Section News

Vanderbilt Section of Surgical Sciences
Winter 2019

I invite you to look through this latest issue of the Section Newsletter as a recap of the last quarter.

You'll find surgery news, promotions, new faculty, innovative research, patient stories and more.

Dr. Seth Karp
Chair, Section of Surgical Sciences

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 Vanderbilt University Medical Center Development at giving@vumc.org or call 615-936-0230.

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Section News

Vanderbilt Section of Surgical Sciences

Winter 2019

Recognizing those who give back: Philanthropic support fuels advances in surgical sciences

Vanderbilt University Medical Center is committed to providing high-quality, compassionate patient care. As a nonprofit organization, we rely on our community of supporters to help us provide the best care to patients and their families. Our specialty teams of surgeons and researchers in the Section of Surgical Sciences work closely with one another to discover innovative medical treatments, while training the next generation of surgeons to continue to provide patient-centered care. By doing so, we're able to further our work in all areas, including cardiac, neurological, oral, pediatric, plastic, general and thoracic surgery, as well as trauma and surgical critical care.

Charles Gavin III and Dr. Richard Miller

It is essential that we attract and retain top leaders in the field. Through philanthropy, we are able to establish directorships to advance the world-class work taking place at Vanderbilt University Medical Center (VUMC). The Carol Ann Gavin Directorship in Trauma and Surgical Critical Care, for example, provides a permanent stream of support for the leader of the Division of Trauma and Surgical Critical Care — benefiting our patients now and well into the future.

Thanks to the care of **Richard S. Miller, MD**, who currently holds the directorship, and his team, Charles Gavin III was inspired to make a gift in memory of his late wife, Carol Ann Gavin. In February 2010, Carol Ann became critically ill while on vacation in Florida. She came to Dr. Miller in April 2010, where she received lifesaving treatment. Afterward, Carol Ann enjoyed five years of quality life before she developed Alzheimer's disease, which ultimately caused her death.

Grateful for the care Carol Ann had received at VUMC years earlier, Charles made a gift in 2016, on what would have been Carol Ann's 79th birthday, to establish the directorship and the Carol Ann Gavin Innovation Fund in Trauma and Surgical Critical Care. Gifts like these help VUMC remain a leader in surgical care.

Other wonderful examples of philanthropic support for the Section of Surgical Sciences include fellowships, research funds, general support and lectureships (see page 24 for a list of lectureships). We are so thankful for the generosity of grateful patients, community members, trainees, colleagues and friends who are making a difference in our work each day through their gifts.

Dr. Seth Karp
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Meszoely helps barrel racer blaze new trail as part of study

Bari Brooks is accustomed to dealing with a trio of obstacles. As a rodeo barrel racer, she must guide her horse as it careens around three 50-gallon drums arranged in a cloverleaf. After being diagnosed with breast cancer, she had to put racing on hold and face three more challenging obstacles: surgery, radiation and chemotherapy.

Dr. Meszoely

Brooks helped remove one of those obstacles for others by participating in TAILORx (Trial Assigning Individualized Options for Treatment (Rx)). The study, published in 2018 in the *New England Journal of Medicine*, looked at the current standard of care for a subset of women with early stage breast cancer. After nine years, results showed that most of them (about 70 percent) don't need chemotherapy.

Brooks joined the study after a consultation with "the two Ingrids" – **Ingrid Meszoely, MD**, Ingram Associate Professor of Cancer Research and associate professor of Surgery, and Ingrid Mayer, MD, MSCI, an author of the TAILORx study. After getting a second opinion at another Nashville hospital, Brooks returned to Vanderbilt and recalls being "blown away" during her first appointment.

"They met with me and my husband. They had a white board. They explained what their jobs were and what had to be done," Brooks said. "Their approach was great, giving us all the information at once."

After Brooks had a lumpectomy to remove her 1.8-centimeter tumor, she agreed to participate in TAILORx and was randomly assigned to the endocrine therapy plus chemotherapy group (versus chemo alone). "I get emotional talking about it," said Brooks, an HR professional in the Vanderbilt Schools of Medicine and Nursing. "Because of this study, thousands of women a year won't need chemotherapy. Sure, I was focused on my survival, but this was something I could do to help both myself and others. This is a big shift in the standard of care. If you can avoid chemotherapy, that's a great win because the side effects can end someone's career. Before it was very much an educated toss of the coin. We now have very concrete data."

Complete story link

Sharp elected to the ACS Board of Regents 2018-2021

Dr. Sharp

Kenneth Sharp, MD, professor of Surgery, will be elected to the American College of Surgeons (ACS), Board of Regents at the organization's Annual Clinical Congress in Boston. Sharp's term will span from 2018-2021.

Sharp has active involvement in the leadership of both regional and national surgical organizations. He has served as the President of the Tennessee Chapter of the American College of Surgeons, President of the Southeastern Surgical Congress, and is the current president of the Halsted Society. He has served as a Governor of the American College of Surgeons, a director of the American Board of Surgery, and was the Secretary-Director of the Southeastern Surgical Congress.

In joining the ACS Board of Regents, which formulates policy and directs the affairs of the College, Sharp will be one of 24 members, including one who serves as ACS President. Regents are elected by the Board of Governors and may serve up to three consecutive three-year terms. Officers are elected each year at the ACS annual meeting.

ACS policies are designed to afford members the broadest possible participation in College affairs. They are formulated and implemented through the work and cooperation of various organizational and administrative elements. These include the College's officers, the Board of Regents, the Board of Governors, College chapters, and the administrative staff.

Complete story link

Transplant Center reaches lung transplant milestone No. 500

Alabama resident Andy Bolden spent much of the last five years on the couch, having difficulty doing something many people take for granted — breathing.

Thanks to a lung transplant in Nov. 2018, he can breathe normally again. It was a landmark for Bolden and the Vanderbilt Transplant Center — the center's 500th lung transplant.

"Lung transplants are the most difficult transplants that we do for a number of reasons," Seth Karp, chair of the Section of Surgical Sciences and director of the Vanderbilt Transplant Center, said. "The patient selection is very challenging and the postoperative management is also very difficult."

"I've got two new lungs," Bolden marveled. "I breathe like a little kid." Bolden suffered from chronic obstructive pulmonary disease (COPD), a progressive lung condition that makes breathing difficult. He said he smoked as a younger man and worked in steel mills.

The heat and the smoke from the plant "really did a number on my lungs," he said. "I was living on medication. It was no quality of life — just living to be living."

Two days after Bolden's operation, he was walking around his hospital room. He spoke recently from an apartment near Vanderbilt, planning all the things he wants to do with his two new lungs that he couldn't when he was couch-bound.

500th double-lung transplant patient Andy Bolden is flanked by (left) Drs. Matthew Bacchetta, Ivan Robbins and (right) Eric Lambright

"I've got some grandchildren and I didn't get to go and play with them," he said. "Now I've got another chance to do it — stuff I didn't get a chance to do."

Bolden said the process to get the transplant took about a year, and he was on the waiting list for lungs for five months. He said his twin sister, Amy Allen, helped him though the process. Their parents are deceased and he is single.

"Vanderbilt is a top-notch facility," he said. "It's a God blessing that you're able to do stuff like that. To me it's just a true miracle. Hats off to some of the finest doctors that I've ever met."

Complete story link

Above left: *Dr. Jim Loyd, Dr. Matt Bacchetta, patient Pam Smith, Dr. Ivan Robbins, Dr. Erin Gillaspie, 500th patient Andy Bolden, Dr. Eric Grogan, Dr. Ciara Shaver and Dr. Eric Lambright*

Right: *Dr. Matt Bacchetta, Dr. Eric Grogan, Dr. Erin Gillaspie, Dr. Eric Lambright, Dr. Jon Nesbitt, Dr. Walter Merrill and Dr. Richard Pierson (former surgical faculty member)*

500th lung transplant celebration

A reunion of patients, former and current faculty and staff who support the lung transplant program recently gathered at a reception to celebrate this milestone. Remarks were made by Drs. C. Wright Pinson, Eric Lambright and Ivan Robbins during the fellowship.

Shah's cardiac surgery team implants Tennessee's first artificial heart

Dr. Shah

"It is really an important moment for us here at Vanderbilt," said **Ashish Shah, MD**, professor and chair of Cardiac Surgery and co-lead surgeon for the procedure. "Our advanced heart failure program has already been a world leader in many respects. But our ability to take care of the truly complicated patients with either complex structural heart problems, or problems that are just not solved by conventional technologies, can now be treated with this approach."

Artificial heart technology has been around for several decades, Shah said, but advanced teams now have the expertise to understand which patients benefit most from implantation.

The team used a SynCardia Total Artificial Heart, a mechanical solution for a patient's failing heart, whereby surgeons completely remove the patient's heart and replace it with an artificial device, eliminating risks associated with leaving a diseased heart in place.

"In starting this program, we really wanted to understand who are the right patients who really benefit from this. And, coupled with our heart transplant program, that allows patients to get transplanted quickly, this becomes an optimal strategy to save lives for the sickest patients," said Shah.

