





# Open Circuit

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WITH YOUR HELP THROUGH GIVING...

# From the Chair's Desk

By Barbara Van de Wiele, MD | Interim Chair



s we end the academic year 2018-2019 and enjoy the beginning of summer, it is very gratifying to reflect on the accomplishments of the last year. You will read about many of them

in this issue of our Open Circuit magazine — imagined and created by Dr. Karen Sibert and her communications team — highlighting our achievements, milestones, and celebrations. I hope that it gives you a vivid sense that we are a diverse yet cohesive group working together to make things better through education, innovation, creativity, clinical care, administration, and research.

We have just graduated an outstanding class of residents and fellows who are going on to great jobs and fellowships, as you'll see elsewhere in this issue. We're delighted that eight of our graduates will stay with us as new faculty members: Drs. Elaine Boydston, Myro Figura, Marisa Hernandez-Morgan, Derek Hsu, Bi Mo, Patricia Nwajuaku, Sandra Sacks, and Matthew Vandiver. As we do every July, we welcome new residents and fellows to our UCLA family as they begin their training here.

We are proud to be among the top five departments of anesthesiology nationally in NIH funding, and to be supporting a creative group of physician scientists along their trajectory to success. We have strengthened our research training and clinical research programs in the last

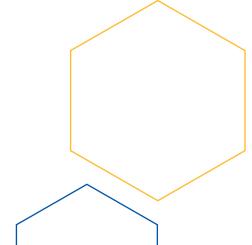
year and maintained department programs at the forefront of innovation. Please consider including our department in your charitable giving plans to support these and other endeavors.

UCLA recently announced plans to begin a full national search for the next chair of our department in late summer or early fall, and will announce it broadly once the search committee is appointed and charged. Our department will take part in a forum with the search committee to discuss in greater detail the opportunities and challenges for the department and the ideal qualities to be sought in the next chair.

It has been a great honor to serve as Interim Chair over the last year and to be part of this great department for a very long time. Wishing everyone a great summer and looking forward to another memorable year —

Best wishes.

Barbara Van de Wiele, MD Interim Chair



COVER IMAGE:



Congratulations to the Class of 2019!

n the lovely sunny evening of June 21, our 2018-19 residents and fellows celebrated their graduation at the UCLA Faculty Center. This year's class includes 23 graduating residents and 20 fellows who completed training in seven different subspecialty areas. They were joined by family, friends, and faculty members for a lively reception and dinner, capped by two highly entertaining videos starring members of our department.

#### **GRADUATION AWARDS**

After Interim Chair **Barbara Van de Wiele, MD**, welcomed the audience, she turned the podium over to Executive Vice Chair **Daniel Cole, MD**, for the evening's first presentation. He announced the vote of the senior faculty to give the Dillon Award, one of our department's top honors, to **Soban Umar, MD, PhD**, for "Outstanding Performance by an Assistant Professor".



This award is named in memory of John Bartley Dillon, MD, who was appointed as the first anesthesiology division chief at the newly created UCLA School of Medicine in 1950.

**Jeffrey Rusheen, MD**, representing the faculty at Olive View-UCLA Medical Center, presented the "Olive View Resident of the Year Award" to CA-1 resident **Paul Helland, MD**.



**Siamak Rahman, MD**, then took the stage to present a special Department Service Award to nurse practitioner **Tsione Holly, FNP, MSN, ANP-BC**, for her diligent and unfailingly cheerful work in support of the Acute Pain and Regional Anesthesiology Service.

Residency Program Director Judi Turner, MD, PhD, and Associate Program Director Jack Buckley, MD, then introduced this year's three chief residents, Albert Feng, MD, Shaishav Shah, MD, and Nicole Yin, MD, with thanks for their countless hours of work in support of the residents this year. The chief residents presented awards to several faculty and staff members on behalf of the graduating class:



- Michael Wolfe, MD, who specializes in critical care medicine, received the prestigious Teacher of the Year Award with its traditional "golden bear" trophy.
- Maryetta Ovsepian, MD, a faculty member at Olive View-UCLA Medical Center, earned special recognition as Teacher of the Year at a UCLAaffiliated institution.
- Andrew Disque, MD, MS, and Jason Lee, MD, were honored with Excellence in Resident Teaching Awards.
- Adrian Nava, one of our invaluable anesthesiology technicians, received the Perioperative Award from the graduating class for his unflagging help in the operating room, always prompt and always with a smile.

The chief residents then called to the stage the new chief residents for 2019-20, elected by their peers with the approval of the faculty: **Matthew Klekman**, **MD**, **Colby Tanner**, **MD**, and **Andrew Wu**, **MD**. They received some special "emoji" gifts from the prior chief residents in recognition of the inevitable tribulations they'll face in the coming year!



As their first official action, the new chief residents extended special thanks to the staff of the Education Office – Lucelva Mendez, Susan Kim, Lucine Torosian, and Wayne Hasby – and presented gifts on behalf of their class.

#### THE RESIDENCY CLASS OF 2019

While we'll bid farewell to some of our residency graduates this summer, others will remain with us at UCLA. Drs. Myroslav Figura and Derek Hsu will be joining the faculty, while Drs. Jeffrey Jeng and Andrea Poon will stay for fellowships in Pain Medicine. Dr. Pamela Chia will start her fellowship in Regional Anesthesiology, and Dr. Samuel Hong will pursue fellowship training here in Critical Care. Drs. Shaishav Shah and Nicole Yin both will become our fellows in Cardiothoracic Anesthesiology.

Residents who will pursue fellowship training elsewhere include:

- Dr. Claudia Cao, Obstetric Anesthesiology at Brigham & Women's Hospital;
- Dr. Timothy Kwiecien, Pain Medicine at the Cleveland Clinic:

- Dr. Monica Miller, Cardiothoracic and Critical Care Anesthesiology at the Massachusetts General Hospital;
- Dr. Catherine Nguyen, Pediatric Anesthesiology at Children's Hospital, Los Angeles;
- Dr. Sophia Poorsattar, Cardiothoracic Anesthesiology at UC San Diego;
- Dr. Robert Shaw, Pediatric Anesthesiology at Boston Children's Hospital;
- Dr. Harlan Stern, Pain Medicine at Ochsner Hospital;
- Dr. Mitchell Weksler, Cardiothoracic
   Anesthesiology at Cedars-Sinai Medical Center.

Fewer than half of the graduating residents will go directly into private practice this year. Drs. Benjamin Kwittken, Jonathan Pang, and Cameron Rice are joining the Ventura Anesthesia Medical Group at Community Memorial Health System in Ventura. Drs. Albert Feng and Evan Sobel will join the private anesthesiology group at Hoag Hospital in Newport Beach, while Dr. Raymond Machi will join several of our previous graduates at Kaiser Woodland Hills. Dr. Martha Ramirez Muro will practice at Pomona Valley Medical Center.

#### **OUR GRADUATING FELLOWS**

Several of our fellowship graduates will be staying on with us at UCLA as faculty members, including:

- Critical Care: Drs. Marisa Hernandez-Morgan and Matthew Scott Vandiver
- Liver Transplantation: Dr. Elaine Boydston
- Pain Medicine: Drs. Bi Mo and Sandra Sacks
- Thoracic Anesthesiology: Dr. Patricia Nwajuaku

Dr. Vikram Fielding-Singh, who already holds a
JD degree, will continue his education beyond
his Cardiothoracic Anesthesiology fellowship with
another fellowship year at UCLA in Critical Care.
Of our other three cardiothoracic fellows, Dr. Vivek
Chellappa will join the private group at Hoag Hospital,
Dr. Jeffrey Kim will begin practice at Kaiser Sunset,
and Dr. Mark Willingham will join the faculty at the
Washington University School of Medicine in St. Louis.

All three of our Regional Anesthesiology fellows will pursue private practice: Dr. **Delara Brandal** at Kaiser

Woodland Hills, Dr. **Sona Dosh**i with Anesthesia Service Medical Group (ASMG) in San Diego, and Dr. **Alice Li** at Beaumont Hospital in Michigan.

Dr. **Joseph Seif**, a member of our Class of 2018 along with Drs. Brandal and Li, will join Dr. Doshi in private practice with ASMG in San Diego after his Critical Care fellowship. Dr. **Daniel Hwang**, another of our 2018 graduates, will join the group at Kaiser Downey after his fellowship in Pediatric Anesthesiology.

Dr. **Jeieung Park**, our other fellow in Liver Transplantation, will join the faculty at the University of British Columbia, Canada.

One of our Pain Medicine fellows, Dr. **Adam Madl**, will join the faculty at the University of Kansas. The other two will go into private practice: Dr. **Ivan Chew** at the Diagnostic Pain Center in Austin, Texas, and Dr. **Isaac Jenabi** at the Comprehensive Pain Center in Las Vegas, Nevada.



#### **VIDEO HIGHLIGHTS**

While anesthesiologists are generally known more for left-brain skills than right-brain creativity, our faculty and residents showed their lighter side at the end of the evening in two video productions that the audience thoroughly enjoyed. Dr. **Evan Sobel** starred in the first, in which he consulted with a number of faculty and residents about the best anesthetic plan for a simple appendectomy. As you might guess, the advice varied with the specialty of the consultant. Then several residents read from their most memorable faculty evaluations to comic effect, especially when the faculty member got the resident's name wrong.

To close out the celebration, Dr. **Nir Hoftman** presented his video illustrating the complications that ensue when he attempts to comply with HIPAA regulations concerning protected patient information. Since neither text messaging nor our paging system are considered secure enough to satisfy HIPAA, he experimented with Morse code, smoke signals, and carrier pigeon. (No actual birds were harmed.) A classic!



#### IMAGES

Dr. Isaac Jenabi, top left, seen here here with his proud father, will begin pain practice in Las Vegas

Dr. Joseph Seif, center, with his family

Graduating fellow Dr. Delara Brandal with son Graham, 10 months



















# ANESTHESIOLOGY 2019 – Our Upcoming Presentations in Orlando



#### **SPECIAL SESSIONS**

SPE01 – Featured Session: Artificial Intelligence in Perioperative Medicine: Moving from Big Data to Smart

Saturday, October 19, 7:45-8:45 AM (Location: W415A Valencia)

Eran Halperin, PhD – What is Machine Learning and How Can It Be Leveraged in Anesthesiology?

Maxime Cannesson, MD, PhD – Applications of Machine-Learning Approaches in the Perioperative Setting: From Low-Resolution to High-Resolution Data

#### SPE29 – Journal Symposium: What's New with the Old

Monday, October 21, 9:30-12:30 PM (Location: W320 Chapin Theater)

#### JS04 – Preoperative Ultrasound-Based Frailty

Assessment as a Predictor of Surgical Outcomes Cecilia Canales, MD, MPH, Einat Mazor, MS, Craig Flath, MD, Susana Vacas, MD, PhD, Victor Duval, MD, Maxime Cannesson, MD, PhD, Soban Umar, MD, PhD, Sumit Singh, MD

#### SPE38 - Best of Abstracts, Clinical Science

Saturday, October 19, 1:00-3:00 PM (Location: W300)

#### BOC06 – An Interpretable Neural Network for Prediction of Postoperative In-hospital Mortality

Christine Lee, MS, Muntaha Samad, BS, Ira Hofer, MD, Pierre Baldi, PhD, Maxime Cannesson, MD, PhD

#### BOC07 – Long-term Risk of Chronic Kidney Disease and Mortality in Children Following Acute Kidney Injury after Noncardiac Surgery

Theodora Wingert, MD, Nahda Harati, MD, Tristan Grogan, MS

#### **ORAL PRESENTATIONS**

#### **OR19-2 – Perioperative Medicine II**

Monday, October 21, 3:15-4:45 PM (Location: W300)

# A3194 - Development, Implementation and Evaluation of a Tele-medicine Preoperative Optimization Initiative at a Major Academic Center

Ari Huverserian, MD, Nirav Kamdar, MD, MPP, MBA

#### **FEATURED ABSTRACTS**

#### F01

Saturday, October 19, 7:30 – 9:00 AM (Location: W206ABC)

#### F1025 – Combined Liver Transplant and Cardiothoracic Surgery versus Isolated Liver Transplant: A Matched Study

Christine Myo Bui, MD, Colby Tanner, MD, Christine Nguyen-Buckley, MD, Jennifer Scovotti, MA, Victor Xia, MD

#### F03

Saturday, October 19th, 3:00 – 4:30 PM (Location: W206ABC)

#### F1080 – Pulmonary Hypertension-induced Right Ventricular Failure is Associated with Endothelial to Mesenchymal Transition Mediated via Transcription Factor Snail

Nicole Yin, MD, Christian Markar, Matthew Mikhael, Emma Said, Trixie Le, Darnell Bagsik, Amir Wissa, Nancy Cao, BA, Soban Umar, MD, PhD

