



UCSD

Emergency Medicine

ANNUAL NEWSLETTER - 2018/19



Contents



Academic Affairs

Page 4

Updates, Meet our New Clinical Faculty

Clinical Care

Page 6

Clinical Care updates, Gary and Mary West SECU, and the new Urgent Care in Rancho Bernardo.

Education

Page 8

Updates, Education News, Graduating & Incoming Residents, Division Updates, & Meet our New Fellows



Alumni

Page 18

Alumni Celebration 2018, Alumni Spotlight: Ronneet Lev, Where Are They Now: Classes of 1998 & 2008



Department News

Page 24

Faculty Spotlight: Kama Guluma, DEM In the News



Research and Scholarly Work

Page 30

Department Research Updates, SAEM18 and ACEP Research Forum Abstracts and Presentations.

.....
On the cover: DEM faculty member, Dr. Paul Ishimine teaching our trainees at the UCSD SIM Center.
.....



Letter from the Chair

DEM Family & Friends

On behalf of the UCSD Department of Emergency Medicine, I wish all of our alumni, staff, friends, and family a happy 2019! I am also pleased to present you our annual newsletter looking back at the accomplishments and events of 2018.

It has been another terrific year for our Department with continuing expansion and growth for our clinical, educational, and research programs. We now oversee 3 Emergency Departments in San Diego and Imperial Counties, as well as 2 Urgent Care sites (La Jolla and Rancho Bernardo), caring for over 150,000 patient visits annually.

Our resident program now includes the VA as a training site, the largest healthcare provider in the country. Our scholarly and research efforts now span not only across the country, but the globe with collaborations with research teams from Japan and Italy.

As you'll see, accolades this year came not only to our faculty, but also our trainees and alumni! Congratulations to Kama Guluma (new Associate Dean for the School of Medicine), Jorge Fernandez (Cal-ACEP Educator of the Year), Leslie Oyama (AAEM Program Director of the Year), and Ashely Alkar (AAEM Resident of the Year), as well as our 1993 alumnus Roneet Lev (just appointed as the Chief Medical Officer for the Federal Office of National Drug Control Policy), to name a few.

Finally, it was great to see so many of you at our recent alumni reunion during ACEP right here in San Diego in October. It was a fun evening of reconnecting, reminiscing, and catching up – we will do it again in the near future, but in the meantime, please keep in touch and have a safe and happy 2019!

Ted Chan, MD

Chair

Academic Affairs



Rick Clark, MD

Vice-Chair, Academic Affairs

Greetings from the DEM Academic Affairs Committee,

Several new members have been added to our academic and contracted faculty this year, including Jenny Farah, Joe Hayek, Aaron Heerboth, and Adam Nadolski. We have been successful in adding recent members to our Ultrasound, EMS and Research Divisions. Our additions now bring DEM faculty totals to 85. We continued to also add affiliated faculty, including members of the VA medical Center and El Centro. Faculty have been successful in securing a variety of leadership positions within the organization, and faculty now represent the DEM in most of the prominent committees of the Medical Center and Medical School, including academic advancement committees. Several faculty, such as Dan Lasoff and Gabe Wardi have also been recognized for the teaching skills this year through a variety of awards. Finally, faculty are now regularly contributing to an ongoing DEM recognition program called the "Academic RVU", that identifies most of the academic pursuits of our Department and is tabulated annually. The DEM continues to recruit and interview academic faculty from most of the specialty areas of Emergency Medicine, and is currently mentoring a number of faculty toward Academic Senate series promotion tracks.



Daniel Lasoff and Gabriel Wardi are graduates of UCSD's Emergency Medicine Residency Class of 2015 and are current faculty. This year Dr. Lasoff won the Whitehill Award for Excellence in Teaching, and Dr. Wardi won the prestigious Golden Apple Teaching Award.



Women in Emergency Medicine (WEM) hiking the Torrey Pines Trail in La Jolla, CA. From left to right: Karen Van Hoesen, Elaine Sapiro, Frannie Rudolf, Brenna Derksen, Nancy Globber, Mary Beth Johnson, Radhika Sundararajan, Christanne Coffey, and Claire Wang.

