





Open Circuit

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WITH YOUR HELP THROUGH GIVING...

From the Chair's Desk



By Maxime Cannesson, MD, PhD | Chair

As a new academic year begins, one can't help but reminisce over the past year. I think fondly of graduation: a constant cycle of birth and rebirth, as new interns begin, and graduating

residents become our professional colleagues. This cycle is the reason many of us go into and stay in academics. We gain fulfillment from helping our trainees grow and develop until they graduate. They become our colleagues and our friends.

But unlike years past, we have to take a moment and acknowledge that this year has not been like those before. Half of our trainees have only been physicians or practiced anesthesiology during this pandemic. They don't have a reference point for what it was like to be an anesthesiology resident before 2020. Everyone acknowledges that residency is tough, but most of us reading this won't ever truly understand how tough residency has been for more than a year and a half.

Despite the challenges that trainees, faculty, nurses and staff have all faced, I have been impressed by how everyone in the department has risen to the challenge, not only to survive, but thrive.

- Judi Turner, MD, PhD, stepped up to the helm to become Vice Chair for Education. Jack Buckley, MD, became our Residency Program Director and Christine Myo-Bui, MD, our Associate Program Director.
- As Associate Dean for Admissions at the School of Medicine, Jennifer Lucero, MD, MA, together with many of our faculty (Patricia Nwajuaku, MD, MPH, Marisa Hernandez-Morgan, MD, Tiffany Williams, MD, PhD, Soban Umar, MD, PhD, and Lisa Lee, MD, MS, among others) conducted one of the most successful and diverse recruitment seasons ever for DGSOM.
- Cecilia Canales, MD, MPH, was selected as the inaugural co-president of the Minority Housestaff Organization (MHO) at DGSOM. The goal of the MHO is to produce tangible work to advance equitable health for all patients, diversity in medicine, and mentorship, and to make progress towards an inclusive educational and clinical environment.
- Two of our faculty members, Susana
 Vacas, MD, PhD, and Emily Methangkool,
 MD, MPH, published outstanding articles in JAMA.

- Soban Umar, MD, PhD, was the recipient of the 2021 Early Career Achievement Award from the American Thoracic Society Assembly on Pulmonary Circulation.
- Matt Fischer, MD, and Lou Saddic MD,
 PhD, secured FAER mentored research awards.

Our department rose to #6 in the country for NIH funding. Our faculty, residents, and basic scientists have an outstanding showing at this year's American Society of Anesthesiologists annual meeting with three presentations in the Best of Abstracts, Basic Science category. After Patricia Kapur, MD, our former chair, was honored last year, our Vice Chair Dan Cole, MD, is about to receive the ASA Distinguished Service Award this year.

I have been proud to see our staff grow and mature in their respective roles. **Stephanie Fisher**, our Chief Administrative Officer, celebrated 20 years of service to UCLA, marking an incredible achievement. The core of the anesthesiologist's profession is clinical care. The ebb and flow of the pandemic have made case volume difficult to predict. But despite the challenges, every clinical provider continues to strive for excellence, doing what is best for our patients and achieving a level of care most people can only dream of in their careers. The social distance necessitated by the pandemic made us crave celebrations and camaraderie that were routine before. This summer, we were able to come together for LA Dodgers games, and we look forward to more events to connect us during the upcoming year.

Thank you, everyone, for your commitment to excellence and for supporting the pillars of the department through clinical care, education, and research.



Maxime Cannesson, MD, PhD



Dr. Cannesson with Drs. Samrawit Abraha, Lydiesther Martinez, Stew Smith, Jennifer Lucero, and Ceci Canales at UCLA Minority Housestaff Inaugural Welcome Reception

A Word from the Editor

By Karen Sibert, MD, FASA



s summer comes to a close, we have much to celebrate and give thanks for, even as we try to come to terms with a world that will never be quite as it was. The Hollywood Bowl reopened, and my husband

and I shared the pure delight of watching John Williams conduct and thousands of people wave light sabers (mine was blue, thank you) as the orchestra played iconic theme music from Raiders of the Lost Ark, ET, and Star Wars.

We went to restaurants and to the beach this summer. We celebrated the graduation of the Class of 2021 with an in-person graduation ceremony – though it was held outdoors at the UCLA Luskin Conference Center, and we still



Chief residents Jake Melendrez, Annie Tran, and Ryan Gamlin

wore masks in the buffet line out of caution and respect for the servers. We congratulated our new chief residents – Drs. Ryan Gamlin, Jake Melendrez, and Annie Tran. We welcomed our CA-1 residents and our new fellows into the operating rooms, and wished the new Class of 2025 all the best as they began their internship year.

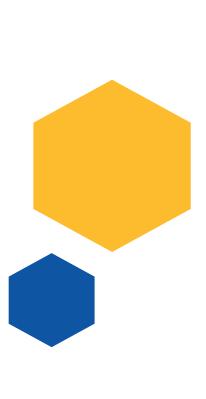
Though the summer brought news of another COVID surge due to the delta variant, to date Los Angeles hasn't seen the deluge of cases that have plagued other parts of the U.S, and our surgical volume continues unabated. We have enjoyed ready access to vaccination and PPE. We've learned to take better care of ourselves. We don't expect people to drag themselves into work when they're ill, as we all used to do because we didn't want to cause inconvenience and we wanted to pretend we were invincible. If there's one thing this pandemic has proved, it's that no one is invincible. Life is short; we need to cherish it, and each other.

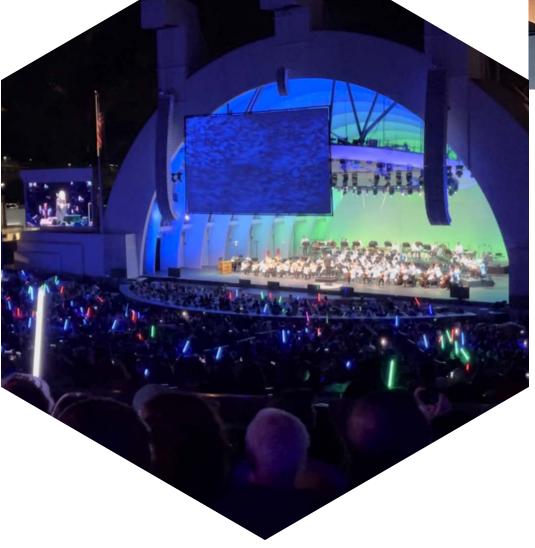
In this issue of Open Circuit, we hope you'll enjoy reading about the many accomplishments of our faculty, fellows, residents, nurse anesthetists, and administration staff members. We have a list of the dozens of panels and presentations you can look forward to seeing – virtually or in person – at ANESTHESIOLOGY 2021 in San Diego, and we want to extend special congratulations to our researchers who've been chosen to present at the prestigious "Best of Abstracts – Basic Science" session on Sunday morning.

Really, we know everyone only wants to look at the photos, and we have plenty of them – from the fun our department had at Dodgers games to our ever-popular pets and babies. But don't miss the feature on our department's podcast "influencers", and a look at the live clinical research happening in our midst.

Please continue to send us your news items, whether you're a current member of the department or a past graduate. We would love to hear from you, and we always appreciate photos! And finally, many, many thanks to Associate Editor Shevaughn Marchese, and to Assistant Editor Darnell Bagsik, for their expert help with this issue.

Karen Sibert, MD, FASA







Congratulations to Our 2021 Graduates

By Shevaughn Marchese

o our collective surprise and delight, we were able to hold our resident graduation ceremony this year in person, not virtually! Residents, their families, and faculty members enjoyed a sunny outdoor event at the Luskin Conference Center on June 26, with a buffet lunch and presentation of awards.

Maxime Cannesson, MD, PhD, our department chair, opened the program with a warm welcome, a commentary on what a remarkable year this has been, and congratulations to all the graduates for their courage, hard work, and resilience. As always, our graduating residents recognized faculty anesthesiologists who have made notable contributions to the department's education programs. Outstanding junior residents also received awards from the faculty.

For the second year in a row, on June 23 we hosted our annual Fellowship Graduation and Awards Ceremony via Zoom. With introductions by Vice

Chair for Education Judi Turner, MD, PhD, the program included affectionate and sometimes humorous bios of our graduating fellows, written and delivered by their fellowship program directors. Read about all of our Class of 2021 residency and fellowship graduates and view their photos in our 2021 yearbook, and be sure not to miss the class photo album at the end!

THE DILLON AWARD



Dr. Andrew Disque receives the Dillon Award

Andrew Disque, MD, received the department's Dillon Award for Outstanding Performance by an Assistant Professor, presented by the senior faculty. Harvey Rosenbaum, MD, introducing Dr. Disque, described him as an "outstanding clinical educator and mentor" who is a member of the Cardiothoracic Anesthesiology and Liver Transplant Anesthesiology teams, and Chair of the Equipment Committee. Dr. Disque's professional activities are focused on advancing patient safety, including the writing of case reports and review articles targeted

toward professional education. Our residents previously awarded Dr. Disque the Excellence in Teaching Award in 2019.

Dr. Rosenbaum explained that the Dillon Award is "designed to honor an Assistant Professor for their accomplishments and contributions to advancing our teaching, clinical, professional and scientific missions." He described our Assistant Professors as "a remarkable and diverse team of individuals who represent the future of our specialty and whose present contributions are essential to our success."

The Dillon Award is named after the first chair of Anesthesiology, John Bartley Dillon, MD. Dr. Rosenbaum noted that Dr. Dillon, in his early career, built a plethysmograph to accurately record finger pulsation. Initially trained in physiology, he transitioned to anesthesiology and later led the Anesthesia Teaching Service at Letterman Army Hospital during WWII. He was recruited to serve as UCLA's first Chief of the Division of Anesthesiology, where he served from 1950-1972. of our specialty and whose present contributions are essential to our success."

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Dr. Jerry Markar and family

RESIDENT AWARDS

Jeffrey Rusheen, MD, presented the Olive View-UCLA Medical Center Resident of the Year Award to Andrew Sikorsky, MD, and applauded his outstanding performance and dedication to patient care. The second annual Medical Student Educator of the Year Award went to graduating resident Albert Lee, MD, who was chosen from a competitive field of candidates. Presenting the award, faculty member John Shin, MD, described Dr. Lee as an outstanding teacher and mentor to our medical students.

AWARDS PRESENTED BY OUR RESIDENTS



Drs. Jeff Kim, Libby Wang, Jake Melendrez, and Azad Hirpara

Residency Program Director Jack Buckley, MD, introduced the 2020-21 Chief Residents, **Azad Hirpara**, **MD**, **Jeffrey Kim**, **MD** and **Libing Wang**, **MD**, and thanked them for their lasting contributions to the department in the area of resident recruitment. The outgoing Chiefs presented awards chosen by the residents.

Adrian Nava won the Perioperative Services Provider of the Year Award for his outstanding support as an anesthesia and perioperative services technician. Dr. Wang stressed that it takes a village to achieve our aim of excellence in care, including our dedicated anesthesia technical personnel. She described Mr. Nava as a true role model in his field.



Dr. Jeff Rusheen and Dr. Andrew Sikorsky, Olive View Resident of the Year

Olive View-UCLA faculty members **Sachin Gupta**, **MD**, and **Maryetta Ovsepian**, **MD**, each received an award for Affiliate Teacher of the Year. Dr. Wang described Dr. Gupta as a role model among UCLA alumni, and an exceptional anesthesiologist who is also immensely humble and personable. Dr. Kim lauded Dr. Ovsepian's vast knowledge about and enthusiasm for regional anesthesiology, and commented that her teaching sparked his own interest in the field.



Dr. Sachin Gupta receives teaching award

Three faculty anesthesiologists received awards for Excellence in Teaching: Lauren, Beck, MD, Elaine Boydston, MD, and Michael Wolfe, MD. Drs. Beck and Boydston also received awards as Teacher of the Month during this academic year. Dr. Wolfe received both the Dillon and Teacher of the Year awards in 2020.

Jason Lee, MD, received the prestigious "Golden Bear" award as Teacher of the Year.



Dr. Jason Lee, Teacher of the Year

Dr. Hirpara thanked Dr. Lee for his dedication to resident teaching in the OR and didactic lectures, in addition to curriculum development and his work on the Education Committee.

