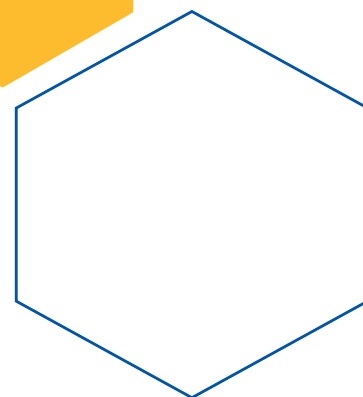


WINTER 2018-2019 EDITION  
UCLA DEPARTMENT OF ANESTHESIOLOGY & PERIOPERATIVE MEDICINE



David Geffen  
School of Medicine

**UCLA** Health



# Open Circuit

**EDITOR: KAREN SIBERT, MD, FASA**  
**ASSISTANT EDITOR: SHEVAUGHN MARCHESE**

---

# Table of Contents

3

## **A NOTE FROM THE CHAIR**

By Barbara Van de Wiele, MD,  
Interim Chair

---

4

## **UCLA SHINES AT ANESTHESIOLOGY 2018**

By Shevaughn Marchese

---

12

## **FIRE DAMAGES RESEARCH OFFICES, COMPUTERS**

By Claire Winters

---

14

## **BACK FROM THE BRINK OF DEATH**

By Karen Sibert, MD, FASA

---

19

## **NO TWO DAYS ARE ALIKE FOR UCLA ANESTHESIA RESIDENTS**

22

## **GIVING ANESTHESIA IN UGANDA**

By Karen Sibert, MD, FASA

---

26

## **MANUEL ROSA-GARRIDO, PHD, WINS AHA EARLY CAREER AWARD**

By Claire Winters

---

27

## **FACULTY NEWS, APPOINTMENTS, AND UPDATES**

29

## **SELECTED RECENT PUBLICATIONS**

33

## **DIFFERENT ROADS LEAD TO SUCCESS IN PROFESSIONAL SOCIETIES**

By Emily Methangkool, MD,  
MPH

---

34

## **OUR HIGH SCHOOL OUTREACH BEGINS THIRD SUCCESSFUL YEAR**

By Christine Nguyen-Buckley,  
MD

---

36

## **EXPERT HELP IN THE PSYCHOTHERAPY OF PAIN**

By Claire Winters

---

39

## **UCLA NURSE ANESTHETISTS: TEAMWORK ON AND OFF DUTY!**

By Lauren Fagan, CRNA, MSN

---

42

## **WELCOME TO OUR NEWEST ADMINISTRATIVE STAFF MEMBERS!**

43

## **A HOLIDAY CELEBRATION WITH A SPECTACULAR VIEW**

46

## **A MEMORABLE KEYNOTE ADDRESS, AND A HANDSHAKE WITH BILL CLINTON**

48

## **WITH YOUR HELP THROUGH GIVING...**

---

### **COVER IMAGE:**

To celebrate Physician Anesthesiologists Week 2019, the department hosted lunch for everyone and invited some special guest visitors. Shepzel, left, and Mazel are full-grown Brussels Griffons who have been specially trained to visit and cuddle with UCLA patients as part of the People-Animal Connection program. They made instant friends with residents Shai Shah, Chloe Tang, and Chirag Desai.

# A Note from the Chair

By Barbara Van de Wiele, MD | Interim Chair

As the holiday season has come to a close and we all have a moment to take a breath, now is a good time to highlight the accomplishments of the past few months – and how far we’ve come from the department’s modest beginning as a division of the Department of Surgery, first headed by John Dillon, MD, in 1950.

For a start, it’s remarkable how much our department has grown over the past several years! We now include in our ranks:

- 110 clinical faculty members
- 8 basic science faculty members
- 146 trainees: 22 fellows, 100 residents, 16 post-doctoral researchers, and 8 graduate student researchers
- 24 attending anesthesiologists
- 45 nurse anesthetists
- 10 researchers and project scientists
- 32 staff employees.

Among our top priorities for 2019 is expansion of our clinical services to align with health system expansion – to bring the right care to the patient in the right location. Delivering anesthesia care in UCLA ambulatory surgery centers remote from Westwood and Santa Monica is a new frontier for us. By the end of next year we will be covering 12 operating rooms in five additional UCLA ambulatory surgery centers.

On January 3, faculty member Kianusch Kiai, MD, anesthetized our first two outpatients for ENT cases in the operating rooms of the UCLA Santa Clarita Health Center, where pain specialists George Pan, MD, and Bradley Reid, MD, have been seeing chronic pain patients and doing interventional procedures for the past few years. Full ambulatory surgery services are on track to be offered at the UCLA community health centers in Santa Clarita, Torrance, and Thousand Oaks by summer’s end. Additional ambulatory operating rooms will begin service in 2020 in Calabasas and North Hollywood. These new sites will require anesthesiology coverage by faculty and staff physicians with a special interest in ambulatory care and the ability to handle the fast pace of outpatient surgery. Dr. Kiai deserves thanks and special recognition for his role in coordinating anesthesia services at all these locations. This is an outstanding growth opportunity for our department in a very competitive healthcare marketplace.

Our computational medicine team, headed by Maxime Cannesson, MD, PhD, in his role as Vice-Chair



for Perioperative Medicine, continues its prominence in publishing highly original research. On the home front, the team has plans to implement individual quality dashboards for our clinical professionals in 2019, and to develop more real-time clinical risk assessment and decision support tools.

In this winter’s edition of Open Circuit, you’ll find updates on a variety of topics including:

- The many presentations our faculty and fellows made at the 2018 annual meeting of the American Society of Anesthesiologists;
- New research publications representing countless hours of work;
- How a grateful patient survived a catastrophic illness and reached out to thank Nir Hoftman, MD, who ran her prolonged “code blue” in the interventional radiology suite;
- Our remarkable residents, who talk to high school students in our communities about anesthesiology and travel as far as Uganda to deliver healthcare.

I would be remiss if I failed to take this opportunity to thank all the dedicated professionals – faculty, staff physicians, fellows, residents, nurse anesthetists, and administrative staff – by whose efforts our department and our patients thrive. It is an honor to work with you all!

Sincerely,

*Barbara Van de Wiele, MD  
Interim Chair*

# UCLA Shines at ANESTHESIOLOGY 2018

by Shevaughn Marchese

Our department once again made a strong impression at the American Society of Anesthesiologists Annual Meeting, which took place at the Moscone Center in San Francisco in October. A diverse group of UCLA Anesthesiology faculty, residents, fellows, post-doctorate researchers, and graduate student researchers collaborated on 45 presentations. Anesthesiology residents presented 13 Medically Challenging Cases, as well as Poster Presentations and Poster Discussions. In total, our department's physicians presented 16 Medically Challenging Cases, more than double the number presented in 2017.



#### IMAGES, top:

Dr. Selma Calmes celebrates her Wood Library-Museum Distinguished Service award with Drs. Zarah Antongiorgi and Barbara Van de Wiele

#### Right:

Drs. Soban Umar, Jack Buckley, Christine Myo Bui, Nikki Yin, Andrew Wu, Shai Shah, and Christine Nguyen-Buckley

UCLA physicians and alumni also attended a reception honoring former UCLA-Olive View Anesthesiology Chair, Selma Calmes, MD. Dr. Calmes was awarded the 2018 Wood Library-Museum Distinguished Service Award. An article detailing Dr. Calmes' contributions to the Wood-Library Museum is featured in the [August 2018 edition of the ASA Monitor](#). Dr. Calmes remains involved in the Department. Her most recent Grand Rounds lecture, in January 2018, was titled "The History of Anesthesia: Where we've been and where we might be going."

## Special Sessions: Young Investigators

Brent Ershoff, MD, presented a Young Investigator Special Session titled "Outcomes and Database Research. His co-investigators were Principal Statistician Tristan Grogan, MS, Joe C. Hong, MD, Eilon Gabel, MD, and Maxime Cannesson, MD, PhD.

## Poster Discussions

Postdoctoral researcher Gregoire Ruffenach, PhD, led a poster discussion titled "Respiration: Basic and Clinical Science. The poster represented a collaboration between the Eghbali Laboratory and the Umar Laboratory. Mylene Vaillancourt, MSc, Shervin Sarji, BSc, Shayan Moazeni, BSc, Nancy Cao, BA, Laila Aryan, BS, Jason Hong, MD, Gregory Fishbein, MD, Soban Umar, MD, PhD, and Mansoureh Eghbali, PhD, were co-investigators.

The Umar and Eghbali laboratories also collaborated on other poster discussions. First author Soban Umar, MD, PhD, along with co-investigators Mylene Vaillancourt, MSc, Gregoire Ruffenach, PhD, Louis A.





Saddic, MD, PhD, Jason Hong, MD, Nancy Cao, BA, Abbas Ardehali, MD, Mansoureh Eghbali, PhD, and former department Chair Aman Mahajan, MD, PhD, MBA, presented “In Vivo Over-expression of Micro Rna-125b Induces Pulmonary Hypertension in Pre-existing Pulmonary Fibrosis.”

Former Student Researcher, and the department’s Business Office Coordinator, Nancy Cao, BA, was first author of the poster discussion, “Comparison of Electrophysiological Remodeling in the Right Ventricles of Rats with Pulmonary Hypertension and Pulmonary Fibrosis-associated Pulmonary Hypertension”. Her co-investigators were Mylene Vaillancourt, MS, Gregoire N. Ruffenach, PhD, undergraduate student Trixie Le, Shayan Moazeni, BS, Mansoureh Eghbali, PhD, and Soban Umar, MD, PhD.

CA-3 resident Catherine Nguyen, MD, led the poster discussion “Validation of the Modified COLDS Score,” along with Lisa Lee, MD, and

fellow residents Robert Shaw, MD, and Marsha Kristel Bernardo, MD.

Theodora Wingert, MD, led a poster discussion titled “Risk Factors for Acute Kidney Injury in the Pediatric Surgical Population and Association with Mortality and Perioperative Outcomes,” with co-investigators Wendy Ren, MD, Tristan Grogan, MS, and Ira Hofer, MD.

## Poster Presentations

CA-2 resident Nicole Andonian, MD, presented “Prehabilitation to Improve Postoperative Outcomes in the Frail Population” in the Perioperative Medicine poster session. Sumit Singh, MD, Soban Umar, MD, PhD, Michelle Braunfeld, MD, and VA Greater Los Angeles colleagues Cathy Lee, MD, Marcia Russel, MD, and Steven Castle, MD, were co-authors.

CA-3 Myroslav Figura, MD, and Ira Hofer, MD, presented “Dynamic Glomerular Filtration Rate Formula as a



Predictor of Perioperative Mortality Compared to Kidney Disease: Improving Global Outcome Acute Kidney Injury Classification System."

Former resident Hanzi Russino, MD, authored "Intralipid Improves Left Ventricular Function in Rats with Lps-induced Cardiac Dysfunction." Her co-authors were Soban Umar, MD, PhD, and Siamak Rahman, MD.

CA-3 resident Pamela Chia, MD, MS, presented "Pulmonary Hypertension is Associated with Neuroinflammation in Rats" in a session titled "Experimental Circulation." Her co-investigators were Mylene Vaillancourt, MSc, Nancy Cao, BA, undergraduate student Trixie Le, Mansoureh Eghbali, PhD, Aman Mahajan, MD, PhD, MBA, and Soban Umar, MD, PhD.