Meet Our New Clinical Faculty



Jenny Farah

Jenny joins us after completing her EMS fellowship right here at UCSD. As a fellow, she did an outstanding job (receiving kudos from the City Fire Chief and County EMS Director) and we were lucky enough to convince her to stay on. Prior to that time, Jenny completed her residency at USC, and BS degree in Biology at USF. As faculty, Jenny is off and running, assuming duties as medical director for Chula Vista Fire, San Diego Fire-Rescue Paramedic Program, and our UCSD Base Station.



Joe Hayek

Joe comes to UCSD after 3 years as faculty at the University of Rochester system. He completed his undergraduate degrees at UC Santa Barbara (Philosophy and Biopsychology) and medical school at Meharry Medical School in Tennessee. Joe is happy returning to Southern California including helping to staff our El Centro site.



Aaron Heerboth

Most of you know Aaron who was one of our residents (class of 2017) and now has completed an HBO fellowship here at UCSD. Prior to that time, he received his undergraduate degree in Chemistry at Macalester College (minors in math, bio, and anthro!), and his MD at Cornell. Aaron joins our HBO division's clinical and research effort, as well as working in our EDs and urgent care.



Adam Nadolski

Adam is another 2017 residency graduate having completed an ultrasound fellowship also here with us at UCSD subsequently. Adam has come aboard with our Department with a 50/50 VA/UCSD split – one of the first such faculty for our Department (our resident now rotate at the VA – see Education section). Previously, Adam completed both undergraduate (Biopsych and Bioengineering) and medical school at Tufts before coming out west to San Diego.

Clinical Care



Gary Vilke, MD

Vice-Chair, Clinical Services

Clinical Operations at the UCSD Department of Emergency Medicine continued our tremendous growth in 2019. Perhaps the highlight of the year was the accreditation of our Geriatric ED at La Jolla (known as the SECU or Senior Emergency Care Unit). This unit, funded by a generous gift from Gary and Mary West was accredited at ACEP's highest GED level – Gold or Level 1 accreditation. Our ED was the first in California (in fact the first level 1 ED established west of the Mississippi, and we are incredibly proud of all of our staff who made this accomplishment possible. Given that over 30% of our patients are seniors over the age of 65, we are setting the bar in terms of improving emergency care for seniors and in training the healthcare workforce of tomorrow to meet the challenges of our aging population.

West SECU

ACEP LEVEL 1 GERIATRIC ED OPENS IN LA JOLLA, CA



Urgent Care

NEW LOCATION OPENS IN RANCHO BERNARDO, CA



At a time when many emergency departments are seeing shrinking censuses, both our Hillcrest and La Jolla emergency departments have seen continued growth. We have expanded case management and social work coverage at both sites and continue to take care of the full array of patients from challenging inner city medical issues to very complex cancer and tertiary referral patients.

Our El Centro emergency department also continues to flourish out in Imperial Valley. As a critical access hospital, our faculty take care of many patients who otherwise would have difficulty getting quality emergent

medical care, including managing critically ill medical patients, complex pediatric issues and traumas from the inland empire.

Also this year, we've opened our 2nd urgent care location in Rancho Bernardo. This newly remodeled facility includes not only our Urgent Care, but also Internal Medicine, Pediatrics, and specialty services like Neurology, Orthopedics, and Urology.

The Rancho Bernardo site complements our La Jolla Urgent Care that opened two years ago. Between the two facilities, we are caring for close to 100 patients a day. The Rancho Bernardo Urgent Care

has on site radiology, point of care testing, and during weekday business hours formal ultrasound. The UCSD Department of Emergency Medicine is looking forward to continued growth and leading the way with innovative care for our patients in 2019.

.....
The Rancho Bernardo
Urgent is located at:
16950 Via Tazon,
Rancho Bernardo, CA 92127

Education

RESIDENT, FELLOWSHIP, MEDICAL STUDENT AND DIVISION UPDATES



Binh Ly, MD
Vice-Chair, Education

"Dynamic" is the word I would use to describe what happened to all aspects of medical education in the Department of Emergency Medicine at UCSD. The following are some of the exciting changes for our residency program, fellowship programs, and medical student programs.

