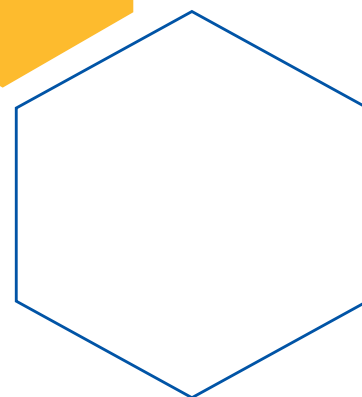


WINTER 2017 EDITION
UCLA DEPARTMENT OF ANESTHESIOLOGY & PERIOPERATIVE MEDICINE



David Geffen
School of Medicine

UCLA Health



Open Circuit

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The Ether Monument in Boston Garden

From the Chair's Desk

By Aman Mahajan, MD, PhD, MBA

As we reach the midpoint of the academic year and approach the holidays, we have much to celebrate! Our faculty and residents turned in an outstanding performance at the ASA annual meeting in October, giving refresher course lectures, leading panel discussions, taking part in governance activities, and earning recognition for top research abstracts, as you'll read in our lead article in this winter's issue of Open Circuit.

Our clinical practice continues to expand, reflecting our commitment to improving population health throughout the greater Los Angeles community, along with advancing tertiary care services at UCLA hospitals. UCLA anesthesiologists who specialize in chronic pain are seeing patients and performing complex procedures in new clinics in the South Bay and Encino, helping patients avoid the risks of opioid overuse with multimodal techniques. We now provide full anesthesiology services at outpatient centers in Encino, Santa Clarita, and Westlake for endoscopies, interventional pain procedures, and ambulatory surgery.

Outside the operating room, we celebrated the 20th anniversary of the Simulation Center this fall. We're expanding our scope of patient care to include telemedicine, health optimization before surgery, and complex care after surgery, reframing the concept of the "preop clinic" into comprehensive perioperative and transitional care. Our research productivity continues to increase, with new grants, publications, and awards. Our faculty physicians, nurse anesthetists, residents, and staff engage in innovative community outreach efforts, and travel the world on humanitarian missions.

As a core component of UCLA's Institute for Precision Health, our department is helping to create a "biobank" and data warehouse for genomic analysis. Already, blood samples have been collected from more than 7,000 patients who were admitted for surgery, and that total will climb to 50,000 within two

years. Our department recently recruited

Eran Halperin, PhD,

who also holds joint professorships in computer science and genetics, to lead the perioperative genomics program.

Dr. Halperin's "[Big Data and Genomics Lab](#)" is working toward predicting treatment outcomes by combining health records with genetic data, and using high-throughput computational power to relate genotype to phenotype.

Our training programs continue to grow, now with 100 residents and more than 20 fellows in all subspecialties. Our unique Faculty/Fellow Advanced Scholarship Training program encourages promising young faculty members and fellows to pursue advanced degrees – in basic science, business, education, health policy, informatics, or public health, as examples – with department-funded tuition support, protected nonclinical time, and dedicated mentorship. We see an abundance of applicants for faculty positions, reflecting the fact that UCLA is becoming a destination of choice for clinician scientists.

I want to extend special thanks to the many alumni who continue to [support our endeavors](#) with generous donations dedicated towards our education, research and clinical programs. Our research and training missions continue to thrive along with our clinical excellence. Our vision is for UCLA's Department of Anesthesiology and Perioperative Medicine to become the best in America, creating knowledge that results in better patient care. We hope you enjoy our Winter 2017 e-magazine, we wish you a very happy holiday season, and we look forward to welcoming you back to campus whenever you find yourself in Los Angeles.



IMAGE

Department Chair Dr. Aman Mahajan and Simulation Center Medical Director Dr. Randolph Steadman at the Center's Anniversary celebration on September 28th.

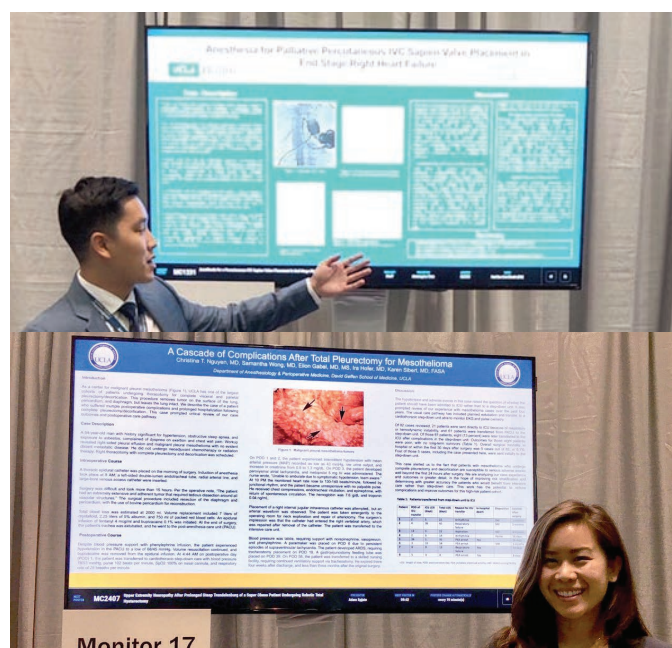
UCLA Shines at ANESTHESIOLOGY 2017

If you planned your schedule well, you could have stayed busy during the ASA's entire annual meeting, ANESTHESIOLOGY 2017, just by attending lectures, panel discussions, "point-counterpoint" debates, and poster presentations by our department's faculty and residents.

Among the highlights – the judges selected two of our department's abstracts for presentation at the prestigious "Best of Abstracts: Basic Science" session during prime time on Sunday afternoon, Oct. 22. The honorees were:

- **Louis Saddic, MD, PhD**, lead author on the abstract, *"Myocardial Injury Leads to Transcriptome Remodeling of the Dorsal Horn"*. The authors concluded, "This is the first study to demonstrate remote remodeling of the cardiac nervous system at the level of the spinal cord through specific changes in gene expression after acute and chronic myocardial ischemia in a large animal model." Dr. Saddic's coauthors on the project are Kimberly Howard-Quijano, MD, MS, Chen Gao, PhD, Tatsuo Takamiya, MD, Christoph Rau, PhD, Yibin Wang, PhD, and Aman Mahajan, MD, PhD, MBA.
- **Gregoire Ruffenach, PhD**, lead author on the abstract, *"Oxidized Lipids: A Critical Role in Pulmonary Hypertension Pathogenesis"*. Dr. Ruffenach and co-authors – Soban Umar, MD, PhD, Mylene Vaillancourt, MSc, Ellen I. O'Connor, BSc, Shayan Moazeni, BSc, Christine Cunningham, BSc, Abbas Ardehali, MD, Aman Mahajan, MD, PhD, MBA, Srinivasa T. Reddy, PhD, and Mansoureh Eghbali, PhD – studied 15-hydroxyeicosatetraenoic acids (15-HETE), in the lungs and plasma of PAH patients and animal models of pulmonary hypertension. They concluded, "This study demonstrates the causal role of 15-HETE in PH pathogenesis as 15-HETE itself is able to trigger PH in wild type mice."

Our faculty members were also featured in a special poster session entitled "Young Investigator – Outcomes and Database Research." John Shin, MD, and colleagues in the Perioperative Medicine and Informatics section of our department presented their abstract, *"A Digital Quality Improvement Approach Improves Prophylaxis and Reduces Incidence of Postoperative Nausea and Vomiting."* Brent Ershoff, MD, and colleagues studied *"The Use of Deep Neural Networks to Predict Post-Liver Transplant Mortality"*, concluding that such machine-learning techniques may offer advantages over commonly used risk models to achieve better predictive performance.



TOP: Christopher Dinh, MD, presents his "Medically Challenging Case" poster, "Anesthesia for a Percutaneous IVC Saphen Valve Placement in End-Stage Right Heart Failure."
BOTTOM: Christina Nguyen, MD, with her "Medically Challenging Case" poster, "A Cascade of Complications After Total Pleurectomy for Mesothelioma."

Our residents presented their work at several "Medically Challenging Case Presentations", on topics as varied as right heart failure, "harlequin" syndrome, continuous spinal catheter use in critical aortic stenosis, and complications following mesothelioma resection (see photos).

Anahat Dhillon, MD, a specialist in critical care, led three separate sessions involving medical ethics: one on the complex issue of futile care; another on ethical considerations in the care of the geriatric patient; and a third on practical tools for responding to difficult emotions in the workplace.

Department Chair Aman Mahajan, MD, PhD, MBA and Maxime Cannesson, MD, PhD, our vice-chair for perioperative medicine, took part in several lectures and panel discussions. They collaborated on a fascinating panel concerning the use of precision medicine and predictive analytics to improve patient outcomes in the perioperative period, discussing the roles of physiologic monitors and genomics research.

Karen Sibert, MD, FASA, moderated a lively panel – attended by several UCLA residents – arguing for and against the proposition that physician-only anesthesia practice is no longer financially viable in today's healthcare marketplace, and will be replaced entirely by care-team practice. (It was difficult to say which speaker prevailed, but opinions were passionate on both sides of the argument.)



From left: Drs. Christopher Dinh, Kate Lee, Marsha Bernardo, Pamela Chia, and Christina Nguyen.

UCLA alumni, faculty and residents took a break from all the activities on Sunday evening, and enjoyed excellent seafood at our dinner reception in the 6B Lounge on Beacon Street, near the Boston Garden and the Massachusetts Steak House. Oren Bernstein, MD, who was a chief resident in our Class of 2011, arguably traveled a longer distance than anyone else there – he made the journey to Boston from his private practice in Oahu!



A. J. Rai, MD; Karen Sibert, MD, FASA; Rex Pearce, MD (CSA District 15 Director); and Shaishav Shah, MD. Drs. Rai and Shah represent UCLA residents in the ASA Resident House of Delegates.

