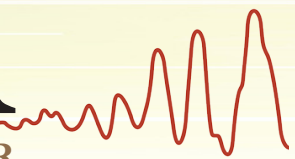


# AM

## ANESTHESIA MONITOR



### DEPARTMENT OF ANESTHESIOLOGY

VANDERBILT UNIVERSITY  
MEDICAL CENTER

Department News | Spring 2017

#### MESSAGE FROM THE CHAIR



Warren S. Sandberg, MD, PhD

The spring season has arrived, ushering in many of our department's signature events. As you'll see in this issue of the *Anesthesia Monitor*, the Bradley E. Smith Endowed Lectureship on Medical Professionalism was held in February and featured an excellent lecture on the complexities of clinician certification by Dr. Cynthia Lien. Upcoming events like the

fundraiser for the Vanderbilt International Anesthesia (VIA) program, our 13th annual Research Symposium, and the Dr. James Phythyon Endowed Lectureship in Pediatric Anesthesiology showcase some of our department's strengths. These events also serve as reminders of the role of philanthropy in supporting the world-class clinical, education, and research accomplishments of our department. As department chair, I'm thankful for past generosity that has allowed us to establish high quality programs like those I've mentioned, and more.

Anyone can offer financial support for our excellent programs – this support could be in the form of purchasing a ticket and attending the VIA fundraiser at the end of April or in the form of a monetary donation – any form

of support provides opportunities for further advancement of our department's mission. Donations can be directed toward a specific program of interest to you, whether it's global health and the VIA, an endowed lectureship like the Phythyon lecture, or a research grant like the B.H. Robbins Scholars program that provides academic mentorship and protected research time to department trainees.

Donors are encouraged to support current endeavors or even to establish a new endowment. Any gift helps us to continue our pursuit of excellence in the areas of global health, research, and trainee education, and ultimately to offer the best in patient care. I welcome you to contact me directly if you're interested in discussing opportunities for charitable giving with the Department of Anesthesiology.

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#### Dr. Bradley E. Smith Endowed Lectureship



Dr. Bradley Smith (left) and Dr. Warren Sandberg (right) with guest lecturer, Dr. Cynthia Lien (center).

This year marks the eighth anniversary of the Dr. Bradley E. Smith Endowed Lectureship on Medical Professionalism. This lectureship was founded to honor Dr. Bradley Smith, chairman of the Department of Anesthesiology for 25 years, 1969-1993.

Dr. Smith and his wife, Mrs. Gretchen Smith, attended the lecture presented by featured speaker, Dr. Cynthia Lien, John P. Kampine Professor and Chair of Anesthesiology at the Medical College of

Wisconsin, and the special breakfast that followed. Dr. Lien, who recently completed her term as a director on the American Board of Anesthesiology (ABA), serving as a board member for twelve years and president from 2015 to 2016, spoke on "Certifying the Good Clinician: Challenges, Opportunities, and the Importance for Society."



Dr. Bradley Smith (left) and Mrs. Gretchen Smith (right) present guest lecturer, Dr. Cynthia Lien (center), with a plaque commemorating the eighth annual Dr. Bradley E. Smith Endowed Lectureship on Medical Professionalism.

Photos Courtesy of Ingrid Laubach

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Twitter: @VUMC\_Anes

## Doing Good Globally: Celebrating Our Department's Service

On April 29, 2017, the Department of Anesthesiology will host its annual fundraiser for the Vanderbilt International Anesthesia (VIA) program. Funds raised will support VIA's initiative to allow department faculty, staff, and trainees to provide perioperative patient care in international settings, focusing on teaching local medical professionals already in the field in order to build capacity for safe anesthesia over the long term.

Over the past year, department faculty, residents, fellows, and CRNAs have traveled to participate in research, education, and medical service using resources supplied by the VIA program.



Currently **Dr. Kelly McQueen, director of Vanderbilt Anesthesia Global Health & Development**, is focused on the long-term pediatric anesthesia and surgery support of the Moore Pediatric Surgery Center in Guatemala. Vanderbilt has been sending teams twice a year for six years to provide surgical service for children in need of dental, urological, orthopedic, and plastic surgery.

The *Shalom Foundation*, based in Franklin, TN, owns and supports the Moore Center and is now interested in expanding their mission to include research and outcomes analysis. Dr. McQueen is working with them to advance these efforts. Dr. McQueen recently returned to Guatemala to engage local academic centers in supporting these efforts in the future.



**Dr. Joel Musee, clinical fellow**, made his second visit to Kenya near the end of his residency, where he split his time between AIC Kijabe Hospital and the main referral hospital in Western Kenya, where the IMPACT (Improving Perioperative & Anesthesia Care and Training) Africa program is based.

In Kenya, Dr. Musee encountered many memorable patients, such as a child with uncorrected aortic stenosis, a septuagenarian matriarch with an 8 cm abdominal aortic aneurysm, a young primigravida in her second trimester with a poorly managed seizure disorder who fell into a fire and sustained 40% full thickness burns, and a parturient who was transferred by ambulance from more than three hours away with obstructed labor and uterine rupture who lost her baby (and almost lost her life).

Says Dr. Musee, "The easy part was teaching . . . the students are always so eager and well prepared, so this was quite gratifying."



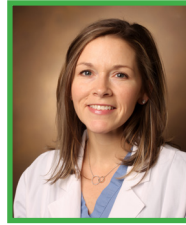
In March, **CA-3 resident Dr. Louise Alexander** returned to AIC Kijabe Hospital in Kenya, where she will spend four weeks teaching Kenyan Registered Nurse Anesthetists (KRNAs) and student KRNAs clinical anesthesia at the bedside, in the classroom, and in the simulation lab. Dr.

Alexander previously spent one month at Kijabe, teaching obstetric anesthesia and performing simulation-based education and research on the management of obstetric emergencies.

Since her last visit, high fidelity simulation equipment has been purchased through the IMPACT Africa grant from the GE Foundation and a simulation center has opened at Kijabe. During Dr. Alexander's current visit, her time will be used to train senior teaching KRNAs to run simulation scenarios and develop simulation curricula and to perform simulation-based education and research on the recognition and management of acute hypoxemia.