Dr. Hirpara introduced the incoming Chief

Residents, **Ryan Gamlin, MD, Jacob Melendrez, MD,** and **Annie Tran, MD**, and wished them success in the upcoming year.

Concluding the ceremonies, Dr. Cannesson and the chief residents presented a special thank-you award and video to **Judi Turner**, **MD**, **PhD**, who last year concluded a long, successful term as residency program director and has been promoted to Vice Chair for Education.



Dr. Turner with the chief residents

All the faculty and residents extended sincere thanks to the Education Office staff – **Jessyka Delgado**, **Susan Kim, Lucelva Mendez**, and **Lucine Torosian** – for their tireless dedication to and support of all our educational programs.

GRADUATING FELLOWS

In the virtual fellowship graduation ceremony, Dr. Turner introduced each of the fellowship program directors in turn to share the graduates' bios and their future plans.

Critical Care Medicine Anesthesiology Program Director Vadim Gudzenko, MD, reflected on the unprecedented critical care challenges the four fellows – Drs. Krisztina Escallier, Kasey Grewe, Melanie Kusonruksa, and

James Madrian – faced as they trained during the COVID-19 pandemic, and their fearless attitudes in this environment.

Adult Cardiothoracic Anesthesiology Program Director Reed Harvey, MD, shared his gratitude for his warm relationships with the four fellows – Drs. Candy Ezimora, Sean Mofidi, Christine Stypula, and Andrew Wu – and appreciation of the opportunity to have such a fulfilling role as program director.

Liver Transplant Anesthesiology Program Director Christine Nguyen-Buckley, MD, shared the bios of Drs. **Courtney Scott** and **Colby Tanner**, and described the breadth of their experience in anesthesiology for abdominal transplants.

Obstetric Anesthesiology Interim Program Director Jason Hirsch, MD, introduced graduating fellow **Krista Cascia, MD**, describing her growth as a trainee and celebrating her decision to accept our offer to stay on as faculty.

Pain Medicine Fellowship Director Jakun Ing, MD, MPH, congratulated the six fellowship graduates: Drs. Brittany Aeschlimann, Jason Daughety, Elizabeth Feenstra, Frederick Li, Mark Motejunas, and Ava Socik. He shared humorous bios, and the fellows' future plans.

Pediatric Anesthesiology Fellowship Program Director Wendy Ren, MD, FAAP, described Drs. **Stephen Acosta** and **Tracie Lo** as embodying "the virtues of the ideal pediatric anesthesiologist – dedicated, kind, always ready to greet you with a smile, and give their patients 110% every day."

Regional Anesthesiology & Acute Pain Medicine
Fellowship Director Eva Boyd, MD, shared a colorful
description of the fellows' daily experience, during which
they could easily surpass their goal of 10,000 steps! She
congratulated Drs. Gary Chan, Gregory Sheehan, and

Kelsey Wang.

In closing the fellowship graduation program, Dr. Turner honored our dedicated Fellowship Programs staff, **Lucine Torosian** and **Susan Kim**, whose hard work has contributed so much to the fellows' success.



Drs. Albert Lee, Bryant Hong, and Dane Saksa



Drs. Aanchal Prakash, Karen Sibert, and Hayley Osen









On the helipad on their last day!



Dr. Mariam Sarwary, Dr. Susan Alaei, and their proud parents



Dr. John Shin and Dr. Albert Lee, Medical Student Educator of the Year



Dr. Nicole Andonian with her family



WELCOME TO UCLA, CLASS OF 2025!

UCLA DEPARTMENT OF ANESTHESIOLOGY & PERIOPERATIVE MEDICINE RESIDENCY CLASS OF 2025



ANESTHESIOLOGY 2021

American Society of Anesthesiologists Annual Meeting October 8–12, 2021 – SAN DIEGO | VIRTUAL

ANESTHESIOLOGY annual meeting

SPECIAL SESSIONS

SPE15 – Best of Abstracts: Basic Science: Sunday, October 10th, 9:45 – 11:45 AM (Location: Upper 9)

BOS06 - 15-HETE Induces Pulmonary Hypertension: The Role of the Inhibitory Protein AP15

Gregoire Ruffenach, PhD, Ellen O'Connor, BS, Srinivasa Reddy, PhD, Mansoureh Eghbali, PhD

BOS07 - Intrathecal Neuronal Nitric Oxide Synthase Inhibition Attenuates Pulmonary Hypertension and Rescues Right Ventricular Failure in Rats

Asif Razee, MS, Somanshu Banerjee, PhD, Michael Zargari, BS, Soban Umar, MD, PhD

BOS08 -Nifedipine Binding to the Skeletal L-type Cav1.1 Channel Remodels its Voltage-sensing Apparatus

Marina Angelini, PhD, Nicoletta Savalli, PhD, Federica Steccanella, PhD, Riccardo Olcese, PhD

SPE05 - APSF Panel: Ten Patient Safety Issues We've Learned from the COVID Pandemic

Daniel J. Cole, MD - The Critical Importance of Developing National Guidelines

SPE08 - WLM History Panel: Untold Stories of Anesthesia in the Second World War: Part 1, Sunday, October 10th, 7:30 - 8:30 AM (Location: Upper 25AB)

> Jane Moon, MD - Lt. Col. Henry K. Beecher: Science Meets Practice during World War II

SPE18 – FAER/eSAS: MSARF/RSP Symposium: Sunday, October 10th, 1:00 – 4:30 PM (Location: Upper 20D)

> Preoperative Sleep Disturbance, not Mini-Cog, Predicts Postoperative Delirium in Geriatric Surgical Patients Scheduled for Elective Noncardiac Surgery

Cecilia Canales, MD, MPH, Sharon Feinberg, RN, Victor Duval, MD, Sumit Singh, MD, Maxime Cannesson, MD, PhD.

SPE20 – Emery A. Rovenstine Lecture: Ever Eger: My Love Affair with Anesthesia: Monday, October 11th, 8:00 – 9:15 AM

(Location: Upper 20ABC)

Daniel Cole, MD, FASA – Distinguished Service Award (DSA).

ORAL PRESENTATIONS (VIRTUAL)

OR01-1 – Ambulatory Anesthesia: Saturday, October 9th, 7:45 – 8:45 AM (VIRTUAL)

A1004 – Novel Non-opioid Anesthetic Mixture More Effective than Opioid-based 6-2-2 for Ocular Block and Ophthalmic Surgery

Sergey Progushev, MD, Sarah Colosimo, CRNA, Gloria Nakyeyune, CRNA, Zhuang T. Fang, MD





Anesthesiology 2021 logo

OR04-1 – Clinical Circulation: Saturday, October 9th, 10:15 – 11:15 AM (VIRTUAL)

A1016 – The Relationship between Intraoperative Hypotension and Postoperative Mortality in Liver Transplantation

Libing Wang, MD, Christine C. Myo, MD, Ira S. Hofer, MD, Eilon Gabel, MD, Victor Xia, MD

OR09-1 – Experimental Circulation: Saturday, October 9th, 1:15 – 2:15 PM (VIRTUAL)

A1072 – Identification of Risk Factors for New Persistent Opioid Use after Surgery

Gia Pittet, PhD, Bunyamin Ozaydin, PhD, Honorio T. Benzon, MD, Siamak Rahman, MD, Theodora E. Wingert, MD, Maxime Cannesson, MD, PhD

OR08-2 – Equipment, Monitoring and Engineering Technology II: Sunday, October 10th, 7:30 – 8:30 AM (VIRTUAL)

A2010 – Preliminary In Vivo Quantitative
Assessment of a Novel Aerosol Containment Device
in an Operating Room Theatre

Sebastian Kwon, MD, MS, John Shin, MD, Liqiao Li, MS, Muchuan Niu, MS, Haoxuan Chen, PhD, Yifang Zhu, PhD, Peyton Tebon, BS, Tristan Grogan, MS, Soban Umar, MD, PhD, Nir Hoftman, MD

OR13-2 – Information Management and Database Research II: Sunday, October 10th, 10:00 – 11:00 AM (VIRTUAL)

A2044 – Defining Gender and Race/Ethnicityspecific Laboratory Reference Ranges and their Impact on Predicting Post-operative Acute Kidney Injury and Mortality Outcomes

Andrew Lee, MS, Ira S. Hofer, MD, Tristan Grogan, MS

OR10-2 – Experimental Neurosciences II: TBI, CVA, POD: Monday, October 11th, 1:15 – 2:15 PM (VIRTUAL)

A3001 – A De Novo, Gain-of-function Mutation In Ca_v1.2 Channel Pore Is Associated With Developmental Delay And Seizures

Nicoletta Savalli, PhD, Federica Steccanella, PhD, Niroshi T. Senaratne, PhD, Michela Ottolia, PhD, Sulagna Saitta, MD, PhD, Riccardo Olcese, PhD

eABSTRACT POSTER PRESENTATIONS (VIRTUAL)

EA01-1 – Ambulatory Anesthesia: Saturday, October 9th, 7:45 AM – 3:00 PM (VIRTUAL)

A4001 – The Novel 6-2-2 Sedation Method: Safe in the Elderly and Morbidly Obese Patients for Ocular Blocks and Ophthalmic Surgery

Zhuang-Ting Fang, MD, FASA, Christopher Weitekamp, CRNA, Jennifer Katsura, CRNA, Ralph Cabrera, CRNA

A4002 – Safety and Efficacy of Rapid, Patienttailored Sedation Method with Dense Analgesia, Patent Airway, and Stable Hemodynamics

Theodora Wingert, MD, Alan Zamora, CRNA, Natalia Macdougall, CRNA, Allison Leveque, CRNA, Zhuang T. Fang, MD, FASA.

EA05-1 – Clinical Neurosciences: Saturday, October 9th, 7:45 AM – 3:00 PM (VIRTUAL)

A4031 – Brain Tissue Changes after Lung Transplantation in Adults

Matthew Vandiver, MD, PhD, Bhaswati Roy, PhD, Rajesh Kumar, PhD

EA19-1 – Perioperative Medicine: Saturday, October 9th, 7:45 AM – 3:00 PM (VIRTUAL)

A4203 – Drug Price and Policy Knowledge
Influence Prescription Behavior in Orphan Disease:
Pheochromocytoma and Paraganglioma as
Prototypes of Orphan Drug Econometrics

Danny Le, BS, Joe Hong, MD, Jason Lee, MD, Joseph Meltzer, MD, Elaine Boydston, MD, Tristan Grogan, MS, Nirav Kamdar, MD, MBA.

ANESTHESIOLOGY 2020

MEDICALLY CHALLENGING CASE PRESENTATIONS

MCC01 - Medically Challenging Cases I: Saturday, October 9th, 1:00 – 3:00 PM (Location: Exhibit Hall)

MC1105 (1:50 – 2:00 PM) – Anesthetic Management of VV-ECMP Patient Undergoing Laparoscopic Cholecystectomy Peter Schnaak, MD, Marisa Hernandez-Morgan, MD

MC1140 (2:00 – 2:10 PM) – Use of Regional Anesthesia in the Setting of Hypertrophic Obstructive Cardiomyopathy

Mariam Sarwary, MD, Pamela Chia, MD, MS, Natale Naim, MD

MC1168 (2:20 – 2:30 PM) – Asleep-awake-asleep Craniotomy in a Patient with Coronary Artery Disease and Heart Block Libing Wang, MD, Joe Hong, MD

MC1221 (2:50 – 3:00 PM) – Postoperative Cardiac Arrest after Transurethral Resection of the Prostate

Vivian Wung, MD, Christine Nguyen-Buckley, MD

MCC02 – Medically Challenging Cases II: Sunday, October 10th, 7:30 – 9:30 AM (Location: Exhibit Hall)

MC2081 (Monitor 01 – 8:10 – 8:20 AM) Successful Resection of Thyroid Cancer
Involving the Trachea and Cricoid Cartilage:
Complex Ventilation Strategy and Constant
Intraoperative Communication
Karen Sibert, MD, FASA, Libing Wang, MD

MC2108 (8:20 – 8:30 AM) – Anesthesia for Inferior Vena Cava Resection in Patient with Carcinoid Syndrome

Alexonder Tran, MD, Christine Nguyen-Buckley, MD

MC2110 (8:20 – 8:30 M) – Acetazolamide-Associated Acute Non-anion Gap Metabolic Acidosis, A Case Report