IMAGES

Boston is where the world's first use of ether in surgical anesthesia took place, commemorated in the Public Garden's Ether Monument, "The Good Samaritan." An inscription reads, "In gratitude for the relief of human suffering by the inhaling of ether a citizen of Boston has erected this monument A.D. MDCCCLXVII." (3 photos - monument by day, by night, and inscription)



ASA GOVERNANCE AND COMMITTEE PARTICIPATION

In parallel with the scientific sessions, many department members participated with the various governance activities of the ASA, attending state and regional caucus meetings and a host of committee meetings. UCLA faculty members currently holding office in the California Society of Anesthesiology include:

- Karen Sibert, MD, FASA – President
- James Moore, MD – Past President
- Judi Turner, MD, PhD – Treasurer
- Rima Matevosian, MD – Secretary
- Philip Levin, MD – Assistant Secretary
- Johnathan Pregler, MD – Alternate Director from California

Our faculty members serve on numerous ASA committees in leadership roles. Dr. Moore just completed his term as chair of the important Committee on Performance and Outcomes Measurement, while continuing to serve as a committee member, and

Dr. Mahajan is beginning work as chair of the Committee on Future Models of Anesthesia Practice. Dr. Mahajan chairs the Educational Track Subcommittee on Perioperative Medicine, of which Dr. Cannesson is a member, and also serves as an alternate in the ASA House of Delegates. Other ASA committees with UCLA faculty participation include:

- Anesthesia Care Team (Dr. Sibert)
- Educational Track Subcommittee on Cardiac Anesthesia (Dr. Mahajan)
- Cardiovascular and Thoracic Anesthesia (Dr. Howard-Quijano)
- Abstract Review Subcommittee on Clinical Circulation (Dr. Howard-Quijano)
- Critical Care Medicine (Joseph Meltzer, MD)
- Economics (Dr. Pregler)
- Electronic Media and Information Technology (Dr. Moore)
- Equipment and Facilities (Drs. Cannesson and Pregler)
- Editorial Board for Interactive Computer-Based



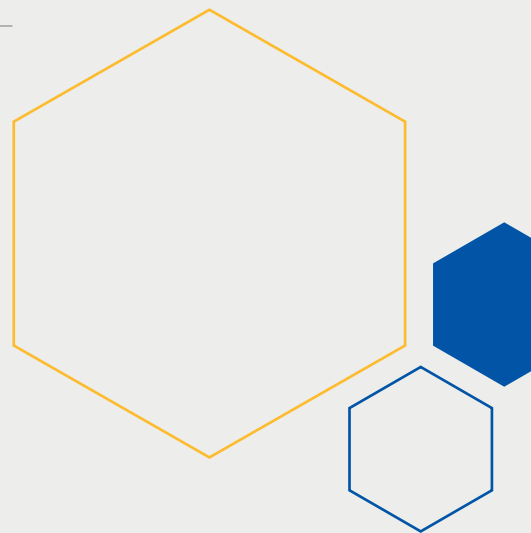
CSA officers and other California anesthesiologists who serve in the ASA House of Delegates, including several of our faculty members: Drs. Judi Turner, Rima Matevosian, Johnathan Pregler, James Moore, Philip Levin, Jonathan Jahr, Karen Sibert and UCLA attending physician Annie Lee, MD.

Education (Randolph Steadman, MD, MS)

- Future Models of Anesthesia Practice (Drs. Mahajan and Sibert)
- Membership (Dr. Pregler)
- Newsletter (Dr. Sibert)
- Palliative Care (Dr. Dhillon)
- Patient Blood Management (Jonathan Jahr, MD, FASA)
- Patient Safety and Education (Emily Methangkool, MD)
- Pediatric Anesthesia (Wendy Ren, MD)
- Educational Track Subcommittee on Pediatric Anesthesia (Dr. Ren)
- Practice Management (Dr. Mahajan)
- Regional Anesthesia and Acute Pain Medicine (Siamak Rahman, MD)
- Educational Track Subcommittee on Regional Anesthesia and Acute Pain (Dr. Rahman)
- Residents and Medical Students (Jacques Neelankavil, MD)
- Scientific Advisory (Dr. Cannesson)
- Standards and Practice Parameters (Dr. Cannesson, Daniel Cole, MD, FASA)

ASA WEINTRAUB AWARDS

Each year, the ASA selects journalists to receive Philip R. Weintraub Media Awards for publications – print, online, and/or video – that educate the public about the specialty of anesthesiology. This year, two of the three awards were presented for work concerning the hazards of anesthesia given to children in dental offices. Reporter Kate Snow and producer Elizabeth Brown, of NBC News, were honored for their television segment titled “[Children at Risk? Kids and Sedation at the Dentist’s Office.](#)” Linda Carroll, a reporter for Today.com, received her award for an online article, “[9 questions to ask your dentist before your child goes under sedation.](#)” Both pieces quoted Dr. Sibert, our department’s Director of Communications.



Budding Careers in Research

By Shevaughn Marchese & Cecelia Canales, MPH

Our department continues to expand its robust basic science laboratories, and is developing new research lines in translational research, digital health, hemodynamics, and precision medicine. The success of this growth is due to our investment in talented faculty members, and in our recruitment of top-notch support staff members working behind the scenes to make sure that research efforts are thriving.



"At UCLA, I can combine teaching, research and care of complex patients. I really enjoy my job, and am happy to be part of the department," says **Matthew Fischer, MD**, who stayed to join our faculty in July after completing his cardiac

fellowship and a master's degree in clinical research. Dr. Fischer focuses on using informatics, epigenomics, and mathematical modeling to improve perioperative outcomes, with a starter grant funded by the Society of Cardiovascular Anesthesiologists.

"Specifically, I am interested in better predicting postoperative atrial fibrillation and acute kidney injury in adult cardiac surgery patients," he explained. With an incidence of 27 to 40 percent after cardiac surgery, atrial fibrillation is a common cause of increased morbidity and mortality, and kidney injury is another significant predictor of poor outcomes.

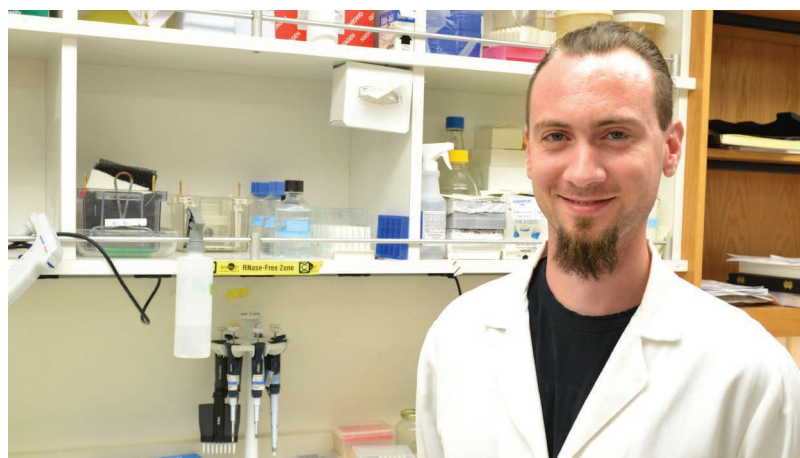
Dr. Fischer currently collaborates with the laboratory of Thomas Vondriska, PhD, to obtain epigenomic data from preoperative blood samples taken the day of surgery. Using epigenomic data and the patient's medical history, the group seeks to risk-stratify cardiac surgery patients based solely on preoperative information. Armed with this knowledge, clinicians may be able to institute preventive measures to lower the risk of atrial fibrillation or kidney injury.



Lisa K. Lee, MD, started on her path to becoming a research clinician while completing her pediatric anesthesia fellowship year at UCLA. She worked on a multi-institutional retrospective study on whether or not nasogastric or orogastric

tubes, placed early in the admission of infants with pyloric stenosis, were associated with increased length of stay. A second project involved validating a perioperative risk assessment tool for pediatric patients who presented with an upper respiratory tract infection on the day of surgery.

Dr. Lee's current research analyzes the differences in the miRNA expression profile of survivor vs. non-survivor pediatric patients with ARDS. *"I feel very lucky to be here because of the amazing resources that we have with a supportive department, the CTSI [Clinical and Translational Science Institute], and the wealth of collaborators at UCLA,"* she said.



Postdoctoral fellow **Gregoire Ruffenach, PhD**, came to UCLA as a visiting graduate researcher in the laboratory of Mansoureh Eghbali, PhD. The team studies the mechanism of development of pulmonary hypertension in patients with preexisting pulmonary

fibrosis. Their work was highlighted at meetings of the American Society of Anesthesiologists, American Heart Association and American Thoracic Society in 2016 and 2017.

Dr. Ruffenach is currently pursuing post-doctoral training with Dr. Eghbali, studying the role of oxidized lipids in pulmonary hypertension pathogenesis. They collaborate with Srinivasa Reddy, PhD, of the Department of Molecular and Medical Pharmacology, with funding from an NIH R01 grant and Dr. Ruffenach's postdoctoral fellowship grant.

Dr. Ruffenach won a "New Investigator Travel Award" from the AHA this year. He was first author on an abstract, "*Causal Role of Oxidized Lipids in Pulmonary Hypertension Development*", that was featured as a "Next Best Thing" in cardiovascular research by the AHA's Council on Basic Cardiovascular Sciences. Another was selected for presentation among the "Best of Abstracts" at the 2017 ASA Annual Meeting.



Susana Vacas, MD, PhD,

joined the department after completing her graduate study at UCSF in 2014, where her experiments focused on the mechanisms and risk factors of delayed cognitive recovery. Dr.

Vacas seeks to improve

patient outcomes after neurosurgery by blocking or alleviating postoperative inflammatory responses.

By studying vulnerable populations, such as patients with obstructive sleep apnea, Dr. Vacas hopes to understand the pathogenic mechanisms behind cognitive dysfunction, and ultimately develop a bioassay for all prospective surgical patients. She is the author of a number of influential studies in the field, and currently holds a patent on modulators of the "Integrated Stress Response", eif2 α pathway, which may mitigate postoperative memory impairment.



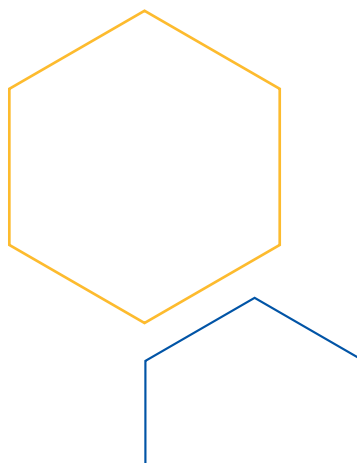
The work of **Louis Saddic, MD, PhD**, involves the complex interrelationships between the central nervous system and cardiac nervous system, highly integrated networks that play significant roles in cardiovascular physiology. He focuses on

understanding the genetic changes that take place in these systems after disease develops -- specifically, myocardial infarction.

