



Do
Good
Do
Better
Always
Better



The UC San Francisco
Department of Emergency Medicine
2019 ANNUAL REPORT

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Letter from the Chair

In February, just as we were wrapping up this 2019 annual report, the world changed. It is now October 2020, and our country remains in a prolonged struggle to make sense of and address the COVID-19 pandemic, a devastated economy and centuries of systemic racism. Individually, each of these problems poses an enormous threat to the physical and mental health of individuals and communities across this country. Together, they form a crisis the magnitude of which we have not experienced for a generation or more.

Emergency departments are not immune. Individuals throughout our department are experiencing stress and grief driven by being firsthand witnesses to the ravages of the pandemic – including being acutely aware of the ways COVID-19 and the economic downturn disproportionately affect communities of color. Our response has been to innovate and work that much harder in our clinical settings, and to intensify our efforts to erase health inequities, but we recognize there is still much more work to be done. Nevertheless, our collective willingness to confront these issues, however imperfectly, is a point of pride because it speaks to the way our people epitomize the values of courage, compassion, commitment and innovative action needed for positive change.

Which brings me back to this report. When I reread it to determine whether we should produce it at all, I found it offered excellent examples of our core values. It demonstrates that in the corners of the universe we touch as emergency physicians – emergency departments in San Francisco, Oakland, Fresno and around the world – we deliver exceptional care to an extraordinarily diverse group of patients, and advance the practice of emergency medicine with an intentional eye toward improving care for all. Though we can always do more – and have committed to doing so – it's also important to recognize our work as a series of small steps toward a better future.



We deliver exceptional care to an extraordinarily diverse group of patients in Northern California and around the world.

In 2019, the time period this report covers, our expansion and restructuring of the leadership team at UCSF Helen Diller Medical Center at Parnassus Heights spurred changes that have significantly improved the efficiency and efficacy of our clinical services, and this is an important piece of how we have responded so well to COVID-19. Earning acceptance into the nationwide Pediatric Emergency Care Applied Research Network speaks to our deep commitment to caring for all children and ensuring they are properly represented in research on emergency care. Our seven talented new faculty members – and our focus on ensuring that they find a welcoming home here – have infused our department with new expertise, energy and perspectives. The evidence of our shared values goes far beyond what we can highlight in this year’s report.

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We are among the leaders in the effort to increase diversity, equity and inclusion in patient care, research and education. Starr Knight, MD, our director of diversity and inclusion, sits on UCSF’s eight-member Faculty Equity Advisor Council, which oversees hiring practices and selection processes across the campus. She and Rosny Daniel, MD, speak and teach nationally on these issues. Numerous faculty members are actively involved in creating a pipeline to health care professions for students of color.

Our clinical work and research at Priscilla Chan and Mark Zuckerberg San Francisco General Hospital and Trauma Center (ZSFG) deliver ongoing evidence of our deep commitment to providing high-quality care to individuals

and communities that for far too long have been denied access. Our efforts to leverage emergency medicine’s unique perspective on patient care have led to the City and County of San Francisco recognizing Hemal Kanzaria, MD, MSc, and Clement Yeh, MD, for their work addressing the health needs of San Francisco’s underserved. Jahan Fahimi, MD, MPH, has taught workshops around the country on violence prevention and the role of physicians in that process.

We are playing a national leadership role in devising the best ways to educate the next generation of emergency physicians, including formalizing a Diversity, Equity, and Inclusion series in our own residency didactics. Jeffrey Tabas, MD, has served on the American Board of Emergency Medicine Continuing Medical Education Task Force, and Esther Chen, MD, now serves as the site director at ZSFG for UCSF’s Office of Graduate Medical Education.

As we’ve highlighted in prior years’ reports, we are the first in the United States to be designated a World Health Organization/Pan American Health Organization Collaborating Centre for Emergency and Trauma Care – one of only two such centers in the world focused on emergency care. As one of the primary forces in achieving this designation, Andrea Tenner, MD, MPH, continues to bring trainings and workshops to other health professionals around the world.



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And these are just a few examples. We are proud of them and others, but still we know they are not enough. So members of our department have volunteered and provided care in COVID-19 hot spots in New York, the Navajo Nation and Brownsville, Texas. Others served in substantial leadership roles within the San Francisco Department of Public Health to assist in the pandemic, specifically concentrating on preparation, surge planning and logistics for the citywide response to COVID-19. In the years ahead, we will conclude our integration with the emergency department at UCSF

Benioff Children's Hospital Oakland, which serves some of the Bay Area's most underserved children and families. At UCSF Helen Diller Medical Center and ZSFG, we are in the process of achieving designation as a geriatric emergency department from the American College of Emergency Physicians, an effort that recognizes the vulnerability of older adults to outbreaks like COVID-19, as well as their unique care needs.

All of these initiatives reflect the mindset of a group of outstanding individuals determined to do good and do better – always better. In the midst of this pandemic and as we continue our efforts to deliver the finest emergency care to everyone who comes through our doors, we know we must examine our own biases – our role in perpetuating, however unconsciously, health inequities the pandemic has amplified and exacerbated.

We also must remember that as physicians and academic leaders, we have both power and influence. If ever there was a time to leverage our influence, that time is now, both to prevent more deaths from this modern-day plague and to promote justice, equity and anti-racism within this institution, in our profession and, more broadly, throughout the communities where we live and work.

As a department, we are unabashedly committed to these efforts. This is a truly remarkable team of passionate, principled people. I am confident that, together, we will continue to make progress toward overcoming the challenges before us.

With both pride and humility,

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

At Parnassus, New Leadership Cultivates Patient-Focused Teamwork

We've prioritized surge and disaster planning, updating our QI program and



improving the patient experience.





A Conversation with the New Chief

Maria Raven, MD, MPH, MSc, was appointed chief of Emergency Medicine at UCSF Helen Diller Medical Center at Parnassus Heights in June 2019. The following conversation with her occurred in January 2020; some answers were updated in May 2020.

In response to ongoing increases in patient volumes and complexity, the emergency department at UCSF Helen Diller Medical Center used 2019 to develop a new leadership structure. Tangible results followed.

What were your initial goals upon becoming chief?



Because I love the faculty here, enjoy working on teams and knew many of us had ideas for improvement, my first goal was to create a larger, more formal leadership team with defined roles, regular communication with all faculty members and the resources to advance important initiatives. We appointed Susan Lambe director of quality improvement (QI), Jahan Fahimi medical director and Elizabeth Kwan director of process improvement. We've been especially focused on fostering a more interprofessional approach to improvement efforts, backed by a strong reliance on data and our relationships with people from the many disciplines we work with every day. With that in mind, we meet weekly to do a deep dive on everything from immediate concerns through mid- and long-term priorities.

In our first six months, we've prioritized surge and disaster planning, updating our QI program and improving the patient experience. We have also worked to improve our charting and documentation with a tremendous effort led by Jackie Nemer. More recently, when it became apparent that COVID-19 was upon us, our team was able to shift gears to focus on preparedness and response to the pandemic. I appointed a director of COVID-19 disaster and preparedness, Jeanne Noble, who has focused specifically on coordinating our response with our ED leadership team and the medical center more broadly.



Can you give some examples in each category?



The COVID-19 pandemic has been such an unprecedented time, it has

made the first eight months of my job seem as if they are in the distant past. That said, for surge planning, we've added a new attending-only shift to triage patients who can be seen and discharged or sent directly to an observation unit [see page 8]. This facilitates throughput and has reduced length of stay (LOS); to date, it's been invaluable. We had already been working with the medical center to create a formal surge plan for the entire hospital, and this work has been advanced during COVID-19. Jeanne Noble, who is in charge of disaster and mass casualty events, had been conducting simulations, and we had adopted an online platform, Elemeno, where faculty and staff could find situation-specific protocols and a training module to prepare for disasters. We were able to leverage this platform to be our single "source of truth" for all policy updates and information related to COVID-19 for our entire ED.