#### F04

Sunday, October 20, 8:00 – 9:30 AM (Location: W206ABC)

# F2003 – Preoperative Ultrasound-based Frailty Assessment as a Predictor of Surgical Outcomes

Cecilia Canales, MD, M.P.H., Einat Mazor, M.S., Craig Flath, MD, Susana Vacas, MD, PhD, Victor Duval, MD, Maxime Cannesson, MD, PhD, Soban Umar, MD, PhD, Sumit Singh, MD

#### F2018 -- Long-term Risk of Chronic Kidney Disease and Mortality in Children Following Acute Kidney Injury after Noncardiac Surgery

Theodora Wingert, MD, Nahda Harati, MD, Tristan Grogan, MS

#### F06

Sunday, October 20, 1:00 – 2:30 PM *(Location: W206ABC)* 

# F2112 – Development, Implementation and Evaluation of a Tele-medicine Preoperative Optimization Initiative at a Major Academic Center

Ari Huverserian, MD, Nirav Kamdar, MD, MPP, MBA

#### **WORKSHOPS**

#### Session 801 - Basic TEE Workshop

Saturday, October 19, 9:00-4:00 PM (Location: W202ABC)

Emily Methangkool, MD, MPH - Faculty

# Session 805 – Electrophysiology: Perioperative CIED Management, Temporary Pacing, Lead Removal, and Left Atrial Implant Devices

Saturday, October 19, 9:00-12:00 PM

(Location: W209ABC)

Jonathan Ho, MD - Moderator

Prince Neelankavil, MD – Left Atrial Appendage

Procedure

Andrew Disque, MD, MS – Lead Removal and

**Temporary Pacing** 

#### Session 822 – Perioperative Point-of-Care Ultrasound

Sunday, October 20th, 9:00-12:00 PM

(Location: W205ABC)

Prince Neelankavil, MD – Faculty

Sumit Singh, MD – Faculty

#### **Session 827 – Perioperative TTE for Everyone**

Sunday, October 20th, 1:15-2:15 PM

(Location: W205ABC)

Jonathan Ho, MD – Faculty

#### Session 830 - Acupuncture

Monday, October 21, 9:00-12:00 PM

(Location: W202ABC)

Eric Hsu, MD – Acupuncture Mechanism

# Session 834 – Basic Critical Care Ultrasonography for the Perioperative Physician

Monday, October 21, 9:00-12:00 PM

(Location: W209ABC)

Wolf Kratzert, MD - Station

# Session 837 – Advanced Critical Ultrasonography for the Perioperative Physician

Monday, October 21, 1:15-4:15 PM

(Location: W209ABC)

Wolf Kratzert, MD – Lung Ultrasound for the Assessment of Hypoxia: Blue Protocol

#### **60-MINUTE PANELS**

# PN221 – Perioperative Brain Health Initiative: Update and Implementation Strategies Panel, Part I

Sunday, October 20th, 1:30-2:30 PM

(Location: W315AB)

Dan Cole, MD - Moderator

# PN227 – Perioperative Brain Health Initiative: Update and Implementation Strategies Panel, Part II

Sunday, October 20th, 2:45-3:45 PM

(Location: W315AB)

Dan Cole, MD - Moderator

### PN231 – Do Perioperative Handoffs Really Cause Harm? If so, What Can We Do About It?

Sunday, October 20th, 4:00-5:00 PM

(Location: W311EF)

Emily Methangkool, MD, MPH – Communicating

for Patient Safety during Handoffs

### PN313 – Innovations in Preoperative Assessment and Optimization

Monday, October 21, 1:15-2:15 PM

(Location: W314AB)

Nirav Kamdar, MD, MPP, MBA – Preops at Home

## PN422A – Performance Metrics for Regional Anesthesia and Pain Medicine: Why and How? Part I

Tuesday, October 22, 1:00-2:00 PM

(Location: W315AB)

James Moore, MD – Multimodal Analgesia

# PN422B – Performance Metrics for Regional Anesthesia and Pain Medicine: Why and How? Part II

Tuesday, October 22, 2:15-3:15 PM

(Location: W315AB)

James Moore, MD - Multimodal Analgesia

#### **60-MINUTE REFRESHER COURSE LECTURES**

# Session 212 – Excitation-Contraction Coupling and Mechanisms of Cardiac Arrhythmias

Sunday, October 20th, 10:30-11:30 AM

(Location: W304EFGH)

Sassan Rafizadeh, MD, PhD – Moderator (Harbor

UCLA Medical Center)

#### Session 302 – The Wave of the Future: Rescue Transthoracic Echocardiography for Non-Cardiac Anesthesiologists

Monday, October 21, 9:30-10:30 AM (Location:W307ABCD)

Prince Neelankavil, MD - Moderator

# Session 313 – Intraoperative Hypotension and Postoperative Adverse Events: What you Need to Know and What Can You Do About That?

Monday, October 21, 1:15-2:15 PM

(Location: W307ABCD)

Maxime Cannesson, MD, PhD – Intraoperative Hypotension – What Can You do about it?

Hypotensive Prediction Index

#### **POINT-COUNTERPOINT**

## PC12 – Peer Review: Blame Game or Quality Improvement?

Sunday, October 20, 2:45-3:45 PM

(Location: W304CD)

Emily Methangkool, MD, MPH – The Peer Review

Process is Necessary for Patient Safety

#### PC18 – Does MIPS Reporting Improve Quality? Monday, October 21, 10:45-11:45 AM

(Location: W304CD)

James Moore, MD - MIPS Overview

#### **ABSTRACT GROUP DISCUSSIONS**

#### **AD04-1: Clinical Circulation**

Saturday, October 19, 3:00-4:30 PM

(Location: W312C)

# A1102 – Frequency and Outcomes of Elevated Perioperative Lactate Levels in Adult Congenital Heart Disease Patients undergoing Cardiac Surgery

Andrew Wu, MD, Jeffrey Kim, MD, Jacques Neelankavil, MD, Theodora Wingert, MD, Tristan Grogan, MS, Jennifer Scovotti, MA, Wolf Kratzert, MD

#### **AD06-1: Critical Care**

Monday, October 22, 3:00-4:30 PM

(Location: W312AB)

#### A4093 - Combined Liver Transplant and Cardiothoracic Surgery vs. Isolated Liver Transplant: A Matched Study

Christine Myo Bui, MD, Colby Tanner, MD, Christine Nguyen-Buckley, MD, Jennifer Scovotti, MA, Victor Xia, MD

#### **AD09-1 - Experimental Circulation I**

Monday, October 21, 9:30-11:00 AM

(Location: W312AB)

# A3005 – Causal Role of LDL Receptor and Oxidized LDL in the Pathogenesis of Pre-clinical and Clinical Pulmonary Hypertension

Sara Navab, MD, Mylene Vaillancourt, MSc, Gregoire Ruffenach, PhD, Jason Hong, MD, Greg Fishbein, MD, Mohamad Navab, PhD, Srinivasa T. Reddy, PhD, Mansoureh Eghbali, PhD, Soban Umar, MD, PhD

#### **AD09-2 – Experimental Circulation II**

Tuesday, October 22, 3:00-4:30 PM

(Location: W312AB)

#### A4203 – Pulmonary Hypertension-induced Right Ventricular Failure Is Associated with Endothelial to Mesenchymal Transition Mediated via Transcription Factor Snail

Nicole Yin, MD, Christian Markar, Matthew Mikhael, Emma Said, Trixie Le, Darnell Bagsik, Amir Wissa, Nancy Cao, BA, Soban Umar, MD, PhD

# A4210 – Pulmonary Hypertension Induced by Oxidized Lipids Is Prevented by ApoA-I Mimetic Peptide 6f

Gregoire Ruffenach, PhD, Ellen O'Connor, BS, Mylene Vaillancourt, MS, Shervin Sarji, MS, Nancy Cao, BA, Christine Cunningham, BS, Victor Grijalva, BSc, Soban Umar, MD, PhD, Srinivasa Reddy, PhD, Mansoureh Eghbali, PhD

# AD13-1 – Information Management and Database Research I

Monday, October 21, 9:30-11:00 AM (Location: W312C)

# A3010 – Savings Advantages of Telemedicine-based Pre-operative Evaluation in an Academic Anesthesia Program

William Thi, BS, Ari Huverserian, MD, Nolan Maloney, BS, Nirav Kamdar, MD, MPP, MBA

#### A3016 - Development of a Machine Learning Model to Predict Postoperative AKI Based on EMR Data Available Prior to Surgery

Nadav Rakocz, BSc, Brian Hill, BSc, Alec Chiu, BS, Sriram Sankararaman, PhD, Eran Halperin, PhD, Ira Hofer, MD

# AD13-2 – Information Management and Database Research II

Tuesday, October 22, 3:00-4:30 PM (Location: W312C)

#### A4211 – Development of a Systemic Machine Automated Robust Triage Tool to Identify High-risk Patients Scheduled for Surgery

Carol Lee, RN, Theodora Wingert, MD, Victor Duval, MD, Johnny Quach, MBA, Maxime Cannesson, MD, PhD, Ira Hofer, MD

#### A4218 – Prediction of Postinduction Hypotension with Deep Learning

Christine Lee, MS, Maxime Cannesson, MD, PhD, Pierre Baldi, PhD

#### AD15-2 – Pediatric Anesthesia II: Spine/Hemostasis/ Respiratory

Tuesday, October 22, 7:30-9:30 AM (Location: W312AB)

#### A4015 –Identification of Novel MicroRNA Involved In the Pathophysiology of Acute Respiratory Distress Syndrome in Pediatric Patients

Lisa Lee, MD, MS, Anil Sapru, MD, MS

#### **eABSTRACT POSTER PRESENTATIONS**

#### EA06-1 - Critical Care I

Sunday, October 20th, 7:45-9:45 AM (Location: WA2 – Area B)

# A2037 (9:15-9:45) – Bedside Ultrasound Assessment for Percutaneous Tracheostomy

Matthew Vandiver, MD, PhD, Mariana Gomez, BS, David Boldt, MD, Joseph Meltzer, MD, Sumit Singh, MD

#### **EA09-1 – Experimental Circulation**

Tuesday, October 22, 7:45-9:45 AM (Location: WA2 – Area D)

# A4052 (7:45-8:15) – A Malignant Hyperthermia-linked Mutation in the Skeletal CaV1.1 Channel Impairs the Activation of Voltage Sensor I

Nicoletta Savalli, PhD, Marina Angelini, PhD, Federica Steccanella, MSc, Taleh Yusifov, PhD, Julian Wier, BSc, Fenfen Wu, PhD, Marbella Quinonez, PhD, Alan Neely, PhD, Stephen Cannon, PhD, Riccardo Olcese, PhD

# A4054 (8:15-8:45) – Modulation of Skeletal CaV1.1 Channels By The $\alpha2\delta$ Subunit Is Mediated by Voltage Sensing Domain I

Federica Steccanella, MSc, Nicoletta Savalli, PhD, Marina Angelini, PhD, Taleh Yusifov, PhD, Alan Neely, PhD, Riccardo Olcese, PhD

#### A4057 (8:15-8:45) - Intralipid Rescues Lipopolysaccharide Endotoxemia-induced Myocardial Dysfunction via Stat3 Phosphorylation

Matthew Mikhael, Lejla Medzikovic, PhD, Hanzi Russino, MD, Faustine Sy, MD, Christian Makar, Siamak Rahman, MD, Mansoureh Eghbali, PhD, Soban Umar, MD, PhD

#### EA11-3 - History and Education III

Tuesday, October 22, 10:15-12:15 AM (Location: WA2 – Area C)

#### A4129 (10:15-10:45) – Perceptual and Adaptive Learning Module Ultrasound Training for Anesthesiology Residents: A Pilot Study

Natan Hekmatjah, BSc., Cecilia Canales, MD, MPH, Mariana Gomez, BS, Elyse Guran, MD, Jeffrey Wiegers, MD, Philip Kellman, PhD, Sally Krasne, PhD, Davinder Ramsingh, MD, Sumit Singh, MD, Judi Turner, MD, PhD

# EA13-1 – Information Management and Database Research

Sunday, October 20th, 10:15-12:15 PM (Location: WA2 – Area D)



A2137 (10:15-10:45) – Practical Considerations for Implementation of A Perioperative Data Warehouse Using Published Specifications from A Different Organization for the Same Electronic Health Record

Richard Epstein, MD, FASA, Eilon Gabel, MD, MS, Ira Hofer, MD

#### EA14-3 – Patient Safety and Practice Management III

Monday, October 21, 9:30-11:30 AM (Location: WA2 – Area C)

#### A3056 (10:00-10:30) – Implementation of Electronic Anesthesia Reporting System within Commercial HER to Improve QI Reporting

