes, we do that. When I’m on call I take brain tumors out of babies and do other things inside the brain — it just so happens that a lot of my interests are deformed bones and correcting those to help the brain grow and the spine function normally,” said Bonfield.

Bonfield, who came to Vanderbilt in 2015, enjoys rounding on patients at Children’s Hospital because it is anyone’s guess as to what the children will say. There’s also a fun element in being able to do follow-ups in clinic that don’t involve shots, and where children get to give him high- and low-fives so he can observe their movements.

“We have serious conditions that we can actually fix in children. They heal better so they can come back from brain tumors and bad head injuries, and a lot of them do well — not just OK. That goes missed by people — the chance to get some really incredible wins,” he said.

Kassis uses new migraine surgery to help ease some patients’ pain

Clarksville resident Hope Dyer remembers the day she looked out a window, saw it was raining and immediately began crying. She realized it was the first time in more than two decades that a drop in barometric pressure before a storm hadn’t triggered a debilitating migraine.

In 2018, Dyer underwent peripheral nerve surgery at Nashville VA Medical Center with the goal of relieving her chronic migraine headaches. The outpatient surgery is now also being offered by the same team of plastic surgeons at VUMC.

“I started getting migraine headaches when I was 14, and it had gotten to the point I was getting them from 18 to 25 days every month,” said Dyer. “Now, I have maybe just five a month. I’m getting out, and I’m doing things now. This has been life changing.”

“Plastic surgeons perform cosmetic procedures like brow lifts and resection of the frown muscles, and patients who had these types of surgeries had been coming in for follow-up appointments saying, ‘I feel so great, even my migraines went away,’” said Salam Kassis, MD, assistant professor of Plastic Surgery, who performs the procedures.

“Now, there’s two decades of peer-reviewed research that shows that surgically releasing nerves entrapped and compressed by muscle, fascia, bone or even by a blood vessel can give significant relief for this select group of migraine headache patients,” said Kassis.
Couple’s bequest celebrates gift of life after kidney transplant

Larry and Sue Hill of Norris, Tennessee, decided after Larry’s life-saving kidney transplant at VUMC in 2012 that they weren’t satisfied just saying thank you and moving on. They wanted to pay it forward.

They made a gift to VUMC, thanking the institution for “the greatest gift you can receive,” the gift of life.

The Hills spoke in November at an annual event to fellow members of the Canby Robinson Legacy Circle, which recognizes donors who have made a gift through their will, retirement plan, life insurance policy or trust. The event celebrates community members who have made these forward-looking gifts to help secure the future of the Medical Center.

After a serious infection that was treated when he was only 18 months old, Larry went on to develop problems with his kidneys in his 40s. This was medically treated for years before he was finally placed on the transplant list.

After 908 days on the list, he received a phone call from his nephrologist, Anthony Langone, MD, associate professor of Medicine, that a donor kidney was on its way to VUMC.

Larry said he and Sue were impressed by Langone and the teamwork that went into his transplant.

“In addition to Dr. Langone and the surgeon, there was a nutritionist, a dietitian, social workers, nurses, phlebotomists, respiratory care, etc. We noticed how people work together at Vanderbilt and wondered how we could be a very small part of the transplant team,” he said.

“We made a commitment that we wanted to be part of this. We wanted to take action and not just sit back and receive. We wanted to make a difference,” Sue said, adding that they hope to inspire others to do the same.

Members of the Canby Robinson Legacy Circle also heard from Seth Karp, MD, the H. William Scott Jr. Professor, chair of the Section of Surgical Services, Surgeon-in-Chief of VUMC, and director of the Vanderbilt Transplant Center.

Karp told the group that solid organ transplants at VUMC have increased 70 percent since 2011, and the Transplant Center recently celebrated its 6,000th kidney transplant. In 2019, VUMC will receive about 80 donors, resulting in 150-plus life-saving transplants. Nationally, there are about 113,000 people today waiting on a life-saving organ, Karp said.

Join your colleagues, alumni and patients in giving back

There are many ways to join our community of supporters — from making an outright gift to making a gift through your will. To learn more about how to help further our mission, contact VUMC Development at giving@vumc.org or 615-936-0230.

