

SUMMER 2018 EDITION
UCLA DEPARTMENT OF ANESTHESIOLOGY & PERIOPERATIVE MEDICINE



David Geffen
School of Medicine

UCLA Health



Open Circuit

EDITOR: KAREN SIBERT, MD, FASA
ASSISTANT EDITORS: SHEVAUGHN MARCHESE, CLAIRE WINTERS

Contents

3

FROM THE CHAIR'S DESK

By Barbara Van de Wiele, MD,
Interim Chair

18

UPCOMING EVENTS

JOIN US IN SAN FRANCISCO
FOR ANESTHESIOLOGY 2018

LEARN – OR BRUSH UP
ON – PERIOPERATIVE
ULTRASOUND AT THE BEACH!

24

ACUTE PAIN? WE'VE GOT THIS UNDER CONTROL

By Peter Jin, MD, and Natale
Naim, MD

31

OUR COMMUNITY PAIN CLINICS EXPAND ACCESS TO CARE

By Claire Winters

38

INNOVATIVE PEER NETWORK OFFERS HELP AFTER STRESSFUL EVENTS

By Claire Winters

4

CONGRATULATIONS TO THE CLASS OF 2018!

GRADUATION AWARDS

UCLA ANNUAL SCIENTIFIC
EVENING: RESIDENT AND
FELLOW RESEARCH TAKES
CENTER STAGE

22

HIGH SCHOOL STUDENTS ENJOY HANDS-ON ANESTHESIOLOGY EXPERIENCE

28

TREATED LIKE ROYALTY! OUR VISIT TO CHINA

By Karen Sibert, MD, FASA

32

DEPARTMENT INITIATIVES SHINE AT QUALITY COUNCIL PRESENTATION

By Claire Winters

40

OUR ANNUAL REUNION OF UCLA WOMEN IN ANESTHESIOLOGY

43

OUR FAR-FLUNG ALUMNI: WHERE ARE THEY NOW?

By Shevaughn Marchese

10

DEPARTMENT HIGHLIGHTS

FACULTY, FELLOW, AND RESIDENT HONORS

MAXIME CANNESSON, MD,
PHD, AND TEAM DEVELOP
MACHINE-LEARNING
ALGORITHM TO PREDICT
HYPOTENSION

WELCOME TO OUR NEWEST
FACULTY PHYSICIANS!

SELECTED RECENT
PUBLICATIONS

26

COMPLEX CARE TEAM DELIVERS RESULTS IN CRITICAL SITUATION

By Claire Winters

34

NURSE ANESTHETISTS: OUR VITAL, GROWING TEAM

By Shelly Anderson, CRNA

42

STAFF NEWS AND UPDATES

45

WITH YOUR HELP THROUGH GIVING–

COVER IMAGE
The Class of 2018

From the Chair's Desk

By Barbara Van de Wiele, MD | Interim Chair

As another academic year has come to a close and a new one begins, now is a perfect time to reflect on the progress of our UCLA Department of Anesthesiology and Perioperative Medicine, and consider where we are going from here.

We have seen change recently, with the departure of our former chair, Aman Mahajan, MD, PhD, MBA. The Dean's Office plans to initiate a chair search in the near future, and in the meantime, it is my honor to take on the challenging work of the Interim Chair position.

Fortunately, our department enjoys strong support from UCLA leadership and a secure financial position. Even more important, we have outstanding leaders in all our divisions and services engaged every day in the clinical, academic, and teaching missions that define us. They lead in our operating rooms, intensive care units, and community pain medicine centers. They are defining the state of the art of enhanced recovery, coordinated complex care, and the practice of opioid-sparing pain medicine. Their combined efforts ensure continuity, stability and success for all of us at UCLA.

Our department excels in so many dimensions, as you will see in this summer's edition of *Open Circuit*.

We have just graduated another class of outstanding residents and fellows, several of whom will be staying on to join our faculty:

- Lauren Beck, MD, in Perioperative Medicine
- Jason Hirsch, MD, in Obstetric Anesthesiology
- Tiffany Williams, MD, PhD, in Cardiac and Pediatric Cardiac Anesthesiology
- George Lim, MD, and Michael Wolfe, MD, in Critical Care
- Samantha Wong, MD, in Pain Medicine and Regional Anesthesiology.

A number of our residents will stay at UCLA in our fellowship programs, while others will join private practices or pursue fellowship training at other academic centers.

In professional leadership, our department is proud to be the home of former ASA President Daniel Cole, MD, and three former CSA Presidents: James Moore, MD, Johnathan Pregler, MD, and Karen Sibert, MD, FASA. Phillip Levin, MD, is the current CSA Assistant Secretary, and is sure to rise in CSA's leadership ranks, while Rima Matevosian, MD, of Olive View-

UCLA Medical Center, serves currently as CSA Secretary. Many of our faculty members are involved in the ASA and CSA committee work that supports the best interests of our profession and our patients at the statewide and national levels.

Research will define anesthesiology's value in the developing future of healthcare. We have enjoyed remarkable success in research grants and awards:

- UCLA Critical Care Center 2018 Research Award given to **Lisa Lee, MD, MS**, for her research in pediatric outcomes after ARDS;
- UCLA Council on Research Grant awarded to **Susana Vacas, MD, PhD**, for her highly original work in neurosurgical anesthesia;
- An NIH-K08 mentored research career grant awarded to **Kimberly Howard-Quijano, MD, MS**, to study "Spinal Neuraxial Modulation of Ventricular Arrhythmias: Mechanisms and Treatment";
- American Society of Regional Anesthesia and Pain Medicine (ASRA) Young Investigator Award given to **Delara Brandal, MD**, one of this past year's chief residents who will stay on at UCLA for fellowship training in regional anesthesiology;
- First Place Oral Presentation at this year's Western Anesthesia Residents' Conference (WARC), awarded to now CA-2 resident **Andrew Wu, MD**, for his abstract on "Development of a Universal Design Dual-Lumen Endobronchial Tube (DLT)," mentored by **Nir Hoftman, MD**.

As the summer begins, we welcome new faculty and the addition of more nurse anesthetists and administrative staff members to our department. In this issue, you can read about the varied interests of all our new department members, and join us in welcoming the newest members of our residency Class of 2022 who are starting their internship year.

With the combined effort of our alumni, faculty, fellows, residents, nurses, and administrative staff, I have every confidence that our department will achieve great successes in the academic year ahead of us, and well into the future.



IMAGE

Barbara Van de Wiele, MD, Interim Chair

Congratulations to the Class of 2018!

Our 2017-2018 residents and fellows celebrated their graduation on June 23rd at UCLA Covel Commons. This year's graduating class included 21 residents and 20 fellows, among whom are the first graduates from our two newest fellowship programs, Perioperative Medicine and Obstetric Anesthesiology.

Graduation Awards

This year's three Chief Residents, Delara Brandal, MD, Karen Chow, MD, and Alice Li, MD, recognized several faculty and staff members on behalf of the graduating class.

Six faculty members received awards for Excellence in Resident Teaching: **Jack Buckley, MD, Joe Hong, MD, Nirav Kamdar, MD, MPP, MBA, Shabnam Majidian, DO, Louis Saddic, MD, PhD, and Christopher Wray, MD.** Dr. Kamdar has received this award every year since he joined the faculty in 2015, and it is Dr. Hong's third Excellence in Resident Teaching award.

Our Residency Program Assistant Director, **Jason Lee, MD,** received the prestigious Teacher of the Year award for the second year in a row. **Peter Lee, MD,** was awarded Affiliate Teacher of the Year, and Anesthesiology Technician **Joshua Esguerra** received the Perioperative Services Award. The department recognized CA-1 resident **Ava Socik, MD,** with the Olive View-UCLA Medical Center Resident of the Year award.

Aman Mahajan, MD, PhD, MBA, presented **Andrew Hudson, MD, PhD,** with the 2018 Dillon Award, one of our Department's top honors, bestowed each year on a highly promising junior faculty member by vote of the senior faculty. Dr. Mahajan also introduced three new Department awards this year.

- The Jordan Miller, MD, Award for Patient Safety and Quality went to **Emily Methangkool, MD, MPH.** The award is named after [Dr. Miller](#), a Professor Emeritus and long-time clinical faculty member.
- Our Anesthesia Clinical Co-coordinator and Pediatric Anesthesiology Director, **Swati Patel, MD,** received the award for "Extraordinary Dedicated Service". Dr. Patel is a UCLA Anesthesiology alumna. In addition to her leadership roles in the department, she serves as the Medical Director of the Ronald Reagan-UCLA Medical Center Operating Rooms.
- Dr. Mahajan recognized **Kenneth Kuchta, MD,** with the Outstanding Service in Quality Improvement and Assurance award, noting that Dr. Kuchta has made substantial contributions to the department's Quality initiatives and chaired the Quality Assurance and Quality Improvement committees for many years.



IMAGES, clockwise
Dr. Andrew Hudson
Dr. Ava Socik, CA-1
Dr. Emily Methangkool



Celebrating the Class of 2018!

Class of '18

While the faculty bade farewell to most of the residents at the end of June, six stayed at UCLA to pursue fellowship training, and one -- Christina Nguyen, MD -- is joining the general faculty at Ronald Reagan Medical Center and the Los Angeles VA Medical Center.

Outgoing chief residents Drs. Brandal and Li joined our Regional Anesthesiology fellowship program this year. Daniel Hwang, MD, began his Pediatric Anesthesiology Fellowship. Vivek Chellappa, MD, Isaac Jenabi, MD, and Joseph Seif, MD, joined our Cardiothoracic Anesthesiology, Pain Medicine, and Critical Care Medicine Fellowship programs respectively.

Christopher Dinh, MD, and Se Fum Wong, MD, entered Critical Care Medicine fellowship programs; Dr. Dinh at neighboring UC San Diego and Dr.

Wong at UC San Francisco. Ajit Rai, MD, is entering Pain Medicine fellowship training at Weill-Cornell in New York. Christina Nguyen, MD, joined the faculty here at UCLA and at the Los Angeles VA Hospital. John Le, MD, joined the faculty at affiliate Olive View-UCLA Medical Center, while Christopher Wijekoon, MD, joined the faculty at UCSF.

Several residency graduates transitioned to private practice. Hayk Minasyan, MD, and Michael Yuan, MD, both entered private practice at the Providence Saint Joseph and Providence Holy Cross Medical Centers. Marsha Bernardo, MD, entered private practice at Mission Hospital and Kyle Bunker, MD, at Cottage Hospital. Karen Chow, MD, and Kate Lee, MD, started at Kaiser Woodland Hills, while Hanzi Russino, MD, is practicing at Kaiser Panorama City. Michelle Mahanian Oheb, MD, began practice at Providence Saint John's Medical Center, and Ara Vehian, MD, at Hoag Hospital-Newport Harbor Anesthesia Consultants.