RESIDENCY PROGRAM

In 2018, the UCSD Department of Emergency Medicine (DEM) continues to offer high-quality educational experiences and the crown jewel of our educational programs continues to be the residency. In nearly three decades of the residency, incoming class sizes were predominantly 6 residents and grew to 9 residents. The current intern class is the first class of 11 residents setting a precedence that we hope to continue for the foreseeable future of the residency.

In addition to increasing the class sizes, the residency has also enhanced the breadth of the curriculum. A central goal in the design of the residency curriculum has been to prepare our graduates to be able to secure jobs in any setting whether it be at a university tertiary care center, urban county hospital, private community hospital or rural hospital. Since the program introduced El Centro Regional Medical Center as a core rotation site 4 years ago, we have seen about one-third of our graduates in those years choose to pursue full- or part-time employment in rural settings in Southern California and beyond. Despite the seemingly diverse experiences offered to our residents, the program leadership recognizes the absence of an experience for our residents at a Veterans Affairs (VA) facility. The VA has been the largest provider of

emergency care to patients in the United States exceeding 2.2 million patients in 2018 and the VA San Diego ranked as the 12th busiest nationally. Following the addition of the VA San Diego as a rotation site in 2018, few, if any, other EM programs in the country offer a more diverse, well-balanced education with experiences in all major settings employing residency-trained, board-certified emergency physicians. In its history, the UCSD EM residency program has graduated 174 residents and the outlook for the future is tremendously bright.

In addition to growth in the number of residents in the program and expansion of the curriculum, several members of the program were also recognized for excellence by national organizations:

- Program Director of the Year (AAEM) - Leslie Oyama, MD (Residency Directory)
- Educator of the Year (Cal ACEP) - Jorge Fernandez, MD (Associate Residency Director)
- Resident of the Year (AAEM) - Ashely Alker, MD (current PGY4 Resident)



.....
 (Top Left) Resident Craig Kutz representing UCSD Emergency Medicine at the NASA NBL, site of the astronaut EVA training. (Top right) Residents Samantha McGlone, Jack Storey, and Megan Tresenriter at the 2018 SAEM Residency Fair. (Right) Jessica Brice, PGY III presented her talk "Bridging the Divide" at FemInEM's 2018 FIX Conference in NYC. (Bottom right) UCSD EM Residents win the CalACEP Escape Room. From left to right: Nate Finch, Emily Sbiroli, Max Caccese, Matt Correia, and Sam Frenkel. (Bottom left) DEM Faculty member Dr. Leslie Oyama and PGY IV resident Ashely Alker both received high honors at the American Academy of Emergency Medicine Scientific Assembly.



The UCSD DEM continues a rich offering of fellowships in the specialty of EM:

**CLINICAL
INFORMATICS***



**CLINICAL
RESEARCH
SCHOLAR**



**EMS/DISASTER
MEDICINE***



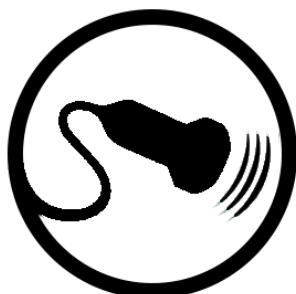
**MEDICAL
TOXICOLOGY***



**PEDIATRIC
EMERGENCY
MEDICINE***



**ULTRASOUND
MEDICINE**



**UNDERSEA &
HYPERBARIC
MEDICINE***



**WILDERNESS
MEDICINE**



FELLOWSHIP PROGRAMS

In 2018, Charlotte Sadler, MD was appointed as the new Fellowship Director for the Undersea and Hyperbaric Medicine Fellowship a position only previously held by 3 others (Tom Neuman MD, Karen VanHoesen MD, and Pete Witucki MD). Dr. Sadler graduated from the UCSD EM residency program in 2014 (Chief Resident) and subsequently completed her fellowship training at UCSD in 2015. She is clearly well-trained and is poised to take this already exceptional fellowship into the future.

Although not primarily housed in the DEM, the Divisions of Pulmonary Critical Care and Anesthesia Critical Care are now welcoming EM trained graduates into their respective Critical Care Fellowship Programs. After completing his training as Chief Resident in our EM program 2015, Dr. Gabriel Wardi matriculated into the Pulmonary Critical Care Fellowship and subsequently became the first graduate of this fellowship program in 2018. Following completion of his fellowship, Dr. Wardi joined the EM faculty with dual academic appointment and clinical responsibilities in both the DEM and the Division of Pulmonary Critical Care. In July 2019, we anticipate the first individual with an EM background to complete the Anesthesia Critical Care Fellowship.