2020 named and academic lecture series

**Gavin Lecture**
Kenji Inaba, MD, USC
February 7, 2020

**Shumway Lecture**
Jonathan Haft, MD
February 21, 2020

**Scott Lecture**
Don Nakayama, MD
March 13, 2020

**Thuss Lecture**
Eduardo Rodriguez, MD, DDS
April 17, 2020

**Hall Lecture**
April 18, 2020
speaker TBD

**McCleery Lecture**
Selwyn Vickers, MD
April 24, 2020

**Dale Lecture**
Jon Matsumura, MD
May 29, 2020

**Fall Series TBD**

**Daniel Lecture**
TBD

**Holcomb Lecture**
TBD
Dmochowski, Guillamondegui contribute to surgeon behavior study

Patients of surgeons with higher numbers of reports from co-workers about unprofessional behavior are significantly more likely to experience complications during or after their operations, researchers from VUMC reported in *JAMA Surgery*.

“Surgical teams require every team member to perform at their highest level. We were interested in understanding whether surgeons’ unprofessional behaviors might undermine culture, threaten teamwork and potentially increase risk for adverse outcomes of care,” said the study’s corresponding author, William Cooper, MD, MPH, vice president for Patient and Professional Advocacy at VUMC.

Cooper, the Cornelius Vanderbilt Professor of Pediatrics and Health Policy, was lead author of a previous study that found that recording and analyzing patient and family reports about rude and disrespectful behavior can identify surgeons with higher rates of surgical site infections and other avoidable adverse outcomes.

In the current study, the researchers — including Roger Dmochowski, MD, MMHC, professor of Urology and vice chair for Faculty Affairs and Professionalism and Oscar Guillamondegui, MD, MPH, professor of Surgery, and vice chair for Surgical Quality and Patient Safety — conducted a retrospective cohort study of outcome data from two academic medical centers that participate in the National Surgical Quality Improvement Program. The cohort included more than 13,600 adult patients who underwent operations by 202 surgeons between 2012 and 2016.

Bacchetta leads expansion of ECMO program providing life-saving, continuity of care

For more than 25 years, VUMC has offered ECMO [Extracorporeal Membrane Oxygenation], a life-sustaining mechanical pump that temporarily takes over for the heart and lungs of critically ill patients, allowing them to rest and recover. ECMO program is the first and largest in Middle Tennessee and one of the largest in the nation. This year, for the first time in a systematic way, VUMC has expanded its ECMO program from its longtime home in the CVICU to the Medical (MICU) and Trauma Intensive Care units. That means more patients can benefit from the life-saving treatment, and patients and families can benefit by staying with their initial care team, rather than shifting to the CVICU when ECMO is necessary.

VUMC is now one of only a few hospital systems in the country that regularly offers ECMO outside the CVICU. “It allows people to receive optimal care from nurses, advanced care practitioners and physicians who manage medical and trauma patients every single day,” said [Matthew Bacchetta, MD, MBA, MA, associate professor of Thoracic Surgery. “And that makes us different from every single program in the region. There’s no program in the Southeast region that offers such diverse and expansive coverage.”

The machine’s external pumps and oxygenators remove carbon dioxide from the blood, replace it with life-saving oxygen and then return it to the patient’s circulatory system. VUMC delivers ECMO to more than 100 patients each year. Since Bacchetta’s arrival last year, Vanderbilt has expanded the use of ECMO in keeping patients alive who are waiting for a lung transplant, and the heart transplant program has made similar progress under the leadership of Ashish Shah, MD, professor and chair of Cardiac Surgery.

Complete Story Link
One last plea for a donor kidney, then a Facebook connection

Will Gallagher had almost given up on Facebook when he decided to post one last plea.

He needed a kidney, was on the waiting list for an organ donor and had tried for months to find one himself. He shared the living donor link from VanderbiltHealth.com over and over; 20-25 people messaged him that they had applied. One person matched but decided not to proceed.

“Then one night — I remember it like it was yesterday — It was 2:30 in the morning, I said, ‘I’m going to try one more time’,” Gallagher said. “I posted it on Facebook just asking and shared the link for Vanderbilt to take the questionnaire. Two or three weeks later, Carissa messaged me. She’s like, ‘Hey, I passed the test and I passed the blood work. We’re a match.’ She was like, ‘So I’m going to go ahead and make an appointment and is January good to come down there and we’ll go?’”