Graduating Fellows

Graduating Cardiothoracic Anesthesiology fellow Marisa Hernandez-Morgan, MD, began a Critical Care Medicine Fellowship at UCLA, while graduating Critical Care Medicine Fellow Jeffrey Kim, MD, entered the Cardiothoracic program. We recruited six graduating fellows to the department faculty - Lauren Beck, MD, Tiffany Williams, MD, PhD, Samantha Wong, MD, Jason Hirsch, MD, George Lim, MD, and Michael Wolfe, MD. Govind Rangrass, MD, joined the faculty at the University of Chicago and Kristel Magsino, MD, at Loma Linda.

Nine graduating fellows went into private practice. Peter Fu, MD, entered private practice at Torrance Memorial, Alexander Fu, MD, at El Camino Hospital, and Jeffrey Cashin, MD, at Children's Hospital & St. Joseph Hospital. Michael Doan, MD, joined ASMG, a medical group that serves Scripps Hospital and Sharp Hospital in San Diego. Vishal Khemlani, MD, entered private practice at Cascade Spine Center, Yuichiro Hayashi, MD, at Monos Health in Las Vegas, and Helen Chan, MD, at the Pain Institute of Southern Arizona. Ankush Bansal, MD, moved to Coastal Pain & Spinal Diagnostics Pain Management Clinic in Carlsbad. Matthew Lopez, MD, joined a private

practice serving the Banner University-affiliated medical centers. Neeti Butala, MD, will complete her Regional Anesthesia fellowship training with us in July.

The graduating chief residents passed the baton to the incoming chiefs, Albert Feng, MD, Shaishav Shah, MD, and Nicole Yin, MD. Congratulations to the class of 2018!

IMAGES

TOP:

Dr. Mahajan presents award for "Extraordinary Dedicated Service" to Dr. Swati Patel

RIGHT:

Chief residents present award to Anesthesia Technician Joshua Esguerra

Dr. Peter Lee named Affiliate Teacher of the Year, with chief residents

Dr. Kamdar receives award from chief residents



UCLA Annual Scientific Evening: Resident and Fellow Research Takes Center Stage

Our residents and fellows work hard on research projects all year. In March, their efforts culminated in presentations at our 10th Annual DAPM Scientific Evening, with a record number of abstracts submitted! Soban Umar, MD, PhD, who serves as our Resident Research Coordinator, led the extensive planning for the event.

The guest judge for the evening was Judith Hellman, MD, Professor and Vice Chair for Research in the Department of Anesthesia and Perioperative Care at UCSF. Dr. Hellman's interests center on basic and translational research on sepsis and other forms of inflammation-associated acute organ failure, which are leading causes of death in intensive care units.

These are the winning presentations, after all the judges' votes were tallied:

- Best Overall Award: **Nicole Yin, MD** – “Spinal Cord Stimulation Therapy Attenuates Activation of Dorsal Horn and Intermediolateral Nucleus Neurons During Acute Myocardial Ischemia”
- 1st Place Fellow Award: **Michael Doan, MD** – “Diastolic Dysfunction is Associated with Adverse Perioperative Outcomes in Patients Presenting for Non-Cardiac Surgery”
- 2nd Place Fellow Award: **Alexander Fu, MD** – “Point-of-Care Ultrasound Aids in Diagnosis and Management of Patients in the Post-Anesthesia Care Unit”



- 1st Place Resident Award: **Hanzi Russino, MD** – “Intralipid Improves Left Ventricular Function in Rats with LPS-Induced Cardiac Dysfunction”
- 2nd Place Resident Award: **Marsha Bernardo, MD** – “Intralipid Fails to Rescue Liposomal Bupivacaine (Exparel)-Induced Cardiac Arrest in Rats”
- 1st Place Basic Science Award: **Greg Ruffenach, PhD** – “A New Animal Model of Pulmonary Hypertension with Pre-Existing Pulmonary Fibrosis”
- 2nd Place Basic Science Award: **Bhaswati Roy, PhD** – “Non-Invasive Absolute Brain Temperature Assessment Using Magnetic Resonance Spectroscopic Imaging”

The evening opened with informal refreshments and time for all to view the wide variety of posters, followed by oral presentations of selected outstanding clinical research abstracts. After the judges reached their decisions, the awards were presented as everyone enjoyed dessert.

The judges who selected winners from among the oral presentations were Drs. Judith Hellman, Rajesh Kumar, Riccardo Olcese, and Michela Ottolia. The judges for the poster presentations were Drs. Kumar, Kimberly Howard-Quijano, Olcese, Michela Ottolia, Wendy Ren, and Soban Umar. Tristan Grogan, the principal statistician for the UCLA Health System, worked with both groups.

The next morning, Dr. Hellman presented Grand Rounds to our department on the topic, “Modulation of Innate Immunity in Sepsis and Inflammation.” We extend sincere thanks to her for her participation and expertise, to all the judges and participants, and to the outstanding department staff who make all our successes possible.



IMAGES

THIS PAGE:

Drs. Antongiorgi, Hellman, and Mahajan

Dr. Cannesson congratulates Dr. Yin on her Best Overall win

OPPOSITE:

Dr. Kumar, CAO Stephanie Fisher, Drs. Olcese, Le and Turner

Department Highlights

Faculty, Fellow, and Resident Honors



Kimberly Howard-Quijano, MD, MS, was awarded the NIH K08 grant (NIH mentored research career grant) to study “Spinal Neuraxial Modulation of Ventricular Arrhythmias - Mechanisms and Treatment”. Dr. Howard-Quijano explains that ventricular arrhythmias are the leading cause of sudden cardiac death in the US. After a myocardial infarction (MI), autonomic dysregulation with sympathetic excitation plays a major role in stimulating abnormal heart rhythms. The stimulation of dorsal root ganglia is emerging as an innovative therapy that reduces sympathetic output and may provide more specific protection against ventricular excitability after chronic MI.



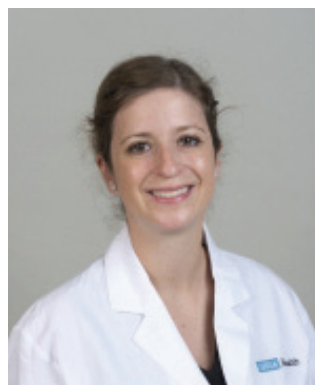
Lisa Lee, MD, MS, was awarded the UCLA Critical Care Center Research Award, a \$25,000 “seed grant” to enable her to study differences in microRNA expression between survivors and non-survivors of ARDS in the pediatric population. Dr. Lee says the results may help identify pharmacologic targets for more specific therapy in a disease where the treatment, thus far, consists mostly of supportive care. In addition, microRNA that are differentially expressed could prove useful as a prognostic tool that might be more accurate than current severity risk scores in the prediction of mortality among pediatric ARDS patients.



Johanna Schwarzenberger, MD, was recently appointed as a “full” or senior oral board examiner by the American Board of Anesthesiology. She has served as a junior examiner since 2011, and has given many mock orals on a regular basis here at UCLA to help our residents and fellows prepare for these examinations. Dr. Schwarzenberger also generously hosts a weekend “oral board brunch” in her home twice a year, where former residents and fellows congregate to study as a group.

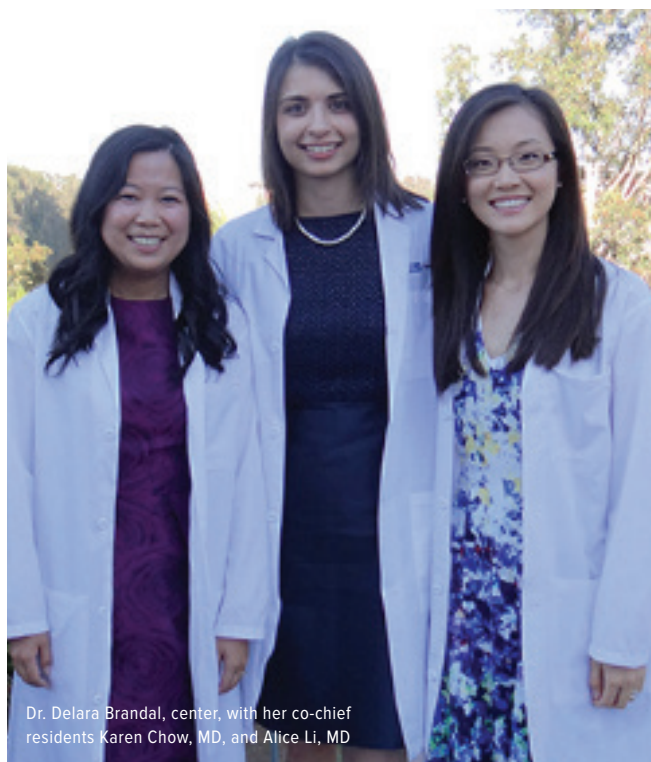


Hayley Osen, MD, MS, now one of our CA-1 residents, earned the 2018 DGSOM Excellence in Teaching with Humanism, Residents and Fellows award for her outstanding performance as an intern.