**CRNAs Stephanie Clark and Jill Moore** recently made a trip to Kijabe, Kenya, supported by VIA, where they served as KRNA educators by delivering classroom lectures and by teaching every day in the theatre. Although their time spent in Kenya was short, they believe their visit made an impact on the program because it allowed the KRNA students to affiliate themselves with professionals in their field and thus begin to see themselves as professionals.



Says Stephanie Clark, "We feel honored to have been the first CRNAs to make the commitment to Kijabe . . . and hope this will encourage other CRNAs from Vanderbilt to be a part of the KRNA training in Kijabe in the future!"

The global health contributions of our department are not limited to those supported by VIA, and we are proud to acknowledge the service of department members supported by other organizations and often by their own personal funds.



**Dr. Lisa Jaeger and Dr. Jason Lane** have been long-term participants in the Pediatric Dental Surgery Mission Trip to the Moore Pediatric Surgery Center in Guatemala, coordinated by the *Shalom Foundation*, along with other members of our department, medical volunteers from other

local organizations, and community volunteers. For this trip, each team member pays his or her own travel expenses and contributes toward the cost of using the surgery center, \$10,000.



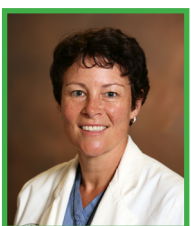
As part of the dental surgery mission team, Dr. Jaeger and Dr. Lane provide general anesthesia for patients between the ages of 18 months and 18 years who are undergoing major dental surgery. Nashville-area pediatric dentists typically perform procedures on 100 children in four days, using three operating rooms. Some of the patients travel two days by bus and even by foot to receive much needed surgery.



CRNA **Mariah Mannion** has made multiple international service trips with a local group called *More Than Medicine*, most recently traveling to Malindi, Kenya, in October 2016, where they operated at Tawfiq Hospital. Four CRNAs and one anesthesiologist provide perioperative care for patients having head and neck cancer surgery.

These visits have evolved into more than just surgical trips. Participants offer education in surgical skills to Kenyan ENT surgeons, and local anesthetists observe the procedures to learn management techniques for more complex cases. On their most recent trip, the team was able to teach the local medical team how to use an ICU ventilator they had received as a donation but were unable to use.

The focus on educating local providers means volunteer participants are helping many more patients than if they were only performing surgical procedures, which makes the missions particularly gratifying. Mariah says, "A favorite thing about this specific trip for me is that it is a beautiful example of a community coming together, without prejudice, to care for patients. A Christian organization helps fund some of the patient care and Kenyan physicians' travel expenses, while we operate in a private, Muslim hospital, both groups so happy to be working together."



CRNA **Mary Peters** recently returned from her fourth medical mission to Nicaragua. She travels with a group called *For Nicaraguan Health*, which consists of about 80 participants who provide strabismus surgery, orthopedic surgery, cataract surgery, endoscopy, and colonoscopy.

Mary works with a cardiology team and provides anesthesia for people undergoing electrophysiology studies and radiofrequency ablations. The team that she travels with performed the first cardiac ablation in Nicaragua eleven years ago. They have been able to successfully treat several young people who are debilitated by their fast heart rhythms and some who have a potential for sudden death. The cardiologists in the group also teach the local cardiologists, who are now able to perform some ablations independently.

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Doing Good Globally

**Nicaragua**  
Mary Peters, CRNA

**Guatemala**  
Stephanie Clark, CRNA  
Matt Kynes, MD  
Jason Lane, MD  
Kelly McQueen, MD  
Jill Moore, CRNA  
Jon Niconchuk, MD  
Veronica Nylander, CRNA  
Laura Zeigler, MD

**Haiti**  
Mariah Mannion, CRNA  
Jon Niconchuk, MD  
Laura Zeigler, MD

**Liberia**  
Jill Moore, CRNA  
Camila Walters, MD

**Serbia**  
Curtis Baysinger, MD

**Bosnia**  
Curtis Baysinger, MD

**South Sudan**  
Matt Kynes, MD  
Mark Newton, MD

**Nigeria**  
Mariah Mannion, CRNA  
Mary Peters, CRNA  
Camila Walters, MD

**Ethiopia**  
Susan Eagle, MD  
Kelly McQueen, MD  
Ban Sileshi, MD

**Mozambique**  
Matt Kynes, MD  
Kelly McQueen, MD  
Camila Walters, MD

**China**  
Laura Zeigler, MD

**Kenya**  
Louise Alexander, MD  
Arna Banerjee, MD  
Jill Boyle, MD  
Adam Canter, MD  
Stephanie Clark, CRNA  
David Gruner, MD  
Jenna Helmer-Sobey, MD  
Mark Jensen, MD  
Mark Kynes, MD  
Mariah Mannion, MD  
Matt McEvoy, MD  
Kelly McQueen, MD  
Jill Moore, CRNA  
Mark Newton, MD  
Joe Schlesinger, MD  
Ric Sedlak, MD  
Ban Sileshi, MD  
Camila Walters, MD  
Scott Watkins, MD

**Uganda**  
Louise Alexander, MD  
Mariah Mannion, MD

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DOING GOOD GLOBALLY

Vanderbilt International Anesthesia Fundraiser

**Date:** April 29, 2017  
**Time:** 6:30-9:30 p.m.  
**Location:** Dyer Observatory  
1000 Oman Drive  
Brentwood, Tennessee

**Tickets:** \$50\*  
\*Ages 6 and up: \$10 | Ages 5 and under: Free  
Coupon code available for Residents & Staff

- Food by Steaming Goat Catering.
- Craft beer tasting.
- Surprise performers.
- Live & silent auctions.
- Supervised children's activities.

Chart reflects information received at time of publication.

## Department Spotlight: Celebrating Departmental Accomplishments

**Dr. Louise Alexander**, CA-3 resident, was nominated by VUSM students and voted an honorary inductee into the Alpha Omega Alpha Honor Medical Society.

**Dr. Brian Allen** has been invited to participate in item review and approval by the MOCA Minute Editorial Board.

**Betsy DeMarcus** has been promoted to Assistant Director of Administration.

**Dr. Katherine Dobie** has been promoted to Associate Professor of Clinical Anesthesiology.

**Jon Dulong** completed the Vanderbilt Program in Research Administration Development (VPRAD) in November 2016.

**Jon Dulong** has assumed the role of Administrative Manager for the Vanderbilt Anesthesiology & Perioperative Informatics Research (VAPIR) Division.