Carissa Buccieri was an acquaintance and Facebook friend when the match was made around November 2017, but their bond strengthened as they worked toward Gallagher’s transplant on March 15, 2018.

Buccieri’s husband Daniel was deployed in Japan when she started the process but was home by the time their surgeries was performed. Douglas Hale, MD, and Rachel Forbes, MD, both associate professors of Surgery, performed their operations transplanting her kidney into Gallagher in March 2018. Buccieri, now 22 and working in her church office at Palms Baptist, said she was feeling great weeks after surgery and described it was “a really easy, easy process,” though the experience is different for everyone.

Organ allocation – Karp quoted
Where you die can affect your chance of being an organ donor

If Roland Henry had died in a different part of the country, his organs might have been recovered. And lives could have been saved.

But the local organ collection agency said no. It gave no reason, no explanation to his family, though the Connecticut man appeared to be a well-qualified donor despite advancing age: he died in a hospital, on a ventilator, previously healthy until a car crash that led to a stroke.

“It was devastating to be told there was nothing they considered worthy of donation. Nada. Not a kidney, not a liver, not tissue,” recalled Henry’s daughter, Donna Cryer, president of the nonprofit Global Liver Institute and herself a recipient of a liver transplant.

Donna Cryer holds up family photos that include her father Roland Henry, as she poses for a photo in Washington. When her father died, she tried to donate his organs, yet the local organ collection agency said no, without talking to the family or providing a reason.

Henry’s case illustrates troubling uncertainty in a transplant system run by government contractors that are under fire for letting potentially usable organs go to waste.

“What we have is broken. We know it is costing people’s lives,” said Seth Karp, MD, professor & Chair, Section of Surgical Sciences and Director, Vanderbilt Transplant Center.

Under U.S. transplant rules, the country is divided into 58 zones, each assigned an “organ procurement organization” in charge of donation at death. Those OPOs are matchmakers with a tough job: get donation consent, collect organs quickly and get them to the right transplant center before they deteriorate, even if a hospital calls with a possible donor at 3 a.m.
Naftel co-authors epilepsy research

Astrocyte cells may contribute to severe cases

The neurodevelopmental disorder Tuberous Sclerosis Complex (TSC) is characterized by often severe epilepsy, along with autism and psychiatric disorders. Astrocytes — star-shaped glial cells that serve multiple functions in the brain — are suspected to play a role in TSC.

Robert Naftel, MD, associate professor of Neurological Surgery, and colleagues have proposed that the water channel aquaporin-4 (AQP4), which is important to the functions of astrocytes, contributes to TSC disease pathology.

Reporting in *Neurobiology of Disease*, they found increased expression of AQP4 in cortical brain tissue removed from TSC patients during epilepsy surgery. Using mouse models and cultured astrocytes, they demonstrated that inactivation of the genes Tsc1 or Tsc2 (mutations in these genes cause TSC) resulted in increased AQP4 expression.

Increased AQP4 expression has been previously reported in temporal lobe epilepsy, supporting a broader role for this protein in astrocyte dysfunction that leads to seizure activity. AQP4 may represent a novel therapeutic target for the treatment of epilepsy in TSC and perhaps other seizure disorders.

This research was supported by the NIH.

Complete Story Link

Goldenring, Choi contribute to gastric cancer study

*Helicobacter pylori* infects approximately half of the world’s population and is the strongest known risk factor for developing gastric cancer. Gastric cancer is the third most lethal cancer worldwide.

A cluster of genes called the cag pathogenicity island renders some strains of *H. pylori* particularly virulent. However, it is not clear exactly how *H. pylori* induces gastric cancer.

Now in a study published in the *Proceedings of the National Academy of Sciences*, authors including James Goldenring, MD, PhD, vice chair for Surgical Research, Section of Surgical Sciences and Paul W. Sanger Professor of Experimental Surgery, and Eunyoung Choi, PhD, assistant professor of Surgery, have shown that in chronically infected mice, carcinogenic strains of *H. pylori* mobilize a transmembrane protein that marks a distinct population of progenitor cells called Lrig1.

Additional collaborators include Lydia Wroblewski, PhD, and Richard Peek, MD. *H. pylori* was found to stimulate Lrig1-expressing progenitor cells in a cag-dependent manner, and these reprogrammed cells gave rise to a full spectrum of differentiated cells. Moreover, in human samples, Lrig1 expression was enhanced in gastric lesions with premalignant potential.