Carol Lee, RN, Emily Methangkool, MD, MPH, Nirav Kamdar, MD, MPP, MBA, Maxime Cannesson, MD, PhD, Kenneth Kuchta, MD, Eilon Gabel, MD, MS

#### EA19-1 - Perioperative Medicine I

Saturday, October 19, 1:15-3:15 PM (Location: WA2 – Area E)

#### A1092 – Point of Care Ultrasound Evaluation in the Postanesthesia Unit: A Multicenter Prospective Observational Study

Davinder Ramsingh, MD, Sumit Singh, MD, Cecilia Canales, MD, MPH, Elyse Guran, MD, Zachary Taylor, MD, Natan Hekmatjah, BS, Ariel Shafa, BS, Kimia Kavosh, BS, Matthew Alschuler, BS, Matthew Holsclaw, MD

#### **EA19-4 – Perioperative Medicine IV**

Monday, October 21, 9:30-11:30 AM (Location: WA2 – Area E)

# A3086 / Monitor 04 (10:00-10:30) – Implementation of a Decision Support Tool for Intraoperative Hypotension

John Shin, MD, Xuezhi Dong, MD, Eilon Gabel, MD, MS, Ira Hofer, MD, Maxime Cannesson, MD, PhD



# Learning Traditional Medicine in China

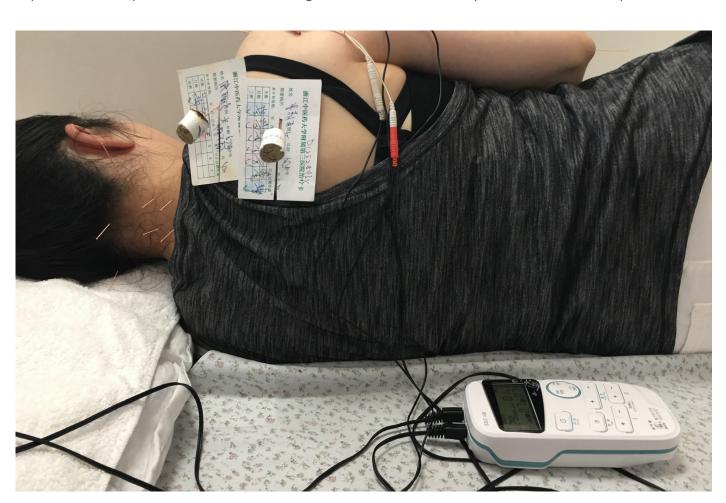
by Gundappa Neelakanta, MD

don't know if it was my mid-to-older life crisis or just a curiosity for knowledge that took me to China in April this year to learn Chinese Traditional Medicine (TCM). I had attended a few acupuncture courses previously during ASA meetings, and read some articles, but was skeptical about its application to modern medicine and in particular to anesthesiology.

However, I also knew that there are more than 27,000 licensed acupuncture practitioners in the US and there is a brisk market for their services. I discussed my interest with Professor Victor Xia, MD, of our department and expressed interest in observing

and learning about TCM in China. Dr. Xia has been working closely with the Second Affiliated Hospital of Zhejiang University in Hangzhou, China, and has been instrumental in setting up an exchange visitor program with them. Two of our residents spend a month rotating in their anesthesiology department every year, and in turn their physicians spend up to a year assisting with research in our department. Dr. Xia was kind enough to arrange my visit to Hangzhou and I jumped at the opportunity.

Having never been to China before, I was uncertain as to what to expect. Thanks to their superb





Acupuncture clinics are located in the older hospital next to regular clinics. I spent every day in the TCM clinics watching and listening to the practitioners. It was a great introduction to the 3000-year-old practice of medicine in China. An important principle of TCM is the fact that we are all part of nature, and thus the five elements of wood, fire, earth, water, and metal affect our bodies. We are all unique and therefore these elements affect us all differently.

In the Chinese medicine tradition, the twelve symmetrical meridians that run in the body represent the interconnected functions of liver, spleen, kidney, heart, lungs, stomach, gall bladder, urinary bladder, small intestine, large intestine, pericardium, and the "triple burner" or "san jiao". (The term "san jiao" refers more to a system than an organ, and is the meridian that involves fluids, digestion, and excretion.)

Uninterrupted flow of qi (pronounced "chee") along these meridians and the balance of yin and yang maintain the body's homeostasis. The meridians were described long before the modern description of anatomy by Vesalius in the 16th century. The holistic practice of TCM includes diagnosis and treatment by herbal medicines, acupuncture, moxibustion (a form of heat therapy in which dried plant materials are burned near the skin), cupping, acupressure, tuina (a form of therapeutic massage), qigong (an exercise and healing mind-body practice), and tai chi (a martial art that can be used as physical therapy).



Highlights of my visit included spending an afternoon in the TCM pharmacy. There were neatly labelled drawers of herbs and treatments that were derived from various parts of many plants and even animals. In order to be effective, the plant products had to be carefully picked at certain specific times of the year. To be consumed, they had to be slowly simmered into a decoction at home that was usually bitter or smelly. However, with modern technology, the pharmacy was able to prepare the medications faster in a carefully controlled pressure cooker and dispense for consumption at home.

IMAGES. top

Inside a traditional pharmacy

Left

A patient undergoing acupuncture and moxibustion treatment



Another highlight was watching the automated machines in the pharmacy programmed to pick up and dispense modern medications even to the wards, reminding me of automated order fulfillment by Amazon.

Following the two weeks of introduction to TCM, I spent two days visiting the Department of Anesthesiology. During this time, I gave a lecture on outpatient surgery in America, which was simultaneously webcast to over 30 anesthesiology departments. I also interacted with the residents in the department and toured the operating room area.

It was immediately apparent that all personnel strictly follow the clean scrub, mask and gown policy. The operating rooms held modern equipment and machines similar to ours but with much less clutter. The anesthetic technique was apparently standardized, and remifentanil was widely used. Most patients were brought to the PACU intubated following surgery, and their postop care was managed by an anesthesiology attending. It was quite interesting to see the nurses using a Segway to get supplies in the long corridors of the newer hospital. It was gratifying to hear them remark that they follow many UCLA protocols including safety at every stage.

TCM is practiced widely alongside modern medicine in China. It seemed to me that modern medicine in China is highly valued and patients seek it first. However, when the relief gained from modern medicine is limited and/or when serious disease is

ruled out, they go to TCM. My observation was that the patients seeking TCM herbs were largely middle age or older, but all age groups appear to seek acupuncture, moxibustion, and cupping. Muscular and skeletal pain was the most common reason for getting acupuncture treatment, although I saw many with Bell's palsy, stroke and other conditions.

My visit has opened my mind to the efficacy of TCM. The practice of TCM must be individualized by highly skilled and trained practitioners, and it involves detailed understanding of the unique nature of each person. Thus, it is difficult to study its effectiveness by comparing randomized study groups according to modern scientific methods. Further, I believe that patients have to be receptive and believe in traditional medicine for it to work. Whether this represents the placebo effect is arguable.

Dare I say that I underwent TCM treatment myself? I obtained relief from long-standing annoying neck pain following acupuncture, cupping, and moxibustion treatment during my visit. In my opinion, TCM shouldn't be a substitute for modern medicine, but it can be viewed as complementary and helpful in the treatment of many conditions.



#### IMAGES, above

Pressure equipment for preparing herbal decoctions

1 ...

Dr. Neelakanta found cupping very effective as pain therapy

# Research Highlights

#### Our Residents Take Top Honors at WARC 2019



ongratulations to our UCLA anesthesiology residents and their remarkable faculty mentors for their best-ever performance at the 57th annual Western Anesthesia Residents' Conference (WARC) held on May 10-12 in Denver! They won top honors both in the oral and poster categories and were selected to deliver more oral presentations (six in all) than residents in any other program.

Ari Huverserian, MD, a CA-2 resident, took the 1st place award for his oral presentation, "The Development, Implementation, and Evaluation of a Telemedicine Preoperative Optimization Initiative at a Major Academic Center." His faculty mentor is Nirav Kamdar, MD, MBA, the department's Director of Quality, and a recognized leader in the use of telemedicine in the preoperative clinic setting.

One of our CA-3 chief residents, **Nicole Yin, MD**, earned the 2nd place award for her oral presentation, "Pulmonary Hypertension-Induced Right Ventricular Failure is Associated with Endothelial to Mesenchymal Transition Mediated via Transcription Factor 'Snail'." Dr. Yin's research mentor is **Soban Umar, MD, PhD**, a noted researcher in pulmonary hypertension and our residency program's research coordinator.

CA-2 resident **David Valdez**, **MD**, won 1st place for his poster presentation in the system and practice category, titled "Simulation with iSimulate-ALSi for Liver Transplant Anesthesiology", under the guidance of faculty mentor **Christine Myo Bui, MD**.

The Department of Anesthesiology at the University of Colorado, Denver, hosted this year's conference, and invited Thomas Hornbein, MD, to give the keynote address. Dr. Hornbein is professor emeritus and past chair of the Department of Anesthesiology at the University of Washington School of Medicine in Seattle.

Dr. Hornbein is famous for his work in high-altitude physiology, and for making the first-ever ascent of Mount Everest's West Ridge with teammate Willi Unsoeld. The pair ran out of oxygen, spent a night out in the open at 28,000 feet, and survived to tell the tale. In his book, "Into Thin Air", author Jon Krakauer wrote, "Hornbein's and Unsoeld's ascent was, and continues to be – deservedly – hailed as one of the great feats in the annals of mountaineering".

Our department's representation at WARC included 12 more residents who presented their research: Drs. Claudia Cao, Jeffrey Jeng, Jeffrey Kim, Monica Miller, Sara Navab, Catherine Nguyen, Dane Saksa, Mariam Sawary, Shai Shah, Colby Tanner, Kelsey Wang, and Andrew Wu. They were accompanied by Dr. Umar and by Mansoureh Eghbali, PhD, who directs our UCLA Physician Scientist Training Program and Basic

Science Training Environment. Drs. Miller, Navab, and Wang were also invited to give oral presentations, while Dr. Huverserian was the only resident honored by having two of his research projects selected for oral presentation.

A total of 211 abstracts were presented at the meeting, including 29 oral and 182 poster presentations. Our residents presented a total of 21 abstracts, six oral and 15 posters, to the delight of **Judi Turner, MD, PhD**, our hard-working and dedicated residency program director.

"Our residents stood out with their outstanding and high-quality presentations," Dr. Umar said. "We would like to thank all the residents and their mentors for their hard work and dedication, and the department leadership for their continued support of research and discovery. In particular, we would like to acknowledge the Clinical Research Committee (CRC) for all the excellent feedback they have been providing on resident research projects."

The next Department of Anesthesiology UCLA Annual Scientific Evening will be held on March 10, 2020 followed by the 58th WARC Meeting to be hosted by Stanford University from May 1-3, 2020.



#### Making our mark at the SCA



Several of our Cardiothoracic Division faculty, residents, and fellows headed for Chicago in May to present lectures and research at the Society for Cardiovascular Anesthesiologists' annual meeting.

- Emily Methangkool, MD, MPH, lectured on "Perioperative CIED Guidelines" and "Anesthesia for SVT Ablation"
- Prince Neelankavil, MD, Associate Director of Cardiothoracic Anesthesiology, spoke about the "Top Five Articles in the Cardiac Literature"
- Tiffany Williams, MD, PhD, discussed "Echo for Congenital Heart Patients"
- Six residents and fellows Drs. Vivek Chellappa,
   Jeffrey Kim, Monica Miller, Sophia Poorsattar,
   Mark Willingham, and Andrew Wu gave poster presentations.



#### Reed Harvey, MD,

took on the challenge of representing our department in the "Echo Jeopardy" competition, which traditionally takes place on the last night of the SCA meeting. Three teams of three players each compete in a tough

game of answering questions about TTE, TEE, general medicine, cardiology, and cardiac surgery.

"The production is very impressive, and the questions are super-difficult," Dr. Harvey said. "The contestants

come from all over the world and represent some of the biggest and best CT anesthesia programs around." Though his team finished in second place, Dr. Harvey said he was excited and honored to be invited to participate. His teammates included Heather Lander, MD, from the University of Rochester, and Dr. Donna Greenhalgh from the University of South Manchester, England. They all enjoyed the enthusiastic support of Dr. Harvey's colleagues and our residents and fellows in the audience.



Vikram Fielding-Singh,
MD, JD, who completed
his cardiothoracic
fellowship in June,
received an SCA Early
Career Investigator
Award of \$1000
for his research on
the incidence of
intraoperative cardiac
arrest and the risk

factors associated with it. The award is designed to motivate physicians early in their training to investigate topics in cardiac, thoracic, and vascular anesthesia and disease. His research involved a retrospective analysis of intraoperative cardiac arrest using a national administrative database.

