Preparing for Ebola

Matt Aldrich, MD, interim director of adult critical care medicine at UCSF Medical Center, is part of the core group at UCSF leading preparations for a potential Ebola Virus Disease patient. In December 2014, the U.S. Department of Health & Human Services designated UCSF Medical Center as an Ebola treatment center – the only hospital in San Francisco to earn this designation and one of 35 such hospitals nationwide.

He understands the event may never occur – to date, there has not been one documented case of Ebola in California – but says, "What’s the alternative to fully preparing? We’re putting processes in place for better emergency response and preparedness; that’s important not just because of Ebola, but because we don’t know what the next infectious disease outbreak will be."

A Long, Thoughtful Process

By late August of 2014, epidemiology and infection control groups at UCSF had already developed a web site and put in place guidelines for screening, personal protective equipment (PPE) and patient isolation. At that point, approximately 30 key stakeholders from Infection Control, Nursing, Critical Care Medicine, Emergency Medicine, Lab Medicine, the Safety Office and the Department of Emergency Management met for the first time.

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Preparing for Ebola
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Their work was quickly colored – the team galvanized – by events at Texas Health Presbyterian Hospital in September, when a patient arriving from Liberia was initially sent home and ultimately died of the disease, but not before infecting two nurses.

The work, however, posed a set of significant challenges. Beyond creation of an isolation unit and training in the use of PPE, they would need to create clear and detailed processes for everything from the use of diagnostic equipment to lab testing, waste disposal and rapid response to an Ebola patient in distress. This multidisciplinary effort has been lead by Adrienne Green, Associate Chief Medical Officer for UCSF Health.

Creating the Unit and Processes

Drawing on CDC guidelines and best practices from Emory University and Nebraska Medical Center, which had successfully handled Ebola cases, the UCSF team decided to create an isolation unit in an existing intensive care (ICU) unit on its Mount Zion campus. The core clinical teams include nurses, clinical lab scientists, respiratory therapists and faculty physicians from critical care, infectious disease, and hospital medicine who have volunteered to train and provide care for Ebola virus infected patients. The School of Medicine and Medical Center decided that no trainees would be involved in direct care.

“Taking the time to go through this process is valuable. Even if it never involves taking care of an Ebola patient.”
— Matt Aldrich, MD

“A guiding principle has been to limit patient contact to a core group of providers and – as we think broadly about what we can accomplish clinically – to also do everything we can to minimize risks to staff,” says Aldrich.

Among other things, this has meant developing new workflows to address the risk of procedures – such as continuous renal replacement therapy – that have been effective in treating Ebola patients, but have the potential for significant blood exposure. The group is also planning to make use of telemedicine to limit the number of providers in the room.

The Role of Critical Care

Aldrich has been unsurprised, though pleased, by the response of critical care staff in both adult and pediatric units. These individuals know that should an Ebola patient arrive, the clinical teams will be isolated and away from their normal lives for at least the entire treatment period.

“We have a sizeable group of volunteers from both Anesthesia and Pulmonary Critical Care,” says Aldrich. “We will work together with the volunteers from critical care nursing, as well as Pediatric Critical Care, Infectious Disease, Hospital Medicine, and Obstetrics to provide the best care possible to patients of all ages.”

Despite the demands of the preparation effort, Aldrich believes, “Taking the time to go through this process is valuable. Even if it never involves taking care of an Ebola patient, the Medical Center has done the right thing by making it a priority. I’m grateful for the very strong support of both UCSF Health and School of Medicine leadership.”

“Taking the time to go through this process is valuable. Even if it never involves taking care of an Ebola patient.”
— Matt Aldrich, MD
On Sunday, February 1st, 40 ambulances arrived at Moffitt/Long Hospital to begin the challenging task of safely transporting 131 patients from the Moffitt/Long and Mount Zion hospitals to the new hospitals at the Mission Bay campus. The patients included newborns, a baby on ECMO, triplets, laboring mothers, and many others. Due to extensive planning, and the hard work of 300 personnel, the process went smoothly. I was particularly proud watching our residents and faculty, who provided critical support at both hospitals during the transition. By early afternoon, all patients were safely admitted to the new hospitals: The UCSF Benioff Children’s Hospital San Francisco, UCSF Betty Irene Moore Women’s Hospital, and the UCSF Bakar Cancer Hospital. Combined, these three hospitals add nearly 300 beds and 20 operating rooms to UCSF Health. Starting February 2nd, Mount Zion Hospital became an Ambulatory Surgery Center (ASC), with 6 OR’s and various non-OR anesthetizing locations.

Staffing 20 new ORs and a 14 bed ICU at Mission Bay, in addition to the ASC at Mount Zion, has created both challenges and opportunities for the Department. Over the last year and into the next, we will have added approximately 14 new faculty members to provide coverage in the new hospitals, in addition to providing for expansion in pain management, critical care, and other areas. Additional faculty are being recruited to San Francisco General Hospital, which will open its new facility, the Priscilla and Mark Zuckerberg San Francisco General Hospital and Trauma Center (please “like” it on Facebook!). Of note, Priscilla Zuckerberg, MD is a UCSF graduate, and recently completed her pediatrics residency at UCSF. This will be a state of the art hospital, with an expansion from 27 to 58 beds in the trauma center, increase in ORs from 10 to 20 (including 8 adult, 8 pediatric and 4 shared adult/pediatric ORs), and doubling of ICU beds (31 single and 13 double intensive care nursery rooms, 14 intensive care unit rooms for adults, 10 pediatric intensive care unit rooms, 12 pediatric cardiac intensive care unit rooms, and 12 transitional pediatric intensive care rooms). James Marks, MD, PhD, Chief of the Anesthesia Service at SFGH and current Chief of Staff, has also been adding faculty in anticipation of having to staff additional ORs and ICU beds.