**Leslie Fowler, MEd**, has been named President-Elect of the Association of Anesthesiology Program Administrators and Educators (AAPAE), a section of the Society of Academic Anesthesiology Associations (SAAA). Leslie played an instrumental role in the creation of this council, designed to foster collaboration among education program administrators in anesthesiology.

**Dr. Andrew Franklin** has been elected to a two-year term on the steering committee of the Pediatric Regional Anesthesia Network (PRAN).

**Christine Goldsberry** has accepted a new position as Grants Manager in the Division of Research.

**Dr. Alex Hughes** has been promoted to Associate Professor of Clinical Anesthesiology.

**Jennifer Jayaram** has been promoted to the role of Advanced Practice Team Leader for the Perioperative Consult Service. She will work with the physician leaders and Brent Dunworth, as well as the perioperative advanced practice team, to maximize current resources and processes and to plan for future growth of the service lines.

**Dr. Jill Kilkelly**, has been invited to join the Pediatric Anesthesia Leadership Council (PALC), a section of the Society

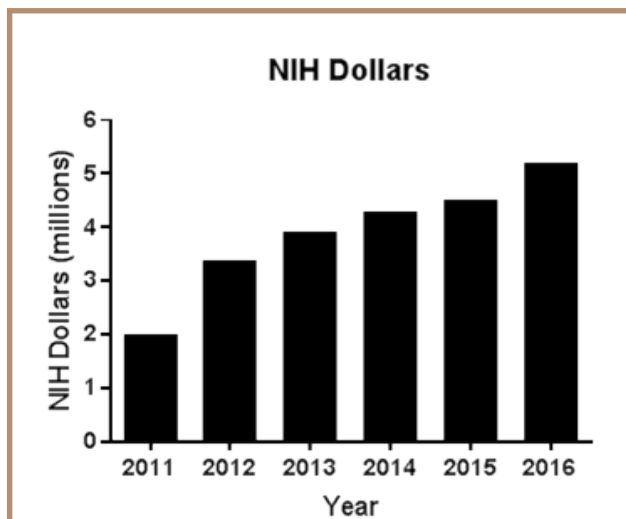


**Buffy Krauser Lupear, CRNA and Senior Quality and Patient Advisor, was recognized as the Advanced Practice Nurse of the Year at the 2016 Nashville March of Dimes gala.**

for Pediatric Anesthesia. The group consists of chairs of Departments of Pediatric Anesthesiology and chiefs of Divisions of Pediatric Anesthesiology. Its purpose is to advance the specialty, providing a forum for leaders in the specialty to collaborate.

**Dr. Koffi Kla** has been promoted to Associate Professor of Clinical Anesthesiology.

**Dr. Avinash Kumar** presented “Neurosciences Year in Review” at the Society of Critical Care Medicine (SCCM) conference in Hawaii in January 2017 and gave an invited lecture to the Department of Family Medicine at Meharry Medical School in Nashville. Dr. Kumar is serving on the SCCM’s Neurosciences Steering Committee, Post Graduate Education Committee and the Multidisciplinary Critical Care Knowledge Assessment Program (MCKAP) Item Writing Committee.



**For 2016, the total NIH funding for the Department of Anesthesiology was \$5.199 million. Our department ranks 9th in NIH funding among U.S. departments of anesthesiology.**

**Dr. Jason Lane** has been promoted to Associate Professor of Clinical Anesthesiology.

**Dr. Jason Lane** has been named Secretary for the Association of Anesthesia Clinical Directors (AACD). As secretary, Dr. Lane will serve as program director for the 2018 and 2019 annual meetings.

**Kristie Lee** completed the Vanderbilt Program in Research Administration Development (VPRAD) in November 2016.

**Dr. Amanda Lorinc** has been approved as an Associate Member of the Association of University Anesthesiologists (AUA).

Department members **Dr. Yin Guo**, **Dr. Liming Luan**, **Dr. Naeem Patil**, **Jingbin Wang**, **Dr. Julia Bohannon**, **Dr. Antonio Hernandez**, and **Dr. Ed Sherwood's** study, "IL-15 Enables Septic Shock by Maintaining NK Cell Integrity and Function," was featured in the "In This Issue" section of the February 1, 2017 issue of *The Journal of Immunology*. This section highlights articles considered to be among the top 10% of articles published in the journal.

**Mariah Mannion, CRNA**, received a "Good Catch Award" at the March

2017 MPMMIC Conference. Mariah was quick to point out the impact that sugammadex, a new neuromuscular reversal agent, has on patients who are taking oral contraceptive agents. Through this process, our department was able to develop a communication tool for patients who may be impacted.

**Karen McCarthy** has been named Technical Lead of the Vanderbilt Anesthesiology & Perioperative Informatics Research (VAPIR) Division.

**Monroe Carell Jr. Children's Hospital at Vanderbilt** is one of only nine children's hospitals in the nation, and the only children's hospital in Tennessee, to be named a Leapfrog Top Hospital for 2016. The selection of Leapfrog's Top Hospitals is based on the results of the 2016 Leapfrog Hospital Survey, completed by more than 1,800 hospitals annually.

**Dr. Edward Sherwood** has been invited to serve as associate editor of *The Journal of Immunology (The JI)*. His two-year appointment will begin July 1, 2017.

**Dr. Edward Sherwood** was appointed to the Basic Science Research Advisory Committee

formed by the Vanderbilt University School of Medicine (VUSM).

**Dr. Paul St. Jacques** has been elected President of the Association of Anesthesia Clinical Directors (AACD).

**Katie Tippey, PhD, (CRISS)**, received the U.S. Department of Transportation Federal Aviation Association Outstanding Student Researcher award.

**Dr. Scott Watkins** has been named Associate Quality and Patient Safety Director (QPSD).

**Dr. Matt Weinger** received a secondary appointment as Professor of Civil and Environmental Engineering in October 2016.

### Leadership Announcement



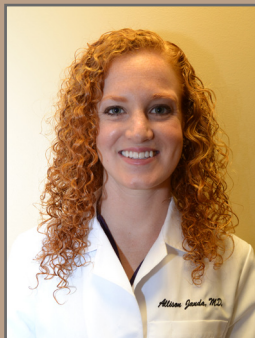
**Dr. Mark Rice** has been named Vice Chair for Clinical Affairs.