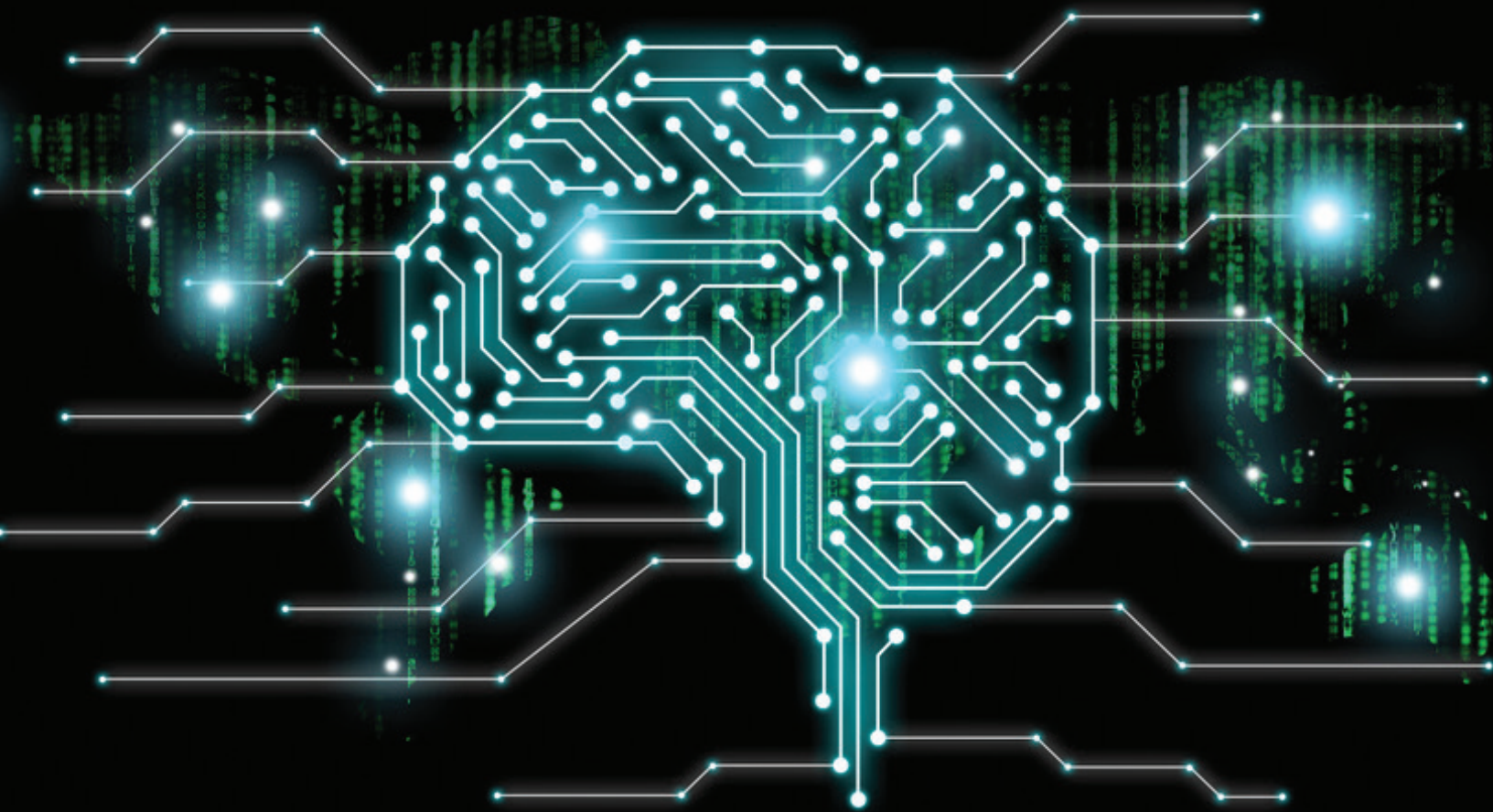
Susana Vacas, MD, PhD, was awarded the UCLA Council on Research Grant (\$8000) to support her translational research on perioperative brain health. Her project studies the subject of delayed postoperative cognitive recovery in patients with obstructive

sleep apnea, a common problem that can lead to disruptive, life-altering complications. Dr. Vacas hopes this research will provide information about the affected brain regions that contribute to cognitive deficits and delirium in the many patients who suffer from obstructive sleep apnea.



Dr. Delara Brandal, center, with her co-chief residents Karen Chow, MD, and Alice Li, MD

Delara Brandal, MD, earned ASRA's Young Investigator Award to support her project called “Development and Implementation of a Clinical Decision Support (CDS) Tool for Prescribing Opioids at Discharge from the Hospital: Impact on Chronic Opioid Use After Surgery.” Dr. Brandal received the award during her CA-3 year as one of our Chief Residents, and now is beginning her fellowship at UCLA Santa Monica Medical Center in regional anesthesiology.



Maxime Cannesson, MD, PhD, and Team Develop Machine-learning Algorithm To Predict Hypotension

Our vice chair for perioperative medicine, Maxime Cannesson, MD, PhD, has led a multi-institutional team to create an algorithm that can predict dangerously low blood pressure before it occurs during surgery. Dr. Cannesson's co-investigators include Feras Hatib, PhD, Zhongping Jian, PhD, Sai Buddi, PhD, Christine Lee, MS, Jos Settels, MS, Joseph Rinehart, MD, and Karen Sibert, MD, FASA. In a new study recently published online in *Anesthesiology*, the team reported that the algorithm predicted hypotension up to 15 minutes in advance in 84 percent of the cases studied.

"Physicians haven't had a way to predict hypotension during surgery, so they have to be reactive, and treat it immediately without any prior warning. Being able to predict hypotension would allow physicians to be proactive instead of reactive," Dr. Cannesson said. "By finding a way to predict hypotension, we can avoid its complications, which can include postoperative heart attack and acute kidney injury, that can lead to death in some cases."



In the study, researchers used a technique called machine learning, a discipline within computer sciences that focuses on the application of algorithms to provide computers with the ability to learn and detect patterns associated with a specific outcome in large datasets. The algorithm was developed to observe subtle signs in routinely collected physiological data that could predict the onset of hypotension in surgical patients.

The researchers used two sets of data to build and validate the predictive algorithm. One data set, used for training, consisted of 1,334 patient records with 545,959 minutes of arterial pressure waveform recordings — recordings of the increase and decrease of blood pressure in the arteries during a heartbeat. That data set included 25,461 episodes of hypotension. A second data set, used for external validation of the model, consisted of 204 patient records with 33,236 minutes of arterial pressure waveform recordings and 1,923 episodes of hypotension.

For each heartbeat, the scientists were able to extract 3,022 individual features from the arterial pressure waveforms. When combined, these features yielded more than 2.6 million bits of information used to build the algorithm. The authors found the algorithm was able to accurately predict an intraoperative hypotensive event 15 minutes before it occurred in 84 percent of cases, 10 minutes before in 84 percent of cases, and 5 minutes before in 87 percent of cases.

“We are using machine learning to identify which of these individual features, when they happen together and at the same time, predict hypotension,” Dr. Cannesson said. “The statistical association between these features and the occurrence of hypotension is fascinating because we can potentially reverse engineer this statistical association and augment our understanding of this complex physiological phenomenon.”

Software that uses the new algorithm, made by Edwards Lifesciences, was granted a “de novo” classification in March 2018 by the U.S. Food and Drug Administration. It has been commercially available in Europe since 2016, Dr. Cannesson noted.

“This is the first time machine learning and computer science techniques have been applied to complex physiological signals obtained during surgery,” Dr. Cannesson said. “Although future studies are needed to evaluate the real-time value of such algorithms in a broader set of clinical conditions and patients, our research opens the door to the application of these techniques to many other physiological signals, such as EKG for cardiac arrhythmia prediction or EEG for brain function. It could lead to a whole new field of investigation in clinical and physiological sciences and reshape our understanding of human physiology.”

This article is reprinted courtesy of the American Society of Anesthesiologists (ASA).



IMAGES

TOP: Dr. Maxime Cannesson

BOTTOM: Dr. Karen Sibert

New Faculty



Lauren Beck, MD, completed her perioperative medicine fellowship at UCLA and residency at the Mount Sinai Hospital in New York. She is a graduate of the University of Alabama at Birmingham School of Medicine. Dr. Beck's professional interests include resident education and perioperative medicine. Her personal interests include running, biking, spending time with her dogs, and traveling.



Jason Hirsch, MD, completed his residency in anesthesiology at UCLA in 2013, and worked with us as a Staff Anesthesiologist for four years before returning to train as the first UCLA Obstetric Anesthesiology Fellow. In addition, Dr. Hirsch's clinical interests include resident and medical student education, and "Enhanced Recovery After Surgery" (ERAS) implementation.



George Lim, MD, joins our faculty in Critical Care after completing his fellowship year. He was a resident in emergency medicine at the Mount Sinai Hospital in New York City but, as a southern California native, wanted to return to Los Angeles for further training in ultrasound and an anesthesiology critical care fellowship here at UCLA. He will work both in the Emergency Department and the ICU, and hopes to pursue his interests in critical care ultrasound as well as in E-CPR.



Bijan Navidi, MD, is a California native who graduated from UC Berkeley with concentration in computers and technology. Dr. Navidi returned to his original love of medicine as a second career, and graduated from the Medical College of Virginia, School of Medicine, followed by an anesthesiology residency and regional fellowship at the University of Southern California, Keck School of Medicine. He returns to academia after working in private practice at Providence Saint John's Health Center in Santa Monica, contributing to our resident teaching and working on expanding outpatient surgery centers. In his personal time, he enjoys photography, travel, being a "foodie", and spending time with his new son, Daniel.



Christina Nguyen, MD, one of our new graduates from the Class of 2018, will join the general faculty and divide her time among the Los Angeles VA Hospital, Ronald Reagan Medical Center, and UCLA-Santa Monica Medical Center. Dr. Nguyen is originally from Sunnyvale, CA, and attended Jefferson Medical College in Philadelphia before completing residency at UCLA. Her professional interests include medical student and resident education, and simulation development, particularly geared toward preparation for the Objective Structured Clinical Examination (OSCE) portion of the new ABA examination process. In her free time, she enjoys any outdoor activity, photography, dressmaking, and cooking.



Nader Tondravi, MD, joins our Pain Medicine faculty after completing his residency and pain medicine fellowship at Northwestern University. He graduated from the Medical College of Wisconsin. Dr. Tondravi's clinical interests include resident education and neuromodulation. In his personal time, he enjoys playing golf and soccer.



Tiffany Williams, MD, PhD, completed her pediatric cardiac and adult cardiothoracic fellowships at UCLA following her graduation from Baylor College of Medicine and residency at University of Texas Southwestern. Her professional interests include congenital cardiac disease and diastolic heart failure. In her free time, she enjoys traveling and biking. She put her pediatric skills to good use recently on a mission trip to Zimbabwe with Operation of Hope, where she anesthetized babies and children for cleft lip and palate repair.



Michael Wolfe, MD, completed his critical care fellowship at UCLA following his residency at the Massachusetts General Hospital. He performed his internship at Newton Wellesley Hospital, and is a graduate of the UCLA David Geffen School of Medicine. His professional interests include resident and medical student education. In his free time, he enjoys beach activities and playing guitar "poorly".



Samantha Wong, MD, completed her residency and pain fellowship at UCLA and joins us as faculty. Her role will involve pain medicine at our newest clinic in Encino, and clinical anesthesiology practice at UCLA-Santa Monica Medical Center. She attended medical school here at David Geffen School of Medicine. Her professional interests include community outreach. In her personal time, she enjoys swimming and traveling.

Selected Recent Publications

1. Calmes SH. **Anesthesiology Consults at the Los Angeles County Medical Examiner-Coroner's Office.** In Sathyavagiswaran L and Rogers C (Eds.) Multidisciplinary Medico-Legal Death Investigation: Role of Consultants. Academic Press/Elsevier Publishers, London. 2018. pp 75-101.



