



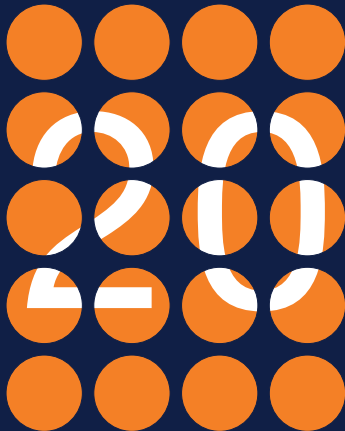
Ensuring Excellence

The UC San Francisco Department of Emergency Medicine

ANNUAL REPORT

Valued Educators

Department of Emergency Medicine
faculty teach in



medical school courses and also
serve as medical student
advisors.



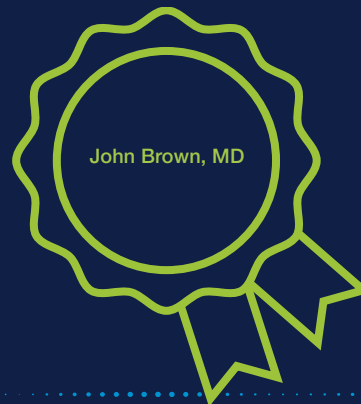
Heroes & Hearts Award



was one of the San Francisco General Hospital Foundation's 2016 Heroes & Hearts Award winners, which recognizes community members who exemplify the "go above and beyond" spirit of the foundation and of Priscilla Chan and Mark Zuckerberg San Francisco General Hospital and Trauma Center. Dr. Yeh has been involved in project EMS-6, aimed at improving the health of some of San Francisco's most vulnerable patients who depend on the emergency care system for almost all of their health needs.

Humanitarian Award

John Brown, MD, was this year's winner of the Humanitarian Award from the California Chapter of the American College of Emergency Physicians. For some 30 years, Dr. Brown has been donating his time to humanitarian causes that range from earthquake relief in the Philippines through service in a primary care clinic in rural Haiti and global health initiatives in Tanzania, with UCSF, and in Ethiopia, with the African Federation for Emergency Medicine.



Watson Scholars

Two of this year's eight UCSF John A. Watson Faculty Scholars – R. Starr Knight, MD, and Kayla Enriquez, MD, MPH – are from the Department of Emergency Medicine. The grants support faculty who demonstrate a commitment to UCSF's mission of diversity.



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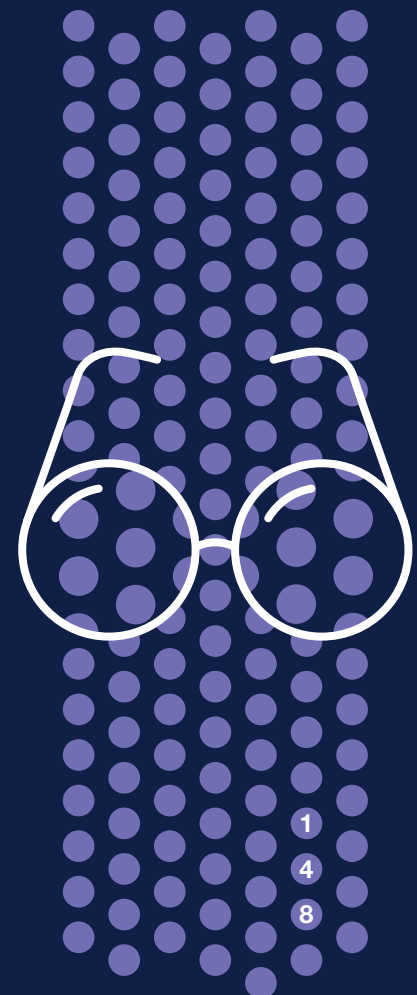
San Francisco Volumes

Our three emergency department sites
in San Francisco had more than



patient visits in 2016.

Peer-Reviewed Publications



In 2016, our faculty published 148 articles in peer-reviewed journals, including nearly every prominent journal for emergency medicine, as well as the *New England Journal of Medicine*, *The BMJ*, *Health Affairs*, *JAMA Internal Medicine* and *Pediatrics*.

Letter from the Chair

The UCSF Department of Emergency Medicine has a simple but essential vision: to continually improve emergent patient care across the life span and around the world. We care for everyone, from the medically complex to the medically indigent and underserved. This vision drives every aspect of our clinical, educational and research missions, and I'm pleased to report that this year we made real progress in all of those areas.

Consider just a few exciting developments:

- Our new state-of-the-art facilities at UCSF Benioff Children's Hospital San Francisco and Priscilla Chan and Mark Zuckerberg San Francisco General Hospital and Trauma Center (ZSFG) have become vital platforms for clinical innovation, research and education.
- We are successfully recruiting a more diverse faculty to improve the care of our diverse patient population. Two of this year's eight UCSF John A. Watson Faculty Scholars – R. Starr Knight and Kayla Enriquez – are from our department. The grants support faculty who demonstrate a commitment to UCSF's mission of diversity.
- In the past two years, we have developed four new fellowships: Global Health, Pediatric Emergency Medicine (jointly with UCSF Benioff Children's Hospital Oakland), Research and Medical Toxicology.
- Our expanding research portfolio casts a wide net by tackling everything from care delivery improvement through community-based prevention and outreach and novel clinical research to provide patient-centered care in the emergency department (ED).
- We lead a multidisciplinary technical working group – which includes the UCSF Center for Global Surgical Studies, the UCSF School of Nursing Center

for Global Health and the UCSF Institute for Global Health Delivery and Diplomacy – to support the activities of the World Health Organization's Emergency, Trauma and Acute Care program.