Working in the laboratories of Aman Mahajan, MD, PhD, our department chair, and Dr. Eghbali, Dr. Saddic and colleagues are using next-generation sequencing to uncover the gene networks that contribute to deleterious outcomes of ischemia, including lethal arrhythmias and heart failure. They are using single-cell RNA sequencing to uncover the specific cells in the central nervous system that undergo these changes.

"I am also interested in the genetic changes that take place in the heart and great vessels of our cardiac surgery patients," Dr. Saddic said. Similar novel sequencing techniques will be used to uncover the genetics of these disorders. He is one of many department members contributing to the UCLA Precision Medicine Initiative. Patients are donating blood samples when they are admitted for surgery, so that their genomes may be fully sequenced.

"The goal is to uncover variants that may help us predict perioperative outcomes, including major adverse cardiac events," Dr. Saddic explained.

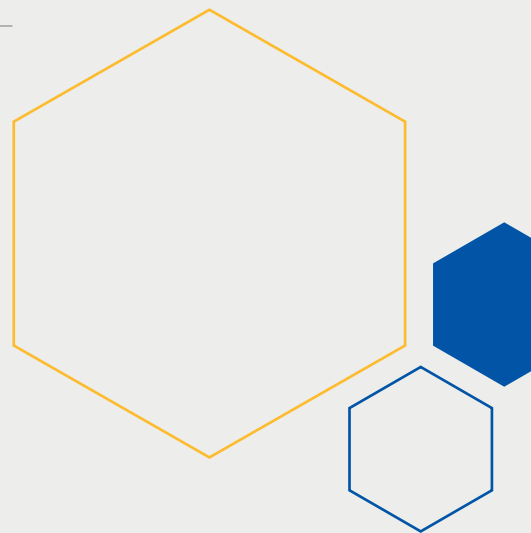


BEHIND THE SCENES

Our research support staff members help residents and faculty develop ideas into successful proposals leading to funding and publications. They support the development and implementation of research protocols, IRB applications, and clinical trials.

We are more fortunate than many academic departments in benefiting from the consistent presence of a biostatistician, Tristan Grogan, MS, who helps residents and faculty develop protocols that are statistically sound, assists with interpretation of results, and helps with the writing of manuscripts and grants.

Other experienced personnel, including Wendy Ma and Stacy Tsan, help with budget development and guide investigators throughout the funding process. Jennifer Scovotti and the Clinical Research Team facilitate new protocol development, IRB submission, data collection, database management and abstract/manuscript preparation. Laura Benscoter provides administrative services, including assistance with new lab setup and facilitating interactions with Environment Health & Safety.



Our Second Annual Cardiovascular Symposium

By Laura Benscoter

The [UCLA Cardiovascular Theme](#) held its second annual [Cardiovascular Symposium](#) on September 25- 26 at UCLA's De Neve Plaza. The Symposium aims to foster education and a sense of collaboration in the cardiovascular community by bringing together faculty, staff, trainees, and students across many specialties for two days of scientific seminars and discussion of current research projects. Supported by the pharmaceutical corporation Pfizer, this year's symposium attracted over 300 attendees, including representatives from 30 UCLA departments and programs, and 24 other institutions.

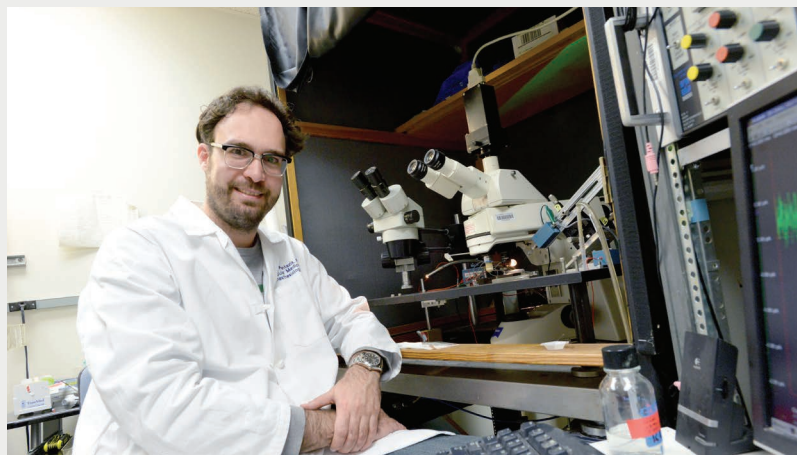
Ten world-renowned leaders in cardiovascular medicine and science gave lectures, and 64 young investigators gave poster presentations of their research. Four of our department's researchers won awards in two of the three categories:

POST-GRADUATES (Post-doctoral students and fellows in the basic sciences)

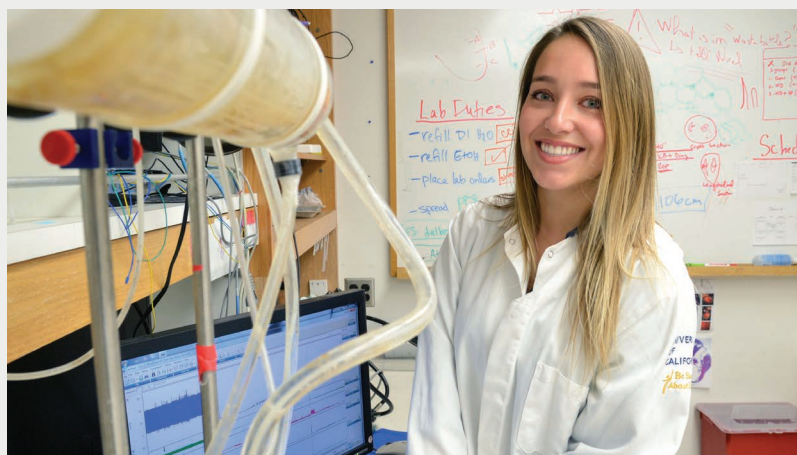
- **Chen Gao, PhD:** "Function Beyond RNA Splicing for RBFOX Family Members in the Heart"
- **Antonios Pantazis, PhD:** "Resolving the Molecular Processes Governing the Activity of a K⁺ Channel (BK) that Regulates Vascular Tone"

GRADUATE AND UNDERGRADUATE STUDENTS

- **Douglas Chapski, BS:** "Top Down Proteomics Identifies Differentially Abundant Proteoforms in Isolated Cardiomyocytes from Healthy and Hypertrophic Hearts"
- **Christine Cunningham, BS:** "Y Chromosome Protection in PH is Not Mediated by Histone Demethylase Kdm5d"



"It was great to be immersed in cutting-edge cardiovascular research, from the molecular all the way through to the population level!" - Poster winner Antonios Pantazis, PhD



"The CV Theme Symposium at UCLA really encourages collaboration-- we have a chance to engage with global leaders in CV research, and learn more about the exciting and innovative projects going on right on our campus." - Poster winner Christine Cunningham, BS

Dr. Hudson Wins Neuroscience Research Award

Andrew Hudson, MD, PhD, is the winner of this year's prestigious William L. Young Neuroscience Research Award, given by the [Society for Neuroscience in Anesthesiology and Critical Care](#) (SNACC). Dr. Hudson is our department's Director of Neuroscience Research, and Assistant Professor in Residence of Anesthesiology and Perioperative Medicine.

Dr. Hudson received the award for his project, *"Burst Suppression in the Cortical Microcircuit"*, which studies mechanisms of anesthesia and states of consciousness.

"Dr. Hudson's work is foundational to understanding how anesthetic drugs affect different states of consciousness and is providing novel non-canonical theories on regulation of neural activity in the brain," says Aman Mahajan, MD, PhD, our department's chair.

"We are revisiting some of the canonical assumptions about what neurons contribute to the electrical activity of the brain," Dr. Hudson says.

Clinicians are familiar with the electroencephalogram, or EEG, which records electrical potentials at the scalp. But it hasn't been clear before that patterns of activity in superficial layers may be different from the deeper layers.

Dr. Hudson credits medical student Angie He for her help with this insight. She worked in Dr. Hudson's laboratory last summer with support from the ASA's Medical Student Anesthesia Research Fellowship (MSARF) Summer Program, sponsored by the [Foundation for Anesthesia Education and Research](#) (FAER).

Dr. Hudson's prize-winning proposal focuses on understanding how activity in the cortical circuit



in different layers combines to produce the pattern of burst suppression in the EEG. Burst suppression is an abnormal EEG rhythm, seen in states of coma or very deep anesthesia, with alternating runs of very low voltages trading off with large voltages. Anesthetic medications including barbiturates, propofol, midazolam, and isoflurane can produce burst suppression, resulting in a large reduction in the cerebral metabolic rate of oxygen and a possible protective effect in cases of acute cerebral insult.

"By using genetically encoded calcium indicators, we can look at activity in different layers of the cortical microcircuit during anesthesia," Dr. Hudson explains.

Dr. Hudson expressed thanks to the international membership of SNACC for recognition of his scientific work. *"The membership of SNACC includes many great neuroscientists working in anesthesia, so it is a real honor to receive this award,"* he said.

Selected Recent Publications

Kamdar N, Hoftman N, Rahman S, Cannesson, M. **Opioid-Free Analgesia in the Era of Enhanced Recovery After Surgery and the Surgical Home: Implications for Postoperative Outcomes and Population Health.** *Anesthesia & Analgesia*, Vol. 125, No. 4, pp. 1089-91.

Aggressive opioid-based postoperative pain control has been demonized as a major contributor to the national opioid addiction epidemic and its associated morbidity, ultimately leading to many preventable deaths. The authors make the case that we must actively work to curtail the detrimental path from acute surgical pain to chronic pain syndromes that may culminate in opioid addiction.

Umar S, Cunningham C, 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*, 2017 September.

