Department Helps New ZSFG Deliver Perioperative Improvements

The changes underway at Zuckerberg San Francisco General Hospital and Trauma Center (ZSFG) begin with the spectacular new physical space. "But the new space also reflects a system-wide effort to enhance patient access and improve care at ZSFG. Physicians from the Department of Anesthesia and Perioperative Care area have been instrumental in the transition and in driving change in a number of key areas," says Jim Marks, MD, PhD, the hospital's chief of the medical staff.

The stories below offer a few examples.

Complex Transition to the New Operating Rooms Proves Successful

As exhilarating as it's been to move to the new hospital, preparing the clinical staff to smoothly transition its operations was an enormously complex challenge. "When the clock flipped from 6:59 to 7:00 AM on May 21, 2016, we had to move from our last case in the old hospital to being ready to handle a potential major trauma – like an airplane crash – in the new hospital," says the ZSFG's medical director of the anesthesia workroom, Stefan Simon, MD.

Thankfully, there was no airplane crash that morning, but the transition in the operating rooms (ORs) and perioperative area was smoother than anyone could expect.
Message from the Chair

Addressing an Epidemic

Since the Institute of Medicine (now the National Academies of Sciences, Engineering, and Medicine) released its sentinel 2011 report, “Relieving Pain in America: A Blueprint for Transforming Prevention, Care, Education, and Research,” there has been growing nationwide recognition of the public health challenges associated with chronic pain and the attendant opioid epidemic, as well as the need for a truly interprofessional approach to tackle these problems. In this issue, we describe some of the interdisciplinary efforts made by the Anesthesia Spine Surgery team with UCSF Spine Surgeons to reduce the postoperative pain and opioid burden for our spine surgery patients. Our faculty have also been instrumental in the successful build and launch of the new Zuckerberg San Francisco General Hospital and Trauma Center, including its new comprehensive pain clinic, now offering underserved patients with access to a full menu of pain relief options while minimizing addiction risks. Several of our faculty members’ 2016 peer reviewed publications (see page 21) also reflect these efforts.

Our team-based transdisciplinary approach to improve patient safety and the patient-centered care of critically ill patients in the UCSF ICUs is highlighted in our Emerge story. As part of these endeavors, the innovative Emerge application, which aggregates data from patients’ electronic medical records with patient and family input was created, along with a patient-family advisory council and the Critical Care Innovations Group website, providing resources for care givers, patients, and families.

The critical role of certified registered nurse anesthetists (CRNAs) in the team-based care of both pediatric and adult surgical patients is described in our CRNA story.

With our focus on interprofessional and team based patient care comes the recognition that we must always strive to provide a supportive, collaborative, and open environment for our faculty, trainees, and staff. In addition, the Department is firmly committed to having a workforce and trainees that reflect the diversity of the San Francisco Bay Area. To that end, we highlight the work by Anesthesia faculty member Jennifer Lucero in her role as Director of the Undergraduate Research Internship in anesthesia, which aims to attract and support underrepresented groups to medicine. Work by our faculty well being committee and a highlight of staff member Carlos Carrillo are also featured in this issue.

Finally, we describe the establishment of the Mark Rosen Education and William Young Research endowments, intended to support the teaching and research careers of junior to mid-career faculty. We are delighted to share these updates with you and look forward to your comments and ongoing support of our department and university. We hope to see many of you at the ASA in October. Details about our alumni reception can be found on page 28.

Michael Gropper, MD, PhD
Professor and Chair
reasonably expect, in part due to the efforts of Simon, Perioperative Medical Director Jens Krombach, MD, and Krishna Parekh, MD, who took special assignments to work on a number of specific aspects of the transition.

“We were a team,” says Simon, noting that Parekh handled everything from setting up simulations in the new hospital to helping determine where to place various types of equipment and that Krombach created an extensive plan for patient flow in the new hospital’s many anesthesia work places.

The process began with a detailed analysis of how to achieve a safe and successful transition without a so-called “soft opening” of the new hospital. “With the flip of a switch, we had to be ready to run 6 or 7 ORs and every anesthesia provider had to be familiar with the new equipment – monitoring equipment, anesthesia machines and computer systems – as well as the layout of the new building, the new rooms, the new patient flow, how patient transport would work and the new communication system,” says Simon.

A Methodical, Multi-Pronged Approach

The team decided to take a multi-pronged approach over the course of the few months leading up to the day of the move. Once they had worked out the preliminary details about the layout of the ORs, the anesthesia workroom and patient flow – and had access to the new hospital – they designed three morning-long sessions where providers could move from station to station and receive training on all the new equipment. Part of the training involved simulations: What if a patient comes in with a gunshot wound to the chest? How to handle a pediatric patient who enters from the emergency department? How would a patient be transported to get an MRI? Which elevator would they use?

“The anesthesia equipment alone was a real challenge, because it is substantially different from what we’d been using in the old hospital,” says Simon. Therefore, the team didn’t stop at simulations, but created three new anesthesia workstations in the old hospital. This made it possible – once they’d completed their simulation training in the new facility – to use the equipment with live patients and fine-tune the setup.

“Every anesthesia provider, including the anesthesia technicians, needed to fulfill the training for all new equipment,” says Simon.

In addition, the team created a “treasure hunt” in the new building, so that whenever work slowed in the old facility, providers could go to the new building to continue to familiarize themselves with the new rooms, layouts and workflow implications.

Finally, the team coordinated its work closely with the many different departments at ZSFG to troubleshoot any and all potential problems.

“Our goal was to eliminate as many hiccups as possible before we made the move,” says Simon. “It was a process of constant problem solving and working as a team and was important because every time we looked at a problem, something would arise that some of us had not thought about at all.”

When the first urgent case appeared for the new hospital – at 10 AM on May 21 – the team felt ready. Simon says, “Getting to a smoothly oiled machine will take months, but it was gratifying that we were fully functional and ready to safely operate at the time of the move.”

More Resources, Improved Design, Enhanced Access for Trauma and Preoperative Care

In addition to being the city’s safety net hospital, ZSFG is San Francisco’s trauma center. Marc Steurer, MD, director of Trauma Anesthesiology at ZSFG, says the new hospital does a remarkable job of accommodating modern patient flow in ways that simultaneously enhance efficiency and patient care. Among the improvements:

- The ambulance bay is just feet away from the trauma resuscitation room.
- The CT scanner is right next to the resuscitation rooms.
- A dedicated elevator transports patients to the operating rooms (ORs), interventional radiology or the intensive care unit (ICU).

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The trauma OR has a large footprint, state-of-the-art equipment and an adjacent blood bank.

A hybrid OR gives clinicians the ability to do both surgical and interventional radiology procedures.

The dedicated trauma ICU has larger, well-equipped and light-filled rooms.

“All of these resources eliminate a lot of hurdles and barriers, allowing us to focus more on our patients,” says Steurer.

Perioperative Process Improvements Center on Patient Needs

Other improvements have been in motion for a few years now – and the new facility enhances those improvements.

Take perioperative care. About three and half years ago, Laura Lang, MD, medical director of ZSFG’s preoperative clinic saw an opportunity to implement a number of innovations that could increase access to care for underserved patients while improving patient outcomes and patient satisfaction. Led by experienced attending physicians, nurse practitioners and registered nurses – and consistently one of the highest performing clinics at ZSFG, with only 8 percent no-shows per month – the clinic was well-positioned to identify opportunities for change and implement them.

One of the first things Lang and her colleagues did was opt to see every patient scheduled for elective surgery in person, rather than only seeing high-risk patients in clinic and doing the rest of their screening by phone, as is common in other hospitals.

“In person screening is more effective for many of our patients,” says Lang. “For example, we can be much more effective in preparing patients for surgery who don’t speak English or need pre-operative testing. And for those who have had limited access to healthcare, we can do a full work-up and then get them connected to health care providers and, where necessary, social services.”