- We are advancing access to pediatric emergency care throughout the Bay Area by expanding our pediatric

emergency medicine faculty, creating the joint fellowship with UCSF Benioff Children's Hospital Oakland, infusing pediatric emergency medicine in all of our didactic programs and fully integrating child life specialists at all three pediatric locations, including the new dedicated pediatric ED at ZSFG.

Our exciting advances also make clear why there is much more to do. We are determined to build an even more robust clinical research infrastructure to take full advantage of our talented researchers and increasing patient volumes. At the same time, we continue to attract and retain the best and the brightest for our faculty, in order to provide the highest-quality care to patients and innovative and effective teaching for our trainees. This demands resources at a time when traditional funding sources are drying up. Yet such investments will pay outsized dividends, because they are the most efficient path to saving lives and improving the quality of many more.

In the past year, we have made tremendous strides toward achieving our vision. We have no intention of stopping now.



PETER E. SOKOLOVE, MD
CHAIR AND PROFESSOR
OF EMERGENCY MEDICINE



New Chief Brings Experience, Expertise and Humility

Christopher Colwell, MD, is chief of Emergency Medicine at Priscilla Chan and Mark Zuckerberg San Francisco General Hospital and Trauma Center (ZSFG). The former chief of the Department of Emergency Medicine at Denver Health and professor and executive vice chair of the Department of Emergency Medicine at University of Colorado School of Medicine, Colwell has received multiple awards for his contributions to emergency medical services (EMS) and trauma care and has published more than 100 papers or book chapters on prehospital, emergency and trauma care.

Q What excited you most upon your arrival?

A A faculty made up of quality people with a diversity of backgrounds, interests and approaches has the opportunity to care for a challenging but phenomenal patient population, some who haven't seen any provider in years. This enables us to impact lives in dramatic ways.

Add the history of this hospital, our affiliation with UCSF and a brand-new emergency department with over 50 private rooms and a dedicated pediatric area with faculty trained in pediatric emergency medicine, and you have a place where people want to go because it's the best possible place to receive their care.

Q What are some of the biggest challenges you face?

A Many of our most important challenges stem from the fact that we've only been an independent academic department for eight years. We have responsive leadership that understands the value of emergency medicine as the hospital's front door and the backup for many clinics and primary care physicians, but we're not always everybody else's priority. That's not unique to here, but we can only change that dynamic if we are a full partner in deciding where to allocate resources and how to make care decisions. With support from hospital leadership, we have begun moving in that direction. As we do, we have to assume a new level of accountability, something our faculty is more than capable of handling.

Q What types of things have you already put in place?

A In addition to working with leadership here, we are working with the city to address the lack of access to psychiatric care and social work resources. We also are enhancing our integration with emergency medical services, so they can better identify cases that don't need to come to the hospital.

Q What about the educational and research aspects of your mission?

A ZSFG is a great place to train emergency physicians to become experts, advocates and leaders, whether they are working in busy urban systems, remote rural hospitals or anything in between. That means, as an example, training them to become the experts in emergency intubation. To have that type of impact is a wonderful privilege and an even greater responsibility.

As for research, part of my job is to work with other department leadership on maximizing our resources, so we can best identify and support great projects and great people, whether it's here at ZSFG or collaborations with others in this or other UCSF departments.

Q What strengths do you bring to this job?

A Most importantly, I come from an outside institution – also a well-established Level I urban trauma center – which confronts some of the same issues we have here. That enables me to put everything on the table and ask basic questions about why we are doing things the way we do them. Some things here are fantastic, but those

“We have a great foundation, and I’m hoping to forge a vision we can all believe in and bring to fruition. It’s a journey I’m truly excited to be going on with this group.”

CHRISTOPHER COLWELL, MD
CHIEF OF EMERGENCY MEDICINE AT ZSFG

that aren’t working as well present a great opportunity to reinvent ourselves.

Another strength is a dedication to being humble, respectful and persistent. This means asking the right questions and pushing to ask deeper questions than before, but not pretending to have all the answers. I know change won’t happen overnight, and where change is necessary, I want to do it in a structured and collaborative way. We have a great foundation, and I’m hoping to forge a vision we can all believe in and bring to fruition. It’s a journey I’m truly excited to be going on with this group.



