Newton, colleagues author study establishing pediatric perioperative mortality rate in East Africa

Two billion of the world’s children lack access to safe surgery and anesthesia, and the need for pediatric surgery in low- and middle-income countries is growing. In these countries, where children make up more than 50 percent of the population, it is estimated that 85 percent of children will require surgery before their 15th birthday, and these countries have a severe shortage of pediatric surgeons and anesthesiologists. Mark Newton, MD, author of a new study published last week by Anesthesiology, explained, “We know from practical experience that pediatric surgical mortality in these settings is high, but we have never been able to prospectively capture the data until now.”

In the new study, “Perioperative Mortality in Kenya: A Prospective Cohort Study from 24 Hospitals,” Newton and his co-authors establish a baseline pediatric perioperative mortality rate for the first time in East Africa and discuss factors associated with mortality. Newton said the authors hope this study will demonstrate the feasibility of collecting perioperative mortality data at scale and illustrate how the data can be used to improve pediatric surgical care systems in these settings.

This groundbreaking study establishes a pediatric perioperative mortality rate for low- and middle-income countries which is 100 to 200 times higher than in high-income countries—further documenting the global surgery imbalance and its dramatic impact on the world’s growing population of children.

The study also illustrates how such data can direct quality improvements. For example, another of the study’s key findings shows a link between mortality and failure to use the Safe Surgery Checklist. Of this finding, Newton said, “This represents a significant finding to be useful for advocacy, education and enforcement of the use of this patient safety tool.”

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GME course focuses on postpartum hemorrhage

Severe postpartum hemorrhage is a leading cause of morbidity and mortality for women in the United States. Expert management requires a coordinated effort from obstetrics, obstetric anesthesia and nursing staff.

A Graduate Medical Education curriculum course for postpartum hemorrhage has been designed to teach residents from multiple disciplines how to communicate effectively and work as a cohesive team. This initiative is designed to reinforce best practice management protocols and is part of a national strategy championed by obstetric anesthesia, obstetrics and mother-baby nursing staff.

Laurie DeSantis, CNM, Quality and Safety Advisor for Women’s Health, said The Joint Commission, the Institute for Healthcare Improvement and the Agency for Healthcare Research and Quality have all endorsed simulation training, especially in critical care areas such as obstetrics, ICUs and Emergency Departments.

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Photo by David Shirk
The end of the year is upon us, and it is time to reflect on all the things the department has accomplished during the past few months.

At the 2019 annual meeting of the American Society of Anesthesiologists in Orlando, Florida, we participated in over 85 activities. Over 45 faculty and over 35 residents from our department attended. From the medically challenging cases to the hands-on workshops to our annual alumni reception, the ASA was a huge success.

Mark Newton, MD, and colleagues authored an important study for global health and anesthesia. The groundbreaking study establishes a pediatric perioperative mortality rate for low- and middle-income countries that is 100 to 200 times higher than in high-income countries.

Bret Alvis, MD, received his first R01 grant. This grant provides funding for his study regarding venous waveforms and how to measure. This study is the only one examining non-invasive ways to measure venous waveforms.

Our Obstetric Anesthesiology Division is making an impact institution-wide with the development of a GME course focusing on postpartum hemorrhage. Obstetric Division Chief Jeanette Bauchat, MD, played a significant role in developing the curriculum.

Joseph Schlesinger, MD, continues to do work on noise and music in the ICU. Currently, the interdisciplinary group is looking into whether music in the ICU rooms will improve patient outcomes.

The amazing thing about our department is the range of work we do. We are involved in so many different things, from research to global health to developing curricula. The Department of Anesthesiology at VUMC is always looking

GME continued from front

Jeanette Bauchat, MD, chief of the Division of Obstetric Anesthesiology, said that there is evidence that maternal and fetal morbidity and mortality are reduced when multidisciplinary teams on labor and delivery work together and simulate and practice obstetric emergency drills. “In simulation, crisis management techniques can be practiced where the stakes are much lower than in an actual maternal emergency,” she said.

This training will help prepare clinicians for real-life emergencies in obstetrics, explained Etoi Garrison, MD, PhD, director of Obstetric Simulation and Education, who helped to develop and implement the curriculum. She said even though the training is for residents, it gives every member of the team, from attendings to nurses, an opportunity for practice-based learning in a safe environment.