The ground-breaking transplant team also included Tony Hernandez, MD, anesthesia and director of the Cardiovascular Intensive Care Unit; lead surgeons Shah and **Keki Balsara, MD**; first assistant Scott Casey; surgical scrub technician Hallie Carroll; and perfusionist Joe Bianchi.

Complete story link

Golinko to direct cleft, craniofacial program

Michael Golinko, MD, has joined Monroe Carell Jr. Children's Hospital at Vanderbilt as assistant professor of Plastic Surgery, medical director of the Cleft and Craniofacial Center, and chief of Pediatric Plastic Surgery.

Dr. Golinko

Golinko was previously assistant professor of Plastic Surgery and medical director of Arkansas Children's Hospital's Craniofacial Program.

"We are very excited to have Dr. Golinko join our faculty to lead the multidisciplinary Craniofacial and Cleft Surgery Center here," said **Galen Perdikis, MD**, chair of the Department of Plastic Surgery. "We feel privileged to have recruited him and look forward to supporting him in his goal of establishing this as a premier, internationally recognized program."

Golinko is setting up the framework to hold a once-a-month team clinic for cleft patients and a second monthly clinic for patients with craniofacial disorders. The clinic would allow patients to see their care teams in one day in one location.

"I am excited to be a part of a very strong, well-respected plastic surgery program and Children's Hospital. Through passion and teamwork, we have the opportunity to become a leader in cleft and craniofacial care," said Golinko. "Our goal is to have a very service-oriented and patient- and family-centered program. The fundamental mission is to help children with cleft and craniofacial issues live their best lives."

Complete story link

Terhune named to senior GME leadership role

Terhune to succeed Brady as he transitions to new role in the medical school

Kyla Terhune, MD, MBA, associate professor of Surgery and director of the Surgery Residency Training Program in the Section of Surgical Sciences, has been named Vice President for Educational Affairs for Vanderbilt University Medical Center and Associate Dean for Graduate Medical Education for Vanderbilt University School of Medicine. Her appointment is effective July 1.

Terhune will succeed Donald Brady, MD, the Medical Center's longtime Graduate Medical Education (GME) leader, as he completes a transition to new responsibilities as Executive Vice-President for Educational Affairs for VUMC and Senior Associate Dean for Health Sciences Education with VUSM.

In this new role, Terhune will serve as the senior leader for all graduate medical education at VUMC, with responsibility for the oversight and administration of VUMC as a sponsoring institution of GME programs, and for all of VUMC's individual GME programs. She will also serve as the Accreditation Council for Graduate Medical Education (ACGME) and The National Resident Matching Program (NRMP) Designated Institutional Official (DIO).

As Associate Dean for Graduate Medical Education, Terhune will work collaboratively with VUSM's Offices of Undergraduate Medical Education and Student Affairs and VUMC's Office of Continuing Professional Development.

In addition, she will assume a key role in the School of Medicine's Liaison Committee on Medical Education re-accreditation efforts in areas where GME intersects with medical student education.

"I am very pleased that Dr. Terhune will succeed Dr. Brady in this role. They will make an outstanding team leading our education and training programs," said Jeff Balser, MD, PhD, President and Chief Executive Officer for VUMC and Dean of VUSM.

"Kyla's skills as a leader, combined with her impressive history as a mentor of students and trainees, provides assurance that our programs in GME will continue to be among the nation's most sought after."

At any given time, Vanderbilt is training more than 1,000 house staff through 95 ACGME-accredited residency and fellowship programs, one CODA-accredited residency, and approximately 50 other non-ACGME accredited fellowships.

Of the 95 ACGME programs, 31 are specialties where VUMC is the only sponsor for that type of specialty training in Tennessee.

VUMC trains 40 percent of Tennessee's pediatricians, 33 percent of general surgeons, 28 percent of internists, and more than 20 percent of obstetricians and gynecologists who practice in the state.

Dr. Terhune

Terhune, who also has served as vice chair for Education for the Section of Surgical Sciences, brings more than a decade as a leader and mentor to her new role. During the past five years the surgery residency training program has flourished under her guidance.

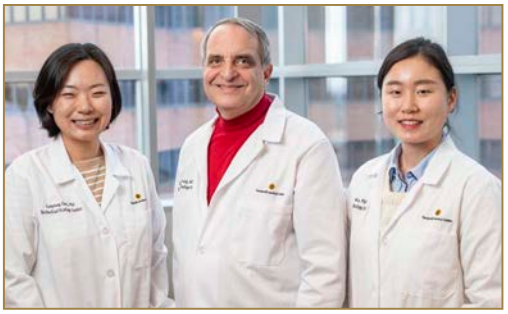
Importantly, she has fostered an inclusive environment where more than 30 percent of the program's residency trainees self-identify as either Black, African-American, Hispanic, Native American, South Asian or East Asian. Women now represent more than half of surgery residents in the program.

Concurrent with a portion of her service as the Section of Surgical Sciences program director, Terhune also served from 2011-2016 as Faculty Head of House for the Hank Ingram House with Vanderbilt University's Ingram Commons. As Head of House, Terhune was responsible for approximately 290 first-year undergraduates who called the facility home.

"I am extremely excited that Kyla has agreed to assume the DIO role at VUMC. Her lifelong dedication to education, her sincere commitment to the trainees she oversees and her innovative approaches to GME will benefit all of our programs as we strive to train trainees superbly equipped to thrive in a rapidly changing health care system. We are honored to have her as part of our institutional education leadership team," said Brady.

Complete story link

Major grant of $26 M to bolster research on inflammation-related cancers



A new grant is helping Eunyoung Choi, PhD, left, James Goldenring, MD, PhD, Jimin Min, PhD, and colleagues around the globe to study inflammation-related cancers

Cancer Research UK has awarded a 20-million-pound grant (about $26 million U.S.) to a team of international investigators, including Vanderbilt's **James Goldenring, MD, PhD**, to study inflammation-related cancers.

Goldenring and other co-investigators from the United States, United Kingdom, Canada and Israel will seek to develop strategies for preventing cancer in patients with chronic inflammation and to devise new treatments for those cancers. Their initiative is one of three new projects awarded a multimillion-pound grant through the charity's global Grand Challenge, an ambitious endeavor that launched in 2017 with four previous grants of a similar scale.

"Individually, these research teams are among the best in the world in their respective fields," said Ian Foulkes, PhD, executive director of research and innovation for Cancer Research UK. "By bringing them together across borders, Grand Challenge is enabling these teams to think bigger and establish new and exciting collaborations. The scale of the funding reflects the opportunity we see in harnessing their ability to understand and tackle cancer."

Complete story link

Hopkins helps patients own their stomas

Heidi Hall shares her story

Dr. Hopkins

My first emotional breakdown over cancer came in the middle of a crowded cafeteria: yes, the four-centimeter tumor in my upper rectum was cancerous, and I'd have to come back in for more scopes and scans to determine whether it was contained. It seemed uncool to drop to the floor and wail unabashedly in the grilled chicken sandwich line while a couple hundred strangers watched. I saved that reaction for a couple weeks later in my colorectal surgeon's office.

That's where **Ben Hopkins, MD,** associate professor of Surgery, comes in. He told me the tumor's location was problematic and would require a colostomy. At first, I actually felt more comfortable with the idea of dying from cancer than living with the ostomy. But I went for it.

My tumor was removed in 2017, and today I have a 1-1/4-inch diameter piece of my bowel that comes through the skin just to the left of my belly button. I shed plenty more tears looking at my new stoma. But I am grateful every day for my sturdy, long-suffering, beautiful body that does everything I need it to do. In the early days, dealing with my stoma was fraught with peril. Being at home with it for a couple months was useful, because it allowed me to make mistakes alone or at least with no other witnesses than my husband and the dog.

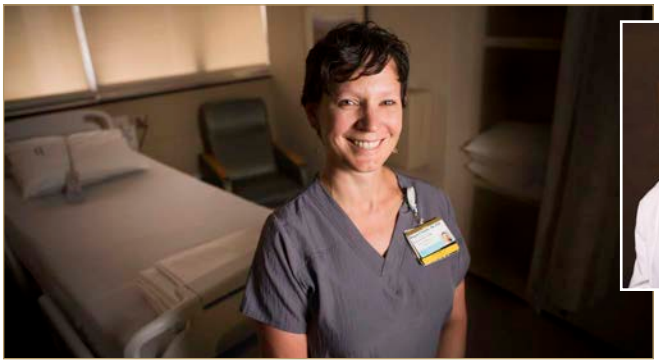
The key to being a successful ostomate is experimenting with different ostomy-care supplies, in conjunction with advice from Vanderbilt's fabulous wound and ostomy nurses. Also find your people. I have an online community and especially love the young, brave, gorgeous men and women who post videos about caring for their stomas.