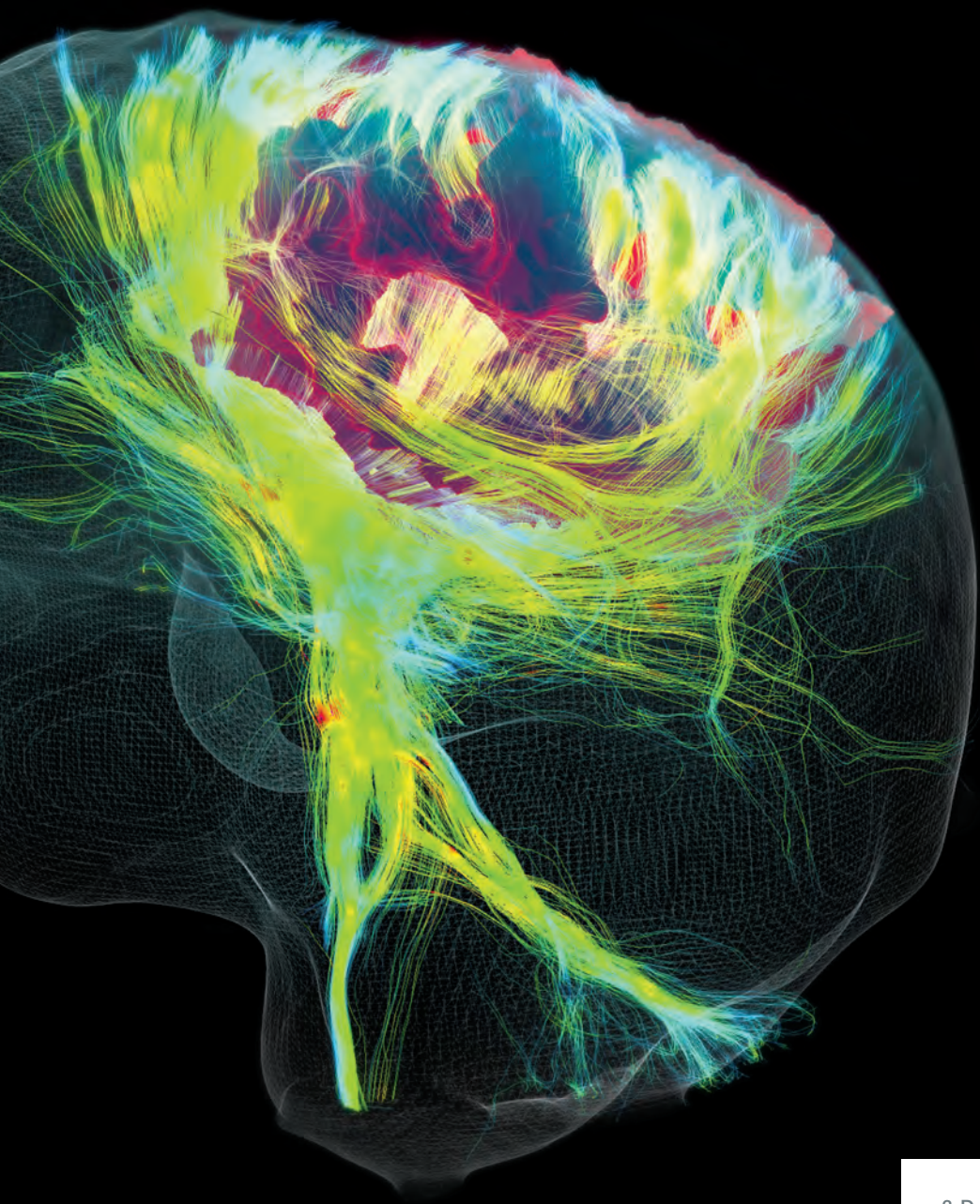
Tony Bennett, ZSFG Benefactor

On Friday, August 19, the City of San Francisco honored Tony Bennett – singer, painter and civic leader extraordinaire – by celebrating his 90th birthday.

On Saturday, August 20, the living legend performed a benefit concert, which raised nearly \$500,000 in support of emergency pediatric care at Priscilla Chan and Mark Zuckerberg San Francisco General Hospital and Trauma Center. The creation of the Tony Bennett Fund for Emergency Pediatric Care will ensure that every child’s emergency care experience is uniquely caring, calm and safe.



Complex Patients Demand Expert Emergency Medicine Detectives



Steven Polevoi, MD, medical director of the emergency department (ED) at UCSF Medical Center at Parnassus, remembers the case of the woman who presented with a severe headache despite no significant history of such headaches. “After evaluating her, we became concerned about stroke or meningitis and sent her for a CT scan,” he says.

While in the CT scanner, the woman lost consciousness and was rushed back to the ED. Within minutes, radiologists reported a rare brain tumor that had caused acquired acute hydrocephalus. Emergency physicians intubated the woman, and neurosurgeons hurried to the ED to place a drain to relieve the pressure in her brain. She walked out of the hospital a week later.

3-D diffusion tensor imaging scan shows nerve pathways (colored) around a glioblastoma (upper right).



“While most cases are not so dramatic, this is one example of the complexity of the patients we see,” says Polevoi. “We are routinely asked to be detectives, to discern the common from the uncommon and make tentative diagnoses that are very challenging from a cognitive perspective – and then to access the full complement of expertise we have available. It’s why we like to work at Parnassus.”