John Shin, MD, Samrawit Abraha, MD, Craig Flath, MD

MC2111 (8:20 – 8:30 AM) – Lumbar Epidural Considerations in a Patient with Lamellar Icthyosis

Ryan Gamlin, MD, Sapna Satyanarayan-Victor, MD

MCC03 – Medically Challenging Cases III: Sunday, October 10th, 10:00 AM – 12:00 PM (Location: Exhibit Hall)

MC2352 (10:50 – 11:00 AM) – Rapid Metabolism of Local Anesthetic during Labor Epidural Phillip Morway, MD

MCC06 – Medically Challenging Cases VI: Monday, October 11th, 1:00 – 3:00 PM (Location: Exhibit Hall)

MC3245 (Monitor 11 – 1:00 – 1:10 PM) Consideration Of Patient Personal Well-being In
Anesthesia Planning: Anesthesia Management
For A Combined Scleral Buckle and Vitrectomy
In A 40 Year-old, G5P0 Woman
Andrew Sikorsky, MD, Zhuang Fang, MD

MC3251 (1:10 – 1:20 PM) – A Red Herring and a Legendary Case: Healthy Young Female Presents with Hallucinations and Winds up on ECMO Maryte Gylys, MD, MBA, Logan Woodhouse, MD, Kasey Grewe, MD, Christopher Ortiz, MD, PhD, Matthew Vandiver, MD, PhD

MC3330 (1:50 – 2:00 PM) – Anesthesia for Tracheoplasty in Mounier-Kuhn Syndrome Nicole Nguyen, BS, Benjamin Kwittken, MD, Jason Lee, MD

MC3439 (2:50 – 3:00 PM) – Anesthetic Considerations when Common Anesthetics are Contraindicated

Douglas Campbell, MD, Pamela Chia, MD, MS

QI PROJECTS

Q101 – Quality Improvement Projects: Sunday, October 10th, 3:30 PM – 5:00 PM (Location: Exhibit Hall)

Q2030 (4:10 – 4:20 PM) – Recycling in the Era of COVID-19

Tanner Tripp, MD, Shanpeng Li, MD, MS, Linda Li, MD Q2071 (4:20 – 4:30 PM) – Quality Improvement: Enhancing Regional Anesthesia Experience for Patients, Surgeons, and the Acute Pain Service Pamela Chia, MD, MS, John Kleinman, MD

Q2140 (4:50 – 5:00 PM) – Reduction of Perioperative Blood Transfusion during Liver Transplantation

Christina Ma, MD, Joseph DiNorcia, MD, MS, Christopher Wray, MD, Victor Xia, MD, Christine Nguyen-Buckley, MD

POINT-COUNTERPOINT

PC01 – Peer Review: Does it Improve Patient
Care and Safety?: Saturday, October 9th, 7:45 –
8:45 AM Location: Upper 6DE)
Emily Methangkool, MD, MPH – Peer Review is
Necessary for Patient Safety

PC02 – Scope of Practice: Can a Nurse Anesthetist Really Do My Job?: Saturday, October 9th, 10:15 – 11:15 AM (*Location: Upper 23ABC*) Karen Sibert, MD, FASA - Moderator

60-MINUTE PANELS

PN315 – Art into Science: The Intersection of Evidence and Pediatric Airway Management in Modern Practice: Monday, October 11th, 2:30 – 3:30 PM (Location: Upper 3)

Lisa Lee, MD – Predictors of Difficult or Impossible Mask Ventilation: What Can We Learn from a Machine?

PN401 – Through the Looking Glass and Beyond the EEG. In Vivo Imaging of Neuronal Activity During Wakefulness and General Anesthesia: Tuesday, October 12**, 7:30 – 8:30 AM (Location: Upper 8)

Andrew Hudson, MD, PhD – Isoflurane differentially affects the activity of parvalbumin and pyramidal neurons in superficial cortical layers in vivo

WORKSHOPS

Session 807 - Electrophysiology: Perioperative CIED Management, Temporary Pacing, Lead Removal, and Left Atrial Implant Devices: Saturday, October 9th, 1:00-2:30 PM

(Location: Upper 28DE)

Jonathan Ho, MD - Moderator Andrew Disgue, MD, MS – Speaker

Session 808 – Basic Critical Care
Ultrasonography for the Perioperative
Physician: Saturday, October 9th, 1:00 – 2:30 PM
(Location: Upper 30ABC)
Wolf Kratzert, MD - Speaker

Session 823 – Basic Transesophageal Echocardiography (TEE) Workshop: Sunday, October 10⁻⁻, 9:00 AM – 4:00 PM (*Location: Upper 30ABC*) Emily Methangkool, MD, MPH - Speaker

Session 825A – Peripheral Nerve Block Workshop: Ultrasound and Simulation: Sunday, October 10th, 10:30 – 12:00 PM (Location: Upper 28DE) Rana Movahedi, MD – Speaker

Session 825B – Peripheral Nerve Block Workshop: Ultrasound and Simulation: Sunday, October 10th, 1:00 – 2:30 PM (*Location: Upper 28DE*) Rana Movahedi, MD – Speaker

Session 825C – Peripheral Nerve Block Workshop: Ultrasound and Simulation: Sunday, October 10th, 3:15 – 4:45 PM (Location: Upper 28DE) Rana Movahedi, MD – Speaker

Session 825D – Peripheral Nerve Block Workshop: Ultrasound and Simulation: Monday, October 11th, 9:15 – 10:45 AM (Location: Upper 28DE) Rana Movahedi, MD – Speaker

Session 835 – Transthoracic Echocardiography for Everyone: Monday, October 11th, 1:00 - 2:30 PM (Location: Upper 29AB)
Jonathan Ho, MD – Speaker

Session 838 – Perioperative Point-of-Care Ultrasound: Monday, October 11th, 1:00 – 4:00 PM (*Location: Upper 30DE*) Prince Neelankavil, MD – Moderator

Session 839 – Integrating Acupuncture in Perioperative Care and Pain Medicine Workshop (Location: Upper 28DE)

Eric Hsu, MD — Speaker

PROBLEM-BASED LEARNING DISCUSSIONS

Q137 – Select Opioid Antagonist for Diffuse Body and Joints Pain. An Alternative Modality versus Opioid Agonist: Saturday, October 9th, 2:30 – 3:30 PM

(Location: Mezzanine 16AB)

Eric Hsu, MD

L216 – Select Opioid Antagonist for Diffuse Body and Joints Pain. An Alternative Modality versus Opioid Agonist?: Sunday, October 10th,

8:45 - 9:45 AM

(Location: Mezzanine 16AB)

Eric Hsu, MD

CLINICAL FORUM

PCF04 – Intraoperative Thoracic & Airway
Disasters: Don't Just Stand There, Do Something!:
Saturday, October 9th, 10:15 – 11:15 AM (Location:
Upper 244BC)

Sophia Poorsattar, MD – Intraoperative Management of Pulmonary Hemorrhage

OTHER SESSIONS

PMS06 – Tips for Residency Program: Saturday, October 9th, 1:00 – 1:50 PM (*Location: Upper 33ABC*)

Jack Buckley, MD - Lead Speaker

ST212 – My Patient is Too Sick for Surgery, but not for NORA? Confronting Challenges to Patient Safety Outside of the OR: Sunday, October 10th, 2:30 – 3:30 PM

(Location: Upper 6A)

Emily Methangkool, MD, MPH. – Perils of caring for the cardiac patient in NORA

ST304 – Brain Monitoring in 2021: Innovations and Applications: Monday, October 11th, 9:30 – 10:30 AM *(Location: Upper 6F)*

Susana Vacas, MD, PhD - Moderator

ST308 – Do Perioperative Handoffs Really Cause Harm? If So, What Can We Do About It?: Monday, October 11th, 2:30 – 3:30 PM (*Location: Upper 2*) Emily Methangkool, MD, MPH – Which handoff should I work on? Intraoperative vs. OR-PACU or OR-ICU Handoffs

ST314 – ALERT! What Do I Need to Do About Intraoperative Neurophysiologic Monitoring?: Monday, October 11th, 3:00 – 4:00 PM (*Location: Upper 6C*)

Natalie Moreland, MD – Amplitude and Latency – Somatosensory evoked potentials for the general anesthesiologist

ST402 – Becoming a #1 Influencer in Anesthesiology: How to Use Social Media for Professional Development: Tuesday, October 12th, 7:30 – 8:30 AM

(Location: Upper 3)

Emily Methangkool, MD, MPH – Tweeting for Career Advancement: A Practical Guide to Leveraging Social Media

ST403 – The Snap on Meds: Recent Insights into New and Old Perioperative Medications: Tuesday, October 12th, 7:30 – 8:30 AM

(Location: Mezzanine 15AB)

Jonathan Jahr, MD – Sugammadex: Questions you were afraid to ask and answers you need to know

RF11 – Program Director Panel Discussion: Saturday, October 9th, 4:00 – 5:00PM (Location: Upper 32AB)

Jack Buckley, MD - Lead Speaker

INTERACTIVE TUTORIAL

IT403 – Health Care Disparities in COVID-19: Fighting the Battle of Unconscious Bias and Understanding Privilege in Health Care: Tuesday, October 12th, 12:00 – 3:00 PM (Location: Upper 29CD)

Jennifer Lucero, MD, MA – Obstetric Anesthesia Robert Eldridge, MD – Critical Care



San Diego beachfror

Awards, Honors, and Recognition

Congratulations to Dr. Eghbali's Lab on NIH Grant News!

Mansoureh Eghbali, PhD, received excellent news in July regarding two of her research team's recent NIH R01 grant submissions — one was awarded funding and another received a fundable score.

This new funding will lend further support to the Eghbali Laboratory's renowned research program studying pulmonary hypertension (PH), a terminal cardiopulmonary disease where patients exhibit a chronic increase of blood pressure within the lungs. This increase results in a severe loss of quality of life and shorter life-expectancy for patients, as it exhausts the right ventricle by forcing it to overwork. To date, no cure exists for pulmonary hypertension and therapeutic options remain limited, especially because the origin of the disease remains unknown.

The "UTY" Gene and the Y Chromosme

The foundation of the R01 grant just funded is a previous publication, in collaboration with Arthur Arnold, PhD, demonstrating that the male-specific Y chromosome gene is protective against experimental forms of PH (Umar et al., 2018, American Journal of Respiratory and Critical Care Medicine). In this proposal, thengraduate student Christine Cunningham identified the "Uty" gene as the protective gene encoded by the Y chromosome, and found that reducing or eliminating Uty expression in the lung tissue was sufficient to eliminate the protection afforded by the Y chromosome. Their bioinformatic studies found that Uty regulates an inflammatory response in the lungs linked to pathogenic vascular remodeling and which is driven by



Drs. Mansoureh Eghbali and Gregoire Ruffenach

proinflammatory chemokines. The research team found that targeting the shared receptor of these proinflammatory chemokines, using a commercially available and FDA-approved small molecule inhibitor, rescues PH development in two preclinical rodent models. Their work also highlights the importance of another downstream Uty pathway in understanding clinical sex differences found in PH treatment efficacy.

Investigating the Gut-Lung Axis

The foundation of the other R01 grant submission that received a fundable score is a previous publication demonstrating that mice develop PH when fed a diet rich in oxidized lipids (Ruffenach et al., 2020, Hypertension). This new proposal is a collaboration between the Eghbali Laboratory and the laboratory of Srinivasa Reddy, PhD, of UCLA's Department of Molecular and Medical Pharmacology. This grant will be the second joint R01 project between Drs. Eghbali and Reddy in their eight-year collaboration.

The goal of their new proposal is to investigate the "gut-lung axis" to uncover how dietary oxidized lipids cause PH through the intestines. While the gut and lungs are anatomically distinct, there are complex pathways and "crosstalk" between their microbiota that can alter immune responses and affect the course of respiratory diseases.

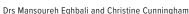
Gregoire Ruffenach, PhD, who joined Dr. Eghbali's lab in 2015, has been the major driving force for this project and very instrumental in the success of this application. Dr. Ruffenach discovered IFI44 (IFN inducible protein 44) as the only gene significantly up-regulated in the small intestines and lungs of mice on an oxidized lipid diet, and found also in the lungs of PH patients. Their preliminary findings, a combined effort of Dr. Ruffenach and Ellen O'Connor (a PhD student in Dr. Reddy's lab), suggest that ingestion of oxidized lipids activates IFI44 in immune cells within the intestine which migrate to the lungs, triggering endothelial cell death and PH. Interestingly, silencing this gene prevents development of PH in mice on an oxidized lipid diet.