In the same session, postdoctorate researcher Gregoire Ruffenach, PhD presented "15hete Diet-Induced Pulmonary Hypertension is Rescued by Apoa-I Mimetic Peptide 6f". His co-investigators were Ellen O'Connor, BS, Mylene Vaillancourt, MSc, Nancy Cao, BA, Shervin Sarji, BS, Victor Grijalva, BS, Soban Umar, MD, PhD, Srinivasa T. Reddy, PhD, and Mansoureh Eghbali, PhD.

Christopher Ortiz, MD, PhD, was first author of the poster, "Assessment of Ventilator Induced Lung Injury in an Animal Model of Pulmonary Fibrosis." Nir Hoftman, MD, Mylene Vaillancourt, MS, Mitchell M. Weksler, MD, Nancy Cao, BA, Trixie Le, Soban Umar, MD, PhD, Aman Mahajan, MD, PhD, MBA, and Mansoureh Eghbali, PhD were co-investigators.

Gundappa Neelakanta, MD, presented "Anesthesia-Related Deaths Reported to Los Angeles County Department of Medical Examiner-coroner, 2008-2017" in a session titled Patient Safety and Practice Management.

## Medically Challenging Case Presentations

CA-3 resident Andrea Poon, MD, presented "Multimodal Approach to Acute on Chronic Pain Management of a Patient with a Retained Bullet in the Pelvis Following the Las Vegas Shooting" with

---

### IMAGES. top:

Drs. Pamela Chia, Christine Myo-Bui, Andrea Poon, and Nicole Yin

### Right:

Drs. Emily Methangkool and Karen Sibert with ASA Social Media Ambassadors







co-author Eric Hsu, MD. In addition, she presented “A Novel Modified Pediatric Face Mask Provided Nasal Cpap Oxygenation and N2O in A Deeply Sedated Obese Patient during Extraction of Retained Placenta”. Her co-investigators were Benjamin Landgraf, MD, fellow resident Myroslav Figura, MD, Bhoumesh Patel, MD, and James Tse, MD, PhD.

CA-3 resident Sophia Poorsattar, MD and Louis Saddic, MD, PhD, presented “Cardiac Strangulation by Epicardial Pacemaker Leads.”

CA-2 resident Sean Mofidi, MD, MS presented “Post-operative Psychogenic Non-epileptic Seizures in A Patient with A Known Seizure Disorder Resulting In Re-intubation” with co-authors Zarah D. Antongiorgi, MD, and Brent D. Ershoff, MD, MS.

Pediatric Anesthesiology fellow Daniel Hwang, MD, presented “Crashing On to Cardiopulmonary Bypass: Cardiac Arrest during Pulmonary Artery Banding” His co-authors were Tiffany Williams, MD, PhD, and Pediatric Cardiac Anesthesiology Director Jure Marijic, MD.





CA-3 resident Jeffrey Jeng, MD, and Kenneth Kuchta, MD, presented "Dysphagia and Chronic Bronchitis due to a Kommerell Diverticulum."

CA-3 resident Mitchell Weksler, MD, and Aviva Regev, MD, MBA, presented "Cesarean Section for a Patient with Fontan Physiology."

Myroslav Figura, MD, presented "A No-cost Face Tent Maintained Oxygenation and Allowed Aggressive Oropharyngeal Suctioning in a Patient with Excessive Nasal Bleeding Following Endoscopic Sinus Surgery." His co-authors were Tejal H. Mehta, MD, Huy Quoc Nguyen, MD, Andrea Poon, MD, and James T. Tse, MD, PhD.

CA-2 resident Ari Huversarian, MD, and Nirav Kamdar, MD, MPP, MBA, presented "Actigraphy to Predict Uncontrolled Pain in a Surgical Patient with Potential for Readmission."

Pamela Chia, MD, MS presented "Intraoperative Considerations for En Bloc Heart-Liver Transplant" with Emily Methangkool, MD, MPH, Vadim Gudzenko, MD, and Christine Myo Bui, MD.

Former Liver Transplantation Anesthesiology fellow Govind Rangrass, MD, Liver Transplantation Anesthesiology Director Christopher Wray, MD, Cory Soto, BS, and Christine Myo Bui, MD, presented "Venovenous Extracorporeal Membrane Oxygenation as A Bridge to Orthotopic Liver Transplantation in Fulminant Hepatic Failure."

Lauren Beck, MD, Natalie Moreland, MD, and Nirav Kamdar, MD, MPP, MBA, presented "Perioperative Coordination for Novel Use of Cangrelor to Bridge Antiplatelet Therapy in A High-Risk Patient with Recent Drug-Eluting Stents" with Marcella Calfon-Press, MD, and Luke Macyszyn, MD.

CA-3 resident Raymond Machi, MD, and Emily Methangkool, MD, MPH, presented "Acute Intraoperative Hepatic Failure during Cardiac Surgery."



Dr. Machi also co-authored "Cerebral Venous Thrombosis in A Patient with Postpartum Headache," with University of California, Irvine residents Syeda A. Quadri, MD, Lawrence Younan, MD, and Slavka Bulleova, MD.

CA-3 resident Robert Shaw, MD, presented "A Case of Hemodynamic Instability Stemming from Endotracheal Tube Occlusion" with CA-2 residents Stefan Beseda, MD, and Jeffrey Kim, MD, and Christine Nguyen-Buckley, MD.

Lisa Lee, MD, co-authored "Management for Major Orthopedic Case in A Pediatric Patient with Myotonic Dystrophy" with former Pediatric Anesthesiology fellow Kristel Magsino, MD.

**IMAGES. top:**

Drs. Pamela Chia and Soban Umar at FAER reception

**Left:**

CA-3 residents Andrea Poon and Myro Figura in the Exhibit Hall

## Special Meetings and Events

Daniel Cole, MD, FASA, past ASA President, presented “The Big Vision for Patient Safety” at a special meeting hosted by the Anesthesia Patient Safety Foundation titled “A New Frontier in Patient Safety: Perioperative Brain Health.”

## Panel Discussions

Several faculty members participated in panel discussions. The department’s Co-Director of Quality, Emily Methangkool, MD, MPH, presented “Complications after Non-operating Room Anesthesia” in a 60-minute panel discussion titled “You Want Me to Give Anesthesia Where? Patient Safety in Non-OR Locations.”

Maxime Cannesson, MD, PhD, moderated a 60-minute panel discussion titled “Tele-Health and Mobile-Health for the Perioperative Physician”, where Nirav

Kamdar, MD, MPP, MBA, presented “Tele-Medicine for Preoperative Optimization and Patient Engagement.”

Associate Director of Pediatric Anesthesiology, Wendy Ren, MD, moderated the panel discussion, “Tonsillectomy and Adenoidectomy Pain Management Sans Codeine.”

J. Prince Neelankavil, MD, participated as faculty in a 60-minute panel discussion titled “Point-of-Care Ultrasound: Training, Education and Clinical Implementation.”

Karen Sibert, MD, FASA, the Department’s Director of Communications and Immediate Past President of the California Society of Anesthesiologists, presented “The Communications Pathway” at a 120-minute Panel titled “You can Become Your State Society President! Five Women Discuss Pathways, Pitfalls, and Leadership Development.” Read more about this talk on page 33.







## Workshops

The Cardiothoracic and Pain Medicine Divisions conducted workshops for meeting attendees. Eric Hsu, MD, a specialist in multimodal pain management, led a workshop on acupuncture.

W. Benjamin Kratzert, MD, led two ultrasound workshops, “Critical Ultrasonography for the Perioperative Physician – Basic Course” and “Advanced Critical Ultrasonography for the Perioperative Physician.”

The department’s Director of Perioperative Echocardiography, J. Prince Neelankavil, MD, co-instructed both a workshop and a self-study program on Perioperative Point of Care, with former faculty member Kimberly Howard-Quijano, MD, MS.

Director of Cardiothoracic Anesthesiology Jonathan Ho, MD, and Andrew Disque, MD, led a workshop titled “Electrophysiology: Perioperative CIED Management, Lead Removal Procedures, and Temporary Pacing” with former colleagues Aman

Mahajan, MD, MBA, and Kimberly Howard-Quijano, MD, MS. Dr. Ho also hosted a Trans-Thoracic Echocardiography workshop titled “Perioperative TTE for Everyone.”

Following the sessions on Sunday October 14th, the group reconnected with UCLA alumni at our annual Dinner Social. UCLA Anesthesiology residency and fellowship program alumni are encouraged to connect with colleagues at future ASA Annual Meetings. To update your contact information in our alumni database, please use the [Alumni Update Form](#), or email the administrative office at [UCLAAnesAdmin@mednet.ucla.edu](mailto:UCLAAnesAdmin@mednet.ucla.edu).

### IMAGES. top:

Drs. Vivek Chellappa, Jeffrey Jeng, Soban Umar, Sophia Poorsattar, and Daniel Hwang

### Left:

Residents with Dr. Soban Umar, right, at the residents' meet-and-greet

# Fire Damages Research Offices, Computers

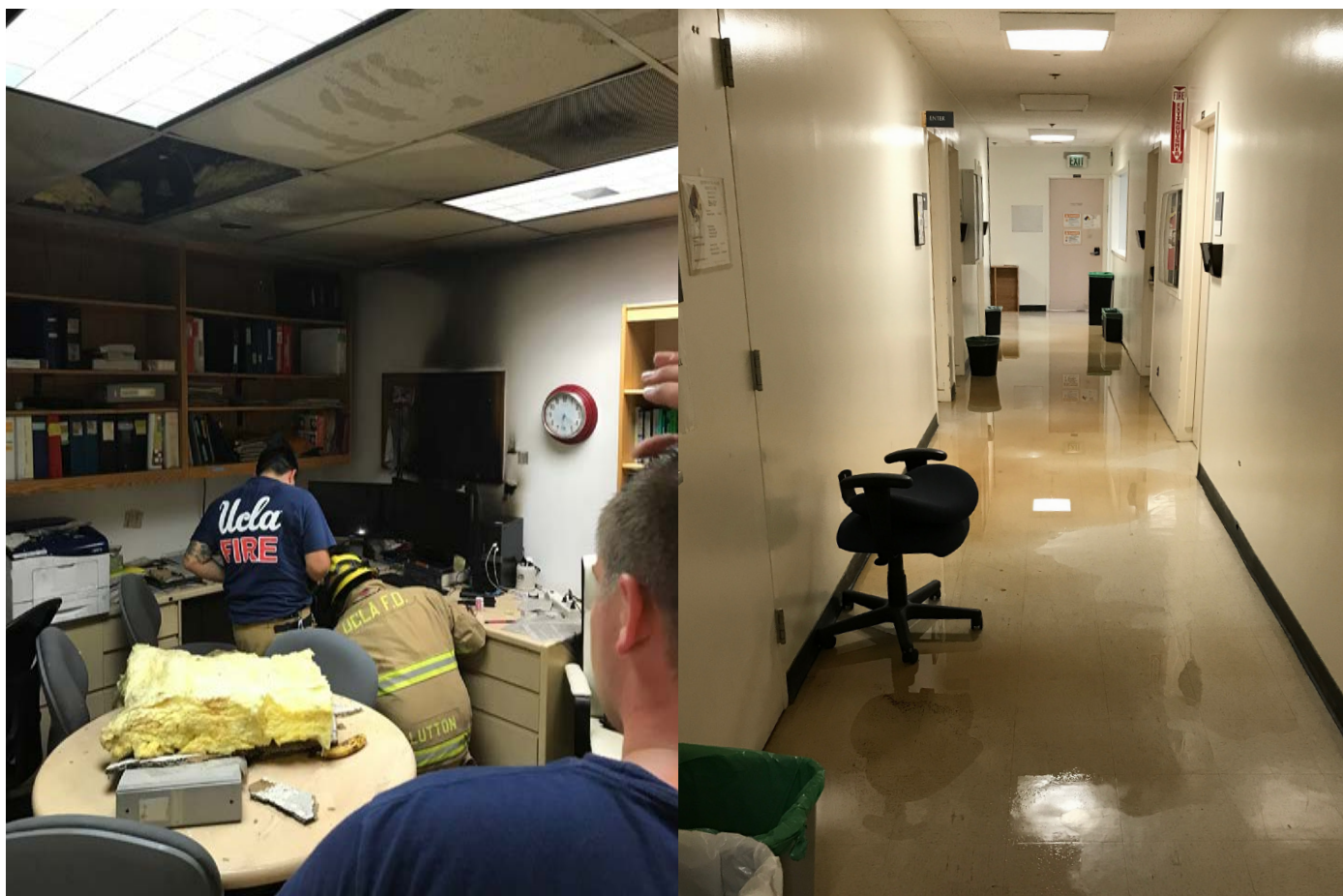
by Claire Winters

There's never a good time to hear bad news, but two days before an American Heart Association (AHA) grant deadline is certainly on the more painful end of the spectrum. Especially when that news is that your office has caught fire. And the flames have taken your backups with them.