Dr. Rice previously served as Associate Vice Chair for Clinical Affairs.

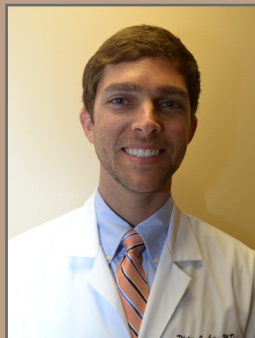
### Congratulations to our 2017-2018 Chief Residents



Melissa Bellomy, MD



Allison Janda, MD



Phil Leisy, MD

Send us your news for inclusion in department publications:  
**Weekly Update,**  
**Anesthesia Monitor**

[AnesthesiologyCommunications@Vanderbilt.edu](mailto:AnesthesiologyCommunications@Vanderbilt.edu)



## Department Research Featured on Journal Cover

A study conducted by researchers in the Department of Anesthesiology found a clinical information systems protocol, developed by the department's Vanderbilt Perioperative Information Management Systems (VPIMS) developer group, improved management of blood glucose during the intraoperative period, resulting in reduced instances of hyperglycemia as well as a reduction in surgical site infections in diabetic patients and those with impaired glucose control following surgical procedures.

The study, "A Perioperative Systems Design to Improve Intraoperative Glucose Monitoring Is Associated



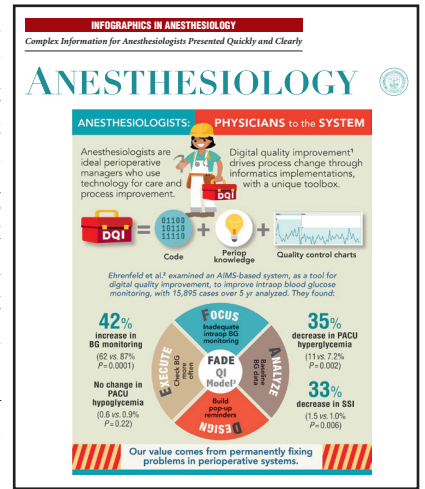
with a Reduction in Surgical Site Infections in a Diabetic Patient Population," was published in and featured on the cover of the March 2017 issue of *Anesthesiology*, with an accompanying infographic created by Dr. Jon Wanderer.

"This particular project has been a very important demonstration of a

departmental and personal initiative stretching back at least 15 years: to use electronic health records as an active performance monitoring and process improvement system working in real time to improve patient outcomes," said Warren Sandberg, MD, PhD, chair of Anesthesiology and senior author on the study.

# PHYSICIAN ANESTHESIOLOGISTS WEEK

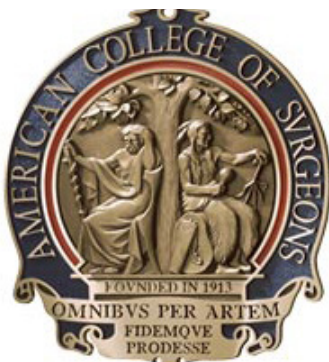
2017 ICE CREAM SOCIAL



## Children's Hospital Verified as Level I Pediatric Trauma Center

Monroe Carell Jr. Children's Hospital at Vanderbilt has received verification from the American College of Surgeons (ACS) as a Level I pediatric trauma center, effective for a period of three years through September of 2019.

To qualify for this verification, the hospital was required to meet 108 essential criteria established by the American College of Surgeons. Successfully meeting these criteria required a strong collaborative effort between surgical, ER, PICU, anesthesiology, radiology, and quality personnel.



There are fewer than fifty verified pediatric trauma centers across the United States, placing the Children's Hospital in elite company, and Monroe Carell Jr. Children's Hospital at Vanderbilt serves as the only ACS Level I verified pediatric trauma center within 150 miles. Furthermore, Vanderbilt is the only institution in the state of Tennessee with both the children's and adult hospitals verified as ACS Level I trauma centers.

During the rigorous verification process, the ACS reviewers specifically identified Dr. Jill Kilkelly (pictured at right), interim chief of the Division of Pediatric Anesthesiology, as a strength of the Monroe Carell Jr. Children's Hospital at Vanderbilt program.



## Department Staff Credo Award Recognition

In 2016, the department instituted a program to recognize, on a quarterly basis, staff members whose behavior exemplifies the characteristics of VUMC's Credo. Recipients were selected by the staff leadership team from a pool of nominations contributed by department members.

**Kelly Peters, senior administrative assistant in CRISS** (pictured top right), was the winner of the first Department of Anesthesiology Staff Credo Award, presented at the December 2016 All-Staff Meeting. Kelly was nominated by her supervisor, Callie Hanks, associate program manager in CRISS, for demonstrating the credo behaviors: 'I am committed to my colleagues' and 'I have a sense of ownership.'

The March 2017 Staff Credo Award recipient was **Frank Aline, business intelligence analyst in VAPIR** (pictured bottom right). Frank received three nominations, one from his staff supervisor, Steve Baker, and one each from faculty members Dr. Jesse Ehrenfeld and Dr. Jon Wanderer. Each nomination lauded Frank's attitude and work ethic. Specifically, Frank developed a data retrieval procedure used by the VAPIR Division called the Tool Kit and presented a poster on this tool at a recent conference.



Photos Courtesy of Ingrid Laubach



## Rengel Named B.H. Robbins Scholar



Dr. Kimberly Rengel, currently a CA-2 anesthesiology resident, has been accepted into the department's B.H. Robbins Scholars program. This program, named in honor of our department's first chairman, Benjamin Howard Robbins, MD (chair of Anesthesiology, 1946-1961), provides participants with six months of clinician-scientist mentored research time during their residency,

followed by a one-year research fellowship with 80% protected research time. Dr. Rengel will also complete a critical care clinical fellowship following residency.

Dr. Rengel's research interest is in improving functional outcomes in patients recovering from critical illness. In a study of prehabilitation, she will test the hypothesis that cognitive and physical exercises prior to major elective surgery (pre-hab treatment) will lead to an increased likelihood of discharge to home rather than to an institution, decreased hospital re-admission, and improved functional status 3 and 12 months after hospital discharge, compared to active attention control treatment. "We are excited to welcome Dr. Rengel into the program and for her research into postoperative functional outcomes," says Robbins Co-Director, Josh Billings, MD, MSCI. "These are key metrics for patients."