"Best of Abstracts: Basic Science"

Another project of Dr. Ruffenach's has been honored by selection for oral presentation at the ANESTHESIOLOGY 2021 Annual Meeting. The abstract is titled, "15-HETE Induces Pulmonary Hypertension: The Role of the Inhibitory Protein AP15". His co-authors are Ellen O'Connor, BSc, Srinivasa Reddy, PhD, and Dr. Eghbali.

Dr. Eghbali serves as the Director of our Physician-Scientist Training Program and of our Basic Science Environment.





Faculty Promotions

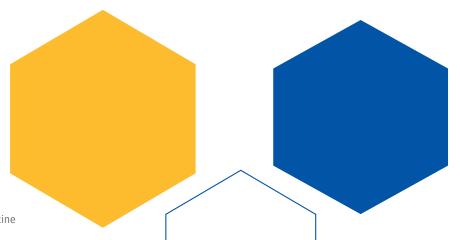








Congratulations to **Soban Umar, MD, PhD**, on his promotion to Associate Professor-in-Residence, and to **Christine Trieu, MD**, **Michelle Harvey, MD**, **John Shin, MD**, and **Sachin Gupta, MD** on their recent promotions from Assistant to Associate Clinical Professor!



"Teacher of the Month" Awards

Our residents continued the monthly tradition of honoring a professor who has shown special dedication to resident teaching. Three assistant professors and one associate professor won awards this spring, and in June, a fellow took home the award for the first time! The residents had these comments about the recent award winners.



Cardiothoracic Anesthesiology Fellow, **Andrew Wu, MD,** "really stands out in his dedication and hard work both to his patients as well as to his residents. Andy is able to superbly balance his own learning with my learning as a resident, which I appreciate immensely. He is incredibly patient and takes the time to clearly explain things. HIs humor helps alleviate tense situations and makes cases more enjoyable. I know it is going to be a great day if I get assigned to Dr. Wu!"



Assistant Clinical Professor Lauren Beck, MD, "is one of the most down to earth and personable attendings I have worked with! She makes it easy to ask questions and provides fantastic explanations so that I always feel like I leave a day working with her having learned something new and interesting. I also appreciate that she makes it a point to have a learning topic every time we work together so that even if our clinical case is less involved, there is still a focus on resident education." Dr. Beck serves as our Associate Residency Program Director for Quality and Safety.



Assistant Clinical Professor **Jason Lee, MD,** "is an eponym for exceptional educator. He teaches not only at the appropriate level of the resident, but also excites residents with his love of learning and profound knowledge of anesthesia. His passion for education is contagious and truly makes him stand out amongst a cohort of already excellent educators. He goes out of his way to make sure residents are learning every day and he makes it seem natural and effortless. That being said, when you sit down to talk to him about medical education, it is clear that his efforts result from a level of diligence and dedication which far exceeds that of any educator in our department." Dr. Lee serves as our Associate Residency Program Director for Didactics and Curriculum Development.



Assistant Clinical Professor Marisa Hernandez-Morgan, MD, MPP, "is incredibly competent not only as a clinician but also as an educator. Her communication skills are exceptional and I think this is what helps make her such an excellent teacher. She is able to explain complex concepts in a way that makes sense to me as a learner. She clearly cares about the residents' education and is always so kind and patient with me. She is an amazing role model and I always look forward to working with her in the OR!" Dr. Hernandez-Morgan specializes in intensive care medicine.



Associate Clinical Professor **Jacques "Prince" Neelankavil, MD,** "has the ability to speak like a layman about incredibly complex topics. He is so smart and can calibrate his teaching to the level of his learner. He gave a completely different talk to the residents as he did to our medical student, but it was perfect in the moment and resulted in everyone understanding our clinical situation much more clearly." Dr. Neelankavil is a cardiac anesthesiologist who serves as our Director of Perioperative Echocardiography and directs our Division of Cardiac Anesthesiology.

Dr. Michela Ottolia Wins NIH R01 Grant

The National Heart, Lung and Blood Institute awarded an NIH/NHLBI R01 grant to **Michela Ottolia**, **PhD**, to investigate a novel regulatory mechanism of cardiac function. Dr. Ottolia and her research team will investigate how changes in intracellular sodium tune cardiac contractility and excitability by affecting the activity of the plasma membrane transporter sodium-calcium exchanger. These studies will be conducted in collaboration with Ariel Escobar, PhD, at UC Merced School of Engineering.



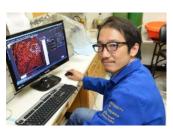
Transmembrane sodium flux is essential to cardiac function. However, an elevated intracellular sodium concentration is a hallmark of a variety of pathological conditions such as ischemia/ reperfusion injury, arrhythmias, and chronic heart failure. A key protein regulated by intracellular sodium is the sodium-

calcium exchanger, a plasma membrane transporter that extrudes calcium after each beat. Consequently, the sodium-calcium exchanger shapes myocytes' calcium dynamics and therefore contractility.

Dr. Ottolia's team has discovered that modulation of the sodium-calcium exchanger by intracellular sodium is required for proper cardiac function, unveiling a novel mechanism that controls myocardial contractility and excitability. With the support of this award, the research group will explore the molecular mechanisms of this new sodium signaling and its potential role in pathophysiological conditions with the hope of contributing to the development of new therapeutic approaches.

Dr. Tomohiro Yokota Wins American Heart Association Award

Assistant Project Scientist **Tomohiro Yokota, PhD,** secured a prestigious Career Development Award from the American Heart Association. Dr. Yokota



investigates the molecular mechanisms of chamberspecific postnatal heart growth in the right and left ventricles. One of the most prominent features in cardiac physiology is

the marked differences in size and function between the left and right ventricles in the adult heart. However, fetal hearts largely have equivalent sizes and function during fetal development before birth. The left ventricle's dominance develops rapidly during the perinatal transition in newborn hearts, in order to support the drastically different hemodynamic loads between the peripheral and pulmonary circulations. This chamber-specific postnatal growth is the cornerstone of postnatal heart development. However, the underlying molecular mechanisms are almost entirely unexplored.

The goal of Dr. Yokota's research is to fill an important gap in current knowledge by uncovering novel signaling mechanisms critical to perinatal heart remodeling and maturation, especially with regard to chamber specificity.

Dr. Umar Wins ATS Early Career Research Achievement Award

Associate Professor-in-Residence Soban Umar, MD, PhD, is the 2021 winner of the Early Career Research Achievement Award, presented by the American Thoracic Society's Assembly on Pulmonary Circulation.

Commending Dr. Umar for his academic excellence, the Assembly leadership noted:

"Dr. Umar received his Medicine degree with honors from Nishtar Medical University in Pakistan. He completed his Ph.D. in cardiovascular physiology and molecular cardiology from Leiden University in the Netherlands with a focus on molecular mechanisms of pulmonary hypertension and right heart failure. He went on to complete his Postdoctoral training in cardiopulmonary pathophysiology from UCLA with a focus on the role of sex hormones and sex chromosomes and epigenetic regulation of pulmonary hypertension. He completed his residency training in Anesthesiology from UCLA in 2016 and has been serving as a faculty member in the Department of Anesthesiology since. Dr. Umar is a



physician-scientist who works as a clinical anesthesiologist and is the principal investigator of an NIH-funded basic and translational cardiovascular research laboratory. He has received funding from the American Thoracic Society (ATS), Foundation for

Anesthesia Education and Research (FAER), UCLA Cardiovascular Theme, and The National Institutes of Health (NIH). Dr. Umar has published > 50 high-quality research papers and has an h-index of 25 with over 2100 citations of his work to date. His valuable contributions to pulmonary vascular disease and right heart failure research have resulted in numerous honors and awards. The Umar Laboratory's research is focused on investigating the pathophysiology and molecular mechanisms of primary and secondary forms of pulmonary hypertension and associated right ventricular dysfunction using cutting-edge multi-omics approaches with a long-term goal to devise novel, effective and targeted therapies."

Dr. Umar is our residency's Associate Program Director for Resident Research. He has been active in our outreach to area high schools, guiding tours through his laboratory to give students an inside look at basic science research. Congratulations, Dr. Umar!

Clinician Scientists Win FAER Mentored Research Training Grants

Two Assistant Professors-in-Residence in cardiothoracic anesthesiology, Louis Saddic, MD, PhD, and Matthew Fischer, MD, have been awarded two-year FAER Mentored Research Training Grants. Dr. Saddic will receive funding for his proposal, "The Mechanistic Exploration of Estrogen Driven Attenuation of Thoracic





Aortic Aneurysms Using Proteomics", and Dr. Fischer for his proposal, "Methylation Quantitative Trait Loci Mapping and Methylome Wide Association Study of Post-Operative Atrial Fibrillation After Cardiac Surgery".

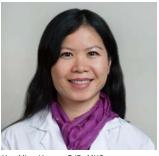
The FAER Mentored Research Training Grants help anesthesiologists develop the skills and preliminary data for subsequent grant applications and the research publications needed to become independent investigators.

Back-To-Back "Excellence in Teaching" Awards

UCLA Anesthesiology professors took home the David Geffen School of Medicine's Kaiser Permanente Award for Excellence in Teaching – not once, but back-to-back, in 2020 and 2021! Adjunct Associate Professor of Anesthesiology and UCLA Simulation Center Interim Executive Director, **Yue Ming Huang, EdD, MHS**, won the accolade in 2020. **Elizabeth Tsai, MD**, an Assistant Professor of Anesthesiology at Olive View-UCLA Medical Center, received the award in 2021. Considered the most prestigious education award granted by the David

Awards, Honors and Recognition

Awards, Honors and Recognition





'ue Ming Huang, EdD, MHS

Elizabeth Tsai, MD

Geffen School of Medicine, the Kaiser-Permanente Award for Excellence in Teaching recognizes prolific educators who have made innovative contributions to medical student education, and have achieved sustained excellence in clinical and classroom teaching over the years.

Dr. Yibin Wang Honored for Excellence in Educational Innovation



Yibin Wang, PhD, received the UCLA College of Life Sciences' Excellence in Education Award for a Tenured Professor. The selection committee stated:

"We selected Professor
Wang for his educational
innovations as the Associate
Director of the Molecular,
Cellular and Integrated

Physiology (MCIP) PhD program. In this position, he has created and oversees a two-quarter 12-credit didactic and problem-solving boot camp for incoming first-year graduate students. The course offers a combination of active-learning sessions, problem-oriented discussion sections, and grant writing—with the goal of preparing graduate students for the fast paced, highly interdisciplinary nature of academic research and for the biotechnology industry. Dr. Wang's boot camp has been tremendously successful; MCIP has the lowest time-to-degree of any biomedical PhD program, and a job placement rate upon graduation of 100%. Owing to the depth, breadth, and rigor of the course, four additional

graduate programs have adopted it for their own programs and it has been cited by internal and external review panels as a major strength of MCIP."

Dr. Wang holds the rank of Professor in the departments of Anesthesiology, Physiology and Medicine.

Santa Monica Hospital Honors Dr. Eva Boyd and Acute Pain Team



Eva Boyd, MD, Director of our Regional Anesthesiology and Acute Pain Medicine
Fellowship, won the Mentor Award at the 2021 Santa Monica Hospital Board of Advisors Staff Appreciation Awards. The entire Acute Pain Team also won the hospital's Team Spirit Award.

Congratulations to Dr. Christine Cunningham, Now PhD!

Integrative Physiology
Interdepartmental Ph.D. Program

DISSERTATION DEFENSE



Christine Marie Cunningham
Mentor: Mansoureh Eghbali
"Y Chromosome Protection and Therapeutic
Potential in Pulmonary Hypertension"

Tuesday, May 18th, 2021 2-3pm https://ucla.zoom.us/j/91659297123?pwd=d0QvOHdXSVh1RmFGS2V4SklOTk9mZz09

Christine M. Cunningham, a former PhD candidate in the Eghbali lab through the Molecular, Cellular & Integrative Physiology program, successfully defended her dissertation this spring and is now Dr. Cunningham! Her dissertation, titled "An Investigation into Y Chromosome Protection and Therapeutic Potential in Pulmonary Hypertension", identified the molecular mechanism behind the protective effect of the Y chromosome in pulmonary hypertension. Her dissertation defense committee included two members of our research faculty: Mansoureh Eghbali, PhD, Dr. Cunningham's long-time mentor, and Tom Vondriska, PhD. During her time in the Eghbali Laboratory, Dr. Cunningham contributed to 12 peer-reviewed works and was funded by a T32 Training Grant, an American Heart Association Fellowship, the 2019 Iris Cantor Young Investigator Award and various poster, talk and travel awards.