These findings provide further insight into the detrimental events that develop in response to *H. pylori* infection.

This research was supported in part by grants from the NIH and by a VA Shared Investment Grant.

Complete Story Link

Journal Link

Diaz presented ATVB award

José A. Diaz, MD, FAHA, director of the Division of Surgical Research and the Light Surgical Research Laboratory, was recently presented the prestigious Special Recognition Award in Thrombosis during the national conference of the The Council on Arteriosclerosis, Thrombosis and Vascular Biology (ATVB). The council established the award in 1981 to recognize council members who have made significant contributions to the council as well as the fields of Arteriosclerosis, Thrombosis, and Vascular Biology.

The Council’s nominating committee annually selects one person from each field to receive the ATVB Special Recognition Award. The award is presented during the ATVB Business Meeting and Awards Reception at the American Heart Association’s Scientific Sessions.
A surgeon answers your most pressing questions about finding quick heartburn relief

Maybe you washed down that order of hot chicken with a new sour beer, or the citrousy dressing on your salad is giving you more than you bargained for. Heartburn can creep up at the worst of times. It may all of a sudden pop up when you’re enjoying an evening out with friends or after an office lunch just as you’re about to give a presentation. That’s when you need quick heartburn relief.

Heartburn occurs when stomach acid rises into the esophagus. Typically, when we swallow, a sphincter around the bottom of the esophagus temporarily relaxes to let food pass into the stomach. Then it tightens again to keep the contents from coming back up. Some foods and beverages may cause the sphincter to relax too much. In some individuals the muscle is weakened, allowing acid to rise and cause the burn.

So what can you do to ease the pain?

We asked Chetan Aher, MD, assistant professor of Surgery, to answer questions on how to put out the flames on heartburn — and when to see your doctor for better symptom control.

Q. What is a good go-to heartburn reliever?
A. “I recommend that people keep some Tums around. Almost everybody gets some small amount of heartburn at some point. And Tums are just a good thing to have around the house. A type of medication that is going to give you more immediate relief on top of Tums is something like Pepcid or Zantac. Those are the drugs that are going to work for relieving heartburn fast.”

Q. How can I find relief if I’m at a restaurant and I don’t have Tums with me?
A. “If you can get your hands on some milk or dairy, that will help to coat the esophagus. Then avoid consuming any additional spicy or acidic foods, because those types of foods tend to worsen the symptoms of reflux.”

Q. What meds should I take if I get heartburn frequently?
A. “Proton-pump inhibitors are in another class and are stronger. Prilosec or Nexium are available over the counter. Those are great drugs, but they’re much better for maintenance. If you take a Prilosec, it doesn’t really do anything for you for 24 hours. It’s not a medication to be taken as needed. It’s more of a maintenance medication.”

Predators’ dentist Ames helps players who suffer tooth loss and pain

Losing teeth is a natural part of childhood -- and sometimes adulthood, if you’re a hockey player.

Predators Austin Watson, Rocco Grimaldi, Craig Smith and Viktor Arvidsson know this.

They’ve all had their teeth knocked out on the job -- and some of them off the job.

All of them have elected to skip the tooth fairy and live with the annoyances that accompany not having some of their chiclets. Eating can be a challenge. Smiling minus your pearly whites can be embarrassing. Talking can be frustrating. Root canals and veneers and long hours in a dentist’s chair are the norm.

Man behind the mouths

Tyler Ames, DMD, assistant professor in the Division of Dentistry and one of the Predators’ team dentists, has seen grown men drawn to tears too many times to remember -- not so much because of the injuries they’ve suffered to their mouths, but more because of the pain that comes with treatment.

Such is the life of a medical mechanic who treats wounds so fresh sometimes they make him cringe. Lost teeth. Lips that require plastic surgery.

His office for Predators games often is Bridgestone Arena.