One of the challenges faced by the Department is the spread of faculty and trainees across the city. It is with mixed feelings that we will begin to videoconference our traditional Grand Rounds and QI conferences on Wednesday mornings, as an effort to reduce the stress of having to cross San Francisco in the peak of commute hour to reach SFGH, the VA, Mount Zion, and Mission Bay in order to start OR cases on Wednesday mornings. In order to minimize the impact of this dispersion, we have started the “Houses” concept, described in this newsletter. These groups will bring residents, fellows, and faculty together in a social environment for mentoring, teambuilding, and camaraderie. In spite of these changes, our residency is viewed as the best in the country, at least according to the recently released Doximity and US News & World Report rankings (http://tinyurl.com/UCSFrank). While many argue with the methodology, I personally believe it is sound.

Speaking of rankings, for a number of years, UCSF has been ranked #1 in terms of NIH funding. However, it is increasingly difficult to fund the research that has been an essential part of our success. I am encouraged by the recent success of our faculty in obtaining funding, but increasingly, academic departments need to provide long-term funding in the form of endowed chairs and distinguished professorships. In addition to providing stability, these endowments are a crucial tool for recruiting top talent to UCSF, where the cost of living serves as a major disadvantage. As many of you are aware, we are in the process of fundraising for the Ronald D. Miller Distinguished Professorship. This Professorship will honor Dr. Miller, our 3rd Chair, who led the Department for 26 years. It will support a clinical/translational researcher in the mold of Dr. Miller, whose critical contributions to transfusion medicine and neuromuscular blockade transformed our specialty. While I don’t expect our alumni to be as generous as Priscilla Zuckerberg, I do hope you will contribute to help assure that we remain the #1 department in the world.

Michael Gropper, MD, PhD
Professor and Interim Chair
W hen I did my cardiac anesthesia rotation, we lost a lot of congenital heart disease patients on the table. Now, thanks to advances in cardiac surgical, anesthetic, perfusion, and critical care techniques – and the strong collaboration between anesthesiology and cardiac surgery – those same patients have a 70-80 percent survival into adulthood. That’s why we’ve been able to shift our focus to the quality of their survival.

In pediatric cardiac anesthesia, we’ve long been concerned about the effect on the developing brain of early exposure to potent inhalational or IV anesthetics. In order to examine outcomes, we’ve needed to develop databases and use the tools of evidence-based medicine – especially randomized clinical trials and comparative effectiveness trials – to critically examine what types of clinician behaviors (i.e., surgical, anesthetic, perfusion, and intensive care) positively affect outcome. This has been a big part of my career.

And though it took an act of Congress to get people to spend money on pediatric clinical trials, we are making progress, especially with thoughtful, collaborative networks, like the Pediatric Heart Network. Similarly, the Congenital Cardiac Anesthesia Society – in partnership with cardiothoracic surgeons – is developing a database that includes best practices in the operating room for patients with congenital heart disease.

At UCSF, we are fostering collaborations among basic scientists and clinical-translational thinkers in pediatric neurology, cardiology, surgery and anesthesia to do programmatic, outcome-based investigations. That work is enhanced by UCSF Benioff Children’s Hospital San Francisco moving to Mission Bay, where clinical scientists can work ever more closely with basic scientists.

The current thinking is that repeated exposure to anesthesia at key developmental points – as well as to cardiopulmonary bypass – can trigger cellular events that lead to bad neurologic outcomes. But we’re also learning that a lot of babies with congenital heart disease are born with brain abnormalities that, in some cases, predate the exposure to anesthesia or bypass. Unlacing these issues is essential if we’re to minimize the risk and maximize the benefit of new therapies and surgical techniques that can mitigate the harmful effects of anesthesia.

At UCSF, we are among those testing the efficacy of an alpha 2 adrenergic agonist – dexmedetomidine – which has neuroprotective effects because of its mechanism of action in the brain. In my clinical experience with dexmedetomidine one can give a fraction of the amount of opiates typically required with other anesthetics. One caution: it can slow heart rate, so it’s important to mitigate that untoward effect with drugs or devices that mitigate the undesired cardiac rhythm consequence.

A lot of the seminal work on dexmedetomidine was done by investigators at UCSF, but there are still gaps in our knowledge so our group has been collaborating with the NIH and pharmaceutical companies to do the work that will create proper protocols and pediatric labeling for this and other drugs, including those in the pipeline that have a pharmaceutical sponsor. That’s the challenge now: how to properly apply new therapeutics in the clinical setting.

We are also looking at new, inhaled agents like xenon, which is another interesting possibility for countering the effects of anesthesia on young children. It was originally used to measure blood flow to the brain, but now we are investigating its potential to protect the developing brain from anesthesia and cardiopulmonary bypass.

Finally, as noted above, thanks to these types of advances there are now more adults living with congenital heart disease than children living with the condition. Many of these adults come to the operating room for a variety of non-cardiac surgical procedures, but because of their palliated congenital heart disease, they often require the expertise of pediatric cardiac anesthesiologists to manage their medically complex preoperative issues. This is an essential evolving role for us as pediatric cardiac anesthesiologists: we care for these patients throughout their life, not just for cardiac surgery, but for non-cardiac surgery as well.
For more than half a century, the UCSF Department of Anesthesia and Perioperative Care has been making groundbreaking clinical discoveries and training generations of leaders in both academic anesthesia (24 chairpersons to date) and private practice.

Much of our department’s success has grown from the vision of our first three chairs: Stuart C. Cullen, William K. Hamilton and Ronald D. Miller. All three believed that anesthesia was in a unique position to conduct important clinical research – and that doing so would draw the best and brightest to our specialty. And they were right.

Yet at a time of intense healthcare change and reduced availability of research support, maintaining this tradition and the department’s international leadership requires carving out a position where someone can dedicate themselves fully to these pursuits. Thus we are redoubling our efforts to raise $2,500,000 to establish the Ronald D. Miller Distinguished Professorship of Anesthesia and Perioperative Care.