Immediately prior to her defense, Dr. Cunningham gave a keynote talk at the Organization of the Study of Sex Differences international meeting where she also received a travel award. She earned her Bachelor in Science degree from Stanford University, and will return to her alma mater to continue research in the field of pulmonary hypertension as a postdoctoral scholar in the laboratory of Mark Nicolls, MD, in the Stanford Division of Pulmonary and Critical Care.

Our

Residents

Shine on



Liked by evchang and others
ucla_anesthesiology_reslife Congratulations
to Drs. Tim Bui, Christopher Little, Kevin Nash
and Peter Schnaak for scoring in the Top 10
percent among those who took the BASIC
Board Exam!!

We are so very proud of you!!

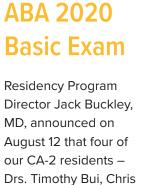
Peter Schnaak – scored in the top 10% of test takers nationwide on the ABA 2020 BASIC examination. Congratulations to these outstanding residents, and to the rest of their class who all earned passing scores after just one year of training!



All our CA-2 class members passed their BASIC exam!

Dr. Buckley explained that the American Board of Anesthesiology transitioned to the current threepart examination system in 2014 to "complement the movement of the Accreditation Council of Graduate Medical Education (ACGME) toward competency-based training and promotion."

The BASIC Examination is now the first examination required for board certification. Taken at the end of the CA-1 year, it must be passed before graduation from the residency program. After completing residency, the graduate takes the ADVANCED Examination. Upon its successful completion, the candidate takes the two-part APPLIED Examination, which now consists of the Standardized Oral Examination and the Objective Structured Clinical Examination (OSCE), to achieve ABA board certification.



Little, Kevin Nash, and



Welcome to Our Newest Faculty Members

By Darnell Bagsik



Colby Tanner, MD
Dr. Tanner completed
medical school at Loma
Linda University, and
anesthesiology residency
and liver transplant
fellowship at UCLA. He
has joined our team
with a clinical focus and
research interest in liver
transplantation as well as

end-stage liver and renal disease. A father of three, Dr. Tanner enjoys sports (when he can find time) including fishing, cycling, and snowboarding.



Krista Cascia, MD

Dr. Cascia completed medical school at Rosalind Franklin University, and residency and obstetric anesthesiology fellowship at UCLA. During her fellowship year, Dr. Cascia helped manage the maternal high-risk service. She continues her clinical focus in obstetric anesthesiology,

and her academic interests include resident education, specifically in obstetric anesthesia simulation and curricula. She enjoys hiking, baking, and spending time with her husband and young daughter.



Hewenfei Li, MD

Born in Chengdu, China, Dr. Li completed medical school at the University of Utah and anesthesiology residency at UCLA. She has joined our team with a clinical focus in multispecialty anesthesiology. Dr. Li's research interests involve obstetric and thoracic anesthesiology. A former

international tennis champion, she loves pets, traveling, and reading.



Stefan Besada, MD

Dr. Besada completed medical school at Baylor College of Medicine in Houston, and anesthesiology residency at UCLA. Born in Wurzburg, Germany, he was an undergraduate at UCLA with a major in anthropology. Dr. Besada has joined our team with a clinical focus in

multispecialty anesthesiology. His academic interests include resident and medical student education, as well as mentorship. His hobbies include kayaking, hiking, and cooking.



Dane Saksa, MD, MBA

Dr. Saksa completed medical school and earned his MBA at Columbia University College of Physicians and Surgeons. Also a graduate of anesthesiology residency at UCLA, he has joined our team with a clinical focus in multispecialty anesthesiology. Dr. Saksa's academic interests involve research in health services, global health, healthcare

administration, and quality improvement.



John W. Patton III, MD, MBA

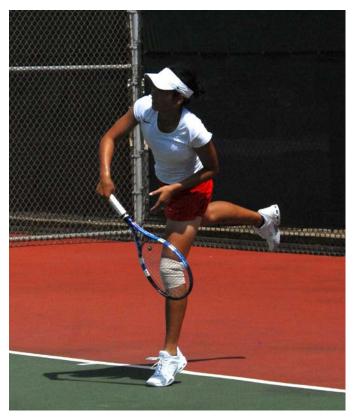
Dr. Patton graduated from medical school and earned his MBA at the University of California, Irvine. He then completed anesthesiology residency at Stanford University School of Medicine, and a fellowship in regional anesthesiology and pain medicine at Cedars-Sinai

Medical Center. His interests include healthcare cost containment, redefining value in healthcare, technology and innovation, and "big data". Dr. Patton joined our faculty team in September with a clinical focus in multispecialty anesthesiology.

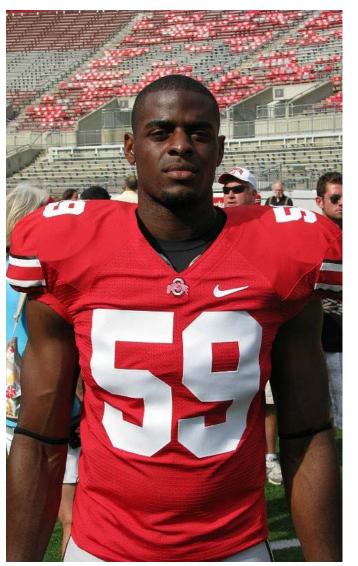
Star Athletes Among Our Newest Colleagues!



 $\label{lem:cardiothoracic} \textbf{Cardiothoracic anesthesia fellow Dr. Stew Smith in action}$



Dr. Elwyn Li, new faculty member, demonstrated her championship form during her years as an international tennis star



Dr. Stew Smith in his linebacker days at Ohio State

Welcome to Our 2021-22 Fellowship Group!

Anesthesiology Critical Care Medicine



Garry Dieter, MD

Dr. Dieter completed medical school at Loma Linda and anesthesia residency at Virginia Mason in Washington State. Excited to come back to SoCal, he follows in the footsteps of our previous fellow, Dr. James Madrian, coming from Spokane, Washington, where he has

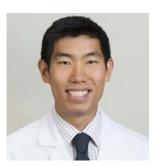
been practicing as a cardiac anesthesiologist. Joining us at UCLA for a year of critical care medicine fellowship, he plans to return to Spokane and join Dr. Madrian and their group of intensivists caring for the cardiothoracic surgical patients in the ICU.



Sean Hickey, MD

Dr. Hickey grew up in Queens, NY and comes with dual US-lrish roots. He completed his medical school training in New York City at Albert Einstein College of Medicine, followed by residency in emergency medicine at Mount Sinai. Though LA-naïve, he is eager to move to the west coast and

join UCLA. As an emergency medicine-trained physician, he will join us for a two-year fellowship in Critical Care.



Albert Lee, MD

Dr. Lee is a true SoCal native. Born and raised in the Koreatown neighborhood, he completed undergraduate work at Occidental College, his medical school training at the University of Chicago and returned to UCLA for anesthesia residency. He

decided to crown his training with back-to-back critical care and cardiothoracic anesthesia fellowships, starting with critical care this year.



Mohammad-Ali Shaikh, MD

Dr. Shaikh is a Texas native who completed both his medical school training and anesthesia residency the University of Texas Southwestern in Dallas. Ready to shed some of his Texan roots, he is thrilled to move west to California and to join UCLA for a year of critical care medicine fellowship.

Cardiothoracic Anesthesiology



Libby Wang, MD

"I grew up in Bakersfield, went to UC Berkeley where I studied bioengineering, and attended medical school at NYU. I did my residency training at UCLA and am so excited to be able to stay here to continue my fellowship training! In my spare time, I love to scuba dive abroad (Bali is my favorite) and bake cookies." Dr. Wang served as one of our three chief residents last year.



Stew Smith, MD

"I was born and raised in Columbus, Ohio, and attended The Ohio State University for both my undergraduate and medical degrees. I walked-on to Ohio State's football team before earning a scholarship and Academic All-Big Ten honors as linebacker under Urban Meyer, while also conducting 9 years of clinical research in anesthesia and

pursuing business entrepreneurship. I then moved on to anesthesia residency at UCSF."



Kasey Grewe, MD

"I'm originally from Portland,
Oregon, and studied chemistry
at Pomona College. I
completed my medical school
and anesthesia residency
at Columbia University and
served as chief resident. I
have just finished my ICU
fellowship here at UCLA. My
main interests include cycling,

surfing, and cooking." Dr. Grewe wrote an <u>article for The Atlantic</u> last year about the horrors of working in the ICU during the worst of the COVID pandemic in New York City.



Michael Tien, MD

"I was born and raised in Southern California and have spent time living in Los Angeles, Orange County, and San Diego. I completed medical school at Mayo Clinic and anesthesiology residency at Stanford University, and am excited to start my cardiothoracic anesthesiology fellowship at UCLA. In my

spare time, I enjoy traveling (pre-COVID), playing and watching basketball (go Lakers!), trying to improve my golf game, and eating at new restaurants."

Liver Transplant Anesthesiology



Hai Pham, MD, MS

Dr. Pham was born in Vietnam and immigrated to the US at age one. He landed in South Philadelphia, where his family still resides, and considers it his hometown. He graduated from Yale in 2012 with a degree in Biology. After 22 long winters, he found his way to California for medical school at UCSF and graduate school at Berkeley

Public Health. He stayed at UCSF for anesthesiology residency and is very excited to be joining the UCLA family. Outside of work, he enjoys cooking, wine tasting, jazz clubs, and Barry's bootcamp.



Mansi Sheth, MD

Dr. Sheth's hometown is
Houston, Texas. She graduated
from UCLA with a BS in
Physiological Science and a
minor in English. She went to
the Keck School of Medicine
at USC and completed her
residency at the University of
Michigan in Ann Arbor. In her
free time, she loves to bike,
play soccer and hang out with

her cat, Sherlock. She is also always excited to talk about UCLA basketball with her fellow Bruins.

Pediatric Anesthesiology



Jean Vo, MD

Dr. Vo emigrated from Montreal when he was in grade school, and French is his first language. He attended UCLA for his undergraduate studies, medical school in Florida, and comes back to UCLA after completing residency at USC. Dr. Vo was a research intern at the Jules Stein Eye Institute during his undergraduate years, and worked as a research coordinator prior to medical

school. He has presented research on household income and its relationship with childhood diabetes. Dr. Vo enjoys the culinary arts, health, sports, and fitness; has a passion for societal environmental impact, and hopes to make a difference.



Elizabeth Kremen, MBBS

Dr. Kremen is a sixthgeneration physician. She attended UC Berkeley as an undergraduate, medical school in Queensland, Australia, and residency at Advocate Illinois Masonic Medical Center. Dr. Kremen has been a biophysics intern, research assistant, phlebotomist, EMT, patient advocate, and brand

ambassador, all before going to medical school. A world





2021-22 Fellows 2021-22 Fellows



traveler, she has visited over 30 countries, backpacked the Routeburn Track in New Zealand, and hiked the Salkantay trail in Peru. She was on the Berkeley ballroom dance team and enjoys dancing blues, swing, salsa, and tango.

Pain Medicine



Joshua Barnhill, MD

Dr. Barnhill was born and raised in St. Louis, Missouri, which is also where he met his wife, Erin. He served in the US Navy for 10 years, including internship at Naval Medical Center San Diego, followed by a tour as a Flight Surgeon and completion of residency at Naval Medical Portsmouth in 2018. He served as the Anesthesia Department Head aboard the USNS Comfort on the Enduring Promise 2018

mission to South America and Central America. He loves spending time with his wife and two children, Dominic (6 years old) and Aria (3). They enjoy riding bicycles, swimming, going to parks, museums, and the beach.