Garrison emphasized the importance of recognizing everyone who contributed to the success of making these training sessions happen. She explained it is important to note this was a truly a multidisciplinary effort.

This training will help the whole team to improve teamwork and communication. According to Bauchat, studies have shown that not only does team training improve people’s performance in an actual emergency, it also improves safety culture. She explained that when teams have worked together before in a simulation situation, it improves their communication in the future because they are more comfortable communicating.

DeSantis explained that during simulation training, they have started to identify issues that cause delays in patient care and have already begun to make changes to the process. “I’m excited that our simulation training has led us to making improvements that will directly impact patient care on the obstetric units,” she said.

Bauch said this training will allow obstetric emergency response teams to respond faster, more efficiently and more effectively. “The hope is that you are catching hemorrhage earlier and treating it faster so women don’t need as many transfusions, so they don’t lose too much blood or need a hysterectomy,” she said.

Garrison emphasized the importance of recognizing everyone who contributed to the success of making these training sessions happen.

Pediatrics continued from front

Newton said he and his colleagues working in Kenya have long known that developing a safe surgery culture within a team model is key to improving outcomes. Therefore, Newton and James O’Neill, MD, established a fellowship program at AIC Kijabe Hospital that trains teams of pediatric surgeons and anesthesiologists. The program has trained 10 pediatric surgeons and 16 pediatric anesthesiologists, in partnership with the University of Nairobi, from eight different African countries.

Many of those trained have gone on to practice as the first pediatric surgeon or pediatric anesthesiologist in their home country. O’Neill explained that the graduates will then be supported to establish specialty training programs in their own countries. “These newly trained pediatric surgeons and anesthesiologists will work as leaders to increase access to surgery for their countries’ children and improve surgical outcomes,” O’Neill said.

Newton said he and colleagues are grateful to the General Electric Foundation, which funded this study and has supported many capacity-building efforts for safe surgery and anesthesia throughout East Africa.
Researchers explore music's effect on ICU patients, staff

Originally published in the VUMC Reporter on Sept. 25, 2019

By Nancy Wise

An interdisciplinary group of Vanderbilt researchers is launching a pilot study on the effect of live music on patients, families and staff in the adult intensive care unit (ICU) and is inviting musical members of the Vanderbilt community to help.

The study, Therapeutic Music in the Intensive Care Unit, calls for volunteer musicians — Vanderbilt students, staff and faculty — to play piano or flute in patients' rooms in Vanderbilt University Medical Center's adult ICUs. The impact of the music program will be assessed over a three-month pilot period with patients, family members and ICU clinical nursing and medical staff using established tools to assess anxiety, perceptions of benefit and strategies and barriers to implementation.

“It's known that music can play an important role in intensive care medicine. It can mask noise levels from therapies like mechanical ventilators and physiologic alarms, blunt the known cardiovascular stresses of noise and promote patient and family relaxation during a difficult time,” said Ruth Kleinpell, PhD, assistant dean of Clinical Scholarship and professor of Nursing, who is co-directing the study. “Yet despite its well-known benefits, music therapy is rarely observed in daily practice in an ICU and there hasn't been a lot of research regarding the impact of music in the ICU for patients, family members and clinicians.”

The pilot is a collaboration between faculty at Blair School of Music, the School of Nursing, Vanderbilt University Medical Center, the Department of Otolaryngology Music Cognition Lab and the Program for Music, Mind and Society.

“As an ICU doctor, I see my patients struggle to get better, but even as they get better, they can have neuropsychological outcomes like PTSD and delirium,” said Joseph Schlesinger, MD, associate professor of Anesthesiology and Biomedical Engineering. “There's a lot of literature that shows that music might alleviate some of that. What we're working to do is bring musicians into the ICU to try to improve patient outcomes, and at the same time help the staff who take care of these patients.”

Vanderbilt University undergraduates are encouraged to participate and investigate using the experience to develop their Immersion projects. Vanderbilt community musicians are asked to fill out an interest form and then participate in an initial one-hour orientation session.

The study will provide information that can help critical care practitioners develop best practices for designing, implementing and evaluating a patient- and family-focused music program in the ICU.