The first thing he does when such injuries occur is check for jaw fractures. If there are any, players typically can’t return to play immediately. Next Ames, who works full-time at Vanderbilt, determines whether or not a tooth can be saved or whether it should be taken out. He then stops the bleeding, provides anesthetics and, often times, sends them back to the ice.
Englot, VISE team explore epilepsy-related brain disturbances

A Vanderbilt team — led by neurosurgeon-scientist Dario Englot, MD, PhD, assistant professor of Neurological Surgery and Electrical Engineering, Radiology and Radiological Sciences and Biomedical Engineering — has received a $3 million basic research grant (R01) from the NIH to study disturbances in brain networks related to attention lapses and cognitive deficits in patients with temporal lobe epilepsy (TLE).

Englot and Catie Chang, PhD, MS, assistant professor of Computer Science, Electrical Engineering, Computer Engineering and Biomedical Engineering, hope understanding these brain network problems may lead to new surgical or behavioral interventions to improve the quality of life for epilepsy patients.

Both are affiliates of the Vanderbilt Institute for Surgery and Engineering (VISE), and Englot also serves as surgical director of Epilepsy for VUMC.

Using a novel approach that integrates multi-modal imaging with in-depth neurocognitive assessments, the project aims to identify specific areas of brain connectivity where vigilance, or sustained attention, is disturbed and may contribute to neurocognitive decline.

“We hope to fill a critical gap in our understanding of the brain network mechanisms underlying neurocognitive problems in TLE,” Englot said. “The results will also inform clinical treatment decisions in TLE, and may help us find new targets for brain stimulation therapies.”

Complete Story Link

Beauchamp part of $11.6 million, multi-investigator study including role of MYC oncogene

Colorectal cancer researchers from VICC have been awarded a Specialized Program of Research Excellence (SPORE) grant from the National Cancer Institute (NCI).

The Gastrointestinal SPORE grant is for a five-year period totaling $11.6 million. The researchers, led by principal investigator Robert Coffey, MD, have succeeded in securing continuous SPORE funding since an initial grant in 2002. The original SPORE program was renewed two times then received bridge funding in 2017.

Competition for SPORE funding is highly competitive. Including Vanderbilt, there are currently just four medical research centers in the nation with NCI-funded SPOREs in gastrointestinal cancer.

“Despite the need for each project to reach a translational goal in five years, we pride ourselves on taking on high-risk, high-reward projects,” said Coffey, Ingram Professor of Cancer Research and director of the Epithelial Biology Center at Vanderbilt University Medical Center.

Those projects include developing an inhibitor for a cancer oncogene currently considered undruggable, identifying how to target cancer stem cells and devising a companion drug to improve the efficacy of and delay resistance to existing targeted therapies.

The project involving Daniel Beauchamp, MD, the John Clinton Foshee Distinguished Professor of Surgery and professor of Cell and Developmental Biology, is titled “Targeting MYC in Colorectal Cancer.” The MYC oncogene is thought to be a driving force in up to 70 percent of human cancers, including colon cancer. Beauchamp and his fellow researchers are focused on developing a drug to inhibit MYC.

Complete Story Link
In a study that sheds new light on the impact of palliative care — specialized medical care focused on pain and symptom management as well as psychosocial interventions to improve quality of life — VUMC researchers found patients with advanced liver disease who received palliative care services spent more days alive outside of the hospital than similar patients who did not receive palliative care.

The study, published in the Journal of Pain and Symptom Management and led by Myrick “Ricky” Shinall, MD, PhD, assistant professor of Surgery, shows that patients experienced a longer period of time from the point of receiving initial palliative care services until their first hospital readmission (about 36% longer) as compared to patients in the randomized controlled trial who did not receive palliative care.

“Liver disease is a leading cause of death in the United States, and we see a large number of individuals with liver disease here because we’re a large transplant referral center,” said Sara Martin, MD, medical director of VUMC Outpatient Palliative Care and a lead study investigator. “Patients with end-stage liver disease (ESLD) have a multitude of very serious symptoms and can be challenging for their loved ones to care for. We were able to show that palliative care interventions can make positive differences for these patients.”

Bacchetta performs VUMC’s first transplant using rehabilitated lungs

Rebecca Milligan was fighting to stay alive, but time was running out. In February, her pulmonologist told her that her lungs were failing and she had maybe six months to live. The 62-year-old from Palmer, Tennessee, was placed on the transplant list at VUMC, but finding the right lungs for her was a challenge.