Such an approach also has a financial advantage in that it decreases cancellations and their associated costs, while reducing patient wait times. Lang and Steurer believed the reduced wait times would increase patient satisfaction.

To find out – and to give patients a voice – in January 2016 they implemented a survey in the clinic to close the loop on patients’ experience. “The data shows a direct correlation between how likely a patient is to recommend us with how satisfied they are with their wait time and instructions,” says Steurer.

Larger Space, Creative Solutions

All of this work will bear even more fruit when the preoperative clinic moves into a larger, self-contained space in the fall of 2016 to accommodate increased volumes. At the moment, it shares space with other surgical services where the waiting room and check-in process is centralized. “When we have our own waiting area and check-in desk, we expect to be able to improve workflow and further improve wait times,” says Steurer.

But he and Lang have not limited their innovations to onsite services. “One of the things we’ve discovered is that sometimes our patients can’t show up due to limited transport – they don’t have a car and can’t afford bus fare on any given day,” says Lang. “So we’ve created a partnership with Lyft where we will offer department-sponsored rides back and forth to our patients who need it on the days of their preop exam and surgery.”

In fact, the Lyft program is part of a comprehensive effort to provide services across the entire spectrum of care. “The preop clinic is a logical connection point in the perioperative episode,” says Steurer. “We are in a position to become more of a perioperative guiding entity by doing everything from helping to decrease infections to coordinating postoperative respite at home.”

Bringing Comprehensive Pain Management to ZSFG’s Underserved

It’s an interesting time to be a pain physician.

On the one hand, demand is intense. With about 100 million Americans suffering from chronic pain, outpatient clinics are overflowing. Meanwhile, inpatient settings are under regulatory pressure to ensure adequate pain control.

“We are in a position to become more of a perioperative guiding entity by doing everything from helping to decrease infections to coordinating postoperative respite at home.”

— Marc Steurer, MD

Laura Lang

Marc Steurer

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Yet even as physicians try to address these demands, epidemic levels of opioid abuse and overdose deaths have dominated the headlines. An article in the August 2015 issue of the Journal of Urban Health reported that from 2010 to 2012, 331 people in San Francisco died from accidental opioid overdose, most of them from prescription opioids – and these cases disproportionately affected the city’s poorest residents.

Anesthesiologist and pain physician Arthur Wood, MD, is determined to offer his patients access to a full menu of pain relief options while minimizing addiction risks. He leads what is rapidly becoming a comprehensive pain management center at ZSFG, where many of the city’s poor receive their care.

Expanding Capacity

Wood arrived at UCSF in 2015 as the first physician on the ZSFG staff to have completed the Accreditation Council for Graduate Medical Education’s (ACGME’s) anesthesiology pain fellowship. His vision was to extend ZSFG’s pain clinic hours beyond a half-day a week and to bring together a full complement of pain management services in one place, including medications, injections, integrative medicine approaches, cognitive-behavioral therapies and procedures. He has moved quickly to realize this vision.

“We’ve co-located our pain clinic with our already established outpatient preoperative clinic and extended it to two half days a week, which has already reduced wait time,” says Wood. “And we’ve successfully recruited and hired two pain-fellowship trained anesthesiologists who will enable us to move to five full days a week some time in the fall of 2016.”

He is confident that demand will justify that level of expansion, in part because transitioning to an electronic referral system – which has made it easier for primary care physicians to get their patients into the clinic – quickly resulted in a doubling of volume.

“We are monitoring whether those increases continue, but given the number of people that suffer from chronic pain in San Francisco, I believe they will,” says Wood.

In anticipation, the pain clinic has secured a new and larger space, which will facilitate an improved patient experience that includes more reductions in wait times and the ability to see multiple providers in one visit.

“We also can do ultrasound guided pain injections in the new space – and will continue to do fluoroscopic-based injections in the operating rooms,” says Wood.

At the same time, he is looking to bring additional services into the clinic, so providers can more easily communicate about complex patients. The possibilities include: the Healthy Spine Clinic, which is staffed by two experienced nurse practitioners; a pharmacist who is helping to develop medication tapers; addiction medicine physicians; onsite physical therapists; and, possibly in the future, the department’s expert in neurostimulation.

In addition, Wood and his colleagues are capturing patient-reported outcomes using the NIH’s PROMIS measures of pain, function, sleep and anxiety to help refine the services they offer to patients.

“We expect this to be a one-stop shop that offers our often underserved patients access to all of the latest treatments for pain,” says Wood.

“We expect this to be a one-stop shop that offers our often underserved patients access to all of the latest treatments for pain.”
— Arthur Wood, MD

ZSFG

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Improvements in Patient Safety and Patient-Centered Care Emerge in UCSF ICUs

In 2012, UCSF Department of Anesthesia and Perioperative Care Chair Michael Gropper, MD, PhD, was called to a meeting with UCSF Chancellor Sam Hawgood and a representative from the Gordon and Betty Moore Foundation. The Moore Foundation representative believed the ICU could be an ideal place to study changes aimed at improving hospital efficiency, outcomes and patient satisfaction – priorities in today’s era of value-based care.

For more than a decade, Gropper had been among those leading efforts to improve ICU care across the country. The meeting offered an opportunity to catalyze and provide an evidence base for the changes he and others were pursuing, including the Society of Critical Care Medicine’s ICU Liberation campaign.

The Moore Foundation decided to fund efforts at UCSF and Johns Hopkins Hospital. Emerge became UCSF’s flagship project and the UCSF Critical Care Innovations Group (CCIG) identified seven focus areas:

1. Preventing central line associated bloodstream infections
2. Preventing ICU-acquired weakness
3. Protecting against delirium
4. Preventing ventilator-associated harms and infections
5. Preventing venous thromboembolic disease
6. Meeting patients’ goals of care
7. Promoting respect and dignity

Because Gropper believed achieving these goals depended on creating a team-based culture in which everyone in the ICU has the opportunity to maximize their contribution, he envisioned Emerge as a transdisciplinary project that would bring together physicians, nurses, pharmacists, respiratory therapists, physical therapists, engineers, administrators, patients and families. Along with ICU clinical nurse specialist Hildy Schell-Chaple, RN, MS, PhD(c), CCRN, CCNS, FAAN, who Gropper calls “an expert clinician and academic who excels in creating bridges that make the huge leap from ideas to implementation,” the two initiated a project with four primary elements:

A patient-family advisory council (PFAC), which is one of the first such ICU-specific advisory groups at UCSF. “The PFAC meets once a month so that patients and families can tell us their experiences and provide input on how we can improve what we do,” says Denise Barchas, RN, MSN, PHN, a veteran ICU nurse who is Emerge’s project director.

A comprehensive, unit-based safety program (CUSP) that empowers frontline ICU providers to quickly address safety concerns and facilitates teamwork and communication.

The CCIG website, which provides important resources for ICU providers, patients and families.

The Emerge application, an innovative and evolving piece of software that can be used on any computer or iPad in the ICU. It feeds aggregated patient data into an easy-to-read, color-coded interface that alerts the ICU team to any concerns about the patient’s care.

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The Patient-Family Advisory Council

“Bringing in the voice of the patient has been critically important,” says intensivist Kevin Thornton, MD. “They’ve helped us build systems and mechanisms that ensure they receive care that is consistent with their goals while being treated with respect and dignity – things not traditionally considered in the quality world.”

One of the PFAC’s first contributions came as the CCIG was developing the patient portion of the web site. “They ripped it to shreds and helped us understand the patient portal was a unique way to get information that can help us really change what we do,” says Thornton.

The PFAC has also helped change the way clinicians communicate and interact with families.