With EM highly experienced faculty holding key positions at the School of Medicine, the future is very bright for the specialty of Emergency Medicine at UCSD.

**denotes ACGME accredited program*

Meet the New Fellows!



Nicole Agostinelli

Hyperbarics



Tabitha Cheng

EMS/Disaster Medicine



Richard Childers

Clinical Research



Brenna Derksen

Hyperbarics



Neil Donner

Hyperbarics



Tony Gao

Toxicology



Jenna Otter

Toxicology



Cameron Smyres

Ultrasound



Carl Youngs

Wilderness Medicine

MEDICAL STUDENT PROGRAMS

As previously noted in this newsletter, Dr. Kama Guluma had to vacate his position as Medical Student Programs Coordinator for the DEM to accept the position as Associate Dean of Admissions and Student Affairs and Dr. Jorge Fernandez has assumed the role of coordinating our vast medical student programs. While this is a new role for Dr. Fernandez at UCSD, he is no rookie in this regard as he previously mentored hundreds of medical students in a similar post for 7 years at the University

of Southern California prior to relocating to San Diego. In addition, to overseeing all the DEM medical student courses, Dr. Fernandez also recently assumed the role of Academic Community Director advising approximately 80-90 students across all four years of medical school.

Similar to the residency and fellowship programs, offerings to medical students from the DEM or led by EM faculty continue to expand at the school of medicine and include the following:

COURSE	STUDENT YEAR	2018 ENROLLMENT	FACULTY COORDINATOR
Subinternship EM	4	54	Kama Guluma MD
Clinical EM	3	31	Kama Guluma MD
Intro to EM	1-2	8	Kama Guluma MD
Toxicology	4	16	Aaron Schneir MD
Ultrasound	4	14	Anthony Medak MD
Undersea/Hyperbarics	4	6	Daniel Popa MD
Wilderness Medicine	1,4	40	Christanne Coffey MD
Multi-organ System Disorder	2	125	Christopher Coyne MD
Transition to Residency	4	108	Gabriel Wardi MD



Visiting Medical Students, Jason Darr and Kuan Chen practicing intubation procedures on the "Trauma Man."



UCSD School of Medicine EM Interest Group (EMIG).

Division Updates

CLINICAL INFORMATICS



Clinical Informatics Director Jim Killeen explaining on local TV about the new health care drones.

Clinical Informatics has had a busy 2018! While Christian Dameff continues his second year of training we added Jeremy Bass from Texas. Jeremy brings a wealth of experience in Psychiatry and Telepsychiatry. He has already taken a deep dive into the Psychiatry workflow processes for optimization in both the inpatient and ambulatory settings. Our Project successes this year includes EMS interoperability

with UCSD and Rady Children's Epic instance, initiating a healthcare drone project under federal guidance, and the opening of the first Mary and Gary West Senior Emergency Care Unit in La Jolla. We have architectural design of materials, lightening and technology all to improve the patient experience and decrease background noise and sundowning. We look forward to the many projects studying the outcome of these efforts.

The clinical informatics fellowship continues to innovate in the domains of healthcare technology, research, and education. Central to this mission is the close integration between our fellowship and UCSD Health's Information Services, where our fellows rotate in various domains across the enterprise.

Second year fellow Christian Dameff MD plans to stay on as full-time faculty after graduation and continue his healthcare cybersecurity research. Notable publications this last year include articles in JAMA, The Journal of Emergency Medicine, and The Journal of the American College of Cardiology. He was also invited to speak at the FDA in January on Medical Device Cybersecurity.

EMS/DISASTER MEDICINE

The EMS division has experienced substantial growth in this past year with faculty responsible for ongoing medical direction of EMS agencies throughout our region including the City of San Diego Fire/EMS, Carlsbad Fire in North County, Chula Vista Fire in the South, and Mercy Air in the skies above. In addition, the UCSD Emergency Department now is a training site for San Diego City Fire paramedics, and our faculty lead numerous education programs for our first responders. Early in 2018, members of the Emergency Department staff from both medical centers joined forces to participate in an active shooter training exercise in La Jolla.