Such was the news that Michaela Ottolia, PhD, woke up to in the early morning on July 10, when phone calls from Business Office Manager Laura Benscoter and Interim Chair Barbara Van de Wiele, MD, alerted her to an electrical fire that had severely damaged her office, as well as Dr. Soban Umar's office next

door. In addition, the corridor was soaked by sprinklers and stained with smoke, affecting the air quality and working conditions for students, scientists and administrators in the research area of the Division on Molecular Medicine in the Center for Health Sciences (CHS).

"When I saw it, my first fear was about injury to anyone," Dr. Ottolia said. But after she was reassured that no one was hurt, she immediately began to worry about the impending AGA Postdoctoral Fellowship grant deadline for her research fellow, Namuna Panday, PhD.





“The submission was due in two days! The finalized files were lost, together with my PC and laptop,” Dr. Ottolia recalled.

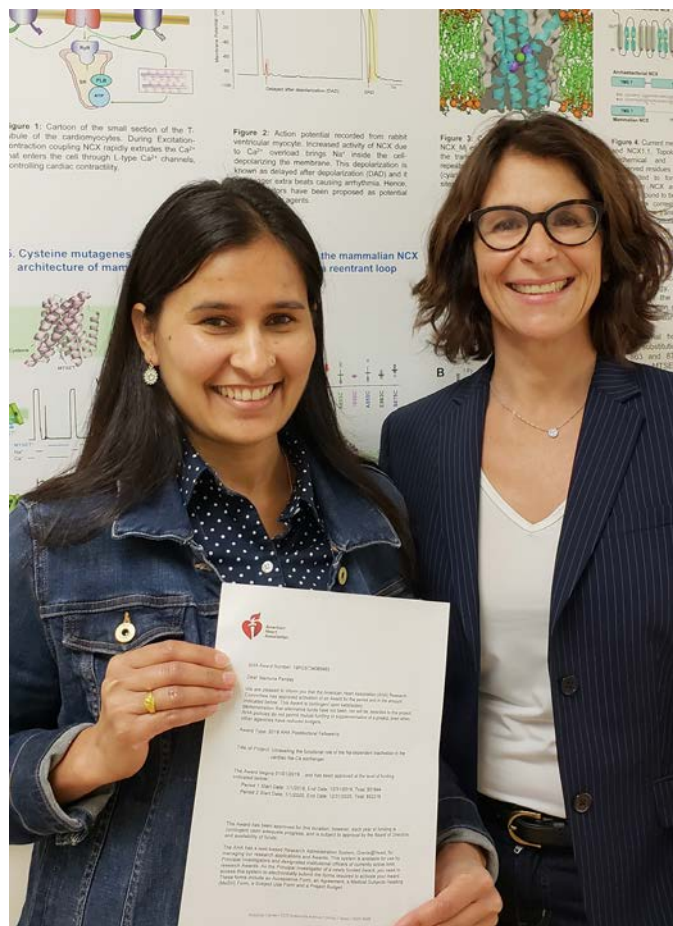
Ms. Benscoter kicked into even higher gear than usual and coordinated the efforts of multiple UCLA teams. The UCLA firefighters’ fast action quickly extinguished the fire, but water and smoke damage to documents and books had to be remedied by an outside document restoration firm. A team from DGIT (David Geffen Information Technology) was able to restore Dr. Ottolia’s computer files quickly. Facilities Project Manager Roland Amrhein led the thorough investigation and construction efforts.

Fortunately, the fire was confined to office space, and the laboratory teams were able to continue their experiments without interruption. Dr. Ottolia and her team lost little time on their research and grant submissions. She credits Ms. Benscoter, working with staff members Brianna Vidales and Nancy Cao, for making sure she had everything necessary to continue her work.

The administrative team, including CFO Wendy Ma and Administrative Specialist Jose Morales, made sure the AHA application was submitted on time. And in November, it was announced that Dr. Panday was awarded the grant. Dr. Ottolia also faced a second deadline two weeks after the fire, for a grant application (NIH Two-PI RO1) with Joshua Goldhaber, MD, a cardiologist at Cedars-Sinai Medical Center.

“I am happy to say this application received an excellent score and will likely be funded. So, in spite of the disaster, we managed to successfully move forward with our research work,” Dr. Ottolia said.

Could there even be a silver lining to the events of that morning in July? The fire interrupted not only her work, noted Dr. Ottolia, but the work of everyone in the department. However, the kindness, support and teamwork she experienced made her appreciate the department community even more. At the time of the fire, Dr. Van de Wiele had just been appointed Interim Chair.



“I am sure that a fire in the department was not on her agenda! It was very comforting to talk to her the morning of the fire and be assured of the department support in the recovery process,” Dr. Ottolia said. “It is especially during these stressful, unexpected events that we understand and appreciate expert and thoughtful leadership.”

### IMAGES. top

[Drs. Panday and Ottolia celebrate AHA postdoctoral fellowship grant](#)

### Left

[UCLA firefighters at the scene](#)  
[Flooded hallway after the fire](#)

---

# Back from the Brink of Death

by Karen Sibert, MD, FASA

No one could have been more surprised than Nir Hoftman, MD, when he recently opened his email to find a message from a patient he cared for nearly five years ago. At the time, he thought that the patient might never survive her catastrophic illness, let alone recover enough to say thank you.

“I am so grateful to you for helping to save my life,” wrote Linda O. Hatcher, a Los Angeles attorney who practices healthcare business law. “My survival and recovery have been extraordinary, and it is in no small measure due to you.”

Dr. Hoftman, UCLA’s Chief of Thoracic Anesthesiology, first met Ms. Hatcher on March 21, 2014, in UCLA’s Interventional Radiology (IR) suite. At that point, the 51-year-old woman needed general anesthesia for a hazardous procedure – inserting an “AngioVac®” device to evacuate thrombi from her venous system – and she was already critically ill from a complex cascade of events. During the case, Ms. Hatcher suffered full cardiac arrest from more thrombi that clogged her lungs and caused her heart to fail.

Dr. Hoftman was in charge of running the “Code Blue” resuscitation that saved her life.

## The Start of the Saga

The story began a month earlier, when Ms. Hatcher finished a lengthy conference call in her law office and suddenly noticed that she couldn’t move her left leg. Initially she thought it was just asleep, but she recalls that there was no numbness or tingling.

“I felt perfectly fine otherwise, but I couldn’t get my leg or my foot to move,” she says. “I couldn’t walk on it. It was completely paralyzed from the hip down.”



At the UCLA Emergency Department, Ms. Hatcher learned she had suffered a stroke due to bleeding from the rupture of a small arteriovenous malformation (AVM) in the right side of her brain. Over the next few days, her ability to move her left leg started to improve. With no sign of further bleeding from the tiny AVM, her physicians decided there was no need for further treatment and she could move on to rehabilitation. Her initial prognosis was excellent.

“I was told that the bleed had been nominal, a ‘leak’ really,” she remembers. “As long as I was diligent



with rehab efforts, I was expected to have a full and complete recovery.”

Only two weeks later, though, Ms. Hatcher suddenly became short of breath and felt discomfort when she tried to breathe deeply. A CT scan revealed a deep venous thrombus (DVT) in her left leg with pulmonary emboli in both lungs – a life-threatening situation.

## The Right Course of Action?

Ordinarily, the treatment for pulmonary embolism is immediate anticoagulation with blood thinners to keep further clots from forming. In the setting of recent intracranial bleeding, however, anticoagulation could be a dangerous plan.

“The brain trumps all,” Ms. Hatcher says. She understood that anticoagulation could lead to further bleeding in her brain and a more severe stroke.

Neil Martin, MD, the former Chair of the Department of Neurosurgery who was in charge of Ms. Hatcher’s care, decided the safest option would be to place an IVC filter to protect her lungs from further emboli and then operate to remove the AVM. After 10 days, it would be safe for her to begin taking blood thinners to dissolve all the clots. The operation was successful (with the expertise of Carsten Nadjat-Haiem, MD, a member of our Division of Neurosurgical Anesthesiology) and for the first four days she seemed to be recovering well.

But then Ms. Hatcher’s left leg swelled painfully. The blood clots in it were getting worse and extending into her pelvis. Thrombus could even be seen above the IVC filter, increasing her risk of lethal pulmonary emboli. Dr. Martin consulted with Robert Shpiner, MD, an expert in pulmonary medicine and critical care, and John Moriarty, MD, an interventional radiologist who specializes in cardiovascular procedures.

The decision was made to attempt the AngioVac procedure to extract as much clot as possible from Ms. Hatcher’s leg, pelvis, and lungs. In the IR suite, Dr. Hoftman induced general anesthesia. Dr. Moriarty

inserted cannulas in large neck and groin veins, and the AngioVac pump set to work.

Almost immediately, however, Dr. Hoftman noticed a developing problem with Ms. Hatcher’s vital signs. The amount of end-tidal carbon dioxide (ETCO<sub>2</sub>) started to drop precipitously – an ominous sign of low cardiac output and more pulmonary emboli. Then he couldn’t obtain any blood pressure reading, and Ms. Hatcher’s heart rate slowed – “a bradycardic wide rhythm,” Dr. Hoftman recalls. He initiated CPR and called for a cardiac surgeon to come at once to the IR suite. Putting Ms. Hatcher on ECMO – extracorporeal membrane oxygenation – would be the only way to save her life.

The only cardiac surgeon in Ronald Reagan Medical Center at the time was Abbas Ardehali, MD, who was performing heart surgery in another operating room. He couldn’t immediately leave. Dr. Hoftman and the team in IR continued CPR while they waited for him.

“How long can we keep doing this?” Dr. Hoftman remembers asking himself. “We had good blood pressure readings with cardiac compressions, but essentially no ETCO<sub>2</sub>, just single digits. Were we actually getting blood flow to the brain? I had really no idea.”