“In medicine we often avoid explicit discussions of death and the process of dying,” says J. Matthew Aldrich, MD, director of adult critical care medicine at UCSF Medical Center. “But the PFAC families have told us that death is on their mind from the moment they enter the ICU and they want to know about some of the practicalities when someone dies.”

Similarly, physicians tend to believe that families don’t want to watch their loved one have a procedure done to them but the UCSF PFAC has made it clear that families often want to be present.

“This can create anxiety for clinicians and raise concerns about patient safety, but it also can be helpful to us and is important to families,” says Thornton. “It is a change though – and especially in a teaching institution, it means that we have to be very clear ahead of time about what families can expect to see and hear.”

“Elevating these patient-centered ideas helps us fight the depersonalization that can occur in the highly technical environment of the ICU,” says Gropper. “We’ve begun recognizing that a patient is not just a 70-year-old male with pneumonia and sepsis, but a retired teacher surrounded by a concerned family…this might be the most important thing that will survive out of this.”

Comprehensive Unit-Based Safety Program

The comprehensive unit-based safety program (CUSP) builds on the concept of putting patients and families first. It is different from traditional QI efforts because, “It is not one concentrated effort on one concern, but creates an apparatus that empowers frontline clinicians to help prevent numerous harms,” says Thornton. “That makes our ICU a much safer place.”

In the UCSF ICUs, clinical staff receive training on how to look for, report and act on anything they believe threatens patient safety. To help, the CCIG has placed cards strategically throughout the units, which remind people to consider ways to reduce potential harms.

“If something pops up, we just fill out a card and then look at these issues right away if it’s an immediate concern or at our monthly meetings,” says Barchas. Staff members have instigated changes about everything from loose cords and how drugs are labeled to how patients are transported.

“An increasing amount of research indicates that simply paying attention can make a big difference,” says Gropper, noting that empowering people enhances their ability and motivation for making positive contributions. “We have all of these amazing people with different skill sets. Why shouldn’t rounds start with the nurse, who knows exactly what’s going on with the patient right now? Why shouldn’t the pharmacist contribute? Why shouldn’t professionals besides the physician have certain order sets that allow them to practice to the top of their profession? It’s an opportunity for all of us to shine.”

CCIG Website

The CCIG website furthers patient safety goals by providing resources for clinicians as well as patients and families.

The site includes a checklist for families to prepare for their arrival at the ICU, and a wealth of information about the providers they’ll encounter, procedures they can anticipate during their stay, and how to cope with life after discharge.

“We realized that using the site to educate family members about the culture of the ICU could have enormous benefits,” says Thornton. “They might see 30-plus clinicians in a day and it can all be very confusing. Our hope is that by

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providing information for family members, they can become better advocates for their loved ones.”

**The Emerge App**

The final piece is the Emerge app, which aggregates essential information and feeds it into a user-friendly interface—a color-coded “harms” wheel broken into the seven key elements of optimizing care in the ICU.

“It’s an easy way to focus our attention on what’s important,” says Barchas. “When something is red we can click in and get the necessary information about what has and hasn’t been done. Does the patient need a medication? Need to ambulate? It’s a good reminder that makes sure we address all of our key goals.”

A patient and family version of the app feeds into the clinician app so clinicians have more insight into the patients’ goals of care, how family members are willing to participate in caregiving and a better sense of who each patient is as an individual.

“What we’re working on now is how using the app affects workflow because it can’t make rounds longer,” says Gropper. “Our expectation is that it can shorten rounds, in its final state.”

“No Silver Bullets”

Despite the successes to date, any effort of this type inevitably takes time and is rarely a smooth road. Some of the bumps have to do with debugging the technology, some with changing long-ingrained behaviors.

Intensive, ongoing staff, patient and family engagement has been one important aspect of overcoming hurdles. “For example, nurse superusers help other nurses understand how investing time in doing some of these things will actually make their jobs easier,” says Barchas.

Now, says Aldrich, it’s time to examine results in some of the harder-to-achieve categories. “We were already good at preventing clinical harms like central line infections and pneumonia, but we have to see if we can get real gains in things like workflow efficiency, patient satisfaction and family engagement, more challenging domains in part because the metrics aren’t as good,” says Aldrich.

One focus has been on time-in-motion studies that examine workflow, especially during rounds. “Rounds have evolved into a time when we communicate essential information among a team about a patient who is critically ill,” says Thornton. “Now, with the amount of data and information available, we think there’s room to realign the paradigm and the app can help.”

“Rounding is where we think we’re getting the biggest bang for the buck,” says Barchas.

The CCIG is also looking at the patient-family experience through surveys and discussions with PFAC to see if they are indeed doing better at meeting the patients’ goals of care.

“This has been an amazing project because it’s not a new drug or medical device,” says Gropper. “It’s about things like using less sedation, getting patients off the ventilator, getting them mobile, washing our hands. There’s nothing glamorous in those things and no one gets rich, but it’s where the biggest successes are in all of medicine.”
As medical schools continue efforts to increase their enrollment of underrepresented racial and ethnic groups, most have recognized that having faculty members with an intimate understanding of the challenges ahead is essential.

Anesthesiologist and obstetrician Jennifer Lucero brings a lifetime of experience to this effort at the UCSF Department of Anesthesia and Perioperative Care. She has been the central figure in the creation of an undergraduate research internship in anesthesia and in the creation of programs for anesthesia residents who identify as underrepresented in medicine (UIM).

Bringing Firsthand Understanding

Lucero grew up in southern California, a first generation college student from a large Latino/Native American family. She wound up navigating Cal State Northridge, Yale Medical School, residencies at UCSF in both obstetrics and anesthesia and an obstetric anesthesia and anesthesia research fellowship.

But it wasn’t easy. Through those years, she experienced firsthand the many challenges facing UIM students and physicians, including open stereotyping, unconscious bias and the nagging belief that the worlds of medicine and research are reserved for those who are white and privileged.

“It didn’t matter that my family thought I was smart or how I am perceived in the white world, I carry all the burdens of being a person of color,” says Lucero. “In my mind, I’ve too often believed I’m not smart enough…not cut out for this.” Lucero managed to work through that feeling, but many UIM students don’t and turn to other professions.

This helps explain why Lucero is so passionate about the undergraduate research internship (URI) in anesthesia. Part of a broader, joint program with Kaiser Permanente that the Department of Obstetrics initiated and leads, the URI offers undergraduate students from UC Berkeley mentorship, shadowing opportunities, research experience, and a virtual handbook for how they can make it to and through medical school.

Expanding the URI

Lucero’s first contact with the program was in 2010, after she had finished her anesthesia residency and was doing her OB-Anesthesia and research fellowships. At the time, she began teaching an informal class that wound up being about the nuts and bolts of applying to medical school, including practical questions about the debt incurred, which Lucero says can be “terrifying.”

She continued in the program as it began to grow and other departments joined. She also became more involved with medical school admissions, where it struck her that once in medical school, very few UIM students even consider becoming a specialist, perhaps because many have had little or no exposure to medical specialties. “I know I didn’t,” she says. “I had no idea.”

This realization drove Lucero to focus her efforts on attracting UIM students to anesthesia.

Creating a Place to Let Your Hair Down

She says that aside from the practical education, one of the most important ways the URI helps achieve the goal of greater diversity is that the students develop a camaraderie that takes them far beyond their internship and helps them sustain their interest in medicine.

“It’s so important, to create a safe zone, because even in a liberal area like this, it can be hard for people who haven’t lived through it to understand the world these students walk in,” says Lucero. “Medical school and residency are hard enough, without this additional cognitive load and because you have all of this baggage, you need more than validation from the majority community; you need your own community, a place where you can detox, let your hair down and talk about these things.”

With that in mind, Lucero has gone beyond the URI to create a UIM welcome event and quarterly dinners for incoming anesthesia residents.