The pursuit of excellence – the title of Dr. Miller’s 2009 Rovenstine Lecture to the ASA – has been the lodestar of Dr. Miller’s career, a highlight of which was his election to the Institute of Medicine at the National Academy of Sciences in 1998. His research contribution began with the historic clinical research he initiated in a combat hospital during the Vietnam Conflict in 1968-69 – work that changed the way hospitals treat coagulopathies associated with massive blood transfusion. It continued with his seminal work on the safe use of neuromuscular blockade, and his serving on several NIH study sections, including being chairperson of the NIH Surgery, Anesthesia, and Trauma Study Section. Dr. Miller’s many contributions to medicine and patient safety honor a history that begins with the research discoveries of John Severinghaus, Ted Eger and Dr. Miller’s classmate, George Gregory.

When he assumed department leadership in 1983, Dr. Miller was determined that others have similar opportunities to make their mark and that the department and specialty expand its leadership role in all aspects of perioperative medicine. During his 26 years of leadership, the department created a nationally recognized multidisciplinary outpatient pain clinic and an inpatient pain service, both of which helped establish UCSF as a leader in pain treatment and anesthesia as the go-to specialty for pain. He continued to expand anesthesia’s leadership in intensive care at UCSF – a role pioneered by his two predecessors as chair. Dr. Miller’s authorship of the most widely used textbook for anesthesia in the world (Miller’s Anesthesia) has highlighted UCSF faculty and dramatically enhanced our department’s international reputation. And he established a translational research fellowship while recruiting leading investigators to our faculty to ensure we grew a research portfolio that reached across specialties and around the world.

Now the pressures of modern healthcare pose a challenge to the department’s and Dr. Miller’s legacies. But as Dr. Miller said recently, “It’s still of prime importance to think big and dream.” We should honor his service and his vision.

The holder of the Ronald D. Miller Distinguished Professor of Anesthesia and Perioperative Care will further Dr. Miller’s deep commitment to clinical research in anesthesia and to excellence in the training and mentoring of young physicians.
Giving Residents a Place to Call Home

Education

D

oximity and US News and World Report recently named the residency program at UC San Francisco’s Department of Anesthesia and Perioperative Care the number one residency in the country for anesthesiology.

No surprise there; the program has been a national leader for years. But the department knows it cannot rest on its laurels. At a time when residency programs are judged not just by the rigor of their training but also by the support and life-work balance they offer, maintaining leadership means finding creative ways to help new physicians adapt to the intense demands of residency.

This can be tricky in a large department like UCSF’s, with its 90 residents rotating to a new location every two months. The size creates unique learning opportunities, but it can also be confusing for entering residents seeking support and guidance. That’s why the department decided to create virtual “houses” — named for each of the department’s long-serving department chairs: Stuart Cullen, William Hamilton and Ronald Miller — where groups of residents can find the support and guidance they need.

Making People Feel At Home in a Large Institution

“We wanted to create the type of camaraderie you see in smaller institutions,” says Kristina Sullivan, MD, who directs the anesthesia internship for the department and was recently elected to the UCSF Academy of Medical Educators.

“We figured why not have a family to go to, rather than just one faculty advisor?” says Kevin Thornton, MD, who serves as chair of the departmental residency well-being committee and program director for UCSF’s Adult Cardiothoracic Anesthesiology Fellowship program. “The houses create a structure for vertical mentoring.”

Vertical mentoring — where each resident receives mentoring from peers the next level up — helps avert residents’ sense of being on their own, while clarifying the expectations that go along with being in a top-notch residency program.

“It offers support for those who may be having a difficult time and, sometimes, it means asking people to dig deeper if they don’t understand what’s expected,” says Chief Resident Wendy Smith.

Creating Common Ground

At a kickoff event in June 2014, every resident, fellow and faculty member was assigned to a house. Veteran faculty spoke of the values each of the historic chairmen brought to the department and the impact they had on residents’ lives and careers.

“A lot of the residents were very moved and talked about how much they liked understanding the history of the department better,” says Smith.

Over the summer, the houses began to bond through a series of faculty-hosted barbecues and additional meetings, out of which emerged self-governing resident leadership councils. The councils, with the help of a faculty mentor, coordinate individual and all-house activities, which include social, career-focused and academic events. As of the writing of this article, those events have included group birthday parties, a panel on fellowship opportunities and an organized discussion about professionalism in medicine.

“In residency, you don’t always have a sense of what your peers are doing, so [during the professionalism evening], residents who have recently been in the same shoes as new residents made clear our common goals and responsibilities,” says Chief Resident Ashley Quan.

“It took away the mystery about what’s expected for everything from asking for days off to not leaving the hospital without seeing if colleagues need breaks,” says Smith.

“What made the professionalism event work was that it was led by senior residents, not faculty, and it accelerated what you need to learn to thrive in a large, complex system,” says Thornton.

Continually Refining the Effort

To help keep residents engaged, the department has created a playful competition among the houses. Each house receives points for attendance at events, presentations, planning and citizenship actions, such as helping a colleague. At the end of the year, the winning house decides on its preferred prize.

Meanwhile, the leadership teams are refining what they’re doing. Based on feedback from their houses, the leadership teams are considering a number of future events:

■ A team-based scavenger hunt through San Francisco
■ A jeopardy style knowledge bowl to prepare for the in-training exam and catalyze group studying
■ A faculty-hosted and/or resident-run journal club to encourage peer learning
■ Events where families and significant others can meet, from a chili cook-off and Panini party to a whiskey tasting.

“We try to figure out what worked and hasn’t worked so we can better meet the needs of all the residents,” says Thornton. “I think people looking at the program now are excited by what we’re doing.”

“We figured why not have a family to go to, rather than just one faculty advisor?”

— Kevin Thornton, MD

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UCSF Department of Anesthesia and Perioperative Care
Acute respiratory distress syndrome (ARDS) is a significant public health concern in the US, afflicting about 200,000 people each year, with a mortality rate of as much as 40 percent, depending on the etiology. Nearly all therapy is supportive: low tidal volume ventilation, fluid conservative strategy and prone positioning.

UCSF anesthesiologist Jae-Woo Lee, MD, is among those working hard to discover therapies that can actually repair the damaged lungs.