Then in June, for the first time at Vanderbilt, doctors transplanted her with donated lungs that were rehabilitated using a procedure called ex vivo lung perfusion (EVLP). The procedure, which involved sending donor lungs to a laboratory in Maryland for perfusion before implantation at Vanderbilt, salvaged organs that were previously unsuitable for transplant and saved Milligan’s life.

Now Milligan can be found walking around the track at Dayani Center, recovering with her two new lungs. “I feel miraculously great,” she said. “I just feel wonderful. Vanderbilt did a really good job.”

Shinall leads study on benefits of palliative care for patients with liver disease

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I suddenly can’t send or receive email on my phone!
My calendar is not right either!
Same on my iPad!

If it’s February 1, 2020, then you likely don’t have Mobile Device Management also called Workspace One on your device.
If you don’t have it, you will have to use webmail on your device for Email, Calendar or Contacts using https://outlook.office.com

Not sure if you have MDM?
If you have an icon for VUMC apps on your phone, you should be all set.
On an IOS device, if MDM is installed you will see under Settings, General, Profiles & Device Management, Workspace Services. Under Workspace Service, click on Accounts. If you see EMAIL-BYOD-O365, then you have MDM installed for VUMC.

For complete details, visit https://www.vumc.org/enterprise/cybersecurity/workspace-one-mobile-device-management
For the short version, visit and click on the relevant MDM quick install for IOS or Android.
https://www.vumc.org/surgical-sciences/faculty-resource-0

As always, we are here to help. Stop by our office with your mobile device and we’ll help get it working for you. The Section IT office number is 343-8906 and our office location is CCC4317 MCN.

Gannon receives award honoring profound impact of research staff

Laboratory and administrative personnel at VUMC were honored for research excellence during the 15th annual Research Staff Awards luncheon at the Kimpton Aertson Hotel in Nashville. Among the recipients of the 2018 awards was Stephen Gannon Jr., CCRP, program director for Operations, Research, and Project Implementation for the Surgical Outcomes Center for Kids (SOCKs). Gannon received the Award for Excellence in Research Contributing to Multi-Investigator Teams. Each recipient was given an award check and crystal trophy.

Gannon, a Certified Clinical Research Professional, came to VUMC in 2014. In 2017, he was appointed program director for SOCKs, which facilitates research across multiple surgical disciplines at the Children’s Hospital.

In a nomination letter for Gannon, SOCKs director Chevis Shannon, MBA, MPH, DrPH, research professor of Neurological Surgery and Pediatrics in the VUSM, wrote that Gannon “is the person you count on to address the small things and ... troubleshoot and fix the big things.”

Recipients of the 2018 Research Staff Awards are, bottom row right, Xiaotao Lu, MS, with James D. Chappell, MD, PhD; second row left, Stephen Gannon Jr., CCRP, with Chevis Shannon, MBA, MPH, DrPH; and, top row right, Sachin Paranjape with Italo Biaggioni, MD
Robinson part of study on obesity and surgical complications

A study in the *World Journal of Surgery* finds that obesity and two post-operative complications linked with it, incisional hernia and post-op infection, have associated genetic variants in common.

It’s a longstanding question: does obesity influence these complications or is the real culprit some other problem that commonly co-occurs with obesity, such as diabetes? To the extent that the genetic variants at issue in the study betray no links with other patient conditions, they might be a key piece of evidence.

Jamie Robinson, MD, MS, (GSR 2020), Joshua Denny, MD, MS, and colleagues gathered body mass index (BMI) and post-op complication data for 736,726 patients, confirming that increases in BMI bear a strong association with both complications.

They used 97 obesity-risk genetic variants to construct genetic risk scoring for obesity, and in a second cohort of 65,174 genotyped patients, they found strong associations between higher genetic risk scores and both complications. Obesity, a strong risk factor for these complications, might indeed be the real culprit.

Robinson and Denny were joined by 32 colleagues from VUMC and other institutions in the Electronic Medical Records and Genomics (eMERGE) Network. The study was supported by the National Institutes of Health.

Complete Story Link

Changes in surgical education ask young surgeons to consider social determinants of health

Haddad part of “Socially Responsible Surgery” founding paper

Social determinants of health (SDOH) such as a patient’s home community and economic status are well recognized in many medical specialties, but the surgical field has been slower to embrace social concerns. Now, an organization of surgical educators and medical students is trying to change that paradigm.

