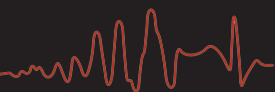


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ANESTHESIA MONITOR



SPRING 2021

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Department of Anesthesiology at
Vanderbilt University Medical Center
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Yaghmour, department's first COVID-19 vaccine recipient



April Kapu, Associate Nursing Officer for Advanced Practice, vaccinates the department's first vaccine recipient, Ted Yaghmour, MD, Director of the Acute Pain Service and Adult Regional Anesthesiology. Yaghmour wears a tiara presented by Department Chair Warren Sandberg, MD, PhD.

VUMC opens Belle Meade location

By Jenelle Grewell

Vanderbilt University Medical Center is expanding throughout the Middle Tennessee region, and one of the most recent locations to open is in Belle Meade.

Vanderbilt Health Belle Meade opened on Monday, Jan. 18, 2021. This outpatient surgery center is combined with a surgical clinic and infusion center.

The center will focus on orthopedic and urology surgeries, including joint replacement, hand, wrist, and upper arm operations, joint arthroscopic surgery, foot and ankle surgeries, prostate surgery, ureteral stents, and high-tech kidney stone management. The center is supported by a full-time pharmacy and lab.

“We also have the facility for extended overnight recovery for

those patients that need a little extra time to recover from their operation but don't need to be transferred to the hospital,” said **Rajnish Gupta, MD**, medical director of Vanderbilt Health Belle Meade.

The Anesthesiology Department will staff Vanderbilt Health Belle Meade with two anesthesiologists and seven to eight certified registered nurse anesthetists every day. According to Gupta, the department collaborated with Perioperative Services and the construction team to envision, design, and develop the location.

“Our department has been critical in determining what operations would occur there, establishing the workflow needed to run an efficient service, identifying the

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MESSAGE FROM THE CHAIR

2021 has begun, and it's time to reflect on 2020 while also looking ahead to the future.



Warren Sandberg, MD, PhD
Chair, Department of
Anesthesiology

2020 was a challenging year, to say the least. The year was defined by COVID-19 and how the medical center, along with our department, had to adjust and change to continue providing the high-quality patient care that is VUMC's hallmark.

The year ended on a high-note as vaccines began to be administered. Ted Yaghmour, MD, was the first member of our department to get vaccinated. I got my first dose of the vaccine myself on Tuesday, Dec. 29, 2020. If you are member of our department and would like to receive the vaccine, look for the sign-up link in our *Weekly Update*.

I am particularly proud of our trainees and how they have responded to the pandemic. Our third-year resident Greg Roop, MD, was recently featured in an article about the collaborative effort of the multiple disciplines at the medical center coming together to help care for COVID-19 patients.

We started off the new year strong with the opening of a new facility at Belle Meade. Vanderbilt Health Belle Meade showcases the demand for the VUMC brand's high-quality medical care. This outpatient surgery center combined with a surgical clinic and infusion center is a collaboration between the anesthesia team and the surgical and nursing teams.

I look forward to 2021 and what the department and its members will accomplish. With the department's involvement in many research projects, education, and clinical advancement, I am confident we will continue to make a name for ourselves as a department dedicated to excellence. ♦

Department awarded NIH grants



National Institutes of Health
Turning Discovery Into Health

By Jenelle Grewell

Several studies in the Department of Anesthesiology have received NIH grants. These studies cover a wide-range of topics and showcase the variety and scope of research in our department.

Jerod Denton, PhD, was awarded a four-year NIH grant for his study on whether inhibitory drugs that act specifically on Kir6.1/SUR2B are an effective therapy for patent ductus arteriosus (PDA) in newborns. This study is in collaboration with Elaine Shelton, PhD, in Pediatrics, who studies molecular mechanisms that underlie PDA in newborns.