Dr. Hopkins asked me on a follow-up visit whether I'd named my stoma. Mine ended up naming itself: The Baby. The Baby can be irritating and unpredictable. The Baby needs regular changing to stay clean and healthy. But The Baby is beloved because she saved my life.

Heidi Hall with her husband, Jeffrey Joseph, and their dog, Griffin

Complete story link

Hooks inspired by songwriting nurse in her own fight with cancer



Dr. Hooks

Megan Palmer, RN works PRN on the 5th floor of the Round Wing

Megan Palmer, RN, a nurse in the VUMC Palliative Care Unit, wears many hats. But she never imagined that writing a song about the perfect Stetson would hold such powerful meaning.

Palmer moved to Nashville to pursue her dream as a fiddler-singer-songwriter and continue her career as a nurse. When she spotted an acoustic guitar at the VUMC nurses' station during her interview, she felt divinely guided to be there.

"I told them that I might be gone sometimes for my music," said Palmer. "They were absolutely cool with that, and I knew this was exactly where I should be."

But just as she was gearing up for a summer tour to support her fifth album, she got the call: after a mammogram, an ultrasound, and a biopsy she learned that she had cancer.

Surgical oncologist **Mary Hooks, MD**, associate professor of Surgery, performed a mastectomy. Chemo followed in which Palmer lost all her hair. As she came to terms with being bald, she experimented with different looks for venturing out in public.

"I had all these Styrofoam heads lined up on my kitchen table," Palmer said. Then a song came to her. Within 20 minutes she had "Stetson" written. "I thought it would be my magic hat. I know that nothing's going to keep me on this earth. Nothing will, but in that moment, I just wanted the perfect Stetson."

The "Stetson" single and music video were released on Blue Rose Music in September. When the video was complete, Palmer shared it with her VUMC care team.

"Megan told me about this project during her treatment," said Hooks. "I was very impressed that she was able and willing to reach out to others during such a physically and emotionally draining personal experience."

"Megan is one of my favorite patients," said **Kye Higdon, MD**, associate professor of Plastic Surgery, who performed Palmer's reconstructive surgery. "She is so talented and has really used her creativity to make such an amazing message through song. Her song 'Stetson' is an impressive tribute to the special woman that Megan is. I'm so grateful to have been a part of battling with her to beat breast cancer and her journey through restoration."

Complete story link

Deppen study maps histoplasmosis risk

About 90 percent of Middle Tennessee residents have had histoplasmosis exposure in their lifetime

In the journal *Emerging Infectious Diseases*, **Stephen Deppen, PhD**, assistant professor of Thoracic Surgery, has co-authored new maps for predicting histoplasmosis growth.

Histoplasmosis is a common lung infection caused by microscopic fungal spores that reside in soil. Most people who inhale these spores don't get sick, but for those with weakened immune systems, the infection can become severe. About 90 percent of Middle Tennessee residents have had histoplasmosis exposure in their lifetime.

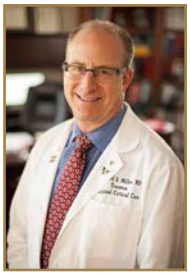
New maps are needed to improve early diagnosis and treatment, particularly for the growing number of people on immunosuppressive medications. Accurate mapping also can reduce the number of pulmonary granulomas (clumps of immune cells) caused by histoplasmosis that are mistaken for lung cancer on X-rays.

This approach, called suitability score mapping, should improve public health assessments and interventions for other geographic-specific infections, the researchers concluded.

Complete story link

Miller plasma study helps critically injured patients survive

Fresh frozen plasma during emergency transport decreases transfusions, improves outcomes



Dr. Miller

Richard Miller, MD, chief of the Division of Trauma and Surgical Critical Care, has co-authored an important plasma study as part of the national Prehospital Air Medical Plasma (PAMPer) trial. Patients in the trial received either prehospital plasma resuscitation or standard-care resuscitation (saline or red blood cells). Plasma is a blood component that has a longer shelf life when frozen. Thawed plasma was used during for the PAMPer trial.

VUMC enrolled 97 patients in this four-year study; 42 received plasma, and 55 received standard care. After 30 days, 69 percent of those 42 patients who received plasma survived, compared to 63 percent of patients who received standard care, which includes giving red blood cell transfusions.

From July 2014 through September 2017, two LifeFlight helicopters, based in Clarksville and Murfreesboro, administered plasma or standard care, for one-month intervals. During the plasma interval, as soon as the patient was deemed eligible for trial, the medical teams began administering two units of plasma to the patient. Once the units were completed, the medical team reverted to standard care.

"The most important part was that plasma lowered the amount of blood transfusions that a patient actually got throughout their hospital stay," Miller said. "It improved their clotting, which makes sense if you give fresh frozen plasma instead of saline."

During the Prehospital Air Medical Plasma (PAMPer) trial, which is a national study that included nine trauma centers, a total of 501 patients received either prehospital plasma resuscitation, or standard-care resuscitation (saline or red blood cells).

Blood banks break down blood into several components and use it for different life-saving circumstances. Plasma, which is a yellowish liquid that helps blood clot, is one of those components and has a longer shelf life when frozen.

Complete story link

New epilepsy monitoring puts data at Englot's fingertips

New epilepsy monitoring systems at VUMC are providing better data for assessing adult and pediatric patients. The new equipment – a $1 million investment – will allow neurologists to study more complex patients using many more electrodes and will advance epilepsy surgery at Vanderbilt in the process.

"Patients are admitted to the hospitals for EEG and video monitoring, so we can determine where the seizures are coming from and can plan a surgery to try to stop those seizures," said **Dario Englot, MD, PhD**, assistant professor and neurosurgical director of Epilepsy.

The video monitoring is better on the new systems with two high-resolution cameras focused on each patient bed. The EEG monitoring is sensitive to high frequency rhythms, which Englot said is a big improvement.

"The quality of the old data was limited, and the speed at which we could collect the data with the previous system prevented us from doing analysis of high-frequency rhythms," said Englot. "High frequency rhythms, we are now learning, can be very important to helping us determine where seizures are coming from."

Complete story link

Neurosurgeons bring resources, hope to Tanzania

The team of Thompson, Bonfield and Vance deliver care for today, education for tomorrow

Street vendors sell caskets along the road that leads to the hospital in Mwanza, Tanzania. It's a stark reality, this expectation of death distilled into an image, then seared into memory. **Reid Thompson, MD**, can't forget what he saw and doesn't want to.

They die from many diseases, but they especially die from head injuries, brain tumors, infections and hydrocephalus that could be survivable if Tanzania had more neurosurgeons.

The VUMC International Neurosurgery Program (INP) is helping medical personnel in some of these nations improve care, on a shoestring budget. Staff sometimes use vacation time and pay their own airfare.

Thompson, the William F. Meacham Professor of Neurological Surgery and chair of the Department of Neurological Surgery, traveled to Tanzania last summer along with two colleagues: neurosurgeon **Christopher Bonfield, MD**, assistant professor and director of the INP, and **E. Haley Vance, DNP, APRN**, a pediatric nurse practitioner with expertise in neurological surgery. The physicians, who plan return trips, say they learn as much as they teach.

"They don't have the same tools that we have here so we can be doing a case that I would think is fairly simple here, but it turns into something much more complex over there," said Bonfield. "They teach me how to open up skulls and repair spina bifida in patients, among other things, with instruments that I wouldn't have thought of or used in that way before. It's still safe. It's just different."

The people are incredibly resilient, Thompson said. He recalled doing surgery on a patient with a brain abscess so bad it took up about a quarter of his brain. Thompson went to bed with the image of street vendors selling caskets on his mind.

"I didn't sleep a wink all night," Thompson said. "I was really worried that he might have a hemorrhage or something terrible." He then pointed to a photo on his phone and said, "This is him standing up the next day, walking around."

Since that trip, Thompson, Bonfield, and Vance have returned to Tanzania on other missions, continuing INP's impact. Other providers who joined them on subsequent trips include: neurosurgeon **Jacob Schwarz, MD**, physician assistant **Amanda Wright, PA-C**, and neurosurgery resident **Scott Zuckerman, MD**.

(Top left) Thompson, Bonfield, and Vance with the Neurosurgery team at the NED Neurosurgery Institute in Zanzibar, (top right) Bonfield and Schwarz performing a spine operation in Zanzibar, (bottom) Thompson and Zuckerman removing a brain tumor in Tanzania

Complete story link

Bichell and Alexopoulos team to turn rare-disease nightmare into a boy's field of dreams

Amber Nickle watches in awe as her 5-year-old son runs the bases at his first tee-ball practice. She also sneaks peeks of him playing with groups of other children on the playground. A year ago, Wyatt was barely walking.

But with the help of two Vanderbilt surgeons – **David Bichell, MD**, William S. Stoney, Jr. Professor of Cardiac and Thoracic Surgery at Children's Hospital, and **Sophoclis Alexopoulos, MD**, chief of Vanderbilt's Division of Hepatobiliary Surgery and Liver Transplantation – Wyatt has made a remarkable health transformation that has helped his parents dare to dream.