Syed Jaffery, MD

"I grew up in Durham, NC, and hopped over to Chapel Hill for college at the University of North Carolina (Go Heels!). I attended residency at UT Southwestern in Dallas for anesthesiology before coming to UCLA for Pain Medicine fellowship.

During my free time, I enjoy weight training, trying new restaurants, riding my Peloton, and taking day trips."



Jerry Markar, MD Dr. Markar grew up in La Crescenta, near Los Angeles, and had a career in construction (installing fire sprinklers) before medical school. After undergraduate study at UCLA, Dr. Markar attended medical school at the University of Illinois at Chicago. He returned to UCLA for residency training, and is very happy to be staying on for a fellowship in Pain Medicine.

When not at work, Dr. Markar enjoys spending time outdoors with his wife and two young sons.



Sara Navab, MD

Dr. Navab is a native Angeleno and a longtime Bruin.
After an early career in the entertainment business in New York City, she attended medical school at UCLA and graduated from our UCLA anesthesiology residency. Her new co-fellows can look forward to her legendary holiday get-togethers, and to

meeting her husband, anesthesiologist Kavah Navab, MD, and her three much-loved cats.



Daniel "Danny" Neuman, DO, MBA

"I grew up in Overland Park, Kansas, and trained at the University of Kansas. My wife and I value new experiences filled with culture, food, and people. We also have a 70 lb. goldendoodle named Nelson, who pretty much runs the show."



Hayley Osen, MD, MS
A native of Pasadena, Dr. Osen completed undergraduate studies at Johns Hopkins and medical school at the University of Michigan in Ann Arbor. By her own account, she shed "tears of joy" at matching into our UCLA residency program (though we suspect the Michigan weather may have played no small part in her readiness to leave), and

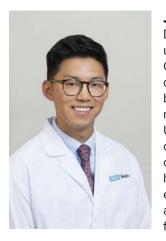
is delighted to be staying on for fellowship training.

Regional Anesthesiology and Pain Medicine



Heidi Bean, MD

Dr. Bean grew up in the suburbs of Chicago and graduated from Rush Medical College in Chicago. She joins our team after completing residency training nearby at Cedars-Sinai Medical Center. She enjoys running, pirate sailing, and watching history shows on YouTube. Dr. Bean looks forward to meeting and working with her new colleagues at UCLA!



Jeffrey Kim, MD, MS

Dr. Kim was a UCLA undergraduate, went to Georgetown for a master's degree in physiology and biophysics, and then finished medical school at the University of Arizona College of Medicine. He served as one of our three Chief Residents here at UCLA last year, and enjoys playing basketball and watching sports in his free time.



Claudia Hammi, DO

Dr. Hammi was born and raised in San Diego where she also attended San Diego State for college. She then attended Western University of Health Sciences in Pomona for medical school, and completed residency training at UC Irvine. Outside of work, she enjoys spending time with her labradoodle puppy

Maui, frequenting the beach, trying new restaurants, kickboxing, and baking. She's interested in pursuing a career in academics and is excited to see which direction this year takes her.



Faculty Influencers Guest-Star on Audio and Video Podcasts

In today's social media-driven society, if you want to get your message out to the world beyond UCLA, you can't expect to accomplish it solely with peer-reviewed publications. Our faculty members have become sought-after contributors on a variety of audio and video platforms. Here are some highlights.

Brain Health

Daniel Cole, MD, FASA, our Vice Chair and a past president of the ASA, was the featured guest on a segment of the ASA Central Line podcast focusing on brain health. A neuroscientist by training, Dr. Cole spent the first 20 years of his career doing bench research on a laboratory model of focal cerebral ischemia. During his term as ASA President in 2015, he led the development of the ASA Brain Health Initiative to tackle the huge problem of postoperative cognitive dysfunction in older adults.



"Anesthesia itself does not cause cognitive decline," Dr. Cole said. Other factors are key components, including the underlying condition requiring surgery, and the inflammatory responses provoked by surgery or major illness.

How can we as anesthesiologists lower the

risk of postoperative cognitive decline? "It's pretty controversial," Dr. Cole said, but "making sure that you're not overdosing the patient" is important, along with avoiding hypotension. "There is no optimal anesthetic," he said, "and it doesn't seem to matter whether patients get regional vs. general."

Pain Medicine and Palliative Care





Sandra Sacks, MD, an assistant clinical professor, serves as vice-chair of ASA's Committee on Palliative Care, and recently guest-starred on <u>Episode 44 of the ASA Central Line podcast</u> discussing the synergy between pain medicine and palliative care.

"It was during one of my rotations in the ICU that I was introduced to palliative care," Dr. Sacks explained. "I didn't even know that it was a possibility to pursue a palliative care fellowship after anesthesia residency. But the more I learned about palliative care, the more that it seemed that it aligned with a lot of my own goals." After her palliative care fellowship, Dr. Sacks went on to complete a pain medicine fellowship. With this combination, she is able to give her patients continuity of care in terms of medication management, and also can perform any interventions they need."

"Historically, anesthesiologists really haven't been integrated into palliative care teams," Dr. Sacks said. "But I think there's actually a huge need for well-trained palliative anesthesiologists, especially with our surgical population. As surgical patients are aging, we know that frail patients are at increased risk for perioperative complications." As perioperative physicians, anesthesiologists are "primed to be the leaders in this area," she concluded.

Payment Progress

Johnathan Pregler, MD, our Medical Director of Operative Services, was a speaker on Episode 46 of the ASA Central Line podcast, discussing ASA's "Payment Progress Initiative" aimed at ensuring appropriate payment levels for anesthesia services. Dr. Pregler chairs the "33% Work Group" as part of the efforts of the ASA Committee on Economics. While other specialities receive Medicare payments averaging 80% of commercial payer rates, anesthesiology's Medicare payments are far less — about 33% of commercial rates, hence the name of the work group.

That problem has only gotten worse, Dr. Pregler explained. "In 2021, Medicare was paying 27% of our latest commercial survey mean value for conversion factor, which is of course, our best estimate of commercial payment rates. Future payment cuts would obviously add to the shortfall should they be implemented in 2022, and could be up to 10%. If these payment cuts go into effect, the Medicare payments could be under \$20 per unit, which would be back to 2008 levels."



In the future, Dr. Pregler said, "the risk of either a public option allowing younger individuals to buy into Medicare or a new Medicare-for-All program could result in a huge expansion of the percent of Medicare-covered payments for the specialty. If Medicare becomes the dominant payer, then the proliferation of these rates could be disastrous."

"We have to learn from the past arguments that were made to correct poor Medicare payments, and we need to be careful not to repeat unsuccessful efforts from the past," Dr. Pregler said. "The next task for the 33% Work Group is to prepare documents to help our members in contract negotiations and other settings to demonstrate that Medicare is not an appropriate benchmark for anesthesia payments."

For Medical Students



Soban Umar, MD, PhD, was interviewed on an <u>audio</u> <u>podcast</u> hosted by the Governing Council of the ASA Medical Student Component Society about his career as a physician-scientist and the future of research in anesthesiology. Dr. Umar is an award-winning researcher in the field of pulmonary hypertension, and serves

as our Associate Residency Program Director for Resident Research.

Why I Love Being an Anesthesiologist

Emily Methangkool, MD, MPH
Vice Chair, Quality and Patient Safety
HS Associate Clinical Professor,
Cardiothoracic Anesthesiology
UCLA Department of Anesthesiology and
Perioperative Medicine



Emily Methangkool, MD, MPH, created a video Zoom presentation for the medical student audience called, "Why I Love Being an Anesthesiologist." She focused on her career as a cardiac anesthesiologist and her role within our department as Vice Chair for Quality and Safety.

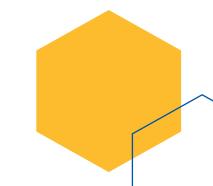
The Future of Anesthesiology

Karen Sibert, MD, FASA, our Director of Communications, has spoken on several podcasts about the future of medicine, whether or not we are facing a shortage of anesthesiologists, and how technology may change how we practice.

She spoke with Kevin Pho, MD, the host of the well-known KevinMD blog, in an April 1 podcast called "Keep insulting doctors, and good luck finding a physician".

Dr. Sibert spoke on the Anesthesiology News podcast, The Etherist, during one segment devoted to "How Physician Shortages Could Change the Future of Anesthesiology", and another episode in April, "Ask the Experts", where she discussed the evolving role of anesthesiologists in modern health care. She also explained her reasons for giving up on Twitter as a way of communicating her ideas and opinions about the specialty.

Dr. Sibert has also been a guest on the podcast "Anesthesia and Pain Management Success", hosted by Jason Harvey, and the "Patients at Risk" podcast, hosted by Drs. Niran Al-Agba and Rebekah Bernard.





Take Me Out to the Ball Game!

We joined more than 42,000 baseball fans on July 25 at Dodger Stadium for an all-department social event, cheering Will Smith's eighth-inning home run as the LA Dodgers triumphed over the Colorado Rockies 3-2.

Chair Maxime Cannesson, MD, PhD, said the event was "a chance for our whole, multi-mission community to connect outside of the day-to-day responsibilities of our regular roles."

Department members enjoyed a second "Dodger Day" on August 30, watching the Dodgers trounce the Atlanta Braves 5-3. To LA fans' delight, the Dodgers' wins this week move them into the top spot in the NL West.

Noting how difficult the past year of isolation has been for all of us, Dr. Cannesson credited administrative staffer Sally Alvarez-deCordova for being the "inspiration and spark" behind these events. He also thanked Olivia Vallejo, Carla Gonzalez, Kristin Christian, Knarik Piloyan, Eli Paray, and Chief Administrative Officer Stephanie Fisher for working on all the important details and logistics involved in making the events such a success.























































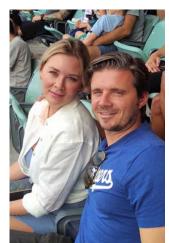












Selected Recent Publications

Editor's note: Our department continues its tradition of academic accomplishment with these recent publications. Every citation selected for mention here represents the results of months or years of work, and of course represents the authors' successful responses to multiple editors' questions and requests for re vision. Congratulations to all our accomplished authors!

THE EVOLUTION OF RCADEMIA



 Vacas S, Cole D, Cannesson M. Cognitive Decline Associated with Anesthesia and Surgery in Older Patients. JAMA. Published online August 2, 2021. doi:10.1001/jama.2021.4773

In this featured editorial in JAMA Insights, Drs. Vacas, Cole, and Cannesson discuss the fact that in the past decade, the population aged 65 years and older increased by more than 30%, and accounts for a disproportionate number of surgical procedures requiring anesthesia. Aging causes changes in the brain that contribute to an increased incidence of postoperative neurocognitive disorders (PNDs). They highlight risk factors and cite interventions that may improve outcomes.

The authors conclude: "Advances in surgery and anesthesia can improve function and quality of

life for older patients, but not without potential risk to brain health. Postoperative neurocognitive decline is a meaningful concern to patients and represents a significant and expanding challenge to health care in the US and worldwide. Surgeons and anesthesiologists should assess, discuss, and optimize associated potential risks for each patient before surgery. Best practices and interventions can begin before surgery and extend well into the recovery period. To be most effective, these strategies require family engagement and the involvement of an interdisciplinary health care team and comprehensive systems of care."

Perioperative risk factors and targeted interventions

for postoperative neurocognitive disorders

Functional status and baseline frailty score Hearing and vision aids made available; exercise programs

Depression

Treatment and counseling

Hypertension

Cardiac evaluation; appropriate perioperative hemodynamic management

Sleep disorders

Optimization of physical environment (eg, sleep hygiene, sleep protocol); treatment of obstructive sleep apnea

Glycemia

Perioperative glycemic control; diabetes control

Alcohol and other substance use/dependence

Treatment of alcohol and substance use disorders; monitoring for substance withdrawal syndromes

Medicatio

Cessation of nonessential medications; review of essential medications; monitoring for polypharmacy and potential interactions

Nutritional statu

Perioperative nutritional plan; supplementation if indicated; shortened fluid fast considered, clear liquids encouraged up to 2 h before surgery; dentures made available; resumption of diet as early as feasible

Perioperative pair

Directed pain history; ongoing education regarding safe and effective use of institutional treatment options; multimodal, individualized pain control; vigilant dose titration

Family and social support system

If concerns, referral to a social worker and/or pastoral care

 Myo Bui C, Tanner C, Nguyen-Buckley C, Scovotti J, Wray C, Xia V. Combined Cardiothoracic Surgery and Liver Transplantation versus Isolated Liver Transplantation. J Cardiothorac Vasc Anesth 35(2021) 2363-2369. https://doi.org/10.1053j. jvca.2020.08.051

Patients with pulmonary arterial hypertension (PAH) frCombined cardiothoracic surgery and liver transplantation (cCSLT) has been increasingly used as a treatment option for patients with both endstate liver disease and advanced cardiothoracic disorders. The authors compared perioperative management and postoperative outcomes between patients undergoing cCSLT and isolated liver transplantation. Despite experiencing a complex intraoperative course, cCSLT patients had comparable 90-day survival to isolated liver transplantation patients. "Comprehensive planning before transplant, optimal patient/donor selection, the multiple-team model, and meticulous intraoperative management are critical to the success of cCSLT," the authors concluded.