Denton explained that Shelton found genes encoding ATP-regulated potassium channel comprising Kir6.1 pore forming subunit and regulatory SUR2B subunit, which belong to the inward rectifier potassium (kir) channel family that Denton's lab studies, are overexpressed and enriched in DA tissue. The study will be conducted by carrying a high throughput screen of 100,000 compounds from the Vanderbilt Institute of Chemical Biology Library for Kir6.1/SUR2B, optimizing lead compounds with chemistry through the collaboration with Craig Lindsley, PhD. Shelton will then use those optimized compounds to determine if they correct PDA in mouse models. By the time the study is over, Denton said he hopes to be in the position to move optimized compounds into advanced preclinical animal models of PDA and eventually clinical trials.

Christopher Hughes, MD, was awarded a five-year NIH grant for his study on whether physical and cognitive training prior to, during, and after hospitalization will improve the long-term cognitive

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New approach helps conserve blood products for liver transplant patients

By Matt Batchelor
Originally published in the VUMC Reporter on Dec. 10, 2020

Liver transplants have traditionally required a high volume of transfusions of blood products, which comes with several downsides. The products are costly to patients — as high as \$15,000 on top of the expense of a transplant. And they are sometimes not well accepted in patients because they degrade over time and are derived from multiple patients.

The best blood, of course, is always one's own, said **Clayne Benson, MD**, director of liver

transplant anesthesia at the Vanderbilt Transplant Center. Benson is pioneering new approaches to conserve blood products by better utilizing a patient's own blood, which has the potential to improve outcomes in patients, cut health care costs and conserve the limited supply of donated blood — especially important in the time of COVID-19, when occasional shortages of products have occurred.

One approach Benson is studying is Acute Normovolemic Hemodilution (ANH), which is used for liver transplant patients who come into the operating

room with adequate red blood cell and platelet counts and whose blood is clotting properly.

“We will take their own blood out of them and replace that blood with other fluids, like generic fluids we use,” said Benson, assistant professor of Clinical Anesthesiology. “You dilute out the blood that is left and so when they bleed that diluted blood, you're not wasting much. And when they need their own blood back, you give it back to them. That allows you to give a smaller amount of blood products from the blood banks, so less foreign blood is used.

“We've been able to show that you can do that, and you can save money and foreign blood.”

Though it is being studied in the liver transplant population, the method could also be useful for other organ transplants and trauma cases requiring large blood transfusions, Benson said.

Kara Siegrist, MD, assistant professor, Cardiothoracic Anesthesiology Division, has been working alongside Benson in the ANH research.

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The Liver Transplant Anesthesia team includes, from left, Clayne Benson, MD, Kevin Furman, DO, Philip Leisy, MD, and Kara Siegrist, MD. (photo by Erin O. Smith)

Residents, fellows step up to help care for COVID patients

By Nancy Humphrey

Originally published in the VUMC Reporter on Jan. 14, 2021

Following a Thanksgiving surge that led to record numbers of admissions of patients with COVID-19, residents and fellows from multiple disciplines have come together under the direction and supervision of critical care attendings to provide the best care to critically ill patients in Vanderbilt University Medical Center's COVID-19 Intensive Care Unit.

In addition to the physicians and nurses staffing the unit on the eighth floor of Medical Center East, fellows and residents from at least 12 programs, including Pulmonary Critical Care, Cardiovascular Medicine, Anesthesiology Critical Care, Anesthesiology and Surgery, as well as residents from other programs provide additional support to the Medical Intensive Care Surge Team.

“As physicians we are trained to meet patients where patient needs are, and we don't always get to define that. I've been very proud of these residents and fellows who have stepped up to care for patients in a global crisis,” said Kyla Terhune, MD, MBA, associate professor of Surgery and Anesthesiology, vice president of Educational Affairs and associate dean for Graduate Medical Education.

“In some ways it's a historical opportunity to serve as a physician and provides a great deal of learning, but it's certainly also

a tragedy and not what anyone anticipated or wanted. For those residents and fellows where it falls within their educational curriculum and skills, they are appropriately contributing the most – but they need support when the patient numbers surge like this,” she said.

Kevin Seitz, MD, a Pulmonary Critical Care fellow, worked in the unit for two weeks between Thanksgiving and Christmas. Since he is subspecializing in the lungs and critical illness, he's already been trained to take care of critically ill patients with failing lungs, but in many ways, the work is very different, he said.