It all started on July 8, 2013 – the date of Wyatt's two-month check-up.

"When we took Wyatt home, we were told that if there was anything concerning, we would get a call from Vanderbilt," said Nickle. That call came around 5 p.m., and we were urged to get to the emergency room immediately."

Nickle and her husband, John Louis, were shocked by what they learned. After a gamut of tests and a four-day hospitalization, their son was diagnosed with Alagille syndrome, a rare genetic disorder that can affect the liver, heart, skin, and other parts of the body. About 1 in 70,000 newborns is diagnosed with the disease, which manifests differently in every patient.

For Wyatt, each one of these systems was impacted. His symptoms included severe, uncontrollable itching; subcutaneous fatty deposits; and record-high cholesterol levels.

Dr. Alexopoulos

Dr. Bichell

"He was waking up every two to three hours, and would scratch himself and cry out in the middle of the night," said Nickle. "We would hear him over the baby monitor crying, 'Mommy, help. Mommy, help.'

These symptoms were all driven by a malfunctioning liver – a liver that could only be sustainably transplanted after a critical open-heart surgery repair to open his pulmonary arteries, increase blood flow to the lungs, and create a healthy environment for his new liver to function.

Bichell performed the first surgery.

"This case was an interplay of all of our specialists," said Bichell. "We wanted to do the fewest invasive procedures as possible with the largest impact. We had to have a plan that included doing what was best for the liver. To ensure an optimal situation for the transplanted liver to do well, we needed to fix the heart first."

Wyatt's heart surgery was in January 2017. Nine months later, he was placed on the liver transplant list.

"We are growing our pediatric liver program," said Alexopoulos, who performed Wyatt's surgery. "We have a multidisciplinary approach with very good outcomes. And because of that skill level, we are able to treat so many more children with liver disease."

When the surgery was over, Wyatt's parents immediately recognized an improvement in their son's skin color. It was four days later that his mom recognized the biggest change.

"With past procedures and anesthesia, he would stay a bit sedated," she said. "But after this one, he was lying still. I kept asking myself, 'Is it the anesthesia or is he just not itching?' Then every day after that, it was like, 'oh my gosh.' Each day, he was only getting better."

It was a life-changing decision for the family — one that also brought a lot of satisfaction to his medical team.

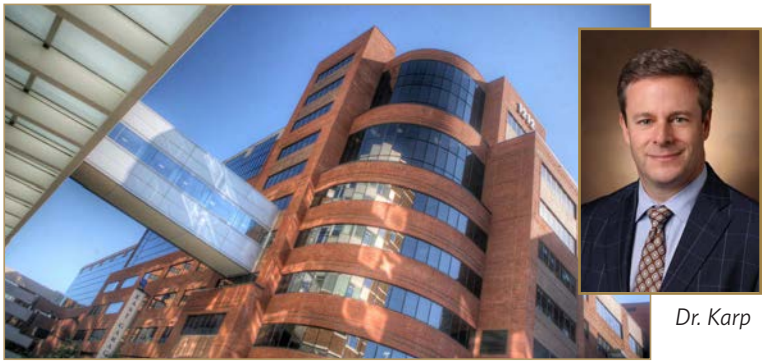
Nickle struggles to find words to describe her son's transformation and how the life-changing liver transplant gave their family a different outlook.

"These are things we prayed about and dreamed about," Nickle said. "This is a new Wyatt, full of giggles and smiles and energy. Our hearts are full."

Complete story link

Vanderbilt sets new heart, overall transplant record in FY2018

Accomplishment highlights multiple medical center developments and improvements



Dr. Karp

VUMC set a new record for total transplants among its five organ specialties in 2018 with more than 500 transplants. The Transplant Center performed 502 transplants between its adult and children's hospitals, topping its previous record of 462 in 2017. As a result, VUMC now ranks as the sixth largest transplant hospital by volume in the nation out of 254 hospitals offering some type of organ transplant.

More than 20 percent of VUMC's transplants were hearts. There were a record 109 adult and pediatric transplants, making VUMC the second largest heart transplant program in the nation by volume for three consecutive years.

"This is a remarkable accomplishment," said **Seth Karp, MD**, chair of Surgical Sciences, H. William Scott Jr. Professor, and director of the Vanderbilt Transplant Center. "The team provides care tailored to each individual patient by combining innovative, cutting-edge methods with true compassion. We are proud to be able to provide this service to our community."

Complete story link

Monthly transplant record marks another first

Complete Story Link

Transplant center debuts new mobile app

Complete Story Link

Complex wounds and burns

Severe burn injuries are challenging to heal because they don't affect the skin uniformly in severity, can damage bones and internal organs, can cover large areas of the body, and can be caused by a wide range of environmental factors, said **Blair Summitt, MD**, associate professor and medical director of acute burn services.

Time is of the essence when working to heal open wounds caused by burns, he said. Without the skin's shielding protection, burn wounds can quickly develop bacterial and fungal infections.

"You also have to get the burned tissue off or debrided, ideally no more than a week after the injury," Summitt explained. "The burn itself can drive a multi-system inflammatory response in the body, so the goal is to get that dead tissue off and at least get temporary coverage on the wound.

"You have to come up with a long-term strategy to get the patient back to functionally living their life. The problem we often run into with patients who have very large burns is that we only have so much healthy skin remaining that we can use to make repairs."

Dr. Summitt

If a patient has unharmed skin available, that skin can be used as a graft or skin transplant to cover the burned areas. There are two types of autologous (from the same individual) skin grafts: split-thickness grafts in which just a few layers of outer skin are transplanted and full-thickness grafts, which involve using all the layers.

The graft is placed on the area needing covering and is secured by stitches or staples and a dressing. Recovery time for a donor site used for a split-thickness skin graft is quick — often less than three weeks. Full-thickness skin grafts take longer to heal, said Summitt. In a few days new blood vessels typically begin growing outward from the body into the transplanted skin in a process known as capillary inosculation.

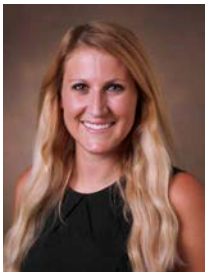
Complete story link

New Brentwood clinic expands Cosmetic Plastic Surgery offerings

VUMC's Department of Plastic Surgery is known as one of the nation's best for reconstructive plastic surgery. With the opening of the new Vanderbilt Cosmetic Plastic Surgery Clinic, the group will now have a more visible presence when it comes to cosmetic procedures.

"We have some of the very best plastic surgeons in the country," said **Galen Perdikis, MD,** professor and chair of Plastic Surgery. "This new clinic location is our way of getting into the community and showing that we offer superior cosmetic techniques, outcomes and patient care. Also, this is a convenient, quiet location, with plenty of privacy and parking, which are all important for our patients."

The new clinic, located at 343 Franklin Road, offers non-invasive cosmetic procedures and aesthetic treatments, as well as consultation and follow-up appointments for both cosmetic and reconstructive plastic surgery patients.



Dr. Megan Vucovich *takes appointments at the Brentwood clinic location*

"We will continue to perform cosmetic and plastic surgeries at the Medical Center's Outpatient Surgery Center," Perdikis said. "The safety profile of performing those surgeries at a major medical facility like Vanderbilt is important, and the well-being of our patients is always our first concern."

Complete story link

*The clinic – **already named a Best of Brentwood winner** – offers comprehensive services and the newest technology as well as consultation and follow-up for cosmetic and reconstructive surgery patients.*

Cosmetic Plastic Surgery locations:

Vanderbilt Cosmetic Surgery
343 Franklin Road, Suite 108
Brentwood, TN 37027
Phone: (615) 936-2700
Fax: (615) 370-3456

Cosmetic Plastic Surgery
The Vanderbilt Clinic, Suite 3701
Nashville, TN 37232
Phone: (615) 322-2350
Fax: (615) 343-2552

Shaffer, Feurer and Forbes study kidney transplant access options for African-Americans

People with blood type B who received a kidney transplant of blood type A2 kidneys had similar outcomes to those with blood type B who received blood type B kidneys. However, hospital costs were significantly higher in the former group, and alternative payment models should be considered, according to the results of a three-year Vanderbilt study. The study's finding is significant because only about 15 percent of people generally have blood type B, which is more common in African-Americans. As a result, such populations have historically been transplanted at lower rates than the much more common blood types A and O because fewer organs are available.

Dr. Shaffer

Since December 2014, the United Network for Organ Sharing (UNOS) has allowed centers to use blood group A2 kidneys for B recipients without obtaining a waiver, seeking to make more organs available to B patients and reduce disparities in wait times. Vanderbilt's study sought to determine the results of the policy change.

Lead author **David Shaffer, MD**, professor of Surgery, notes that of the roughly 1,000 people on the Vanderbilt waitlist for a kidney, more than 400 are African-Americans.

"This is a significant option for centers to adopt to reduce the disparity and increase access to kidney transplants for blood group B recipients who are principally ethnic minorities," he said.