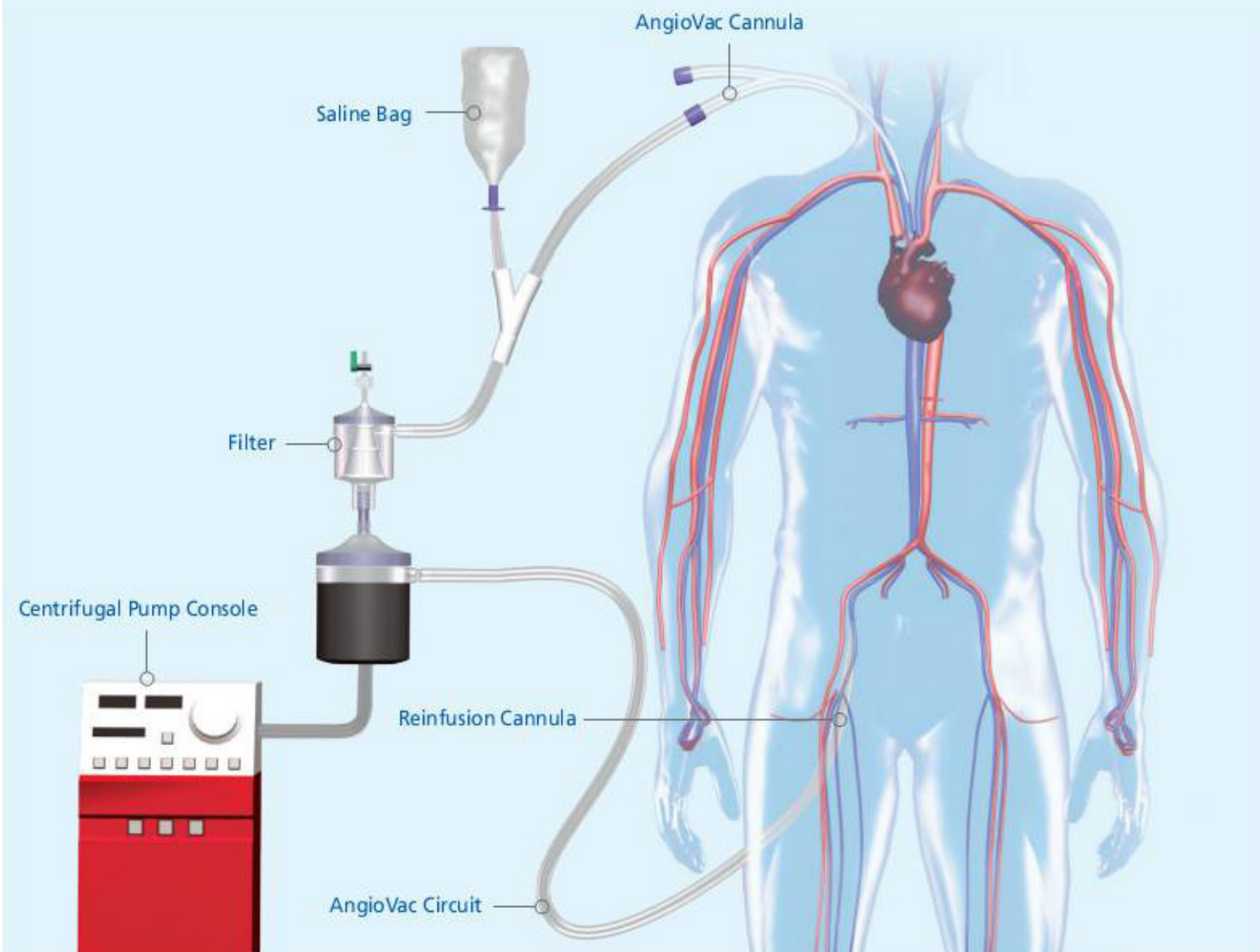
The code continued for more than 30 minutes before Dr. Ardehali arrived and started ECMO. Dr. Moriarty used thrombectomy catheters to extract as much clot as possible from Ms. Hatcher’s pulmonary arteries. The ECMO system cooled down her blood temperature in order to protect her brain, but no one was sure she would ever wake up again.

“I was almost certain that she would have significant anoxic brain injury,” Dr. Hoftman says.

## “My Brain Was Absolutely Fine!”

Within four days, Ms. Hatcher’s condition improved enough to allow discontinuation of ECMO, and the





next day she no longer needed the ventilator. Being extubated was the first event she remembers. She has no recollection at all of the cardiac arrest or the time she spent on ECMO – “no bright light or near-death experience,” she says.

“The first thing I remember was when they were taking all the tubes out. I put my hand up to my nose which was very sore, probably from the feeding tube,” Ms. Hatcher recalls. “And my body was so depleted. I couldn’t sleep but I was exhausted, just as people always describe about the ICU – all the noise and alarms going off constantly. But once I was fully awake, my brain was absolutely fine!”

Remarkably, Ms. Hatcher started answering email and handling questions from work while she was still in the hospital. And she remembers vividly the evening that Dr. Hoftman came to visit her on 6 North after she left the ICU. She was smiling, sitting up in bed, in the midst of a lively conversation with her mother and a nurse.

“The door opened, and I didn’t know who he was,” Ms. Hatcher says. “He looked at me and he looked very confused. He looked up at the whiteboard and then he looked back at me. He stepped outside to check the room number. He looked absolutely flabbergasted.”



She remembers that Dr. Hoftman couldn't believe the extent of her recovery, and said several times, shaking his head, "We just don't make those saves!"

"He kept repeating it," Ms. Hatcher says, laughing. "I finally said, 'You know, I guess now you can say that you do!'"

Dr. Hoftman admits that he has often been a pessimist during cardiac arrest codes, but observing Ms. Hatcher's remarkable recovery has changed his outlook.

"After I saw that case, I can't say that it turned me into a code optimist, but now I'm less belligerent with the code optimists," he says wryly. "Which is a good thing!"

### Ms. Hatcher's Message

Since leaving the hospital two months after her initial AVM bleed, Ms. Hatcher has gladly returned to work. She is active now in the Department of Neurosurgery's Patient and Family Advisory Council. Her only lingering problem is weakness in her left leg that keeps her using a cane to walk. She credits her physical recovery to her ongoing hard work in physical therapy.

"I never needed any cognitive therapy," she says, "but that's the only kind of therapy I didn't have to do!" She encourages all patients to be fully engaged in their recovery and rehabilitation. "I viewed myself as a critical part of my healthcare team," Ms. Hatcher says. "Tell me what I need to do to get well and get my life back, and I will do it."

Ms. Hatcher also wants to send a message of deep gratitude to everyone in healthcare – physicians, nurses, therapists, and technicians in every field – as she believes we don't receive nearly enough positive reinforcement.

"I know that everyone involved was desperately trying to save my life," she says. "It is certainly by the grace of God that I am here, but also because people used all their amazing talents to help me – not just to save my life, but save my brain!"

"I'm still serving a purpose on this planet, and still a productive member of society. I could be dead," she marvels. "I have such a first-hand realization that there is no greater calling on this earth than taking care of human beings. People in the profession of healthcare are so unbelievably gifted – there's nothing harder or more important. We need to do whatever we can to encourage them that their work is meaningful – to make sure they get rewarded and lifted and appreciated. They deserve it!"











---

# No Two Days Are Alike for UCLA Anesthesia Residents!

For the residents in our department, it's hard to predict what the day will bring.

One day they may be in the operating room giving anesthesia for an aortic dissection or a liver transplant, or carrying the code beeper as Team Captain.

On another day they may be on the beach at the annual residents' retreat, getting advice about the transition into practice, enjoying a day outside with friends, and remembering why choosing Los Angeles for residency was such a good idea in the first place.

To celebrate Physician Anesthesiologists Week 2019, the residents enjoyed lunch courtesy of the department, and had a chance to play with visiting People/Animal Connection dogs Mazel and Shepzel, who are very well-behaved Brussels Griffons. The dogs' usual routine is to make rounds and cuddle with UCLA hospital patients, but they happily sat on laps and made new friends in the anesthesia department offices.

On another day in January, the residents spent the afternoon learning emergency tracheotomy skills from faculty member Jack Buckley, MD, using porcine tracheas. Half a world away, two senior residents had the chance last fall to see elephants in Uganda while on a safari break from a two-week training rotation. (Read more about the experiences of Sam Hong and Sophia Poorsattar on p. 22.)

It's all part of the varied learning experience at UCLA!

The fall retreat this year for all four classes of residents featured a Friday evening social in Westwood and resumed early Saturday morning on Hermosa Beach, with a beach yoga and meditation session, and a free essential oil roller for the first 30 participants.

The morning included review and feedback sessions about the residency program with Program Director Judi Turner, MD, PhD, and other faculty members. Another session, titled "Residents Relying on Residents," focused on "things you wish you had known earlier or still want to know," and included helpful information about applying for fellowships and jobs. A private practice panel after lunch brought back several UCLA graduates to describe their experiences. The day concluded with "dinner, games, and resident bonding time," and significant others were invited to join in.







# Giving Anesthesia in Uganda — Our Residents Report Back from Their Two-Week Rotation

By Karen Sibert, MD, FASA

C A-3 residents Sam Hong, MD, and Sophia Poorsattar, MD, with faculty member Aviva Regev MD, MBA, boarded flights last fall on a long journey to Mbarara, a city of 195,000 in southwest Uganda, for a two-week rotation caring for women at the [Centre for Gynecologic and Fistula Care](#) at Mbarara Hospital.

The trio made the trip under the auspices of Medicine for Humanity (MFH), a nonprofit medical care and teaching organization dedicated to improving the health of women in underserved communities, and training local physicians so that women can have access to specialty care year-round. Its work represents an educational partnership between UCLA Health and Mbarara University of Science and Technology (MUST).

“The cases we did were predominantly urogynecological surgeries with the majority being various types of fistula repairs,” says Dr. Poorsattar. With little obstetric help available in most African villages, many women who experience obstructed labor suffer from obstetric fistula afterward, a vaginal tear between the bladder and/or rectum that results in constant leakage of urine, stool, or both, and often turns sufferers into outcasts. (Nicholas Kristof of the New York Times has written memorably about the thousands of women who endure obstetric fistula, calling them “[the world’s modern-day lepers](#).”)

In the year leading up to their annual visit, MFH recruits women from all over the region to come to the university in the fall while the multidisciplinary team is there, Dr. Poorsattar reports. The patients undergo



an evaluation process headed by Musa Kayondo, MD, who chairs the Department of Obstetrics and Gynecology at MUST, with his team of residents. The chief surgeon from UCLA is Christopher Tarnay, MD, a urogynecologist who leads UCLA's Division of Female Pelvic Medicine and Reconstructive Surgery. Dr. Tarnay is now MFH President and Medical Director.

“Our surgical camp had two rooms running each day, with Sam and I each performing the anesthesia for one room and Dr. Regev supervising,” Dr. Poorsattar recalls.





## CENTRE FOR GYNECOLOGIC AND FISTULA CARE

Built with support from Medicine for Humanity



Usually Dr. Tarnay and his fellow would operate in one room, while Dr. Kayondo operated in the other. Local surgical residents were always present in both rooms and were actively involved in patient care throughout recovery.

“It’s a big adjustment,” Dr. Regev says. “You need to make a big mental shift in how you approach your practice. There’s no other option. You have fewer monitors, and less choice in your drugs. It’s a very unfamiliar situation that takes you out of your comfort zone.”

From the faculty viewpoint, Dr. Regev says, she learned along with the residents. There was no EKG or end-tidal CO2 monitoring capability in the operating rooms, and most operations were performed under spinal anesthesia. Most patients were very stoic, and didn’t expect or need sedation.

“There was no reliable oxygen supply,” Dr. Regev recalls, and most cases were done on room air. “It just gets tricky if the case goes long or the block isn’t great.” She missed having propofol and phenylephrine most, and ephedrine was only on hand some of the time. The only IV sedatives readily available were diazepam and ketamine.



Dr. Poorsattar doing a spinal anesthetic



With Steven Ttendo, MD, head of the Dept. for Anesthesia and Critical Care at MUST

“It was definitely a valuable experience for the residents,” Dr. Regev says, as they had the opportunity to become very proficient at performing spinal anesthetics. The team also learned from the challenge of providing anesthesia care in a setting of far fewer resources than they usually enjoy at UCLA.