“Patients will be offered individual music sessions to be played by their bedside. For patients unable to communicate their preferences, family or bedside staff will decide if it is conducive for the patient to receive a music therapy session,” Kleinpell said. “Bedside clinical nurses will assist in monitoring the patient's response to the music in terms of changes in vital signs, restlessness, promotion of sleep or other signs of relaxation.”

The session will be stopped if there are observed changes in a patient’s vital signs or clinical status that may indicate an unfavorable response, such as increased heart rate or blood pressure, agitation or restlessness.

Kleinpell and Schlesinger hope the study leads to a formal music program in all VUMC ICUs. “Eventually, we'd like to have local musicians — this is Music City, after all — come into the hospital and play music in a therapeutic setting to try to help the patients, families and clinicians,” Schlesinger said. “As we go forward, we'd like to make it a standard of care in the ICU.”

Other participants include Marianne Ploger, BM, MM, associate professor of Music Perception and Cognition and director of the Musicianship Program, Blair School of Music; Reyna Gordon, PhD, assistant professor of Otolaryngology and Psychology and co-director, Music Cognition Lab, VUMC; Miriam Lense, PhD, assistant professor of Otolaryngology and co-director, Music Cognition Lab, VUMC; and Todd Rice, MD, MSc, associate professor of Medicine and director of the Medical ICU.

Nashville Piano Rescue has donated an upright piano on wheels to be used by the program; musicians will be asked to play from an established playlist of classical music previously evaluated as effective in hospital settings.
Vanderbilt was well represented at the American Delirium Society Meeting in June 2019 in Boston. Pratik Pandharipande, MD, Christopher Hughes, MD, Kimberly Rengel, MD, and Heidi Smith, MD, all gave oral presentations, and Tina Boncky, MD, presented a poster.

Pediatric Anesthesia fellows Clayton Adams, MD, Meagan Dodd, MD, Jaclyn Irwin, MD, and David Roberts, MD, had the opportunity to go to Chapel Hill, NC, and do a bootcamp with the Pediatric Anesthesia fellows there. Jenna Helmer-Sobey, MD, was instrumental in this experience for them.

Brian Allen, MD, Jane Easdown, MD, and Leslie Fowler, MEd, conducted a session at Society for Education in Anesthesia.

Jane Easdown, MD, received the Distinguished Educator in Anesthesiology award from ASA and SEA. The award was announced during the Emery A. Rovenstine Lecture on Monday, Oct. 21, at the ASA annual meeting in Orlando.

Leslie Fowler, MEd, 2017-19 AAPAE President, gave the welcoming address at the annual AAPAE Meeting.

Christopher Hughes, MD, will be inducted as a Fellow in the American College of Critical Care Medicine at the 2020 Society of Critical Care Medicine Critical Care Congress in February.

Matt Kynes, MD, presented on ERAS for pediatric orthopedic surgery at the ERAS USA meeting in New Orleans. Matt did an outstanding job and represented VCH very well on the national level.

Mark Newton, MD, attended the World Congress of Surgery in Krakow Poland from Sunday, Aug. 11 to Thursday, Aug. 15. Newton spoke on the Global Anesthesia Crisis.

Mark Newton, MD, has been appointed as the new Director of Anesthesia Global Health and Development in the Department of Anesthesiology.

Pratik Pandharipande, MD, MSCI, received the Foundation for Anesthesia Education and Research (FAER) Mentoring Excellence in Research Award.

Michael Pilla, MD, produced a documentary, “A Perfect Match: The Selection Ritual to Become a Doctor,” which was a finalist at the Nashville Film Festival.

Matthias L. Riess, MD, PhD, was selected to become a Fellow of the American Society of Anesthesiologists.

The Riess Lab represented the department well at the American Heart Association’s Scientific Sessions 2019 meeting in Philadelphia, with two oral presentations and four posters.
**Service Awards**

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Send us your news for inclusion in department publications:  
*Weekly Update, Anesthesia Monitor & Blog*  
anesthesiology.communications@vumc.org
Alvis awarded R01 grant for study regarding non-invasive ways to capture venous waveforms

A team of researchers at VUMC who are developing a non-invasive way to capture venous waveforms to assess and monitor volume status was awarded a five-year R01 grant. Bret Alvis, MD, the principal investigator, leads a team of physicians from both the Department of Anesthesiology and the Department of Surgery and engineers from the Department of Engineering. “This is the first grant I am the principal investigator on. It’s extremely exciting and a testament to the great team I am lucky enough to be a part of,” he said.