3. McCabe M, An N, Aboulhosn J, Schwarzenberger J, Canobbio M, Vallera C, Hong R. Anesthetic management for the peripartum care of women with Fontan physiology. *Int J Obstet Anesth*.

Online publication July 27, 2021. DOI: https://doi.org/10.1016/j.ijoa.2021.103210

As outcomes for surgical palliation have improved, women with single ventricle congenital heart disease are surviving into their reproductive years and may become pregnant. The cardiovascular changes of pregnancy may stress the Fontan circulation and pose significant risk to the mother and fetus. Pregnant women with Fontan physiology were identified from the Ahmanson/UCLA Adult Congenital Heart Disease Center database. A total of 37 pregnancies were identified between 2000 and 2019. Twenty live births from 19 patients were reviewed and compared for cardiac history, obstetric history, anesthetic management and cardiovascular outcomes. The authors concluded: "Epidural anesthesia is safe and effective for both vaginal and cesarean deliveries. Judicious fluid management

- is critical in minimizing postpartum cardiovascular complications. Many patients do not require higher level of care, invasive monitoring or central venous access during the peripartum period.".
- 4. Harvey R, Chellappa V, Mofidi S, Scovotti J, Neelankavil J, Saddic L. Intraoperative diastolic function assessed by TEE does not agree with preoperative diastolic function grade in CABG patients. Echocardiography. Online publication July 13, 2021. https://doi.org/10.1111/echo.15137.

The authors' aim was to compare the agreement of the 2016 ASE/EACVI guidelines for grading diastolic dysfunction (DD) with the most commonly used intraoperative transesophageal echocardiography (TEE)-based diastolic function grading algorithm in cardiac surgical patients, and to describe the contribution of the echocardiographic variables used in the algorithms to any observed differences. They concluded: "The results of this study demonstrate that the incidence and grading of DD in cardiac surgical patients vary greatly depending on chosen technique and may be more descriptive of the algorithm selected than the actual pathophysiology. This is the first study, to our knowledge, that clearly provides an argument against using each method interchangeably to define DD."

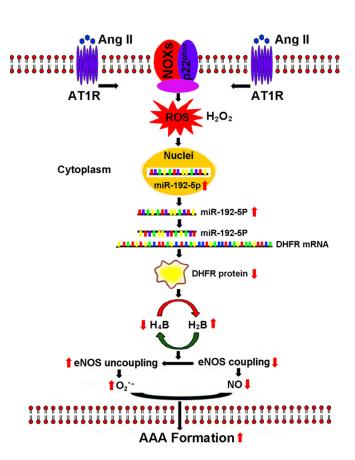
5. Luppi A, Cain J, Spindler L, Gorska U, Toker D, Hudson A, et al. Mechanisms Underlying Disorders of Consciousness: Bridging Gaps to Move Toward an Integrated Translational Science. Neurocritical Care 35, 37-54 (2021). Online publication July 8, 2021. https://link.springer.com/article/10.1007/s12028-021-01281-6

Dr. Andrew Hudson was part of a multidisciplinary working group for the Curing Coma Campaign tasked with assessing the state of the science to identify where gaps currently exist in understanding the mechanisms that produce disorders of consciousness. The group concluded: "In this white paper, we discuss research priorities that would enable us to begin to close these knowledge gaps. We propose that a fundamental step towards this goal will be to combine translational, multi-scale, and

Selected Recent Publications

multimodal data, with new biomarkers, theory-driven approaches, and computational models, to produce an inte-grated account of neural mechanisms in DOC. Importantly, we envision that reciprocal interaction between domains will establish a "virtuous cycle," leading towards a critical vantage point of integrated knowledge that will enable the advancement of the scientific understanding of DOC and consequently, an improvement of clinical practice."

6. Huang K, Narumi T, Zhang Y, Li Q, Murugesan P, Wu Y, Liu NM, Cai H. Targeting MicroRNA-192-5p, a Downstream Effector of NOXs (NADPH Oxidases), Reverses Endothelial DHFR (Dihydrofolate Reductase) Deficiency to Attenuate Abdominal Aortic Aneurysm Formation. Hypertension, Vol. 78 No. 2, 282-293. Online publication June 28, 2021. https://doi.org/10.1161/HYPERTENSIONAHA.120.15070



"We have shown that endothelial-specific DHFR (dihydrofolate reductase) deficiency un-derlies eNOS (endothelial NO synthase) uncoupling and formation of abdominal aortic aneurysm (AAA). Here, we examined a novel role of microRNA-192-5p in mediating NOX (NADPH oxidase)dependent DHFR deficiency and AAA formation. microRNA-192-5p is predicted to target DHFR. Intriguingly, homo sapiens-microRNA-192-5p expression was substantially upregulated in human patients with AAA. In human aortic endothelial cells exposed to hydrogen peroxide (H2O2), homo sapiens-microRNA-192-5p expression was significantly upregulated. This was accompanied by a marked downregulation in DHFR mRNA and protein expression, which was restored by homo sapiens-microRNA-192-5p-specific inhibitor. Of note, microRNA-192-5p expression was markedly upregulated in Ang II (angiotensin II)-infused hph-1 (hyperphenylalaninemia 1) mice, which was attenuated in hph-1–NOX1, hph-1–NOX2, hph-1–neutrophil cytosol factor 1, and hph-1-NOX4 double mutant mice where AAA incidence was also abrogated. indicating a downstream effector role of microRNA-192-5p following NOX activation. In vivo treatment with mus musculus-microRNA-192-5p inhibitor attenuated expansion of abdominal aortas in Ang II-infused hph-1 mice as defined by ultrasound and postmortem inspection. It also reversed features of vascular remodeling including matrix degradation, adventitial hypertrophy, and formation of intraluminal thrombi. These animals had restored DHFR mRNA and protein expression, attenuated superoxide production, recoupled eNOS, and preserved NO bioavailability.

In conclusion, our data for the first time demonstrate a critical role of microRNA-192-5p in mediating NOX-dependent DHFR deficiency and AAA formation, inhibition of which is robustly effective in attenuating development of AAA. Since the mouse and human mi-croRNA-192-5p sequences are identical, the microRNA-192-5p inhibitors may be readily translatable into novel therapeutics for the treatment of AAA."

7. Misic V, Rajaram K, Gabel E. A simulation-based evaluation of machine learning models for clinical decision support: application and analysis using hospital readmission. Nature Partner Journals (npj) Digital Medicine. Online publication June 14, 2021. https://www.nature.com/articles/s41746-021-00468-7#Sec2

"The interest in applying machine learning in healthcare has grown rapidly in recent years. Most predictive algorithms requiring pathway implementations are evaluated using metrics focused on predictive performance, such as the c statistic. However, these metrics are of limited clinical value, for two reasons: (1) they do not account for the algorithm's role within a provider workflow; and (2) they do not quantify the algorithm's value in terms of patient outcomes and cost savings. We propose a model for simulating the selection of patients over time by a clinician using a machine learning algorithm and quantifying the expected patient outcomes and cost savings. Using data on unplanned emergency department surgical readmissions, we show that factors such as the provider's schedule and postoperative prediction timing can have major effects on the pathway cohort size and potential cost reductions from preventing hospital readmissions." The authors concluded: "As this work evolves, we hope to transform this into a true patient trial to compare our simulated in-silico results against real in-vivo outcomes."

8. Thangathurai D, Riad M. Ketamine-Fentanyl
Combination Improves Outcomes in the Intensive
Care Settings. EC Pharmacology & Toxicology 9.1
(2021): 8-13. Online publication December 31, 2020.
https://www.ecronicon.com/ecpt/ECPT-08-00530.
php

"The ideal combination of pharmaceutical agents would aim at improving symptoms while causing the least side effects. The aim is to improve patients' experience, decrease organ damage, increase quality of care and thereby decrease ICU length of stay. For the last 30 years, our institution has adopted a multimodal approach for our ICU patients

in order to facilitate pain relief and sedation. The purpose of the multi-modal approach is to reduce the number days on ventilators, optimize pain relief, provide sedation while decreasing undesirable side effects, and improving the overall outcome. We found that out of all possible pharmacological agents available to us, the combination of low dose ketamine with low dose fentanyl produces the desired analgesic and sedative effects with minimal side effects." The authors found that the combination of low-dose ketamine 2 mg/ml and fentanyl 5 mcg/ml, with or without midazolam as needed, at infusion rates of 3-15 ml/hr, enabled early extubation, provided good pain relief, and minimized side effects in adult and geriatric patients.

 Reider-Demer M, Jalilian L, Roy S, Lee J, Dong X, Hitson H, Thomas E, Grogan T, Simkovic M, Kamdar N. Implementation and Evaluation of a Neurology Telemedicine Initiative at a Major Academic Medical Center. Telemed J E Health. Online publication April 28, 2021. DOI: 10.1089/tmj.2020.0502

The COVID-19 pandemic led to rapid adoption of telemedicine services for outpatients. This retrospective case series study describes the structure and implementation of telemedicine-based outpatient neurology clinics at the UCLA Medical Center. Nearly 7,200 patients were evaluated by telemedicine, and 9189 video visits were conducted between October 2018 and June 2020. The authors reported that the median telemedicine patient avoided a roundtrip driving distance of 33 miles and roundtrip travel time of 75 min. Within sample, median hourly earnings were \$27/h. The median patient saved \$18 on fuel and parking and \$36 of time-based opportunity savings, for total savings of \$54 per video visit. Eighty-six percent of patients surveyed were satisfied with their video visit experience, and their health care providers likewise reported high levels of satisfaction with telemedicine.



Research - LIVE!

nyone in the operating room areas at Ronald Reagan Medical Center over the past few weeks has had the opportunity to see clinical research in action. Two different research studies have been recruiting subjects in real time – one studying a way to protect anesthesia team members from infectious aerosols during intubation, and the other collecting video and pulse oximetry data on subjects with diverse skin tones to inform future research on remote vital sign monitoring.

Keeping Infectious Aerosols Contained

The first study's aim is to quantify the effectiveness of the SLACC – the "Suction-assisted Local Aerosol Containment Chamber". This is a clear, box-like personal containment device with a torso drape and protective arm sleeves that is designed to protect healthcare workers from droplet and/or aerosol contamination during intubation.

Inspired by the risks to personnel during the first surge of the SARS-CoV-2 pandemic, members of our department worked with the UCLA Bioengineering Division to develop the SLACC prototype in the spring of 2020. They published their initial report in *Anesthesia & Analgesia* in September 2020: "A Novel Negative Pressure Isolation Device for Aerosol Transmissible COVID-19".

Now the team is conducting a prospective randomized controlled trial to test the efficacy of the intubation box, taking air samples under carefully controlled conditions.

"Since we perform aerosol-generating procedures daily in the operating room, it's an ideal place to test our box," says **John Shin, MD**, Associate Clinical Professor and our Director of Medical School Education.

"Patients who participate in our trial are randomized to either the SLACC group or the control group (no SLACC)," Dr. Shin explained. "In the SLACC group, patients undergo anesthesia induction and intubation with the SLACC placed over their head. During this period, we are measuring aerosol particles both inside and outside of

SLACC to determine the efficacy of SLACC in containing aerosols." The intubations are done under standardized conditions by members of the team, using video laryngoscopy.

Dr. Shin's co-investigators in the study are four faculty members – Drs. Nir Hoftman, Jason Lee, Chiewlin Liew, and Soban Umar – and CA-3 resident Sebastian Kwon. They are collaborating with members of the Environmental Sciences Division in the Fielding School of Public Health. Supported by seed grant funding from our department, their aim is to complete the study with a total of 80 to 100 patients.