This is the first-ever study to shed light on the role of sex chromosomal influence on pulmonary hypertension. Our department's researchers showed that the Y chromosome – found only in males – may be the single most important factor protecting against the development of this catastrophic disease. The study is the work of the cardiovascular research team headed by Soban Umar, MD, PhD, with the supervision and mentorship of senior author Mansoureh Eghbali, PhD.

Rosa-Garrido M, Chapski D, Schmitt A, Kimball T, Karbassi E, Monte E, Balderas E, Pellegrini M, Shih T, Soehalim E, Liem D, Ping P, Galjart N, Ren S, Wang Y, Ren B, Vondriska T. **High resolution mapping of chromatin conformation in cardiac myocytes reveals structural remodeling of the epigenome in heart failure.** *Circulation*, 2017 August 117:029430.

This investigation reveals chromatin architectural rearrangements that occur during heart failure and in a model in which the chromatin structural protein CTCF is depleted in the heart. Enhancer-promoter interactions, topologically associating domain boundaries, and other chromatin features are dynamic with cardiac perturbation.

Hudson AE, **Metastability of Neuronal Dynamics During General Anesthesia: Time for a Change in Our Assumptions?** *Front Neural Circuits*, 2017 August 25:11:58.

This article begins from the observation that different anesthetic agents produce stereotyped signatures in the EEG, yet how brain activity transitions between these different EEG signatures in time remains understudied. Data in rats anesthetized with isoflurane suggest that brain activity alternates between multiple states, often spending two to 10 minutes in one state before shifting to another, even without a stimulus or change in the anesthetic. Brain state may be metastable during anesthesia: though it appears that the brain is at equilibrium on short timescales (seconds to a few minutes), longer intervals show shifting behavior. This could explain difficulties encountered with depth-of-anesthesia monitors, and should force a rethinking of the notion of depth of anesthesia as a single dimension.

Vacas S, Takashige Y, Cannesson M. **Intraoperative Noninvasive Cardiovascular and Brain Monitoring in the Elderly.** Curr Anesthesiol Rep, 2017 November.

This report provides a brief review of noninvasive cardiovascular and brain monitoring tools that could potentially decrease neurological complications in the perioperative period. The aging of the population is a major issue affecting healthcare for the foreseeable future. Optimal perioperative care for the elderly is of increasing importance. During surgery, preserving brain perfusion is probably one of the most important parts of hemodynamic management, and can be appropriately achieved by using several available cardiovascular and neurologic monitoring tools.

Agopian VG, Busuttil RW, Hong F, Min Y, Steadman RH, Wang Y, Xia VW. **Venovenous Bypass Is Associated with a Lower Incidence of Acute Kidney Injury After Liver Transplantation in Patients with Compromised Pretransplant Renal Function.** Anesthesia & Analgesia, 2017 Nov;125(5):1463-1470.

The aim of this large retrospective study was to determine if VVB was associated with a lower incidence of posttransplant acute kidney injury (AKI). The authors demonstrated that utilization of intraoperative VVB was associated with a significantly lower incidence of posttransplant AKI in patients with compromised pretransplant renal function.

Wray, CL. **Liver Transplantation in Patients With Cardiac Disease.** Semin Cardiothorac Vasc Anesth, 2017 October; 1:1089253217736050.

A wide range of cardiovascular disorders may affect the liver transplant patient. The cardiac conditions that are most common include coronary artery disease, cirrhotic cardiomyopathy, and structural heart disease. In this review, these conditions are explored in the context of the perioperative cardiac evaluation of liver transplant candidates.

Vaillancourt M, Chia P, Sarji S, Nguyen J, Hoftman M, Ruffenach G, Eghbali M, Mahajan A, Umar S. **Autonomic nervous system involvement in pulmonary arterial hypertension.** Respiratory Research, 18:201, <https://doi.org/10.1186/s12931-017-0679-6>, online publication Dec. 4, 2017.

Pulmonary arterial hypertension (PAH) is associated with increased sympathetic nervous system (SNS) activation, decreased heart rate variability, and presence of cardiac arrhythmias. Reduction of neurohormonal activation could be an effective therapeutic strategy. Direct methods such as cervical ganglion block, pulmonary artery denervation (PADN), and renal denervation have been employed to attenuate SNS activation in PAH. The authors summarize the multiple aspects of autonomic nervous system involvement in PAH, and discuss different strategies used to target the autonomic nervous system for treatment.



IMAGES

LEFT: Simulation Center Education Director Dr. Yue Ming Huang, Cecilia Canales, Monica Bolanos and Stephanie Fisher.

RIGHT: Dr. Steadman with Stan, the first simulator, in 1996.

BOTTOM: Drs. Steadman and Huang with Transition to Internship Bootcamp students.

The UCLA Simulation Center Celebrates 20 Years of Teaching

By Claire Winters

This fall, the [UCLA Simulation Center](#) celebrated its 20th anniversary. From its humble beginnings in a shared CHS lab space with a single mannequin – the beloved “Stan” – the center has grown to a 9,000 square foot, newly renovated facility in Westwood’s Learning Center. With state-of-the-art computerized simulation rooms, debriefing areas, and a small army of mannequins, the center’s programs help students and clinicians at all levels improve performance, shorten response times, and maintain practice standards.

Randolph Steadman, MD, MS, our department’s Professor and Vice Chair for Education, established the Simulation Center in 1996 with an investment from the Department of Anesthesiology and Perioperative Medicine. Partnership with the David Geffen School of Medicine (DGSOM) followed soon, and now the center trains hundreds of health care students, nurses, dentists, and physicians each year throughout the UCLA Health System.

CREATING LEARNER-CENTRIC DIALOGUES

Dr. Steadman began his career in emergency medicine and worked as an Advanced Critical Life Support (ACLS) instructor. Upon completing his training in anesthesiology at UCLA, his faculty mentor suggested he find a practice niche. Remembering how engaged and activated his ACLS students were while working with mannequins, he decided to investigate the growing field of simulation. After traveling to Stanford University to observe its anesthesiology department’s simulation program, Dr.

Steadman was convinced that one would be of great benefit to UCLA.

“A lot of anesthesia is preparing for things that don’t happen frequently,” Dr. Steadman said. “Students don’t encounter critical events often, but we can guarantee they see them in the Sim Center.”

Simulations offer students and faculty the opportunity to deconstruct the decision-making process. Traditional medical training focuses on an “apprenticeship” model, where students and residents accompany attending physicians on rounds, observing decisions as they are made and taking part as their experience allows. However, Dr. Steadman feels this model leaves gaps in training.

“I felt my experience in medical school – the apprenticeship model – was extremely flawed,” Dr. Steadman said. “Following a doctor around was not very learner-centric. I couldn’t learn their thought processes.” The Simulation Center, he believes, enables students to practice the “how” of providing care, and deepens their empathy and critical thinking skills by creating a space for them to question the “why”.

EXPONENTIAL GROWTH

In the Simulation Center’s first year, our department’s faculty anesthesiologists offered to work with medical students during their physiology curriculum. The collaboration gave students an exciting introduction to the field of anesthesiology. Word spread



quickly, and soon the Simulation Center began fielding requests from other departments. Today, simulation experience is an integral part of training in anesthesiology, emergency medicine, family medicine, internal medicine, pediatrics, obstetrics, radiology, surgery and nursing.

In 2000, Yue Ming Huang, EdD, MHS, came on board as the center's first full-time staff member to support simulation and clinical research. After completing her doctorate in 2006, she joined the faculty and became the Education Director. Dr. Huang conducts extensive research on instructional techniques, teamwork, communication skills, and the effectiveness of simulation training. The program has added a team of actors (the Standardized Patient Program) to help trainees develop patient communication skills.

Maxine and Eugene Rosenfeld, longtime donors to the Chancellor's Associates, have made generous \$1 million gifts to the center twice, in 2006 and 2016, underwriting new tools including the human patient simulator, which has life-like physiology and the ability to "talk" and interact with the learner. The gifts have also funded additional clinical equipment such as ultrasound machines, expanding the center's capacity and scope.

NEW FRONTIERS

In order to serve additional clients, the center is developing screen-based and online simulation tools. By partnering with technology and gaming companies, the center is exploring how augmented reality (AR) and virtual reality (VR) scenarios may contribute to health care education.

In recent years, the center has created on-site simulations as part of quality initiatives at the Ronald Reagan Hospital, along with workshop training in Transgender Medicine and in the difficult subject of Child and Intimate Partner Abuse.

The center is expanding its reach by developing assessment tools and programs for ongoing certification. The American Board of Anesthesiology uses the Simulation Center for its Maintenance of Certification program, and offers weighted credits to those who choose simulation over lecture-based recertification.

The Simulation Center's multidisciplinary staff continues to create solutions for UCLA's diverse learning groups. As of last year, the DGSOM reported that students attended simulation training up to nine times each year. From a student's first year of medical school to ongoing professional certification and team-wide, site-specific quality exercises, the Simulation Center has become an integral part of the UCLA Health System's commitment to leading-edge patient care and innovation.

IMAGES

TOP: Dr. Xia with surgery clerkship students auscultating Simon, the Sim Center's first SimMan2G.

BOTTOM: Dr. Sophie teaching a student how to intubate.