Dr. Rengel will be mentored throughout her scholarship period by Dr. Chris Hughes, associate professor, Division of Anesthesiology Critical Care Medicine.



CRNA WEEK CELEBRATION LUNCHEON

# WELCOME

NEW DEPARTMENT MEMBERS




**Casey Balthazar**  
CRNA

**PREVIOUS POSITION:**  
RN, Surgical Intensive Care Unit, Bay Medical Center, Panama City, FL

**EDUCATION:**  
MS in Nursing (Anesthesiology), Middle Tennessee School of Anesthesia, Madison, TN (2016)

BS in Nursing, Union University, Jackson, TN (2011)

**FUN FACT:**  
I am the oldest of 6 and a 4th generation descendant of Thomas Jefferson.



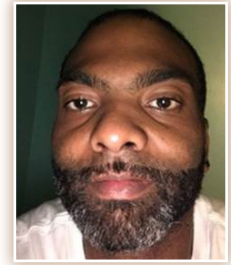
**Claudius Balzer, MD**  
Postdoctoral Research Fellow  
Division of Research

**PREVIOUS POSITION:**  
Resident, Department of Anesthesia, University of Greifswald, Germany

**EDUCATION:**  
MD, Ernst-Moritz-Arndt University, Greifswald, Germany (2012)

MS in Healthcare Management, Ernst-Moritz-Arndt University, Greifswald, Germany (2016)

**FUN FACT:**  
I am a German anesthetist doing a research fellowship.

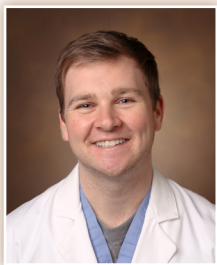


**Derwin Campbell**  
Clinical Trials Associate II  
PCRI

**PREVIOUS POSITION:**  
Anesthesia Tech, Vanderbilt University Medical Center, Nashville, TN

**EDUCATION:**  
BA in Business, Tennessee State University, Nashville, TN (2004)

**FUN FACT:**  
I love sports and am the father of two girls.



**Joshua Campbell**  
CRNA

**PREVIOUS POSITION:**  
RN, CVICU, Centennial Medical Center, Nashville, TN

**EDUCATION:**  
MS in Nursing (Anesthesiology), Middle Tennessee School of Anesthesia, Madison, TN (2016)

BS in Nursing, University of Tennessee, Knoxville, TN (2010)

**FUN FACT:**  
I enjoy playing golf and probably watch too much football.

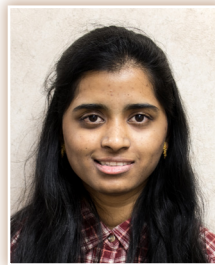


**Jessica Fults**  
Research Assistant II  
Division of Research

**PREVIOUS POSITION:**  
Biology Research Assistant, University of Alabama, Tuscaloosa, AL

**EDUCATION:**  
BS in Biology, University of Alabama, Tuscaloosa, AL (2016)

**FUN FACT:**  
I enjoy rock climbing.

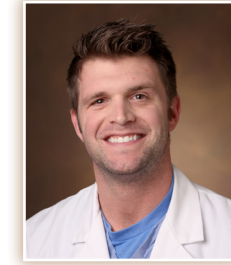


**Ramya Ganti**  
Business Intelligence Analyst  
VAPIR

**PREVIOUS POSITION:**  
Business Analyst, Deloitte Consulting

**EDUCATION:**  
BS in Electronics and Communication Engineering, Osmania University, Hyderabad, India (2014)

**FUN FACT:**  
I love traveling and have visited many states in the U.S. in just a span of one year. I can also speak five languages fluently.



**Dillon Heath**  
CRNA

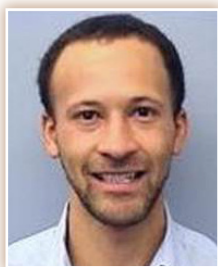
**PREVIOUS POSITION:**  
RN, Medical Intensive Care Unit, Vanderbilt University Medical Center, Nashville, TN

**EDUCATION:**  
MS in Nursing (Anesthesiology), Middle Tennessee School of Anesthesia, Madison, TN (2016)

BS in Nursing, Middle Tennessee State University, Murfreesboro, TN (2010)

**FUN FACT:**  
I have known my wife since kindergarten.





**Alan Hendon**  
CRNA

**PREVIOUS POSITION:**

RN, Trauma Intensive Care Unit, Vanderbilt University Medical Center, Nashville, TN

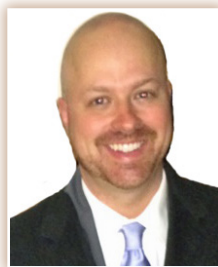
**EDUCATION:**

MS in Nursing (Anesthesiology), Middle Tennessee School of Anesthesia, Madison, TN (2016)

BS in Nursing, Middle Tennessee State University, Murfreesboro, TN (2012)

**FUN FACT:**

I chose my career path at the age of 16. I knew that I wanted to administer anesthesia after I encountered my first CRNA when I was rushed in for an emergency craniotomy related to a subdural hematoma.



**Lorenzo Hughes, MD**  
Assistant Professor of Clinical Anesthesiology  
MSA Division

**PREVIOUS POSITION:**

Acting Director of Pain Management, Assistant Professor of Pain Management and Anesthesiology, NYU Lutheran Medical Center, Brooklyn, NY

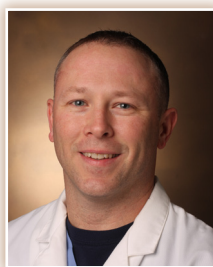
**EDUCATION:**

MD, Indiana University Medical Center, Indianapolis, IN (2005)

BS, Indiana University, Bloomington, IN (2000)

**FUN FACT:**

I am known to enjoy a good meal.



**Brad Koss**  
CRNA

**PREVIOUS POSITION:**

CRNA, Mission Hospital

**EDUCATION:**

MS in Nursing (Anesthesiology), Middle Tennessee School of Anesthesia, Madison, TN (2009)

BS in Nursing, Belmont University, Nashville, TN (2005)

BS in Computer Information Systems, Northwestern State University, Natchitoches, LA (1993)

**FUN FACT:**

I lived out one of my dreams by participating in a Braves Fantasy Camp and was fortunate to meet some of my childhood heroes and play alongside and against them.