Dr. Fielding-Singh found that about 5.7 patients per 10,000 hospital admissions will suffer an intraoperative cardiac arrest. The outcomes after these arrests are very poor: approximately 35 percent of these patients will die soon, as opposed to 1.3 percent of admissions who do not suffer intraoperative cardiac arrest. Selected factors independently associated with increased odds of intraoperative cardiac arrest included age over 80 years; cardiac, thoracic, or vascular surgery, congestive heart failure; pulmonary circulation disorders; peripheral vascular disease; end-stage renal disease; and fluid and electrolyte disorders.

#### IMAGES. counterclockwise

UCLA faculty and residents support Dr. Reed Harvey in the SCA's Echo Jeopardy; Drs. Reed Harvey and Monica Miller at the 2019 graduation reception; Dr. Vikram Fielding-Singh

Research Highlights

Research Highlights

#### **Grants and Awards**



Soban Umar, MD, PhD, our department's Residency Research Director, has received a K08 Clinical Investigator Award from the National Heart, Lung, and Blood Institute (NHLBI). His research proposal is to study the "Role of the Novel MicroRNA-125b in Pulmonary Hypertension Associated with Pulmonary Fibrosis". Dr. Umar and his team have developed a novel combined animal model of pulmonary fibrosis associated with pulmonary hypertension. MicroRNA-125b is significantly upregulated in the lungs of rats with combined PF-PH. Dr. Umar will study the possibility of targeting this and other molecules for novel therapeutics, and use a bioinformatics approach to identify the key networks mediating the transition of pulmonary fibrosis to combined PF-PH.

**Michela Ottolia, PhD**, is a co-investigator with Joshua Goldhaber, MD, of Cedars-Sinai Medical Center, on an NHLBI R01 grant, "Regulation of cellular calcium by cardiac sodium-calcium exchange." They will

study the sodium-calcium exchanger (NCX), a major regulator of calcium in heart cells. Since calcium regulation by NCX affects the strength of heart muscle as well as the electrical pacemaker activity of the heart, it is essential to understand how NCX controls calcium in the heart. This has important implications for managing the altered calcium fluxes in heart failure (>1,000,000 hospitalizations in the U.S. per year), heart attacks (>700,000 per year in the U.S.) as well as sick sinus syndrome and heart block (which require placement of >600,000 pacemakers in the U.S. annually).

Manuel Rosa-Garrido, PhD, has received a threeyear Career Development Award from the American Heart Association (AHA). His research concerns heart failure and how it leads to global remodeling of the 3-D structure of the genome. In his new study, he hopes to elucidate the chromatin remodeling mechanisms by which genetics and environmental factors are linked to the gene reprogramming that takes place during heart disease. The research also will test novel areas of therapeutic intervention. It may be possible to use targeted chromatin remodeling as a new treatment to prevent or reverse the cardiac disease phenotype.



Chen Gao, PhD, has been awarded a K99 grant to study the "Novel Mechanism of RBFox1 Mediated RNA Metabolism in Heart Failure". She will work with Professor Yi Xing, PhD, of the UCLA Department of Microbiology, Immunology, and

Molecular Genetics. Dr. Gao has a long-term research interest in studying the functional impact of RNA-binding proteins in cardiac development and disease. During her PhD training, she has identified a master regulator for mRNA splicing in the heart – RBFox1. Dr. Gao's K99 proposal is based on exploring a different function of RBFox1 as an RNA-binding protein in the heart, including how RBFox1 can mediate the cardiac fibrotic response during cardiac stress.

Dr. Gao has also been honored with an AHA
Career Development Award, which will allow her to
extend her research interest to explore the cardiac
transcriptome complexity and post-transcriptional
regulation of cardiac mRNA species. This will be an
independent project with Dr. Gao as the principal
investigator, which is an important milestone for her
work as an independent faculty research scientist.

Varina Clark, a third-year medical student at the David Geffen School of Medicine, is the recipient of the competitive Dean's Leadership in Health and Science Scholarship. Ms. Clark will receive funding for a one-year fellowship in Dr. Soban Umar's lab in our Division of Molecular Medicine. Her translational research project is focused on the investigation of novel gene therapy for right ventricular failure

in the context of pulmonary arterial hypertension. The scholarship committee was impressed with the quality of her project, and the strength of the mentoring relationship described. After the fellowship, Varina will resume her education as a fourth-year medical student.

# National and International Meetings

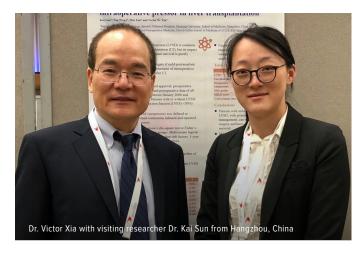
Several members of our department presented research at the recent International Liver
Transplantation Society Annual Meeting in Toronto,
Canada, including faculty members Victor Xia, MD,
and Christopher Wray, MD. Dr. Wray also moderated a special section on Anesthesiology and Critical Care.
Our two liver transplantation fellows, Drs. Elaine
Boydston and Jei Park, presented posters. Three of Dr. Xia's anesthesia research associates – Drs.
Xiangong Zuo, Hong Fu, and Kai Sun – visiting us from China also gave oral and poster presentations. Their research topics included:

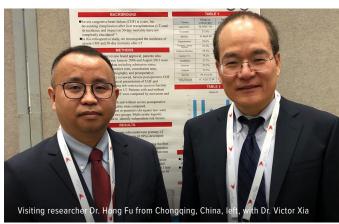
- Severe Congestive Heart Failure After Liver Transplantation. Hong Fu and Victor Xia
- Preoperative left ventricular systolic dysfunction in association with increased consumption of intraoperative pressor in liver transplantation. Kai Sun, Yun Wang, Min Yan and Victor Xia
- Pretransplant metabolic syndrome associated with major adverse cardiovascular events after liver transplantation. Xiangong Zuo and Victor Xia.

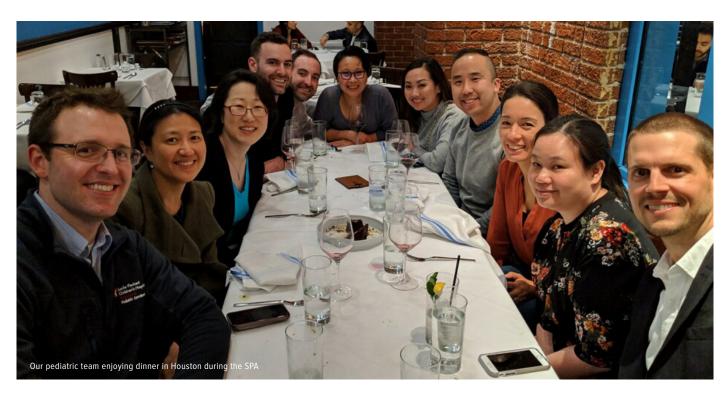
Our busy pediatric group took time out in March to head for the Society of Pediatric Anesthesiology (SPA) annual meeting in Houston, held in conjunction with the American Academy of Pediatrics. The faculty attendees included Drs. Ihab Ayad, Michelle Harvey, Lisa Lee, Jure Marijic, Wendy Ren, and Christine Trieu. Dr. Lee guided listeners on "A Walk-through Logistic Regression" as part of the SPA Research Workshop, while fellows Daniel Hwang and Matthew Desmond presented two posters each.

CA-3 resident **Robbie Shaw**, who will begin pediatric fellowship at Boston Children's Hospital, completed our delegation. They all enjoyed getting together with former UCLA residents and fellows. Their presentation titles were:

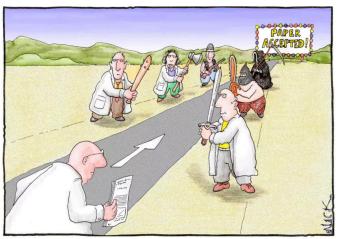
- Fighting Tooth and Nail: A Rare, Enormous
   Anterior Mediastinal Mass in an "Asymptomatic"
   Pediatric Patient. Daniel Hwang, MD, Christine
   Trieu, MD
- Perioperative Outcomes and Complications:
   Pediatric Patients with Osteogenesis Imperfecta
   Presenting for Anesthesia. Daniel Hwang, MD,
   Shirley Tang, MD
- A New Syndrome: Faciothoracic Hypoplasia, Complete Tracheal Rings, and Situs Ambiguus. Matthew Desmond, MD, Ashley Prosper, MD, Diana Hekmat, MD
- Under Pressure: Transducer Configurations to Prevent Pressure-related Vascular Complications. Matthew Desmond, MD, Tristan Grogan, MS, Tiffany Williams, MD, PhD
- Optimization of the COLDS Scoring System.
   Robert Shaw, MD, Catherine Nguyen, MD, Lisa Lee, MD.







#### **Selected Recent Publications**



Most scientists regarded the new streamlined peer-review process as "quite an improvement."

Editor's note: Our department continues its tradition of academic accomplishment with these recent publications. Every citation selected for mention here — a list which is by no means exhaustive — represents the results of months or years of work, and also verifies the authors' successful responses to multiple editors' questions and requests for revision. Congratulations to all our accomplished authors! For a more complete view of our publications in clinical and basic science research, please visit the research section of the website for UCLA Anesthesiology & Perioperative Medicine.

 Gabel E, Shin J, Hofer I, et al.: Digital Quality Improvement Approach Reduces the Need for Rescue Antiemetics in High-Risk Patients. Anesth Anala 2019; 128(5): 867-876.

Affecting nearly 30% of all surgical patients, postoperative nausea and vomiting (PONV) can lead to patient dissatisfaction, prolonged recovery times, and unanticipated hospital admissions. There are well-established, evidence-based guidelines for the prevention of PONV; yet physicians inconsistently adhere to them. The authors hypothesized that an electronic medical record—based clinical decision support (CDS) approach that incorporates a new PONV pathway, education initiative, and personalized feedback reporting system could decrease the incidence of PONV.

The overall incidence of PONV estimated from the model decreased from 19.1% (95% CI, 17.9%–20.2%) the week before implementation of the CDS to 16.9% (95% CI, 15.2%–18.5%; P = .007) the week after implementation. The authors concluded that the reduction in the cumulative PONV rate was likely driven by a significant decrease in the incidence of PONV for the high-risk patients (5.9%) with no statistically significant decrease in the low-risk patients (0.7%).

2. Fu H, Sun K, Gong W, Agopian V, Yan M, Busuttil R, Steadman R, Xia V. Preoperative beta blockade and severe intraoperative bradycardia in liver transplantation. Clin Transplant 2018 Dec; 32(12): e13422. Epub 2018 Oct. 27. https://www.ncbi.nlm.nih.gov/pubmed/30312516

Nonselective beta blockade is commonly prescribed for liver transplantation candidates, but its impact on intraoperative hemodynamics has not been well understood. In this study, the authors found that patients who received preoperative beta blockade had a significantly higher incidence of severe intraoperative bradycardia compared with those who did not (9.6% vs 3.2%, P = 0.001, OR 2.95, 95% CI 1.42-6.12, P = 0.004). Severe intraoperative bradycardia was associated with increased 30-day mortality.

3. Lin M, Ramkumar M, Kugler J. Laying Hands on the Patient Who Is Unstable: Bedside Diagnosis in Medical Emergencies. Amer Journal of Medicine, epub ahead of print, May, 2019, in press. https://www.amjmed.com/article/S0002-9343(19)30349-3/fulltext

The authors examine a troubling trend in modern medicine: physicians are so accustomed to looking at bedside monitors and extensive electronic medical records that they may forget to physically examine the patient. "Patients are easily reduced to a virtual corpus of data," they observe, while physical signs are ignored. They cite the example of a patient with hypotension in the simulation setting, whose diagnosis

of anaphylactic shock was critically delayed as the team failed to examine the mannequin and find the telltale urticarial rash. The authors propose a rapid, high-yield approach to the physical examination for common emergent inpatient scenarios, focusing on circulation, airway, breathing, and neurologic screening. Facility with bedside ultrasound is recommended for the rapid evaluation of heart and lung pathology.

# **Monitoring** A Big Problem for Little Patients Cardiac Output:

In pediatric surgery, cardiac output falls before MAP declines and is not frequently monitored.1 Sigurdsson et al.<sup>2</sup> have validated a minimally invasive method of monitoring cardiac output Periaortic Flow Probe · Carries complication risks · The gold standard for · Not sized for all pediatric Not used clinically Extracorporeal AV Ultrasound<sup>2</sup> Partial CO<sub>2</sub> Rebreathing · Not validated in Validated against periaortic flow probe Percentage error mean 44.5%<sup>3</sup> Precision similar to gold standard Invasi **Transthoracic Bioimpedence**  Percentage error
 26.6%<sup>1</sup> Not validated in pediatrics Electrocautery  $PE = \frac{1.96 \times SDbias}{mean COPVEP} \times (100\%)$ interferes with function V(t) Percentage error mean 42.9%<sup>3</sup> **Esophageal Doppler Pulse Contour Analysis** · Not validated in pediatrics Not validated in Percentage error mean 42.1%<sup>3</sup> pediatrics

 Trieu C, Williams T, Cannesson M, Marijic J. Babies and Children at Last: Pediatric Cardiac Output Monitoring in the 21st Century. Anesthesiology 2019; 130(5): 671-673.