We've also been reimagining the QI program and dedicating more resources to it [see page 11]. One thing we've instituted is that after formal case reviews, Dr. Lambe sends case summaries to the entire faculty and to the leads of nursing and pharmacy. We make sure to communicate what we've done to follow up and any

The pandemic has necessitated a large group effort from our leadership team, and we have been able to engage junior and research faculty to help.



results we've achieved. When a system issue comes up, we bring it to our multidisciplinary unit-based leadership teams (UBLTs) – and we also provide feedback to other departments on issues that require collaborative action.

To improve the patient experience, we're using a grant from the medical center. We've instituted an amenities cart – with things like sudoku, earplugs, pencils and blankets – and we're getting privacy screens and a cell phone charging tower. We're also piloting patient care technicians who greet and help patients, while also keeping them apprised of their status. The initiative extends all the way to putting plants in the lobby and making sure the bathrooms are consistently clean. We will likely need to reimagine this effort in the age of social distancing necessitated by COVID-19.



Any other important changes?



For our UBLT meetings, we've engaged multiple disciplines, giving everyone a chance to come together and think about issues that affect the department at large [see page 11]. One example: To address surge and boarding concerns, we decided that for lower-acuity patients, we could expand into the endoscopy suite [when it is not in use]. That took a lot of buy-in from a lot of people, but the UBLT successfully got it done.

We're also providing development opportunities for our amazing faculty, making sure they have a role and are able to contribute in ways that interest them: The pandemic has necessitated a large group effort from our leadership team, and we have been able to engage junior and research faculty to help. We are looking at how to use the ED as point to intervene with vulnerable patients. And one big change for next year is that we have grant funding to become certified as a geriatric ED. We also have more resources to create or implement evidence-based interventions for things like sepsis and alcohol use disorder. There is always more to do, and I have learned from this pandemic to expect the unexpected and to be nimble in the way we provide the best care for patients and the best support for our faculty.



Median Discharge Length of Stay, All ED Patients



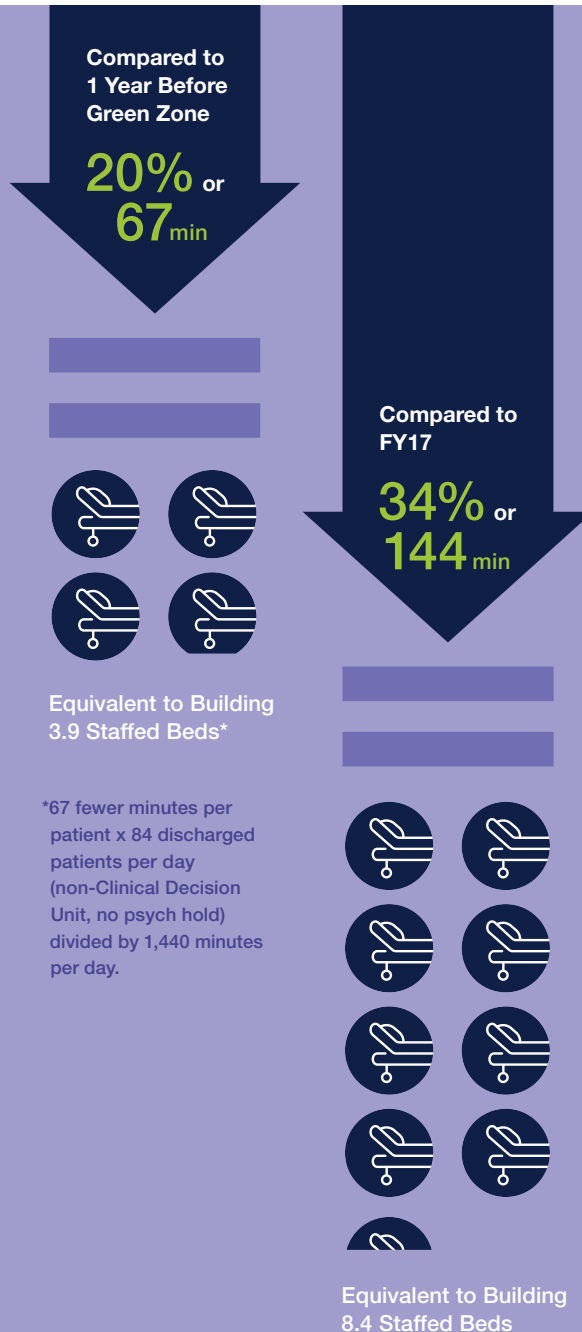
ELIZABETH KWAN, MD
ASSOCIATE CLINICAL PROFESSOR