Author **Selma Calmes, MD**, professor emerita of anesthesiology, after her retirement from clinical practice at UCLA went to work as the only physician anesthesiologist in the LA County Coroner's Office. Some of her remarkable cases and experience

are documented in her chapter of this book, *Multidisciplinary Medico-legal Death Investigation: Role of Consultants*. The book focuses on the role consultants have in medical examiner/coroner offices, and provides a multidisciplinary view on the topic. It covers many specialties, including anesthesiology, surgery, radiology, pediatrics, cardiology-electrophysiology, cardiac pathology, forensic anthropology and odontology, firearms examination, eye pathology and psychiatry.

2. Cannesson M. **From Invention to Innovation: Bringing Perioperative Physiological Closed-Loop Systems to the Bedside.** *Anesthesia & Analgesia*, June 2018; 126(6):1812-1813.

The article summarizes the regulatory considerations for closed-loop critical care devices, a subject of relevance to readers in the areas of critical care medicine, anesthesiology, systems engineering, physiological modeling, and human factors research.

3. Hatib F, Jian Z, Buddi S, Lee C, Settels J, Sibert K, Rinehart J, Cannesson M. **Machine-learning Algorithm to Predict Hypotension Based on High-fidelity Arterial Pressure Waveform Analysis.** *Anesthesiology*, June 2018.

With appropriate algorithms, computers can learn to detect patterns and associations in large data sets. The authors' goal was to apply machine learning to arterial pressure waveforms and create an algorithm to predict hypotension. The algorithm detects early alteration in waveforms that can herald the weakening of cardiovascular compensatory mechanisms affecting preload, afterload, and contractility.

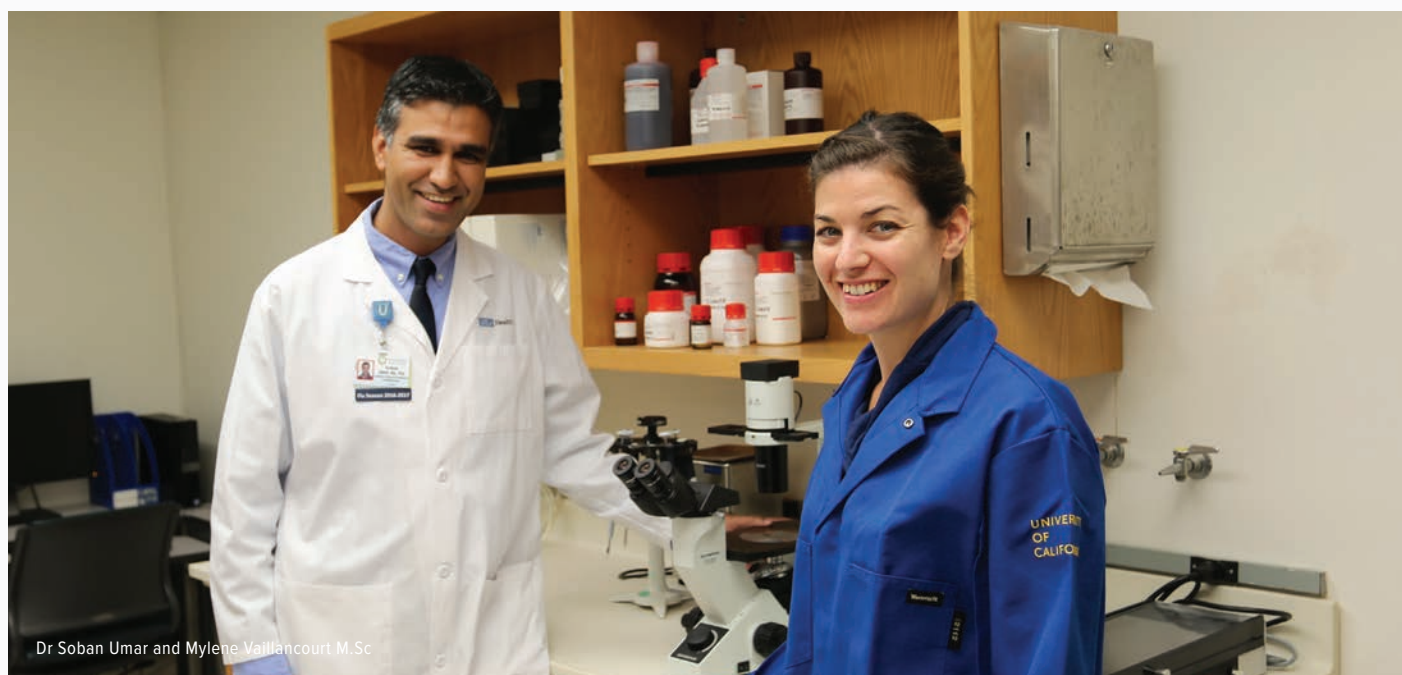
4. Song X, Roy B, Kang DW, Aysola RS, Macey PM, Woo MA, Yan-Go FL, Harper RM, Kumar R. **Altered Resting-state Hippocampal and Caudate Functional Networks in Patients with Obstructive Sleep Apnea.** *Brain and Behavior*, June 2018; 8(6):e00994.

The aim of this investigation was to examine resting-state functional connectivity (FC) of the hippocampus and caudate to other brain areas in OSA relative to control subjects, and to relate these changes to mood and neuropsychological scores. Obstructive sleep apnea subjects showed significantly higher levels of anxiety and depressive symptoms over healthy controls. The compromised hippocampal-cortical FC in OSA may underlie depression and anxious mood levels in OSA, while impaired caudate-cortical FC may indicate deficits in reward processing and cognition. These findings provide insights into the neural mechanisms underlying the comorbidity of mood and cognitive deficits in OSA.

5. Umar S, Li J, Hannabass K, Vaillancourt M, Cunningham C, Moazeni S, Mahajan A, Eghbali M. **Free Fatty Acid Receptor G-protein-coupled Receptor 40 Mediates Lipid Emulsion-induced Cardioprotection.** *Anesthesiology*, April 2018.

This paper highlights the mechanisms of direct cardioprotective effects of lipid emulsion in rescue from local anesthetic cardiotoxicity. More importantly, the authors have identified the key cell membrane receptor responsible of the effects of lipid emulsion in the heart.

6. Lee CK, Hofer I, Gabel E, Baldi P, Cannesson M. **Development and Validation of a Deep Neural Network Model for Prediction of Postoperative In-hospital Mortality.** *Anesthesiology*, April 2018.



Dr Soban Umar and Mylene Vaillancourt M.Sc

The authors tested the hypothesis that deep neural networks trained on intraoperative features can predict postoperative in-hospital mortality. The authors concluded that deep neural networks can predict in-hospital mortality based on automatically extractable intraoperative data, but are not (yet) superior to existing methods.

7. Nguyen-Lee J, Moreland N, Sadoughi A, Borna R, Salehi A, Jahr J. **Sugammadex: Clinical Pharmacokinetics and Pharmacodynamics.** Current Anesthesiology Reports, April 2018.

This chapter provides an evidence-based understanding of the pharmacokinetics and pharmacodynamics of sugammadex. Sugammadex is a c-cyclodextrin that rapidly reverses the effect of aminosteroid nondepolarizing neuromuscular blocking agents (NMBAs), specifically rocuronium and vecuronium, by forming an inactive 1:1 complex. It has been shown to be an effective reversal agent with an acceptable safety and efficacy profile.

8. Umar S, Cunningham CM, Itoh Y, Moazeni S, Vaillancourt M, Sarji S, Centala A, Arnold AP, Eghbali M. **The Y Chromosome Plays a Protective Role in Experimental Hypoxic Pulmonary Hypertension.** American Journal of Respiratory and Critical Care Medicine, April 2018;197(7):952-955.

The role of sex chromosomes in the development of pulmonary hypertension has not been studied in the past. We conducted the first investigation of the role of sex chromosomes, in the absence of gonadal hormones, in the development of hypoxia-induced PH using the unique Four Core Genotypes (FCG) and XY mouse models. We found that the Y chromosome is protective against development of hypoxia-induced pulmonary hypertension in gonadectomized mice.*

9. Vacas S, Van de Wiele B. **Designing a pain management protocol for craniotomy: A narrative review and consideration of promising practices.** Surgical Neurology International, December 2017.

Craniotomy is a relatively common surgical procedure with a high incidence of postoperative pain. Development of standardized pain management and enhanced recovery after surgery (ERAS) protocols are crucial to optimize outcomes and patient satisfaction and reduce health care costs. Strategies to reduce craniotomy pain demand interventions during all phases of patient care: preoperative, intraoperative, and postoperative. Opioids remain the mainstay for pain relief, but patient-controlled analgesia, NSAIDs, standardization of pain management, bio/behavioral interventions, modification of head dressings, and patient-centric management have the potential to improve patient care.

Upcoming Presentations at ANESTHESIOLOGY 2018

THE FUTURE STARTS HERE

ANESTHESIOLOGY 2018
SAN FRANCISCO
OCTOBER 13-17

Register now goanesthesiology.org



UCLA is well represented at this year's ASA annual meeting, ANESTHESIOLOGY 2018. The events will take place October 13 to 17 at San Francisco's Moscone Center. See below for presentations, panels, and lectures to be given by our faculty. A full list -- including poster presentations by faculty, fellows, and residents -- may be found on our department website.

SPECIAL SESSION: YOUNG INVESTIGATORS

Y101 – Outcomes and Database Research: Saturday, October 13th, 1:15-2:45 PM (Location: North, Room 22)

Y101-1 – Hydromorphone Presentation Dose Influences Intraoperative Hydromorphone Administration Dose: An Observational Study Using Interrupted Time Series Analysis.