“It’s all about the pipeline,” she says. “About getting more students of color through medical school and getting them excited about anesthesia early on.”
How have advances in spine anesthesia contributed to the dramatic upswing in the number of deformity surgeries for older adults?

Fifteen years ago, we thought 60 was old for spine surgery, but today, 70 is the new 50. 70-year-olds are healthier and more active than they used to be, so rather than be debilitated from spine-related problems, they opt for surgery. Part of why we can offer that surgery is attributable to new surgical techniques and implants, but part of it is that advances in spine anesthesia have enhanced patient safety and improved functional outcomes. Three areas are particularly important: Doing a better job of controlling blood loss, optimizing neurological outcomes and improving pain management while minimizing the use of opioids.

In the last 20-25 years, research has helped us dramatically reduce bleeding during spine surgery. It began in the early 1990s, when our spine team – one of the first dedicated spine anesthesia teams in the country – began pushing the envelope on how low we could safely take patients’ blood pressure. Later, we moved to the use of pharmacologic agents that decrease blood loss; most recently, we’ve been using antifibrinolytic agents that stabilize clots so they last longer. Though there are still some arguments about optimal dose, and caution is advised for patients with coronary disease and those at risk for stroke, these drugs have shown themselves to be extremely safe and have become the standard of care at many centers around the country.

These days, thanks to reductions in blood loss, fewer patients need to go to the ICU after spine surgery, and we see shorter stays and fewer infections – especially important for older adults who are at greater risk.

We have also been developing and pioneering the use of advanced neuro-monitoring for spinal cord and spinal nerve protection, most notably through the use of motor-evoked and sensory-evoked potentials. During spine surgeries here, a neurophysiologist actively monitors nerve pathways and if we see something that might affect motor function, we can inform the surgeon and he or she can undo what they did. We believe we’ve seen reduced incidence of nerve injuries and reduced severity when they do occur. Together with surgeons here, we’ve produced many papers that describe how to optimally use these techniques.

Finally, there’s pain management. Historically we used to admit many patients to the ICU after surgery in order to manage uncontrollable postoperative pain. In addition, a high percentage of spine patients experience chronic pain and the older one gets, the more debilitating pain becomes because most of us lose our ability to compensate and deterioration occurs faster.

So we’ve worked hard to find new ways to get spine patients – particularly older spine patients – through surgery in such a way that their acute postoperative pain is manageable and they avoid chronic pain down the road, all the while minimizing the use of opiates, something of great concern today. We have become incredibly aggressive in using drugs that reduce the need for narcotics after surgery. The added benefit is that reducing the narcotics also seems to reduce postoperative delirium in our older patients. [Jacqueline Leung, MD, is the department expert in understanding the connection between anesthesia and postoperative delirium.]

In particular, we will routinely give preoperative patients opiate-sparing agents, such as gabapentin. We will often use ketamine intraoperatively. For too long, people resisted the use of ketamine out of fear of potential side effects, but at the doses we give it is incredibly safe and the net benefit far outweighs the risk: patients who get intraoperative ketamine need less pain medication six weeks after surgery than those who don’t get the ketamine. Where appropriate, we will also use lidocaine infusions, magnesium and dexamethasone – and we maximize the use of acetaminophen, always seeking effective alternative analgesics. We also are working closely with the acute pain service to develop an ERAS (enhanced recovery after surgery) pain pathway that we hope to standardize to improve patient outcomes long after they leave the hospital, all of which is especially important for our older patients.
"Medicine is different now and people are much more aware of creating a life-work balance," says Dorre Nicholau, MD, PhD, and UCSF Department of Anesthesia and Perioperative Care's vice chair for Professionalism and Well-Being. She says a combination of factors – including efficiency pressures, nonstop change and a generation of physicians with a different mindset and expectations – have shifted the focus.

With that in mind, Nicholau leads a faculty committee in an effort aimed at creating a more accommodating on-site environment as well as avenues for faculty to get the most from their time away from work.

"We've set some things in motion and are working with the administration to see what else we can get done," says Nicholau.

The Work Environment

On the job, the primary focus has been on reducing stress and fatigue while creating closer ties within the department.

For example, anesthesiologist Kerstin Kolodzie, MD, PhD, recommended a yoga class and when she got the go-ahead, worked with Nicholau, Department Chair Michael Gropper, MD, PhD and UCSF Fitness and Recreation to arrange a free, twice-a-week class.

"There's been steady attendance by a group of faculty who really like it," says Nicholau. She and her team have also added an acupuncture class on Friday afternoons for relaxation and pain management, as well as monthly departmental lunches.

"The lunches are a rare opportunity to be together as a group," says Nicholau.

Creating Scheduling Options to Optimize Time Away from Work

Perhaps a more complex challenge than on-site concerns has been finding ways to optimize physicians' time away from work without breaking the bank or making scheduling unmanageable.

To make it easier for those going on maternity or paternity leave, the group has created a simple, online chart that outlines the different options and their implications for disability leave, reimbursement and advancement.

The group has also proposed awarding additional nonclinical days for attending educational meetings – a challenge for a department in which most physicians carry a particularly heavy clinical load. Other possibilities include allowing people to bank their nonclinical days so they don't feel pressured to use what they've accumulated in one constrained time period and creating staggered shifts to help those with obligations like getting children off to school.

"Though all of these options can potentially cause some scheduling headaches, they do give faculty more control over their schedules and Dr. Gropper has been very responsive to trying to work things out," says Nicholau.

Dorre Nicholau (left) leads an effort to offer stress-reduction options for faculty, including twice-weekly free yoga classes and monthly departmental lunches.
Certified registered nurse anesthetists (CRNAs) have long played a vital role at UCSF Medical Center. New hospitals at Mission Bay and limits on the number of residents, faculty hires and resident work hours have only enhanced the importance of these highly skilled professionals.

As evidence, there are now 42 CRNAs practicing between the Parnassus, Mission Bay, Mt. Zion, and Orthopaedic Institute campuses, says Leigh-Ann Langford, Lead CRNA for the UCSF Department of Anesthesia and Perioperative Care.

A Move Into Pediatric Anesthesia

The increased demands have also caused the department to hire two dedicated pediatric CRNAs and to institute a national search for two pediatric cardiac CRNAs. “This is a first for UCSF and we will be one of only a few academic medical centers in the country to have pediatric cardiac nurse anesthetists in those roles,” says Langford. Scott Schulman, MD, MHS, chief of pediatric cardiac anesthesiology, has been instrumental in this pioneering initiative, having worked frequently with pediatric cardiac CRNAs while he was at Duke University Medical Center.

Given the UCSF Department of Anesthesia and Perioperative Care’s national and global leadership, Langford anticipates other institutions will ultimately follow suit by using CRNAs with their pediatric and pediatric cardiac populations.

Increasing Specialization, Professionalization, Recognition

Langford says that using CRNAs in the pediatric cardiac setting is an example of the innovative culture at UCSF and that department Chair Michael Gropper, MD, PhD, who has worked closely with CRNAs for years, has been a visionary in finding creative new ways to make use of their skill set.

“UCSF CRNAs have a long track record of exemplary care in the adult clinical setting, and are a fiscally responsible way to help meet the clinical, educational and research challenges of operating an academic medical facility,” says Langford. They are also leaders in their field, having delivered local, national, and international presentations, including at UCSF’s Changing Practice of Anesthesia conference.

The expanding roles are happening at a time when CRNAs around the country are enhancing their discipline’s reputation through such innovations as pain fellowships and the creation of a Doctorate of Nursing in Anesthesia Practice. “At UCSF, we now have five CRNAs who have completed their doctorates, and the American Association of Nurse Anesthetists will require a DNAP in order to enter the profession by 2025,” says Langford. “All of these things have enabled our profession to garner new levels of recognition for the value we deliver to health care.”
Long before joining the UCSF staff 25 years ago, Carlos Carillo was a baseball fanatic, having played in high school and, later, for a semi-professional team. Born and raised in the city’s Mission district, Carillo is also a lifetime fan of the San Francisco Giants.