Going Global: International Physicians at UCLA

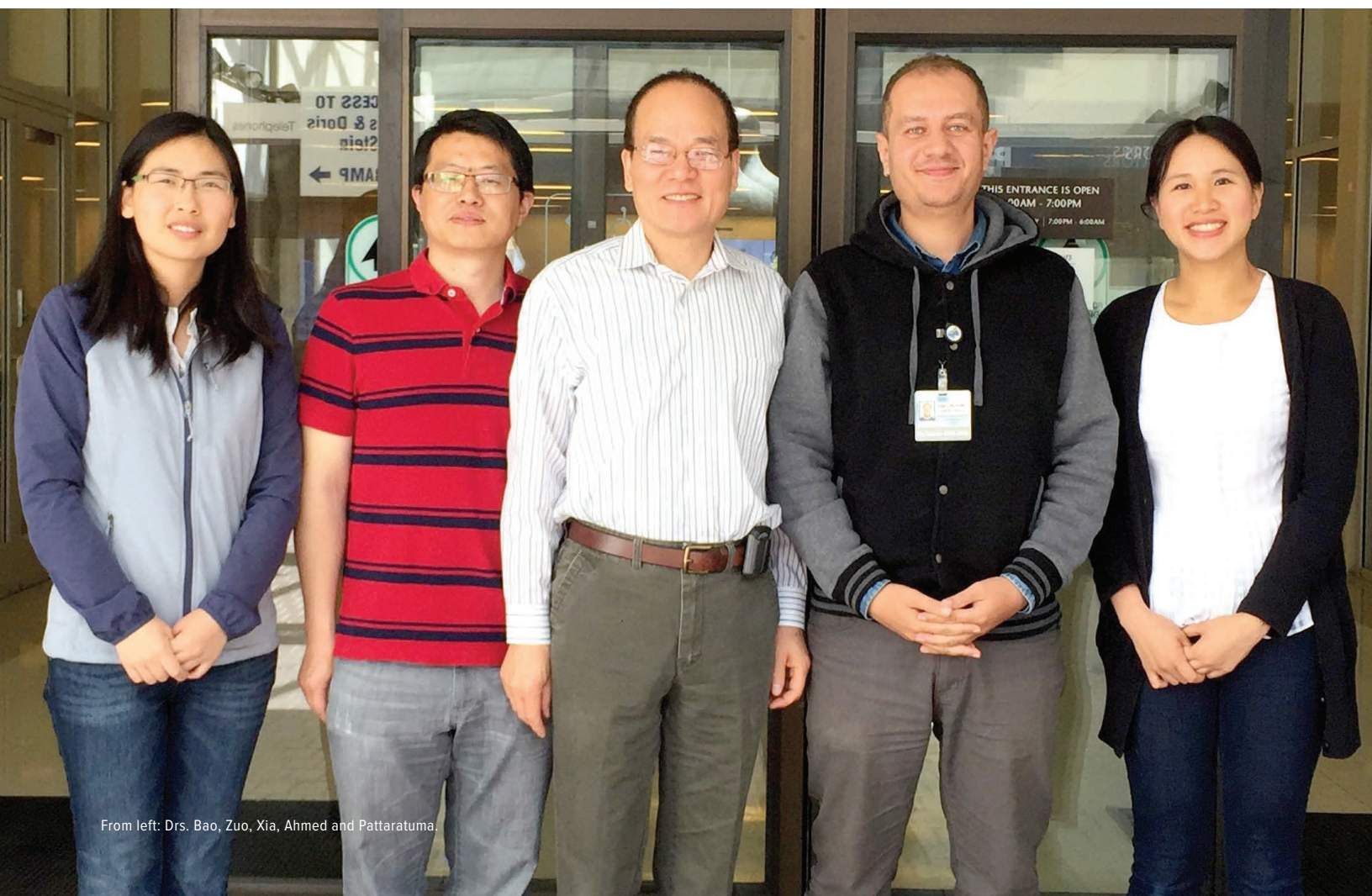
By Victor Xia, MD

Our department, known for providing world-class patient care, research, and education, attracts many international physicians to study and visit here, either as researchers or observers. Often, the visitors are interested in the work of our busy [liver transplant service](#).

International doctors who wish to perform research must apply for an [Exchange Visitor Program](#) J-1 visa. The minimal period of study is six months. Those who simply want to observe our clinical operations

or research may spend as little as a week or several months here, and can visit as tourists with a B1 or B2 visitors' visa. International physicians come from a wide range of countries including China, Thailand, Korea, Taiwan, Singapore, Canada, and Egypt. We have also hosted physicians from Europe and Latin America.

In 2017, five international researchers have worked with our liver anesthesia group.



From left: Drs. Bao, Zuo, Xia, Ahmed and Pattaratuma.

-
- Dr. Hyun Sik Chung recently arrived at UCLA from the Catholic University of Korea in Seoul, where he practices anesthesiology, and will be with us for a year.
 - Dr. Ahmed Mohamed Abdelmoteleb Abdelhafez, an anesthesiologist from Assiut University in Egypt, came to us in early 2015 and returned home in April. Dr. Ahmed studied postoperative pain and its effect on liver transplantation patients, and found that high-level postoperative pain was associated with worse post-transplant outcomes.
 - Dr. Xiangrong Zuo is an intensivist from Nanjing Medical University, Nanjing, China, who spent a year with us and returned to China in October. Dr. Zuo examined the prevalence and the effect on perioperative outcomes of metabolic syndrome in liver transplant recipients.
 - Drs. Naren Bao, from China Medical University in Shenyang, and Vanda Pattaratuma, from Srinakharinwirot University in Thailand, also finished their study with us this year. Their work has been presented at the International Liver Transplantation Society Annual Meeting in Prague, and at the ASA's recent annual meeting in Boston.

In 2018, we anticipate hosting three more physicians from China and Thailand. For the international physicians, the main purpose of study at UCLA is to use what they have learned here to advance patient care, research, and education in their home countries and institutions. We are happy to see that many UCLA care models and methods have been embraced by the international physicians who have studied here.



A First Look at Anesthesiology for College and Medical Students

By John Shin, MD

Our department served as a clinical preceptorship site this year for the UCLA Premedical Enrichment Program (PREP). This summer program's purpose is to provide promising students from educationally and financially disadvantaged backgrounds with the means to strengthen their ability and readiness to study medicine.

As a major initiative of the David Geffen School of Medicine's Office of Diversity, Inclusion, and Outreach, this program has been extraordinarily successful. Established in 1982, UCLA PREP now boasts more than 900 alumni, including many faculty members now teaching in the medical school. Over 88 percent of PREP students have been accepted to medical schools including UCLA, the University of Southern California, UCSF, and Harvard. Two-thirds of these students are the first in their families to receive a college education.

The summer program consists of academic sessions, mentoring, clinical preceptorship, and career guidance. We hosted college students from UCLA and various California State University campuses. The students had an opportunity to speak to our faculty and residents about careers in medicine, and learn about anesthesiology as a specialty. They also observed in the operating rooms.

"I really appreciated the chance to visit today and talk with everyone," said Jordan Alvira, a junior from Cal State San Bernardino. "I had no idea what anesthesia was, and it was so exciting to see it in person!" We hope our participation in this program will encourage diversity within the medical school as well as our specialty.

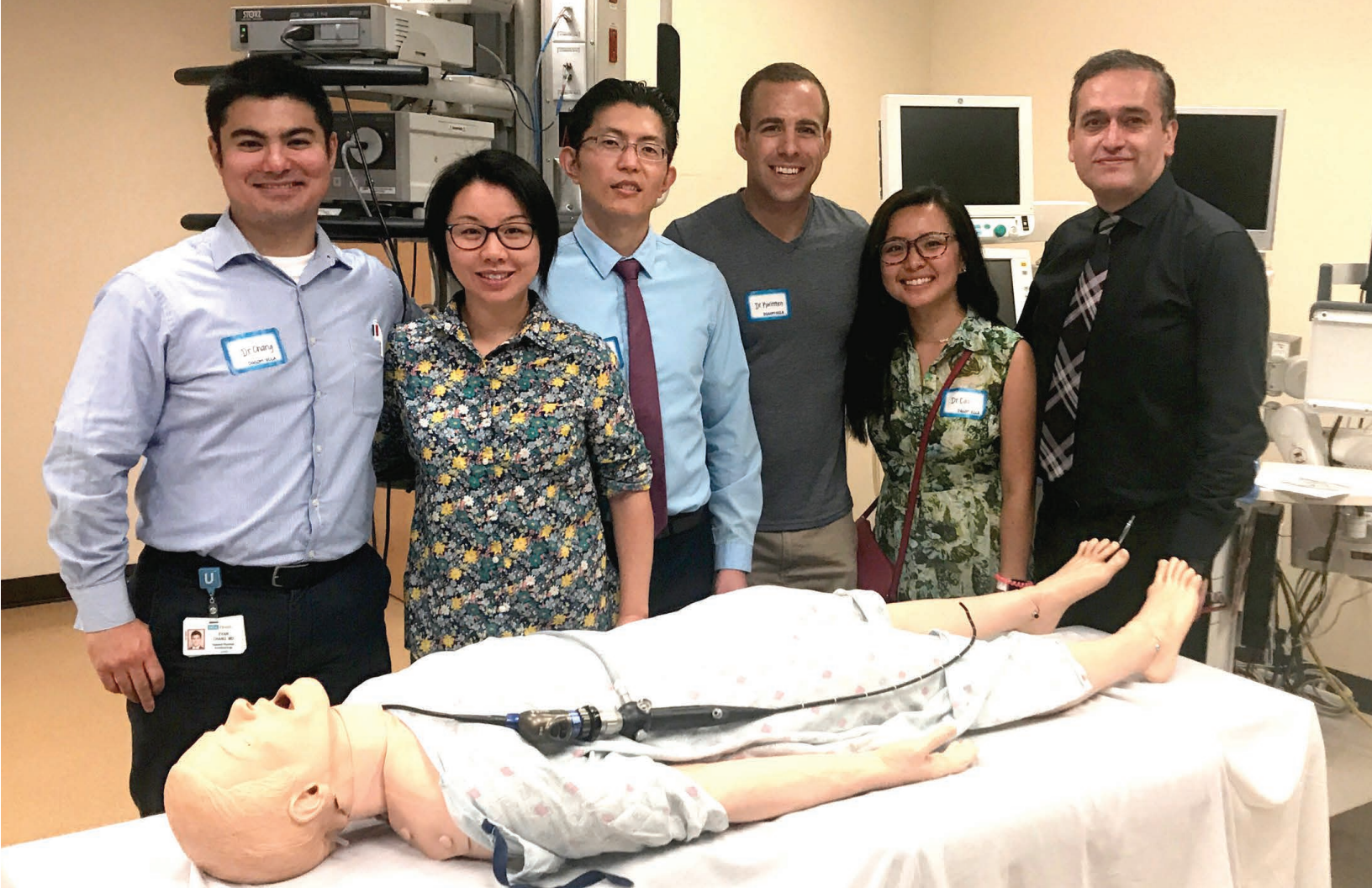
OUR RESIDENTS HELP RECRUIT TOP MEDICAL STUDENTS

In September, we participated in the sixth annual California Medical Student Anesthesia Symposium. This event is hosted by a different anesthesiology department every year, and this year's session was held at the campus of the University of California, Irvine. Nearly 100 medical students of all levels attended to learn about our specialty. Although most students were from schools in California, some traveled from as far away as Philadelphia.