Brent D. Ershoff, MD, Tristan Grogan, MS, Joe C. Hong, MD, Eilon Gabel, MD, Maxime Cannesson, MD, PhD

WORKSHOPS

Session 802 – Electrophysiology: Perioperative CIED Management, Lead Removal Procedures, and Temporary Pacing. Saturday, October 13th, 9:00-12:00 PM (Location: West, Room 3006)

Jonathan Ho, MD
Kimberly Howard-Quijano, MD, MS
Andrew Disque, MD
Aman Mahajan, MD, PhD

Session 806 – Acupuncture: Saturday, October 13th, 9:00-12:00 PM (Location: West, Room 3018)

Eric Hsu, MD

Session 821 – Perioperative TTE for Everyone: Sunday, October 14th, 9:00-12:00 PM (Location: West, Room 2014)

Jonathan Ho, MD

Session 823 – Critical Ultrasonography for the Perioperative Physician – Basic Course: Sunday, October 14th, 1:15-4:15 PM (Location: West, Room 3006)

Wolf B. Kratzert, MD, PhD

Session 824 – Perioperative Point of Care Ultrasound: Sunday, October 14th, 1:15-4:15 PM (Location: West, Room 3014)

Kimberly Howard-Quijano, MD, MS
Jacques Neelankavil, MD

Session 831 – Advanced Critical Ultrasonography for the Perioperative Physician: Monday, October 15th, 9:00-12:00 PM (Location: West, Room 3022)

Wolf B. Kratzert, MD, PhD

PANEL DISCUSSIONS

PN308 – You Can Become Your State Society President! Five Women Discuss Pathways, Pitfalls, and Leadership Development: Monday, October 15th, 1:15-3:15 PM (Location: West, Room 2002)

Karen S. Sibert, MD, FASA – The Communications Pathway

PN108 – You Want Me to Give Anesthesia Where? Patient Safety in Non-OR Locations: Saturday, October 13th, 12:00-1:00 PM (Location: West, Room 3003)

Emily Methangkool, MD – Complications after Non-operating Room Anesthesia

PN319 – TeleHealth and Mobile Health for the Perioperative Physician: Monday, October 15th, 3:45-4:45 PM (Location: North, Room 24)

Maxime Cannesson, MD, PhD - Moderator
Nirav Kamdar, MD, MPP, MBA – Using Tele-Medicine for Preoperative Optimization and Patient Engagement

PN410 – Tonsillectomy and Adenoidectomy Pain Management Sans Codeine: Tuesday, October 16th, 9:45-10:45 AM (Location: West, Room 2010)

Wendy Ren, MD - Moderator

PN504 – Point-of-Care Ultrasound: Training, Education and Clinical Implementation: Wednesday, October 17th, 8:00-9:00 AM (Location: North, Room 2022)

Prince Neelankavil, MD

PN508 – Big (Observational) Data to Improve the Value of Perioperative Care: Wednesday, October 17th, 9:15-10:15 AM (Location: North, Room 2004)

Aman Mahajan, MD, PhD – Creation and Validation of a Database to be used for Quality Improvement and Clinical Research Projects

REFRESHER COURSE LECTURE

Session 202 – Role of Anesthesiologists in Value-Based Perioperative Care and Healthcare Transformation: Sunday, October 14th, 8:00-9:00 AM (Location: North, Room 24)

Aman Mahajan, MD, PhD – Implementing Value Based Care and Clinical Pathways for Surgery and Postoperative Care

SELF-STUDY PROGRAM

SS103 – Perioperative Point of Care Ultrasound: Saturday, October 13th, 7:00-5:00 PM (Location: South Lobby)

Kimberly Howard-Quijano, MD, MS
Prince Neelankavil, MD

SPECIAL EVENTS

SPE02 – Featured Session: Leading Improvements in Health through Safety and Innovation: Saturday, October 13th, 12:00-1:00 PM (Location: West, Room 2022)

Aman Mahajan, MD, PhD – Lead Speaker

SPE06 – Anesthesia Patient Safety Foundation: A New Frontier in Patient Safety: Perioperative Brain Health. Saturday, October 13th, 2:30-4:30 PM (Location: South, Room 206)

Daniel Cole, MD – The Big Vision for Patient Safety

Learn – or Brush Up On – Perioperative Ultrasound at the Beach!

If you've never felt adequately trained in perioperative ultrasound, or just want a comprehensive review and update of what you previously learned, we have the solution for you!

The third annual Perioperative and Acute Care Ultrasound Workshop will be hosted jointly by the UCLA and Loma Linda University Medical Center anesthesiology departments on September 22-23, right by the ocean in beautiful Huntington Beach. The focus of the workshop is to teach practitioners how point-of-care ultrasound (POCUS) can facilitate

acute care management, both for adult and pediatric patients.

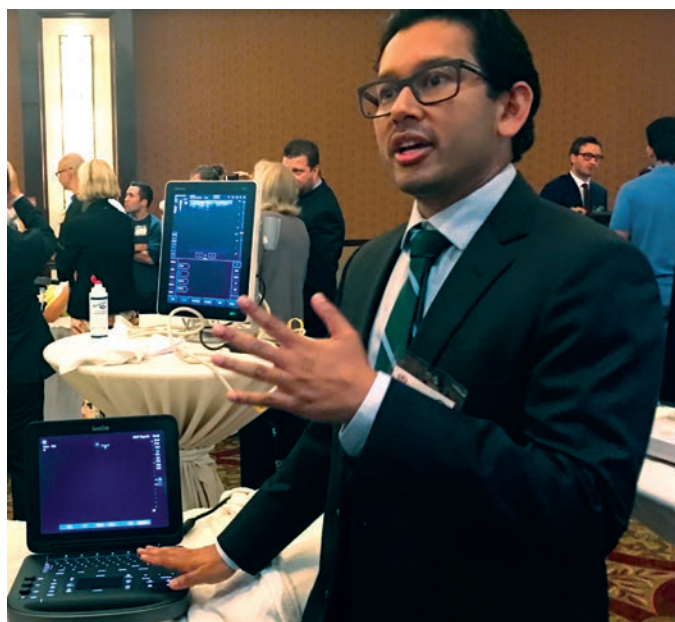
National experts in POCUS provide hands-on teaching at the workshop, which is co-directed by Davinder Ramsingh, MD, of Loma Linda, and Prince Neelankavil, MD, of UCLA. The instructors have developed a “whole-body” ultrasound examination that has been validated for its clinical utility. This examination, termed FORESIGHT (focused perioperative risk evaluation sonography involving gastro-abdominal, hemodynamic, and trans-thoracic ultrasound)



has been designed by a multidisciplinary team of anesthesiology, emergency medicine, critical care, and cardiology specialists. Attendees will learn the key aspects of cardiac, pulmonary, abdominal, and hemodynamic ultrasound for the perioperative and acute care settings, and earn up to 17 CME credits in the process.

For full details and to register online, see the program's website: www.pocuseducation.com

Click [here](#) to download the program brochure. We hope to see you there!



IMAGES

LEFT:

Dr. Sumit Singh demonstrates lung ultrasound

ABOVE:

Dr. Neelankavil teaches cardiac echo views

High School Students Enjoy Hands-on Anesthesiology Experience

Our faculty members Christine Nguyen-Buckley, MD, John Shin, MD, and Karen Sibert, MD, FASA, hosted an enthusiastic group of high school juniors from El Segundo High School on a full morning visit to the UCLA Simulation Center on June 6. With their teachers, Donna Tucker (a former nurse) and Tiffany Maisonet, the students had the chance to hear and ask questions about careers in medicine and anesthesiology, and then watched a live simulation training session in real-time by video feed.

In a separate event on May 25, two of our residents visited the Girls' Academic Leadership Academy, the first-ever all-girls' public school in Los Angeles with a curriculum focused on science, technology, engineering, and math (STEM) education. CA-2 resident Sophia Poorsattar, MD, and CA-1 resident Thu Nguyen, MD, demonstrated the art of point-of-care ultrasound to the students, and fielded many questions about their personal pathways into medicine and anesthesiology.

Both events were part of the ongoing partnership between our department, the California Society of Anesthesiologists (CSA) and Project Lead the Way,

a national nonprofit organization which has developed the innovative curriculum in biomedical education now in use at El Segundo High School, GALA, and Venice High School. CSA provides financial support for teacher training, and our department makes faculty and resident time available to support the educational mission.

The students at the Simulation Center watched raptly as CA-3 resident Lena Russino, MD, demonstrated the diagnosis and management of acute air embolism as it evolved during a simulated laparoscopic tubal ligation. Dr. Shin explained what was happening at every step.



IMAGES

Dr. Shin explains physiologic monitoring

Dr. Nguyen-Buckley leads students on Sim Center tour

Dr. Nguyen demonstrates radial artery ultrasound



Dr. Poorsattar demonstrates neck ultrasound to GALA students

As the vital signs deteriorated, one student exclaimed, “This is stressful already, and I’m just watching!” They were impressed at how Dr. Russino remained calmly in control of the situation, and coordinated the efforts of her team.

After the simulation, the students practiced using point-of-care ultrasound with Dr. Shin, and then toured the Simulation Center with Dr. Nguyen-Buckley, seeing the various OR, ED, and ICU sites, and all the different mannequins available for training.

Ms. Tucker, the lead teacher, sent a note of thanks to the team for “taking time out of your busy schedules for the next generation of care providers. They were very excited and impressed with hearing about how each of you came into the field of anesthesiology.”

She emphasized the importance of the lessons the students took away from watching the simulation:

- Communication
- Asking for help
- Keeping calm
- Reasoning through what was happening
- Taking action to bring the patient back to homeostasis.

“Seeing and learning this process can be used across all disciplines, and is an excellent life skill,” Ms. Tucker wrote. “We simply could not have asked for a more engaging learning opportunity. Not one cell phone came out during the simulation!”



Acute Pain? We've Got This Under Control

by Peter Jin, MD, and Natale Naim, MD

The Acute Pain Service at UCLA Medical Center, Santa Monica is committed to improving patient outcomes with the use of multimodal analgesic strategies and an emphasis on regional anesthetic techniques. Our team includes physician anesthesiologists Natale Naim, MD, Ali Sadoughi, MD, Eva Boyd, MD, Shabnam Majidian, DO, and Peter Jin, MD. We also have two current fellows, Peter Fu, MD, and Neeti Butala, MD, who will finish training this year, while two of our graduating UCLA residents, Alice Li, MD, and Delara Brandal, MD, will stay on for fellowship training with us in regional anesthesiology.



The use of regional anesthesia for surgery has been around for many years but recently has expanded rapidly due to advances in technique and equipment. Research is showing improved patient satisfaction, decreased opioid use, and better overall pain management, which validates the use of regional anesthesia not only for surgery, but also as a huge role within the multimodal analgesic strategy in postoperative acute pain management.

Ultrasound Improves Success

The use of the ultrasound, in our opinion, is the main reason for the growth of regional anesthesia. It provides improved accuracy of needle and nerve localization, increased consistency of a successful block, and decreased time to perform our nerve blocks.

Most of our blocks utilize peripheral nerve catheters which stay in place for one or more days after surgery, prolonging the benefits of our regional techniques. Our catheter program has seen significant growth with the use of portable, disposable local anesthetic infusion pumps for home use. A member of our team will follow the patient postoperatively with daily phone calls while the pump is in place.

These pumps have made it possible for patients to spend a shorter time in the hospital. Many of our **total knee replacement** patients receive an adductor canal catheter and are able to go home on postoperative day (POD) 2, and a few have even been able to go home on POD 1. With our **hip fracture protocol**, patients begin a multimodal analgesia protocol on admission, which

IMAGES

TOP: Natale Naim, MD

BOTTOM: Peter Jin, MD



includes placement of a fascia iliaca nerve block catheter. The block provides comfort and ease during lateral positioning for spinal anesthesia, and many patients never need any opioids for pain control. About 250-300 hip fracture patients present for care each year.