**Matthew Mazaloukas, PhD**  
Postdoctoral Research Fellow  
Division of Research

**PREVIOUS POSITION:**

Postdoctoral Fellow, Department of Pharmacology, Vanderbilt University Medical Center, Nashville, TN

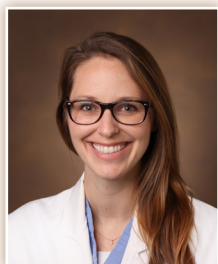
**EDUCATION:**

PhD in Pharmacology, Vanderbilt University, Nashville, TN (2014)

BS in Biophysics and Biology, University of Southern Indiana, Evansville, IN (2004)

**FUN FACT:**

I have several trophies that I earned from chess tournaments that I played in when I was in middle and high school.



**Emily McMaster**  
CRNA

**PREVIOUS POSITION:**

RN, Neuroscience Intensive Care Unit, Emory University Hospital, Atlanta, GA

**EDUCATION:**

MS in Nurse Anesthesia, Medical University of South Carolina, Charleston, SC (2016)

BS in Nursing, Medical University of South Carolina, Charleston, SC (2010)

BA in History, Clemson University, Clemson, SC (2007)

**FUN FACT:**

I speak French.



**Sarah Moroz**  
Research Assistant II  
CRISS

**PREVIOUS POSITION:**

Risk Adjustment Specialist, Serenity Care PACE, Brighton, MA

**EDUCATION:**

BA in Psychology, College of the Holy Cross, Worcester, MA (2015)

**FUN FACT:**

I am a fluent Russian speaker.



**Hunter Peek**  
CRNA

**PREVIOUS POSITION:**

RN, MSICU, TriStar Centennial Medical Center, Nashville, TN

**EDUCATION:**

MS in Nursing (Anesthesiology), Middle Tennessee School of Anesthesia, Madison, TN (2016)

BS in Nursing, Middle Tennessee State University, Murfreesboro, TN (2008)

**FUN FACT:**

My father, my brother, and I built my parents' house ourselves.



**Krystal Peek**  
CRNA

**PREVIOUS POSITION:**

RN, Medical Intensive Care Unit, St. Thomas Midtown Hospital, Nashville, TN

**EDUCATION:**

MS in Nursing (Anesthesiology), Middle Tennessee School of Anesthesia, Madison, TN (2016)

BS in Nursing, Lipscomb University, Nashville, TN (2009)

**FUN FACT:**

I am a huge Harry Potter fan.



**Venessa Robinson**  
Accounting Assistant IV  
Administration

**PREVIOUS POSITION:**  
Inventory Specialist, Material  
Management, St. Thomas  
West Hospital, Nashville, TN

**EDUCATION:**  
MBA, Cleary University, Ann  
Arbor, MI (2014)

**FUN FACT:**  
I like to travel.



**Lori Schirle, PhD**  
CRNA

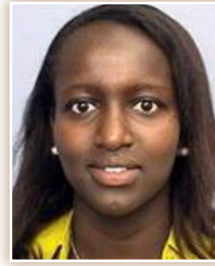
**PREVIOUS POSITION:**  
CRNA, Jackson Memorial  
Hospital, Miami, FL

**EDUCATION:**  
PhD in Nursing, University  
of Miami, Coral Gables, FL  
(2016)

MS in Nursing Anesthesia,  
Florida International  
University, Miami, FL (2004)

BS in Nursing, Saginaw Valley  
State University, University  
Center, MI (1985)

**FUN FACT:**  
I am currently a post-doc  
fellow at Vanderbilt School of  
Nursing in Health Services  
Research.



**Grace Umutesi**  
Program Coordinator  
Vanderbilt International  
Anesthesia  
Office of Educational Affairs

**PREVIOUS POSITION:**  
Outbreak Response Team,  
CDC/Global Immunization  
Division (GID)

**EDUCATION:**  
BS in Biology, Oklahoma  
Christian University, Edmond,  
OK (2015)

**FUN FACT:**  
In 2002, I was 10 miles away  
from the Nyiragongo volcano  
during the volcanic eruption.



**Zeping Xu, MD, PhD**  
Postdoctoral Research Fellow  
Division of Research

**PREVIOUS POSITION:**  
Associate Senior Doctor,  
Department of Anesthesiology,  
Jiangsu Cancer Hospital,  
Nanjing, Jiangsu, China

**EDUCATION:**  
MD, Nanjing Medical University,  
Nanjing, Jiangsu, China (2002)  
PhD, Nanjing Medical University,  
Nanjing, Jiangsu, China, (2016)

**FUN FACT:**  
I studied before as a visiting  
doctor in Japan and Germany for  
several months.

## Recent Publications

Bae L, **Bohannon JK**, Cui W, Vinish M, Toliver-Kinsky T. Fms-like tyrosine kinase-3 ligand increases resistance to burn wound infection through effects on plasmacytoid dendritic cells. *BMC Immunol.* 2017 Feb 22;18(1):9. doi: 10.1186/s12865-016-0188-2. PubMed PMID: 28228109; PubMed Central PMCID: PMC5322596.

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**Bohannon JK, Sherwood ER**. Editorial: Feeling the burn: sphingolipids and infection risk after thermal injury. *J Leukoc Biol.* 2016 Dec;100(6):1227-1228. PubMed PMID: 27909176.

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**Chestnut DH.** On the Road to Professionalism. *Anesthesiology*. 2017 Feb 10. doi: 10.1097/ALN.0000000000001545. [Epub ahead of print] PubMed PMID: 28187021.

Clebone A, Burian BK, **Watkins SC**, Gálvez JA, Lockman JL, Heitmiller ES; and the Members of the Society for Pediatric Anesthesia Quality and Safety Committee (see Acknowledgments). The Development and Implementation of Cognitive Aids for Critical Events in Pediatric Anesthesia: The Society for Pediatric Anesthesia Critical Events Checklists. *Anesth Analg*. 2017 Jan 10. doi: 10.1213/ANE.0000000000001746. [Epub ahead of print] PubMed PMID: 28079584.

**Delpire E**, Kahle KT. The KCC3 cotransporter as a therapeutic target for peripheral neuropathy. *Expert Opin Ther Targets*. 2017 Feb;21(2):113-116. doi: 10.1080/14728222.2017.1275569. PubMed PMID: 28019725.