“Learning to care for patients with respiratory failure is a core part of our fellowship training, and that is what we do in the COVID ICU, but this is an unsettling and unpredictable disease process where we don't totally understand the disease progression. It's tough to care for these patients because they are so sick.”

Seitz said when he's taking care of a patient with bacterial pneumonia, for example, he has a “decent handle” on whether the patient will improve.

“When a patient with COVID gets worse, it's hard to know whether to blame COVID or something else. And is it something we would normally see in a patient with pneumonia who is very sick or is it something unique to the virus? It's often unclear who's going to get better and who's not; some take weeks and months to



Anesthesiology resident Greg Roop, MD, is among the group of fellows and residents from numerous programs to provide additional support to the Medical Intensive Care Surge Team. (photo by Donn Jones)

get better and others continue to deteriorate,” he said.

Different disciplines working together to care for patients with COVID-19 requires improvisation and open communication, Seitz said.

“As much as it's a horrible context that brought us to these circumstances, it's a positive, collaborative environment in there. It requires a lot of communication to figure out how to make the most of everyone's skills,” he said. “I know we're up against this awful pandemic and I wish the disease weren't here, but there's camaraderie in that.”

Greg Roop, MD, a third-year Anesthesiology resident, left his pediatric anesthesia rotation when he was asked by a chief resident to help staff the COVID-19 ICU during Thanksgiving week. He was

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VA adopts enhanced recovery for total knee, total hip patients

By Paul Govern

Originally published in the VUMC Reporter on Jan. 7, 2021

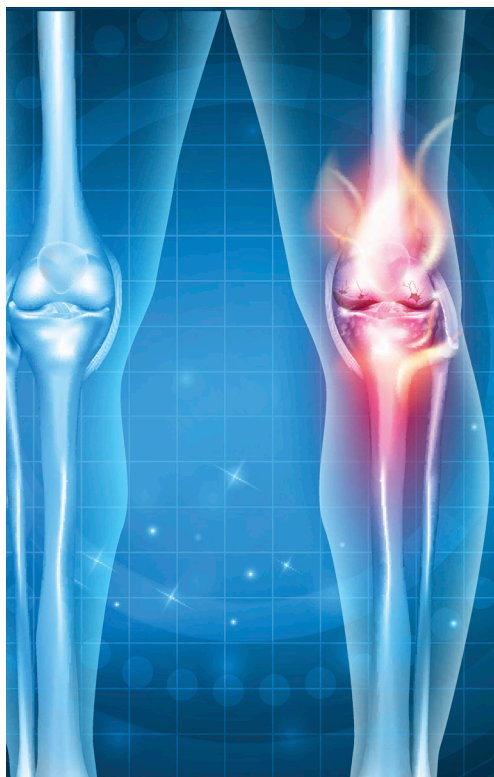
For patients receiving total knee or total hip replacements at the Nashville VA Medical Center, the use of opioids for inpatient pain management and the total time patients spent in the hospital were both greatly reduced following the January 2016 adoption of sweeping quality improvement measures.

That's according to a study reported in the *Canadian Journal of Anesthesiology* by Vanderbilt University Medical Center anesthesiologists **Bret Alvis, MD, Christopher Hughes, MD**, and colleagues. (The VA facility is adjacent to the VUMC campus and its patients are served by physicians from VUMC.)

“Next door at the VA, we were successful in implementing enhanced recovery protocols similar to those that have been associated with improved patient outcomes for many of our surgical service lines here at VUMC,” said Alvis, assistant professor of Anesthesiology and Biomedical Engineering.

The VA quality initiative hinged on establishment of an Anesthesia Perioperative Care Service (APCS) and adoption of a set of clinical protocols known in the literature as enhanced recovery after surgery, or ERAS. (At VUMC, a house-wide initiative to adopt ERAS pathways is well underway.)