So in 1989, when he heard the Giants were hiring extra ushers for the World Series, he managed to secure one of the jobs. It didn’t take long before it became more exciting than he could have expected. Standing in the right field corner at Candlestick Park before game three, Carillo felt a shake. “At first, I didn’t think anything of it – there were a lot of forklifts driving around hauling bags of ice – but then I heard someone say ‘earthquake,’” he says.

As any Bay Area baseball fan knows, the game was called off and the stadium evacuated. Though Carillo was as upset by the incident as anyone else, it didn’t deter him from pursuing more permanent work with the team. He became an usher and held the job for the next couple of years until he found a fulltime job with the phone bank for a UCSF HIV-AIDS project.

Within a few years, though, Carillo’s daughter Clarissa was born – his son Carlos arrived three years later – and looking to find a way to pay for private school, Carillo thought again of the Giants, this time as a moonlighting position to help make ends meet.

Monitoring the Field

The Giants quickly rehired him as a field supervisor on the security team, a job he’s held ever since. This season is his twenty-first and he generally works every night and weekend game that the Giants play at home, as well as the occasional weekday game if he can make it fit with the demands of his current UCSF job: facilities coordinator for the UCSF Department of Anesthesia and Perioperative Care.

Before each game, Carillo makes sure everyone on the field has the proper credentials for access. Most of the time it’s not a problem, but occasionally people hoping to sneak a story will try to sneak in. During the game, Carillo keeps people from going to places they’re not supposed to be, like the time a streaker burst through the gate and onto the field.

And after the game, he says, “I escort the umpires into their clubhouse because sometimes the fans can get very hostile, especially if an ump blew a call or cost the Giants the game.”

Enjoying the Work, Embracing the Grind

Carillo says he loves both of his jobs. At UCSF, he is responsible for coordinating any department moves to and from the institution’s various facilities, including preparing or renovating offices for new arrivals and addressing general maintenance issues.

“I look forward to what I have to do each day at UCSF and the department and my supervisor have been amazing about allowing me to continue working with the Giants,” he says.

He confesses, though, that during the baseball season, some days can be exhausting. When the Giants are in town, his workday will start at 7 am and end at 3:30 pm. When there is a weeknight game, he immediately hops the shuttle to Mission Bay and then walks to the ballpark where work begins at 4:30 pm. Assuming the game doesn’t go into extra innings, he is home by 1 am, only to start the routine again the following morning.

“The security team is like my second family and seeing the players, seeing season ticket holders…it’s an incredible feeling, a shot of adrenaline that rejuvenates me.”

— Carlos Carillo

UCSF Department of Anesthesia and Perioperative Care | Anesthesia News | Fall 2016 | 13
Modeled on William K. Hamilton’s 1961 midwestern anesthesia residents’ conference, the Western Anesthesia Residents’ Conference (WARC) was established at UCSF in 1963, with the intent of providing residents and fellows with a forum for presenting their clinical and bench research, where they would not be overshadowed by their faculty mentors. The meetings have also provided residents with the rare opportunity to interact with peers from other institutions and learn about different approaches to education and research.

The 54th Annual WARC was again hosted by UCSF – for the first time in 18 years – from April 29–May 1, 2016, and was a big success. Nineteen anesthesiology residency programs and about 280 attendees participated. Some highlights from the 2016 meeting included:

- Adding the “Poster Showcase” as a new session. The WARC 2016 Abstract Committee selected some interesting abstracts prior to the main poster session, giving twelve poster presenters the opportunity to be recognized and answer questions in front of the entire audience.
- 5th Annual Eger Lecture presented by UCSF active Professor Emeritus George A. Gregory, MD
- Keynote speaker Jesse Levinson, PhD, co-founder and CTO of Zoox
- UCSF Anesthesia Resident Josemine Carey, MD, won Best Critical Care Poster Presentation, for *Atenolol toxicity in acute renal failure: an unusual presentation and its management*

We’d like to thank the following people for volunteering their time to help with WARC 2016:

- WARC Program and Signage: UCSF Anesthesia and Perioperative Care Resident Tina Vu
- UCSF OCME Planners: Courtney Flookes, Dawn Bohlmann
- Oral Session Moderators: UCSF Anesthesia and Perioperative Care Residents Ben Alter, Michael Bokoch, Gregory Chinn, Marisa Hernandez-Morgan, Masood Memarzadeh, Jeremy Pearl, Paul Su, and Elizabeth Whitlock
- Poster Session Timekeepers: Shikha Sharma, Chris Cosden; UCSF Anesthesia and Perioperative Care staff Vanessa Cheng, Cindy Chin, Marie Hollero, Bernadette Martin, Bryanna Stitt, and Morgen Ahearn; UCSF Anesthesia and Perioperative Care Residents Michael Bokoch, Melanie Hall, Mike Lubrano, Annie Park, Jeremy Pearl, and Elizabeth Whitlock
- Registration Staff: UCSF Anesthesia and Perioperative Care staff members Abby Binaoro, Cindy Chin, Marie Hollero, Marie Lim, Bernadette Martin, and Bryanna Stitt. UCSF OCME staff Dawn Bohlmann and Courtney Flookes
- Professor and former UCSF Anesthesia and Perioperative Care Chair Mervyn Maze, MB ChB, and the FAER Organization, which sponsored the monetary awards

We’re looking forward to WARC 2017, to be hosted by Oregon Health and Science University.
Host Program Highlights UCSF Leadership

The UCSF Department of Anesthesia and Perioperative Care was delighted to host the Association of University Anesthesiologists 63rd Annual Meeting in San Francisco this year, from May 19–21, 2016, with a special aligned meeting day at the IARS 2016 Annual Meeting and International Science Symposium on May 21. In addition to a robust program featuring education sessions highlighting cutting edge topics, we were excited to share some of our city’s attractions, including holding the host social event at the California Academy of Sciences, located in Golden Gate Park near the UCSF Parnassus campus.

Sessions presented by the AUA Educational Advisory Board focused on the science of communication and feedback, as well as producing and publishing successful educational research. Educational session speakers were: Robert Gaiser, MD; Davinder Ramasingh, MD; Alex Macario, MD, MBA; Maxine Papadakis, MD; George Gallos, MD; Charles W. Emala, MD; Mark D. Neuman, MD; Lee A. Fleisher, MD; Frederic T. (Josh) Billings, MD, MSCI; Warren S. Sandberg, MD, PhD; Rebecca D. Minehart, MD; and Keith H. Baker, MD, PhD.

A key component of the May 21 aligned meeting day was the TH Seldon Memorial Lecture by John P.A. Ioannidis, DSc, MD, “Reproducible Research: Impact in the Evidence-Based Decision Making.” In addition, a state of the art review of endothelial glycocalyx practice and critical care medicine was presented by moderator Randal Dull, MD, PhD, and panelists Sisse Ostrowski, MD, PhD; Randal Dull, MD, PhD; Patrick Singleton, PhD; Eric Schmidt, MD; and Jean François Pittet, MD. Scholars’ panels and small group sessions also offered attendees with concrete, nuts and bolts tips on research career trajectory, designing and conducting collaborative and impactful research projects, current trends in academic anesthesia, as well as scientific manuscript and grant writing sessions. Our own Vice Chair for UCSF Anesthesia and Perioperative Care Research, Judith Hellman, MD, was a member of the “Research in the 21st Century” Scholars’ Panel. Other aligned meeting day panelists and presenters were: Marcelo Gama de Abreu, MD, MSc, PhD, DESA; Marcos F. Vidal Melo, MD, PhD; Alex Evers, MD; Jennifer Grandis, MD; Max Keiz, MD, PhD; Anke Winter, MD, MSc; Ben Julian A. Palanca, MD, PhD, MSc; Laure Aurelian, M. Sc, PhD; Mark Neuman, MD, MSc; Eric R. Gross, MD; and May Hua, MD.