Healing with Stem Cells

For a number of years, Lee worked with critical care specialist Michael Matthay, MD, in a lab focused on using adult mesenchymal stem cells to normalize alveolar epithelial permeability and fluid transport in damaged lungs.

Working with donor human lungs declined for transplantation, the research team injured the lungs in the lab using bacterial pneumonia, and then administered mesenchymal stem cells, which homed in on the inflammatory site and began secreting anti-inflammatory cytokines.

“We were able to demonstrate these stem cells have therapeutic effects; they stopped the inflammation and repaired the damage,” says Lee.

The group then advanced to a series of pre-clinical studies in collaboration with University of Texas, Galveston and Production Assistance for Cellular Therapies, a NIH-sponsored group that provides clinical grade cells for clinical trials. Using a sheep model of sepsis, the researchers found a very similar therapeutic effect to what they originally found in the human lung and in preclinical small animal models.

“Based on these results, Dr. Matthay is now conducting a Phase I and II clinical trial on the therapeutic use of bone marrow-derived human mesenchymal stem cells for ARDS,” says Lee.

Moving to Microvesicles

To build on that work, Lee’s lab has begun studying whether microvesicles can achieve a similar therapeutic effect to the mesenchymal stem cells. Microvesicles are membrane fragments released from the endosomal compartment of cells as exosomes or shed from surface membranes. The microvesicles retain the phenotype of the cells from which they originate, due to the presence of mRNA, microRNA and proteins such as keratinocyte growth factor, a known epithelial growth factor with therapeutic properties.

Microvesicles are of interest to medical researchers because they offer a couple of potential advantages over live stem cells. First, because they are anuclear, they pose minimal risk of spontaneous tumor formation. Second, the microvesicles do not require a bone marrow transplant facility for storage and so may be less expensive and more accessible for use as therapeutic agents.

“Our theory is that they will behave as smart drugs,” says Lee. “Get to the target site through surface receptors, stop the inflammation and repair the damage to the lung.”

To date, Lee’s group has been able to demonstrate in both bacteria- and endotoxin-induced ARDS that the microvesicles do retain most of the therapeutic properties of the live stem cells.

“In pre-clinical models, the effect has been pretty remarkable,” says Lee.

In addition, his team has been able to change the phenotype of the microvesicles, depending on how you treat the cells. “If you stress the cells with TLR3 agonists, you can create a more robust anti-microbial phenotype,” says Lee.

While Lee’s lab is still engaged in the pre-clinical work, he believes the initial findings make microvesicles very promising for an eventual translational study to treat ARDS.
When a 2014 survey on staff engagement revealed that, at times, being spread across multiple locations can make it difficult for staff members in the UCSF Department of Anesthesia and Perioperative Care to feel like part of a cohesive team, something clicked for Kien Truong.

Truong – billing coordinator for the department’s Mount Zion operation – approached Lorenzo Woo, formerly the department’s assistant director for education and Carroll Schreibman, who at that time was the SFGH Division Manager and who is currently the department’s Associate Chair of Administration and Finance, with an idea.

“I thought: ‘Why not plan a series of small functions throughout the year to bring staff together from the different work sites?’” says Truong.

Eventually, Truong engaged colleagues from each site to do just that. The Anesthesia Staff Support Engagement Team (ASSET) began functioning in the fall of 2014, and its members are enthusiastic that they can enhance the staff’s sense of unity.

“Kien’s personality – he had already cultivated relationships with many people – was critical in getting us out of the starting gate,” says Vanessa Cheng, another ASSET member.

A Staff-Driven, Staff-Led Effort

Most academic departments understand how important it is that non-academic staff members use their professional skills and institutional knowledge to support the department’s mission; the value is evident in a multitude of interactions that occur every day.

To galvanize and inspire staff members to continually do their best work, the ASSET team – Truong, Cheng and Phillip Evans – worked with Martie Santos (a senior human resources analyst) to create a staff mixer where staff members could openly discuss the survey results and offer specific feedback about what activities they would like to see. Marie Hollero joined ASSET in October of 2014 and brings valuable team building skills.

“This is very much a staff-driven, staff-led effort; there is no management involved, except for Martie [at first] who was more of an advisor,” says Truong. “Our main mission is to create a more cohesive work environment within the department where people are comfortable approaching each other. We want to create events where people can chat with their co-workers and walk away saying, ‘That was fun.’”

Our main mission is to create a more cohesive work environment within the department where people are comfortable approaching each other.” — Kien Truong

Left to right: Phillip Evans, Marie Hollero, Vanessa Cheng, Kien Truong

Once an avid figure skater, today he loves to bowl, sings karaoke, and enjoys “vegging out at home with a good movie and awesome snacks.”

Vanessa Cheng has been with the department for more than two years; her primary responsibilities are to help on-board and off-board staff and faculty and serve as assistant to the vice-chair of academic affairs. Born in Hong Kong, she and her family moved to the US when she was five. After graduating from Lowell High School and earning her undergraduate degree in international relations from UC Davis, she previously worked at the Asian Week Foundation. In her spare time, she enjoys volunteering in her community and quiet hikes. “The quieter, the better,” she says.

Phillip Evans has been with the department for more than five years. His primary responsibilities are managing the extramural funds for the Center for Cerebrovascular Research, as well as its day-to-day operations. Raised in Oregon, he has been in the Bay Area for more than 25 years. Before joining UCSF, he worked in the hospitality and escrow industries. In his spare time, he enjoys weekend getaways and volunteering for his community to raise much-needed funds for a variety of charities.
Farewell
Chuck Hajek and Lorenzo Woo

The Department of Anesthesia and Perioperative Care would like to extend its heartfelt gratitude and a fond farewell to two outstanding administrative leaders.

Chuck Hajek began his career in the Anesthesia Department in February of 2005, as our Budget and Finance Officer. In this role he managed all department funds, and implemented fiscal policies, reporting systems and controls for all funds under management. Prior to coming to the Department, Chuck spent over ten years in financial management roles in private industry, and credits Marge O’Halloran and Dr. Ronald Miller for taking “a chance on someone with no experience in the financial management of academic medicine.” Marge and Dr. Miller’s “gamble” has certainly paid off.