Representing our department were faculty members Reza Borna, MD, and myself, with residents Claudia Cao (CA-2), Evan Chang (CA-1), Ben Kwittken (CA-2), and Lena Russino (CA-3).



Dominic Tran (UCLA undergraduate), John Shin, MD, and Jordan Alvira (Cal State San Bernardino undergraduate).



The program started off in the morning with a lecture by Scott Engwall, MD, MBA, chair of the Department of Anesthesiology at UC Irvine, who spoke about leadership. Anil Panigrahi, MD, PhD, an assistant professor at the Stanford University Department of Anesthesiology, Perioperative and Pain Medicine, spoke about his subspecialty training in transfusion medicine. I was asked to discuss the wide spectrum of future career opportunities in anesthesiology.

After the faculty lectures, a panel of anesthesia residents from different programs answered questions from the audience. In the afternoon session, students rotated through hands-on workshops including TEE, ultrasound for vascular access, intubation, advanced airway skills, regional anesthesia, and emergency simulation scenarios. The day was capped off by a residency fair where students had the chance to

speaking individually with faculty and residents from each of the residency programs in attendance.

The day was very successful, with much enthusiasm generated among the students, and great interest in our department from medical students at all levels. We hope many of these students will apply for rotations with us, and we look forward to working with some as future residents in our program!

IMAGE

UCLA faculty and residents lead a simulation workshop for medical students at the California Medical Student Anesthesia Symposium. From left to right: Evan Chang, MD (CA-1), Lena Russino, MD (CA-3), John Shin, MD (faculty), Ben Kwittken, MD (CA-2), Claudia Cao, MD (CA-2), Reza Borna, MD (faculty).

Our Residents Excel in Research, Service, and Leadership

By Jack Buckley, MD, and Judi Turner, MD, PhD

As 2017 comes to a close, we reflect on another exciting and productive year for our 100 anesthesiology residents at UCLA. Resident representation at the ASA Annual Meeting in Boston was strong, with nine residents invited to present their research and case reports. We also had numerous presentations at the 2017 Western Anesthesia Residents Conference (WARC) in Portland, where our residents were awarded both the 1st and 2nd place oral presentations as well as the 2nd place poster presentation.

Delara Brandal, MD, one of our Chief Residents, recently published an important article, "[Impact of enhanced recovery after surgery and opioid-free anesthesia](#)" on opioid prescriptions at discharge from the hospital", as a first author in the November 2017 issue of Anesthesia and Analgesia. Pamela Chia, MD, CA-2 Resident, was one of two lead authors of an article on "[Autonomic nervous system involvement in pulmonary arterial hypertension](#)", published in the journal Respiratory Research.

To encourage this excellent track record of resident research, the department is actively recruiting for our [Anesthesiology Resident Research Pathway \(ARRP\)](#) and [Anesthesiology Resident Scholars Program \(ARSP\)](#). The ARRP is an intensive 11-month research opportunity for approved residents. The ARSP is a competitive 60-month program that includes an additional \$10,000 per year stipend, and is intended to train future clinician scientists dedicated to advancing research in anesthesiology.

The department has continued our strong relationship with the Second Affiliated Hospital of

Zhejiang University School of Medicine (SAHZU) in China for the sixth year, providing residents with the opportunity to [travel to Hangzhou, China](#) and participate in a month-long clinical and educational rotation. This year, CA3 residents John Le, MD and Ara Vehian, MD were selected to participate in this international elective. Residents have found it valuable to experience health care delivery in a tertiary care Chinese hospital, where over 100,000 procedures and surgeries done annually. Our residents are able to participate in all the subspecialties of anesthesiology and experience traditional Chinese medicine in a clinical setting.



Christopher Morando, MD, Sophia Poorsattar, MD, Christine Nguyen-Buckley, MD, and Nikki Yin, MD, speak about the PLTW program's value at Venice High School.

In addition to their academic accomplishments, residents have been involved in significant activities outside the operating room. In collaboration with the California Society of Anesthesiologists (CSA), UCLA residents Vivek Chellappa, MD, Samuel Hong, MD, Christopher Morando, MD, Christina Nguyen, MD,

Sophia Poorsattar, MD, Martha Ramirez Muro, MD, Ara Vehian, MD, and Nicole Yin, MD, have participated in community outreach activities in greater Los Angeles as part of Project Lead the Way, a national non-profit organization that trains teachers and provides resources to “engage students, one medical mystery at a time.” Our residents visited classrooms at three high schools in Los Angeles to expose students to the specialty of anesthesiology, and give hands-on airway and intubation demonstrations. [See related article in this issue.]



Dr. Sibert (far right) accepts Certificate of Recognition from the CA State Senate on behalf of our department at the CSA launch event at Venice High School. At far left is Assembly-member Sebastian Ridley-Thomas.

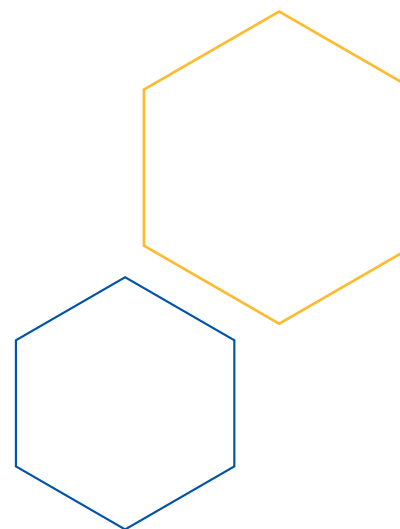
CA-3 resident Ajit Rai, MD, MS, and CA-2 resident Shaishav Shah, MD, represented UCLA anesthesiology residents as delegates to at the 2017 ASA Annual Meeting Resident House of Delegates, with sponsorship by the CSA. CA-2 resident Myroslav Figura, MD, is the winner of an ASA Emerging Leaders scholarship to attend the ASA Practice Management meeting in New Orleans in January, which promotes professional advocacy and management skills. Several residents have also been active with the Anesthesiology Student Interest Group at the David Geffen School of Medicine at UCLA, leading clinical skills workshops, round table discussions, and interactive case-style presentations.

Faculty have also taken on new leadership roles within our dynamic residency program. Jason Lee, MD, has been appointed as the Assistant Residency

Program Director. In the last year, he has been instrumental in organizing the resident core didactic curriculum as well as our faculty-moderated, resident-led board review. Soban Umar, MD, PhD, has been appointed as the Residency Research Coordinator. In this role, Dr. Umar is responsible for coordination and oversight of all resident research and scholarly activities.

Our Resident Wellness Committee remains integral in promoting physician wellness and engaging residents by organizing social outings, monthly treats, and wellness initiatives, including a free, month-long cycling program which has been highly popular. Our Resident Recruitment Committee continues to plan pre-interview socials and dinners to maximize applicant and resident interaction, as we seek to recruit top medical students to our residency program once again.

Thanks to all of our dedicated residents, faculty, and staff for making 2017 such a tremendous success! We look forward to 2018 and even greater accomplishments in all of our endeavors, both at UCLA and in the greater professional and scientific community.



UCLA and CSA Partner in Public School STEM Education

Our residents Sophia Poorsattar, MD, Nikki Yin, MD, and Christopher Morando, MD, with faculty members Christine Nguyen-Buckley, MD, and Karen Sibert, MD, FASA, joined Assemblymember Sebastian Ridley-Thomas, teachers, and students on October 5 in celebrating a partnership to support science, technology, engineering and mathematics (STEM) education at three high schools in the Los Angeles area.

The special launch event at Venice High School on October 5 highlighted the partnership between our department and the California Society of Anesthesiologists (CSA). We are jointly supporting an innovative four-year curriculum in biomedical education for high school students, developed by Project Lead the Way (PLTW), a national nonprofit organization that trains teachers and provides resources to *“engage students, one medical mystery at a time.”*

Our department is lending support to PLTW by sending residents to visit classrooms, talk to the students about anesthesiology and healthcare careers, and give hands-on demonstrations of airway rescue techniques. Students from the three high schools – El Segundo High School, Venice High School, and the Girls Academic Leadership Academy – will visit the UCLA Simulation Center during the spring semester.

Our residents brought along “Harvey,” a teaching mannequin, and Dr. Yin guided one student through how to use a laryngoscope to perform endotracheal intubation. The audience applauded when the student connected the ambu bag to the endotracheal tube, and the mannequin’s lungs inflated. *“You saved him!”* said CSA Executive Director David Butler.

CSA’s role is to help fund two-week training sessions in the biomedical curriculum for teachers during the summer each year. Donations are coordinated through the new CSA Foundation for Education. UCLA faculty members Maxime Cannesson, MD, PhD, John Shin, MD, Dr. Nguyen-Buckley, and Dr. Sibert serve on the Foundation’s Board of Directors.

Assemblymember Ridley-Thomas delivered the keynote address at the launch event, commending all the participants and emphasizing to the students the value of the scientific, writing, and analytic skills they are acquiring via the PLTW program. The students escorted the visitors on classroom tours, where many of their projects were on display. They spoke movingly about how the PLTW curriculum has raised their sights and given them the confidence to aspire to high-level careers in bioscience and healthcare.

State Senator Ben Allen’s staff presented special Certificates of Recognition from the California State Senate to the UCLA Department of Anesthesiology, CSA, and PLTW for their contributions to Los Angeles public school education through the biomedical sciences curriculum.

To view a five-minute video of highlights from this event, please click [here](#).

Welcome to Our Newest Faculty Physicians!

By Claire Winters



Kenji Ogura, MD, MS, completed his residency at UCLA and joins us as faculty at UCLA and the VA West Los Angeles Healthcare Center. He attended medical school at Florida International University's Herbert Wertheim School of Medicine and has interests in simulation-based training and biotechnology. In his personal time, Dr. Ogura enjoys playing competitive soccer and learning golf.