The host program presented on May 19 adopted the theme of the UCSF campus, which is precision medicine. Although it’s tempting to think of precision medicine as a laboratory endeavor, we take a much broader view. At UCSF, we are driven by the idea that when the best research, the best teaching, and the best patient care converge, we can deliver breakthroughs that help heal the world. UCSF is host to four professional schools, medicine, dentistry, pharmacy, and nursing, all of which are ranked at the very top of their specialties. The AUA 2016 host program highlighted UCSF leadership in a number of important areas: basic laboratory discovery, translational research in neurosciences, cutting-edge care of the underserved with HIV/AIDS, and importantly, our strong commitment to building a workforce that represents the incredible diversity of the San Francisco Bay Area and California. The sessions were both enlightening and entertaining.

Our speakers included:

- Talmadge King, Jr, MD, Dean of the UCSF School of Medicine, and Professor of Medicine. Aside from being one of the world’s leading authorities on interstitial lung disease, he is a visionary leader of the school, and a champion of diversity in academic medicine.
- Joe Derisi, PhD, Professor and Chair of the UCSF Department of Biochemistry and Biophysics, Howard Hughes Investigator, and recipient of a MacArthur Genius Award. Derisi has pioneered innovative technologies using DNA micro-arrays for rapid pathogen detection.
- Diane Havlir, MD, Professor of Medicine and Chief of the HIV / AIDS Division at Zuckerberg San Francisco General Hospital. She leads the UCSF HIV programs, which have served as a model for both the United Nations and US AIDS efforts.
- Stephen Hauser, MD, Professor and Chair of the Department of Neurology at UCSF. He is internationally renowned for his work on immune mechanisms of multiple sclerosis.
Traditionally, hospital-based departments, and especially anesthesia departments, have found it difficult to raise money for endowments, but we can’t let that stop us from aggressively pursuing fundraising to support our academic mission of education and research,” says Michael Gropper, MD, PhD and chair of the UCSF Department of Anesthesia and Perioperative Care. “Our department has a history of leadership in these areas that it’s imperative we maintain.”

A near doubling of clinical volume over the past five or six years has only complicated the task, which is why Gropper believes it’s more important than ever for alumni and friends to support these missions. “When the NIH’s contribution to research has shrunk to about 10 or 15 percent of what people need, we can’t rely solely on external funding,” he says.

The recent successful effort establishing the Ronald D. Miller Distinguished Professorship of Anesthesia and Perioperative Care was a good start on maintaining the legacy, but establishing the Mark Rosen Educational Endowment and Bill Young Research Endowment will create sustainable support that goes beyond adding a mid- to late-career researcher. “These funds will allow grateful alumni and patients to direct their generosity to a specific area,” says Gropper, about the endowments named for two beloved former faculty members.

As residency program director for many years, Mark Rosen, MD, trained hundreds of anesthesiologists. “He set the bar high for our training program and was a fierce advocate for residents,” says Gropper. “For many of us, he guided us through training and set the course for the rest of our careers and we are very grateful.”

Bill Young, MD, who passed away in 2013, excelled at bringing diverse groups together to conduct research on complex clinical issues. A world-renowned researcher himself who authored more than 300 peer-reviewed publications, Young was also the department’s vice chair for research. “He was a wonderful and effective mentor for both junior and mid-career faculty, many of who went on to their own highly successful careers,” says Gropper.

Please honor the careers of both of these men by helping to preserve and grow our department’s legacy of groundbreaking contributions to academic medicine.

To contribute to either of these endowments, contact:

Olivia Herbert
Executive Director of UCSF Development
Phone: 415-476-9878 or 877-499-8273
Email: Olivia.Herbert@ucsf.edu

Staff Appreciation 2016

Department staff gathered at the carnival-themed staff appreciation event in Stern Grove on July 15.

First Row, L to R: Joice Karyadi, Dulce Mohler, Dereca Akins, Helen Lee, Marie Hollero, Frida Stone, Courtney Carter, Dominique Shields

Second Row, L to R: Alma De Leon, Vanessa Cheng, Shane Loetterle, Ed Mathews, Carroll Schreibman, Abby Binaoro, Diana Guo, Celeste Wright, Megan Moran

Back Row, L to R: Rachelle Avila, Julie Leong, Bernadette Martin, Morgen Ahearn, Serena Smith, Adam Jacobson, Jonathan Eklund
New Faculty

Career Faculty

Andrea Olmos, MD
Health Sciences Clinical Instructor / Liver Transplant Anesthesia Fellow (Non-ACGME)
Joined Faculty July 2016
MEDICAL SCHOOL
UCSF
INTERNSHIP
Anesthesiology, UCSF
RESIDENCY
Anesthesiology, UCSF

Jeremy Pearl, MD
Health Sciences Clinical Instructor / Regional Anesthesia Fellow (Non-ACGME)
Joined Faculty July 2016
MEDICAL SCHOOL
Stanford University School of Medicine
INTERNSHIP
Internal Medicine, Kaiser Permanente San Francisco
RESIDENCY
Anesthesiology, UCSF

Jina Sinskey, MD
Health Sciences Assistant Clinical Professor
Joined Faculty September 2016
MEDICAL SCHOOL
Tufts University School of Medicine
INTERNSHIP
Anesthesiology, UCSF
FELLOWSHIP
Obstetric Anesthesiology, UCSF

Elizabeth Whitlock, MA, MS, MD
Health Sciences Clinical Instructor / T32 Postdoctoral Scholar
Joined Faculty July 2016
ADVANCED DEGREES
MA, Biological/Biomedical Sciences, Washington University
MS, Clinical Investigation, Washington University
MEDICAL SCHOOL
Washington University School of Medicine in St. Louis
INTERNSHIP
Anesthesiology, UCSF
FELLOWSHIP
Clinical Research, UCSF
Visiting Faculty

Nancy Fammartino, MBBS
Visiting Assistant Professor
Joined Faculty August 2016

MEDICAL SCHOOL
James Cook University, Queensland

INTERNSHIP
Austin Hospital, Melbourne

RESIDENCY
St. Vincent’s Hospital, Melbourne

FELLOWSHIP
Obstetrics, Royal Women’s Hospital, Melbourne

Melissa Haque, MBBS
Visiting Assistant Professor
Joined Faculty July 2016

MEDICAL SCHOOL
University of Western Australia

RESIDENCIES
Pre-Specialty Training (3 years)
University of Western Australia
Anesthetic Training (7 years)
University of Western Australia
(6-month rotation each at
Princess Margaret Hospital (pediatric),
King Edward Memorial Hospital
(maternity), Perth)

FELLOWSHIPS
Medical Education / Simulation
Joondalup Health Campus, Perth
Regional and General (ENT, Cardiac
Surgery) Anesthesia
St. Vincent’s Hospital, Melbourne

PREVIOUS EMPLOYMENT
Chief Registrar, St. Vincent’s Hospital,
Melbourne
Consultant Anesthetist, Perth

Andrew Milne,
MBChB, FRCA
Visiting Clinical Instructor
and Trauma and Acute Care Fellow (Non-ACGME)
Joined Faculty July 2016

MEDICAL SCHOOL
University of Aberdeen

INTERNSHIP
Foundation Training, North Central
Thames Foundation School, London

RESIDENCY
Acute Care Common Stem, Anesthetics;
Anesthetics Core Training, South East
London School of Anaesthesia, London
Deanery. Specialty Registrar Training,
Anesthetics & Critical Care, Central
School of Anaesthesia, London Deanery
Honors & Awards