Alvis explained that it wasn’t until recently that technology was good enough to amplify the peripheral signals to non-invasively capture venous waveforms. “We have been trying to make sense of these waveforms in various clinical volumes states,” he said.

The grant will provide funding for them to study and better understand how the venous waveforms change specifically in patients with volume overload. “We are trying to better understand fluid status both in the vasculature and outside the vasculature. We hypothesize we can use the amplitudes of these venous waveforms to quantify the volume status in and outside blood vessels,” he said.

He explained that there isn’t currently a great way to monitor how much blood is in the blood stream. “We use a lot of data points like blood pressure, heart rate and central venous pressures to make our best clinical ‘guess.’ But research has shown these are quite poor in detecting someone’s volume status, despite the fact that knowing how much volume a patient requires is very important in a multitude of clinical scenarios. Whether it is determining if a patient is hemorrhaging, requiring volume resuscitation or is in a volume overloaded state, knowing if they need more or less fluid is extremely important because all of it can affect organ function.”

Alvis said his experience as an anesthesiologist helps him with this research because he interacts with patients with a multitude of disease processes and gets to collaborate with a multitude of people in his clinical work. “It was an easy transition to collaborate in my research work. I have a baseline understanding that is helpful in studying venous waveforms. At the heart of all of this, we are trying to better understand volume status, which is the focus of any anesthesiologist or critical care doctor. Every anesthesiologist wants to know a patient’s volume state, and we can’t do that very well right now,” he said.

He explained that this is a new, novel concept, developed here at VUMC, that requires a team and the collaborative nature of VUMC. “It is a lot of work and a lot of fun because we get to discover together and teach each other.”
**NEW DEPARTMENT MEMBERS**

Christine Abboud, DO
Fellow
Perioperative Medicine

**EDUCATION:**
Residency, Anesthesiology, Case Western University Medical School, Cleveland, OH (2019)
DO, Lake Erie College of Osteopathic Medicine, Erie, PA (2015)

**FUN FACT:**
I’m bilingual (English and Arabic), and I practice yoga daily.

---

Clayton Adams, MD
Fellow
Pediatric Anesthesiology

**EDUCATION:**
Residency, Anesthesiology, University of Alabama, Birmingham, AL (2019)
MD, Emory University, Atlanta, GA (2015)

**FUN FACT:**
I was a patient at Vanderbilt’s Children’s Hospital when I was five years old.

---

Louise Alexander, MD
Instructor
Pediatric Anesthesiology

**EDUCATION:**
Residency, Anesthesiology, Vanderbilt University Medical Center, Nashville, TN (2017)
MD, Medical University of South Carolina, Charleston, SC (2013)

**FUN FACT:**
I grew up in South Carolina in a family of farmers and incredible cooks with my dad farming Waygu beef and grandfather who farmed peaches. Thanks to them I can make you the best homemade peach ice cream you’ve ever tasted and a quite tasty steak dinner.

---

Charles Baysinger, MD
Fellow
Anesthesiology Critical Care Medicine

**EDUCATION:**
Residency, Anesthesiology, University of Kentucky, Lexington, KY (2019)

**FUN FACT:**
Despite the Vanderbilt University/Vanderbilt University Medical Center split, I have 24 years of work experience at Vanderbilt. I love movies, movie soundtracks, and movie scores.

---

Tanya Bradley
Lead Administrative Assistant
Obstetric Anesthesiology

**FUN FACT:**
I am a fan of all things farm related, including raising chickens and growing lots of veggies.

---

Carrie Brintz, PhD
Assistant Professor
Pain Medicine

**EDUCATION:**
PhD, Clinical Psychology, University of Miami, Miami, FL (2016)
MS, Clinical Psychology, University of Miami, Miami, FL (2013)

**FUN FACT:**
I play a musical instrument.

---

Denise Brown
Senior Administrative Assistant
Ambulatory Anesthesiology

**FUN FACT:**
I love to spend time with my family. I love to read. I am a bit obsessive about cleanliness. I don’t eat pork or pork based products. I love to cook.