Redesigned Green Zone Eases

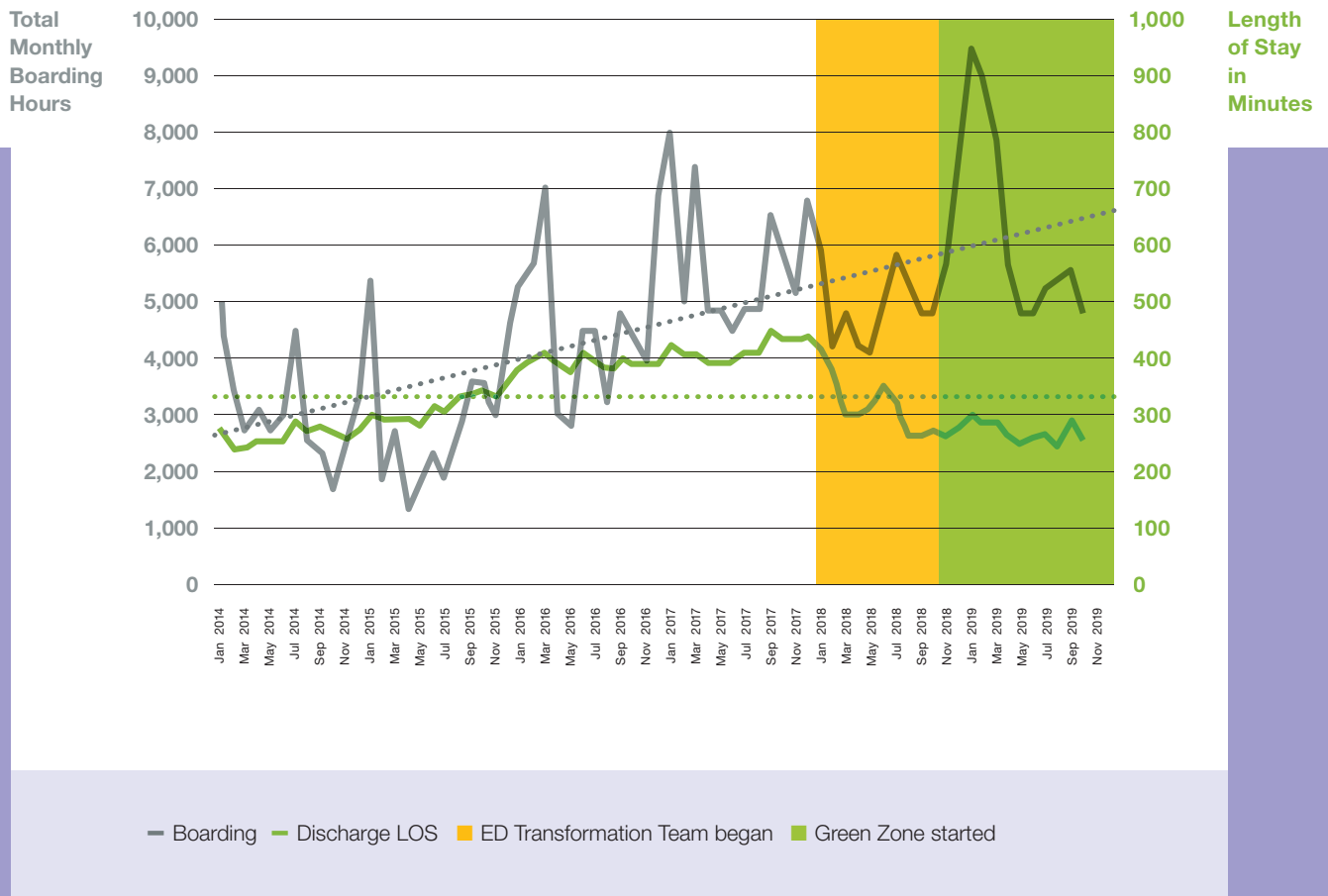
Increased Volumes

Continuing a comprehensive improvement initiative that began in January 2018, Elizabeth Kwan, MD, director of process improvement, led the launch of a redesigned split flow and care area called the Green Zone. By focusing on throughput and flexing resources to meet patient care demands, the Green Zone produced dramatic improvement in patient flow despite unprecedented inpatient boarding. “Everyone benefits. Within a week, all patients were being seen faster,” says Kwan.

Compared to the prior 12 months, the first year of the Green Zone resulted in a decreased length of stay (LOS) for *all* discharged patients of 20 percent, or 67 minutes per patient, equivalent to adding almost four staffed ED beds. Compared to fiscal year 2017 (FY17), the LOS for discharged patients decreased by 34 percent, or 144 minutes, equivalent to adding more than eight staffed beds. Bed utilization in what used to be called the Fast Track increased by 80 percent.



Monthly Boarding and ED Discharge Length of Stay



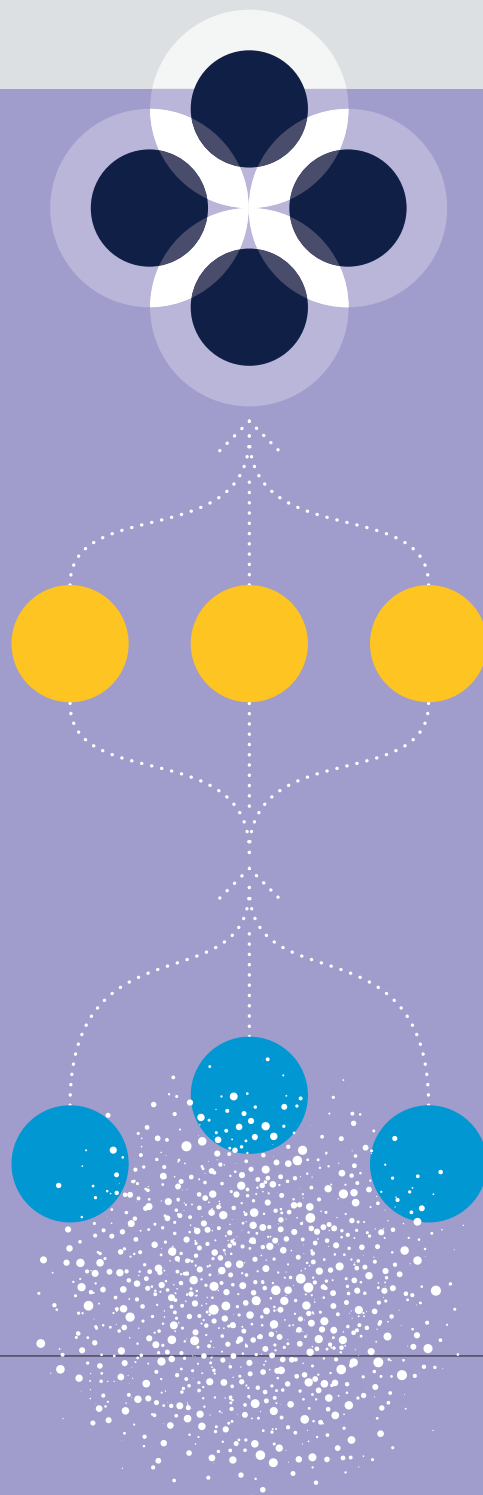
“Everyone benefits.
Within a week, all patients
were being seen faster.”

ELIZABETH KWAN, MD

The department's participation in the medical center's tiered huddling system has made a significant contribution to patient safety and more tightly woven the ED into the hospital's workflow.



JAHAN FAHIMI, MD, MPH
ASSOCIATE PROFESSOR



Each morning, in tier one, front-line providers collect data about the current state and past 24 hours. Next, representative front-line providers share that information with unit-based leaders, who, in turn, share information in a huddle with executive management.

Revitalizing QI

When Susan Lambe, MD, became director of quality improvement for the ED at UCSF Helen Diller Medical Center, one of her first moves was to form a multidisciplinary case review committee, which included pharmacists, nurses, advanced practitioners, residents, residency leadership and the ED leadership team. She ensured people could report cases to her in multiple ways and sought to focus largely on systems changes as the best opportunity to prevent future mistakes.

“Our job is to create a culture of safety, and our motto is the only mistake is a mistake you don’t learn from,” says Lambe. “We’ve worked hard to help people understand that our goal is not to ostracize, but to understand that reporting cases improves care for all our patients.” To that end, members of the leadership team often report their own cases. In addition, Lambe has emphasized providing support for those involved in adverse events to help address the potential emotional impact.

Other important innovations include plans for a quality newsletter for those who can’t attend case reviews and mentoring trainees to review and present many of the cases. “It helps residents learn what it means to commit to quality improvement in a culture of transparency and reflection,” says Lambe.



SUSAN LAMBE, MD
ASSOCIATE CLINICAL PROFESSOR

Changes Improve Throughput,

Respond to Clinical Needs

When he became medical director of the ED at UCSF Helen Diller Medical Center, Jahan Fahimi, MD, MPH, prioritized fostering an interprofessional approach in the UBLTs. “Social workers, security, nursing, nurse practitioners, physician assistants.... All bring a lot of strengths,” he says.

In weekly meetings, these representatives report on anything related to operational flow or QI, while also leaving room for ad hoc items. For example, when the coronavirus hit, Fahimi says that interprofessional representation eased the team’s ability to develop workflows in response to rapidly changing guidelines.

Equally important, the department’s participation in the medical center’s tiered huddling system has made a significant contribution to patient safety and more tightly woven the ED into the hospital’s workflow. Each morning, in tier one, front-line providers collect data about the current state and past 24 hours. Next, representative front-line providers share that information with unit-based leaders, who, in turn, share information in a huddle with executive management.

“Patient safety depends on the rapid flow of situational data,” says Fahimi. “This system allows us to more nimbly problem solve in real time. It also enables me to provide important feedback to the ED. As a key part of this, we’re no longer just a front-door unit; we have a seat at the decision-making table.”

PECARN Membership to Grow Collaborations, Spur Pediatric EM Advances

In 2019, the UCSF Department of Emergency Medicine earned membership in the Pediatric Emergency Care Applied Research Network, or PECARN. In doing so, the department took another leap forward in its growth as a research-oriented academic medicine department.

The first federally funded pediatric emergency medicine (PEM) research network in the United States, PECARN conducts research through a network that consists of a data coordinating center and seven multi-institution research nodes. Cooperative agreements between seven academic medical centers and the Maternal and Child Health Bureau/Emergency Medical Services for Children Program at the Health Resources and Services Administration provide financial support.

“PECARN is one of the most highly regarded pediatric research networks in the country, and it has already brought important research and resources to our division,” says Jacqueline Grupp-Phelan, MD, MPH, site principal investigator and chief of Pediatric Emergency Medicine at UCSF.