## Most Memorable Experiences?

Dr. Hong recalls his most memorable case. “We had a case of a failed spinal anesthetic that we had to convert to general anesthesia,” he says. “We used a Benson anesthesia machine with no ventilator, no ventilation monitoring parameters, and no end-tidal gas measurements. To top it off, the only available volatile agent was halothane.”

“We were also frequently recruited to assist in emergent situations with patients who were decompensating,” Dr. Poorsattar remembers. These cases occurred sometimes in the recovery areas and sometimes during emergency cesarean sections for placental abruption or uterine perforation. The team also helped on occasion with neonatal resuscitation attempts.

Off duty, Dr. Hong was especially impressed during his interactions with the local people “whether on the street, in a restaurant, or on safari,” he says. The entire MFH team had the opportunity to travel to the famous [Queen Elizabeth National Park](#), several hours away, for an overnight safari tour. The park is adjacent to two game reserves and is known for its wildlife



including the African bush elephant, hippopotamus, Nile crocodile, Cape buffalo, leopard, lion, chimpanzee, and hyena.

Judi Turner, MD, PhD, residency program director, reports that our residents will receive ABA training credit for their two weeks in Uganda, and that we plan to send two residents each year.



The full MFH team on safari

Dr. Poorsattar feels that the rotation was “one of the most significant moments of growth I have had during my anesthesia training.” Thinking back to all the patients, trainees, physicians and staff they worked with in Mbarara, she says, “I am so grateful for my experience and hopeful for the lasting positive impact on their lives.”

### The history of Medicine for Humanity

Leo Lagasse, MD, Professor Emeritus of Obstetrics and Gynecology at UCLA, was inspired to found MFH during a safari visit to Kenya in 1995, where he was moved by the plight of many women who lacked healthcare. For years, he led international teams in annual visits to provide gynecologic care in underserved areas and to train local surgeons and nurses in their specialized work. Dr. Tarnay made his first visit in 2009, and when Dr. Lagasse retired, he took on the leadership role. Dr. Regev explains that the teaching and training

mission, in addition to delivering high-quality care, differentiates MFH from other humanitarian organizations. This was her second trip to Uganda with MFH, and she hopes to return. “It’s what makes me so proud to be a part of the work this group is doing,” she says.

Donations to MFH have funded construction of the new 50-bed Centre for Gynecologic and Fistula Care, where our anesthesia team worked during their rotation. Before it was built, patients sometimes had to sleep on floors and in corridors, as the existing ward had only six beds. To learn more about UCLA’s collaboration with Medicine for Humanity, or to donate, please [visit the MFH website](#).

*Photographs courtesy of Molly Marker and Medicine for Humanity*

# Manuel Rosa-Garrido, PhD, Wins AHA Early Career Award

By Claire Winters



Congratulations to Manuel Rosa-Garrido, PhD, who is honored with the prestigious 2018 American Heart Association (AHA) Outstanding Early Career Investigator Award. Dr. Rosa-Garrido, Assistant

Project Scientist in the UCLA laboratory headed by Thomas Vondriska, PhD, was recognized both for the quality of his presentation and the potential impact of his work, “Elucidation of Gene Regulation Paradigms by Integrating Chromatin Architecture, Histone Marks, and DNA Methylation.” The award was presented at the Basic Cardiovascular Sciences 2018 Scientific Sessions in San Antonio, Texas.

The work studies “how the three-dimensional structure of the genome changes during the development of heart failure, and how these changes regulate the expression of the genes that trigger the disease,” says Dr. Rosa-Garrido. “We also found that cardiac-specific loss of the chromatin structural protein CTCF induces heart failure. Together, these findings suggest that remodeling is a promising target for therapeutic intervention.”

Dr. Rosa-Garrido is originally from the south of Spain and obtained his PhD in biomedicine from the University of Cantabria. There, he focused on ribosomal RNA transcription in cancer proliferation. He was recruited to the Vondriska Laboratory in 2012 as a postdoctoral fellow, where he shifted his focus to heart failure. The Vondriska Laboratory investigates the epigenomic mechanisms of cardiovascular disease.

After initially studying the reciprocal regulation of the cardiac epigenome, Dr. Rosa-Garrido’s current work focuses on how the 3D structure of the genome changes during the development of heart failure.

“The best part of working at UCLA is the work environment,” he says. “I have access to cutting-edge instrumentation and face-to-face interaction with experts in systems biology, epigenetics, and cardiology.” In addition, Dr. Vondriska’s support “has allowed me to develop my own project in a very independent manner and to share my work at national and international meetings: two essential elements for developing a successful career in research.”

Dr. Rosa-Garrido’s next step is to obtain research funding to facilitate his transition to principal investigator. “My ultimate career goal is to have my own research lab in academia where I can continue mentoring young scientists and improve the quality of life for patients with cardiovascular disease.”





# Department Highlights

## Faculty News, Appointments, and Updates



**Mansoureh Eghbali, PhD**, begins a new appointment as Director of the Basic Science Research Training Environment. Dr. Eghbali also serves as Director of the Physician-Scientist Training Program, and mentors junior physician scientists in the department.



**Thomas Vondriska, PhD**, and **Riccardo Olcese, PhD**, have agreed to serve as Co-Directors of Basic Science Research Program Administration. Along with Dr. Eghbali, they will lead basic science activities in the department.

The 2019 list of southern California “Superdoctors®” includes four UCLA faculty anesthesiologists: **Ihab Ayad, MD**, **Swati Patel, MD**, **Karen Sibert, MD, FASA**, and **Barbara Van de Wiele, MD**. Distributed each year by the LA Times Media Group, the list of 1900 physicians includes 28 anesthesiologists who were nominated by their peers and then selected by criteria including professional activities, leadership positions, academic achievements and “Star Search Credentials.”



**Maxime Cannesson, MD, PhD**, is the department’s new Director of Clinical Research. He continues to serve as Vice Chair for Perioperative Medicine.



**Christopher Wray, MD**, is now Chief of the Liver Transplant Anesthesia Division. Dr. Wray has served as the Associate Director of the Liver Transplant Anesthesia Service and Director of the Liver Transplant Anesthesia Fellowship since 2014. He takes over the role from **Randolph Steadman, MD, MS**, as Dr. Steadman’s responsibilities at the UCLA Simulation Center continue to grow.



**Keren Ziv, MD**, is the new Interim Director of the Neuroanesthesia Division, and **Jack Buckley, MD**, is now Associate Director of the Neuroanesthesia Division.



**Cristianna Vallera, MD**, was appointed Assistant Director of Quality/Performance Improvement for the UCLA Medical Center-Santa Monica Operating Rooms, and Medical Director for Obstetric Anesthesiology at Martin Luther King, Jr. Community Hospital.

**Eva Boyd, MD**, is the new Program Director of the Regional Anesthesia Fellowship. Dr. Boyd also serves as Assistant Director of Regional Anesthesia at UCLA Medical Center-Santa Monica.

**Natale Naim, MD**, was appointed Director of the Acute Pain Service at UCLA Medical Center, Santa Monica, in addition to her responsibility as Director of Regional Anesthesia at UCLA Medical Center-Santa Monica.

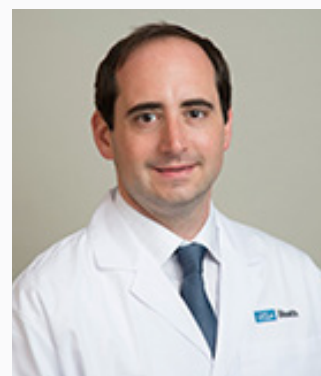
**Zarah Antongiorgi, MD**, was appointed Medical Director for the Post-Anesthesia Care Unit (PACU) at RRMCMC.

**Vadim Gudzenko, MD**, now serves as Associate Chief, Division of Critical Care.

**Eilon Gabel, MD**, was appointed Director of Informatics Operations and Chief Data Architect, Center of Excellence for Perioperative Analytics.



**Soban Umar, MD, PhD**, was awarded an American Thoracic Society (ATS) Foundation/Pulmonary Hypertension Research Fellowship grant for “miR-125b as a Novel Therapeutic Target in Pulmonary Hypertension Associated with Pulmonary Fibrosis.” Two of Dr. Umar’s students took honors in the recent 2018 UCLA Cardiovascular Symposium. Christian Makar took first place for his research poster in the undergraduate category, and PhD candidate Christine Cunningham won top honors for her poster in the graduate category.



**Eran Halperin, PhD**, and **Ira Hofer, MD**, were awarded a DGSOM seed grant for work in machine learning and the use of EMR and genetic data to predict postoperative outcomes.

**Philip Levin, MD**, chief medical officer at UCLA-Santa Monica, is the new Secretary of the California Society of Anesthesiologists, succeeding **Rima Matevosian, MD**.



## Selected Recent Publications



**Editor's note:** Our department continues its tradition of academic accomplishment with these recent publications. Every citation selected for mention here illustrates the results of months or years of work, and of course represents the authors' successful responses to multiple editors' questions and requests for revision. Congratulations to all our accomplished authors! For a more comprehensive view of our publications in clinical and basic science research, please visit the website for [UCLA Anesthesiology & Perioperative Medicine](http://UCLA Anesthesiology & Perioperative Medicine).

1. Kamdar N, Huverserian A, Regev A, Beck L, Mahajan A. **Telemedicine for Anesthesiologists: Preoperative Evaluation and Beyond.** ASA Monitor, October 2018.

*This article provides a comprehensive look at the state of telemedicine in anesthesiology. The authors examine the effects of smartphone use, reimbursement policies, and training needs. It also explains how our department has implemented telemedicine consultations and monitoring.*

2. Lee LK, Bernardo MKL, Grogan TR, Elashoff DA, Ren WHP. **Perioperative Respiratory Adverse Event Risk Assessment in Children with Upper Respiratory Tract Infection: Validation of the COLDS score.** Pediatric Anesthesiology, October 2018.

*The decision to proceed with anesthesia and surgery has been controversial in pediatric patients with an upper respiratory tract infection. The COLDS score was proposed by Lee and August as a potential risk stratification scheme. The aim of the study was to evaluate the utility of the COLDS score in predicting perioperative respiratory adverse events and optimize its predictive ability. The COLDS score has the potential to be a valuable risk assessment tool for prediction of perioperative respiratory adverse events and appears to have a better predictive value in certain subpopulations.*

3. Lee LK, Burns RA, Dhamraits RS, Carter HF, Vadi MG, Grogan TR, Elashoff DA, Applegate RL 2nd, Iravani M. **Retrospective Cohort Study on the Optimal Timing of Orogastric Tube/Nasogastric Tube Insertion in Infants with Pyloric Stenosis.** Anesthesia and Analgesia, September 2018.

*Hypertrophic pyloric stenosis in infants can cause a buildup of gastric contents. Orogastric tubes (OGTs) or nasogastric tubes (NGTs) are often placed in patients with pyloric stenosis before surgical management to prevent aspiration. However, exacerbation of gastric losses may lead to electrolyte abnormalities that can delay surgery, and placement has been associated with increased risk of postoperative emesis. In this multicenter retrospective cohort study, data were extracted from the medical records of 481 patients who underwent pyloromyotomy for infantile hypertrophic pyloric stenosis from March 2013 to June 2016. The study concluded that OGT/NGT placement on admission for pyloric stenosis is associated with a longer time to electrolyte correction in infants with abnormal laboratory values on presentation and, subsequently, a longer time until they are ready for surgery.*

4. Jun H, Vacas S, Feng X, Lutrin D, Uchida Y, Lai IK, Maze MI. **Dexmedetomidine Prevents Cognitive Decline by Enhancing Resolution of High Mobility Group Box 1 Protein-Induced Inflammation through a Vagomimetic Action in Mice.** *Anesthesiology*, May 2018, Vol.128(5): 921-931.