The extracorporeal AV ultrasound approach offers a simple and reliable method of monitoring cardiac output using existing central and arterial lines.

This editorial comments on the cover article in the May issue of Anesthesiology by Sigurdsson and colleagues about a new cardiac output monitoring system based on extracorporeal AV ultrasound measurement in small children. The technology, while invasive, is "one of the first to be meticulously tested in this important patient population", the authors wrote. "Despite the encouraging results from this study, there are still many challenges in developing the ideal cardiac output monitor for pediatric patients."

5. Le T, Makar C, Morway P, Hoftman N, Umar S. Pulmonary artery denervation: a novel treatment modality for pulmonary hypertension. J Thorac Dis. 2019 Apr;11(4):1094-1096. doi: 10.21037/jtd.2019.02.93.
https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6531721/

Pulmonary arterial hypertension (PAH) is a complex pulmonary vascular disease that is associated with sympathetic nervous system (SNS) over-stimulation, renin-angiotensin-aldosterone system (RAAS) activation and cardiac arrhythmias. In this editorial, the authors comment on studies to evaluate pulmonary artery denervation (PADN) as a treatment for PAH. They conclude that PADN is a direct, targeted, and minimally invasive procedure that offers a novel therapeutic option, but whether it is superior to standard-of-care pharmacologic therapies is still debatable and remains to be established in the long term.

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

In previous work, the authors have shown that hydrogen peroxide (H2O2) downregulates tetrahydrobiopterin salvage enzyme DHFR (dihydrofolate reductase) to result in eNOS (endothelial NO synthase) uncoupling and elevated blood pressure. Here, they aimed to delineate molecular mechanisms underlying H2O2 downregulation of endothelial DHFR by examining transcriptional pathways hypothesized to modulate DHFR expression and effects on blood pressure regulation of targeting these novel mechanisms. Bioinformatic analyses confirmed a positive correlation between E2F1 and DHFR in human endothelial cells and arteries, and downregulation of both by oxidized phospholipids. In summary, endothelial DHFR is downregulated by H2O2 transcriptionally via an E2F-dependent mechanism, and that specifically targeting E2F1/2/3a to restore DHFR and eNOS function may serve as a novel therapeutic option for the treatment of hypertension.

 Ma L, Liu W, Hudson AE. Propofol Anesthesia Increases Long-range Frontoparietal Corticocortical Interaction in the Oculomotor Circuit in Macaque Monkeys. Anesthesiology 2019 Apr;130(4):560-571. doi: 10.1097/ ALN.00000000000002637.

https://www.ncbi.nlm.nih.gov/pubmed/30807382

A decrease in frontoparietal functional connectivity has been demonstrated with multiple anesthetic agents, and this decrease has been proposed as a final common functional pathway to produce anesthesia. Two alternative measures of long-range cortical interaction are coherence and phase-amplitude coupling. The effects of propofol on phase-amplitude coupling between different cortical areas have not previously been reported. Propofol anesthesia induces coherent oscillations and increases certain frontoparietal interactions in oculomotor cortices. Frontal eye field and lateral intraparietal area show increased coherence and phase-amplitude coupling. Visual areas 2 and 1, which have similar anatomic projection patterns, show similar increases in phase-amplitude coupling, suggesting higher order feedback increases in influence during propofol anesthesia relative to wakefulness. This suggests that functional connectivity between frontal and parietal areas is not uniformly decreased by anesthetics.

 Yu J, Zeng C, Wang Y. Epigenetics in Dilated Cardiomyopathy. Curr Opin Cardiol 2019; 34(3):260-269. doi:10.1097/HCO.0000000000000616. https://www.ncbi.nlm.nih.gov/pubmed/30973397

Characterized by enlarged ventricles and loss of systolic function, dilated cardiomyopathy (DCM) has the highest morbidity among all the cardiomyopathies. Although it is well established that DCM is typically caused by mutations in a large number of genes, there is an emerging appreciation for the contribution of epigenetic alteration in the development of DCM. Some of the recent progress in the field of epigenetics is in DCM is presented, focusing on the four major epigenetic modifications: DNA methylation, histone modification, chromatin remodeling, and the noncoding RNAs. The major players involved in DCM-related epigenetic reprogramming are also highlighted. Finally, the diagnostic and therapeutic implications for DCM based on new knowledge of epigenetic regulation are discussed.

9. Tzimas C, Rua CD, Buergisser PE, Jean-Louis F, Lee K, Chukwuneke J, Dun W, Wang Y, Tsai EJ. WIPI1 is a Conserved Mediator of Right Ventricular Failure. JCI Insight 2019; 25(5). pii: 122929. doi: 10.1172/jci.insight.122929. https://www.ncbi.nlm.nih.gov/pubmed/31021818

Right ventricular dysfunction is highly prevalent across cardiopulmonary diseases and independently predicts death in both heart failure and pulmonary hypertension. Progression towards right ventricular failure (RVF) can occur in spite of optimal medical treatment, highlighting current insufficient understanding of RVF molecular pathophysiology. To identify molecular mechanisms that may distinctly underlie RVF, the authors investigated the cardiac ventricular transcriptome of advanced HF patients, with and without RVF. Using an integrated systems genomic and functional biology approach, they identified an RVF-specific gene module, for which WIPI1 served as a hub and HSPB6 and MAP4 as drivers, and confirmed the ventricular specificity of Wipi1, Hspb6, and Map4 transcriptional changes in adult murine models of pressure overload induced RV- versus LV- failure. A shift towards non-canonical autophagy in the failing RV correlated with RV-specific Wipi1 upregulation.

10. Zhou M, Wang Y, et al. Targeting BCAA Catabolism to Treat Obesity-Associated Insulin Resistance. Diabetes 2019. pii: db180927. doi: 10.2337/db18-0927. https://www.ncbi.nlm.nih.gov/pubmed/31167878

Recent studies implicate a strong association between elevated plasma branched-chain amino acids (BCAAs) and insulin resistance (IR). However, the causal relationship and whether the interrupted BCAA homeostasis can serve as a therapeutic target for diabetes remain to be established experimentally. In the present study, unbiased integrative pathway analyses identified a unique genetic link between obesity-associated IR and BCAA catabolic gene expression at pathway-level in human and mouse populations. The data demonstrate a pivotal causal role of BCAA catabolic defect and elevated BCAAs/BCKAs in obesity-associated IR and provide proof-of-concept evidence to the therapeutic validity of manipulating BCAA metabolism for treating diabetes.

# Dr. John Miller: Anesthesiologist by Day, Magician by Night

by Carey Walovich



ohn Miller, MD, an attending anesthesiologist here at UCLA, was only eight years old when his mother introduced him to his first magic trick, a classic sleight-of-hand.

The most widely used version of this trick is

performed with three cups and three small balls. The magician makes the balls appear to pass through the solid bottom of cups, jump from cup to cup, disappear from the cup and appear in different places, or vanish all together.

"After that, I had to know everything about magic." says Dr. Miller. From then on, his mother often took him to the venerable magic shop, Berg's Magic Studio, so that he could learn every trick and technique he could get his hands on.

Dr. Miller has come a long way since then. He received his medical degree from UCLA in 1983 and completed his residency and fellowship here in cardiothoracic anesthesiology. As he pursued a career in medicine, however, he never lost his fascination with performing

When Dr. Miller was 21, he attended a show at the renowned <u>Magic Castle</u> in Hollywood. "I was carrying a deck of cards with me, so when the performers

were done with their sets, I started to do a trick for them." It just so happened that Albie Selznick, the establishment's producer, walked by and stopped to watch. He was so impressed that he invited Dr. Miller, on the spot, to perform. It was here that "Doctor John" officially became a professional magician.

Throughout the years, Dr. Miller has continued to perfect his magic skills and now specializes in performing close-up magic. These tricks are more personal and detail-oriented than some of the larger-scale ones, as they require skills of misdirection, lightness of hand, and of course, entertaining the audience with humor and wit.



Karen Sibert, MD, FASA, our Director of Communications, and her husband, Steven Haddy, MD, had the chance to see Dr. Miller in action on June 22 at the Santa Monica "Summer Soulstice" street fair. Dr. Miller's prowess with sleight-of-hand tricks delighted the audience of children and adults alike.





"It's actually pretty amazing!" Dr. Sibert said. "There he is in short sleeves, no jacket, no place to hide anything. You're standing right there, and you still have no idea how he's making things appear and disappear." Coins appear and vanish, cards change color or transform from blank to printed, and all of it happens in the blink of an eye.

A card that Dr. Sibert signed personally, and handed to Dr. Miller, somehow vanished from the deck of cards and then was discovered folded up inside a tiny wooden box that was sitting on the table all by itself the whole time, she said. "It was hard to believe!"

It's this kind of moment that brings Dr. Miller fulfillment, making people laugh and instilling a sense of joy in all who watch his performances. "Medicine is obviously



a very serious business. Magic allows the audience to not be so serious, to feel like kids again, hopefully experiencing that same wonder and amazement that I felt when I saw my first magic trick. For me, it's a great balance to medicine. So if I can elicit those feelings in my audience members, then I know I've done my job!"

Dr. Miller's next magical appearance will be at the Santa Monica Playhouse's Magic Monday on August 26 at 7:30 pm. Dr. Sibert and her husband plan to make a point of catching his next appearance. For more information about this event, please visit the Playhouse website.



# Department Awards and Honors



In May, UCLA Health presented the "Drivers of Change" award to the UCLA team that provides critical life support in record time with extracorporeal membrane oxygenation (ECMO). Headed by Medical Director Vadim Gudzenko, MD, of our Critical Care Division, the multidisciplinary ECMO/ECLS team includes anesthesiology, cardiac surgery, critical care transport, nursing, perfusion, physical therapy, and respiratory therapy staff members. They actively collaborate with cardiology, pulmonary medicine, emergency medicine, interventional radiology, and other clinical services. The award recognizes "an inter-professional team that effectively utilized a systematic process to plan and implement an initiative that improved patient, staff, unit or

organizational outcomes." **Joseph Meltzer, MD**, co-director of our Critical Care Division, joined Dr. Gudzenko at the award ceremony.



F. Michael Ferrante, MD, the director of the UCLA Comprehensive Pain Centers, was named to Los Angeles Magazine's 2019 list of "Top Doctors" in the greater Los Angeles area in the category of Pain Medicine. (Of note, the magazine does not include a category for Anesthesiology...)



Karen Sibert, MD, FASA, has been elected to the Board of the LA County Medical Association (LACMA) as a Councilorat-Large, and took office July 1. Dr. Sibert has also been named a delegate to the California Medical Association (CMA) and

will represent LACMA District 5 at the CMA House of Delegates in October. In addition, she is President-elect of District 5, and Treasurer of the Women Physicians' Issues and Advocacy Committee (WPIAC). Dr. Sibert is a past president of the California Society of Anesthesiologists.



Yue Ming Huang, EdD,
MHS, earned the annual
UCLA Faculty/Staff
Partnership Award,
given to an individual
who "reflects the values
of collaboration and
collegiality between
faculty and staff." Dr.
Huang is Associate
Adjunct Professor in our

department and Education Director of the UCLA Simulation Center. Dr. Huang received the award at the yearly Staff Assembly Centennial Scholarship and Awards Recognition reception on June 27, with commendation "for her extraordinary partnership efforts on numerous education projects over the course of her career at UCLA."



Two of our faculty members – Drs. Swati
Patel and Shabnam
Majidian – were honored this year with "2019
UCLA Exceptional
Physician" awards from
UCLA Nursing. These awards recognize faculty physicians who demonstrate core UCLA values

including "integrity, compassion, respect, teamwork, and excellence". To receive one of these awards, the physician must be nominated by a UCLA employee, and the selection committee always seeks endorsement by the nominee's department chair. Criteria for selection include:

- A focus on "healing humankind" through strong relationships with patients and families;
- · Respect toward patients and colleagues;
- Clinical excellence and willingness to share knowledge;
- Integrity demonstrated through actions and words.

As our chief of pediatric anesthesiology, and as the Medical Director of the RRMC ORs who "runs the board" and keeps everything going, Dr. Patel is indispensable, highly respected, and beloved.



An expert in regional anesthesiology, **Dr. Majidian** received high commendation as a "wonderful anesthesiologist" with "brilliant bedside manner", and a "simply amazing human being" with great teaching skills and clinical expertise.