After successfully stewarding the Department through the 2009 – 2010 state furlough, Chuck became the Department’s Associate Chair for Finance in November of 2010. This expanded role included strategic planning and oversight of clinical enterprise and research program operations. Chuck developed and implemented mission based financial statements, which allowed the Chair to make informed decisions regarding resource allocation by Department mission. In addition, he played a significant role in the development and implementation of the Department research bridge funding program, as well as a strategic plan to achieve the Morton Society median compensation for anesthesia faculty.

The following year, Chuck became the Department’s Associate Chair for Finance and Administration, taking on oversight responsibility for all Department functional areas. As Associate Chair for Finance and Administration, Chuck continued to make improvements to the Department’s financial and administrative management processes to improve efficiency, customer service, and accountability. In addition, he led the Department’s effort to analyze and negotiate the new UCSF Health Funds Flow model.

However, Chuck’s biggest challenge in this role was addressing the Department’s recent forecasted financial deficit for FY13-14. In the spring of 2013, Anesthesia was forecasting a significant financial loss for FY12-13 and, given the state of finances at the time, our initial budget for FY13-14 indicated an even deeper loss. While the Department had (and continues to have) appropriate reserve levels, it was clear that our anticipated financial performance path was not sustainable.

The drivers for the poor financial performance were twofold; (1) lower than expected clinical revenues due to the implementation of the APeX electronic medical record system and (2) expense growth rate that outpaced Department professional fee growth.

In order to address the financial performance issue, Chuck collaborated with the Department’s Finance Committee to develop cost reduction measures with the following goals:

1. Identify areas of cost savings that did not inhibit the ability of the Department to achieve its core mission of improving patient lives through excellence, innovation, and leadership in patient care, scientific discovery, and education.
2. Distribute the burden of cost saving measures across Department missions (clinical, research, education, academic affairs, and central expense).
3. Assess the near term (FY13-14 & FY14-15) impact.

A thoughtful, clear cost reduction package was developed, presented to and unanimously approved by the Department’s Chair Advisory Group (CAG). A communication approach specifically targeting each impacted employee group was developed. A Department-wide communication followed. While most cost reduction decisions were not popular, the Department at large appreciated the transparency and fairness in the decision making process.

As a result of these cost reduction measures and better than expected professional fee revenue, the Department’s financial performance is back on track.

While managing these financial and administrative challenges, Chuck has always maintained a focus on staff development, and names participating in the success of those around him as his biggest reward. Chuck’s belief is that our overall contributions are measured by our impact on others around us – and he has certainly lived this out during his time in the Anesthesia Department. We wish him the best of luck in his next endeavors.

In March of 2010, when the Anesthesia Department’s beloved Residency Program Coordinator and den mother, Jeanie Murakawa, passed away after a sudden and unexpected illness, she left a gaping hole in the Department on both a professional and personal level.

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Farewell
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While no one could take Jeanie’s place, we were extremely lucky to hire Lorenzo Woo to take on the responsibility of a newly formed and expanded position: Assistant Director for Anesthesia Education. In addition to operational duties, the position was now responsible for strategic planning for the Department’s Education Domain.

Lorenzo came to the Department with over 20 years of graduate medical education (GME) experience, previously directing the UCSF Office of GME. This experience allowed Lorenzo to quickly and realistically assess the Anesthesia Education Domain’s established goals, objectives and operations and suggest improvements to streamline the workflow.

From the start, Lorenzo embraced a teamwork-based approach, which extended even beyond the Education Domain. In fact, perhaps his most outstanding legacy will be his efforts to engage the entire Anesthesia staff group following less than optimal results on a 2013 UCSF-wide Gallop poll about staff engagement. In April of that year, the Department launched a grass roots campaign with the initial goal of hearing from the staff about how to work collaboratively to create a “great place to work.” This led to Lorenzo (in collaboration with Carroll Schreibman, who at that time was the SFGH Division Manager and is now the Department’s MSO) hosting small staff working groups to stimulate the engagement discussion and garner feedback and ideas from the staff members themselves.

While Lorenzo would say that he was “just a bean counter” during this process, his leadership and positivity created an open atmosphere and a safe environment for staff to voice both their concerns and their suggestions for improvement. This work led to the establishment of quarterly staff meetings, a stronger focus on staff development, and most importantly, the formation of the staff ASSET (Anesthesia Staff Support Engagement Group) group. ASSET now has a funded mandate to engage the staff through a UCSF Chatter group and various staff events. Recently, they conducted a morale poll that showed improvement in staff morale and engagement since the commencement of their efforts. Lorenzo’s leadership was instrumental in making these improvements.

Although we will miss Lorenzo greatly, at least we know we can still stop by the Millberry Union Fitness and Recreation Center to participate in his BodyPump class! We wish him all the best as he focuses on his most important role: being a super-dad.

New Faculty

Career Faculty

Angela Lipshutz, MD
Assistant Professor in Residence
Joined Faculty September 2014

ADVANCED DEGREE
MPH: Johns Hopkins Bloomberg School of Public Health

MEDICAL SCHOOL
UCSF

INTERNSHIP
Internal Medicine: Stanford University School of Medicine

RESIDENCY
Anesthesiology: Massachusetts General Hospital & UCSF

FELLOWSHIP
Critical Care Medicine: UCSF

PREVIOUS EMPLOYMENT
Per Diem Anesthesiology Faculty: UCSF

Erin McKay, MD
Health Sciences Assistant Clinical Professor
Joined Faculty July 2014

MEDICAL SCHOOL
Boston University School of Medicine

INTERNSHIP
Anesthesiology: UCSF

RESIDENCY
Anesthesiology: UCSF

FELLOWSHIP
Critical Care Medicine: UCSF

Lawrence Poree, MD, PhD, MPH
Health Sciences Clinical Professor
Joined Faculty February 2015

ADVANCED DEGREES
MPH, PhD
Toxicology and Environmental Health Sciences: UC Berkeley