Often the Parnassus ED sees patients with comorbidities ranging from transplant and immunosuppression complications to rare syndromes and diseases, patients who are on a host of interacting, sometimes experimental, medications. Polevoi says that repeated exposure to such patients allows the Parnassus team to better understand unusual complications, build trust with other specialties and avoid unnecessary hospitalizations by discharging even some of the most complex cases when it’s safe and appropriate.

The Power of Experience

Two recent patients exemplify how the Parnassus ED addresses these challenges with the assistance of multiple specialties and the availability of immediate investigations.

One patient arrived with severe shortness of breath. His end-stage renal disease, heart failure, cirrhosis of the liver, chronic obstructive pulmonary disease

and schizophrenia challenged the ED team’s ability to make the diagnosis. They gathered their data, consulted with medical and renal teams on-site and, within an hour, found the patient had recurrent chylothorax, an obstruction of lymphatic drainage that produces fluid in the chest. They hospitalized the patient immediately, and he underwent emergent hemodialysis.

The other patient presented with neck pain and shortness of breath. He had had an aortic valve replacement and a liver transplant, and was now suffering from lymphoma secondary to immunosuppressive therapy for the transplant. “The potential diagnoses included blood clot, heart attack, some complication of immunosuppression, neurologic toxicity and heart failure,” says Polevoi. Comprehensive testing in the ED and consults with the transplant and malignant hematology services established that the neck pain was a result of degenerative cervical disease and the shortness of breath related to mild anemia. After stabilizing the patient, the ED team sent him home.

“We work hard to maintain a consistent flow – to discharge patients or get them upstairs quickly, so we can bring our expertise to increasing numbers of patients,” says Polevoi.

“We are routinely asked to be detectives, to discern the common from the uncommon and make tentative diagnoses that are very challenging from a cognitive perspective – and then to access the full complement of expertise we have available. It’s why we like to work at Parnassus.”

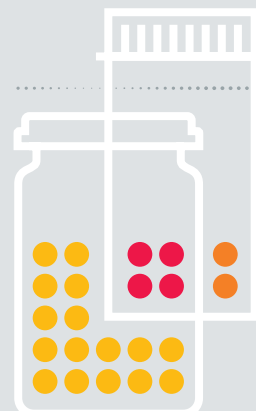
STEVEN POLEVOI, MD

MEDICAL DIRECTOR OF THE EMERGENCY DEPARTMENT
AT UCSF MEDICAL CENTER AT PARNASSUS

Complexity Breeds Innovation

Because of the extremely complex cases that come through its doors and the need for smooth throughput, the ED at UCSF Medical Center at Parnassus is constantly innovating to improve its care. In the past two years, those innovations have included:

- An eight-bed observation unit – called the Clinical Decision Unit – to care for ED patients who need extended observation or treatment but are likely to be discharged within 24 hours.
- A provider-in-triage who jump-starts care on high-volume days by ordering investigations that may take some time.
- A discharge coordinator who helps assure close follow-up and arranges additional testing for patients who are sent home.
- A dedicated pharmacist who helps to sort out which medications are safe for patients on multiple interacting medications.



Grace, Skill and Humor Cure a Child's Aggressive MRSA Infection

On a rainy day in February, while dropping her 6-year-old daughter, Sadhbh, at school, Catherine Kilroy noticed a small blemish on Sadhbh's chin. Normally, Catherine would not have been overly concerned, but by evening, the blemish had grown significantly, so Catherine decided to run her daughter to a nearby urgent care clinic.



STEVEN BIN, MD
MEDICAL DIRECTOR AND INTERIM
CHIEF OF THE DIVISION OF PEDIATRIC
EMERGENCY MEDICINE

"The urgent care doctor prescribed antibiotics and told me to keep an eye on it, but a few hours later at dinner, Sadhbh told me she felt hot," says Catherine. "Her face was white, with angry red lines, so I took a picture and texted it to the urgent care doctor. He told me to take Sadhbh to the emergency room at UCSF right away."

At the UCSF Benioff Children's Hospital San Francisco Emergency Department, Catherine and Sadhbh met Steven Bin, MD, the medical director and interim chief of the Division of Pediatric Emergency Medicine. Bin was concerned about a MRSA (methicillin-resistant *Staphylococcus aureus*) abscess infection and used a combination of pharmacological and nonpharmacological techniques to relieve Sadhbh's anxiety and pain. After lancing and draining what turned out to be a significant abscess, Bin put Sadhbh on antibiotics that are typically most effective with MRSA.

"The doctors and nurses were great," says Catherine. "They were calm and reassuring. They took us into a private space with kid-size gowns and a menu of movies Sadhbh could watch to distract her from the pain."

Teamwork Addresses

Stubborn Recurrence

Over the next few days, Sadhbh had to return to the ED three more times for pediatric emergency medicine physicians to drain the infection. Due to the persistent re-emergence of the abscess, the team set up a consultation with UCSF plastic surgeon William Hoffman, MD. "The emergency department really went to bat for me to find a spot in Dr. Hoffman's schedule," says Catherine.