**Delpire E**, Weaver CD. Challenges of Finding Novel Drugs Targeting the K-Cl Cotransporter. *ACS Chem Neurosci*. 2016 Dec 21;7(12):1624-1627. PubMed PMID: 27998063.

**Delpire E**, Wolfe L, Flores B, **Koumangoye R**, Schornak CC, Omer S, Pusey B, Lau C, Markello T, Adams DR. A patient with multisystem dysfunction carries a truncation mutation in human SLC12A2, the gene encoding the Na-K-2Cl cotransporter, NKCC1. *Cold Spring Harb Mol Case Stud*. 2016 Nov;2(6):a001289. PubMed PMID: 27900370; PubMed Central PMCID: PMC5111002.

**Delpire E.** The mysterious role of the neuronal anion exchanger-3. *J Physiol*. 2017 Jan 17. doi: 10.1113/JP273033. [Epub ahead of print] PubMed PMID: 28097651.

Dexheimer JW, Kurowski BG, **Anders SH**, McClanahan N, Wade SL, Babcock L. Usability evaluation of the SMART application for youth with mTBI. *Int J Med Inform*. 2017 Jan;97:163-170. doi: 10.1016/j.ijmedinf.2016.10.007. PubMed PMID: 27919376.

**Ehrenfeld JM, Wanderer JP**, Terekhov M, **Rothman BS, Sandberg WS.** A Perioperative Systems Design to Improve Intraoperative Glucose Monitoring Is Associated with a Reduction in Surgical Site Infections in a Diabetic Patient Population. *Anesthesiology*. 2017 Jan 19. doi: 10.1097/ALN.0000000000001516. [Epub ahead of print] PubMed PMID: 28106608.

Fei M, **Wanderer JP, Jiang Y, St Jacques PJ.** Association between the availability of videolaryngoscopes and the incidence of emergency surgical airway in the perioperative setting of a large academic medical centre: a retrospective observational study. *Br J Anaesth*. 2016 Dec;117(6):824-826. PubMed PMID: 27956683.

Fensterheim BA, **Guo Y, Sherwood ER, Bohannon JK.** The Cytokine Response to Lipopolysaccharide Does Not Predict the Host Response to Infection. *J Immunol*. 2017 Mar 8. pii: 1602106. doi: 10.4049/jimmunol.1602106. [Epub ahead of print] PubMed PMID: 28275139.

**Franklin AD, Sobey JH**, Stickles ET. Anesthetic considerations for pediatric electroconvulsive therapy. *Paediatr Anaesth*. 2017 Feb 17. doi: 10.1111/pan.13115. [Epub ahead of print] Review. PubMed PMID: 28211248.

**Freundlich RE**, Duggal NM, Housey M, Tremper TT, Engoren MC, Kheterpal S. Intraoperative medications associated with hemodynamically significant anaphylaxis. *J Clin Anesth*. 2016 Dec;35:415-423. doi: 10.1016/j.jclinane.2016.09.023. PubMed PMID: 27871567.

**Freundlich RE**, Maile MD, Hajjar MM, Habib JR, Jewell ES, Schwann T, Habib RH, Engoren M. Years of Life Lost After Complications of Coronary Artery Bypass Operations. *Ann Thorac Surg*. 2016 Dec 6. pii: S0003-4975(16)31300-5. doi: 10.1016/j.athoracsur.2016.09.048. [Epub ahead of print] PubMed PMID: 27938887.

**Freundlich RE, Wanderer JP, Ehrenfeld JM.** Building Big Datasets: Do Not Forget the EMR. *Anesth Analg*. 2017 Feb 16. doi: 10.1213/ANE.0000000000001809. [Epub ahead of print] PubMed PMID: 28212218.

**Guo Y, Luan L, Patil NK, Wang J, Bohannon JK, Rabacal W, Fensterheim BA, Hernandez A, Sherwood ER.** IL-15 Enables Septic Shock by Maintaining NK Cell Integrity and Function. *J Immunol*. 2016 Dec 28. pii: 1601486. doi: 10.4049/jimmunol.1601486. [Epub ahead of print] PubMed PMID: 28031340.

**Gupta RK, McEvoy MD**, Neal JM. Reply to Drs Weisman and Gebhard. *Reg Anesth*

**APRIL 28, 2017**  
**6:30 AM - 2:30 PM**

DEPARTMENT OF ANESTHESIOLOGY  
VANDERBILT UNIVERSITY  
MEDICAL CENTER  
Compassionate | Creative | Committed | Collaborative

**13TH ANNUAL**  
**RESEARCH SYMPOSIUM**

**Breakfast | 7:30 am**  
Student Life Center, Board of Trust Room

**Poster Presentations | 8:00 am**  
Student Life Center, Board of Trust Room

**Oral Presentations | 9:30 am**  
Student Life Center, Boardroom C

**Research Awards | 2:00 pm**  
Student Life Center, Board of Trust Room

**Grand Rounds | 6:30 am**  
Light Hall 208

**"Blood transfusions, coagulation abnormalities and severe trauma"**

**FEATURED SPEAKER**  
**Jean-Francois Pittet, MD**  
David H. Chestnut Endowed Professor of Anesthesiology  
Professor, Department of Surgery  
Investigator, Center for Lung Injury and Repair  
Investigator, Alabama Resuscitation Center  
Editor-in-Chief, *Anesthesia & Analgesia*  
The University of Alabama at Birmingham

Pain Med. 2017 Jan/Feb;42(1):117-118. doi: 10.1097/AAP.0000000000000527. PubMed PMID: 27997485.

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Holroyd JL, Vasilopoulos T, **Rice MJ**, Rand KH, Fahy BG. Incidence of central venous catheter hub contamination. J Crit Care. 2017 Feb 27;39:162-168. doi: 10.1016/j.jcrc.2017.02.035. [Epub ahead of print] PubMed PMID: 28259730.

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Itagaki T, Oto J, Burns SM, **Jiang Y**, Kacmarek RM, Mountjoy JR. The effect of head rotation on efficiency of face mask ventilation in anaesthetised apnoeic adults: A prospective, randomised, crossover study. Eur J Anaesthesiol. 2016 Dec 22. doi: 10.1097/EJA.0000000000000582. [Epub ahead of print] PubMed PMID: 28009638.