UCSD faculty and staff participate in an EMS active shooter training exercise.

HYPERBARIC MEDICINE



HBO fellow Brenna Derksen in the "chamber."

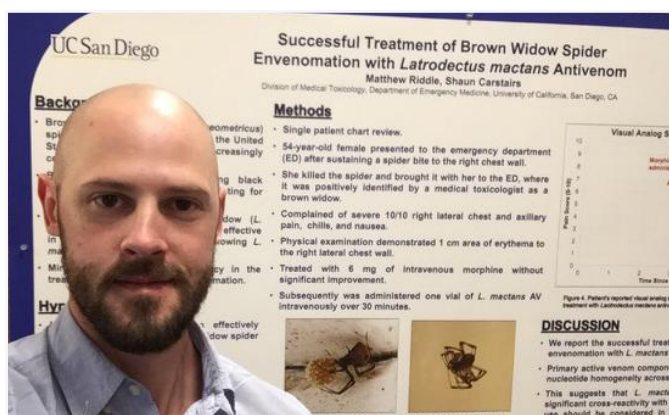
It is an exciting time for the Hyperbaric Medicine and Wound Care Division. The fellowship continues to grow under the leadership of Dr. Charlotte Sadler. This year the division has three fellows, and ACGME has approved the division for four fellows for the upcoming academic year. The division is happy to announce that they will have their largest fellowship class to date with 3 civilian and 1 US Navy hyperbaric fellows.

Many of our faculty and all three fellows were invited to speak at the UHMS Pacific Chapter meeting in Kona, Hawaii, this past November. The faculty's hard work is being recognized. The division is happy to announce that Dr. Anthony Medak is the UHMS Pacific Chapter President Elect. Dr. Pete Witucki is serving on the UHMS Board of Directors. Also, Emeritus Professor, Tom Neuman will be recognized for his outstanding work in diving medicine with the 2019 NOGI for Science at the Academy of Underwater Arts and Sciences black-tie gala during the DEMA Trade Show in Orlando on November 14, 2019. This award is "considered the Oscar of the ocean world."

The division continues its work in groundbreaking research and is also involved with some exciting studies looking at the use of hyperbaric oxygen therapy for the treatment of interstitial cystitis, ulcerative colitis, and severe traumatic brain injuries.

MEDICAL TOXICOLOGY

The Division of Medical Toxicology continued to set high standards of teaching and research for the DEM in academic year 17/18. Dan Lasoff was awarded recognition for outstanding teaching this year. The Division continued to maintain a very popular and well-subscribed elective for residents and students, attracting rotators from schools and programs around the country. Division members delivered lectures both locally and nationally to multiple organizations and have been working institutionally on adapting phenobarbital into the ED for ethanol withdrawal. Division members continued publishing multiple manuscripts in a variety of journals, and research is ongoing through registries, the California Poison Control System, and in vitro models. Finally, Dan Lasoff and other Division faculty recently received the largest grant in Division history to study bridging patients with opioid addiction.



Tox Fellow Matthew Riddle presenting his research study

PEDIATRIC EMERGENCY MEDICINE



Residents training in neonatal care at UCSD SIM Center.

The Division of Pediatric Emergency Medicine continues to play an active role in clinical care, education, and research. Division faculty helped plan the largest, regularly scheduled pediatric emergency medicine educational conference in California, the San Diego Regional Pediatric Emergency Medicine Conference, which was held this year on April 3, 2018 and attracted nearly 100 attendees.

The Division also serves as the academic home for the pediatric emergency medicine fellowship. The fellowship accepted 4 new pediatric emergency medicine fellows from a highly competitive applicant pool for the entering class starting July 2019. Nicholas Pokrajac, MD, previously a UCSD EM Chief Resident, will graduate from the fellowship in June.

Division faculty are also participating in important research collaborations. The largest of these research collaborations is a multi-year, multi-center collaboration seeking to validate the PECARN head and abdominal CT imaging rules in children who sustain traumatic injuries. Division faculty are also participating in the National Emergency Airway Registry (NEAR) research collaborative.