*Inflammation initiated by damage-associated molecular patterns has been implicated for the cognitive decline associated with surgical trauma and serious illness. We determined whether resolution of inflammation mediates dexmedetomidine-induced reduction of damage-associated molecular pattern-induced cognitive decline. Conclusion: Dexmedetomidine resolves inflammation through vagomimetic (neural) and humoral pathways, thereby preventing damage-associated molecular pattern-induced cognitive decline.*

5. Methangkool E, Howard-Quijano K, Mahajan A. **Cardiac Dysrhythmias: Understanding Mechanisms, Drug Treatments, and Novel Therapies.** *Advances in Anesthesia*, December 2018, Vol 36(1):181-199. Epub September 27, 2018.

*This review article describes the mechanisms for cardiac arrhythmia generation and delineates different types of dysrhythmias that can occur under anesthesia. Potential medical and interventional therapies for these arrhythmias are also discussed.*

6. Gabel E, Shin J, Hofer I, Grogan T, Ziv K, Hong J, Dhillon A, Moore J, Mahajan A, Cannesson M. **Digital Quality Improvement Approach Reduces the Need for Rescue Antiemetics in High-Risk Patients: A Comparative Effectiveness Study Using Interrupted Time Series and Propensity Score Matching Analysis.** *Anesthesia & Analgesia* December 2018. Doi: 10.1213/ANE.0000000000003828. Epub ahead of print.

*Postoperative Nausea and Vomiting (PONV) affects 30% of all surgical patients and can lead to patient dissatisfaction, prolonged recovery times, and unanticipated hospital admissions. We hypothesized*

*that an electronic medical record-based clinical decision support (CDS) approach that incorporates a new PONV pathway, education initiative, and personalized feedback reporting system can decrease the incidence of PONV. The study showed a decrease in incidence of PONV after implementation of the CDS.*

7. Lee LK, Woodfin MY, Vadi MG, Grogan TR, Ross PJ, Applegate RL 2nd, Iravani M. **A comparison of postoperative outcomes with PDA ligation in the OR versus the NICU: a retrospective cohort study on the risks of transport.** *BMC Anesthesiology* December 2018. doi: 10.1186/s12871-018-0658-6. <https://www.ncbi.nlm.nih.gov/pubmed/30579349>

*This study aimed to determine whether PDA ligations in the NICU corresponded to higher risk of surgical site infection or mortality and if transport was associated with worsened perioperative outcomes. The study found no increased risk. There was an increased incidence of hemodynamic instability in the OR group on transport back to the NICU. Larger multicenter studies following long-term outcomes are needed to evaluate the safety of performing all PDA ligations in the NICU.*

8. Iorga A, Umar S, Ruffenach G, Aryan L, Li J, Sharma S, Motayaghani N, Nadadur RD, Bopassa JC, Eghbali M. **Estrogen rescues heart failure through estrogen receptor Beta activation.** *Biology of Sex Differences*. 2018 October 30;9(1):48. doi: 10.1186/s13293-018-0206-6. <https://www.ncbi.nlm.nih.gov/pubmed/30376877>

*Recently, we showed that exogenous treatment with estrogen (E2) rescues pre-existing advanced heart failure (HF) in mice. Since most of the biological actions of E2 are mediated through the classical estrogen receptors alpha (ERα) and/or beta (ERβ), and both these receptors are present in the heart, we examined the role of ERα and ERβ in the rescue action of E2 against HF. The study showed that E2 treatment rescues pre-existing severe HF mainly through ERβ. Rescue of HF by ERβ activation is also associated with stimulation of cardiac angiogenesis, suppression of fibrosis, and restoration of hemodynamic parameters.*





Our highly productive machine-learning research team: Vali Salari, Olivia Vallejo, Sophia Hocini, Maxime Cannesson, Drew Cheng, Emily Walters, Ira Hofer, Cecilia Canales, James Moore, Claudia Bueno

9. Pantazis A, Westerberg K, Althoff T, Abramson J, Olcese R. **Harnessing photoinduced electron transfer to optically determine protein sub-nanoscale atomic distances.** Nature Communications. 2018 November 9. doi: 10.1038/s41467-018-07218-6. <https://www.ncbi.nlm.nih.gov/pubmed/30413716>

*Proteins possess a complex and dynamic structure, which is influenced by external signals and may change as they perform their biological functions. We present an optical approach, distance-encoding photoinduced electron transfer (DEPET), capable of the simultaneous study of protein structure and function. We report the first implementation of DEPET on human large-conductance K<sup>+</sup> (BK) channels under voltage clamp. We describe conformational rearrangements underpinning BK channel sensitivity to electrical excitation, in conducting channels expressed in living cells. Finally, we validate DEPET in synthetic peptide length standards, to evaluate its accuracy in measuring sub- and near-nanometer intramolecular distances.*

10. Li H, Li Q, Zhang Y, Liu W, Gu B, Narumi T, Siu KL, Youn JY, Liu P, Yang X, Cai H. **Novel Treatment of Hypertension by Specifically Targeting E2F for Restoration of Endothelial Dihydrofolate Reductase and eNOS Function Under Oxidative Stress.** Hypertension 2019 Jan;73(1):179-189. doi: 10.1161/HYPERTENSIONAHA.118.11643. <https://www.ncbi.nlm.nih.gov/pubmed/30571557>

*We have shown that hydrogen peroxide (H<sub>2</sub>O<sub>2</sub>) downregulates tetrahydrobiopterin salvage enzyme DHFR (dihydrofolate reductase) to result in eNOS (endothelial NO synthase) uncoupling and elevated blood pressure. Here, we aimed to delineate molecular mechanisms underlying H<sub>2</sub>O<sub>2</sub> downregulation of endothelial DHFR by examining transcriptional pathways hypothesized to modulate DHFR expression and effects on blood pressure regulation of targeting these novel mechanisms. The study showed that endothelial DHFR is downregulated by H<sub>2</sub>O<sub>2</sub> transcriptionally via an E2F-dependent mechanism, and that specifically targeting E2F1/2/3a to restore DHFR and eNOS function may serve as a novel therapeutic option for the treatment of hypertension.*

# 2019 CSA ANNUAL MEETING INNOVATIONS IN ANESTHESIOLOGY



LEARN FROM THE MOST RESPECTED  
PHYSICIAN ANESTHESIOLOGISTS ABOUT  
ANESTHESIOLOGY AND PERIOPERATIVE CARE



California Society of  
**ANESTHESIOLOGISTS**  
*Physicians for Vital Times*

Paradise Point  
Hotel and Resort  
**SAN DIEGO**

**MARCH 7-10  
2019**



# Different Roads Lead to Success in Professional Societies

by Emily Methangkool, MD, MPH

Do you have what it takes to become president of your state anesthesiology society?



Drs. Karen Sibert and Linda Hertzberg, past CSA Presidents

On a sunny afternoon during the 2018 ASA annual meeting, five previous society presidents gathered to share their perspectives on their pathway to leadership. Their panel presentation, titled “You Can Become Your State Society President! Five Women Discuss Pathways, Pitfalls, and Leadership Development,” was moderated by Linda Hertzberg, MD, FASA, California Society of Anesthesiologists (CSA) past president and current ASA Director from California, and featured Karen Sibert, MD, FASA, CSA immediate past president and our department’s Director of Communications.

The previous society presidents all had excellent advice to share. Dr. Hertzberg began the panel by stating, “Expect the unexpected – you never know where life will lead you.” She advised finding a niche – for example, communications, advocacy, practice management, etc. – and getting involved.

For Maxine Lee, MD, MBA, FASA, immediate past president of the Virginia Society of Anesthesiologists and current ASA Director from Virginia, getting involved was easy – at every turn, she found leaders in her society enthusiastic and welcoming. Whenever she asked for help she got it. At the same time, she emphasized, “You can’t have it all; there are opportunity costs. Continued success revolves around finding the proper balance.”

Rose Berkun, MD, FASA, and immediate past president of the New York State Society of Anesthesiologists, echoed Dr. Hertzberg and Dr. Lee. She agreed with becoming an expert in a certain area, but said, “No matter what you choose, you have to be passionate and authentic.”

Although getting involved early may lead to more opportunities, it is never too late. “Say yes when the opportunity presents,” Dr. Berkun recommended, “and believe in yourself!” Dr. Berkun noted that it is important for women to fight imposter syndrome, be proactive, show initiative, and not to fear failure. Most importantly, be open-minded and willing to learn.

Deborah Plagenhoef, MD, faced additional challenges as only the sixth female president of the Texas Society of Anesthesiologists since it was founded in 1936. For men and women, she advised, it is important to prove oneself – do more than the others. Be assertive, voice your opinions, but also be willing to contribute to solutions. Dr. Plagenhoef said,

“Be seen – make yourself invaluable due to your expertise and passion. Stand out in unexpected ways,” Dr. Plagenhoef recommended.

Dr. Sibert closed out the panel by detailing her pathway to the presidency. Part luck, part timing, she moved from being involved at the committee level to Assistant Secretary, then Secretary. However, few secretaries had moved on to the presidency in the past. Dr. Sibert found that she needed to learn more about advocacy, legislation, and the business affairs of the society. By getting more involved in all those areas – especially in the issue of safe pediatric dental anesthesia – and being present whenever needed, her route ultimately led to her tenure as president in 2017-18.

These five previous society presidents all followed very different paths to leadership, but all were enthusiastic and embraced opportunities when they became available. They took initiative and delivered what they promised. In the end, it allowed them to move to the top of the governance of their respective societies. Despite the completion of their terms, they continue to be involved in both their state societies and the ASA, showing that there is always more to do and exemplifying leadership for both men and women.



# Our High School Outreach Begins Third Successful Year

By Christine Nguyen-Buckley, MD

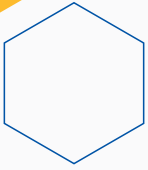
UCLA Anesthesiology continues in its third successful year providing outreach to three Los Angeles-area public high schools: El Segundo High School, the Girls Academic Leadership Academy (GALA), and Venice High School. This is a unique collaboration involving our department, the California Society of Anesthesiologists (CSA), and Project Lead the Way, a nonprofit organization supporting STEM (Science, Technology, Engineering, and Math) education.

A highly successful part of this initiative occurs when our residents visit classrooms in participating

high schools. The residents engage high school students in educational sessions about medicine and anesthesiology. This unique curriculum, involving hands-on demonstrations with an airway mannequin and hand-held ultrasound, was developed by Dr. Sophia Poorsattar (CA-3), and is being adapted for use at other academic centers.

Both students and teachers are very enthusiastic about these educational sessions! Said Ms. Emma Gallagher, a teacher at Venice High School, “It was such a gift for my students to have access to such incredible presenters and medical professionals.”





“The kids absolutely love hearing about the passion your doctors have, the pathway they took to get there, and what anesthesiology entails,” said Ms. Donna Tucker, a former nurse who is now an El Segundo High School science teacher.

The high school visits are a highlight of the year for our residents as well.

“I had the absolute best time participating in the Project Lead the Way program,” said Dr. Monica Miller, a CA-3 resident. “The students were so smart and engaging. They asked such great questions and seemed to really enjoy learning more about our field of medicine.”