One of the area's finest plastic surgeons, Hoffman was only a few minutes into the exam when he excused himself, secured an operating room and escorted the Kilroys to the hospital. "An hour later we were in surgery and Sadhbh had a drain placed in her chin," says Catherine. Sadhbh went home on another cocktail of antibiotics. Five days later the drain was removed, the infection gone.

Today, Sadhbh is her spunky self, with nothing to show for her ordeal but two nearly invisible scars beneath her chin. Grateful for the way she was treated – "Everybody was just really nice," she says – she donated a library of her own movies to the ED.

"Because Sadhbh kept getting worse, it was a very emotional and frightening time," says Catherine. "But there were so many good things about the experience. The doctors were amazing – great doctors whom I trusted not just because they were very serious in their approach to medicine, but because they were so calm and loving. They let me be in the room with Sadhbh the entire time, and they took the time to smile and be funny. They remembered they were dealing with kids and scared parents.... You don't forget that. You don't forget the doctors who save your child."



“You don’t forget
the doctors
who save your
child.”

CATHERINE KILROY
SADHBH’S MOTHER

After diligent care from UCSF pediatric emergency medicine clinicians and collaboration with other UCSF experts to erase a stubborn MRSA infection, Sadhbh made a full recovery.

2016 Year in Review

In 2016, the UCSF Department of Emergency Medicine continued to make essential, vital contributions to care delivery at UCSF Health, as well as to a discipline that is a critical piece of delivering accessible, high-value care for patients. During this tumultuous time in health care, our role has never been more important.

Clinical Care

In 2016, our three San Francisco sites and our Oakland site – UCSF Medical Center at Parnassus, Priscilla Chan and Mark Zuckerberg San Francisco General Hospital and Trauma Center (ZSFG) and UCSF Benioff Children's Hospitals in San Francisco and Oakland – provided hands-on care 24/7 for approximately 177,000 patient visits. In San Francisco, ambulance volumes were approximately 26 percent of census at both Parnassus and ZSFG. Fresno had 111,960 patient visits, with 40 percent arriving by ambulance.

ZSFG is the EMS base hospital for the City and County of San Francisco and northern San Mateo County, and this year our ZSFG faculty provided medical direction for nearly 5,000 high-risk prehospital patients. We did that while upgrading our communications system to one that integrates phone and radio with telemedicine capabilities. We also successfully transitioned to the new ZSFG ED, which covers four times the space of our previous facility, including 59 private rooms and a dedicated pediatric area



ZSFG is the EMS base hospital for the City and County of San Francisco and northern San Mateo County, and this year our ZSFG faculty provided medical direction for nearly 5,000 high-risk prehospital patients.



Clockwise from upper left: The Clinical Decision Unit at UCSF Medical Center at Parnassus, the new emergency department at ZSFG and an ambulance arriving at UCSF Benioff Children's Hospital San Francisco.

staffed by faculty trained in pediatric emergency medicine.

Also at ZSFG, continual process improvement informed by lean methodology includes daily interdisciplinary ED huddles with frontline staff and the creation, development and implementation of a new fast-track system to promote team-based and patient-centered care. One result of this improvement work was that we achieved our goal of having only 5 percent of patients leave without being seen. Despite increased patient volumes and no increase in physician staffing, we also achieved an 18 percent decrease in total ED length of stay (LOS) for all patients, a 46 percent decrease in LOS for our lower-acuity patients and the shortest LOS for discharged patients since we have been collecting and reporting these data.

Education

We continue to grow and improve our educational enterprise. Christopher (Toff) Peabody, MD, and Sonny Tat, MD, received Excellence in Teaching Awards from the Haile T. Debas Academy of Medical Educators in 2016, as did volunteer faculty members Caitlin Bailey, MD, Gene Hern, MD, and Arun Nagdev, MD. In 2015, Steven Bin, MD, Esther Chen, MD, Zlatan Coralic, PharmD, Christopher Fee, MD, Jacqueline Nemer, MD, Evelyn Porter, MD and Eric Silman, MD, received the same award.

Finally, our Faculty Teacher of the Year was Michelle Lin, MD.