Remote Heart Rate Monitoring

As telemedicine has gained recognition and proved its utility during the pandemic, there is a growing need to make sure that contactless estimation of heart rate – a critical vital sign – is reliably accurate so that remote monitoring can be trusted. Unfortunately, the estimation of heart rate from facial videos to date has been less accurate with darker skin tones, which are more affected by differing light conditions.

Laleh Jalilian, MD, Assistant Clinical Professor, is collaborating with the Visual Machines Group laboratory of Achuta Kadambi, PhD, to gather a large-scale database of vital signs in subjects of different diverse skin tones, focusing on heart rate and blood oxygenation.

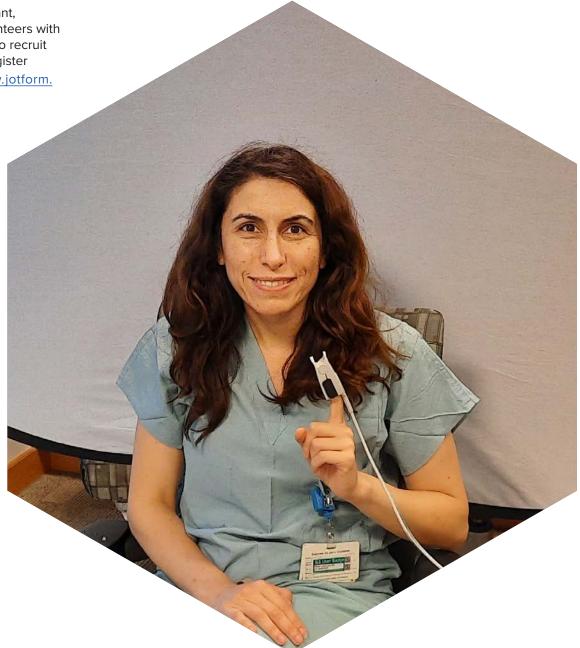
"As part of our study, participants are seated in front of a camera, with a pulse oximeter attached to their finger," explained **Pradyumna Chari**, a graduate student in Dr. Kadambi's lab. "Five one-minute videos are recorded and synchronized data from the camera and pulse oximeter are recorded, while the participant sits still."



In their research proposal for the study, the authors noted, "Since communities of color are disproportionately affected by both COVID-19 and cardiovascular disease, there is a pressing need to deploy contactless HR sensing solutions for high-quality telemedicine evaluations." Such technologies may help improve telemedicine setups and make remote diagnosis more precise.

The study is funded by a UCLA Innovation Grant, enabling the researchers to compensate volunteers with a \$20 Amazon gift card. They are continuing to recruit additional subjects. Anyone interested can register and get further information here: https://www.jotform.







IMAGES

LEFT: Dr. Laleh Jalilian demonstrates study set-up

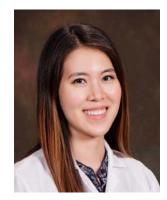
CENTER: Graduate student Pradyuman Chari received the President of India Gold Medal from the Indian Institute of Technology in Madras.

RIGHT: The air containment box has sleeves to enable intubation and mask ventilation without contamination of personnel ${\bf r}$

Our Nurse Anesthesia Team is Stronger Than Ever

By Gloria Nakyeyune, MSN, CRNA; Brianna Ortbals, MSN, CRNA; and Gillian Quian, DNP, CRNA

ollowing a very challenging 2020 and start to 2021, the UCLA nurse anesthesia team is coming out of the pandemic stronger than ever. This new strength is definitely needed with the new wave of cases coming post-pandemic, and our short-staffed situation following a year-and-a-half long hiring freeze. Luckily, we can finally welcome three of the new hires who have recently started work!



Ellen Lee, MSN, CRNA:

Ellen joined the department's team of nurse anesthetists in May. Ellen was born and raised in Atlanta, Georgia, and received her BSN from Southern Adventist University in Chattanooga, TN. After working in a vascular and thoracic ICU in Orlando, FL, and in the neuro ICU at Vanderbilt University,

she went on to complete her MSN at the Middle Tennessee School of Anesthesia near Nashville, TN. After graduating, Ellen relocated to the Pacific Northwest and worked in a small anesthesia group in Portland, OR. Ellen recently moved to Los Angeles to be closer to family and friends due to the pandemic, and is excited to explore her new home! In her free time, Ellen loves spending time with her dog, Macy, looking for new places to eat on Yelp, and relaxing on the many beaches that Southern California has to offer!



Tseganesh Haileselassie, MSN, CRNA:

Tseganesh is originally from Addis Ababa, Ethiopia. She earned a Bachelor of Science in Medical Technology degree from the University of Maryland, and worked both in clinical and research labs before going back to school to pursue nursing. Tseganesh worked at the UCLA Medical

Center 4 East CCU, and then earned her Master's in Nurse Anesthesia from USC. She has been practicing as a nurse anesthetist for ten years at Loma Linda University Medical Center. Tseganesh lives in Westwood with her anesthesiologist husband and their three children. When not working, she enjoys cooking and spending time with her family.



Cynthia Leaks, MSN, CRNA:

Cynthia grew up in Amarillo, Texas, and earned a Bachelor of Science degree from Baylor University. She followed her fiancé to California, and then completed her BSN at Mount Saint Mary's College. She worked at Kaiser Permanente Sunset, and then earned her Master's in Nurse Anesthesia

from USC. Cynthia has been practicing at Loma Linda University Medical Center for the past five years before joining UCLA in June. Cynthia lives on the USC campus with her husband and their two children. She loves to watch movies and shop on Amazon.





Ana Armenta, Gillian Quian, Gloria Nakyeyune, and Brianna Ortbals

Despite the challenging year, our CRNAs always found a way to keep learning and educating our UCLA team members. Four of us (Gloria Nakyeyune, Brianna Ortbals, Ana Armenta, and Gillian Quian) gave an anesthesia machine lecture to the anesthesia technicians and hospital assistants at the Jules Stein Eye Institute. The staff members were very appreciative and felt that they were better able to understand anesthesia machines and how to troubleshoot them in emergencies!

UCLA's CRNAs are involved in teaching opportunities both on campus and off campus. Nurse anesthesia students at the University of Southern California are taught a variety of clinical skills at LA County + USC hospitals. Recently, Gloria Nakyeyune, Gillian Quian, Brianna Ortbals, and Erica McCall volunteered to help the students at a simulation lab for central line and arterial line placements. Sarah Colosimo and Gillian Quian presented a session on pediatric airway emergencies for the perioperative staff at Santa Monica Hospital, and Gillian Quian gave a lecture on malignant hyperthermia for the perioperative staff at the Westwood Ambulatory Surgery Center.

This year the department added one nurse anesthetist to every Saturday shift at Ronald Reagan Medical Center to assist with the increased caseload on the



Teaching at Jules Stein Eye Institute



Saturday MD-CRNA call team with Jim Moore, Christopher Weitekamp, Gloria Nakyeyune, Brianna Ortbals, Reza Borna, and Michael Sopher

weekends. In addition to this shift, three of us (Chris Weitekamp, Gloria Nakyeyune, and Brianna Ortbals) volunteered to help out on the Saturday of the annual Resident Retreat in May. To quote interim team captain Brianna Ortbals: "My three phones and pager didn't stop ringing for twelve long hours! I was exhausted, but it definitely gave me more respect for board runners and team captains!"

Our social events sadly were very spaced out this past year, literally and figuratively. We managed to have a bike ride and beach meet-up, socially distanced, in the fall of 2020. Fast forward to spring — our team finally met up for a happy hour at Santa Monica Brewing Company. We have another beach day planned and are looking forward to department-wide social events such as the upcoming Dodgers games!



A rare chance to socialize

Our wellness coordinator, Lauren Fagan, put together goodies for all the CRNAs during National CRNA Week in January, and the department contributed Amazon gift cards. The wellness coordinator sends out "Wellness Wednesday" tips to the CRNA group to help encourage one another and to remind each other of the importance of taking care of mental, physical, and spiritual health. Lauren and Gillian Quian also schedule Zoom happy hours once a month to connect after a long day at work.

The CRNA team continues to grow, collaborate, and adjust to the constant curve balls thrown our way. We are excited to be a part of the UCLA family and make a difference in our patients' lives daily.



Beach yoga



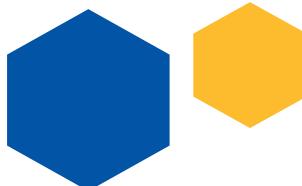
Candy to celebrate National CRNA Week



Mugging with mannequins at the Simulation Lab



Gena Dix backpacked the Trans Catalina Trail -- 40 "strenuous but beautiful" miles!



Administrative Staff Update

By Shevaughn Marchese

Staff Recognition

Thanks to enthusiastic support from their colleagues, several of our dedicated administrative staff members received shout-outs on our MS Teams Administrative Staff Recognition Channel. Conceived earlier in 2021 by the Staff Recognition Committee, the recognition channel is part of a four-tier recognition plan for administrative personnel. Read more about the plan on page 53 of our Winter 2020-21 edition. All members of the administrative group are encouraged to express gratitude or send praise to colleagues on our group MS Teams Recognition channel. Additionally, each month, the committee enters the names of everyone recognized by their peers in a prize drawing at our monthly staff meeting. Sally Alvarez-Decordova, Kathy Hercules, Susan Kim, Jessyka Delgado, Darnell Bagsik, Areli Gonzalez, Eli Paray, Kristin Christian and Quenesha Caballero won prizes at recent meetings.

The third tier of the program allows faculty, residents, fellows, and researchers to nominate administrative staff members for semiannual recognition awards. All 31 administrative staff members received nominations! The committee randomly selected four prize winners: Christine Than, Areli Gonzalez, Quenesha Caballero and Patsy Olivo.

At our first Administrative Staff Retreat on May 27th, the committee recognized the entire team, spotlighting each person and reading one of the recognition nominations they had received. This fourth and final tier gives each person an opportunity to shine and be celebrated.

The Administrative Group also values balance – Bruin Pause Sweeps, our monthly sweepstakes to promote breaks during the workday, is still popular. Recent winners were Jennifer Scovotti, Quenesha Caballero, Areli Gonzalez, Jessyka Delgado, Sally Alvarez-Decordova, Eli Paray, Olivia Vallejo and Knarik Piloyan.

Celebrating Years of Service

Time flies when you're having fun! Olivia Vallejo celebrated 10 years, and Wendy Ma, 15 years of service to UCLA in February. **Stephanie Fisher** achieved 20 years of service in June, and the administrative staff joined our monthly all-staff meeting with "Purple Rain"

Zoom backgrounds to share our congratulations!



A Zoom screenshot from Stephanie Fisher's "Purple Rain" party

Milestones



Congratulations to business office analyst **Knarik Piloyan**, who completed an Executive Master's degree in Health Administration at USC and celebrated at an in-person graduation. She plans to use the new skills and knowledge she acquired to grow her career.



We love celebrating our family members' milestones, as well.

Yazmin, daughter of Carla

Gonzalez, graduated from

Canyon High School with

Academic Achievement this summer. Yazmin is interested in pre-medical studies. She currently attends College of the Canyons and plans to transfer to a university – preferably UCLA!

Congratulations, Yazmin!



Just five days after her 11th birthday, **Talia**, the daughter of **Quenesha Caballero**, graduated from the 5th grade at ICEF View Park Preparatory Elementary and Middle School. The family celebrated with a late lunch/dinner at the Sugar Factory. Next, Talia moves on to Marina Del Rey Middle School and Performing Arts Magnet with a focus on dance and theater. We can't wait to see what she'll do next!

At The End Of a Long Day (Or Night), It's Great To Come Home To Our Families and Pets!





























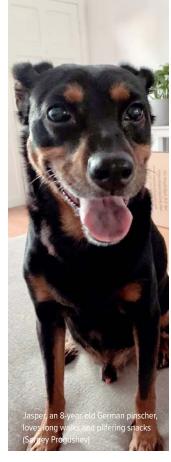














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PLEASE ADDRESS THE ENVELOPE TO THE ATTENTION OF: Stephanie Fisher, Chief Administrative Officer

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!