Faculty Honors, Awards and Appointments

J. Matthew Aldrich, MD  
CAMPUS HONOR  
UCSF Exceptional Physician Award, 2016

Neal Cohen, MD, MPH, MS  
EXTRAMURAL APPOINTMENTS  
Reelected Chairman of the Board for El Camino Hospital, Mountain View  
Chair, newly created ASA Committee on Health and Public Policy  
Chair, American Society of Anesthesiologists (ASA) Section on Professional Practice  
Chair, Critical Care Medicine Examination Committee, American Board of Anesthesiology (ABA)

Monica Harbell, MD  
CAMPUS APPOINTMENT  
UCSF School of Medicine High Intensity Teaching Position  
Medical Student Longitudinal Coach

Kerstin Kolodzie, MD, PhD  
CAMPUS HONOR  
UCSF Haile T. Debas Academy of Medical Educators  
Excellence in Teaching Award, 2016

Michael Lipnick, MD  
CAMPUS HONOR  
UCSF Haile T. Debas Academy of Medical Educators  
Excellence in Teaching Award, 2016

Oana Maties, MD  
CAMPUS HONOR  
UCSF Haile T. Debas Academy of Medical Educators  
Excellence in Teaching Award, 2016

Manuel Pardo, MD  
EXTRAMURAL APPOINTMENT  
President Elect, Association of Anesthesiology Core Program Directors

Oliver Radke, MD, PhD  
EXTRAMURAL APPOINTMENT  
Scientific Committee, Ambulatory Anesthesia, German Society of Anesthesia and Intensive Care Medicine (DGAI)

David Robinowitz, MD, MHS, MS  
CAMPUS HONOR  
UCSF Health Great Experience Award, September 2016

Mark Rollins, MD, PhD  
CAMPUS APPOINTMENT  
UCSF School of Medicine High Intensity Teaching Position  
Director, Anesthesia Core Rotation

Michael Rowbotham, MD  
EXTRAMURAL HONOR  
2016 Mitchell B. Max Award for Neuropathic Pain

Gabriel Sarah, MD  
CAMPUS APPOINTMENTS  
UCSF School of Medicine Faculty Council, 2016 – 2019  
LCQ: LGBT Topic Steward  
AAMC: Minority Faculty Development Seminar Attendance Funding, 2016

Jessica Tashjian, MD  
CAMPUS HONOR  
UCSF Haile T. Debas Academy of Medical Educators  
Excellence in Teaching Award, 2016

Kevin Thornton, MD  
CAMPUS APPOINTMENT  
Program Director, Anesthesia Critical Care Medicine Fellowship Program

John Turnbull, MD  
CAMPUS APPOINTMENT  
UCSF School of Medicine High Intensity Teaching Position  
Assistant Director, Airway, Breathing, Circulation Bridges Curriculum  
Foundational Science Block

Arthur Wood, MD  
CAMPUS APPOINTMENT  
UCSF School of Medicine High Intensity Teaching Position  
Pain Topic Steward

Trainee Honors, Awards, and Appointments

Odmara Barreto-Chang, MD  
EXTRAMURAL AWARDS  
NIH – NMA Travel Award Program for Residents Interested in Careers in Academic Medicine, 2016

Nicole Jackman, MD, PhD  
INTRAMURAL AWARDS  
2015 – 2016 UC President’s Carbon Neutrality Initiative Fellow  
Efficient Use of Fresh Gas Flow With Inhaled Anesthetics Can Decrease Costs and Impact Medical Greenhouse Gas Emissions at UCSF

Jason Lang, MD, PhD  
INTRAMURAL AWARDS  
2015 – 2016 UC President’s Carbon Neutrality Initiative Fellow  
Recognized for efforts to reduce carbon emissions across UCSF and beyond

Departmental Honors and Awards

Best Abstract / Poster of Meeting at the American Society of Regional Anesthesia and Pain Medicine’s (ASRA) 41st Annual Meeting, March 31 – April 2, 2016, New Orleans, LA.  

UCSF Department of Anesthesia and Perioperative Care Authors:

Catherine Chiu, MD, Intern  
Pedram Aleshi, MD, Associate Clinical Professor  
Christina Inglis-Arkell, MD, Assistant Clinical Professor  
Candace Shavit, MD, Clinical Instructor  
Edward Yap, MD, Assistant Clinical Professor  
Monica Harbell, MD, Assistant Clinical Professor
UCSF Caring Wisely Awards

Caring Wisely is an organized process for engaging and supporting frontline clinicians in efforts to remove unnecessary costs from healthcare delivery systems. The program was created and launched by the UCSF Center for Healthcare Value in November 2012. Each project has a maximum budget of $50,000 and receives project support from the Caring Wisely team.

More than 65 ideas and 20 full project proposals were collected in each of the first 3 years of the program, with 2-3 projects chosen for implementation each year.

The UCSF Department of Anesthesia and Perioperative Care had faculty involved with 2 projects accepted into the Caring Wisely Program for the 2016–2017 academic year:

■ Perioperative OSA Pathway:
  Andrew Schober, MD
  Rachel Eshima McKay, MD
  Sakura Kinjo, MD
  Jon Matthew Aldrich, MD
  Daniel Burkhardt, MD
  Matthias Braehler, MD, PhD
  David Robinowitz, MD, MHS, MS

■ Enhanced Recovery After Surgery Pathway for Cesarean Delivery:
  Monica Harbell, MD
  Mark Rollins, MD, PhD

Monica Harbell, MD
CAMPUS APPOINTMENT
2016–2017 Caring Wisely
Project Leader

Andrew Schober, MD
CAMPUS APPOINTMENT
2016–2017 Caring Wisely
Project Co-Leader

Sakura Kinjo, MD
CAMPUS APPOINTMENT
2016–2017 Caring Wisely
Project Co-Leader

Lee-Lynn Chen, MD
CAMPUS APPOINTMENT
2015–2016 Caring Wisely
Project Leader

AARC 2016

Respiratory Care Services at ZSFG Receives National Research Awards

Respiratory Care Services (RCS) at ZSFG had 12 abstracts accepted for presentation at this year’s International Respiratory Congress in San Antonio, TX. These abstracts represent the efforts of an 8-member RCS research team under the direction of Rich Kallet, MS, RRT, FCCM (Director of Quality Assurance). Members of the research team include Justin Phillips, RRT; Lance Pangilinan, RRT; Earl Mangalindan, RRT; Kelly Ho, RRT; Gregory Burns, RRT; Vivian Yip, RRT; and Joseph Booze, RRT. John Kelly, Director of Respiratory Care Services, and Dr. Susan Yoo, RCS Medical Director, strongly support participation in clinical research as a pillar of the department’s mission and for the professional development of the department’s practitioners.

Two of the abstracts won the Editor’s Choice award given to the top-ten rated abstracts: Gregory Burns, RRT (Factors Influencing the Effects of Aerosolized Prostacyclin in Severe ARDS) and Vivian Yip, RRT (The Impact of SBT and DSI in ARDS). In addition, the abstract on aerosolized prostacyclin in ARDS won the 2016 Monaghan-Trudell Fellowship for Aerosol Technique Development. These three awards bring the number of national research awards received by the department to ten. Other topics that will be presented include bench studies on the performance accuracy of capnography during supplemental oxygen delivery, the performance of algorithms controlling compression volume loss during mechanical ventilation, and various aspects of physiologic dead-space ventilation in ARDS.