Socially Responsible Surgery (SRS) was founded at Boston University Medical Center (BUMC) in 2014. Through research, education, and advocacy, the group aims to establish social responsibility as a core value of surgical practice and raise attention to SDOH in surgical training and care.

“Factors like nutrition, access to care, and insurance status play major roles in how a patient will recover from surgery,” said Diane Haddad, MD, a general surgery resident in research at VUMC. “Social determinants of health are intrinsic to effectively caring for surgery patients.”

Haddad attended medical school at BUMC, was a founding member of SRS, and co-authored a paper in *Frontiers in Surgery* that defined the group’s core concepts and goals.

Changing Surgical Education

As a movement led by surgical residents and educators, SRS has a strong focus on medical training. SRS leaders hope to integrate its principles into the formal medical school curriculum, create more service-learning projects and help surgery residents build careers that incorporate these values.

Complete Story Link

Journal Link
Sunil K. Geevarghese, MD, MSCI, recently received the inaugural 2019 American Society of Transplant Surgeons (ASTS) Pipeline Award, which recognizes dedication to the transplant surgical experience of medical students and residents through recruitment, research and mentorship.

A native of Tennessee, Geevarghese graduated from VUMC with the Coniglio Prize in Biochemistry and the Scott Prize in Surgery. He remained at Vanderbilt for general surgery residency and performed liver transplant research in the laboratory of C. Wright Pinson, MD, MBA. Fellowship training in multiorgan transplant and hepatobiliary surgery followed at the Dumont-UCLA Transplant and Liver Cancer Center under the tutelage of Ronald W. Busuttil, MD, PhD. There he received the Fujisawa Clinical Achievement in Transplantation Award.

The son of distinguished career educators, Geevarghese has made surgical education his major ongoing work. Recognizing a major gap in perioperative resident education, he devised the Educational Time-Out to formalize preoperative goal-setting during the surgical time-out and to provide feedback using the SIMPL app. He created the Vanderbilt ASTS Transplant and Hepatobiliary Surgery Fellowship, which offers a two-year fellowship as well as an internal track combining residency and fellowship into six clinical years. Given the rising tide of burnout among healthcare providers, he founded the Vanderbilt Resilience Rapid Response Team, a team of residents and faculty specially trained to facilitate early recognition and support. A sought-after educator in transplantation, he has lectured for over a decade in the Vanderbilt Schools of Medicine, Nursing, and Management. For his efforts in surgical education, he was elected to membership in the Alpha Omega Alpha in 2014 and received the coveted Robert S. McCleery Master Teacher Award for Surgical Resident Education in 2017. A busy clinical hepatobiliary and transplant surgeon with a regional referral base, he was named to the Vanderbilt Physician Council for Clinical Service Excellence in 2018.

Dr. Geevarghese has been active nationally in several roles. He serves as member of the Wellness Taskforce and Chair of the Membership & Workforce Committee of the ASTS, Chair of the Education & Training Committee, and an Executive Council Representative of the Southeastern Surgical Congress, and member of the Executive Council of the Society of University Surgeons. Over the last decade he has mentored twenty students and residents, nine of whom have chosen careers in transplant surgery, three of whom have become associate program directors.

Married to Dr. Liby John Geevarghese, staff psychiatrist at the Nashville VA Hospital, they have three children and have called Nashville home for over 25 years. In his free time, he enjoys family, travel and horology.
Congratulate 2019 years of service awards recipients

DEPARTMENT OF SURGERY
DIVISION OF TRAUMA & SURGICAL CRITICAL CARE
Associate Professor of Surgery
Catherine Caldwell
John Morris
Kenneth Sharp
35 YEARS OF SERVICE

30 YEARS OF SERVICE
Chereta Brigman
Kevin Kelly
Joan Lorber

20 YEARS OF SERVICE
Carolyn Brennan
Martha Lavy
Anna Means
Scott Pearson

15 YEARS OF SERVICE
Wuraola Adesinasi
Callie Baker
Kerry Fair
Sunil Geevarghese
Christy Hinkle
Sabry Iskandar
Eric Lambright
Ralph LaNeve
Amy Maynard
Ingrid Meszoely
Robert Muldoon
Kyla Terhune