Acute post-mastectomy pain can be a major challenge, as it can result in prolonged hospitalization, emotional distress, and an increased risk of chronic pain. Thoracic paravertebral block can provide excellent postoperative analgesia, so we place the paravertebral catheter prior to surgery. We have been able to reduce postoperative opioid consumption significantly, and send patients home with a continuous portable infusion pump for local anesthesia.

More Outpatient Cases Possible

Equally exciting are surgeries that used to be inpatient cases due to postoperative pain issues, but are now performed in an ambulatory surgery center setting with the help of our peripheral nerve blocks. Shoulder, elbow, wrist, and hand surgery cases receive a brachial plexus nerve catheter with

a disposable pump, and report excellent pain control. Our foot and ankle surgeries receive popliteal and saphenous nerve catheters with pain-free recovery for the duration of the pump system, which can last up to four postoperative days. Patients can remove and dispose of the catheters themselves, at home.

We are working to improve our techniques, decrease complication rates, and provide our services to even more patient populations. The growth of our program shows that the benefits of the services we provide are making a difference for our patients. We have research endeavors on the horizon as well. With the concerns for the opioid epidemic plaguing our nation today, we are even more convinced of the importance of regional anesthesia within the multimodal analgesic strategy.



Complex Care Team Delivers Results in Critical Situation

By Claire Winters

“It’s like an orchestra. Everyone’s playing differently, but if we’re not in harmony, it won’t work,” says Nirav Kamdar, MD, MPP, MBA, Director of Quality and a leader in our department’s innovation efforts. This “harmony” is exemplified by a recent collaboration among our Health System’s departments of neurosurgery, medicine, cardiology, and anesthesiology to deliver an optimal outcome in a complex case.

The patient, Russell Kingsley, suffered a fall which resulted in a fractured neck and spinal cord compression. When he arrived at UCLA’s Ronald Reagan Medical Center, he had already developed paralysis of both arms and one leg. Prompt surgery was critical to stabilize the fracture and prevent further damage, but treatment was complicated by his current blood-thinning medications, his underlying heart condition, and his compromised kidney function. After the patient’s initial evaluation, our department’s Complex Care Team (CCT) was contacted and quickly mobilized to facilitate a coordinated perioperative care plan.

Dr. Kamdar evaluated the patient at bedside. That afternoon, Lauren Beck, MD, our Perioperative Medicine Fellow, summarized the case’s complexities. Specialists from neurosurgery, nephrology, cardiology, and pain medicine provided consultation and agreed on how to adjust the patient’s many medications in view of the upcoming surgery. That evening, Barbara Van de Wiele, MD, our Director of Neurosurgical Anesthesiology, and Natalie Moreland, MD, Director

of Anesthesia for Spine Surgery, reviewed the case further and refined the perioperative and intraoperative plan of care. The new plan was entered into Care Connect, UCLA’s electronic health record, including the new doses of the patient’s medications to minimize surgical and cardiac risk, and preparations for intraoperative dialysis if needed.

Mr. Kingsley had difficult decisions to make. His quality of life was dramatically impaired by the extent of his injuries, but could be even worse if surgery led to any of the many possible complications. How did he come to a quick decision to move forward with the high-risk operation?

“It was clear that they did their homework,” says Mr. Kingsley. “They were perfectionists, and they put their heads together. I was totally comfortable with the whole team.” He said the team didn’t sugar-coat the risks; he was encouraged to get his affairs in order. Ultimately, though, Mr. Kingsley hoped for a better quality of life than he could have without surgery.

Thanks to the team effort and meticulous planning, the complex 6-hour operation unfolded like “a routine appendectomy,” says Dr. Kamdar. Within one hour of extubation, the patient had full movement of his arms and legs and was texting the good news to his friends and family.

“Post-surgical texting is always a good sign!” says Dr. Kamdar.

The speed and success of this collaboration is a result of years of focused attention on our perioperative care redesign. It illuminates how far the profession of anesthesiology has moved beyond the walls of the operating room to deliver all-encompassing perioperative care — as reflected in the name change of our department to become the UCLA Department of Anesthesiology and Perioperative Medicine.

In 2015, Maxime Cannesson, MD, PhD, an internationally known anesthesiologist and researcher in areas as diverse as enhanced recovery and machine-learning, was recruited to serve as our Vice Chair for Perioperative Medicine. Today, the scope of our perioperative care extends into the intensive care units and even beyond the hospital, with broad expansion of our community pain medicine clinics and the use of telemedicine

to augment the reach of our Preoperative Evaluation and Planning Center (PEPC).

And how is Mr. Kingsley doing after surgery?

While still in the PACU, he said, "I feel like a million bucks. I'd race out of here, if I could. I thought I'd have some irreversible damage, but it's like I never had anything wrong. I'm forever grateful. I'm overwhelmed by this staff, this hospital, and their care and concern."

Drs. Natalie Moreland, Nirav Kamdar, and Lauren Beck



Treated Like Royalty! Our Visit to China

By Karen Sibert, MD, FASA

When my husband and I were invited to deliver lectures in late June at the 2018 Chinese Cardiothoracic Congress in Tianjin, China, we were quite surprised and honored to be asked. Of course we accepted, and are very glad we took the opportunity for an extraordinary experience despite the near-tropical summer heat and humidity everywhere we traveled.

My husband, Steven Haddy, MD, FACC, FCCP, is the chief of cardiovascular anesthesiology and director of the cardiothoracic fellowship program at the University of Southern California's Department of Anesthesiology. His lecture involved the management of pulmonary hypertension and right ventricular failure. It was a special privilege for me to speak at the opening plenary session on new developments in my field, thoracic anesthesiology.

The first part of our journey took us to Shanghai, where we had a chance to tour the Fudan University Shanghai Cancer Center as the guests of the department chair, Dr. Changhong Miao, who later in the week would also head the 2018 Cardiothoracic Congress. The Cancer Center is a remarkably busy hospital by any standard. There were crowds of patients and family members everywhere. In the hospital's 29 operating rooms, the teams perform an average of 146 cases per day and over 3200 cases each month! And these are not small cases. The hospital is known for its specialization in highly complex surgeries, including giant neck tumors with difficult airways, and massive hepatic carcinoma resections. The anesthesiology department hosts a weekly "Talk about tumor and anesthesia" session on China's premier social media platform, WeChat, so that anesthesiologists around the country can share information and clinical tips.

The operating rooms were amply equipped with electronic health records, infusion pumps, and virtually all the same equipment we would see at UCLA. Patients for Whipple procedures or thoracotomies routinely receive invasive monitoring and epidural analgesia. A 4-D echocardiography machine, newly acquired, was in use during a pancreatic surgery case to evaluate right ventricular function and assess volume status. Even the time-out at the start of the case was remarkably consistent with what we do at home.

After the day concluded, we joined Dr. Miao and a group of faculty and residents for a lovely dinner at a restaurant called "Heng yue xuan", which means "a peaceful place where you feel happy all the time". This was a former residential mansion located in a beautiful garden park not far from the hospital. We had a fascinating discussion about how hard the anesthesiologists routinely work. Cases often go from 8 a.m. until midnight with no relief, as the number of patients appears to be limitless, with an impressive number of transplants and other demanding cases. There is some difficulty attracting young physicians into anesthesiology because of the extreme workload.

The several young women in the group were interested to hear about how my husband and I have combined work and family, and they seemed very surprised that we had raised three children! Young professional women in Shanghai may have trouble finding husbands, we learned, and some prefer to remain single rather than have to give up any degree of independence. But they all seemed very content with their career choices and dedicated to their profession.



IMAGES

LEFT: The Great Wall at Badaling

RIGHT: Shanghai skyline, Pudong

BOTTOM: Drs. Haddy, Sibert, and Miao, front row,
with Fudan faculty and residents

Later in the week, we traveled to Tianjin for the Cardiothoracic Congress, a well-attended national meeting. We were advised to speak a little more slowly than normal during our talks, but otherwise the expectation was that the audience would understand the content in English without any interpretation. I attended some talks that were delivered in Chinese, but definitely needed an interpreter by my side! Many of the slides contained content and graphs in English, which helped a great deal.

Before we left, we had a fascinating though brief tour of Tianjin, which is a coastal metropolis about an hour from Beijing. Several Western countries established concessions in the city during the 19th century, so there is a legacy of European-style

buildings, including one that resembles London's Big Ben, and a large Ferris wheel that is now an iconic emblem of Tianjin. After a traditional lunch featuring Tianjin's famous soft buns, filled with pork or vegetables, we departed for two days in Beijing before our flight back to the United States. Not far from Beijing, we had a chance to climb part of the Great Wall at Badaling, truly a never-to-be-forgotten experience!

The hospitality we received was incomparable, and we hope to repay the generosity of our hosts should they have occasion to visit us here. Sharing medical knowledge across international boundaries is a wonderful opportunity, and is one of the special joys of life in medicine.



Our Community Pain Clinics Expand Access to Care

By Claire Winters

Our department continues its commitment to advancing the treatment of chronic pain and the specialty of pain medicine through the recent addition of two new community pain clinics. This year, we opened new clinics in Encino and Burbank and moved our Torrance clinic to a new site. These locations join existing clinics in Thousand Oaks, Westwood and Santa Clarita, as well as our flagship Comprehensive Pain Center in Santa Monica, headed by F. Michael Ferrante, MD.

Kianusch Kiai, MD, MS, our Director of Community Perioperative Practices, managed the expansion, which he says is part of the health system's overall goal of reducing barriers to treatment by making care more physically accessible to the communities we serve. The expansion allows physicians "to reach a large population of patients who otherwise might not have the ability to access UCLA healthcare, including pain management," says Christina Jeter, MD, a physician at the Burbank clinic. Samantha Wong, MD, one of this year's graduating fellows in Pain Medicine, will practice in our new Encino clinic.

The field of pain medicine is sometimes poorly understood by other physicians and the public alike. The consequences of inadequate pain treatment can be severe for patients, including addiction and the inability to work or enjoy meaningful activities. Physicians at the clinics work to improve outcomes by taking a proactive role in patient education.

"One big misconception is that opioids are the only treatment available for chronic pain," says Dr. Jeter. "In fact, there are a variety of options available including several classes of non-opioid medications and injections which can often effectively improve pain and function."

In addition to their work at the clinics and hospitals, our physicians have been reaching out to patients through community events such as health fairs and panel discussions. The UCLA Comprehensive Pain Center also features a robust [video gallery](#) in which physicians answer common pain treatment questions.

For more information on UCLA's pain medicine team and locations, visit the UCLA Comprehensive Pain Center [website](#).