The study is published in the *Journal of the American College of Surgeons*. Other authors are **Irene Feurer, PhD**, research professor of Surgery and Biostatistics; **Rachel Forbes, MD, MBA**, assistant professor of Surgery; and Scott A. Rega, MS.

Complete story link

Research reveals DBS surgery lends new hope for Parkinson's

Deep brain stimulation (DBS) surgery has been used for two decades as a last-resort treatment for patients with Parkinson's disease. But a new longitudinal surgery study at Vanderbilt offers a glimmer of hope for younger Parkinson's patients. Although still far from a cure, the surgery study provides some of the first evidence that any medical treatment can slow the progression of tremors, the signature symptom of the disease.

The Vanderbilt study, published in July by the *American Academy of Neurology*, has used the DBS surgery in a new way. Instead of waiting for Parkinson's symptoms to worsen to a severe stage, doctors are performing DBS before patients would historically qualify.

Mallory Hacker, PhD, research assistant professor of Neurology, is the study's lead author and first discovered the impact on tremors.

But for one Vanderbilt doctor, the study is looking for proof of what he already knows in his gut.

Peter Konrad, MD, PhD, professor of Neurological Surgery and vice chair for Research and Innovation, Surgical Services, has performed hundreds of DBS surgeries. He believes he has already witnessed a slowed progression of Parkinson's even if he wasn't looking for it. After years of staying in contact with DBS patients, he noticed that many are far less debilitated than anyone would have expected.

"They should be in a nursing home by now, but they aren't," Konrad said. "We still don't have the proof, but it is obvious to me they are in better shape."

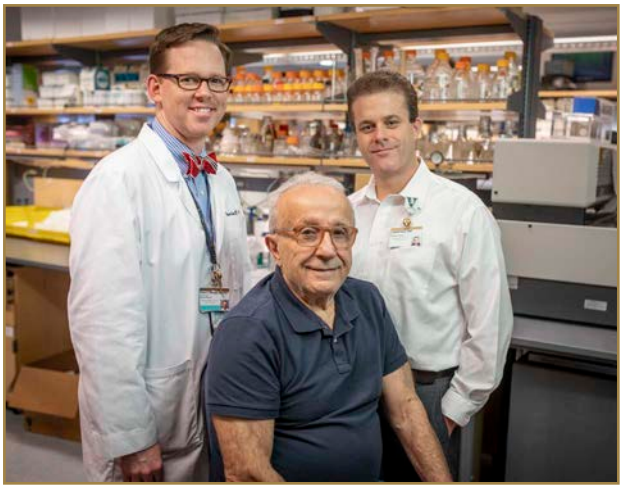
Dr. Hacker

Dr. Konrad

DBS was once highly controversial. During the four-hour DBS surgery, a team of doctors place a tiny electrode deep within the patient's skull, where electric shocks can stimulate the portion of the brain at the root of the disease. If the procedure works, symptoms will fade with the flip of a switch. And maybe — just maybe — those tremors will never spread at all.

Complete story link

Albaugh, Abumrad, Flynn pinpoint bile acid benefits for Surgical Weight Loss



Vance Albaugh, MD, PhD, left, Robb Flynn, PhD, and Naji Abumrad, MD, seated, are studying how weight-loss operations cause positive metabolic effects, even before weight loss happens

A team of Vanderbilt investigators has pinpointed the role of bile acids and a specific signaling pathway in the positive metabolic effects of weight-loss surgery.

The findings – reported in the journal *Gastroenterology* by **Vance Albaugh, MD, PhD**, chief resident in Surgery; **Robb Flynn, PhD**, associate professor of Surgery; **Naji Abumrad, MD,** John L. Sawyers Professor of Surgery – could guide new treatment strategies for obesity and diabetes which continue to climb in the American population.

With bariatric surgery, metabolic benefits can happen within days, before weight loss occurs.

"Surgical patients can experience dramatic changes in glucose regulation while they are still in the recovery room," said Flynn. "These operations cause metabolic changes that we don't really understand."

In previous studies, Flynn, Abumrad and others found increased levels of serum bile acids, gut compounds that help digest dietary fats after two commom bariatric operations - Roux-en-Y gastric bypass and vertical sleeve gastrectomy.

Complete story link

Journal link

Plastic surgery provides patient confidence after Surgical Weight Loss surgery

After undergoing gastric sleeve surgery for weight loss at VUMC in October 2016, Denise Stevenson was ecstatic with the results, but she realized during a yoga class 10 months later that her weight loss journey was not over.

"I knew there was a good chance after a significant weight loss that I could have loose skin," said Stevenson, who shed 105 pounds in a year. "But the extra skin really impacted my confidence. Mostly I was very self-conscious that if I moved a certain way my skin would be exposed."

"I would describe my skin like liquid — it would just flow out from the edges of my clothing," she said. "If I laid on my side, it would puddle next to me. On this day in yoga class I was trying to kick up into a handstand; I nearly had a wardrobe malfunction."

Stevenson, who weighed 240 pounds prior to the surgery, set a goal to lose between 80 and 90 pounds. Prior to surgery, she wore size 18-20 clothing. Today she is a size 4.

Dr. Perdikis

Galen Perdikis, MD, professor and chair of the Department of Plastic Surgery, was Stevenson's surgeon. He sees multiple new patients monthly post weight loss. In 2018 Stevenson, 54, had a belt abdominoplasty or circumferential body lift, breast augmentation and breast lift.

"This specialty [skin repair] has grown over the past 15 years as weight loss surgeries have become safer and more prevalent," said Perdikis. "Our patient volume continues to increase and the patients span all ages."

Complete story link

Bacchetta to help expand pulmonary surgery program

Matthew Bacchetta, MD, MBA, MA, has joined the Department of Thoracic Surgery as an associate professor and the surgical director of a new respiratory institute at VUMC that will be launched soon.

Bacchetta brings years of varied experience to the institute, from engineering and business to medical ethics and transplant surgery.

"I came to Vanderbilt because I thought there was a great opportunity to help grow the program in end-stage lung disease and potentially build a world-class respiratory institute. Vanderbilt has all the right ingredients — really outstanding people in pulmonary medicine, pulmonary hypertension, a good surgical team and a departmental leadership that is forward-thinking and determined to develop a world-class program," he said. "It is an exciting opportunity. And Nashville happens to be a great place to live."

Bacchetta, a native of rural Pennsylvania, described his journey from farm country to New York City to Nashville. He began his higher education studying engineering at Duke University.

"I always wanted to be an engineer," he said. "I thought that I would be an engineer and then go into research and then eventually become a physician and somehow combine that."

Complete story link

Vanderbilt Institute for Surgery & Engineering (VISE) where surgery and engineering meet

The landmark Vanderbilt Institute for Surgery and Engineering (VISE) celebrated its opening of dedicated space in Medical Center North in December. The 7,000-square-foot suite features a mock operating room and large work space with surgical robots, imaging devices, and tracking and surgical guidance systems. It also includes a shared development area, several smaller development labs, a machine shop equipped with a 3-D printer and a laser cutter, a wet laboratory, office space and a conference room.

VISE is an interdisciplinary, trans-institutional program that supports interactions between engineers and physicians to develop methods, devices, algorithms and systems to improve patient care.

The proximity of VISE to the offices of many of the surgical department faculty is critical.

"This is a really unique resource for us in the Department of Surgery and in the Section of Surgical Sciences," said **Seth Karp, MD**, chair of Surgical Sciences, H. William Scott Jr. Professor, and director of the Vanderbilt Transplant Center. "Surgeons are busy, and to be able to walk from the operating room to their office and pass this center, there's just no price you can put on that."

Previously, VISE was a "virtual institute" with no physical home.

An information booklet is available via pdf of the event, symposium speakers, current innovations and abstracts.

Complete story link

VISE website link

Jackson named informatics fellow

Gretchen Purcell Jackson, MD, PhD, associate professor of Pediatric Surgery, Pediatrics and Biomedical Informatics, has been named a fellow of the American Medical Informatics Association (AMIA). Jackson is one of seven VUMC employees that are among an inaugural group of 130 AMIA fellows.

The new honorary program for AMIA members is meant to recognize professional achievement in the application of information science to serve clinical teams and biomedical research. The fellows will be inducted at the AMIA 2019 Clinical Informatics Conference in Atlanta.

Jackson's research focuses on understanding how social media and technologies such as the internet can help patients and families take active roles in their health care.

Complete story link

New registry seeks answers to sports concussion mysteries

News of sport-related concussions may rule airtime on ESPN, but it wasn't until the early 2000s that the situational factors surrounding concussions and the severity of symptoms were studied from a medical perspective.

Dr. Yengo-Kahn *Dr. Zuckerman*

Fast-forward to 2018 and, due to a range of factors, including limited funding for research, a lot of questions about concussion treatment remain unanswered — questions that **Aaron Yengo-Kahn, MD**, third-year neurosurgery resident, and **Scott Zuckerman, MD, MPH**, co-director of the Vanderbilt Sports Concussion Center, hope to help answer.