Additionally, at the SAEM Annual Meeting in Indianapolis, Dr. Ishimine co-chaired the 2018 Academic Emergency Medicine Consensus Conference: "Aligning the Pediatric Emergency Medicine Research Agenda to Reduce Health Outcome Gaps." This international conference brought together leaders in emergency medicine, pediatrics, and pediatric emergency medicine. The conference proceedings were published in Academic Emergency Medicine in December 2018. Dr. Ishimine also completed a seven-year term on the American Board of Emergency Medicine/American Board of Pediatrics Pediatric Emergency Medicine Subboard, which included two years as the chair.

ULTRASOUND

The division of Ultrasound had an exciting year. A fellow alumnus, Michael Macias started a regional Ultrasound conference titled "Bread and Butter" where several UCSD faculty served as speakers and instructors. Current fellow, Cameron Smyres and faculty Sukh Singh led the Ultrasound Division on a mission to Uganda where they worked with physicians at Mulago National Referral Hospital to teach ultrasound.



U/S Division teaching ultrasound in Uganda.

Residents

MEET OUR NEWEST RESIDENCY CLASS AND OUR NEW ALUMNI



WHERE ARE THEY FROM?

New Class

CLASS OF 2022

BACK ROW

Henry Montilla
Brian Bisanz
Brenna Hogue
Jennifer Stone
Casey Smith
Thomas Allen
Tamara Casas

Penn State
Loyola University
Boston University
University of North Carolina
University of Arizona
University F. Edward Hebert
Hofstra University

FRONT ROW

Benjamin Supat
Kaitlin McIntyre
Morgan Carlile
Nathan Finch

UC San Diego
University of Miami
University of Missouri
Loyola University



WHERE ARE THEY GOING?

Nick Aldridge	Kaiser San Diego
Joe Brown	Ultrasound fellowship, UCSF
Nancy Globler	EMS fellowship, Stanford
Brenna Derksen	HBO fellowship, UCSD
Mark Darocki	Ocean Medical Center, NJ
Jimmy Corbett-Detig	Pioneers Hospital
Cameron Smyres	Ultrasound fellowship, UCSD
TC Ence	Pioneers Hospital
Thien Nguyen	Kaiser Los Angeles

New Alumni

CLASS OF 2018

FROM LEFT TO RIGHT





Alumni

*Celebrating, reuniting and
reminiscing*

UCSD Emergency Medicine Residency Alumni from around the United States gathered on September 30th, 2018 in San Diego for an Alumni Reunion & Celebration. The occasion marked the 25th anniversary of the graduation of the very first residency class as well as the 50th anniversary of the ACEP National Meeting.

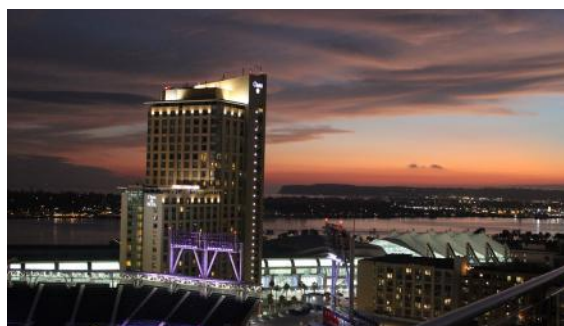
More on page 20

Alumni Celebration

SAN DIEGO, CA | SEPTEMBER 30TH, 2018



.....
(Top left) *Residency Director, Leslie Oyama* with graduated residents *Michael Holman (16')*, *Sean Okumura (17')*, and his wife *Katie*. (Top right) *Raj Patel (05')* and *Taylor Cardall (03')*. (Center) View from the *Ultimate Skybox of Petco Park* and the *San Diego Bay*. (Bottom right) *Jim Larson (97')* enjoying the celebration (Bottom left) *Charles Simmons (94')*, *Todd Hanna(94')*, *Peter Rosen*, *James Dunford*, *Tom Peitz (94')*, and *Michele Grad (94')*.
.....