IMAGES

TOP:

UCLA Health Primary & Specialty Care offices in Encino.

BOTTOM:

Christina Jeter, MD, Kianusch Kiai, MD, MS, and F. Michael Ferrante, MD

Department Initiatives Shine at Quality Council Presentation

By Claire Winters

At our annual presentation to the health system's Quality Council, our department received accolades for innovative and value-added care throughout our perioperative services, ICUs, and pain medicine programs.



"The major theme was the collaboration we are doing with other departments," says **Nirav Kamdar, MD, MPP, MBA**, our Director of Quality. "That's what anesthesia is all about. We're the one specialty that has a presence amongst all others. Our job is about orchestrating that collaboration."

The presentation was largely the work of Dr. Kamdar and Carol Lee, RN, BSN. It shared our successes in collaborating with the surgical departments (including colorectal, urology, obstetrics and gynecology, and orthopedics), which have resulted in improved outcomes for patients and fewer postoperative complications.

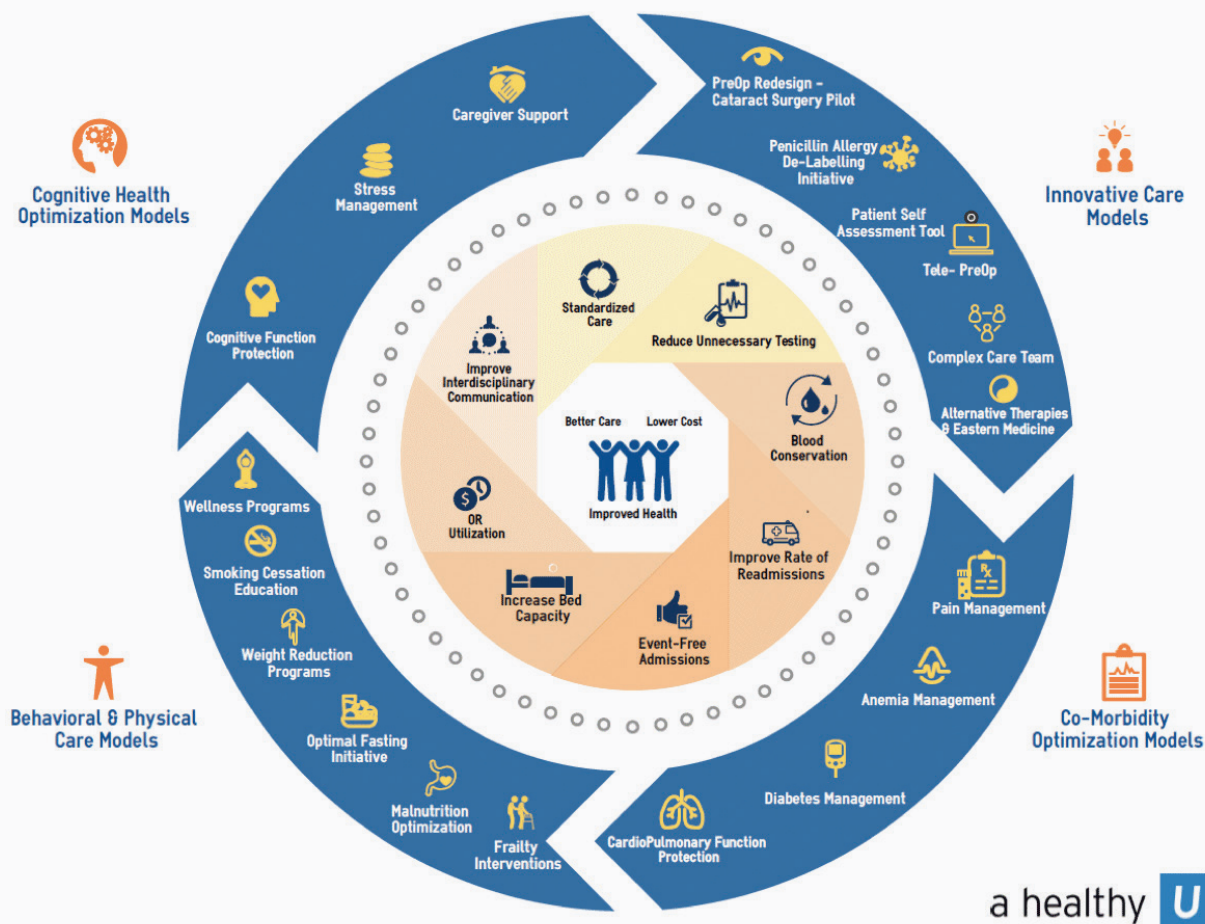
Other innovations include comprehensive screenings in the Preoperative Evaluation and Planning Center (PEPC), led by Victor Duval, MD, which have reduced surgical cancellations and delays. The continued success of the efforts of the Complex Care Team (CCT) – developed by ICU faculty including Vadim Gudzenko, MD, and now led by Dr. Kamdar with the help of Lauren Beck, MD, our fellow and now faculty member in Perioperative Medicine – have reduced postoperative ICU admissions and length of stay.

The efforts of Siamak Rahman, MD, and Natale Naim, MD, the directors of our Acute Pain Services, have improved patient satisfaction with pain management and reduced length of stay with the consistent use of regional blocks. The Enhanced Recovery after Surgery (ERAS) Collaborative, driven by Maxime Cannesson, MD, PhD, Aviva Regev, MD, MBA, Dr. Rahman, and Ms. Lee, has reduced postoperative nausea and vomiting and lessened the need for opioid prescriptions at discharge.

The presentation also showcased our informatics team, led by Ira Hofer, MD, Director of the Division of Bioinformatics and Analytics. We highlighted the team's surgeon dashboards, which enable physicians to view the accuracy of scheduling time, operational variables, and readmission rates, among other statistics. "That kind of individual data feedback is huge in helping our colleagues inform their work," says Dr. Kamdar.

The Electronic Anesthesia Reporting System (eARS), championed by Kenneth Kuchta, MD, Chair of Quality Improvement, and Emily Methangkool, MD, MPH, Co-Director of Quality Assurance and Quality Improvement, has greatly facilitated confidential reporting of complications or other adverse events.

Finally, we shared the progress of our peer support pilot program, which launched in mid-December. The program, which trains and provides peer supporters to physicians, nurses and administrators who've endured troubling events, is one of the initiatives spearheaded by Keren Ziv, MD, the chair of our Anesthesiology Wellness Committee.



The program ensures that department members receive the emotional support after challenging events needed to function optimally at work and in their personal lives. “It’s culture that makes hospitals safe,” notes Dr. Kamdar. “Anesthesia, as a specialty, is the prototype for patient safety. Dr. Ziv has taken a very active role in shaping the culture.”

While the Quality Council presentation allowed other departments to consider how our work might benefit them, it also provided us with new ideas to augment our hospital’s “complex adaptive system.”

“By listening to other departments’ successes and challenges, we were able to identify where we could collaborate in the future,” says Dr. Kamdar. One of the recurring topics was the rate of readmission for patients with uncontrolled postoperative pain, an area which we are actively addressing.



Nurse Anesthetists: Our Vital, Growing Team

By Shelly Anderson, MSNA, CRNA

Our nurse anesthetist team has grown significantly during the last 12 months. We regularly host students from the University of Southern California and Kaiser schools of nurse anesthesia during their clinical rotations, and have attracted some of their top graduates. In addition, we recruited new graduates and experienced nurse anesthetists from across the country. Our team strives to provide value by seeking talented professionals who bring diversity to our UCLA practice.

We welcome three new graduates:

Anna Kim, CRNA, MS, spent six years working as an ICU nurse in Los Angeles and New York City before completing her master's degree at Albany Medical College. She recently returned to Los Angeles and joined our department in March. In her personal time, she enjoys traveling and trying new food.

Amy Szymkowicz, CRNA, DNP, also joined us in March. She earned her Doctor of Nursing Practice degree from the Fairfield University and Bridgeport Hospital Nurse Anesthesia Program in Connecticut, and her professional interests include quality improvement projects. She enjoys traveling and hiking.

Scott Demar, CRNA, MSN, is a new graduate who rotated through UCLA during his training. Scott earned his Master's in Nursing Anesthesia from the California State University Fullerton, Kaiser School of Anesthesia.

We also welcome three experienced team members:

Sheila Carbonell, CRNA, joins us in a per diem position, after earning her Master's in Nurse Anesthesia from USC in 2008.

Kris Bradley, CRNA, MSN, joined the department in June as a Senior Nurse Anesthetist. He earned his MSN degree from St. Mary's University Minnesota/Minneapolis School of Anesthesia. Professionally, Kris enjoys working with diverse patient populations across a broad spectrum of anesthesia practice. In his personal time, he enjoys painting, visiting museums and galleries, running, traveling, and checking out live music.

Jenna Dobling, CRNA, MSN, joined the anesthesia team in December, and earned her MSN degree at Rush University in Chicago, IL. She recently moved from the Washington DC area to California for her husband's job in the Navy, and is excited to be part of such a wonderful anesthesia team. In her free time she enjoys running and staying busy with her two young boys.

While we said a reluctant farewell to Puja Karki, CRNA and will soon to Brittany Countryman, CRNA, who is relocating with her growing family to North Carolina, by mid-summer we will have a diverse group of 41 staff nurse anesthetists working at a variety of clinical sites. UCLA's nurse anesthetists are dedicated to developing optimal teamwork and organizational strategies that have a direct impact on improving patient care to our community. With their help, our department plans to expand our busy Medical Procedure Unit (MPU) model to include bronchoscopies and expand GI services.

Many of our nurse anesthetists also provide educational programs for UCLA nursing departments. Our course in "Procedural Sedation" is the most requested and well-attended program. Several nurse anesthetists have also developed and taught a sought-after "Airway Management" course. Using airway mannequins from the UCLA Simulation Center, they teach proper technique for chin lift, jaw thrust, mask ventilation, and placement of oral and nasal airway devices. The evaluations from the attendees have been so positive that we've increased the class size and added additional classes.

We work closely with nurse educators in multiple departments to increase patient safety through up-to-date education.

Alison Goltermann, CRNA, MSN, taught a malignant hyperthermia course.

Susie Pak, CRNA, MSNA, and **Natalia MacDougall, CRNA, MSN**, gave an anesthesia course to the brachytherapy team in 200 Medical Plaza, after our department began providing anesthesia for patients there on a regular basis.

Puja Karki, CRNA, and **Natasha Pyykko, CRNA**, participated in the Ambulatory Surgery Center skills day.

Ana Armenta, CRNA, gave an anesthesia review to MPU nurses at UCLA Medical Center, Santa Monica.