Yengo-Kahn and Zuckerman recently began pilot testing a new sports concussion registry that asks several questions on a variety of concussion-related factors.

"This registry allows us to prospectively capture risk factors for prolonged recovery after sport-related concussion and better evaluate important outcome metrics such as return to school and scholastic performance," said Zuckerman. "We can also investigate novel variables such as player aggressiveness and sportsmanship and how they may have a potential link to increased sport-related concussion incidence."

Complete story link

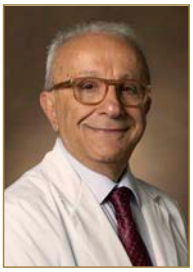
VUMC part of initiative to advance the application of AI to health care

IBM Watson Health has announced plans to make a 10-year, $50 million investment in joint research collaborations with Brigham and Women's Hospital — the teaching hospital of Harvard Medical School — and Vanderbilt University Medical Center to advance the science of artificial intelligence (AI) and its application to major public health issues.

Drawing on the respective areas of expertise of each organization, the collaborations will be a joint effort among IBM Watson Health's newly appointed vice president and chief science officer, **Gretchen Purcell Jackson, MD, PhD**, David Bates, MD, MS, chief of General Internal Medicine at Brigham and Women's Hospital, and professor of medicine at Harvard Medical School, and VUMC's Kevin Johnson, MD, MS, chair of the Department of Biomedical Informatics, and Gordon Bernard, MD, Executive Vice President for Research.

Complete story link

Research team explores link between stem cell transplant, diabetes



Dr. Abumrad

Current studies estimate that as many as 50 percent of stem cell transplant recipients develop diabetes. Further, diabetes also dramatically increases the risk of death for these patients, although not via the cardiovascular and kidney complications normally associated with uncontrolled blood sugar.

This problem has very few accepted answers. No one knows how stem cell transplantation leads to diabetes or why diabetes has such a negative outcome in many stem cell transplant patients.

Naji Abumrad, MD, the John L. Sawyers Professor of Surgical Sciences, is part of an interdisciplinary research team that is determined to answer these questions. The team — led by Brian Engelhardt, MD, MSCI, Division of Hematology and Oncology — includes experts in diabetes, immunology, endocrine surgery and transplantation who are fully investigating the transplant-diabetes link.

Complete story link

Danter featured in major *New York Times* series

Matthew Danter, MD, assistant professor of Cardiac Surgery recently appeared in a major *New York Times* feature "24 Hours in America." The series documents moments – "large and small, quiet and indelible" – that occur over the course of a single day in the United States. In Danter's case, the "moment" was a heart transplant for a man at high risk.

Dr. Matthew Danter, center, a transplant surgeon at Vanderbilt University Medical Center, with the family of Troy Roberts. Dr. Danter's team replaced Mr. Roberts's damaged heart in an operation that lasted about eight hours

Troy Roberts, 66, of Bald Knob, Ark., was 38 years old when he started having heart attacks, his wife, Debbie, said. He was a manager at a lunch meat manufacturing company was active in most every way, and played a range of sports.

Not far beneath the surface, though were, warning signs. There were nine children on his mother's side of the family, and all but one of them had died of heart disease. One of Troy's uncles died at 36. There were also half-cousins who died after heart attacks.

Complete story link

English obesity study shows South lags in surgeries

A new study reveals that the while the South has some of the highest obesity rates in the country, weight-loss surgeries per capita are among the nation's lowest. **Wayne English, MD**, study co-author and associate professor of Surgery, cites numerous factors.

Dr. English

"Bariatric surgery remains one of the most underutilized treatments," said English. "There is a great need to offer universal coverage for bariatric surgery so that treatment for a life-threatening disease is not determined by where you happen to live."

The study, presented as part of ObesityWeek 2018, correlated surgery rates to state obesity rates, economic rankings and whether weight-loss surgery was covered as an essential health benefit under the *Affordable Care Act*. The authors concluded that economic status and insurance coverage played a greater role in determining utilization of bariatric surgery than the prevalence of obesity.

Complete story link

English receives Clements Safety & Quality Award

At the same ObesityWeek meeting at the American Society for Metabolic and Bariatric Surgery (ASMBS) the board members awarded **English** the "Dr. Ronald Clements Patient Safety & Quality Award" which is part of the ASMBS Foundation's 2018 LEAD Awards. This award honors those who have shown outstanding leadership and dedication to the field of metabolic and bariatric surgery.

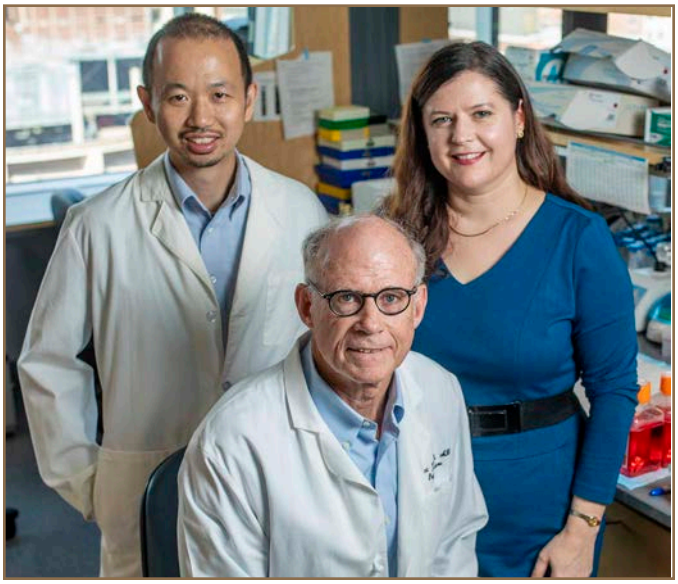
Quarterly M&M schedule

CME credit/attendance is only being documented via text-in

SCHEDULE FOR 2019

- **March 1, 2019**
- **June 7, 2019**
- **September 6, 2019**
- **December 6, 2019**

Geiger supports Cancer Moonshot team to help map tumor progression



Ken Lau, PhD, left, Robert Coffey, MD, Martha Shrubsole, PhD, and colleagues are working on the revolutionary Colon MAP initiative

A trans-institutional team of researchers at VUMC and Vanderbilt University has received an $11 million Cancer Moonshot grant to build a single-cell resolution atlas to map out the routes that benign colonic polyps take to progress to colorectal cancer, the third most common cancer among both men and women in the United States.

Timothy Geiger, MD, MMHC, associate professor and chief of General Surgery, is part of the Colon Molecular Atlas Project (Colon MAP) initiative. The work entails gathering thousands of data points per cell for each participant and then transforming that information into multidimensional geographic maps that enable scientists to study interactions among tumor cells, the microbiome and the immune microenvironment.

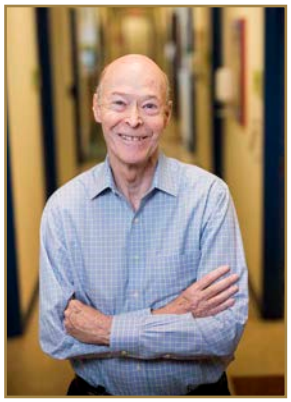
The principle investigators leading Colon MAP will identify which people are at greatest risk for colon cancer, discover cell characteristics that could lead to chemoprevention strategies and possibly recommend changes in screening and surveillance practices.

Vanderbilt is one of only five institutions designated a Pre-Cancer Atlas Research Center by the National Cancer Institute. The four other institutions will lead similar efforts involving precancerous lesions of the skin, lung and breast.

Complete story link

Pietsch's extracorporeal membrane oxygenation (ECMO) program provides a "Breath of Life" to young patients

Few things have given **John Pietsch, MD**, professor of Pediatric Surgery and Pediatrics, greater satisfaction than watching the critically ill infants and children he has treated grow up to lead happy, healthy and productive lives.



Dr. Pietsch

Pietsch has contributed to hundreds of these success stories since 1989, when he established the extracorporeal membrane oxygenation (ECMO) program at then Vanderbilt Children's Hospital, now known as Monroe Carell Jr. Children's Hospital at Vanderbilt.

ECMO delivers oxygen and removes carbon dioxide from the blood as it passes through a machine outside the body. This allows the lungs and hearts of critically ill patients the time to rest and heal. First shown to be effective in newborn babies, ECMO is now used in older children and adults.

Pietsch's first ECMO patient at Vanderbilt, Chelsea Brown, graduated from Northeastern University in Boston in 2013 with a degree in architecture. He was able to reconnect with her last fall when she attended an ECMO reunion for patients and families.

"When these patients go home, they're still recovering and not fully back to normal," he said. "It is nice to see them living their lives after ECMO."

Pietsch is living his life, too. While he stepped down from his role last fall as ECMO program director, that doesn't mean the 72-year-old is retiring. Today, he has more time to devote to his research interests and to the Junior League Center for Advanced Maternal Fetal Care, which he co-directs, as well as teaching and research.