Jiang G, Kiefer RC, Rasmussen LV, Solbrig HR, Mo H, Pacheco JA, **Xu J**, Montague E, Thompson WK, Denny JC, Chute CG, Pathak J. Developing a data element repository to support EHR-driven phenotype algorithm authoring and execution. J Biomed Inform. 2016 Aug;62:232-42. doi: 10.1016/j.jbi.2016.07.008. PMID: 27392645.

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Dexmedetomidine for prevention of delirium in elderly patients after non-cardiac surgery. J Thorac Dis. 2016 Dec;8(12):E1759-E1762. doi: 10.21037/jtd.2016.12.56. PubMed PMID: 28149635; PubMed Central PMCID: PMC5227247.

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Kula AO, **Riess ML**, Ellinas EH. Increasing body mass index predicts increasing difficulty,

*Featured Speaker*



Dolores Benedicta Njoku, MD

Visiting Professor Seminar | May 18, 2017  
Grand Rounds Lecture | May 19, 2017

*Save the Date*  
for the 12th annual  
Dr. James Phythyon Endowed Lectureship  
in Pediatric Anesthesiology

*Featuring Speaker*  
Dolores Benedicta Njoku, MD  
Program Director, Pediatric Anesthesiology  
Associate Professor of Anesthesiology  
and Critical Care Medicine  
Johns Hopkins University School of Medicine

*Presented By*  
DEPARTMENT OF ANESTHESIOLOGY  
VANDERBILT UNIVERSITY  
MEDICAL CENTER  
Monroe Carell Jr.  
Children's Hospital  
at Vanderbilt

failure rate, and time to discovery of failure of epidural anesthesia in laboring patients. *J Clin Anesth*. 2017 Feb;37:154-158. doi: 10.1016/j.jclinane.2016.11.010. PubMed PMID: 28235511.

**Kumar AB, Andrews W, Shi Y, Shotwell MS, Dennis S, Wanderer J, Summitt B.** Fluid resuscitation mediates the association between inhalational burn injury and acute kidney injury in the major burn population. *J Crit Care*. 2016 Oct 19;38:62-67. doi: 10.1016/j.jcrc.2016.10.008. [Epub ahead of print] PubMed PMID: 27863270.

**Liang Y, Chaichana K, Pretorius M, Eagle S, Jiang Y.** Incidental Detection of an Intracardial Floating Thrombus by Echocardiography During Coronary Artery Bypass Surgery. *Anesth Analg*. 2017 Jan 19. doi: 10.1213/ANE.0000000000001739. [Epub ahead of print] PubMed PMID: 28107270.

**Liang Y, Smith JL, Rice MJ.** Emerging Technologies: Let's Not Jump the Gun. *Anesth Analg*. 2017 Feb 17. doi: 10.1213/ANE.0000000000001902. [Epub ahead of print] PubMed PMID: 28221199.

**Lopez MG, Pandharipande P, Morse J, Shotwell MS, Milne GL, Pretorius M, Shaw AD, Roberts LJ 2nd, Billings FT 4th.** Intraoperative cerebral oxygenation, oxidative injury, and delirium following cardiac surgery. *Free Radic Biol Med*. 2017 Feb;103:192-198. doi: 10.1016/j.freeradbiomed.2016.12.039. PubMed PMID: 28039082.

**Luan L, Patil NK, Guo Y, Hernandez A, Bohannon JK, Fensterheim BA, Wang J, Xu Y, Enkhbaatar P, Stark R, Sherwood ER.** Comparative Transcriptome Profiles of Human Blood in Response to the Toll-like Receptor 4 Ligands Lipopolysaccharide and Monophosphoryl Lipid A. *Sci Rep*. 2017 Jan 5;7:40050. doi: 10.1038/srep40050. PubMed PMID: 28053314; PubMed Central PMCID: PMC5215261.

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Marra A, **Pandharipande PP.** The evolving approach to sedation in ventilated patients: a real world perspective. *Ann Transl Med*. 2016 Dec;4(24):494. doi: 10.21037/atm.2016.12.56. PubMed PMID: 28149856; PubMed Central PMCID: PMC5233542.

**Mathews L, Camalier CR, Kla KM, Mitchell MD, Konrad PE, Neimat JS, Smithson KG.** The Effects of Dexmedetomidine on Microelectrode Recordings of the Subthalamic Nucleus during Deep Brain Stimulation Surgery: A Retrospective Analysis. *Stereotact Funct Neurosurg*. 2017 Jan 28;95(1):40-48. doi: 10.1159/000453326. [Epub ahead of print] PubMed PMID: 28132061.

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Siew ED, Fissell WH, Tripp CM, Blume JD, Wilson MD, Clark AJ, Vincz AJ, Ely EW, **Pandharipande PP**, Girard TD. Acute Kidney Injury as a Risk Factor for Delirium and Coma during Critical Illness. *Am J Respir Crit Care Med*. 2016 Nov 17. [Epub ahead of print] PubMed PMID: 27854517.

**Smith H**, Gangopadhyay M, Gobin C, Fuchs C, Thompson J, Ely W, **Pandharipande P**. 499: DELIRIUM RISK FACTORS AND OUTCOMES IN CRITICALLY ILL CHILDREN. *Crit Care Med*. 2016 Dec;44(12 Suppl 1):201. PubMed PMID: 27850139.

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## Press Coverage on Opioid Use

Dr. David Edwards appeared in multiple media outlets covering opioid use, including:

**Substance Abuse is a Disease, CNN Headline News: On the Story**

**What the Surgeon General's Addiction Report Really Means, MedPage Today**

**MorningLine: Opioid Epidemic, NewsChannel5**

**Opioids Epidemic: How it Started, How to Battle It (Podcast with Dr. Jenna Walters), The Tennessean**

**Expert Compares Current Opioid Crisis to Past Tobacco Crisis, The Tennessean, Murfreesboro Daily News Journal, Clarksville Leaf-Chronicle**

**How Experts Would Change the Opioid Crisis, The Tennessean**

**Survey Finds Prescription Drug Use Now Eclipses Tobacco Use, DrugRehab.com**



# 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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Research



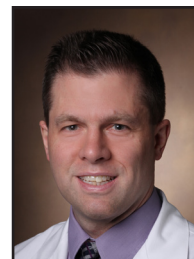
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