Compared to analgesics, opioids bring a slower functional



(photo from iStock)

recovery. Accordingly, ERAS pathways discourage use of opioids in favor of multi-modal analgesia, that is, more use of adjuncts like acetaminophen (Tylenol), ibuprofen and gabapentin. This approach to pain management supports the other chief components of ERAS, including earlier feeding and oral hydration after surgery and earlier ambulation.

ERAS pathways for total hip and total knee were created with the involvement of anesthesiologists and APCS staff, surgeons, physical therapists, pharmacists and social workers. Under the APCS, a critical care physician provides daytime in-hospital coverage (and overnight home call) and nurse practitioners provide continuous in-hospital coverage.

For the study, the team collected data on total hip/total knee patients admitted to the VA during the 400 days before and 400 days after the initiative's start date of Jan. 1, 2016 — 282 patients in all.

Among the bulk of patients — that is, those falling in the interquartile range, statistically speaking — the median hospital length of stay decreased from three days to two.

Among the bulk of patients, median inpatient opioid intake by IV decreased from 11.2 to zero morphine milligram equivalents (MME), while median inpatient oral opioid intake decreased from 105 to 68 MME.

Other patient outcomes targeted by the quality initiative remained statistically unchanged, including overall costs per patient, outpatient opioid use and unexpected hospital readmission (within 30 days).

“In this initial study we would of course also liked to have seen improvements in these additional key outcomes of care. Our data appear to indicate that, as we continue to refine our clinical protocols, we can expect to realize additional benefits across the board,” Alvis said.

Other authors on the study included Roland Amsler, BBA, **Philip Leisy, MD**, Xiaoke Feng, MS, Matthew Shotwell, PhD, **Pratik Pandharipande, MD**, Muhammad Ajmal, MD, Michael McHugh, MD, and **Ann Walia, MBBS**. ♦

Grants

continued from page 2

and disability outcomes in elderly surgical patients. Elderly surgical patients are at an extremely high-risk for cognitive and function decline after hospitalization. Individual interventions such as anesthesia and sedation strategies, mobilization, and rehabilitation have exhibited limited success in reducing this decline.

“We wanted a program to be pragmatic and scalable to a large number of patients,” Hughes explained. He said the cognitive training needs to target areas

where deficits are seen after hospitalization, such as attention and executive function. As for physical training, Hughes said the training needs to be able to be performed safely at home, work the core and extremities, and feature some aerobic training. Also, the difficulty level must be easily increased or decreased depending on the patient’s fitness level.

The assessment for cognition will use the Computerized Neurocognitive Assessment Vital Signs platform at baseline both 3 months and 12 months after surgery. As for physical function assessment, daily activities and instrumental activities will be examined, in addition to depression and pain questionnaires. ♦

Belle Meade

continued from page 1

anesthesia equipment necessary, and collaborating with all the relevant parties every step of the way,” Gupta said.

Gupta said over the past few years, it has become apparent that VUMC is the fastest growing health system in the region and has been challenged to keep up with the demand for excellent care within Nashville and the surrounding areas. “This growth is evidenced by the rapid hiring of anesthesiologists and CRNAs within our department,” Gupta said.

Warren Sandberg, MD, PhD, Anesthesiology Department Chair, said Vanderbilt Health Belle Meade is a testament to what VUMC provides for the region. “There is a demand for our services. The brand of VUMC comes with a promise of quality patient care.”

The addition of Vanderbilt Health Belle Meade identifies and addresses a huge need for operations to move out of the main hospital and into the outpatient arena. According to Gupta, this has only been possible recently for some operations, such as total

joint surgery, because of the careful collaboration needed between anesthesia and surgery.

Total joint surgery previously required a three- to five-day hospital stay but can now be done safely with same-day discharge. Instead of requiring a minimum hospital stay of one to two days, urological surgeries such as complex kidney stones and prostate surgeries can now be done as ambulatory surgeries thanks to improved surgical technique, technological advancement, and careful perioperative management.

“These advances in surgical and anesthetic care are allowing patients to have a premium surgical experience and still recover safely in the comfort of their own home,” Gupta said.