MEDICAL SCHOOL
Stanford University School of Medicine

INTERNSHIP
Transitional: Santa Clara Valley Medical Center

Visiting Faculty

Erik Litonius, MD, PhD
Visiting Assistant Professor
Joined Faculty November 2014

ADVANCED DEGREE
PhD: University of Helsinki, Finland

MEDICAL SCHOOL
University of Helsinki, Finland

RESIDENCY
Anesthesiology: Helsinki University Hospital (HUCH)

PREVIOUS EMPLOYMENT
Family Physician: Inga and Sibbo Healthcare Centers, Finland Attending Physician Helsinki University Central Hospital (HUCH)

Romain Pirracchio, MD, PhD
Visiting Associate Professor
Joined Faculty February 2015

ADVANCED DEGREE
PhD, Epidemiology and Biostatistics: Paris Diderot University

MEDICAL SCHOOL
Lariboisiere Medical School, Paris Diderot University

FELLOWSHIP
Critical Care: Hôpital Lariboisiere

PREVIOUS EMPLOYMENT
Head of the Surgical and Trauma Critical Care Team, Hôpital Européen Georges Pompidou, Paris Descartes University
Gregory Chinn was born in San Francisco and grew up in Southern California. He completed his undergraduate and MD/PhD degrees at UC Irvine. Greg’s research involved transcription factors and their role on cortical development in mice. Last year, he returned to San Francisco to complete his intern year at UCSF as part of the categorical anesthesia residency. Currently he is in the first year of anesthesia training as a CA-1.

Greg reflected on the selection process he went through: “I ranked UCSF at the top of my list after doing an away sub-I in Anesthesia here and seeing firsthand the program’s many strengths. Immediately, I appreciated the diversity of patients and types of cases that the different sites offer, from the veterans at the VA, to the trauma and underserved at SFGH, to the complex ‘zebras’ at Moffitt. Additionally, both the faculty and the residents were phenomenal teachers and I knew I wanted to be at that level one day. I also ranked the research tract highly given my interest in research and desire for a career in academics. UCSF Anesthesia is incredibly generous with support for research interests in any topic, and there are countless opportunities for projects.”

When Greg is not at the hospital, he enjoys spending time with his wife and daughter as they take advantage of all the Bay Area has to offer. They love the giraffes at the SF Zoo, the aquarium at the California Academy of Sciences, and the carousel in Golden Gate Park. There are so many outdoor activities to enjoy: hiking in the Marin headlands with breathtaking views of the Golden Gate Bridge and SF, biking through Sausalito, and day trips to Napa.

When asked about his current experience, Greg said, “Now that I’m a CA-1 and get to practice anesthesia daily, I couldn’t be happier or feel more fulfilled. I love my co-residents; it feels like we’re family. We all are there to support each other, which makes the steep learning curve bearable. I feel so lucky to be at this incredible institution with faculty, mentors, and co-residents that I truly admire and respect.”

Marisa Hernandez-Morgan was born and raised in a small town in Southern California, but she later moved to the big city of Los Angeles. She completed undergraduate studies, medical school and a Master’s degree in Public Policy at UCLA. Marisa reflected on the fourth year of medical school: “when it came time to choose a residency program I knew what I was looking for, and I knew I would find it all at UCSF. I wanted a program that would give me the chance to work at several different training sites, one that emphasized compassionate care and provided the opportunity to work with a diverse patient population.”

When asked about her current experience as a resident, she replied, “not only has the program provided the vigorous clinical training that I was looking for, but it has also given me the chance to work with leaders in the field who are patient, enthusiastic teachers. Everyday I work with faculty who are dedicated to resident education; it is a real strength of the program.”

Marisa enjoys being in one of the most unique cities in the world. In her free time she’s usually out enjoying the San Francisco food scene, hiking or exploring the city via scooter. There are so many street festivals, concerts and outdoor events it is impossible to be bored!
Peer Reviewed Publications


Gelb AW. Lifelong lessons I learned from my resident research project. Canadian journal of anaesthesia = Journal canadien d’anesthesie. 2014;61(12):1130-1131.

Golden MJ, Morrison LA, Kim H, Hart BL. Increased Number of White Matter Lesions in Patients with Familial Cerebral Cavernous Malformations. AJNR. American journal of neuroradiology. 2015.


Hirsch J. Hemodynamic Control and Delirium. Current Anesthesiology Reports. 2015(January).


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Active Research Grants

Jon Matt Aldrich
Principal Investigator
UCOP, Individual Grant, 01/01/2014–12/31/2015
Advanced Resuscitation Training (ART) $113,599

Pedram Aleshi
Principal Investigator
Anesthesia Department, Individual Grant, 10/01/2014–09/30/2015
Anesthesia Department Seed Support for Clinical Research $16,000

Roland Bainton
Principal Investigator
Anesthesia Department, Individual Grant, 07/01/2014–06/30/2015
A Platform for Rapid Characterization of Metabolic Disrupters in Whole Animals $420,240

Matthias Behrends
Principal Investigator
Anesthesia Department, Individual Grant, 10/01/2014–9/30/2015
Anesthesia Department Seed Support for Clinical Research $16,000

Philip Bickler
Principal Investigator
Various Industry Sponsors, Clinical Trial, 09/01/1986–12/31/2015
Accuracy of Pulse Oximeters with Profound Hypoxia $731,917

Jeffrey Ghassemi
Principal Investigator
Anesthesia Department, Individual Grant, 07/01/2014–06/30/2015
Anesthesia Department Seed Support for Clinical Research $19,994

Michael Gropper
Principal Investigator
Covidien, Clinical Trial, 01/21/2014–04/04/2015
Controlled Desaturation for Cerebral Oximetry $164,064.02

Marek Brzezinski
Principal Investigator
Alzheimer’s Drug Discovery Foundation, Individual Grant, 10/01/2011–05/31/2015
Effects of Brain Beta Amyloid on Postoperative Cognition $300,000