“Earning entrance to the network is a major accomplishment for the entire department,” says Peter Sokolove, MD, professor and chair of the department.



JACQUELINE GRUPP-PHELAN, MD, MPH
CHIEF AND VICE CHAIR FOR
PEDIATRIC EMERGENCY MEDICINE



NICOLAUS GLOMB, MD, MPH
ASSISTANT CLINICAL PROFESSOR

Successful Application Built on Diverse Experience

Becoming part of PECARN is a highly competitive process. Nodes – six of which contain three Hospital Emergency Department Affiliates and one EMS Affiliate – are chosen every four years. UCSF's department joined departments from Brown University and Emory University, as well as the Alameda County Emergency Medical Services Agency, to earn its spot.

“The makeup of populations around Brown, Emory and UCSF Oakland and San Francisco were complementary and under-represented in the network,” says Grupp-Phelan in explaining the successful application. “We also had diverse geographic representation, and leadership from each team had participated in major PECARN studies before.”

Alameda County EMS – for which former UCSF Department of Emergency

Medicine Vice Chair Karl Sporer, MD, is medical director – was equally important for the application's success due to its large, diverse population, centralized database and strong working relationship with UCSF Benioff Children's Hospital Oakland. In addition, the innovative work on EMS education in lower-resource settings of UCSF's Nicolaus Glomb, MD, MPH, enhanced the EMS component, as did collaborative opportunities with the outstanding UCSF/EMS team at San Francisco's Priscilla Chan and Mark Zuckerberg San Francisco General Hospital and Trauma Center (ZSFG).

Grupp-Phelan adds that PECARN membership offers the opportunity to further strengthen ties among the two UCSF Benioff Children's Hospitals – one a quaternary care hospital and the other the only Level I trauma facility in

a freestanding pediatric hospital in Northern California – and Alameda County EMS.

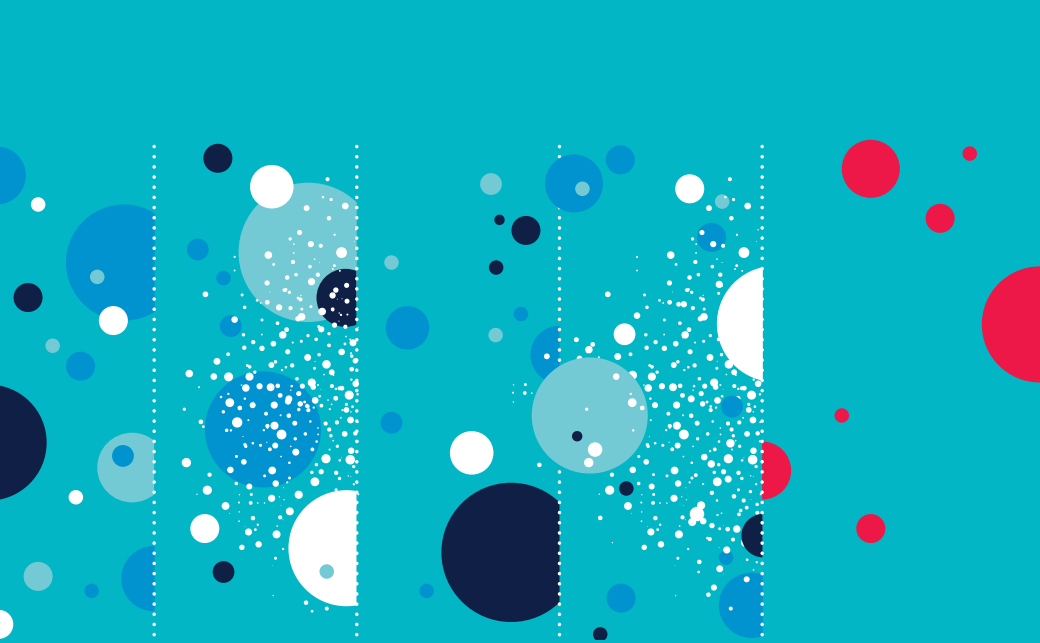
“There was an amazing amount of collaboration just in the application process,” she says. “Kevan McCarten-Gibbs, Stacey Hanover and Kelley Meade from Oakland; Karl Sporer from Alameda EMS; Steven Bin and Barbi Feldhauser from Mission Bay – and [Department Chair] Peter Sokolove, who is a tireless advocate for pediatric research.”

“We're excited both because of the opportunity for new and larger trials and because PECARN will enable us to reach a wider audience for the research we already do in Oakland,” says McCarten-Gibbs, Emergency Medicine division chief at UCSF Benioff Children's Hospital Oakland.

“PECARN is one of the most highly regarded pediatric research networks in the country, and it has already brought important research and resources to our division.”

JACQUELINE GRUPP-PHELAN, MD, MPH

Sam Lu, MD,
examines Matthew
Rodriguez, 3,
at UCSF Benioff
Children's Hospital
Oakland.



The breadth of PECARN has enabled suicidal screening of more than 10,000 children over the past three years, as well as follow-up for three to six months as a means to testing how to more effectively prevent suicide in children and adolescents.

Expanding Research

Opportunities

As of this writing, PECARN had already enabled the UCSF-Brown-Emory node to join a number of existing studies or expand their own within the network. Among studies already running at one or both UCSF Benioff Children's Hospitals are the following:

- Validating criteria to safely reduce computerized tomography (CT) scans for patients arriving with cervical spine trauma, with the goal of reducing radiation exposure
- Testing the use of tranexamic acid to speed clotting when children present with severe head and abdominal injuries
- Comparing the efficacy of ultrasound to a physical exam for diagnosing intra-abdominal injury
- Developing standardized dosing guidelines for prehospital personnel to safely administer seizure medication

Another study addresses the challenge that EMS and emergency department (ED) teams face when working with children whose primary concern is mental health-related. "Many of these children arrive at an ED and are medically cleared but have to wait for behavioral health treatment – and the ED is not the best place for them to be," says Sporer.

The current study builds on prior work that Sporer, Grupp-Phelan and Glomb did on how to safely divert children with mental health problems from the emergency department directly to a mental health unit. By linking five years of prehospital and hospital data, something that had long been a challenge, the team found that 17 percent of pediatric EMS calls had behavioral health as the chief complaint. Using a guideline that has become standard practice for Alameda County EMS teams, 37 percent of those patients were transported directly to a mental health facility – and only 0.4 percent of those needed a retransport back to the ED. The team presented its findings at



KARL SPORER, MD
VOLUNTEER CLINICAL PROFESSOR

the Society for Academic Emergency Medicine's annual meeting.

"We're now hypothesizing that, using the existing infrastructure in San Francisco and Alameda, we can develop a system where a separate child crisis team triages these children and diverts some directly to a psychiatric emergency center or crisis stabilization unit and allows some to stay at home while also plugging them into the behavioral health system for follow-up care," says Glomb.



Grupp-Phelan and Aaron Kornblith, MD,
attend a PECARN meeting.



KEVAN MCCARTEN-GIBBS, MD
VOLUNTEER ASSOCIATE CLINICAL
PROFESSOR

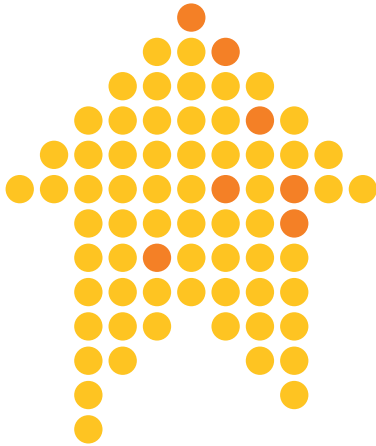
The Benefits of Research for Clinical Care

The advantage of PECARN is that it can bring these types of studies to other centers, and adapt them to what are often very different systems and circumstances.