Another component of this partnership involves high school students visiting UCLA. Last spring, students from El Segundo High School toured the UCLA Simulation Center. Ms. Tucker said her students were very excited and impressed with hearing about how each resident came into the field of anesthesiology.

“We simply could not have asked for a more engaging learning opportunity – not one cell phone came out during the simulation!” Ms. Tucker said.

Our department is in the process of planning UCLA Simulation Center class visits for 2019. We look forward to continuing and expanding our successful collaboration. We would like to thank our department for supporting this program, including the staff in the Education Office, the residents and faculty who have volunteered their time, and the OR scheduling team, all of whom have made these visits possible.

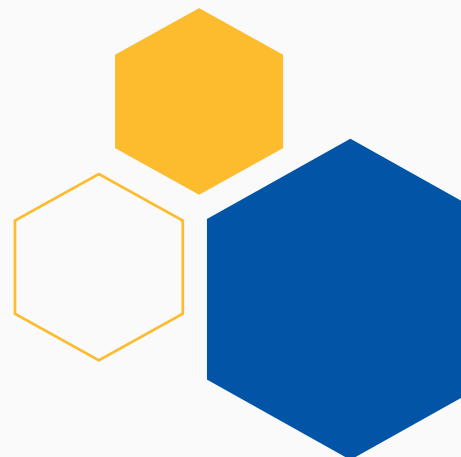


**IMAGES. left:**

Drs. Aanchal Prakash, CA-1, and Ben Kwitken, CA-3, at El Segundo HS

**Right:**

Dr. Martha Ramirez, CA-3, shows GALA students how to start an IV  
Dr. Monica Miller, CA-3, demonstrates intubation



# Expert Help in the Psychotherapy of Pain

By Claire Winters



To treat the multiple facets of pain – emotional and social as well as physical – our Director of the UCLA Comprehensive Pain Centers, **F. Michael Ferrante, MD**, created a new “Psychology of Pain” program to enhance our collaborative, multimodal,

holistic approach to pain treatment.



**Julie Wu, LCSW**, is the program’s outpatient therapist. She helps patients develop coping skills to reduce the emotional suffering that accompanies pain, and teaches them techniques to improve their functionality and quality of life. Her primary

treatment modality is “Cognitive Behavioral Therapy” (CBT), in which the therapist helps the patient develop coping strategies by adjusting thoughts, beliefs and attitudes. This helps the patient replace “maladaptive” behaviors with “adaptive” ones that can help achieve the patient’s self-defined goals.

## Working with the Skeptical Patient

For patients resistant to the therapeutic process, Ms. Wu uses “Motivational Interviewing” to build rapport

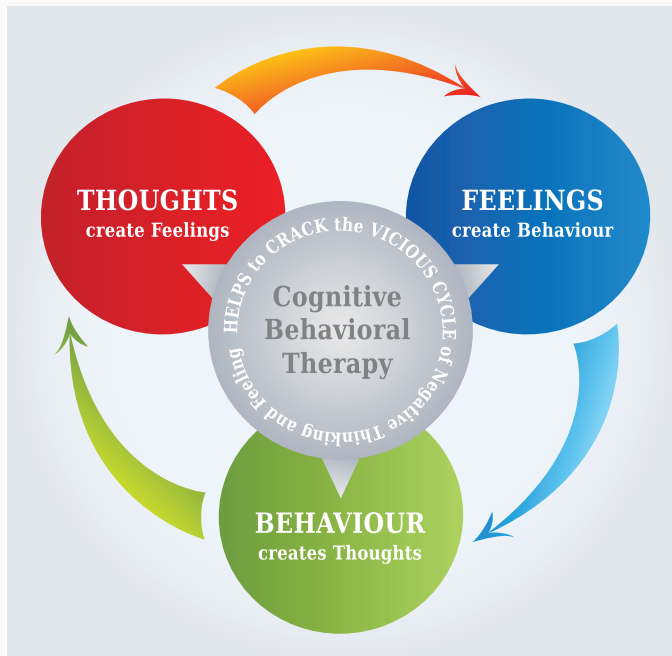
and trust before they’re ready to engage in intensive CBT. These patients, usually referred to therapy by their physicians, often enter with a skeptical attitude, asking, “What are you going to do for me?”

Motivational interviewing, developed in the 1990s to help problem drinkers overcome resistance to treatment, “is an engagement strategy that helps patients see how therapy can facilitate their goals,” says Ms. Wu. “I meet them where they’re at, and I dig slowly.”

The strategy helped her work with a patient who had been in a disfiguring car accident. In addition to the pain from her injuries, the patient suffered from a loss of self-esteem since she had derived much of her self-worth from her looks. To make matters worse, “her boyfriend left her because she wasn’t pretty anymore,” Ms. Wu explained. By building rapport and expressing empathy, she earned the patient’s trust, and the patient began to open up to the possibility that therapy could be beneficial. At that point, Ms. Wu had her buy-in to begin therapy.

Other obstacles may arise when a patient suffers from post-traumatic stress disorder or has a history of substance abuse. For these patients, Ms. Wu may begin treatment with exercises from the “Seeking Safety” curriculum. Developed in the early 1990s by Lisa M. Najavitz, PhD, “Seeking Safety” teaches present-moment coping skills that avoid trapping the patient in a constant replay of traumatic events. Many of its 25 topics incorporate meditation, mindfulness, and self-compassion. Titles include “Creating Meaning,” “Healing from Anger,” and “Coping with Triggers.”





As patients gain self-awareness by working through the topics, they identify goals that treatment can help them achieve, she explained, “such as a patient whose driver’s license has been revoked due to drug use and wants to drive again.” The patient can then engage in a course of CBT to work toward concrete behavioral changes in daily life.

## Innovation and Collaboration

Ms. Wu completed undergraduate work at UC Davis and received her master’s degree in social work from the University of Southern California. Prior to joining UCLA, she worked in community health care clinics and hospitals with many transient clients whose social needs were unmet. The work helped her develop the skills to assess clients efficiently and help them build mental resources.

“Mental health care is not always available in medical settings. It was an exciting opportunity when Dr. Ferrante established this program to treat the pain patient holistically,” Ms. Wu says. “There is growth and collaboration, and UCLA is leading the way.” She was

drawn to UCLA to work with its innovative, talented staff and physicians, and to treat regionally, culturally, and economically diverse patients.

As challenging as it is to see patients in crisis, she believes that continued advancements in mental health and the treatment of pain are creating profound improvements in patients’ quality of life.

“I have patients using the coping tools we develop in therapy. They recognize their stressors in daily life and implement these tools. They are seeing that it’s working, and that it’s something they can do easily and for the rest of their lives. When they become self-empowering, that’s when there’s the most progress,” she says.

*Patients interested in pain psychotherapy may call 310-794-1781 for more information. Patients may also discuss their symptoms with their primary physicians who may make referrals for pain psychotherapy at the UCLA Comprehensive Pain Center in Santa Monica.*







# UCLA Nurse Anesthetists: Teamwork On and Off Duty!

By Lauren Fagan, CRNA, MSN

Our nurse anesthetist team continues to expand, welcoming colleagues from across the country with diverse backgrounds and levels of experience. As 2019 begins, we have a total of 45 staff anesthetists covering all of our campuses.

**Christopher Weitekamp, CRNA, MSN**, joined our team in November after earning his MSN degree through the California State University Fullerton and the Kaiser Permanente School of Anesthesia. His interests include multimodal pain management and opioid-sparing techniques. In his personal time, he enjoys traveling, staying active, and caring for his pets.



As our CRNA family grows, we have taken the initiative to get together at least once a month to participate in wellness activities to stay balanced while getting to know each other outside of the OR. We regularly attend yoga classes taught by **Lisa Saubert, RN**, who

works in the MPU. Last month's class was a "goat yoga" session, where real goats actually participated and interacted with the class! "The goats walk around and walk under you or get on top of you to make the pose more challenging or just make it lighthearted!"

explained **Debbie Paris Teho, CRNA**. "They will walk under you as you do your downward dog, or hop on your back to make you engage your core more! Super fun experience!!"

**Jacqui Becerra, CRNA, MSN**, organized a Santa Monica beach day to round out the summer for the nurse anesthetists where we picnicked, played games, and got to know the new CRNAs and their families. **Alison Goltermann, CRNA, MSN**, coordinated a group to run in the Annual Santa Monica/ Venice Christmas Run, which offers the option of a 5k or 10k – and everyone dresses in holiday gear.

On November 3, several of us participated in the "Light the Night" fundraiser walk for the Leukemia and Lymphoma Society. Our team was led by **Gena Dix, CRNA, MSN**, and many of us helped raise money for the cause, surpassing our donation goal. Way to go, team!



#### IMAGE, left:

Alison Goltermann, Rose Cheung, Jacqui Becerra, Amy Szymkovich, and Courtney Jolin at Santa Monica-Venice Christmas run

#### This page:

Rose Cheung and new friend at goat yoga!

Debbie Paris Teho, Lauren Fagan, Jacqui Becerra, and Gena Dix

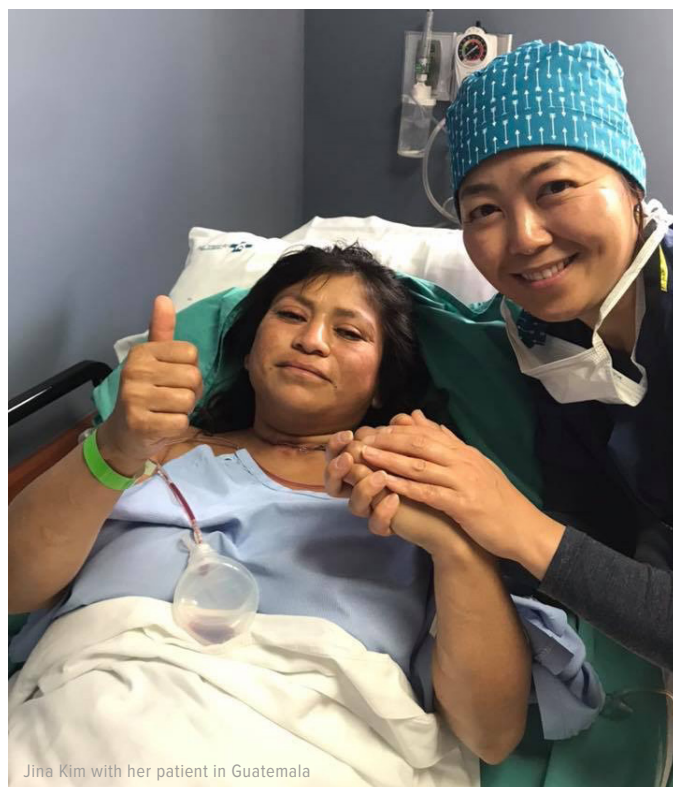
While we enjoy socializing, we also emphasize the importance of staying active professionally. In September, **Natalia MacDougall, CRNA, MSN**, spoke at the Ophthalmic Anesthesia Society Conference in Chicago. Her lecture was titled “Beauty Is in the Eye” and included practices for improving patient satisfaction and the associated costs and benefits.

**Sal Tafoya, CRNA, MS**, taught a pediatric cardiac anesthesia lecture to USC student nurse anesthetists this fall. We have a close relationship with nurse educators in multiple departments to increase patient safety throughout the perioperative services. Many of our nurse anesthetists continue to help provide educational courses for our UCLA nursing departments including “Procedural Sedation” and “Airway Management,” which are both highly requested and well attended.