Catherine Chen
Principal Investigator
Foundation for Anesthesia Education and Research, Research Career Award, 07/01/2013–06/30/2015
Unnecessary Preoperative Testing in Medicare Patients Undergoing Cataract Surgery $75,000

Lee-lynn Chen
Principal Investigator
Mt. Zion Health Fund, Individual Grant, 04/01/2014–06/30/2015
Implementation Barriers to the Colorectal ERAS Pathways at Mount Zion $30,000

Helene Choquet
Principal Investigator
American Heart Association, Fellowship, 07/01/2014–06/30/2016
Contribution of Cardiovascular Risk Factors and Inflammation to Familial CCM1 Disease Severity $94,000

Zhonghui Guan
Principal Investigator
NIH/NINDS, Research Career Award, 09/30/2012–08/31/2017
Epigenetic Regulation in Neuropathic Pain $947,160

Tomoki Hashimoto
Principal Investigator
NIH/NINDS, Individual Grant, 03/15/2011–02/29/2016
Intracranial Aneurysm Pathogenesis-Roles of Vascular Remodeling and Inflammation $1,674,637

Judith Hellman
Principal Investigator
Anesthesia Department, Individual Grant, 07/01/2014–06/30/2015
Anesthesia Department Research Award $100,000

Helen Kim
Principal Investigator
NIH/NINDS, Individual Grant, 07/01/2013–06/30/2018
Predictors of Spontaneous Cerebral AVM Hemorrhage $2,335,649

Project Co-Leader
NIH/NINDS, Multicenter Project Grant, 09/30/2014–07/31/2019
Project 1: Modifiers of Disease Severity and Progression in Cerebral Cavernous Malformation $563,366

Sakura Kinjo
Principal Investigator
Anesthesia Department, Individual Grant, 10/01/2014–09/30/2015
Anesthesia Department Seed Support for Clinical Research $16,000

Kerstin Kolodzie
Principal Investigator
Anesthesia Department, Individual Grant, 10/01/2014–09/30/2015
Anesthesia Department Seed Support for Clinical Research $6,000

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**Active Research Grants**

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**Jens Krombach**
Principal Investigator
UCOP Prescription Loss Prevention Program, Individual Grant, 07/01/2013–06/30/2015
Development and Implementation of a Comprehensive Anesthesia Checklist App for Routine and Emergency Procedures
$111,401

**Philip Kurien**
Principal Investigator
Anesthesia Department, Individual Grant, 10/01/2014–09/30/2015
Anesthesia Department Seed Support for Clinical Research
$16,000

**Michael Lawton**
Program Director
NIH/NINDS, Multicenter Project Grant, 09/30/2014–07/31/2019
Brain Vascular Malformation Consortium: Predictors of Clinical Course
$6,179,248

**Chanhung Lee**
Principal Investigator
Anesthesia Department, Individual Grant, 07/01/2014–06/30/2015
Anesthesia Department Research Award
$3,300

**Jae-Woo Lee**
Principal Investigator
NIH/NHLBI, Individual Grant, 05/01/2012–04/30/2017
Human Mesenchymal Stem Cell Microvesicles for the Treatment of Acute Lung Injury
$1,904,985

**Jacqueline Leung**
Principal Investigator
NIH/NIA, Individual Grant, 09/15/2009–07/31/2015
Pathophysiology of Postoperative Delirium in Older Patients
$2,067,530

**Martin London**
Principal Investigator
Anesthesia Department, Individual Grant, 07/01/2014–06/30/2015
Anesthesia Department Research Award
$9,350

**Jennifer Lucero**
Principal Investigator
Anesthesia Department, Individual Grant, 07/01/2014–06/30/2015
Anesthesia Department Research Award
$20,520

**James Marks**
Principal Investigator
UC Irvine, Subcontract-Research, 05/01/2014–04/30/2015
Evaluating Diagnostic Antibodies for Botulinum Neurotoxins
$1,294,897

**Mervyn Maze**
Principal Investigator
Masimo Corporation, Clinical Trial, 06/01/2011–09/30/2015
Providing Good Sleep for ICU Sedation
$232,987

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Active Research Grants

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Lingzhong Meng
Principal Investigator
Anesthesia Department, Individual Grant, 10/01/2014–09/30/2015
Anesthesia Department Seed Support for Clinical Research $16,511

Claus Niemann
Principal Investigator
HRSA, Individual Grant, 09/01/2011–06/30/2015
The Effect of Therapeutic Hypothermia on Deceased Donor $2,001,108

Jonathan Pan
Principal Investigator
Foundation for Anesthesia Education and Research, Research Career Award, 07/01/2014–06/30/2015
Dexmedetomidine Renders Neuroprotection via Modulation of Systemic and Local Immune Responses Following Rodent Spinal Cord Injury $175,000

Ludmila Pawlikowska
Core Co-Leader
NIH/NINDS, Multicenter Project Grant, 09/30/2014–07/31/2019
Genetic and Statistical Analysis Core (GSAC) $417,458

Arun Prakash Budde
Principal Investigator
Anesthesia Department, Individual Grant, 07/01/2014–06/30/2015
Anesthesia Department Research Award $63,042

Principal Investigator
NIH/NIGMS, Research Career Award, 02/01/2015–01/31/2019
Role of Innate Immune Cells and Pathways in Ventilated Lung Ischemia Reperfusion $790,880

Jeffrey Sall
Principal Investigator
SmartTots, Individual Grant, 08/01/2013–07/31/2015
Recognition Memory Following Early Childhood Anesthesia $200,000

Principal Investigator
UCSF School of Medicine, Individual Grant, 08/01/2014–07/31/2015
Testosterone’s Role in Sex-Specific Outcomes After Early Anesthesia $97,850

Principal Investigator
NIH/NIGMS, Individual Grant, 01/15/2015–03/20/2020
Testosterone’s Role in Sex-Specific Outcomes After Early Anesthesia $1,524,496

Mark Schumacher
Principal Investigator
Anesthesia Department, Individual Grant, 07/01/2014–06/30/2015
Anesthesia Department Research Award $130,290