There are several goals for the new Vanderbilt Health Belle Meade. According to Gupta, the first and foremost goal is to deliver cutting-edge and high-quality patient care. The new location should provide greater and more convenient access to surgical care to a large portion of the Nashville population. “We want to make sure these patients receive the premier Vanderbilt experience for their care,” he said.

Gupta said he also wants to develop a strong sense of teamwork, where every person feels valued and important to the team. “It generates an atmosphere where people are excited to come to work.”

Finally, Gupta said he wants to take this opportunity to advance both academic and operational excellence. “We have a chance in this new center to refine surgical efficiency, provide quality care, and advance the science of anesthesia and surgery. I want to embrace these goals as a collaborative effort with all of our surgeons, nurses, and anesthesia team members.”

According to Sandberg, this collaborative effort of the different clinical teams is vital to providing exceptional patient care. He said every step of the perioperative process is important and ensures VUMC and the department remain at the forefront of knowledge in patient care.

“Belle Meade Ambulatory Surgery Center will be the flagship outpatient surgery center for Vanderbilt, with a brand-new building, cutting-edge equipment, and world-class physicians,” Gupta said. ♦

Liver transplant continued from page 3

“The ANH project is just one example of the advancements in exemplary patient care we strive to achieve to provide the best, safest and most cost-effective health care to some of the sickest patients in the hospital,” she said. “With the volume of liver transplants we do at VUMC, even little cost savings on an individual level can add up to big savings for the hospital system. I’m proud to be part of such a wonderful multidisciplinary team of physicians and nurses all working together for the good of our patients.”

Benson’s interest in blood product conservation was inspired by necessity, when he served in the Special Operations Surgical Team (SOST) in the Air Force about a decade ago. The team served injured military personnel in the field, such as in Afghanistan, where the traditional assortment of blood products are not available. In that situation, medics would take blood from other soldiers whose blood matched the injured, which is fresh and not degraded.

That experience piqued his interest in applying those lessons to the hospital setting. Another area of

study is retrieving the blood of organ donors to go along with organs at the time they are retrieved, then transfusing the blood into donors’ bodies, which is not typically done today.

Benson noted that VUMC is part of a multicenter study of a device called TransMedics, affectionately known as Heart in a Box. Blood from heart transplant patients is retrieved at the time the heart is removed and then perfused into the organ en route to VUMC for transplant. Preliminary data shows the hearts can be preserved longer before transplant, expanding the supply of organs. Benson foresees expanding that program to livers.

“All these things require a team,” Benson said. “I’ve been lucky to have on the surgical side, Sophaclis Alexopoulos, MD, chief of Liver Transplantation, who has been very supportive of all of these things, in addition to all the surgeons on the team. When I first became the director of liver transplant anesthesia, we didn’t do ANH, but some team members on the anesthesia side were enthusiastic about it, as well as some of the surgeons. But it took some time and once they saw the benefit of it, then they were all on board.” ♦

COVID patients continued from page 4

paired first with a Pulmonary Critical Care fellow, then with a Cardiology fellow after that.

“Anesthesiology residents are uniquely positioned to transfer into this type of care — so much of what we do in the OR can be transitioned to the ICU setting particularly in terms of ventilator management and hemodynamics,” Roop said.

“The transition was great. I have to give a lot of credit to the pulmonary critical care faculty and staff and the entire internal medicine department. They realize that residents from other specialties don’t necessarily care for these patients all the time and they were very patient as they taught us how to manage them. The credit goes to them for their patience and being willing to share their knowledge with us.”

Roop said his experience left a positive impact upon his training as a physician. Working with others from

other specialties and seeing how they approach a situation was invaluable. It was an opportunity to learn in ways he never imagined.

“It was really interesting for me to interact with Pulmonary Critical Care faculty and fellows. While every specialty has the best interest of the patient in mind, we all approach these problems from different perspectives.”

Roop said while there was “some fear of the unknown” in caring for patients critically ill with COVID-19, he feels grateful to have contributed to their care.