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Kyle Bruns, DO
Fellow
Anesthesiology Critical Care Medicine

**EDUCATION:**
Residency, Anesthesiology, Loyola University Medical Center, Maywood, IL (2017)
DO, Kansas City University of Medicine and Biosciences, Kansas City, MO (2013)

**FUN FACT:**
I love to dance.

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Katherine Burelbach
Lab Technician
Research

**EDUCATION:**
Residency, Anesthesiology, Icahn School of Medicine at Mount Sinai, New York, NY (2019)
MD, Icahn School of Medicine at Mount Sinai, New York, NY (2015)

**FUN FACT:**
I love to scuba dive.

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Bryan Carter, MD
Fellow
Anesthesiology Critical Care Medicine

**EDUCATION:**
BS, Nursing, Clemson University, Clemson, SC (2014)
BS, Food Science, Clemson University, Clemson, SC (2013)

**FUN FACT:**
Nursing is my second degree. I moved to Nashville from Greenville, SC, in January 2015. I live with my amazing dog, Doby, and fiance Philip Leisy, who works for Vanderbilt as well.

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Marisa Case
Research Nurse Specialist II
Research

**EDUCATION:**
BS, Nursing, Clemson University, Clemson, SC (2014)
Jonathan Finney, MD
Fellow
Pain Medicine

EDUCATION:
Residency, Physical Medicine and Rehabilitation, University of Pittsburgh Medical Center, Pittsburgh, PA (2019)
MD, University of California, San Francisco, CA (2015)

FUN FACT:
I enjoy spending time with my wife and our two daughters. My favorite activities include listening to live jazz and funk, jogging, and enjoying adventurous cuisine. I have a passion for various sports teams, including the New Orleans Saints and LSU Tigers.

Tony Chang, MD
Assistant Professor
Multispecialty Adult Anesthesiology

EDUCATION:
Fellowship, Trauma Anesthesiology, University of California, San Francisco, CA (2019)
Residency, Anesthesiology, University of California, San Francisco, CA (2014)
MD, University of South Alabama, Mobile, AL (2010)

FUN FACT:
I have saved three kittens from drowning.

Angela Conner
Certified Registered Nurse Anesthetist

EDUCATION:
BS, Neuroscience, Vanderbilt University, Nashville, TN (2019)

FUN FACT:
I’ve watched the entire Game of Thrones series three times! Once in a single week!

Jared Cummins, MD
Fellow
Cardiothoracic Anesthesiology

EDUCATION:
Residency, Anesthesiology, Vanderbilt University Medical Center, Nashville, TN (2019)
MD, Virginia Commonwealth University School of Medicine, Richmond, VA (2015)

FUN FACT:
I have my private pilot’s license.

Megan Dodd, MD
Fellow
Pediatric Anesthesiology

EDUCATION:
Residency, Anesthesiology, University of Tennessee, Knoxville, TN (2019)
MD, University of Texas Medical Branch, Galveston, TX (2015)

FUN FACT:
I am fluent in four languages: English, Spanish, French and Creole.

Angela Conner
Certified Registered Nurse Anesthetist

EDUCATION:
MS, Nurse Anesthesia, Middle Tennessee School of Anesthesia, Madison, TN (2009)
BS, Nursing, Middle Tennessee State University, Murfreesboro, TN (2009)

FUN FACT:
I am a hardworking individual that lives to do anything outside and exercise as much as possible.

Keagan Chronister
Research Assistant I
Research

EDUCATION:
BS, Neuroscience, Vanderbilt University, Nashville, TN (2019)

FUN FACT:
I lived in France for a year between college and graduate school. When I moved into my apartment I learned that I would have a roommate. She remains one of my best friends to this day.

Jared Cummins, MD
Fellow
Cardiothoracic Anesthesiology

EDUCATION:
Residency, Anesthesiology, Vanderbilt University Medical Center, Nashville, TN (2019)
MD, Virginia Commonwealth University School of Medicine, Richmond, VA (2015)

FUN FACT:
I have my private pilot’s license.

Melanie Cundiff
Associate Program Manager
Office of the Chair

EDUCATION:
BS, Cultural Geography and Global Studies, History, & Political Science, Middle Tennessee State University, Murfreesboro, TN (2017)

FUN FACT:
I am a trivia expert and I love to sing.