"Pediatric research is a needle-in-the-haystack business, and we need to multiply our outcomes," says Grupp-Phelan. For example, in her own work on suicidal screening, the breadth of the network has enabled the screening of more than 10,000 children over the past three years, as well as follow-up for three to six months as a means of testing how to more effectively prevent suicide in children and adolescents.

"It's an exciting opportunity for us to lead or be part of multicenter research studies that enable us to establish new clinical treatment guidelines, and provide evidence that lays a foundation for developing child health policies," says Glomb.

New Faculty Members Enrich a Growing Department



As its growth accelerated in 2019, the UCSF Department of Emergency Medicine faced the pleasant challenge of selecting an optimal mix of new faculty members from a top-of-the-line pool and putting systems in place to help junior faculty succeed.

“We had 70 applications for seven spots and spent a lot of time finding the cream of the crop,” says Jeffrey Tabas, MD, director of faculty development. “Our search committee [which Tabas co-chaired with Malini Singh, MD, MPH, MBA] was 50 percent women or under-represented in medicine, and we carefully screened each candidate for teaching,

scholarly and research activities, as well as contributions to diversity and equity – and the people we’ve found enrich the department in many different ways.”

Equally important, Tabas and a diverse faculty development committee – which included Chief Administrative Officer Christine Montgomery, MHA, and Associate Chair for Education Christopher Fee, MD – also developed a proactive plan and dedicated resources to ease the new hires into their new professional home.

The team began by revising and updating orientation materials to accurately describe what the new faculty could expect in credentialing, maintenance of certification, benefits, advancement and promotion challenges, and how to access support and resources. The information became part of a robust electronic binder for the new hires.

In addition, a faculty development committee, with representatives from all three clinical sites and all three ranks of professor – and also composed of 50 percent women or groups under-represented in medicine – revitalized the mentoring program by rigorously delineating duties and commitments from both mentor and mentee, building in accountability and offering coaching on how to be an effective mentor.

Finally, says Tabas, “While not specific to new faculty, we’ve begun systematically tracking awards and development opportunities, and disseminating these opportunities. This type of recognition improves opportunities for the advancement and recognition of our entire faculty.”

The stories that follow profile these talented new faculty members.

In 2019, 70
applicants
vied for seven
available
faculty spots.



“I was drawn to UCSF’s emphasis on diversity, equity and inclusion in research and clinical medicine.”

Riham Alwan, MD, MPH

Pediatric Emergency Medicine

Born and raised in Detroit, Riham Alwan, MD, MPH, strongly considered social work before choosing a combined master’s in public health and MD program at Wayne State University. She trained in large urban trauma centers, completing an emergency medicine residency at Henry Ford Hospital, and a pediatric emergency medicine fellowship at Cincinnati Children’s Hospital Medical Center.

Alwan’s research focuses on the interplay between violence, health behaviors and health outcomes. Using qualitative and community-based research methods, Alwan explores ways to improve immigrant and refugee health. Her fluent Arabic and conversational Spanish – as well as being a prolific traveler – enhance that work.

Alwan says, “I was drawn to UCSF’s emphasis on diversity, equity and inclusion in research and clinical medicine.” A pediatric emergency medicine division that lies within emergency medicine is a particular advantage that allows Alwan to practice emergency medicine across the life span. She looks forward to collaborative research that will highlight and enrich the diverse communities of San Francisco.



Nancy Anaya, MD

Ultrasound; Medical Education;

Diversity, Equity and Inclusion

Nancy Anaya, MD, was a toddler when she and her family arrived in Los Angeles from Mexico. “I was my family’s primary translator, including when we went to the doctor,” she says. “That’s how my interest in health and providing access to language-appropriate care began.”

The first in her family to graduate from high school and college, Anaya eventually moved on to the UC Irvine School of Medicine and discovered emergency medicine while doing a master’s in global health at UCSF. She did her residency at Detroit Medical Center before returning to UCSF to do an ultrasound fellowship, ultimately accepting a full-time faculty position in 2019. “This is a very diverse emergency department,” she says. “That was important to me as a first-generation Latina woman.”

In addition to her clinical duties, Anaya mentors high school students in San Francisco’s Mission District, working with Starr Knight, MD, director of emergency ultrasound at UCSF. “We’re integrating ultrasound into anatomy classes – and we are examples of people in medicine who look like the students,” she says.



Joseph Brown, MD

Ultrasound, Medical Education

It was at Northwestern University’s Feinberg School of Medicine that Joseph Brown, MD, discovered emergency medicine. When he matched at UC San Diego – and his eventual wife, a urologist, matched at UCSF – they made the move from Chicago. World travelers and endurance athletes, Brown and his wife quickly came to appreciate California’s outdoor scene and cultural diversity.

It was as a resident that Brown developed an interest in both ultrasound and procedural-based teaching. In 2018, he became an ultrasound fellow at UCSF, before joining the faculty in 2019. He is now airway director at ZSFG, while maintaining his ultrasound and teaching activities, which include mentoring residents and medical students.

As a fellow, Brown conducted a study on the educational impact of the ultrasound image review process. He is also working with an anesthesia-trauma fellow to test a new time-out protocol that standardizes communication among clinical staff when patients need to be intubated as part of a trauma activation. “We expect that using this protocol will improve communication between all parties in the room and enhance everyone’s understanding of patient management,” he says.



“I especially wanted to work with patients who are underserved and providers who have been historically excluded from medicine.”

Rosny Daniel, MD

Medical Education; Diversity, Equity and Inclusion

Since he was a child in Southern California, Rosny Daniel, MD, wanted to become a doctor, like his father.

“I especially wanted to work with patients who are underserved and providers who have been historically excluded from medicine,” he says, adding that his social justice work, biochemistry major and athletic interests as an undergraduate all pointed him toward a career in medicine.

He completed medical school, residency and a fellowship in medical education at UCSF, choosing emergency medicine because, he says, “There’s a mix of community awareness, helping individuals, working at a good pace – and having a life outside of medicine.... I believe people fulfilled outside of work bring passion back to it.”

The Bay Area certainly enables Daniel to pursue his own diverse passions. He soaks up cultural events and the outdoors with his family and miniature schnauzer. Within the department, he actively participates in integrating diversity, equity and inclusion concepts into patient care and into residency

curriculum and recruitment; he has spoken at national conferences on these efforts.

“We have great models in our department,” he says. “They challenge us on how we interact with each other and the ways in which we can have a positive impact.”



Nida Degesys, MD

Geriatric Emergency Medicine

After an undergraduate education focused first on journalism, then on political science, Nida Degesys, MD, joined the Peace Corps, where she spent much of her time volunteering in local health centers in Panama. It was then, she says, “I realized that providing the care was what was getting me up in the morning.”

After postbaccalaureate training and then medical school at Northeast Ohio Medical University, Degesys chose emergency medicine because, she says, “It is an honor to be part of somebody’s worst day.” She did her residency at UCSF, completed an administrative fellowship at Stanford focusing on geriatric emergency medicine and then came “home” to UCSF.

She is now part of a team working toward fulfilling requirements for the ED at UCSF Helen Diller Medical Center to receive accreditation as a geriatric ED from the American College of Emergency Physicians. “Older people have different medical issues and comorbidities. Too often, to their detriment, we treat them the same as younger adults,” says Degesys.

“I want our patients to be treated as if they are my own parents.”

“I moved to UCSF...and I’ve been blown away by the commitment to education and diversity, as well as by the quality of the faculty, the research and the commitment to patients. I feel lucky to be here.”