David Shimabukuro
Co-Principal Investigators
Michael Gropper
Vanderbilt University, Subcontract-Research, 08/15/2012–06/30/2017
The MENDS II Study $200,304

Hua Su
Principal Investigator
NIH/NINDS, Individual Grant, 01/01/2014–12/31/2018
Hemodynamics of Cerebral Arteriovenous Malformations $1,562,940

Principal Investigator
NIH/NINDS, Individual Grant, 04/15/2014–03/31/2016
Soluble VEGF Receptor Therapy for Brain Arteriovenous Malformation $790,313

Principal Investigator
UCSF Research Evaluation and Allocation Committee (REAC), Individual Grant, 01/01/2014–12/31/2015
Mouse AVM Models for Mechanistic Study and Therapeutic Test $30,000

Principal Investigator
NIH/NHLBI, Individual Grant, 01/16/2015–12/31/2018
Cell Type-Specific Influences on HHT Pathogenesis $1,582,037

Principal Investigator
The Michael Ryan Zodda Foundation, Individual Gift, 01/01/2013–Ongoing
Research on Vascular Malformations of the Brain $20,000

Steven Takemoto
Principal Investigator
Anesthesia Department, Individual Grant, 07/01/2014–06/30/2015
Anesthesia Department Research Award $70,576

James Sonner
Principal Investigator
Anesthesia Department, Individual Grant, 07/01/2014–06/30/2015
Anesthesia Department Research Award $91,958

Principal Investigator
UCSF Academic Senate, Individual Grant, 02/01/2015–01/31/2016
Novel Anesthetics $30,000

Arthur Wallace
Principal Investigator
Northern California Institute for Research and Education, Individual Grant, 03/01/2012–03/01/2016
Perioperative Outcomes Epidemiologic Consortium $150,000

Principal Investigator
VA National Anesthesia Office, Individual Grant, 01/02/2014–01/01/2016
VA Anesthesia Quality Improvement Program $100,000

Edward Yap
Principal Investigator
Anesthesia Department, Individual Grant, 07/01/2014–06/30/2015
Anesthesia Department Research Award $50,000

Xiaobing Yu
Principal Investigator
Foundation for Anesthesia Education and Research, Research Career Award, 07/01/2013–06/30/2015
Treating Neuropathic Pain with Spinal Cord Transplants of Genetically Modified Human Pluripotent Stem Cell-Derived GABAergic Inhibitory Neurons $175,000

C. Spencer Yost
Principal Investigator
Mt. Zion Health Fund, Individual Grant, 04/01/2014–06/30/2015
Improved Fluid Management in Abdominal Surgery $23,000

News
Honors & Awards

Faculty Honors, Awards and Appointments

Sue Carlisle, MD, PhD
CAMPUS AWARD
Holly Smith Award for Exceptional Service to the School of Medicine, 2015

Neal Cohen, MD, MPH, MS
EXTRAMURAL APPOINTMENTS
Chair for the ASA Section on Professional Practice Overseeing the Following ASA Committees:
■ Committee on Economics
■ Committee on Academic Affairs
■ Committee on Governmental Affairs
■ Committee on Health Policy Research
■ Committee on Large Group Practice
■ Committee on Practice Management
■ Committee on Rural Access to Anesthesia
Member, Practice Expense Subcommittee of the AMA Relative Value Update Committee
Co-Chair, ABA Critical Care Examination Committee

Gerald Dubowitz, MB ChB
EXTRAMURAL AWARD
Unrestricted Gift Fund of $50,000 from the Mulago Foundation for Global Health Program Support in Uganda
EXTRAMURAL HONOR
Honorary Lecturer, Department of Anaesthesia, School of Medicine, College of Health Sciences, Makerere University, Uganda
Visiting Professor, Stanford University
Visiting Professor, Drexel University

Michael Gropper, MD, PhD
CAMPUS AWARD
UCSF 150th Anniversary Alumni Excellence Award (Top 150 Campus Alumni)
EXTRAMURAL APPOINTMENT
Foundation for Anesthesia Education and Research, Academy of Research Mentors

Tomoki Hashimoto, MD
CAMPUS APPOINTMENT
Professor (joint appointment), UCSF Department of Neurological Surgery

Hung Nguyen, MD
CAMPUS AWARD

James Ramsay, MD
EXTRAMURAL AWARD
Society of Cardiovascular Anesthesiologists, Distinguished Service Award, 2015

Muhammad Shaikh, MD, PhD
EXTRAMURAL APPOINTMENT
American Board of Anesthesiology (ABA), Oral Examiner

Respiratory Therapy Award

Rich Kallet, RT
CAMPUS AWARD
San Francisco Health Commission Employee Recognition Award

Education Program Awards

RESIDENCY PROGRAM AWARD
The UCSF Anesthesiology Residency Program
Top Anesthesiology Program in the United States, U.S. News and World Report and Doximity, 2014

MEDICAL STUDENT PROGRAM AWARD
Anesthesia 110
Highest Rated Core Clerkship, 2013-2014
Top Core Clerkship Program at UCSF for 10 of the Last 12 Years

Anesthesia Residents
Highest Rated Clinical Teachers for the Last 12 Years

Welcome — We are pleased to announce the appointment of Carroll Schreibman as the Department of Anesthesia and Perioperative Care’s Associate Chair for Finance and Administration. She has served capably in this role in an interim capacity since Chuck Hajek’s departure to the Dean’s Office in August.

Carroll has been with the Department since 2002, when she started as an analyst supervisor in the Center for Cerebrovascular Research. In 2006, she became the Director of Administration for the Department’s SFGH Division. Carroll’s strong financial stewardship of pro-fee collections and the SFGH Affiliation Agreement provided the Department as a whole with greater stability, supporting projects that have fostered change management and improvement.

Carroll’s collaborative and engaged leadership style is recognized throughout the SFGH and UCSF Communities. She has served in many campus level leadership roles, as a member of the SOM LDP Selection Committee, as a Campus Skelly Officer, Step One Grievance Officer, and finally, as a Gallup Engagement Ambassador.