Unfortunately, Dr. Majidian will soon be leaving our faculty and moving to a location closer to family. She will certainly be missed!



Nirav Kamdar, MD, MPP, MBA, presented invited lectures at the University of Kansas Medical Center's Annual Post-Graduate Symposium of Anesthesiology. One of his presentations — "The Next Generation of Anesthesiologists: A Call

to Disrupt and Rebrand Anesthesia for Better Value" -was honored as the symposium's Annual Paul Lorhan, MD, Memorial Lecture. Dr. Lorhan was an early leader



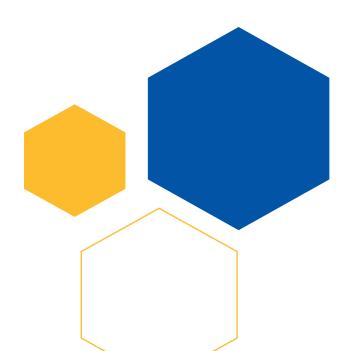
in the anesthesiology department and founded the first Kansas anesthesiology residency program in 1938. Dr. Kamdar also spoke on an area of his special expertise, "Telemedicine Pre-Ops and Remote Monitoring for the Perioperative Anesthesiologist".



Maxime Cannesson, MD, PhD, has traveled the world this year as an invited speaker and an international expert on medical applications of artificial intelligence (Al). He delivered a lecture on "Al in Anaesthesia" to the Royal College of Anaesthetists in

London and to the Healthcare Executive Forum in Houston. He was invited to give Grand Rounds at the Massachusetts General Hospital on the topic, "Al and Autonomous Systems in Anesthesia", and spoke to the Society for Technology in Anesthesia in Scottsdale, Arizona about "Bringing Al and Closed Loop Systems to the Bedside." In April, he journeyed

to Sao Paulo, Brazil to lecture at the Congresso Paulista de Anestesiologia about hemodynamic optimization during surgery, closed-loop systems in anesthesia, and predicting fluid responsiveness. Dr. Cannesson is our Vice Chair of Perioperative Medicine and Director of Clinical Research.



# Dr. Vanila Singh Guides National Opioid Policy at HHS

oday's opioid crisis is "all about the synthetic opioids," said **Vanila Singh, MD, MACM**, a pain medicine specialist and former UCLA faculty member, who now serves in Washington DC as Chief Medical Officer in the Office of the Assistant Secretary for Health at the Department of Health and Human Services (HHS).

Dr. Singh gave a riveting Grand Rounds presentation on June 19 to our department, titled "The Opioid Crisis: HHS Strategy and Advancing Pain Management."

She explained that the rate of opioid-related deaths from prescription drugs started to rise in 1999, when the misguided "Pain is the 5th Vital Sign" campaign prodded doctors to prescribe opioids more liberally. However, Dr. Singh said, there is now a second wave of deaths from heroin use, four times worse today than in 2010. Today,

powerful synthetic opioids like fentanyl are flooding into the US from China and other foreign suppliers, increasing the death rate from overdose.

"Cocaine and methamphetamine use are also on the rise," Dr. Singh said. "We are in a full-blown drug crisis."

She estimates that 50 million Americans endure chronic pain, and 19 million suffer from debilitating high-impact pain that imposes social isolation and impairs their function and quality of life.

As physicians cut back their opioid prescriptions on the advice of the 2016 CDC guidelines, many pain patients were left in the lurch, Dr. Singh said. Patients with chronic pain who were compliant with opioid use and weren't "drug-seekers" were suddenly forced into rapid taper



of their opioid medications, leading to severe pain and even to suicide. Others turned in desperation to the black market for heroin.

"The CDC guidelines have been misinterpreted," Dr. Singh said, and turned into harsh state laws that may restrict opioid prescriptions to a week or less, even for severe postoperative pain. "A patient with a seven-level fusion may get only three days of opioids," Dr. Singh said. "We need to put doctors in charge of medicine again."

#### THE HHS PAIN TASK FORCE

To tackle this difficult public health crisis, HHS established the Pain Management Best Practices Inter-Agency Task Force, which brought together experts in pain medicine, addiction, recovery, substance use disorders, mental health, minority health, and more. Chaired by Dr. Singh, the Task Force issued its final report in May, earning widespread praise from more than 150 organizations of physicians, nurses, pharmacists, psychologists, and patient advocates.

The report<sup>1</sup>, accessible at <u>HHS.gov</u>, outlines five broad categories for pain treatment:

- Medication: opioid and non-opioid
- Restorative therapies: physical therapy, occupational therapy, exercise
- Interventional procedures
- Behavioral health approaches
- Complementary and integrative health measures such as yoga and Eastern medicine.

Both acute and chronic pain management should be "individualized, multimodal, and multidisciplinary," Dr. Singh advised, and education at the curriculum level should lead to a "general, holistic understanding across specialties."

The report's recommendations include:

• Greater use of telehealth, tele-mentoring, and mobile apps

- Better third-party payment for non-opioid therapies, medication-assisted treatment such as buprenorphine, and behavioral health
- Educating primary care physicians and teams; encouraging appropriate referrals
- Improvements to coverage barriers
- Training of more pain medicine specialists to close workforce gaps.

"It's high time to coordinate on this issue!" she said. Anesthesiologists need to be "part and parcel" of the battle. As opioid prescriptions have come under increasing scrutiny, physicians at the front lines have started refusing to treat chronic pain patients. Patients may be unfairly stigmatized as "addicts", adding to the suffering they already endure from intractable pain.

"People talk about being dehumanized and treated like pariahs when they go to the ER or a clinic complaining of pain," Dr. Singh said. Pointing out that June 19 is World Sickle Cell Day, she highlighted the fact that many patients in sickle cell crisis have severe pain but may be denied medication and viewed as "drug-seekers and second-class citizens."

Dr. Singh emphasized that simple algorithms can't adequately guide the practice of pain medicine. "There's a need for individualized patient care," she said. "Patients are not all the same and we don't want to be treated that way. Even with similar diagnoses, patients will need different treatment plans due to comorbidities and other factors."

While she continues her work in HHS, Dr. Singh is on leave from her faculty position as a Clinical Associate Professor in the Department of Anesthesiology, Perioperative and Pain Medicine at Stanford University. She was a member of the UCLA faculty from 2002 to 2003, immediately after she completed residency and pain medicine fellowship training at Cornell-Weill University Medical Center in New York City. In 2016, Dr. Singh earned the master's degree in Academic Medicine (MACM) from Keck School of Medicine at the University of Southern California.

1.U.S. Department of Health and Human Services (2019, May). Pain Management Best Practices Inter-Agency Task Force Report: Updates, Gaps, Inconsistencies, and Recommendations. Retrieved from U. S. Department of Health and Human Services website: https://www.hhs.gov/ash/advisory-committees/pain/reports/index.htm



# Supporting Public Education at the Girls Academic Leadership Academy

ur faculty member **Christine Nguyen-Buckley, MD**, welcomed students from the <u>Girls Academic Leadership Academy (GALA)</u>, an all-girl public school for Grades 6-12 in Los Angeles, on a visit to the UCLA Simulation Center in April. Their visit was part of our ongoing support of <u>Project Lead the Way</u>'s biomedical curriculum in three area public high schools, in partnership with the California Society of Anesthesiologists (CSA).

Anesthesiology residents **Sophia Poorsattar, MD**, **Emily Walters, MD, PhD, Sean Mofidi, MD, MS**, and

sub-intern **Alessandra Chen** spoke to the students about their road to medicine and answered questions. Medical student **Sara Arastoo** also spoke to the group about her research in e-cigarette and tobacco cessation, and conducted an engaging question-and-answer session.

Dr. Nguyen-Buckley is our faculty liaison with Project Lead the Way, which offers its biomedical curriculum at Venice High School and El Segundo High School in addition to GALA. Our residents have done classroom visits – and more are planned – to all three schools,

discussing careers in healthcare and giving students hands-on experience in airway management and ultrasound techniques.

Patricia Nwajuaku, MD, MPH, and Karen Sibert, MD, FASA represented our department and the CSA at the "Women's Leadership Breakfast: Launch Her Future" event in March for the benefit of GALA, which offers a rigorous curriculum focused on science, technology, engineering, and mathematics (STEM). Dr. Nwajuaku had the opportunity to meet State Senator Holly Mitchell of the 30th Senate District, who is the Chair and founder of the Senate Select Committee on Women and inequality.

Dr. Nwajuaku has a long record of interest in education and global health issues. A graduate of the David Geffen School of Medicine here at UCLA, she enlisted in the Air Force and served as a flight surgeon in the US and Europe. She has worked in health policy research and public health education in Nigeria, completed anesthesiology residency at the University of Florida, and earned her Master of Public Health degree at Columbia University. She joins our faculty this year, specializing in thoracic anesthesiology.





# Welcome To Our Newest Faculty and Attending Physicians!

By Carey Walovich



**Elaine Boydston, MD**, completed her liver transplant anesthesiology fellowship at UCLA and residency at the Mount Sinai Hospital in New York. She is originally from Austin, TX and a graduate of the University of Texas and UT Southwestern Medical School. Her professional interests include medical student and resident education and simulation. In her free time, she enjoys traveling, surfing with her husband, and spending time with her French bulldog puppy, Frankie.

**Britten Cole, MD**, is a Chicago native who completed her residency in anesthesiology at Mount Sinai Medical Center in New York. She entered the US Navy in 2006 and was stationed in Bethesda, MD until she deployed to Iraq in 2008. After leaving the Navy, she relocated to Orlando with her husband and two children. She joins our attending anesthesiologist group and looks forward to living in Los Angeles where she'll be closer to family and friends.



**Myro Figura, MD**, completed his anesthesiology residency at UCLA and is a graduate of the Robert Wood Johnson Medical School at Rutgers University. His professional interests include healthcare technology, entrepreneurship, and education. He is originally an East Coast native, but has adapted well to southern California -- in his free time, he can be seen outdoors enjoying fitness activities, playing tennis, and traveling.

#### IMAGES, top:

Dr. Patricia Nwajuaku, left, with State Senator Holly Mitchell

#### Below

Residents Emily Walters, Sophia Poorsattar, and Sean Mofidi field questions from GALA students



**Yuichiro Hayashi, MD**, obtained his medical degree at the Medical College of Wisconsin, and thereafter moved back to Los Angeles to complete anesthesiology residency and a pain medicine fellowship at UCLA. He returns to join our UCLA faculty after practicing in a private pain management group in Las Vegas. In his free time, Dr. Hayashi likes to stay active. He particularly enjoys running, hiking, golfing, skiing, and tennis.



Marisa Hernandez-Morgan, MD, completed her medical degree at UCLA, residency at USCF and her fellowship in critical care at UCLA. Her professional interests include medical student and resident education. Her current research focuses on health policy and reducing healthcare disparities. In her free time, she enjoys traveling and exploring all that Los Angeles has to offer!



**Bi Mo, MD**, completed neurosurgery training at UC Davis, anesthesiology residency at Thomas Jefferson University in Philadelphia, and has just finished his pain medicine fellowship at UCLA. His professional interests include neuromodulation, minimally invasive spinal interventions, and graduate medical education. He is an avid painter and enjoys food, travel, and track days with his spouse and three children.



Jane Moon, MD, is a critical care anesthesiologist at the Los Angeles VA Hospital who completed her residency and fellowship at USC. She joins our faculty at Ronald Reagan Medical Center while continuing her work at the VA. Having taught high school history before medical school, her professional interests include resident education and anesthesia history. In her free time, she enjoys writing and spending time with her daughters.



Rana Movahedi, MD, completed her anesthesiology residency at Cedars-Sinai Medical Center in Los Angeles and her regional anesthesiology fellowship at the Hospital for Special Surgery in New York. She comes to UCLA after working as an associate professor of clinical anesthesiology at the Keck School of Medicine at USC, where she also served as the section director for regional anesthesiology and the program director for the regional anesthesiology and acute pain medicine fellowship. She currently serves as a faculty member for ASRA perioperative ultrasound courses.



Patricia Nwajuaku, MD, MPH, will join the thoracic anesthesiology division after completing a thoracic anesthesiology fellowship here at UCLA. She completed her MPH degree at Columbia University, medical school at UCLA, and anesthesiology residency at the University of Florida. She has also served as a flight surgeon in the United States Air Force, reaching the rank of major. Upon joining our faculty here at UCLA, she hopes to continue to expand her work in global health, community outreach, capacity building, and medical education.



**Sandra Sacks, MD**,is a California native and completed her anesthesia residency at Stanford University. She joins our pain medicine faculty after completing dual fellowship training in palliative care at Cedars-Sinai Medical Center and pain medicine at UCLA. She will be working closely with our oncology services, with a focus on cancer pain and improving the quality of life for cancer patients through medical management and minimally-invasive interventions.