Zhanna Livshits, MD

Medical Toxicology



After emigrating from Belarus with her family as a child, Zhanna Livshits, MD, grew up in Los Angeles. While attending UC Irvine School of Medicine, she did an elective in rural India that spurred her interest in emergency medicine. She completed her residency at Johns Hopkins and then a fellowship in medical toxicology at NYU’s Poison Control Center. By 2011, Livshits was an attending physician at Weill Cornell Medical Center and part of the toxicology consult service there.

In October 2019, she says, “I moved to UCSF...and I’ve been blown away by the commitment to education and diversity, as well as by the quality of the faculty, the research and the commitment to patients. I feel lucky to be here.”

In addition to her clinical duties, Livshits teaches residents and fellows about medical toxicology and is helping to develop a toxicology consult service. She hopes eventually to conduct research on substance use disorders, medication-assisted therapies and adverse medical events, particularly among the elderly.



Efrat Rosenthal, MD

Pediatric Emergency Medicine

For Efrat Rosenthal, MD, becoming a physician was a given from a very young age. “A friend from elementary school reminds me I always wanted to be a pediatrician,” she says.

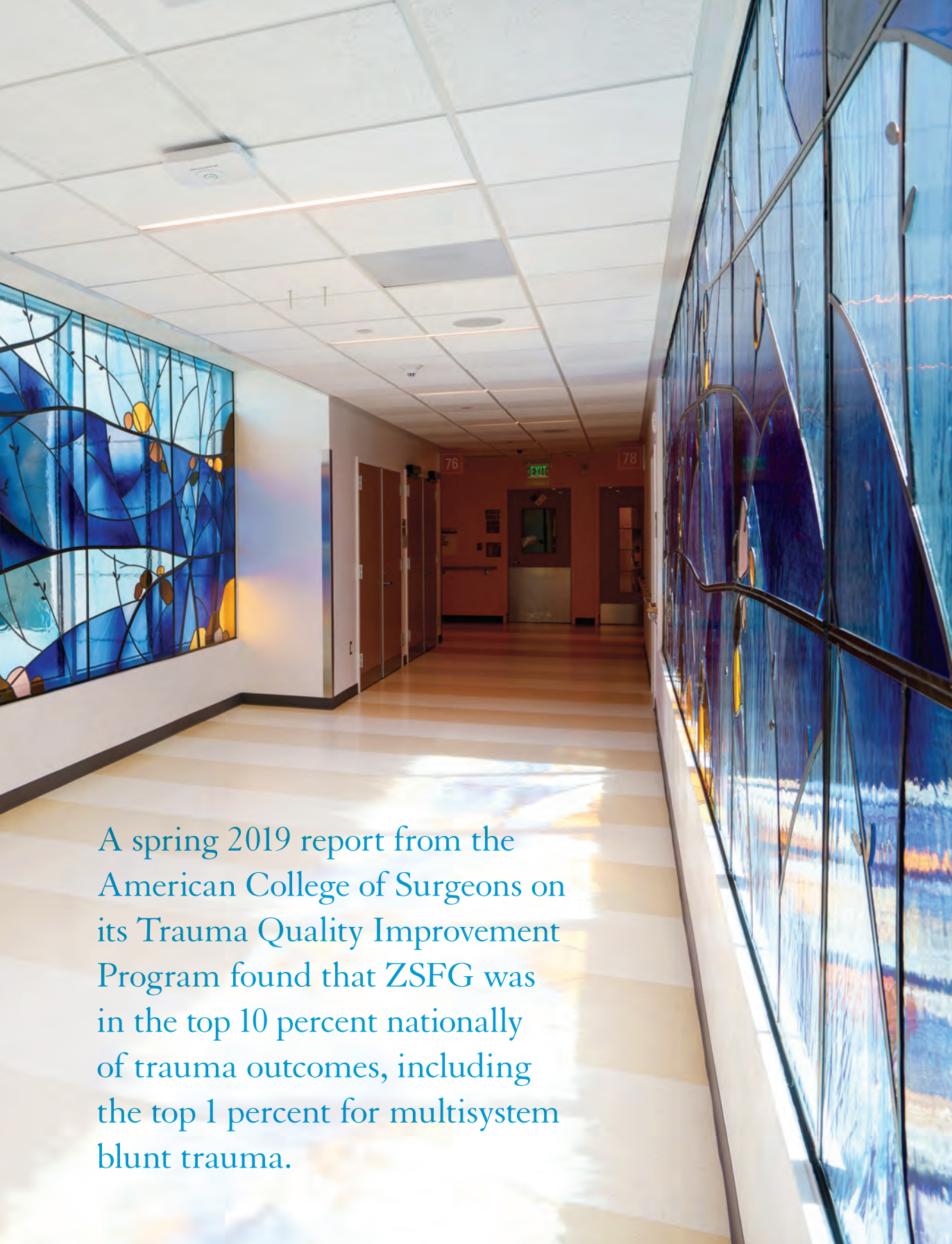
After graduating from the Sackler School of Medicine in Israel, she completed her residency at Yale, worked for a year in rural South Africa and then moved on to a satellite hospital of Boston Children’s, working as a hospitalist, mostly in the pediatric emergency department. She then did a fellowship in PEM at Baystate Medical Center before she and her husband – now an interventional pulmonologist at UCSF – decided to move west with their three young children.

Rosenthal says her academic interests include disaster preparedness and injury prevention in children. That work reflects her deep commitment to her own family life.

“I find it very rewarding to work in pediatrics, to work with both the patients and their families.”

2019 Year
in Review





A spring 2019 report from the American College of Surgeons on its Trauma Quality Improvement Program found that ZSFG was in the top 10 percent nationally of trauma outcomes, including the top 1 percent for multisystem blunt trauma.

As noted in the introductory letter, in 2019, the UCSF Department of Emergency Medicine continued to grow and expand our influence. Trainees, clinical colleagues and patients from the Bay Area, the nation and around the globe benefit from our faculty's extraordinary dedication and leadership.

Patient Care

With an expanded and restructured leadership program, UCSF Helen Diller Medical Center at Parnassus Heights instituted a number of programs to improve quality and safety for its patients. A revamped Green Zone resulted in a decreased LOS for *all* discharged patients of 20 percent, or 67 minutes per patient, equivalent to adding almost four staffed ED beds. Bed utilization in what used to be called the Fast Track increased by 80 percent. A dedicated QI director, an interprofessional emphasis on unit-based leadership teams, and active involvement in the medical center's tiered huddling system and other medical center efforts, including surge planning, have all opened the lines of communication between the ED leadership team and UCSF Medical Center leadership. This has been a key element in improved outcomes and care coordination throughout the hospital, ensuring that the ED is engaged in medical center-wide clinical and operational decision making.

At ZSFG, we continued to build on the growth, efficiency gains and social medicine services described in our 2018 report. A spring 2019 report from the American College of Surgeons on its Trauma Quality Improvement Program found that ZSFG was in the top 10 percent nationally of trauma outcomes, including the top 1 percent for multisystem blunt trauma. We expanded both

our toxicology and EMS services. Our Centralized Ambulance Destination Determination (CADDIE) project added to the ways we address the needs of the city's underserved communities by working directly with EMS to reduce diversion and our "left without being seen" rate. Newly appointed Medical Director of Care Coordination Hemal Kanzaria, MD, MSc, will co-lead the design and implementation of care coordination, social services and utilization management activities. That work will benefit from a \$1 million donation

A \$1 million donation from Kaiser Permanente will help support the ZSFG Social Medicine Team.

from Kaiser Permanente to support the ZSFG Social Medicine Team, which Kanzaria also leads. The money will go toward enhancing the services the Social Medicine Team offers, including expanding the connection with Psychiatric Emergency Services.