“It’s a very unique situation and it was definitely a challenge. We’re navigating the unknown and we have to put our heads together and try to come up with different ways to treat these patients,” he said.

“The clinical course of some of them was unlike anything I had seen previously, and it’s like our hands were tied a bit. But I am very honored to participate in their care.” ♦

Celebrating departmental accomplishments and new hires



Warren Sandberg, MD, PhD, Chair, Department of Anesthesiology, and Chief of Staff, Perioperative and Critical Care Services for Vanderbilt University Adult Hospital, received his COVID-19 vaccine on Tuesday, Dec. 29, 2020. (photo by Warren Sandberg)

Lauren Poe, DO, Assistant Professor of Anesthesiology, has been dually appointed as Assistant Professor of Hematology and Oncology.

Nominated by the Society of Cardiovascular Anesthesiologists, **Miklos Kertai, MD, PhD**, now serves as a member of the National Quality Forum Surgery Standing Committee.

Matthias Riess, MD, PhD, FASA, is the guest editor of the special collection on “Current and novel experimental methods in ischemia/reperfusion research” that will be published by *Journal of Visualized Experiments (JoVE)*.

Camila Walters, MD, was the guest editor on a special issue of *Children*. The issue featured several articles by department members.

Jonathan Wanderer, MD, MPhil, was appointed to the Faculty Advisory Council for Vanderbilt University Medical Center.

Matthew Weinger, MD, was elected as one of the 2020 fellows of the American Association for the Advancement of Science.



On Sunday, Dec. 13, the Sandbergs hosted a Holiday Drive-Thru event where participants donned their masks and enjoyed the holiday lights, decorations, and music of the Sandberg home from the safety of their vehicles. (photos by Jenelle Grewell)

Aditi Balakrishna, MD
Assistant Professor
Anesthesiology Critical Care Medicine

Education and Training:

Fellowship, Anesthesiology Critical Care Medicine, Massachusetts General Hospital, Boston, MA (2020)

Residency, Anesthesiology, Massachusetts General Hospital, Boston, MA (2019)
MD, Yale School of Medicine, New Haven, CT (2015)

Fun Fact: I was born in Japan.



Tiffany Brainerd, MD
Assistant Professor of Clinical Anesthesiology
Multispecialty Adult Anesthesiology

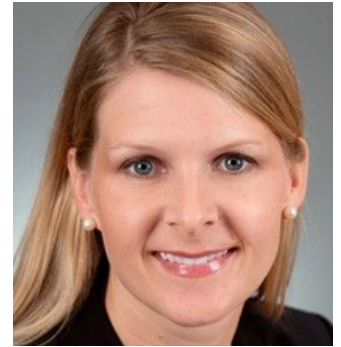
Education and Training:

Fellowship, Pediatric Anesthesiology, Boston Children's Hospital, Boston, MA (2011)

Residency, Anesthesiology, University of Arizona, Tucson, AZ (2009)

MD, University of Texas, San Antonio, TX (2004)

Fun Fact: I am an active rock climber, ice climber, and mountaineer. I have climbed to the highest point in the Western and Southern Hemispheres: Aconcagua, 22,841 feet above sea level.



Travis Brown
Communications Coordinator
Office of the Chair

Education and Training:

BA, Communication Arts, University of Alabama, Tuscaloosa, AL (2000)

Fun Fact:

I play the synthesizer.



Melody Campbell
Certified Registered Nurse Anesthetist

Education and Training:

DNAP, Nurse Anesthesia, Middle Tennessee School of Anesthesia, Madison, TN (2020)

BSN, Lipscomb University, Nashville, TN (2015)

Fun Fact:

I was born in South Africa.



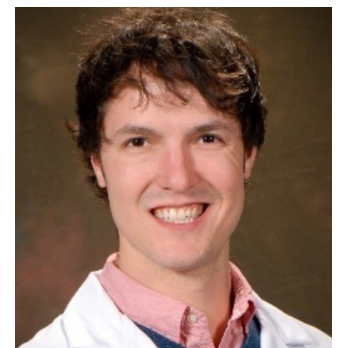
Nickolas Esbrook
Certified Registered Nurse Anesthetist

Education and Training:

DNAP, Nurse Anesthesia, Middle Tennessee School of Anesthesia, Madison, TN (2020)

BSN, University of Michigan, Ann Arbor, MI (2012)

Fun Fact: I enjoy spending nights looking at the sky with my telescope.