EVELYN PORTER, MD
ASSISTANT PROFESSOR



ZLATAN CORALIC, PharmD
ASSOCIATE PROFESSOR AND PHARMACIST



SONNY TAT, MD
ASSISTANT PROFESSOR



ESTHER CHEN, MD
PROFESSOR



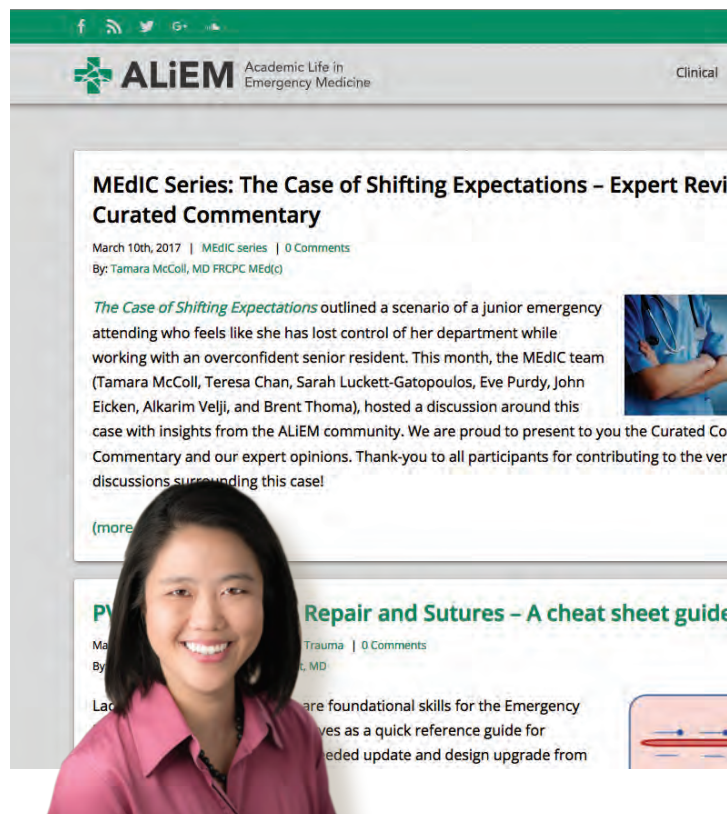
CHRISTOPHER (TOFF) PEABODY, MD
ASSISTANT PROFESSOR



JACQUELINE NEMER, MD
PROFESSOR

Not only does she direct our Digital Innovation Lab, but also through her connections in the blogging world (editor-in-chief of Academic Life in Emergency Medicine, or ALiEM) and the podcasting world (EM:RAP series), she has introduced faculty and residents to the world of FOAM EM (free open access medical education) and helped them disseminate their expert knowledge through these digital publication platforms.

For example, the 2016 ALiEM blog publications authored by our faculty have each garnered at least 1,000 views world-wide. Additionally the EM:RAP podcast segments have over 15,000 subscribers. With online educational resources becoming increasingly central in the millennials' personal learning network, we are positioning ourselves as leading experts, educators and scholars in the multimedia domain.



MICHELLE LIN, MD
PROFESSOR AND FACULTY TEACHER OF THE YEAR
DIRECTOR, DIGITAL INNOVATION LAB AND EDITOR-IN-CHIEF, ALiEM

Our emergency medicine residency program continues to grow. We expect our cohort of residents in San Francisco to increase to 56 by 2018. In San Francisco, Program Director Christopher Fee, MD, enhanced our residency program in a variety of ways. The curriculum has increased the amount of high-fidelity, simulation-based training, increased the frequency of journal club meetings, and instituted new lectures on relationships with patients, conflict resolution and end-of-life care.

We also offer a thriving array of emergency medicine fellowships in EMS and Disaster Medicine, Global Health, Medical Education, Pediatric Emergency Medicine, Medical Toxicology, Research and Emergency Ultrasound.



JAHAN FAHIMI, MD
ASSISTANT PROFESSOR



ERIC ISAACS, MD
PROFESSOR AND BRIDGES
CURRICULUM STUDENT COACH



JUAN CARLOS MONTÓY, MD
RESEARCH FELLOW AND FORMER
RESIDENT



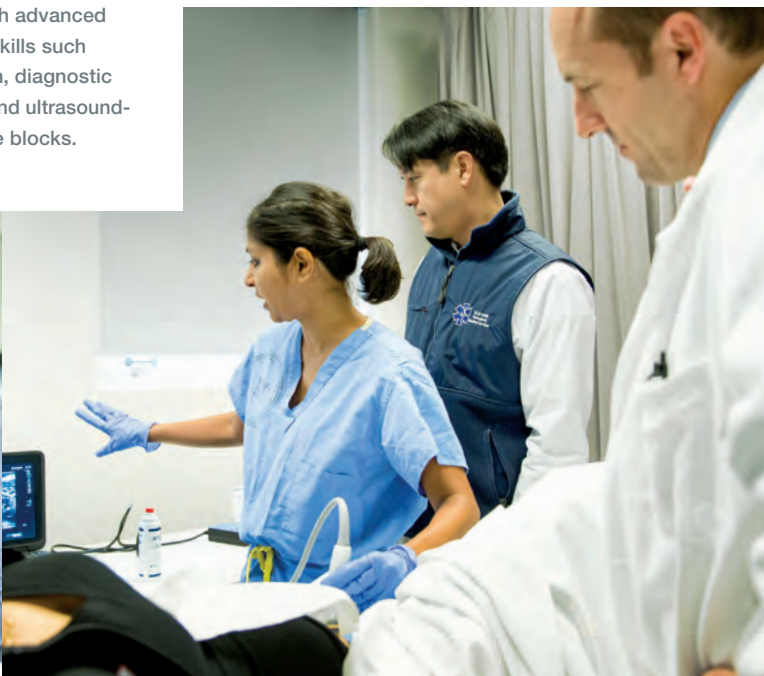
CHRISTOPHER FEE, MD
PROFESSOR AND
RESIDENCY PROGRAM DIRECTOR

We teach in 20 courses in the School of Medicine, including a number of popular electives. Our faculty provides substantial research mentorship and career guidance for many UCSF students, including students with Underrepresented in Medicine (UIM) backgrounds through the PROF-PATH Fellows program. Jahan Fahimi, MD, is teaching the social justice section of the medical student curriculum, while Steven Polevoi, MD, and Eric Isaacs, MD, are student coaches in the Bridges Curriculum.