Also at ZSFG, Dina Wallin, MD, led the creation of an ED equity group, with the goal of creating an open environment where all clinical and administrative staff can support one another and ensure mutual respect across the board – developments that have a very real effect on patient care. "They're doing a great job in enabling people to speak their truth about equity and inclusion concerns," says Starr Knight, MD.

At UCSF Benioff Children's Hospital San Francisco, Shruti Kant, MBBS, led the expansion of our work with Bay Area emergency departments to ensure all acutely ill children receive appropriate and timely care upon arrival at any emergency department. The program – Improving Pediatric Acute Care Through Simulation – is a collaborative effort among many of the nation's finest children's hospitals. Across the bay, a team at UCSF Benioff Children's Hospital Oakland leads the Western Regional Alliance for Pediatric Emergency Management, which received a grant from the U.S. Department of Health and Human Services to develop a regional pediatric disaster preparedness center of excellence for the northwest region of the United States.

The Public Health Institute has designated UCSF Fresno a California Bridge Program Star Site, dedicated to prevention, treatment and long-term recovery for patients with opioid use disorders. This commitment is hospital-wide, and the Bridge team includes a dedicated substance use navigator and a multidisciplinary team that oversees implementation of medication-assisted treatment (MAT) throughout the emergency department. The team has completed more than 350 consults and initiated MAT for 150 patients at the Community Regional Medical Center/ UCSF Fresno. In addition, we continue to teach physicians, staff and patients about safe opioid use and nonopioid alternatives for pain.



HEMAL KANZARIA, MD, MSc
ASSOCIATE PROFESSOR



DINA WALLIN, MD
ASSISTANT CLINICAL PROFESSOR



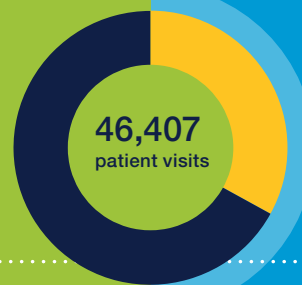
STARR KNIGHT, MD
ASSOCIATE CLINICAL PROFESSOR



SHRUTI KANT, MBBS
ASSOCIATE CLINICAL PROFESSOR

2019 by the Numbers

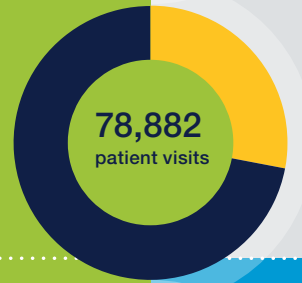
UCSF Helen
Diller Medical
Center at
Parnassus
Heights



UCSF Benioff
Children's
Hospital
San Francisco



Zuckerberg
San Francisco
General
Hospital



The Community
Regional
Medical Center
in Fresno



Medical direction for
more than 5,000 high-
risk calls in its capacity
as the EMS base
hospital for the City
and County of San
Francisco and northern
San Mateo County





CORTLYN BROWN, MD
RESIDENT



CAROL CHEN, MD, MPH
ASSISTANT CLINICAL PROFESSOR



MARY MERCER, MD
ASSOCIATE CLINICAL PROFESSOR
AND EMS AND DISASTER MEDICINE
FELLOWSHIP DIRECTOR



ERIC ISAACS, MD
PROFESSOR AND BRIDGES
CURRICULUM STUDENT COACH

Even as our residency and fellowship programs grew, we continued to teach 22 courses at the School of Medicine and had six student coaches in the UCSF Bridges Curriculum.

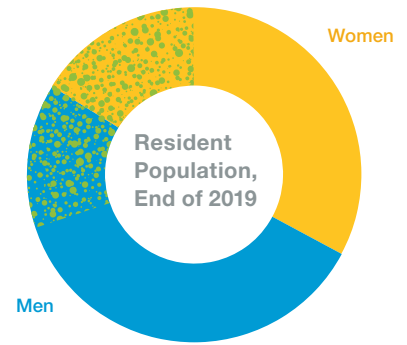
Education

Drawing on November 2019 grant funding from CalMedForce, our department is funding one additional resident position effective July 2020, bumping the number of residents to 57, of which 28 were women and 17 were from under-represented in medicine (UIM) groups.

With the leadership of Dina Wallin, MD; Starr Knight, MD; Rosny Daniel, MD; and others, we formalized a Diversity, Equity, and Inclusion (DEI) series in residency didactics. The enhanced curriculum, says Knight, the department's director of diversity and inclusion, reflects the department's efforts to lead on DEI. Further evidence of that leadership:

- The department has one of the highest percentages of John A. Watson Faculty Scholars at UCSF. In 2019, Rosny Daniel, MD, became the department's fifth Watson Scholar.
- More than half of the department's faculty has completed UCSF's DEI Championship Training Program, something Knight spoke about as an invited presenter at the 2019 Association of American Medical Colleges' Group on Diversity and Inclusion.
- Wallin has set a goal that half of Grand Rounds presenters will be either women or people of color, says Knight.
- Knight and Cortlyn Brown, MD, provide a DEI orientation for all incoming interns.

Under-represented in medicine



For 2019-2020, the department's fellowship programs also continued to grow. We had 15 fellows, the largest number ever, due in part to the expansion of both Medical Toxicology and EMS and Disaster Medicine to two fellows per year and to the inauguration of our newest fellowship at UCSF Benioff Children's Hospital San Francisco: a Pediatric Emergency Ultrasound fellowship. Margaret Lin-Martore, MD, and Aaron Kornblith, MD, run the program, and Scott Sutton, MD, is the inaugural fellow.

Even as our residency and fellowship programs grew, we continued to teach 22 courses at the School of Medicine and had six student coaches in the UCSF Bridges Curriculum: Eric Isaacs, MD; Marianne Juarez, MD; Margaret Lin-Martore, MD; Christopher "Toff" Peabody, MD, MPH; Steven Polevoi, MD; and William Shyy, MD.

Finally, our faculty members and trainees continued to receive recognition for their education efforts:

- Wallin became our new residency didactic director in March 2019; pediatric residents also recognized her as Faculty of the Year.
- Daniel received the Dean's Diversity Fund Award from the UCSF School of Medicine and was a 2019 John A. Watson Faculty Scholar.
- Mary Mercer, MD, is now director of the EMS and Disaster Medicine Fellowship, after longtime director John Brown, MD, stepped down.
- Carol Chen, MD, MPH, led the inaugural offering of the UCSF CME course High Risk Emergency Medicine Hawaii: Pediatric Emergencies Boot Camp.
- Lin-Martore was chosen to participate in the UCSF Teaching Scholars Program.



MARIANNE JUAREZ, MD
ASSISTANT CLINICAL PROFESSOR



CHRISTOPHER "TOFF" PEABODY, MD, MPH
ASSISTANT PROFESSOR



STEVEN POLEVOI, MD
CLINICAL PROFESSOR



WILLIAM SHYY, MD
ASSISTANT CLINICAL PROFESSOR



MARGARET LIN-MARTORE, MD
ASSISTANT CLINICAL PROFESSOR

Research

In 2019, our faculty, fellows and residents published 90 articles in peer-reviewed journals, including nearly every prominent journal for emergency medicine, as well as articles in *American Journal of Preventive Medicine*, *The BMJ*, *Critical Care Medicine*, *Health Affairs*, *JAMA Internal Medicine*, *JAMA Network Open*, *Journal of Immigrant and Minority Health*, *Journal of Stroke and Cerebrovascular Diseases*, *Pediatrics*, *PLOS ONE* and *Toxicon*.