**Matthew Scott Vandiver, MD, PhD** completed his critical care fellowship at UCLA following residency at the John Hopkins Hospital. His internship was at Sinai Hospital in Baltimore after graduating from the MD-PhD program at the John Hopkins School of Medicine. His professional interests include neuroscience research involving perioperative delirium and Post-Op/ICU cognitive dysfunction and resident education. Outside of medicine, he enjoys playing tennis, running and spending time with his wife and daughter.

# Dr. Jean-Francois Pittet: "What do you need to know to publish in anesthesia journals?"



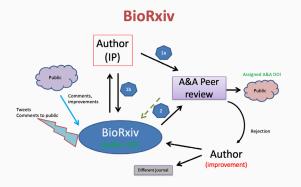
We have the pleasure of welcoming a new adjunct faculty member in residence for two weeks each year, as **Jean-Francois Pittet**, **MD**, **DEAA** (Diplomate of the European Academy of Anaesthesiology), joins our ranks. Dr. Pittet is well known to many in academic practice as the Editor-in-Chief of the journal *Anesthesia & Analgesia (A & A)*.

Dr. Pittet gave Grand Rounds to our department on July 17, posing the question: "What do you need to know to publish in anesthesia journals?" His most provocative comments concerned the future of the peer review process in academic medicine.

"I think in 10 to 15 years, it will all be open access online," he told the audience. Dr. Pittet cited the example of bioRxiv (pronounced "bio-archive"), a free online archive

and distribution service developed by Cold Spring Harbor Laboratory for unpublished articles in the life sciences. Since these preprints aren't copyrighted, the articles can still be submitted to peer-review journals such as A & A. A new, similar platform called <a href="mailto:medRxiv">medRxiv</a>, is co-sponsored by the British Medical Journal and Yale University.

Dr. Pittet showed a graphic illustrating the process he sees evolving. Authors will publish their articles as preprints online and submit also to journals such as A & A. The public as well as the official reviewers will be able to provide feedback and critiques to the authors in an open, real-time process far different from confidential peer review as we know it today. Authors can then continually revise articles up to the time they are accepted for publication in a peer-reviewed journal.



The question, of course, will be how to prevent the dissemination of erroneous or "fake news" that could potentially cause harm. So far, Dr. Pittet said, the preprint platforms intend to publish nonclinical research only; the website for medRxiv cautions strongly against premature application to patient care. These new platforms could be extremely disruptive to the current market model for publishing peer-reviewed research, he said, and print journals could even disappear.

Dr. Pittet offered practical tips for authors seeking to publish in IARS journals:

- Complete 70 percent of your research before publishing, to avoid the perils of publishing too early or too late:
- Consider publishing a short communication to mark your research territory;
- Publish something new;
- Be strateair
- Don't publish anything you plan to patent;
- Don't split your research into too many publications; avoid "salami science";
- Pay attention to the authors' guidelines provided by the journal;
- Choose an appealing title and catchy keywords;
- Prepare a strong cover letter that makes an impact.

"Remember that you have only one shot!", Dr. Pittet told the audience. "Get it right!"

#### **PUBLISHING IS A BUSINESS**

Reminding the audience that "publishing is a business" with authors and readers as customers, Dr. Pittet said he hopes to publish articles that address important perioperative problems, identify critical gaps in care, and demonstrate solutions.

Dr. Pittet discussed the steps that are being taken to create a journal that is more inviting to readers, such as placing the most important manuscripts first and increasing the number of infographics. The journal is also working to shorten the turnaround time for review and publication, as well as increase participation from physicians and scientists in China and elsewhere outside the US.

A native of Switzerland, where he completed his anesthesiology residency and fellowship in critical care, Dr. Pittet's career in America began in 1990 when he started a research fellowship at the University of California San Francisco (UCSF) in cardiovascular research. He stayed on as an attending physician and codirector of the surgical ICU until 2010, when he moved to Birmingham, Alabama, to become Director of the Division of Critical Care Medicine at the University of Alabama at Birmingham (UAB).

Today, Dr. Pittet is the David H. Chestnut Professor of Anesthesiology and Perioperative Medicine at UAB, and an investigator in UAB's Center for Lung Injury and Repair and in the Alabama Resuscitation Center. Meanwhile, much of his time is spent editing A & A, one of our specialty's most prestigious journals. He and Maxime Cannesson, MD, PhD, our Vice Chair for Perioperative Medicine, know each other well, as Dr. Cannesson serves as the Editor of A & A's section on Technology, Computing, and Simulation. Dr. Pittet's wife Gia, an audiologist and PhD candidate, is conducting her doctoral research with Dr. Cannesson's mentorship.

Dr. Pittet's long experience in academic medicine stands to be a valuable resource to UCLA. He has served as a member of the UC Statewide Committee on Research Policy, and as an Associate Editor and Editor of the ASA's journal *Anesthesiology*. He has lectured extensively in Europe and America on mechanisms of lung injury in trauma and other topics.

As Dr. Cannesson puts it, Dr. Pittet "knows the UC system extremely well; he would be a great resource" for any young faculty member to discuss career development within the UC system.

Further, Dr. Cannesson says, "Dr. Pittet has significant experience with research and scholarly activity, and would be able to provide guidance on potential research ideas and manuscript preparation."

# Alumni Interview Corner

By Carey Walovich

Welcome to our first UCLA anesthesiology alumni interview corner! We'll report on the accomplishments, projects, life changes and stories of your fellow Bruins.

Lorraine Lubin, MD, returned to UCLA this year as a faculty member specializing in pediatric critical care and pediatric cardiothoracic anesthesiology after working in private practice at Cedars-Sinai Medical Center for 11 years. She earned her MD degree from the University of Michigan and then came to UCLA for residency in pediatrics. There, she met Dr. Judith Brill, our long-time faculty member, who encouraged her to go on to a fellowship in pediatric critical care, followed by anesthesiology residency here. Dr. Lubin was part of our graduating residency class in the year 2000, and is board certified both in pediatrics and anesthesiology.

Dr. Lubin was kind enough to take time out of her busy day to answer a few more questions for us.

#### Tell us a little more about your background—

"I have a background in pediatrics but became very interested in acute care during my residency. I was curious as to how I could build a career balancing the two. My mentor, Dr. Brill, at that time was the medical director of pediatric critical care, and was an amazing role model. She was the person who recommended that I do a residency in anesthesiology. I admired her skill set and knowledge base.

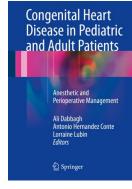
It was during my fellowship that I was exposed to the pediatric and adult congenital heart population, which is now my main focus. When I was a new attending, I rotated in the PICU and worked as a cardiac anesthesiologist with a dual appointment. My heart has always been in congenital heart care in the operating room and ICU. Being able to take care of my patients and their unique needs, particularly the kids, is very



special. We build the best and most unique plan for each patient – we do things I'd want for my own child."

# What is your favorite part of working at UCLA?

"There is a level of excellence here that I admire! That's why I'm so happy to be back at UCLA and working with my extraordinary colleagues for a program I am personally very passionate about."



# What is your proudest professional achievement?

"In 2017, several colleagues and I published the textbook Congenital Heart Disease in Pediatric and Adult Patients. I'm very proud of this accomplishment!"



"This establishment has exceptionally trained physicians that are dedicated to providing specialized and unique care for their patients. For example, every week my team puts together an assessment for each of our pediatric patients. We create a truly unique surgical plan for each kid in our unit; we know them and that builds trust. How we approach cases and patients is one of our greatest strengths."

# What do you enjoy most about being a faculty member?

"My goal is to provide good training and mentoring so this specialty is able to keep going. Being able to work with and train the next generation of anesthesiologists is very rewarding."



IMAGES. left to right
Dr. Lorraine Lubin, off-duty!
Dr. Lubin is a co-editor of this recent textbook
Dr. Lubin with her husband, Sharath Gadasally, and son Ravi. 12

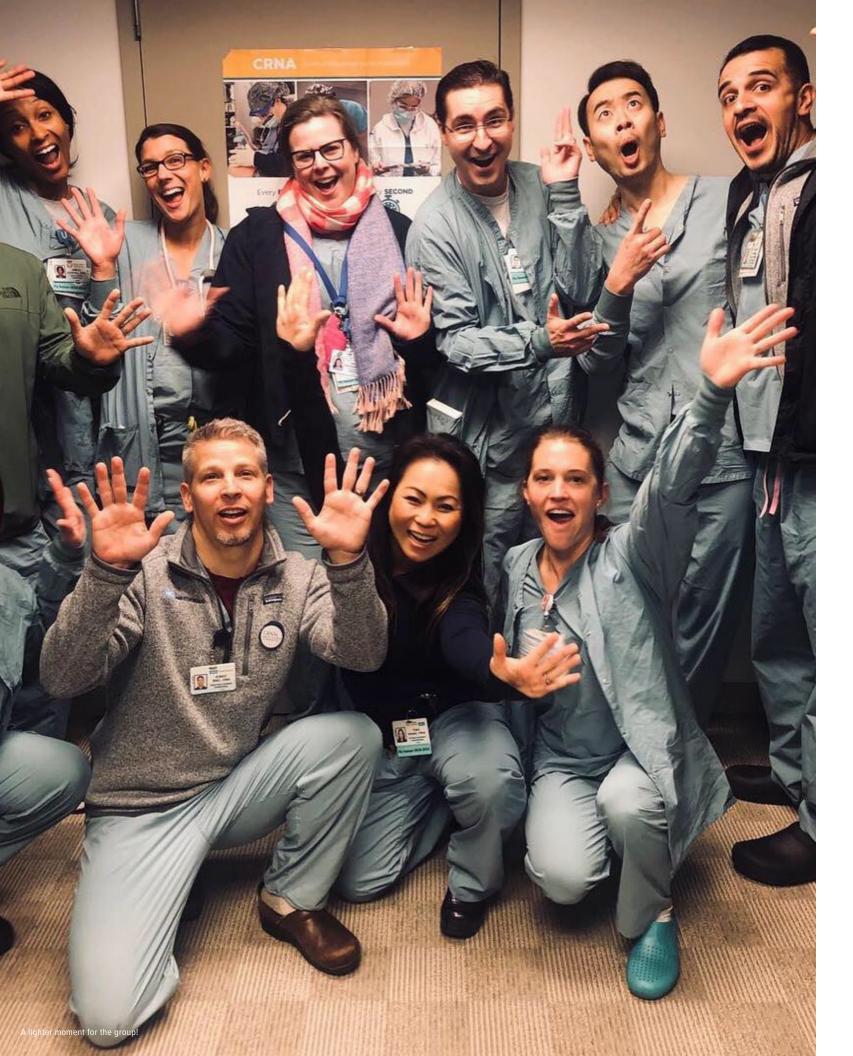
# Alumni Spotlight

rom Andrew Germanovich, DO, who specializes in pain medicine and completed a fellowship in sports medicine at UCLA in 2013:



I am currently a pain management doctor at Restore Orthopedics in Orange, California, in private practice working in a multispecialty group. Have two children ages 9

and 11. Doing Clinical Research Trials in biotechnology, and occasional anesthesia.



# Celebrating our UCLA Nurse Anesthesia Team

By Shelly Anderson, MBA, MSNA, CRNA, and Kris Bradley MSN, CRNA

ur nurse anesthetist team continues to expand, and we currently cover six UCLA perioperative sites. We welcome a diverse trio of new colleagues from across the country this year to bring fresh talent to our team:

Madeleine Tchamala, MSN, CRNA, joined our department in May. She received her undergraduate degree in psychology from the University of Manitoba and her BSN from Drexel University. She earned her MSN degree from the California State University Fullerton and the Kaiser Permanente School of Anesthesia, and spent the first four years of her career as a nurse anesthetist in New York. In her personal time, she enjoys dancing, reading, traveling, and spending time with her husband and children.

Jennifer Katsura, MSN, CRNA, joined us in April after earning her BSN from UC Irvine and her MSN degree from Samuel Merritt University in Oakland. Before graduation, she provided anesthesia care on a mission trip in Guatemala, which has sparked her professional interest in delivering care to diverse patient populations. In her free time, she enjoys traveling, spending time with family, and finding new places to eat.

**Nital Sampat, MSN, CRNA**, joined our department in April after earning her MSN degree from Villanova University in Pennsylvania. She obtained her undergraduate BSN from Stevenson University, Maryland. Outside of work, she enjoys being with her husband and two sons, as well as watching sports, cooking, traveling, and laughing.

These new team members allow our group to serve the UCLA mission to deliver leading-edge patient care, research, and education. All of our nurse anesthetists are clinical instructors, and the department serves as a clinical site for two local schools of nurse anesthesia. The Kaiser and USC Schools of Nurse Anesthesia have increased numbers of students at both the Westwood and Santa Monica sites. Rose Cheung, MS, CRNA, and Erica McCall, MSN, MPH, CRNA, have presented material on student didactic training and how to effectively teach adult learners.