Globally, in addition to expanding our elective opportunities to Tanzania, Chiapas and Saipan, Renee Hsia, MD, and Andrea Tenner, MD, lead a new multi-disciplinary technical working group to support the activities of the World Health Organization's Emergency, Trauma and Acute Care program. The collaboration includes the UCSF Center for Global Surgical Studies, the UCSF Department of Emergency Medicine, the UCSF School of Nursing Center for Global Health and the UCSF Institute



Faculty teach advanced procedural skills such as intubation, diagnostic ultrasound and ultrasound-guided nerve blocks.





Studies this year included evaluation of an opt-out strategy for HIV testing in the ED and a systematic review of emergency care in 59 low- and middle-income countries for WHO.



for Global Health Delivery and Diplomacy.

Collaborative activities in 2016 included development of the WHO Basic Emergency Care (BEC) course and associated e-learning adjuncts, including handheld applications, development of global implementation, monitoring and evaluation strategies for the course, contributing to the global review of the WHO Emergency Care Systems framework, and review and piloting of Francophone versions of several components of the WHO Emergency Care Systems Development Toolkit.



RENEE HSIA, MD
PROFESSOR AND DIRECTOR OF
HEALTH POLICY STUDIES



ANDREA TENNER, MD
ASSISTANT PROFESSOR AND
DIRECTOR OF THE GLOBAL HEALTH
FELLOWSHIP PROGRAM

Research

We continued to invest in and mentor our growing research faculty. As this report highlights, in the past academic year our faculty published 148 articles in peer-reviewed journals, including nearly every prominent journal for emergency medicine, as well as articles in the *New England Journal of Medicine*, *The BMJ*, *Health Affairs*, *JAMA Internal Medicine* and *Pediatrics*.

As an example of the scope and impact of our research output, our toxicologists published two articles that identified two separate Bay Area outbreaks of counterfeit medications containing fentanyl. The work made clear the potentially serious consequences of exposure to these medications, a finding that is especially helpful for first responders and frontline emergency physicians, who must identify and manage patients with acute opioid overdose.



TERI REYNOLDS, MD
ASSOCIATE PROFESSOR AND LEAD
SCIENTIST FOR THE WORLD HEALTH
ORGANIZATION EMERGENCY, TRAUMA
AND ACUTE CARE PROGRAMME

Other highly noted work included a successful opt-out strategy for HIV testing in the emergency department, helping advance efforts to understand patient wishes for involvement in their

emergency care, and participation in the National Emergency Airway Registry, which aims to document the airway management experience of clinicians in the emergency department setting and facilitate multicenter research on emergency airway management. Another important publication came from faculty member Teri Reynolds, MD, who leads the emergency and trauma care program at the World Health Organization; she published a systematic review of emergency care in 59 low- and middle-income countries for the *Bulletin of the World Health Organization*.

In short, 2016 saw our outstanding faculty make enormous strides toward realizing our vision of improving emergency care across the life span and around the world for everyone from the medically complex to the medically indigent and underserved. In doing so – and in fostering and personifying all of the values highlighted in UCSF's PRIDE (Professionalism, Respect, Integrity, Diversity and Excellence) initiative – our department has garnered global respect. We could not be more proud.

Selected Publications

Through our research – 148 peer-reviewed publications in 2015-2016 – our department continues to have an enormous influence on the practice of emergency medicine. What follows is just a small selection of our most impactful publications.

A national study of the prevalence of life-threatening diagnoses in patients with chest pain.

Hsia RY, Hale Z, **Tabas JA**. *JAMA Internal Medicine*. 2016 Jul 1; 176(7):1029-32.



Counterfeit Norco poisoning outbreak – San Francisco Bay Area, California, March 25-April 5, 2016.

Vo KT,** van Wijk XM, Lynch KL, Wu AH, **Smollin CG**. *MMWR Morbidity and Mortality Weekly Report*. 2016 Apr 29; 65(16):420-3.



Do patients hospitalised in high-minority hospitals experience more diversion and poorer outcomes? A retrospective multivariate analysis of Medicare patients in California.

Shen YC, **Hsia RY**. *BMJ Open*. 2016 Mar 17; 6(3):e010263.



Irrigation of cutaneous abscesses does not improve treatment success.

Chinnock B, **Hendey GW**. *Annals of Emergency Medicine*. 2016 Mar; 67(3):379-83.



Long-term mortality of patients surviving firearm violence.

Fahimi J, Larimer E, Hamud-Ahmed W, Anderson E, Schnorr CD, Yen I, Alter HJ. *Injury Prevention*, 2016 Apr; 22(2): 129-34.