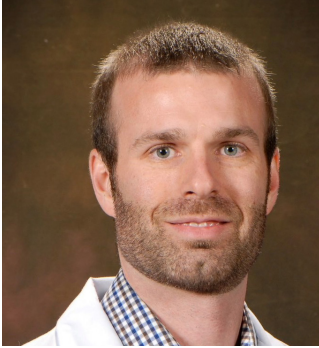


Don Finley
Associate Application Developer

Education and Training:

BFA, Graphic Design, Austin Peay State University, Clarksville, TN (2012)

Fun Fact: I lived and traveled in Europe from 2006 to 2009.



Johnathan Haynes
Certified Registered Nurse Anesthetist

Education and Training:

DNAP, Nurse Anesthesia, Middle Tennessee School of Anesthesia, Madison, TN (2020)

BSN, Indiana Wesleyan University, Marion, IN (2017)

Fun Fact: I have five children and enjoy hunting.



Pedro Mascaro, MD
Instructor in Clinical Anesthesiology
Multispecialty Adult Anesthesiology

Education and Training:

Fellowship, Interventional Pain Medicine, Jackson Memorial Hospital, Miami, FL (2020)

Residency, Anesthesiology, Jackson Memorial Hospital, Miami, FL (2019)

MD, University of Miami, Miami, FL (2015)

Fun Fact: I enjoy playing tennis, soccer and golf. I am a certified scuba diver and have dived on four continents.



Christie Moss
Certified Registered Nurse Anesthetist

Education and Training:

MSN, Nurse Anesthesia, Lincoln Memorial University, Harrogate, TN (2020)

BSN, Cumberland University, Lebanon, TN (2012)

Fun Fact: I am bilingual. I can read, write, and speak Spanish.



Mary Purtle
Certified Registered Nurse Anesthetist

Education and Training:

MS, Nurse Anesthesia, University of Alabama, Birmingham, AL (2002)

BSN, University of Memphis, Memphis, TN (1999)

Fun Fact: I retired from Emory Healthcare and recently moved to Nashville to be closer to my daughter. I am in good health, enjoy working, and plan to work as long as possible.

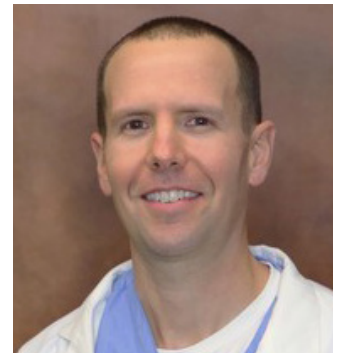
Christopher Rhea
Certified Registered Nurse Anesthetist

Education and Training:

MS, Nurse Anesthesia, Texas Christian University School of Nurse Anesthesia, Fort Worth, TX (2010)

BSN, University of Texas, Arlington, TX (2005)

Fun Fact: I like to golf.



Rebecca Shah
Certified Registered Nurse Anesthetist

Education and Training:

MSN, Anesthesia, University of North Carolina at Greensboro, Winston Salem, NC (2005)

BSN, Spring Hill College, Mobile, AL (2001)

Fun Fact: I enjoy traveling, mahjong, tennis, and medical mission trips.



Kala Sigona
Certified Registered Nurse Anesthetist

Education and Training:

DNAP, Nurse Anesthesia, Middle Tennessee School of Anesthesia, Madison, TN (2020)

BSN, St. Ambrose University, Davenport, IA (2014)

Fun Fact: I make the best chocolate chip cookies.



Denny Simon, MD
Instructor in Clinical Anesthesiology
Multispecialty Adult Anesthesiology

Education and Training:

Residency, Anesthesiology, Vanderbilt University Medical Center, Nashville, TN (2020)

Residency, General Surgery, Vanderbilt University Medical Center, Nashville, TN (2018)

MD, SUNY Downstate College of Medicine, Brooklyn, NY (2016)

Fun Fact: I am the first doctor in my family.