Among the year's highlights:

- With our colleagues in the Department of Neurology at ZSFG, we received a large grant to serve as a site for the Brain Oxygen Optimization in Severe Traumatic Brain Injury Phase 3 (BOOST3) trial. A randomized clinical trial to determine the comparative effectiveness of two strategies for monitoring and treating patients with traumatic brain injury in the intensive care unit (ICU), the study will determine the safety and efficacy of a strategy guided by treatment goals based on both intracranial pressure (ICP) and brain tissue oxygen (PbtO₂) as compared to a strategy guided by treatment goals based on ICP monitoring alone.
- The department is a subhub in the SIREN (Strategies to Innovate EmeRgENcy Care) Clinical Trials Network funded by the National Institute of Neurological Disorders and Stroke, the National Heart, Lung, and Blood Institute and the National Center for Advancing Translational Sciences. Robert Rodriguez, MD, associate chair for clinical research, serves as departmental lead for the SIREN network.
- Rodriguez was lead author – joined by residents Jesus Torres, MD, and Mayra Cruz, MD – of an October 30, 2019, paper in *PLOS ONE* that documented the impact of President Trump's rhetoric on Latino patients' perceptions of safety and access to emergency care. On November 5, 2019, Torres spoke about the study on Telemundo.
- Juan Carlos Montoy, MD, PhD, was awarded the National Institutes of Health's R01 Diversity Supplement Grant to promote diversity in health-related research.
- Nicolaus Glomb, MD, MPH, was named a 2019 American Pediatric Association Research Scholar, a fellowship that provides three years of training, mentoring and networking for up-and-coming pediatric researchers.
- Aaron Kornblith, MD, was named a member of the Society for Pediatric Research.
- The UCSF Department of Emergency Medicine joined the National Foundation of Emergency Medicine, with Debbie Madhok, MD, receiving the department's first grant from the foundation.



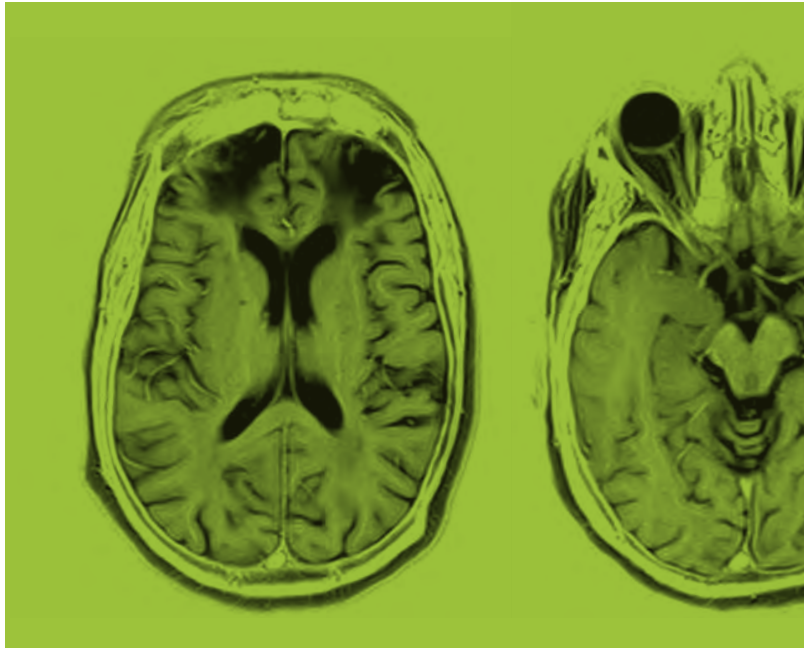
ROBERT RODRIGUEZ, MD
PROFESSOR AND ASSOCIATE CHAIR
FOR CLINICAL RESEARCH



JESUS TORRES, MD
RESIDENT



MAYRA CRUZ, MD
RESIDENT



We are partnering with the Department of Neurology at ZSFG for a clinical trial comparing two treatment strategies for traumatic brain injury in the ICU.



JUAN CARLOS MONTTOY, MD, PhD
ASSISTANT PROFESSOR



AARON KORNBLITH, MD
ASSISTANT CLINICAL PROFESSOR



DEBBIE MADHOK, MD
ASSISTANT CLINICAL PROFESSOR AND
NEUROCRITICAL CARE SPECIALIST

Selected Publications

In 2019, department faculty, fellows and residents had 90 peer-reviewed publications. What follows is a small selection of some of our most impactful studies.

Depression, anxiety, and emergency department use for asthma.

Bardach NS, Neel C, Kleinman LC, McCulloch CE, Thombly R, Zima BT, **Grupp-Phelan J**, Coker TR, Cabana MD. *Pediatrics*. 2019 Oct;144(4):e20190856. doi: 10.1542/peds.2019-0856.



Parent-adolescent agreement about adolescent's suicidal thoughts: a divergence.

Brahmbhatt K, **Grupp-Phelan J**. *Pediatrics*. 2019 Feb;143(2):e20183071. doi: 10.1542/peds.2018-3071. Epub 2019 Jan 14.



Emergency department closures and openings: spillover effects on patient outcomes in bystander hospitals.

Hsia RY, Shen Y-C. *Health Aff (Millwood)*. 2019 Sep;38(9):1496-1504. doi: 10.1377/hlthaff.2019.00125.



Effect of revealing authors' conflicts of interests in peer review: randomized controlled trial.

John LK, Loewenstein G, Marder A, **Callahan ML**. *BMJ*. 2019 Nov 6;367:l5896. doi: 10.1136/bmj.l5896.



Frequent emergency department users: focusing solely on medical utilization misses the whole person.

Kanzaria HK, Niedzwiecki M, **Cawley CL**, Chapman C, Sabbagh SH, Riggs E, Chen AH, Martinez MX, **Raven MC**. *Health Aff (Millwood)*. 2019 Nov;38(11):1866-1875. doi: 10.1377/hlthaff.2019.00082.



Assessing the use of Google Translate for Spanish and Chinese translations of emergency department discharge instructions.

Khoong EC, Steinbrook E, **Brown C**, Fernandez A. *JAMA Intern Med*. 2019 Feb 25;179(4):580-582. doi: 10.1001/jamainternmed.2018.7653.



Implementation of federal dependent care policies for physician-scientists at leading US medical schools.

Ormseth CH, Mangurian C, Jaggi R, Choo EK, Lowenstein DH, **Hsia RY**. *JAMA Intern Med*. 2019 Oct 14;e194611. doi: 10.1001/jamainternmed.2019.4611.



Declared impact of the US President's statements and campaign statements on Latino populations' perceptions of safety and emergency care access.

Rodriguez RM, **Torres JR**, Sun J, **Alter H**, **Ornelas C**, **Cruz M**, Frainow-Wong L, Aleman A, Lovato LM, **Wong A**, Taira B. *PLOS ONE*. 2019 Oct 30;14(10):e0222837. doi: 10.1371/journal.pone.0222837. eCollection 2019.



Triage: making the simple complex?

Weber EJ. *Emerg Med J*. 2019 Feb;36(2):64-65. doi: 10.1136/emered-2018-207659. Epub 2018 Oct 16.



Comparison of oral ibuprofen at three single-dose regimens for treating acute pain in the emergency department: a randomized controlled trial.

Motov S, Masoudi A, Drapkin J, **Sotomayor C**, Kim S, Butt M, Likourezos A, Fassassi C, Hossain R, Brady J, Rothberger N, Flom P, Marshall J. *Ann Emerg Med*. 2019 Oct;74(4):530-537. doi: 10.1016/j.annemergmed.2019.05.037. Epub 2019 Aug 2.



Altmetric Attention Scores captured on August 24, 2020.



Ellen Weber, MD, and Shelby Legeros, MD, in the Emergency Department at UCSF Helen Diller Medical Center at Parnassus Heights

emergency.ucsf.edu

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