Patient choice in opt-in, active choice, and opt-out HIV screening: randomized clinical trial.

Montoy JC,* Dow WH, **Kaplan BC**. *The BMJ*. 2016 Jan 19; 532:h6895.



Physician spending and risk of malpractice claims: defensive medicine may not be as common as we think.

Waxman DA, **Kanzaria HK**. *The BMJ*. 2015 Dec 14; 351:h6768.



Quality indicators for blogs and podcasts used in medical education: modified Delphi consensus recommendations by an international cohort of health professions educators.

Lin M, Thoma B, Trueger NS, Ankel F, Sherbino J, Chan T. *Postgraduate Medical Journal*. 2015 Oct; 91(1080):546-50.



Return visits to the emergency department: the patient perspective.

Rising KL, **Padrez KA**,* O'Brien M, Hollander JE, Carr BG, Shea JA. *Annals of Emergency Medicine*. 2015 Apr; 65(4): 377-86.e3.



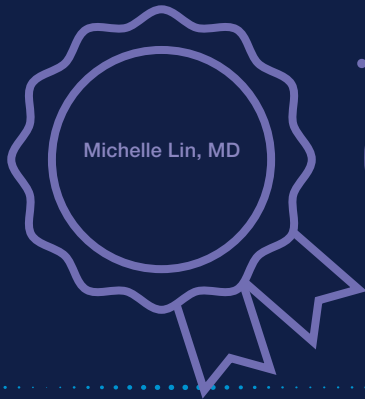
Variation in quality of urgent health care provided during commercial virtual visits.

Schoenfeld AJ, Davies JM, Marafino BJ, Dean M, DeJong C, Bardach NS, Kazi DS, Boscardin WJ, Lin GA, **Duseja R**, Mei YJ, Mehrotra A, Dudley RA. *JAMA Internal Medicine*. 2016 May 1; 176(5):635-42.



Teacher of the Year

Michelle Lin, MD, was the department's teacher of the year. She directs our Digital Innovation Lab, and as editor-in-chief of the blog Academic Life in Emergency Medicine (ALiEM) and contributor to the EM:RAP podcast series, she has introduced many faculty and residents to the world of FOAM EM (free open access medical education) and helped them disseminate their expert knowledge through these digital publication platforms worldwide.



1,000+
views/
ALiEM article

15,000
EM:RAP subscribers

New Fellowships

We've introduced four new fellowships in the past two years: Global Health, Pediatric Emergency Medicine (jointly with UCSF Benioff Children's Hospital Oakland), Research and Medical Toxicology.



New Emergency Department at ZSFG



High Volume Trauma Care

Fresno was one of the busiest Level I Trauma Centers in California, with

111,960

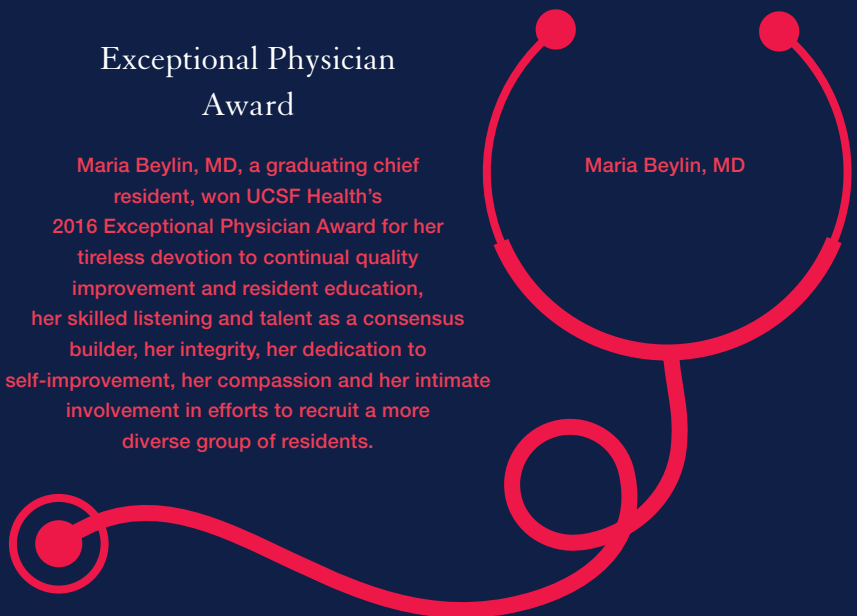



patient visits.

Exceptional Physician Award

Maria Beylin, MD, a graduating chief resident, won UCSF Health's 2016 Exceptional Physician Award for her tireless devotion to continual quality improvement and resident education, her skilled listening and talent as a consensus builder, her integrity, her dedication to self-improvement, her compassion and her intimate involvement in efforts to recruit a more diverse group of residents.

Maria Beylin, MD





Pathogenic strains of *Streptococcus pyogenes* bacteria can send patients to the emergency department with everything from simple skin infections to life-threatening illnesses.

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Department of
Emergency Medicine

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Imaging Lab / Science Source
and Thorkild Tylleskar.