**Erica McCall, CRNA, MSN**, joined the USC Program of Nurse Anesthesia faculty in July 2016 to create and teach a new course called “Epidemiology and Public Health” as the program transitions from a Master’s to a Doctor of Nurse Anesthesia Practice (DNAP). She received a promotion last July; along with

teaching her new course, she now provides academic oversight to all the clinical sites where the students rotate. Erica was asked to lecture at a Neurosurgery Grand Rounds about our procedural sedation policy, and she finished her Master of Public Health this year! She has certainly been busy, and we are very proud of all she has accomplished.



Our group continues to strive to do our part supporting healthcare for the underserved internationally. Two of our nurse anesthetists served on medical mission trips this year. **Jina Kim, CRNA, MSN**, recently joined Operation International Team ENT, a group of 18 other medical professionals, in Guatemala City where they performed 70 surgeries in early November. Surgeries included cleft lip and cleft palate repair, lipoma resections, and thyroid and goiter surgeries. This was her first mission trip as a nurse anesthetist, and we are thrilled she was able to participate in such an extraordinary experience and represent UCLA Health.

**Erica McCall, CRNA, MSN**, traveled to El Salvador last spring with FUDEM, a private nonprofit organization that provides free vision services, glasses, and ophthalmic surgery for people in need. They drove



in big vans to schools up in the mountains to do eye examinations. The kids were able to choose a frame, and a week later they had the glasses delivered. She did a collection at her own children's schools and was able to bring over 300 AYSO (American Youth Soccer Organization) jerseys to give to schoolchildren in El Salvador. What a special way to give back internationally!



Karen Chou and her husband with baby Lily

Our “team” grows outside the health system as well, as we welcomed a new baby to our UCLA family.

**Karen Chou, CRNA, MSN**, and husband Artie are proud new parents of their beautiful daughter, Lily Blake Chou, born November 18.

Our nurse anesthetists continue to find ways to help streamline and advance our role within the department, give back to the community, and strengthen the future of our profession. It is an honor to work with each one of them. We look forward to seeing what this dynamic group will do next!

**IMAGES, right, top to bottom:**

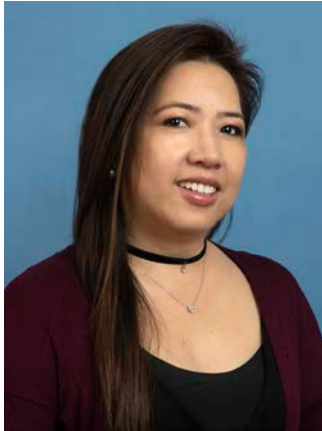
At our holiday brunch

Ready for yoga class

Debbie Paris Teho, Huy Vo, and Chris Weitekamp



# Welcome to Our Newest Administrative Staff Members!



**Carmen Cynthia Abuel** goes by the nickname “Menchie” and joined the department as an Administrative Specialist in October. Prior to joining UCLA, she worked for G-PATH Medical Associates, a pathology group affiliated with Integrated Oncology/ LabCorp/Covance, as a

Senior Administrator and Practice/Site Manager. In her free time, she enjoys traveling around the world, exploring different cuisines, cooking her specialty flan, and other creative projects.

**Carlos Mendez** joined the department in September as a Work-Study Assistant to assist with the coordination of Grand Rounds, among other duties. He is currently contemplating switching to Neuroscience as his major, albeit he enjoys his current major, which is Molecular and Cell Developmental Biology. Outside of work and academics, he enjoys reading, listening to interesting podcasts, peanut butter, and running. He aspires to run a sub-four-minute mile and a sub-fifteen 5K in the future.

**Negar Mosallanejad** joined the Anesthesiology HR- Academic Personnel Office in February 2018. She assists Eli Paray and Christine Sana in creating dossiers for faculty who are up for review. She is a senior majoring in Gender Studies and pre-optometry. Prior to joining our department, she worked for Santa Monica College’s Accounts Payable office. Her interests are traveling and meeting new people.

**Hailemariam Teshome** joined the department as a student intern in September in the Bioinformatics and Health Analytics division. He works on machine-learning and database-related projects. He is currently a senior studying Neuroscience and aspires to do research in bioinformatics and neural electronics. In his free time, he likes to go bouldering, play competitive Catan (a multiplayer strategy game in which players compete to build settlements and accumulate resources), and watch detective mysteries.



**Knarik Piloyan** joined the business office team with the Float Pool Administrative Team hoping to find a compatible department to develop her career path. She now fills a role recently vacated by **Daniel Vasquez**, who moved to a private practice environment

while pursuing a master’s degree. Prior to UCLA, Knarik worked at a hospice as an office manager while finishing up her Bachelor’s Degree in Public Health from California State University, Northridge. She is currently working on her Executive Master’s in Health Administration degree at USC. In her free time, she likes to go to new restaurants, binge-watch shows, and go on new adventures.





# A Holiday Celebration with a Spectacular View

Our entire department came together after work on December 14 for a wonderful holiday celebration on the top floor of the Hotel Angeleno with its panoramic view. Everyone enjoyed an excellent buffet and a spectacular view of the 405 freeway with all the traffic we didn't have to fight! Many thanks to Shevaughn Marchese, Carla Gonzalez, and all the staff who helped coordinate a memorable event.

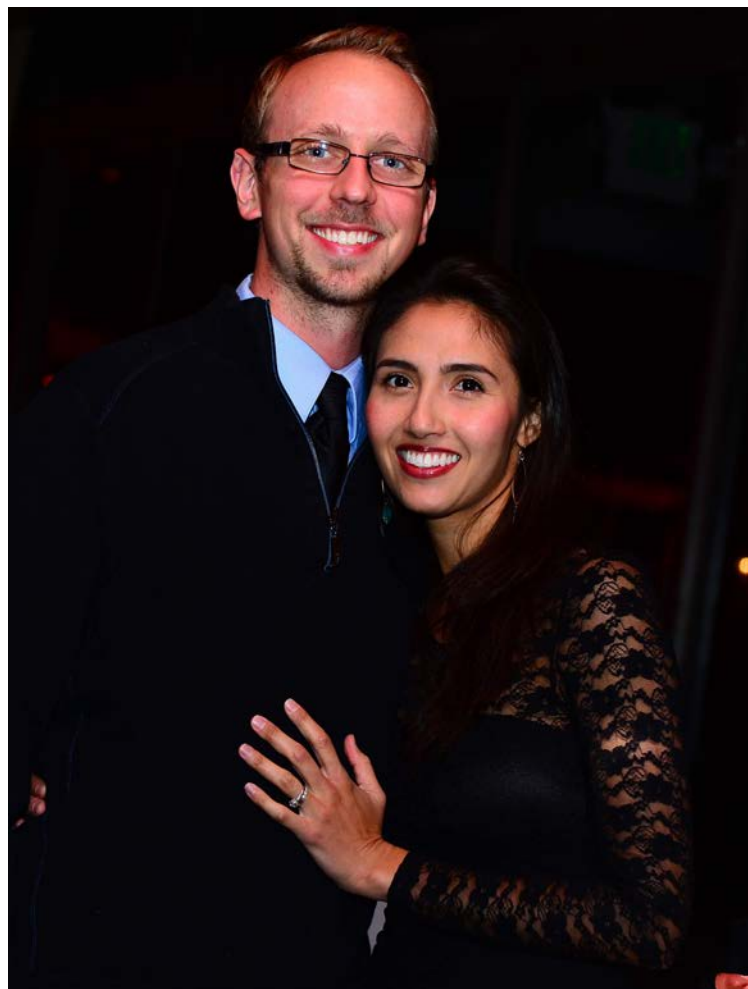
*(Photography by Rick Schmitt)*











---

# A Memorable Keynote Address, and a Handshake with Bill Clinton

The 7th Annual World Patient Safety, Science & Technology Summit featured Dan Cole, MD, FASA, a clinical professor in our department and former ASA President, as a keynote speaker. In his address, titled “Our Dream...It Starts Now,” Dr. Cole talked about the critical need for patients to know they are safe, and for all of us in healthcare to “walk with patients across the quality chasm.”

“Trust is the foundation of our specialty,” Dr. Cole told listeners. “Safety is the bedrock upon which the quality pillars stand.”



At the meeting, Dr. Cole enjoyed meeting former President Bill Clinton, and introduced himself as “Dan Cole from the American Society of Anesthesiologists.” Mr. Clinton made a complimentary remark about ASA, Dr. Cole said, and later gave a “shout-out” to physician anesthesiologists and our profession during his own keynote address later in the day.

Three of our CA-3 residents, Drs. Albert Feng, Ray Machi, and Nikki Yin, also attended the conference and helped as volunteers. Dr. Cole introduced them to Dr. Jannicke Mellin-Olsen, the President of the World Federation of Societies of Anesthesiologists (WFSA), who is a full-time practicing anesthesiologist in Norway.

Dr. Cole is a founder of the ASA Perioperative Brain Health Initiative, which focuses on efforts to reduce postoperative delirium. This condition can occur in up to 60 percent of high-risk patient populations, especially the elderly, and leads to increased mortality and morbidity including long-term cognitive decline and potential acceleration of dementia. Dr. Cole said that postoperative delirium is a \$150 billion problem in the US, and as many as 40 percent of cases are deemed preventable.

“It’s a very compelling patient safety target,” Dr. Cole said. He made reference in his talk to the famous report “[To Err is Human](#),” published by the Institutes of Medicine in 1999, which spotlighted the harm to thousands of patients caused by medical errors.

“That was the pivotal point in which we moved from the Stone Age into the Bronze Age in patient safety,”





Dr. Cole said. “And now we have the opportunity to move into the golden era.”

Dr. Cole explained that anesthesiology has an outstanding legacy of working to prevent medical errors, but now we must expand our work in the domain of preventable harm. Change management is complex and challenging, he said, but “it is critical that we always articulate the sense of urgency if we want to advance change.”

The World Patient Safety, Science & Technology Summit is sponsored by the non-profit Patient Safety Movement Foundation, with the ultimate goal of reaching zero preventable patient deaths. The Foundation asks hospitals and healthcare professionals to implement its roster of “[Actionable Patient Safety Solutions](#),” which include creating a culture of safety, reducing healthcare-associated infections, monitoring for opioid-induced respiratory depression, and reducing unnecessary blood transfusions.

This year’s January meeting in Huntington Beach was co-convened by ASA and the European Society of Anaesthesiology. It featured keynote addresses from public figures and patient safety experts including Peter Pronovost, MD, PhD, the anesthesiologist who has made a science of improving patient safety with consistent implementation of evidence-guided checklists.



**IMAGES, left:**

Dr. Cole with President Clinton

**This page:**

Drs. Ray Machi, Albert Feng, Dan Cole, and Nikki Yin

With Dr. Jannicke Mellin-Olsen, WFSA President

---

# With Your Help Through Giving...

The UCLA Department of Anesthesiology and Perioperative Medicine has the potential to advance research, make anesthesia even safer, diagnose risk factors, prevent complications, and give every patient hope for a quick return to health and full activity.

Your generosity can help make this possible through multi-year pledges, outright gifts, commemorative gifts, planned giving such as trusts and bequests, and endowed giving. Please consider a gift as part of your year-end tax planning.

## ONLINE:

Please visit our website to donate:

<https://www.uclahealth.org/anes/giving>

## MAIL:

Please make your check or money order payable to the UCLA Foundation, and write "Department of Anesthesiology" in the memo line.

## PLEASE ADDRESS THE ENVELOPE TO THE ATTENTION OF: Stephanie Fisher, Chief Administrative Officer

Dept. of Anesthesiology Business Office  
10833 Le Conte Ave., BH 714 CHS  
Los Angeles, CA 90095-7115

## PHONE:

Please call 310-267-8679



# Thank you!