Alyssa Smith
Certified Registered Nurse Anesthetist

Education and Training:

DNAP, Nurse Anesthesia, University of Pittsburgh, Pittsburgh, PA (2020)

BSN, Texas Christian University, Fort Worth, TX (2015)

Fun Fact: I am very interested in providing healthcare on a global scale! I have participated in two medical missions in the past, and my DNP project involves implementing a malignant hyperthermia program at a hospital in Laos.





Elavonta Shervette Thomas
Certified Registered Nurse Anesthetist

Education and Training:

MSN, Anesthesia, Georgetown University, Washington DC (2006)

BSN, Florida State University, Tallahassee, FL (1999)

Fun Fact: I like to run half marathons.



Stacy Waller
Certified Registered Nurse Anesthetist

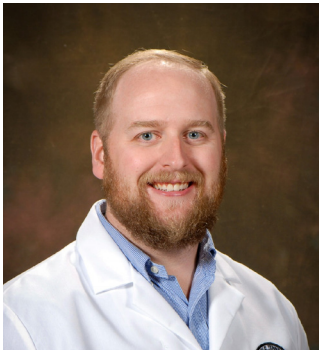
Education and Training:

DNAP, Nurse Anesthesia, Middle Tennessee School of Anesthesia, Madison, TN (2020)

BSN, Anderson University, Anderson, SC (2016)

Fun Fact:

I used to be a baker.



Grant Young
Certified Registered Nurse Anesthetist

Education and Training:

DNAP, Nurse Anesthesia, Middle Tennessee School of Anesthesia, Madison, TN (2020)

BSN, Cumberland University, Lebanon, TN (2009)

Fun Fact:

I can cross one eye independent of the other eye.



Adam Zoccola
Certified Registered Nurse Anesthetist

Education and Training:

DNAP, Nurse Anesthesia, Middle Tennessee School of Anesthesia, Madison, TN (2020)

BSN, Middle Tennessee State University, Murfreesboro, TN (2010)

Fun Fact: I was born and raised in Mount Juliet, TN. I love to hunt and fish. Family time and work life balance are the most important things to me.

Recent publications

Ahmed ST, Akeroyd JM, Mahtta D, Street R, **Slagle J**, Navar AM, Stone NJ, Ballantyne CM, Petersen LA, Virani SS. Shared Decisions: A Qualitative Study on Clinician and Patient Perspectives on Statin Therapy and Statin-Associated Side Effects. *J Am Heart Assoc.* 2020 Nov 17;9(22):e017915. doi: 10.1161/JAHA.120.017915. Epub 2020 Nov 10. PMID: 33170055.

Alvis BD, Amsler RG, **Leisy PJ**, Feng X, Shotwell MS, **Pandharipande PP**, Ajmal M, McHugh M, **Walia A**, **Hughes CG**. Effects of an anesthesia perioperative surgical home for total knee and hip arthroplasty at a Veterans Affairs Hospital: a quality improvement before-and-after cohort study. *Can J Anaesth.* 2020 Dec 2. English. doi: 10.1007/s12630-020-01865-4. Epub ahead of print. PMID: 33263180.

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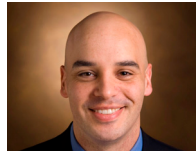
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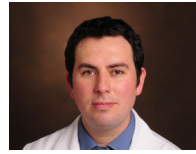
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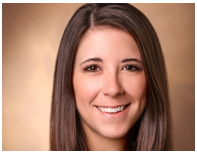
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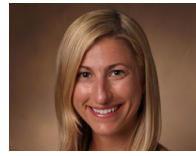
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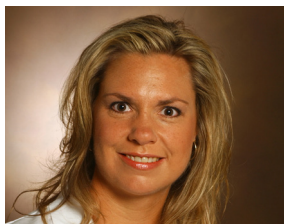
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