Complete story link

Colon & Rectal Surgery team publish benefits of "Enhanced Recovery Programs" (ERP) for improved patient outcomes

Springer Nature published "An enhanced recovery program in colorectal surgery is associated with decreased organ level rates of complications: a difference-in-differences analysis" in *Surgical Endoscopy*.

The research team included **Drs: Alexander Hawkins, Timothy Geiger,** Adam King, Jonathan Wanderer, Vikram Tiwari, **Roberta Muldoon, Molly Ford, Roger Dmochowski**, Warren Sandberg, Barbara Martin, **Benjamin Hopkins,** and Matthew McEvoy.

From the Abstract

Background: Perioperative care has lacked coordination and standardization. Enhanced recovery programs (ERPs) have been shown to decrease aggregate complications across surgical specialties. We hypothesize that the sustained implementation of an ERP will be associated with a decrease in a broad range of complications at the organ system level.

Study design Adult patients undergoing elective colorectal procedures between 1/2011 and 10/2016 were included. Patients were stratified based on exposure to a sustained ERP (7/2014–10/2016) after an 18-month wash-in period in a pre-post analysis. The primary outcome was 30-day complication rate by organ category as collected by National Surgical Quality Improvement Program (NSQIP) abstractors. Demographic and other patient level data were collected. Complication rates were compared using multivariable regression employing a differences-in-differences (DiD) approach using the national NSQIP PUF file to account for secular trends.

Timothy Geiger, MD, MMHC, Molly Ford MD, Ben Hopkins, MD, Roberta Muldoon, MD and Alex Hawkins, MD, MPH

Journal link

Thayer looks beyond the wound to discover the why

Every year in the United States, an estimated 8 million people seek medical help for wounds that just will not heal. **Wes Thayer, MD, PhD**, associate professor of Plastic Surgery and VUMC's Wound Care director, is part of the teams that care for these patients and look beyond the wound to find the 'why.'

Dr. Thayer

A litany of issues can cause a poorly healing wound including severe trauma, burns, obesity, vascular diseases, lymphedema, diabetes, smoking, poor nutrition and a weakened immune system. And when a combination of these issues is present, the body's natural ability to heal can be greatly impaired.

"At some institutions, a patient will see a wound care specialist and that's the only medical provider they see for a chronic wound," said Thayer. "At Vanderbilt, we have a powerful system of referrals so we can take a much more comprehensive, coordinated approach to wound care."

Complete story link

Study of Biblical reference to lepers may have been socially accepted, suggests Shinall

People with leprosy may not have been as socially excluded during the time of Jesus as many believe, and his willingness to flout the laws of Leviticus to interact with them should be reinterpreted in that context, concludes Vanderbilt's **Ricky Shinall, MD, PhD** in a new peer-reviewed analysis.

Dr. Shinall

Shinall is an assistant professor of surgery at VUMC who also earned a Masters of Divinity and a PhD in Religious Studies from Vanderbilt. In his paper, he closely examined stories about people with leprosy and discussions of disease and impurity throughout the New and Old Testaments, as well as other contemporaneous religious texts.

He found that while there were indeed a number of rules and customs for separating people with leprosy from the rest of the community, they were not universally applied in every community or during every era.

Complete story link

Scooters accidents plague the ED and Trauma Center

Doctors plea with riders to wear helmets

Cameras recently captured a scooter rider running a red light. As he crossed the intersection at Commerce and 5th, he collided with a BMW. Miraculously, that man went to VUMC with just minor injuries.

Oscar Guillamondegui, MD, MPH, medical director of the Trauma ICU, said that's the kind of thing they often see in the emergency room. He estimates seven to 10 people enter the emergency room with scooter injuries each week.

"The majority of people have broken arms and hands, scraped up broken faces, and then if it's a bad enough injury, it's going to also affect the brain behind that face and that's the tragedy," Guillamondegui said.

About once a month, the Trauma ICU treats someone with a traumatic brain injury.

"A weekend of enjoyment in a city that you don't really know can turn into a tragedy that can last the rest of your life," Guillamondegui said.

Fox17 News link

The Tennessean published an opinion piece on helmet safety from **Oscar Guillamondegui, MD, MPH**, medical director of the Trauma ICU.

Tennessean story link

Past quarters, Section Credo winners

Carmen Solorzano, MD, chair of Surgical Oncology and interim department chair, Tequila Brown, Business Process Manger and Dan Beauchamp, MD, President for Vanderbilt-Ingram Cancer Center Network Affairs

Brian Drolet, MD, assistant professor of Plastic Surgery, Angelene Timbs, Section Education and Sallie Walker, Administrative Officer

The Section Leadership is pleased to announce our past two Section Credo winners who have exhibited exemplary skill and compassion in their respective positions. **Tequila Brown**, Business Process Manager, Division of Surgical Oncology, receieved her award in Spring 2018. Tequila joined the division in 2015 as an Administrative Assistant II and was quickly promoted to her current position. Nominators' notes remark she has "a great work ethic," "positive attitude," and "truly a team leader."

Angelene Timbs, Section Education, Department of Plastic Surgery, received her Section Credo award in Fall 2018. Angelene joined VUMC in June 2001, working for Rehabilitation Services. In February 2002, she transferred to Plastic Surgery and worked in various positons from the clinic to the administrative office. In November 2017 she assumed the role of Associate Program Manager for the Plastic Surgery Residency Education program. Nominators' notes remarked "she's amazing," "a quick learner," and a "meticulous record keeper."

Congratulations to both of you!

EDUCATION PROGRAM **HIGHLIGHTS**

Former GSR Broman identifies wound photo limitations in assessing SSIs

Wound photos may decrease a surgeon's ability to correctly identify a surgical site infection (SSI) while providing a false sense of confidence according to a recent VUMC simulation study.

Dr. Broman

With her colleagues, study co-author **Kristy Kummerow Broman, MD, MPH**, former resident of General Surgery, compared surgeons' internet-based assessments of postabdominal surgery case vignettes with and without wound photography for the detection of SSIs.

"Our data suggest that wound photography, as it was created and employed in this study, may not improve upon current electronic message or telephone-based triage mechanisms for determining which patients require in-person wound assessment," said Broman.

The addition of wound photography did not change accuracy for a diagnosis of SSI: 57% were correctly identified without photographs and 58% with. For cases without an SSI, surgeons made a correct diagnosis in 56.1% of cases based on symptom reports alone versus 63.4% of cases that also had wound photography.

Surgeons reported greater confidence when vignettes included a wound photograph, regardless of whether they correctly identified an SSI; however, they were more likely to undertriage patients when vignettes included a wound photograph, again regardless of whether they correctly identified an SSI.

Complete story link

Reframing the value of resident education:
How much would it cost to not train residents?

Hospital and surgical administrations struggle to strike a balance between cost-containment measures and providing high-quality care for patients. Graduate medical education (GME) may become a target of the cost-cutting measures if viewed as only indirectly related to patient care. But for **Kyla Terhune, MD, MBA**, associate professor of Surgery and Anesthesiology and vice chair for education, Surgical Sciences, this approach ignores the ways in which residents generate value for the investments in education.

Terhune and **Andrew Medvecz, MD**, resident in research, published the study as part of RISE (Resources in Surgical Education), an education initiative of the American College of Surgeons. She and her colleagues assert the value that trainees bring to an institution.

Although sizable, the direct and indirect costs associated with GME must be balanced with the service and revenue generated by surgical residents while receiving training. Costs should also be balanced against the additional productivity gained for surgery teams. Residents deliver in-house call coverage for most surgical services, reducing the need to have attending surgeons or ancillary providers in this role. While they cannot bill for on-call services, residents allow attending surgeons to maintain busy operative and administrative calendars that provide value to their institutions.

Terhune's article further asks: If surgical residents were eliminated from the healthcare system, how might quality and volume of care suffer? One study found significant expense from hiring additional providers compared to resident utilization. Perhaps the most significant cost of cutting GME funding and resident programs is the long-term reduction of the surgical labor force. Many hospital systems struggle to provide on-call surgical services to emergency departments, leading to delayed care and increased resource use for hospital transfers. Curtailing or eliminating residency positions will ultimately exacerbate the problems with access to care and long wait times.


Dr. Terhune

The article notes that surgical residents are particularly critical for underserved communities including veterans and rural populations. Their value in preserving the safety net and the cost of surgical education is relatively efficient compared to other strategies, both from a short- and long-term perspective. Terhune and her co-authors close their argument by asking a critical question: how much it would us at the institutional level *not* to fund surgical training?

Complete story link

GSR Wali Johnson presented Watkins Award

Recently **Wali Johnson, MD**, third year General Surgery resident, was presented with The Levi Watkins Jr., MD, Award at the annual Levi Watkins Jr., MD Lecture. The award is given annually to at least one graduate student and one medical student associated with VUSM who have made outstanding contributions to the institution in fostering a more diverse environment that is enriching, encouraging, and embracing to all VUSM students, faculty and administration.