Jacqui Culbertson, CRNA, MSN, provided a medication safety administration presentation for the nurses at the Ambulatory Surgery Center.

A major addition to our leadership objectives is team members' participation in one-on-one coaching and goal setting sessions, in addition to performance evaluations. These allow nurse anesthetists to discover professional and personal goals that facilitate growth and increase motivation. Through these sessions, we have discovered many different interests that will help our team and department grow through education, resource management, and wellness. Examples of developing goals include recycling in the OR, time management initiatives, and welcoming new staff with a summer beach picnic.

Our team members continue to be active in department-sponsored wellness events, such as an outdoor spin class coordinated by Nirav Kamdar, MD, MPP, MBA, with excellent recruitment efforts by Puja Karki, CRNA. We have several nurse anesthetists involved in our peer support program, and many take an active role in welcoming our new nurse anesthetists and creating a smooth and supportive transition. Additionally, the nurse anesthetist group continues to support international healthcare with medical missions (see our Global Healthcare [webpage](#)).

Our "team" grows outside the health system as well, as we welcomed two new babies to our UCLA family! Alex Olender, CRNA, and his wife are the proud parents of Emma Olender. Simson Wang, CRNA, and his wife welcomed Camden Reimund Wang.

This ambitious group of nurse anesthetists makes working at UCLA a joyful and inspirational experience. *We are excited for the future!*

IMAGES

TOP:

Alex Olender and his wife welcome Emma Olender

BOTTOM:

Simson Wang and his wife welcome Camden Reimund Wang



Innovative Peer Network Offers Help After Stressful Events

By Claire Winters

Practicing medicine in a leading-edge academic setting offers many advantages: challenging cases, accomplished colleagues, and access to the most technologically-advanced equipment. And yet, the on-going pressures of such an environment can make it nearly impossible for physicians, nurses and staff to allow themselves to accept emotional support after challenging events, the same support they recognize as vital to their patients' health and functioning.

"The culture of medicine, one of high standards and perfectionism, is also one in which emotional reactions to adverse events are generally not acknowledged or openly discussed. To our detriment, we are trained to ignore our own humanness and frailty," says Susana Vacas, MD, PhD.

To remedy this, our department embarked on a six-month peer support pilot program that concluded at the end of June. (We featured the program's launch in our Winter 2017 issue of *Open Circuit*.)



The peer support program was developed by Brenda Bursch, PhD, Professor of Psychiatry and Biobehavioral Sciences, and implemented in our department by the chair of our Wellness Committee, **Keren Ziv, MD**, and our Program Manager, Shevaughn Marchese.

The program trained 24 of our department members to offer nonjudgmental, confidential immediate support and information to colleagues who encountered adverse and difficult events. Through role-playing,

dialogue scripts and on-going check-ins, peer supporters learned how to let their well-honed problem-solving skills recede into the background and allow their listening skills and empathy to come to the fore.

"Peer support training helped me recognize signs of distress and suffering in a peer-to-peer context," says Dr. Vacas. "Before, I wasn't sure how to speak to someone in this condition. I worried that I might offend them or cross our professional boundaries. The training gave me the tools needed to approach my colleagues, listen to their stories, offer perspective, and provide appropriate resources."

Increased Self-Awareness

"I've been surprised by even how, when things go well, people still need peer support," says Dr. Ziv. Even if successfully treated, "a case with high risk is still unsettling."

Dr. Ziv herself took advantage of peer support following a difficult case. The procedure had many risks the team successfully handled, and the outcome was positive, yet she found herself shaken by thoughts of what could have gone wrong. Discussing her feelings about the event with a colleague in the program enabled her to recover her sense of stability quickly and connect to a sense of achievement.

Dr. Vacas notes the pilot helped her understand how the day-to-day stressors of her work can compound. "Through my peer support conversations, I began to learn more about my 'grief load,'" she says. "Everyone reacts to these stressors differently, some through anger, some through frustration, confrontation, sadness."



The program taught participants that emotional responses to adverse events can take many different forms, influenced by the individual's past and conditioning. What's important is not learning to give an "appropriate" response, but taking the time to understand and explore pain and, if necessary, access additional resources – such as therapy or support groups – to further explore it.

A Changing Culture

"I was very happy to see representatives from the resident classes and CRNAs attend the peer support training. It shows that our department is invested in supporting each other in our high-stress environment," said Shelly Anderson, CRNA. Dr. Ziv also notes that the Chief Residents took an especially active role in making sure residents participated. This year's incoming class will train its class representatives to be peer supporters.

While the pilot has concluded, our department will continue to host the program. Dr. Bursch is now working on training other departments, with an eye toward a hospital-wide rollout in the future.

Adoption of peer support can take time, since participants must trust their vulnerabilities with their professional peers. Why not just confide in a friend?

"An untrained colleague might be more concerned about their own needs," says Dr. Bursch, whereas a peer supporter has the training to detect the needs of the colleague in distress. But at this stage, "whether or not they use it is not as important as whether it's available," she adds. "It's reassuring to know that the organization is there to support them."

Did You Know...?

A UCLA Wellness app named "Connectd" is a confidential tool available to UCLA Health staff, faculty, and trainees. It offers brief mental health and substance abuse self-screening, health and wellness resources, and both experimental and evidence-based symptom management tips. The app allows users to track their symptoms and substance use over time, monitor progress, and receive feedback about their risk levels.

In addition to quick, practical advice, interested users can learn more about conditions they may be struggling with, such as suicidal thoughts, depression, anxiety, or the after-effects of trauma. After completing the brief screeners, users might be directed to other digital resources, such as the "Quit That!" and "PTSD Coach" apps, or they might be advised to seek professional help. The app also features guided meditations, relaxation exercises, and time management tips.

To access Connectd:

- Access the app's activation code (available to UCLA Health faculty and staff) on the department Intranet home page
- Go to the U App Catalog on your UCLA-configured phone, or to your app store
- Download Connectd (note spelling); search "connectd behavioral" in the Apple app store

If you are experiencing technical difficulties with the app, or would like to provide feedback, please contact Brenda Bursch, PhD, at bbursch@mednet.ucla.edu.

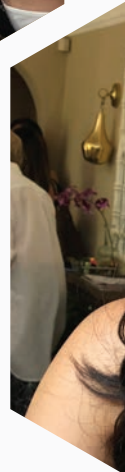
Our Annual Reunion of UCLA Women in Anesthesiology Events

By Karen Sibert, MD, FASA

Every summer, the women physicians in our department – alumnae, faculty, fellows, and residents – gather for a reunion lunch. It's always a potluck event, and children are welcome, which makes it a lively afternoon! This year the group met at the lovely home of DeEtte Zahn, MD.

The event, which began in 1978, was originally the idea of Selma Calmes, MD, one of the first women faculty in our department and the former chair at Olive View-UCLA Medical Center. "There was a scarcity of women faculty and residents in the anesthesia department and in the medical center as a whole," Dr. Calmes wrote. "Because we were so few, we all became friends."

Now the tradition continues, and this annual event offers a chance for women in anesthesiology of all ages to get acquainted, network, and compare notes. We extend many thanks to Wendy Ren, MD, who has volunteered for several years to be the event coordinator, and to Dr. Zahn and her family for hosting.





Dr. DeEtte Zahn and daughter Bella, 8



Dr. Wendy Ren, event coordinator



Staff News and Updates

New Arrivals



Kathy Good is our new Mail Assistant. She previously volunteered at UCLA and is an alumna of its Project Search Program, which teaches job skills and provides placement services. Kathy is a resident of Westwood, who enjoys hip-hop

dancing and making art in her spare time.



Evan Moh joined the department in March as a Senior Programmer Analyst. He received his bachelor's degree in Industrial and Systems Engineering from USC, and is currently pursuing a MS in Healthcare Administration from UCSF.

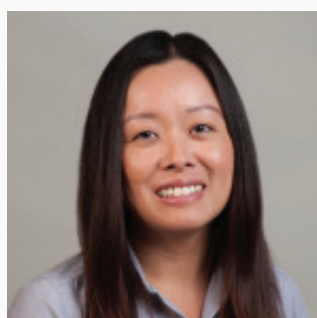
Before joining UCLA, Evan worked at UnitedHealth Group (formerly Davita Medical Group) as a business analyst. He is excited to try new ice cream shops and travel outside the state.



Elizabeth Suh joined the department as an Administrative Specialist in April. Prior to UCLA, she worked for California Medical Evaluators as a medical-legal provider liaison and account manager. In her free time, she likes finding a new

places to eat, being outdoors, and bowling.

On the Move



Wendy Ma, the former Director of Research Administration for Surgery, Anesthesiology, Emergency Medicine and Oncology, became our department Chief Financial Officer in January.



Claire Winters, formerly an administrative specialist, became our Communications Manager in June. She works closely with Shevaughn Marchese and Dr. Karen Sibert on the department website, our newsletters, and other communications initiatives.

Our Far-Flung Alumni: Where Are They Now?

By Shevaughn Marchese

Benjamin Carroll, MD, Class of 2014, is practicing at Torrance Memorial, and just welcomed a second boy, Nathan, to his family.

Emily Methangkool, MD, MPH, Class of 2013, is celebrating the completion of her MPH degree at UCLA School of Public Health this year. She was honored at this year's graduation ceremony as the winner of the first-ever Jordan Miller, MD, Award for Patient Safety and Quality.

Eric Hodes, MD, MBA, joined an anesthesiology practice in Sonoma County after graduation. The practice grew from nine to over 50 anesthesiologists serving seven hospitals and 18 outpatient centers. He was part of the group's leadership for many years, and served as president and CEO from 2012-2017. In 2017, he was appointed Chief Medical Officer at a Dignity Health hospital in Sacramento, and also earned an MBA at the Haas School of Business at UC Berkeley. He still practices clinically about once a month, and says that he will always love the specialty. Classmates might remember that Dr. Hodes got married during his CA-1 year at UCLA. They are still going strong and have two children – one in college in San Diego and the other in high school. Unfortunately, the family lost their home in Santa Rosa to the Sonoma County fires in October, 2017. We wish Dr. Hodes and his family all the best as they try to navigate insurance issues and rebuild.



IMAGES

TOP: Dr. Emily Methangkool with sons Logan, left, and Mason

BOTTOM: Dr. Benjamin Carroll and his growing family

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:

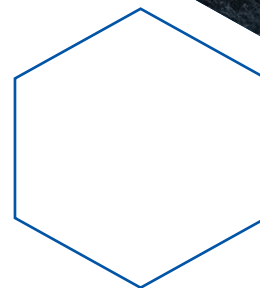
Please make your check or money order payable to the UCLA Foundation, and write "Department of Anesthesiology" in the memo line.

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!