Our nurse anesthetists teach campus-wide courses to nurses and physicians throughout the year. The Conscious Sedation and Airway Management courses continue to be highly sought-after lecture series.

Jenna Dobling, MSN, CRNA, participated recently in community outreach at a local career fair for 11-14 year old students at Pleasant Valley Junior High School, highlighting advanced practice nursing with a focus on our profession and a typical day in the life of a nurse anesthetist. She included hands-on airway props including LMAs, endotracheal tubes, and laryngoscopes with both Macintosh and Miller blades.

#### LAVENDER OIL AND SOOTHING SOUNDS



The anesthesia practice of **Huy Vo, MSN, CRNA**, offers integrated, holistic care using complementary medicinal modalities.

As Mr. Vo explains it, "I see the period between the preoperative evaluation and bringing them back to the operating room as a potential opportunity to establish a meaningful connection with patients to allay their concerns and anxieties with surgery. Over this past year, I've begun to integrate a handful of complementary modalities like meditation and deep breathing exercises into my practice."

In addition to these techniques, Mr. Vo incorporates essential oils like lavender and eucalyptus, music (a curated OR playlist), and sound therapy in the form of a nine-inch brass singing bowl.

"If it sounds like a lot of work carrying these items around and employing these techniques for every single patient, well, it IS," he says. "What keeps me motivated is that at the end of the day we're taking care of people. Since providing compassionate, patient-centered care is one of UCLA Health's core missions, I figure this is my one small contribution."

#### **ENCOURAGING DIVERSITY**



Ana Armenta, MSN,
CRNA, is an active
member of the national
Diversity in Nurse
Anesthesia Mentorship
Program (DNAMP). The
American Association of
Nurse Anesthetist (AANA)

conducted a profile survey in 2018, revealing that of the 53,000 nurse anesthetists in the United States, only 11 percent are from minority groups. In an effort to mirror our diverse US population, the program's mission is to inform, empower and mentor registered nurses from underserved population groups with information to prepare them for a successful career in nurse anesthesia.

Since its inception in 2008, the DNAMP has conducted three-day anesthesia workshops throughout the country. The events offer aspiring nurse anesthetists an opportunity to learn about the application process and the educational rigors of nurse anesthesia education. Participants are given access to and encouraged to network with nurse anesthesia program directors, minority nurse anesthetists, and nurse anesthesia students from across the country. The DNAMP also offers mock interviews for those applying to nurse anesthesia programs, as well as essay and application review. Most recently, the program held a workshop and information session at Samuel Merritt University in Oakland California. Ms. Armenta and Jamilla Churchill, MSN, MPH, CRNA, attended the event and have been volunteering for this organization since 2012.



#### **CELEBRATING THE CAREER OF PAM SHADE!**

Pamela Shade, MSN, CRNA, retired at the end of June after 35 years of outstanding service to UCLA patients. She has been an integral part of our group as well as a highly regarded teacher to our student nurse anesthetists. We are so sad to see her go, but know that she will have more time to pursue her passions for traveling and skiing! Please take time to read the separate tribute to her career elsewhere in this issue, with photos from her retirement celebration.

Our group of dynamic nurse anesthetists continuously proves that together is better! We build trust, relationships, and teamwork inside and outside of the operating room. Earlier this year, we celebrated National CRNA Week 2019 with a bang! The group enjoyed a catered breakfast and gifts from our department. It is a joy to work in such a supportive and enriching environment.

Every day, we continue to find ways to support UCLA values to ensure integrity, compassion, respect, teamwork, excellence and discovery in the work we do daily. We look forward to the next unique challenges and opportunities that come our way!

#### MAGES left to righ

Huy Vo's "singing bowl" and essential oils soothe nervous patients
Ana Armenta works to advance diversity among CRNAs
Jamilla Churchill, second from left, at Diversity CRNA event

# Reflections On Finishing My MBA

by Shelly Anderson, MSNA, MBA, CRNA



Editor's note: We first reported on Chief Nurse Anesthetist Shelly Anderson's MBA studies in our "In the News" column of February 5, 2018. Now we're delighted to congratulate her on her graduation in April from the University of Redlands. Ms. Anderson offers her thoughts on the value of her studies.

This two-year full-time program proved challenging while also working full time as the CRNA Manager for the UCLA Department of Anesthesiology and Perioperative Medicine. I believe an MBA is an extremely valuable degree for any medical professional transitioning from a clinical to a hospital administration position. The knowledge gained in business analytics, finance, and organizational behavior is essential to performing my new job duties.

The MBA program at the University of Redlands was especially appealing due to the study-abroad options available to students. I had the opportunity to travel to Vietnam and Cambodia to study global economics. I specifically researched foreign direct investment in

Vietnam healthcare. This experience was crucial in understanding the opportunities for US-based hospital systems to partner with foreign systems in order to provide cost-effective quality healthcare abroad while also serving as potential training sites for academic centers.

In addition, I traveled to Lisbon, Portugal for an intense capstone to my final semester. My team worked as consultants with a digital marketing company, "Codedesign", to research growth opportunities in the U.S. market. The final capstone provided the challenge to incorporate coursework from marketing to organizational structure. The opportunities to travel abroad align with my interest in global healthcare. These experiences from school had a direct effect on my work in the DGSOM (David Geffen School of Medicine). I participated in the DGSOM Global Health Faculty Town Hall to discuss ways to allow students more opportunities in medical mission work and global healthcare.

It is an advantage to have clinicians move into administration positions at UCLA Health. Deciding to continue my education to prepare for the challenge of my management position proved not only necessary for operations, but also rewarding. I was given the tools to expand.



# Celebrating the Career of Pamela Shade, MSN, CRNA



with great affection and respect, it's time for us to bid a reluctant adieu to one of our most beloved department members — Pamela Shade, MSN, CRNA — as she begins the next phase of her life: her well-earned retirement!

"Pam Shade has been the most loyal and inspiring CRNA I've worked with over the years," says Shelly Anderson, MBA, MSNA, CRNA, our chief nurse anesthetist. "I had the pleasure of working trauma anesthesia with her at Harbor UCLA for many years on the weekends while we both worked at UCLA during the week. She is ready for any case and any situation at any time. Pam is an incredible team player

and would run into your room to help you or offer you a break before taking her own."

"Seeing Pam was a bright spot in the day for so many people here at UCLA, including me," says Interim Chair Barbara Van de Wiele, MD. "We are so fortunate to have had her on our team!"

Ms. Shade began her career with her graduation from Ohio State University in 1981. Upon moving to Los Angeles, she worked first at Huntington Memorial Hospital, and then started working in the four-bed ICU on 7 West in the old Center for the Health Sciences (CHS) building.

She transferred to the Emergency Department in 1986 with, as she tells the story, "the sole purpose of being a flight RN for Medstar, which was UCLA's own helicopter." She recalls that it was a "beautiful blue/gold" fixed-wing Lear 35 air ambulance. Then, in 1989,

Ms. Shade began working part-time in the pediatric ICU because she felt that she needed that experience to be ready for pediatric air transports.



"At the time, I had zero desire to be involved in anything pediatric," Ms. Shade says, "but I wanted to be a safe RN with peds transports and felt PICU was the best route for that." Soon she found that she loved taking care of pediatric patients.

Medstar ceased operation in the 1990s, so she started working full-time in the PICU, which is where she first met Dr. Judith Brill, a faculty member in our department, who helped convince her to become a nurse anesthetist. She began nurse anesthesia training at USC in 2001 and completed her degree in 2004, working weekends with school during the weekdays. To no one's surprise, she was selected as the class valedictorian.

After graduation, Ms. Shade first worked at Harbor-UCLA, and then returned to UCLA in 2006. "Upon returning," she says, "I felt as if I were returning into a family and continually bumping into staff whom I had known for years!"

Debbie Dach, CRNA, who was our chief nurse anesthetist until her retirement in 2017, recalls, "I first met Pam when she was a nurse anesthesia student. She was outstanding, and I wanted to hire her for our team. Her orientation day at UCLA was like escorting someone to their high school reunion. Everywhere we went, she was greeted with joyful hugs and admiration!"

Ms. Shade's previous nursing and leadership experience contributed to her outstanding CRNA career. "She excels at every avenue she pursues," says Ms. Anderson. Ms. Dach concurs, adding, "She rarely missed a day of work. Patients and surgeons regularly requested her for their anesthesia care.

She would change her work days to accommodate those requests if necessary. She's very compassionate and a wonderful listener. Patients always felt that she put their individual needs first."



An avid skier, Ms. Shade loves to travel, and you might find her on the slopes in Mammoth or in Switzerland. For her retirement party, sponsored by our department, her colleague Emily Pinho, MS, CRNA, baked an amazing cake in the form of a ski lift.

But the guest of honor is known for shying away from attention, and Ms. Anderson says it was hard even to get her to come to her own party!

Leaving UCLA is bittersweet, Ms. Shade says, "as I was saying goodbye to CRNAs, MDs, RNs, and PSSTs for whom I had so much respect! I feel very privileged to have had an opportunity to work with people whom I feel are the best. We have an awesome anesthesia department. My only regret is not being able to say a personal goodbye" to some of the many people she worked with over the years.

There is no question that Ms. Shade will be deeply missed. We wish her all the best for many years of enjoying the ski slopes and whatever else she chooses to do in her richly deserved free time ahead!

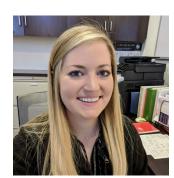
# Staff News and Updates

#### **NEW ARRIVALS**



Sandra Martinez, MPH
joined the department as
a Research Analyst in the
Preoperative Evaluation
and Planning Clinic (PEPC)
in April after finishing her
Master in Public Health
at UCLA. She assists with
recruiting patients for clinical

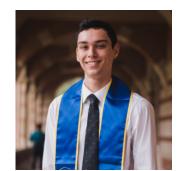
research, managing data collection, and preparing IRB protocols and submissions. Prior to joining our department, she worked for the LA County Department of Public Health's Tuberculosis Control Program in the Education and Evaluation Unit.



Kristin Christian joined the Business Office as an Administrative Analyst. In her role, she assists with processing purchases and reimbursements, transactions, policy, compliance, and organization projects. Before

joining the team, she worked as a Student Affairs Officer at the Anderson School of Management in the doctoral program office. Outside of work, she enjoys spending time with her husband and dog, reading, and shopping.

#### ON THE MOVE



Kevin Wright, formerly a student worker, became a staff Research Associate II under Dr. Andrew Hudson. He'll be running optogenetic, electrophysiological, and calcium imaging experiments on mice to

determine mechanisms by which anesthesia induces changes in the brain that result in loss of consciousness.

Kevin graduated from UCLA in June with a B.S. in Neuroscience and is looking forward to applying to PhD programs later this year!



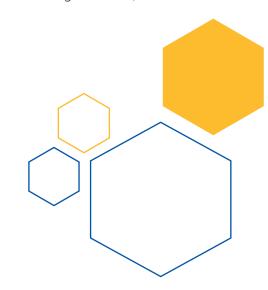
At the All Abilities Job
Fair on June 11, our very
own Mail Assistant, **Kathy Good**, spoke about her
experiences as a graduate
of the Project SEARCH
internship program.

She spent the day with UCLA students sharing her background, answering questions and inspiring others to pursue their professional passions!



Olivia Vallejo, Quality Improvement Manager, has been nominated for the UCLA Administrative Management Group's 2019 Rising Star Award. This award is designed to recognize individuals who have demonstrated

exceptional leadership qualities and actively seek professional development opportunities to grow their careers. Congratulations, Olivia!





# Our Annual Reunion of UCLA Women in Anesthesiology

very summer, the women physicians in our department – past and present; 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 **Judi Turner, MD**, **PhD**, our residency program director, invited the group to gather around the pool on July 20 in the sunny backyard of her Santa Monica home.

This event, which originated in 1978, was the idea of **Selma Calmes, MD**, one of the first women on our department's faculty and the former chair at Olive View-UCLA Medical Center. Dr. Calmes is the author of the chapter, "A History of Women in American Anesthesiology" in the recent textbook, *The Wondrous Story of Anesthesia* (Eger, Saidman, Westhorpe eds., Springer, available as ebook).

"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 reunion tradition continues, and this annual event offers a chance for women in anesthesiology of all ages to get acquainted or reacquainted, network, and compare notes. We thank **Wendy Ren, MD**, who has volunteered for several years to be the event coordinator, and Dr. Turner for hosting, for the standout watermelon margaritas, and for the wisdom to provide ample pool toys!

(Article and photos by Karen Sibert, MD, FASA)



































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!