10 YEARS OF SERVICE
Phyllis Aycock
Stephane Braun
Eunyoung Choi
Tracey DeWire
Oliver Gunter
Douglas Hale
Keeli Lewis
Kendra Lucas
Mayur Patel
Myrick Shinall
Allen Sills
Marjorie Tattersfield

5 YEARS OF SERVICE
Tyler Ames
Naira Baregianian
Shannon Bell
Cynthia Blalock
Donald Carter
John Curci
Wayne English
Stephen Gannon
Kyle Hocking
Dildora Jorgali
Elizabeth Manning
Jessica Mercer-Monnig
Richard Pierce

DEPARTMENT OF PLASTIC SURGERY
Assistant Professor of Plastic Surgery and Surgery
J. Bradford Hill, MD
Assistant Professor of Plastic Surgery
Salam Al Kassis, MD
Brinkley Sandvall, MD

DEPARTMENT OF CARDIAC SURGERY
Assistant Professor of Cardiac Surgery
Jordan Hoffman, MD

DIVISION OF PEDIATRIC CARDIAC SURGERY
Assistant Professor of Cardiac Surgery
Nhue Do, MD

DEPARTMENT OF SURGERY
DIVISION OF GENERAL SURGERY
Assistant Professor of Clinical Surgery
Susan Maurer, MD

DIVISION OF HEPATOBILIARY SURGERY & LIVER TRANSPLANTATION
Associate Professor of Surgery
Martin Montenovo, MD

DIVISION OF SURGICAL ONCOLOGY & ENDOCRINE SURGERY
Assistant Professor of Surgery
Colleen Kiernan, MD, MPH

DEPARTMENT OF PEDIATRIC SURGERY
Professor and Chair of Pediatric Surgery
Jeffrey Upperman, MD
Assistant Professor of Pediatric Surgery
Irving Zamora, MD, MPH

NEW FACULTY

DEPARTMENT OF SURGERY
DIVISION OF SURGICAL RESEARCH
Research Assistant Professor of Surgery
Izumi Kaji, PhD

DEPARTMENT OF NEUROLOGICAL SURGERY
Associate Professor of Neurological Surgery
Robert Naftel, MD

DEPARTMENT OF PLASTIC SURGERY
Assistant Professor of Plastic Surgery
J. Bradford Hill, MD
Assistant Professor of Plastic Surgery
Salam Al Kassis, MD
Brinkley Sandvall, MD
Section Community Holiday Projects

The Section partnered with Nashville’s “Room in the Inn”

This Section-wide project supported the efforts of the Room in the Inn which assists Individuals who are moving into a house or apartment after having no place to call their own for many months or years. Many people that Room in the Inn helps settle into their new homes arrive with few belongings aside from the clothes on their back. To help them get settled the Room in the Inn provides “Welcome Home Baskets” filled with essential items. Through the generosity of Section staff and faculty we were able to fill 10 Welcome Baskets with household goods, cleaning and cooking products, and many housekeeping essentials.

With the generosity of Section staff and faculty we were able to help Operation Stand Down TN by providing for 2 military families in need by collecting $1,500.00. Thank you all for your generous donations and support for our adopted family. We were able to collect $900 to cover Jeff (husband), Lorena (wife), and Aaron (11 yr old son)’s Christmas wish list!!

Jeff’s wish list was for work boots and pants. We were able to provide the boots, 4 pairs of pants (khakis, jeans and dress pants) as well as a $50 gift card to Target and a $50 Visa Gift Card.

Lorena’s wish list was to do something stress free. We were able to get her a $100 gift card to O.Liv Body Bar here in Nashville as well as a $50 Target gift card and a $50 Visa gift card.

Aaron’s wish list was for an X-Box game (WreckFest), Basketball, Nerf Gun, Titans, Preds and Vols gear, pants, and adventure books. All of these items were covered.

For Jeff and Lorena, we also gave a $50 gift card for dinner at their choice of Carrabba’s, Outback, Fleming’s or Bonefish Grill and 2 AMC movie passes so they can enjoy a date night.

Also, for the family we were able to provide a $100 Gift Card to Kroger and a $50 Honey Baked Ham Gift Card (their wish list) for their Christmas Dinner.

On top of the Adopt a Family above, we collected an additional $500, which will be used to help another family of 5 that Operation Stand Down TN is assisting to fulfill their wish list!

A sincere Thank you to all of you for helping to spread the Love and Joy of the Season!!