Megan Dodd, MD
Fellow
Pediatric Anesthesiology

EDUCATION:
Residency, Anesthesiology, University of Tennessee, Knoxville, TN (2019)
MD, University of California, San Francisco, CA (2015)

FUN FACT:
I used to work at an animal hospital where I first learned about anesthesia, and helped intubate and anesthetize dogs for surgery.

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Assistant Professor
Multispecialty Adult Anesthesiology

EDUCATION:
Fellowship, Trauma Anesthesiology, University of California, San Francisco, CA (2019)
Residency, Anesthesiology, University of California, San Francisco, CA (2014)
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Tony Chang, MD
Assistant Professor
Multispecialty Adult Anesthesiology

EDUCATION:
Fellowship, Trauma Anesthesiology, University of California, San Francisco, CA (2019)
Residency, Anesthesiology, University of California, San Francisco, CA (2014)
MD, University of South Alabama, Mobile, AL (2010)

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Cardiothoracic Anesthesiology

EDUCATION:
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MD, Virginia Commonwealth University School of Medicine, Richmond, VA (2015)

FUN FACT:
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Megan Dodd, MD
Fellow
Pediatric Anesthesiology

EDUCATION:
Residency, Anesthesiology, University of Tennessee, Knoxville, TN (2019)
MD, University of California, San Francisco, CA (2015)

FUN FACT:
I used to work at an animal hospital where I first learned about anesthesia, and helped intubate and anesthetize dogs for surgery.
Rosilia Gaudino
Senior Administrative Assistant
EDUCATION:
-さらに詳細な情報

Reagan Groer
Certified Registered Nurse Anesthetist
EDUCATION:
-さらに詳細な情報

Calvin Gruss, MD
Instructor
Multispecialty Adult Anesthesiology
EDUCATION:
-さらに詳細な情報

Matthew Hamilton, MD
Fellow
Pain Medicine
EDUCATION:
-さらに詳細な情報

Jacob Hernandez
Certified Registered Nurse Anesthetist
EDUCATION:
-さらに詳細な情報

Jaclyn Irwin, MD
Fellow
Pediatric Anesthesiology
EDUCATION:
-さらに詳細な情報

Christina Jelly, MD
Assistant Professor
Anesthesiology Critical Care Medicine
EDUCATION:
-さらに詳細な情報

Kirsten Lee, MD
Fellow
Cardiothoracic Anesthesiology
EDUCATION:
-さらに詳細な情報

Zhu Li
Research Assistant III
Research
EDUCATION:
-さらに詳細な情報

Aaron Lloyd, MD
Fellow
Anesthesiology Critical Care Medicine
EDUCATION:
-さらに詳細な情報

Samantha McClenahan, PhD
Fellow
Research
EDUCATION:
-さらに詳細な情報

Gregory Mitchon, MD
Fellow
Anesthesiology Critical Care Medicine
EDUCATION:
-さらに詳細な情報

FUN FACT: I am pursuing school to become an RN.

FUN FACT: I am an avid sports fan.

FUN FACT: I enjoyed spending time with my boys and taking them hunting and fishing. When the time allows, my wife and I love cheering the Georgia Bulldogs in Athens.

FUN FACT: I’m from Louisiana. I opted to attend nursing school instead of moving to Colorado Springs to train for the 2008 Olympics in Beijing.

FUN FACT: I have lived in Nashville for about 18 years and worked at Vanderbilt for 17 years.

FUN FACT: I have moved 12 different times.

FUN FACT: I love spending time with my two boys, Odin and Abel. I enjoy playing softball and gardening.
John Moore, MD  
Assistant Professor of Clinical Anesthesiology  
Pediatric Anesthesiology  

**EDUCATION:**  
Fellowship, Pediatric Anesthesiology, Boston Children’s Hospital, Boston, MA (2016)  
Residency, Anesthesiology, Naval Medical Center, San Diego, CA (2011)  
MD, Wake Forest University School of Medicine, Winston-Salem, NC (2004)  

**FUN FACT:**  
Qualified as a Marina Corps Mountain Leader.

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Jonathan Niconchuk, MD  
Assistant Professor  
Pediatric Anesthesiology  