The Department of Anesthesia and Perioperative Care at ZSFG has a storied history of clinical research on mechanical ventilation during critical illness. This dates back to the mid-1970s with the publication of the seminal study on Optimal PEEP by H. Barrie Fairley, MD. RCS members assisted with these early research projects. In the mid-1980s RCS began to develop, execute and publish their own studies under the guidance of anesthesia faculty members Richard M. Schlobohm, MD; Jeffrey A. Katz, MD; James D. Marks, MD; Jean-Francois Pittet, MD; Michael Matthay, MD, and most recently, Michael S. Lipnick, MD. RCS has been multidisciplinary in its research, having published studies with members of the UCSF Departments of Surgery, Pulmonary and Critical Care Medicine, Neurology and the Cardiovascular Research Institute.

“We strongly support participation in clinical research as a pillar of the department’s mission and for the professional development of the department’s practitioners.”
— John Kelly and Dr. Susan Yoo


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Jackson MV, Morrison TJ, Doherty DF, McAuley DF, **Matthay MA**, Kisselenfennig A, O’Kane CM, Krasnodembskaya AD. Mitochondrial Transfer via Tunneling Nanotubes is an Important Mechanism by Which Mesenchymal Stem Cells Enhance Macrophage Phagocytosis in the In Vitro and In Vivo Models of ARDS. *Stem Cells*. 2016 Aug;34(8):2210-22.


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London MJ. Intraoperative Mean Blood Pressure and Outcome: Is 80 (mm Hg) the “New” 60? Anesthesiology. 2016 Jan;124(1):4-6.


Publications continued from previous page


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Weiskopf RB. What is innovation? Transfusion. 2016 Mar;56 Suppl 1:S3-S.


Active Research Grants

Pedram Aleshi  
Principal Investigator  
Anesthesia Dept,  
10/1/2014–9/30/2016  
Anesthesia Department  
Clinical Research Award  
$16,000

Benedict Alter  
Principal Investigator  
FAER, 7/1/2016–6/30/2017  
Mechanisms and  
Translational Application of  
Conditioned Analgesia in  
Post-operative Pain  
$75,000

Roland Bainton  
Principal Investigator  
Anesthesia Dept,  
7/1/2015–6/30/2017  
Anesthesia Department  
Research Award  
$80,000

Philip Bickler  
Principal Investigator  
Various Industry Sponsors,  
Accuracy of pulse oximeters  
with profound hypoxia  
$400,000

Marek Brzezinski  
Principal Investigator  
Girfols Therapeutics Inc,  
10/1/2015–10/31/2017  
A Prospective, Multicenter,  
Randomized, Double Blind,  
Placebo-Controlled Study to  
Evaluate the Safety and  
Efficacy of Preoperative  
Antithrombin  
Supplementation in Patients  
Undergoing High-Risk  
Cardiac Surgery with  
Cardiopulmonary Bypass  
$300,000

Monica Harbell  
Principal Investigator  
Anesthesia Dept,  
10/1/2014–9/30/2017  
Anesthesia Department  
Clinical Research Award  
$16,000

San Francisco Foundation  
Award  
$125,000  
Principal Investigator  
International Anesthesia  
Research Society,  
7/1/2015–6/30/2018

Endothelial Inflammatory  
Pathways in Septic  
Vasculopathy and Organ  
Injury  
$750,000

Jan Hirsch  
Principal Investigator  
VA Office of Academic Affairs,  
7/1/2013–6/30/2017  
VA Advanced Fellowship  
Program in Simulation  
$500,000

Irfan Kathiriya  
Principal Investigator  
Anesthesia Dept,  
7/1/2016–6/30/2017  
Anesthesia Department  
Research Award  
$80,000

Michael Lawton  
Principal Investigator  
NIH/NINDS,  
9/30/2014–7/31/2019  
Brain Vascular Malformation  
Consortium: Predictors of  
Clinical Course  
$6,179,248

Jae-Woo Lee  
Principal Investigator  
NIH/NHLBI,  
5/1/2012–4/30/2017  
Human mesenchymal stem  
cell microvesicles for the  
treatment of acute lung  
injury  
$1,899,191

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Grants
continued from previous page

Jacqueline Leung
Principal Investigator
NIH/NIAID, 6/1/2015–5/31/2017
The Effects of Light vs Deep Anesthesia on Postoperative Cognitive Outcomes
$444,033

Michael Lipnick
Principal Investigator
Hellman Fellows Fund, 7/1/2016–6/30/2019
2016-2017 Hellman Family Awards for Early Career Faculty
$49,812

Bin Liu
Principal Investigator
NIH/NIGMS, 8/6/2012–7/31/2017
Internalizing human antibody-targeted nanosized siRNA therapeutics
$1,607,090

Martin London
Principal Investigator
Anesthesia Dept, 7/1/2015–6/30/2017
Anesthesia Department Research Award
$5,500

Jennifer Lucero
Principal Investigator
Anesthesia Dept, 7/1/2014–6/30/2017
Anesthesia Department Research Award
$20,520

James Marks
Principal Investigator
NIH/NIAID, 2/1/2013–1/31/2018
Generation of therapeutic antibodies for serotype F botulism
$5,448,316

Jonathan Pan
Principal Investigator
FAER, 7/1/2014–3/31/2016
Dexmedetomidine Renders Neuroprotection via Modulation of Systemic and Local Immune Responses Following Rodent Spinal Cord Injury
$175,000

Ludmila Pawliwowska
Co-Leader
NIH/NINDS, 9/30/2014–7/31/2019
Antibody Technology Research Center
$5,779,613

Mervyn Maze
Principal Investigator
NIH/NIGMS, 9/1/2013–8/31/2017
Inflammation resolving mechanism dysregulation in postoperative cognitive decline
$1,212,399

Co-Principal Investigator
UCSF REAC, 7/1/2016–3/31/2017
The Effects of Exercise “Prehabilitation” on Cognitive and Functional Recovery after Surgery in Older Adults
$40,000

Mervyn Maze
Principal Investigator
NIH/NIGMS, 9/1/2013–8/31/2017
Inflammation resolving mechanism dysregulation in postoperative cognitive decline
$1,212,399

Co-Principal Investigator
UCSF REAC, 7/1/2016–6/30/2017
The Effects of Exercise “Prehabilitation” on Cognitive and Functional Recovery after Surgery in Older Adults
$40,000

Mark Schumacher
Principal Investigator
Anesthesia Dept, 1/1/2016–6/30/2017
Anesthesia Department Research Award
$80,000

Arthur Wallace
Principal Investigator
NCIRE, 3/1/2012–3/1/2017
Perioperative Outcomes Epidemiologic Consortium
$150,000

Principal Investigator
VA National Anesthesia Office, 1/2/2014–1/1/2017
VA Anesthesia Quality Improvement Program
$100,000

Biographies
continued on next page
UCSF Anesthesia and Perioperative Care
Annual Alumni Reception

American Society of Anesthesiologists (ASA) Meeting
Saturday, October 22, 2016 | 6:30pm – 10:30pm
The Gage Restaurant | 24 South Michigan Avenue | Chicago, IL 60603
Passed Hors d’Oeuvres and Hosted Bar
Please RSVP to Paperless Post Invitation.
If not received, please contact: maelani.atken@ucsf.edu

UCSF Maintenance of Certification in Anesthesia Simulator Course

The American Board of Medical Specialties requires the American Board of Anesthesiology (ABA) to include practice performance assessment and improvement in Part IV of the Maintenance of Certification in Anesthesiology (MOCA®). The ABA recognizes simulation training as an innovative approach to assess a physician’s clinical and teamwork skills in managing critical events and included it in the Part IV Maintenance of Certification in Anesthesiology (MOCA®) requirements.

The Anesthesia Simulation Center of the UCSF Department of Anesthesia & Perioperative Care is endorsed by the American Society of Anesthesiologists for meeting the standards required for conducting ABA MOCA simulation courses.

Upcoming Course Dates:
Friday, March 24, 2017
Friday, April 21, 2017
Friday, June 16, 2017
For more information or to register, go to http://tiny.ucsf.edu/moca.