Sirisha Rao, MD, MS, completed her critical care fellowship at UCLA following her residency at the Yale University School of Medicine. Dr. Rao performed her internship at St. Joseph's Hospital and Medical Center and graduated from the Creighton University School of Medicine. Her professional interests include resident education, and in her free time she likes to bake pastries and travel.



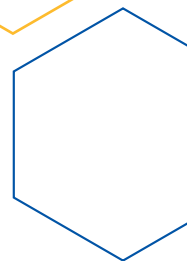
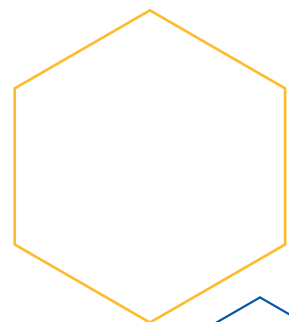
Nathan Schulman, MD, a member of our residency Class of 2016, returned to UCLA this fall. He is a graduate of Indiana University School of Medicine. After spending some time in private practice anesthesia at Providence Saint Joseph and Providence Holy Cross Medical Centers, Dr. Schulman is working with our expanding outpatient surgery centers as well as contributing to the residency teaching program. In his personal time, he enjoys playing hockey and traveling.



Shirley Tang, MD, MS, joined the department's faculty in September, practicing both at UCLA and at the West Los Angeles VA Healthcare Center. Dr. Tang earned her MD degree at the University of Arizona College of Medicine - Tucson, and pursued residency training followed by a fellowship in pediatric anesthesiology at UCLA. Her interests include medical simulation-based training and quality improvement projects. In her personal time, she enjoys traveling and exploring local food scenes.



Andrew "Ace" Young, MD, joined the critical care division in the fall after completing residency and fellowship here at UCLA. Originally from outside LA, he ventured away to Northwestern University for undergraduate education and to Columbia University for medical school. His professional interests include resident education, especially that involving perioperative and critical care. Outside of work, he enjoys traveling, board games, and spending time with his wife and son. For those curious to know -- as an infant, Dr. Young's parents called him "Ace" for no particular reason, and it has been his name ever since.





IMAGES

TOP: Salvador Tafoya and friend in the Dominican Republic

LEFT: Our team gets set for the Liquid Run

RIGHT: You have to be tough to finish the Spartan Run!

Nurse Anesthetists: Active UCLA Team Members!

By Kelly Gibson, CRNA, and Susie Pak, CRNA

Our nurse anesthetist team has experienced exciting changes over the past few months. In June, Debbie Dach, CRNA, retired after more than 30 years of service and Shelly Anderson, CRNA, MSNA, was appointed Principal Nurse Anesthetist. It is a hard role to fill, but Ms. Anderson proved ready for the leadership position. Since joining the Bruin family in 2008, she has excelled as a clinician, an educator, and a leader.

Ms. Anderson is currently enrolled in the MBA program at the University of Redlands. *"I'm very excited to lead such an excellent group of CRNAs,"* she said. *"Every day I'm motivated by the support of our team. Together, we can add significant value to our department and UCLA Health."* Congratulations, Shelly!

Our department has expanded our busy Medical Procedure Unit (MPU) model to include Santa Monica Hospital. Kianusch Kiai, MD, the MPU Medical Director, is working with us to develop a high-efficiency workflow. The nurse anesthetists are dedicated to developing optimal teamwork and organizational strategies that have a direct impact on improving patient care to our community.

The nurse anesthetist team continues to grow to keep up with these changes. We welcomed Alison Goltermann, CRNA, this fall as the newest addition to the CRNA team, after she finished her MSN at the University of Southern California. Her interests include innovative pain management techniques to mitigate the opioid crisis. Jenna Dabling, CRNA, will join us this month, after working previously at Inova Fairfax Hospital in Virginia and at the Massachusetts General Hospital in Boston. She brings valuable years of experience to our practice.

Several UCLA nurse anesthetists traveled the world this year to provide anesthesia services for those in need. Some of their stories have been featured on our ["In the News"](#) webpage.

- [Natasha Pyykko, CRNA](#), traveled to Kenya.
- [Lauren Fagan, CRNA](#), traveled to Myanmar.
- Sal Tafoya, CRNA, traveled to the Dominican Republic to provide anesthesia for pediatric patients with congenital heart disease.
- Thao Hoang, CRNA, traveled to Mexicali to give anesthesia for pediatric and adult plastic surgery cases. Their team did 50 cases in two days!



LEFT: We said farewell to longtime Chief CRNA, Debbie Dach.
RIGHT: We congratulate Shelly Anderson on her promotion.



Wellness initiatives have become an important part of our routine with all the activities on campus and abroad. Nurse anesthetists Puja Karki, Dominick Berkery, Katie McGowan, and Ms. Anderson joined our department's peer support group championed by Keren Ziv, MD. They are learning professional-level counseling skills to help their peers deal with stressful events. [See a related story in this issue, on p. 30.]

Huy Vo, CRNA, and Ms. Anderson organized team-building events. Our nurse anesthetists competed as a team in the Spartan Race, a grueling physical challenge course in Big Bear, and the Liquid Run, an obstacle course completely floating on water! We learned the value of working together and supporting each other to the finish line. Regular exercise is a great way to stay healthy and the exciting -- yet anxiety-provoking -- challenge courses provide motivation to keep us moving!

The nurse anesthetists serve as a great educational resource to other perioperative nurses at UCLA. Jacqui Culbertson, Kelly Gibson, and Allison Leveque have taught important elements of the perioperative process, such as anesthesia basics, pharmacology, arterial line monitoring, and airway skills. Sal Tafoya, Ana Armenta, and Alan Zamora have prepared an extensive one-day pre- and post-anesthesia management course for nurses in the Ronald Reagan Medical Center pre-treatment and PACU areas. Erica McCall, Natalia MacDougall, and Matt Park teach the popular moderate sedation course for nurses from a variety of specialties.

Our UCLA family grew significantly this year with new spouses and new babies. Our newlywed staff members include Allison Davis, Emily Pinho, Natalia MacDougall, Jacqui Culbertson, and Rose Wechter. Our list of new parents:

- Amy Kim and her husband welcomed Leo Kim on January 7.
- Jeremy Gaudin and his wife welcomed Audrina Rose Gaudin on July 25.

- Brittany Countryman and her husband welcomed Lucy Monroe Countryman on August 30.
- Kristin Bishop and her husband welcomed Louis Henry Fitzgerald on October 15.

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



IMAGES

LEFT: Baby Bishop with his big brother!

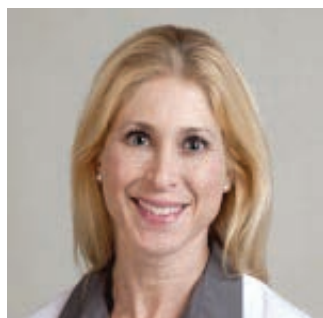
RIGHT: Audrina Gaudin rocks her pink hair bow!

BOTTOM: Lucy Countryman, Pretty in Pink!

Anesthesiology Volunteers Train for Innovative Peer Support

By Claire Winters

Hosting a four-hour volunteer training session the evening before a holiday weekend might seem like a losing proposition.



Dr. Keren Ziv, chair of our department's Anesthesiology Wellness Committee.

On November 9, however, **Keren Ziv, MD**, chair of our Anesthesiology Wellness Committee, and Shevaughn Marchese, our department's program manager, prevailed. They welcomed 24 of our department's physicians, nurse anesthetists, and staff members to train

as peer supporters in a pilot program that offers optional, confidential, and immediate support and information to colleagues suffering in the aftermath of adverse or difficult events.

[Brenda Bursch, PhD](#), led the training in her role as Professor of Psychiatry and Biobehavioral Sciences, and a member of the Semel Institute for Neuroscience and Human Behavior.

"I was very impressed with how engaged everyone was," said Dr. Bursch, who asked participants why they were drawn to this work. *"Each person had a story from their own experience, or of someone they knew. They recognized this was real and important."*

IMAGES

LEFT: Drs. Nirav Kamdar, Susana Vacas and Ken Kuchta at peer support training, as DGSOM Board of Advisors member Gordon Lee observes.

RIGHT: Jessica Lloyd, MD (left) shares a moment with Rebecca Wilkinson, UCLA Physician Wellness Program Manager. Shevaughn Marchese, program coordinator, is in the background.

The pilot program is a component of the Employee Mental Wellness and Resilience Initiative, which emphasizes three core elements:

- An online self-assessment tool to help identify risk for depression, anxiety, or trauma
- Resiliency-skills training sessions
- Acute localized support, including the training of managers and supervisors to help identify employees in need, peer support, and referrals to professionals for targeted treatment.

Ours is the first department in the UCLA Health System to train members to function as peer supporters. For decades, anesthesiology has been spotlighted as a high-risk profession for suicide, substance abuse, and -- more recently -- burnout. In the last decade, studies on the *"second victim"* phenomenon have alerted health care systems to the emotional devastation that critical care professionals can suffer after unexpected patient death, the experience of treating disaster victims, or committing errors that lead to tragic consequences.



CREATING A “JUST CULTURE”

In their article, [The Impaired Anesthesiologist: Not Just About Drugs and Alcohol Anymore](#), Gregory Rose, MD, and Raeford Brown Jr., MD, wrote, *“In anesthesiology, the acuity of our patients and the urgency of care that we provide may translate into errors that can be catastrophic. Errors that lead to adverse outcomes inevitably produce two victims: the patient and the physician. These errors lead to an increasingly depressed state for the practitioner.”*

This is compounded by a medical culture that encourages physicians to cover their pain. *“The unspoken message of this culture could be summed up as ‘big boys and girls don’t cry’ – a belief that physicians cannot and should not show weakness or vulnerability,”* the authors concluded.

Swati Patel, MD, our chief of Pediatric Anesthesiology, reached out to Dr. Bursch after reading about her [work with pediatric residents](#) here at Mattel Children’s Hospital UCLA. They agreed with Dr. Ziv that the anesthesiology department would be an ideal match to test the Mental Wellness and Resilience Initiative’s peer support pilot, and the call went out for volunteers.

Dr. Ziv and Ms. Marchese administered a wellness survey to our physicians, who overwhelmingly indicated that *“finding a supportive colleague who understands”* to talk to after a difficult or adverse event was their #1 wish from the program.