**EDUCATION:**  
Fellowship, Pediatric Anesthesiology, Vanderbilt University Medical Center, Nashville, TN (2019)  
Residency, Anesthesiology, Vanderbilt University Medical Center, Nashville, TN (2018)  
MD, Harvard Medical School Boston, MA (2014)  

**FUN FACT:**  
I can fix a flat tire pretty quickly. (My grandfather invented the first tire repair plug.)

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Allison Owen, PhD  
Fellow  
Research  

**EDUCATION:**  
PhD, Physiology, University of Kentucky, Lexington, KY (2017)  
BA, Biology & Chemistry, Franklin College of Indiana, Franklin, IN (2012)  

**FUN FACT:**  
A little fact about myself is that I have ridden a camel but have never ridden a horse (despite living in Kentucky for the past seven years).

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Radha Patel  
Certified Registered Nurse Anesthetist  

**EDUCATION:**  
MS, Nurse Anesthesia, Middle Tennessee School of Anesthesia, Madison, TN (2019)  
BS, Nursing, Belmont University, Nashville, TN (2014)  

**FUN FACT:**  
I have a dog named Cooper.

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Charina Pelayo  
Certified Registered Nurse Anesthetist  

**EDUCATION:**  
MS, Nurse Anesthesia, Middle Tennessee School of Anesthesia, Madison, TN (2019)  
BS, Nursing, Chamberlain College of Nursing, Addison, IL (2013)  

**FUN FACT:**  
I was born in the Philippines.

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Elizabeth Pogue  
Certified Registered Nurse Anesthetist  

**EDUCATION:**  
MS, Nurse Anesthesia, Middle Tennessee School of Anesthesia, Madison, TN (2019)  
BS, Nursing, Belmont University, Nashville, TN (2015)  

**FUN FACT:**  
I recently traveled to Hungary because my husband’s family is Hungarian and now I can speak a few phrases in Hungarian.

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Gwendolyn Randall  
Certified Registered Nurse Anesthetist  

**EDUCATION:**  
PhD, Simulation Laboratory Management, Belmont University, Nashville, TN (2017)  
MS, Nursing, Temple University, Philadelphia, PA (2000)  
MS, Nurse Anesthesia, St. Joseph’s University, Philadelphia, PA (1995)  

**FUN FACT:**  
I am a trivia expert and I love to sing.

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Marjorie Reeves, DNP  
Certified Registered Nurse Anesthetist  

**EDUCATION:**  
DNP, North Shore University Health System School of Nurse Anesthesia, Evanston, IL (2018)  
MS, Nursing, Rush University College of Nursing, Chicago, IL (2012)  

**FUN FACT:**  
I was in the Joffrey Ballet of Chicago as a child.

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David Roberts, MD  
Fellow  
Pediatric Anesthesiology  

**EDUCATION:**  
Residency, Anesthesiology, Vanderbilt University Medical Center, Nashville, TN (2019)  
MD, Mayo Medical School, Rochester, MN (2015)  

**FUN FACT:**  
I am a peace corps volunteer.

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Kaylyn Sachse, MD  
Fellow  
Regional Anesthesia & Acute Pain Medicine  

**EDUCATION:**  
Residency, Categorical Anesthesiology, University of Texas, San Antonio, TX (2019)  
MD, University of Texas Southwestern Medical Center, Dallas, TX (2013)  

**FUN FACT:**  
I love to travel at every available opportunity.

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Danielle Schuette  
Certified Registered Nurse Anesthetist  

**EDUCATION:**  
MS, Nurse Anesthesia, Middle Tennessee School of Anesthesia, Madison, TN (2019)  
BS, Nursing, Belmont University, Nashville, TN (2014)  

**FUN FACT:**  
I am an Asian raised by Caucasian (aka I was adopted).

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Danial Shams, MD  
Fellow  
Regional Anesthesia & Acute Pain Medicine  

**EDUCATION:**  
Residency, Anesthesiology, Rush University Medical Center, Chicago, IL (2019)  
MD, University of Texas Medical School, Houston, TX (2015)  

**FUN FACT:**  
I lived in three countries and speak three languages (not the first three I learned).
Kristin Singh  
Certified Registered Nurse Anesthetist

**EDUCATION:**
- MS, Nurse Anesthesia, Medical University of South Carolina, Charleston, SC (2015)
- BS, Nursing, Belmont University, Nashville, TN (2011)