Levi Watkins Jr., MD, made significant contributions toward increasing opportunities for underrepresented minorities in the sciences.


Dr. Johnson

In 1966, Watkins was the first African-American student to be admitted to VUSM. He graduated in 1970 and was selected as a member of the Alpha Omega Alpha medical honor society. A distinguished physician and researcher, he continued his training at Johns Hopkins University and Harvard.

Dr. Watkins embodied the attributes important in serving as a role model for those who pursue careers in medicine and the biomedical sciences. Award recipients are chosen for making outstanding contributions that continue Watkins' legacy.

CELEBRATE

THE DIFFERENCE WE MAKE EVERY DAY

Register for one of the March 7th or 8th events at the VU multiplex dome Food, Fun and Stories of Success

VUMC is hosting a special employee appreciation event — Celebrate the Difference WE Make Every Day! — to applaud recent successes and acknowledge the many contributions of the Medical Center's employees during three sessions on March 7-8.

To make it as convenient as possible for employees to attend, regardless of role, work shift or location, the event is offered in three, identical sessions over the course, of two days. All employees from the 21st Avenue campus as well as those from Vanderbilt Health One Hundred Oaks, Green Hills and Williamson County and surrounding counties, are encouraged to attend.

The event will be at the climate-controlled Vanderbilt University Indoor Multipurpose Facility, a part of the Vanderbilt Recreation and Wellness Center at 2700 Children's Way. The annual VUMC Picnic has also been added following the program, attendees are invited to enjoy a full meal with their colleagues.

During a 75-minute program, the State of the Medical Center address from Jeff Balser, MD, PhD, president and CEO of VUMC and dean of the Vanderbilt University School of Medicine will be presented. Attendees will also hear inspiring stories from patients and colleagues, as well as enjoy live entertainment and fun activities.

Two sessions are offered on Thursday, March 7. The first session is at 10:30 a.m., with doors opening at 10 a.m., and the second session is at 4:30 p.m., with doors opening at 4 p.m. On Friday, March 8, there is one session at 10:30 a.m., with doors opening at 10 a.m.

To ensure there are enough meals for everyone, you MUST register. Register in the Learning Exchange. Search for "Celebrate2019," (Registration link) and enroll in the specific session you are attending.

Complete story link

Community service project helps displaced children with personal items as they transition to new homes

LOVE on wheels

LOVE-ON-WHEELS.ORG

For its 2018 Annual Holiday Service Project, the **Section of Surgical Sciences** and the Surgical Outcomes Center for Kids (SOCKS) Team partnered with Love-on-Wheels to provide essential items for children entering foster care in the Nashville community. Love-on-Wheels is a 502c(3) non-profit organization that provides new suitcases filled with basic necessities for children ranging in ages from infants up to 18. The goal is to provide stability and a stronger sense of self-worth in crisis as they transition into a new home. Stephen Gannon, coordinator for (SOCKS) at Monroe Carell Jr. Children's Hospital spearheaded the service project. Faculty and staff across all departments and divisions in the Section donated money and urgently needed items such as diapers, socks, underwear, pajamas, and toiletry items to fill about 100 new suitcases that were delivered to Love-on-Wheels before the holidays.

Love-on-Wheels website link

Time-based billing: What matters? Account for time well spent

1. Total time of the visit (*not just time spent counseling*)
- ***ONLY faculty time is included***, not resident time or discussing for education

2. >50% of the total visit time dedicated to counseling and coordination of care
- Not appropriate to use time-based billing to support a higher level of service when it is not supported by medical necessity

3. Face-to-face time with patient (or family)
- **Inpatient:** Total time can include both "face-to-face time," and time spent on the unit/floor documenting, reviewing the chart or results, gathering additional patient information and/or in discussion with other providers
  - **NOT** time spent off the unit/floor or attending to other patients
  - **DOES** include family discussions when patient unable to participate and directly related to acquiring patient history or management/ prognosis
- **Clinic:** Total time calculated must be "face-to-face" time only

4. Brief description of counseling and coordination of care
- Risks/benefits of treatment versus non-treatment, discussion of results or workup, instructions, education, etc.

*Outpatient = **only face-to-face time***

New Patient	Total Face-to-Face Time	Established Patient	Total Face- to-Face Time	Outpatient Consultation	Total Face- to-Face Time
99201	10 minutes	99211	5 minutes	99241	15 minutes
99202	20 minutes	99212	10 minutes	99242	30 minutes
99203	30 minutes	99213	15 minutes	99243	40 minutes
99204	45 minutes	99214	25 minutes	99244	60 minutes
99205	60 minutes	99215	40 minutes	99245	80 minutes

*Inpatient = time for the patient **face-to-face + floor/ward***

Initial Hospital	Total Face-to-Face Time	Subsequent Hospital	Total Face-to-Face Time	Inpatient Consultation	Total Face-to-Face Time
99221	30 minutes	99231	15 minutes	99251	20 minutes
99222	50 minutes	99232	25 minutes	99252	40 minutes
99223	70 minutes	99233	35 minutes	99253	55 minutes
				99254	80 minutes

EXAMPLES

of time-based statements that must be documented:

INPATIENT TIME-BASED BILLING:

"Total visit time=35 minutes including exam, review of imaging and labwork, discussion with consultants, documentation and decision-making; >50% spent counseling/coordinating care including discussion with patient of plan for ---- and coordination with consultants" or "20 of 35 minutes spent counseling/ coordinating care, including....."

OUTPATIENT BILLING:

"Total face-to-face time spent was 30 minutes, with >50% in counseling and coordination of care, including discussion of weight loss prior to next visit, review of CT imaging and operative planning."

Select the time-based code closest to the time spent

For example, 99214 has typical time of 25 minutes and 99213 has typical time of 15 minutes. If the face-to-face office time is 21 minutes, select 99214 because it's more than ½ the time difference

Section of Surgical Sciences Coders

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For any coding or billing questions, you may also email **sectionrevenue@vumc.org**

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Colorectal, General Surgery, Surgical Admin, Surgical Weight Loss – Nancy Cochran
Liver and Renal Transplant – Mary "Liz" Sonnier
Oral Surgery – Michelle D. Cornwell
Pediatric Surgery – Michelle Dickens
Plastics – Kelly Stranko
Surgical Oncology – Michelle Dickens
Trauma/EGS – Jim Dieterich and Tiffany Sommers
Vascular – Jim Dieterich
Neurosurgery – Holly Shockley and Jessica "Jessi" Malek
Thoracic - Kelly Stranko
Peds Cardiac - Michelle D. Cornwell

NEW FACULTY

DEPARTMENT OF PLASTIC SURGERY
Assistant Professor of Plastic Surgery
Michael Golinko, MD

DEPARTMENT OF SURGERY
DIVISION OF GENERAL SURGERY
Professor of Clinical Surgery
David Beck, MD

DIVISION OF TRAUMA & SURGICAL CRITICAL CARE
Assistant in Surgery
Jennifer Lusty, MSN

FACULTY PROMOTIONS

DEPARTMENT OF SURGERY
Research Assistant Professor
Sinju Sundaresan, PhD

DIVISION OF TRAUMA & SURGICAL CRITICAL CARE
Associate Professor of Surgery (with Tenure)
Mayur Patel, MD, MPH

DIVISION OF VASCULAR SURGERY
Associate Professor of Clinical Surgery
C. Louis Garrard, MD

2019 *U.S. News* Voting: Support Vanderbilt's National Reputation

Claim your Doximity profile and share the good news about VUMC with your peers

Amazing discoveries, research and innovation at VUMC - website link

Annual voting for *U.S. News & World Report's* "Best Hospitals" rankings is now open. If you are eligible to vote in the adult or pediatrics subspecialties included in the survey and have claimed your profile on Doximity, look for an email notification from Doximity or watch for VUMC announcements.

2019 Lectures for Section departments and divisions

Mandrell Lecture in Transplantation
January 4, 2019, Mureo Kasahara, MD, PhD

Gavin Family Lecture in Trauma and Surgical Critical Care
February 1, 2019, Deborah Stein, MD, MPH

George Lecture in Transplantation
February 8, 2019, Yuri Genyk, MD

Shumway Lecture in Transplantation
February 22, 2019, Ashish Shah, MD

H. William Scott Lecture in Surgical History
March 8, 2019, Bonnie Miller, MD

Barney Brooks Lecture
April 5, 2019, Jeffrey Drebin, MD, PhD

Thuss Lecture in Plastic Surgery
April 12, 2019, Paul Cederna, MD

Hall Lecture in Oral & Maxillofacial Surgery
April 13, 2019, Jamie Lozada, DDS

McCleery Lecture & Master Teacher Award
May 3, 2019, Rachel Kelz, MD

Dale Lecture
May 10, 2019, Ali AbuRahma, MD, FACS, FRCS

Holcomb Lecture in Pediatric Surgery
Fall, 2019, TBD

Rollin Daniel Lecture in Cardiothoracic Surgery
Fall, 2019, TBD