“We’ve had a need for this for a long time,” said Dr. Ziv. *“I’m very proud that we’re the first department to do this at UCLA. Programs like this only succeed if leadership is on board, and Dr. Mahajan’s interests are very much aligned with this. He’s been very supportive.”*

The training session explored working in a “Just Culture” -- a non-punitive environment where accountability is shared, and mistakes become learning opportunities. Speakers examined the dangers that face “identified individuals” or “second victims” -- the healthcare workers who are suffering after adverse events.

Dr. Bursch and Karen Miotto, MD, the chair of UCLA’s Physician Wellness Program, demonstrated communication techniques through role-playing exercises. The trainees then broke into small groups to practice approaching and supporting distressed colleagues. They found that there is a learning curve, and it’s not always easy to pivot from communicating and asking questions as a clinician to providing empathic and non-judgmental support as a peer.

“As human beings we want to get information, but that’s not helpful,” said Dr. Bursch. *“Not to grill for details, or to problem-solve, and to reflect back emotion – that’s hard to do.”* Instead, she said, peer support requires you to *“track the emotional content of what they’re saying. You want them to feel seen and supported.”*

The trainees were encouraged to listen and redirect conversations back to the emotional needs of the distressed colleague through open-ended questions:

- *“How are you feeling?”*
- *“What do you need?”*
- *“How can I help you?”*

“The training gave us guidance and confidence,” said Dr. Ziv. *“It helped us become better listeners.”*

Dr. Bursch plans to provide an additional training session for those who would like more coaching. In addition, peer supporters will have monthly check-ins and debriefings where they can request additional coaching and resources.

“Until now, there hasn’t been someone trained to see how you are and to refer you to other resources if you need additional help,” says Ms. Marchese. *“We have other procedures in place for safety and patient care. This is where we look at the physician as a human, an individual.”*

Many thanks to our peer supporter volunteers, listed below. To learn more the program, or about becoming a peer supporter, please contact Dr. Ziv, kziv@mednet.ucla.edu, or Ms. Marchese, smarchese@mednet.ucla.edu.

PEER SUPPORTERS

Shelly Anderson, CRNA
Dr. Zarah Antongiorgi
Dominick Berkery, CRNA
Dr. Delara Brandal
Dr. Karen Chow
Dr. Marc Iravani
Dr. Nirav Kamdar
Puja Karki, CRNA
Dr. Kenneth Kuchta
Dr. Alice Li
Dr. Elaine Liew
Katelyn McGowan, CRNA
Dr. Emily Methangkool
Dr. Natalie Moreland
Dr. Jennifer Nguyen-Lee
Dr. Swati Patel
Dr. Mariya Sviklik
Dr. Shirley Tang
Dr. Judi Turner
Dr. Susana Vacas
Dr. Barbara Van de Wiele
Dr. Cristianna Vallera
Dr. Keren Ziv
Shevaughn Marchese - Coordinator

Staff News and Updates

By Claire Winters

Shevaughn Marchese (nee Mongroo), our program manager, traveled to Italy in September for a fairy-tale wedding to Antonio Marchese, executive chef at Amici Brentwood. The two were married first in a civil ceremony here in Los Angeles, followed by a lovely Catholic nuptial mass in Gravina Di Puglia, known as the “city of the rock-cut churches” and the birthplace of the 18th century Pope Benedict XIII.

We wish Mr. and Mrs. Marchese all the best for a long and happy life together!



Shevaughn and Antonio Marchese arrive at their wedding reception in Italy.



The bride and groom with wedding guests.



Patsy Olivo is our Human Resources Coordinator. This fall, she enrolled in a master's program to receive her MS in Health Care Administration. Patsy says, "Participating in various business excellence initiatives and planning committees

at UCLA further sparked my interest in taking on leadership roles and taking the next step in my education." She plans to continue in the human resources field after graduation.



Brianna Vidales is an administrative assistant in the department, focusing on purchase coordination. She started three years ago as a student worker and joined us full-time in September. Brianna received her bachelor's degree in Biology and

looks forward to returning to school eventually for a master's in public health or business administration. She enjoys traveling and spent a summer abroad in seven countries, sampling the McDonald's in each one.



Johnny Quach joined the department in September as Assistant Director, Business Analytics & Operations. He received his MBA from the USC Marshall School of Business and was an Operations Consultant at Beachbody before joining

UCLA. In his spare time, he enjoys checking off spots on Jonathan Gold's list of the 101 Best Restaurants in LA.



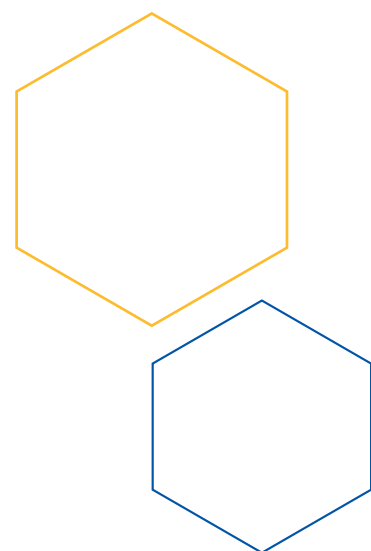
Claire Winters joins the administrative office to contribute to communications projects. Her essays and profiles have appeared in Elle, Investor's Business Daily and Human Parts, among others. She also works as a nonfiction book

developer. Prior to switching her focus to writing, Claire spent fifteen years as a professional actor in New York and Los Angeles and is a graduate of the MFA Program at American Conservatory Theater.



Marisabel Silva currently assists the personnel office part-time while finishing her degree. She looks forward to joining us full-time upon her graduation this winter with a bachelor's degree in Biology and a minor in Chicano Studies. Her

favorite thing about working at UCLA is the great team members she interacts with every day. In her spare time, she enjoys playing soccer, singing and drawing.



Our Far-Flung Alumni: Where Are They Now?

Candice Williams, MD, Class of 2012

"I'm currently practicing interventional pain management at Kaiser Moreno Valley. I am spending my time playing piano and organ and volunteering at schools promoting STEM careers. I also have a new member of the family, Melody Carmichael Williams, who is 8 months old."

Adrienne Ma, MD, Class of 2013

"I am back in Hawai'i working with Pacific Anesthesia, Inc. on Oahu. I get to work with former residents Oren Bernstein [Class of 2011] and Kelly Okazaki [Class of 2014] as well! We are always looking for more people to work with us so anyone interested in moving to Hawai'i please contact one of us!"

"I'm happy to report that I still have thriving friendships with many of my co-residents and we have been doing annual trips together since graduating in 2013. This year we did two trips! One in Maui and one to Newport Beach."

Eric Hodes, MD, Class of 1992

"I am the CMO at a Dignity hospital in Sacramento following a long anesthesiology career which culminated with being president of a 55-member group in Sonoma and Napa counties for about five years. I finish my MBA at UC Berkeley next month."

"On a down note, my home in Santa Rosa recently burned down and we are dealing with that aftermath."

I am married to the same wife I was with while at UCLA :) and I have two amazing kids and a cool dog."

Oren Bernstein, MD, FASA, Class of 2011 is in private practice in Oahu, and recently became President of the Hawaii Society of Anesthesiologists (HSA). Tiffany Ching, MD, Class of 2015, became HSA Secretary. In November, they hosted Steven Haddy, MD, Class of 1977, and his wife, UCLA faculty member Karen Sibert, MD, FASA, at a lovely dinner in Honolulu with other HSA members -- in the midst of an impressive thunderstorm. Dr. Haddy, who is chief of cardiovascular anesthesiology at USC, and Dr. Bernstein worked together during Dr. Bernstein's cardiac fellowship year. Also present were several special guests including ASA President Jim Grant, MD, MBA, FASA, and Immediate Past President Jeff Plagenhoef, MD, FASA. Dr. Bernstein and HSA hope to collaborate with CSA in hosting a future educational meeting in Honolulu.

IMAGES

LEFT: Dr. Candice Williams, Class of 2012, and family.

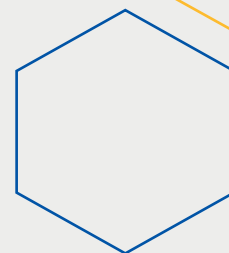
MIDDLE: Dr. Adrienne Ma with co-residents from the Class of 2013.

Top row, left to right: Albert Tran, MD (Class of 2013), John Shin, MD (Class of 2013), Jay Woodfin, Tim Harvey and Edwin Yamoah, MD (Class of 2013).

Bottom row, left to right: Dr. Adrienne Ma (Class of 2013), Kaori Shin, Michelle Woodfin, MD (Class of 2013), Michelle Harvey, MD (Class of 2013), and Christine Trieu, MD (Pediatrics Fellowship 2014).

RIGHT: Dr. Bernstein is at the far right in this photo taken at the graduation of the Class of 2010, with Drs. Ellen Choi, Prince Neelankavil, and Siyavash Fooladian.





In Memoriam

Steven James Soule, MD, Class of 1990

We report with sorrow that Dr. Soule died on June 9, 2017, at the age of 61, following a lengthy history of primary sclerosing cholangitis, a successful liver transplant, and finally the development of cholangiocarcinoma. Born in Alaska, Dr. Soule grew up in Oregon and graduated from Stanford University. He met his wife, Marlene Lamp, MD, while they were both students at the University of Michigan Medical School. After residency at UCLA, the family moved to Ventura, where Dr. Soule spent the next 25 years at St. John's Regional Medical Center in Oxnard. He was active in physician leadership, serving as Chair of the Department of Anesthesia, and as President of the Medical Staff. An [obituary](#) in the Ventura County Star contains more information about Dr. Soule's remarkable life.

Dr. Soule is survived by his wife, Dr. Lamp, his two children, Olivia and Erik, and an extended family, to all of whom we extend sincerest condolences. Dr. Lamp notes that Erik is now a resident in anesthesiology in Detroit, following in his father's footsteps. The family requests that any donations in Dr. Soule's memory be made to the Pediatric Brain Tumor Foundation, at curethekids.org/givenow.

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, commemorative gifts, planned giving such as trusts and bequests, and endowed giving. Please consider a gift as part of your year-end tax planning.

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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!