**FUN FACT:** I have an identical twin sister.

Nicholas Statzer, MD  
Assistant Professor  
Multi-specialty Adult Anesthesiology

**EDUCATION:**
- Fellowship, Acute Pain Medicine, Grand Rapids, MI (2014)

**FUN FACT:** I play guitar, build amps, and have a small obsession with fuzz pedals.

Ari Tallen, MD  
Fellow  
Anesthesiology Critical Care Medicine

**EDUCATION:**
- Fellowship, Acute Pain Medicine & Regional Anesthesia, Vanderbilt University Medical Center, Nashville, TN (2019)
- MD, Michigan State University College of Human Medicine, Grand Rapids, MI (2014)

**FUN FACT:** I am a scuba diver. I have moved 12 times in my life.

Jake Trahan, MD  
Fellow  
Pain Medicine

**EDUCATION:**
- Residency, Anesthesiology, Vanderbilt University Medical Center, Nashville, TN (2019)
- MD, Louisiana State University, New Orleans, LA (2015)

**FUN FACT:** I boil crawfish.

Binh Tran, MD  
Fellow  
Obstetrics Anesthesiology

**EDUCATION:**
- Residency, Anesthesiology, Upstate Medical University, Syracuse, NY (2019)
- MD, Ross University School of Medicine, Portsmouth, Dominica (2014)

**FUN FACT:** I have traveled to 28 countries. I have ziplined down the Great Wall of China and SCUBA on three continents.

Anne White  
Certified Registered Nurse Anesthetist

**EDUCATION:**
- MS, Nurse Anesthesia, Middle Tennessee School of Anesthesia, Madison, TN (2010)
- BS, Nursing, Piedmont College, Athens, GA (2006)

**FUN FACT:** I used to be a majorette and twist fire batons at the halftime of football games.

Kacy Wilson  
Certified Registered Nurse Anesthetist

**EDUCATION:**
- MS, Nurse Anesthesia, Middle Tennessee School of Anesthesia, Madison, TN (2019)
- BS, Nursing, Belmont University, Nashville, TN (2014)

**FUN FACT:** I have participated in the Macy’s Thanksgiving Day Parade.

Edward Yaghmour, MD  
Associate Professor  
Multi-specialty Adult Anesthesiology

**EDUCATION:**
- Fellowship, Acute Pain Medicine, Grand Rapids, MI (2014)

**FUN FACT:** I am an avid runner.

John Corey, MD  
Associate Professor of Clinical Anesthesiology

Andrew Franklin, MD, MBA  
Associate Professor

Patrick Henson, DO  
Associate Professor of Clinical Anesthesiology

Joseph Schlesinger, MD  
Associate Professor

Amanda Shakal, DO  
Assistant Professor of Clinical Anesthesiology

Sheena Weaver, MD  
Associate Professor of Clinical Anesthesiology
Recent Publications


Ding JM, Ehrenfeld JM, Edmiston EK, Eckstrand K, Beach LB. A Model for Improving Health Care Quality for Trans-


Department Leadership

Warren S. Sandberg, MD, PhD
Chair, Department of Anesthesiology
Vanderbilt University Medical Center

We provide uncompromising quality in clinical care, research and education. We are:

**Compassionate:** Offering exceptional perioperative care and pain management to a complex population.

**Creative:** Advancing the frontiers of science, healthcare and technology.

**Committed:** Equipping future leaders with solid education and training, both here and abroad.

**Collaborative:** Working across Vanderbilt University Medical Center and beyond to achieve measurable outcomes.

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  Associate Vice Chair, Educational Affairs
- Matthew McEvoy, MD
  Vice Chair, Educational Affairs
- Pratik Pandharipande, MD, MSCI
  Associate Vice Chair, Faculty Affairs
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- Matthew Weinger, MD
  Vice Chair, Faculty Affairs
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  Department Administrator

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  Chief, Pediatric Cardiac Anesthesiology
- Letha Mathews, MBBS
  Chief, Neuroanesthesiology
- Michael Pilla, MD
  Chief, Multispecialty Adult Anesthesia
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  Chief, Cardiothoracic Anesthesiology
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  Associate Chief, Anesthesiology Critical Care Medicine