Alumni Spotlight

RONEET LEV, CLASS OF 1993

NEW CHIEF MEDICAL OFFICER FOR THE WHITE HOUSE OFFICE OF NATIONAL DRUG CONTROL POLICY

Our very own Roneet Lev, Class of 1993, was recently appointed as the CMO for the White House Office of National Drug Control Policy (ONDCP). The ONDCP is in the Executive Office of the President and is charged with coordinating the federal drug policy among all federal agencies. As CMO, Dr. Lev brings her medical expertise to the ongoing drug issues facing this country, coordinating across the federal government all efforts regarding prevention, treatment, and recovery.

Many of you know, Roneet has been a terrific leader on many EM issues including the opiate drug crisis here in San Diego, in California (as former Cal-ACEP President), and at the national level. We are incredibly proud of Dr. Lev as our alumna and her accomplishments. Congrats - we know you'll make a huge difference!



Dr. Lev's residency class; class of 1993. Left to right: Richard King-sland, Roneet Lev, Leslie Milne, Karen Van Hoesen.



Where Are They Now:

TEN & TWENTY YEARS AGO



CLASS OF

1998

Christy Rosa - Alvarado
Medical Center, CA

Brian Snyder - UC San
Diego, CA

Maryanne Fuchs -
Grossmont Emergency
Medical Group, CA

Greg Lampe - Mission
Medical Center, CA

Aviva Jacoby - Legacy
Hospital, OR

Katie Hurt - John Muir
Medical Center, CA



Dan Firestone - Medical
Director, Regal Medical
Group, CA

Sean Nordt - Associate
Dean, CMO, Chapman
School of Pharmacy, CA

William Meade - Director,
Business Development
Emergent Medical
Associates, CA

Alicia Minns - Fellowship
Program Director, Medical
Toxicology, UCSD, CA

Rob Marsan - Scripps Mercy
Hospital, CA

Julie Marmon - ER
Specialists Urgency Center,
CO

Byron Buckley - Sharp
Memorial Hospital, CA

CLASS OF
2008

Department News

Faculty Spotlight

DR. KAMA GULUMA

NEW ASSOCIATE DEAN FOR ADMISSIONS AND STUDENT AFFAIRS

UCSD DEM Professor Kama Guluma selected as new Associate Dean for Admissions and Student Affairs for the UCSD School of Medicine.

Dr. Guluma joined the faculty here at UCSD in July of 2001, after completing an emergency medicine residency at the University of Michigan. His research interests include neurological emergencies and ischemic stroke, and he has been a Principal Investigator in NIH-funded program grants exploring new translational concepts such as induced hypothermia and external counterpulsation for acute ischemic stroke, and he is the coordinator of the research education program (Research Conference) in the department. He is the Neurological Emergencies section editor and a reviewer for the Journal of Emergency

Medicine, is a contributing author to Rosen's Emergency Medicine (the foremost textbook of Emergency Medicine) and other emergency medicine texts such as the 5-Minute Emergency Medicine Consult, and is a co-editor of an emergency medicine research text book.

Before taking on the new Associate Dean for Admissions and Student Affairs role, he was the Director of Student Programs in the department (and is the EM clerkship director), and is also privileged to be one of six Academic Community Directors in the UCSD School of Medicine, responsible for the social and professional well-being, mentorship, and integration of a sixth of the medical school student body. He is a past recipient of the Medical Student Teaching Award in the department, and

has been a nominee for the Kaiser Excellence in Teaching Award in the UCSD School of Medicine. He is an Oral Examiner with the American Board of Emergency Medicine. His clinical interests include neurological emergencies and international emergency medicine. Outside of medicine and UCSD he enjoys spending time with his wife (whom he describes as awesome) and children (also described as awesome), and martial arts - with rankings up to 4th degree black belt (aikido, aikijutsu/jujutsu/judo, hsing-i kung-fu)

Congratulations Dr. Guluma!



Department News



Nancy Guber (4th from left) won 2nd place at AAEM's Research Competition.



The UCSD Department of Emergency Medicine, along with our friends at West Health, are honored at being selected as one of the first level 1 accredited Geriatric Emergency Departments in the country, the first in California.



Dr. Jorge Fernandez awarded the CalACEP Educator of the Year 2018. Dr. Fernandez was also elected to serve on the Cal ACEP 2018-19 Board of Directors.

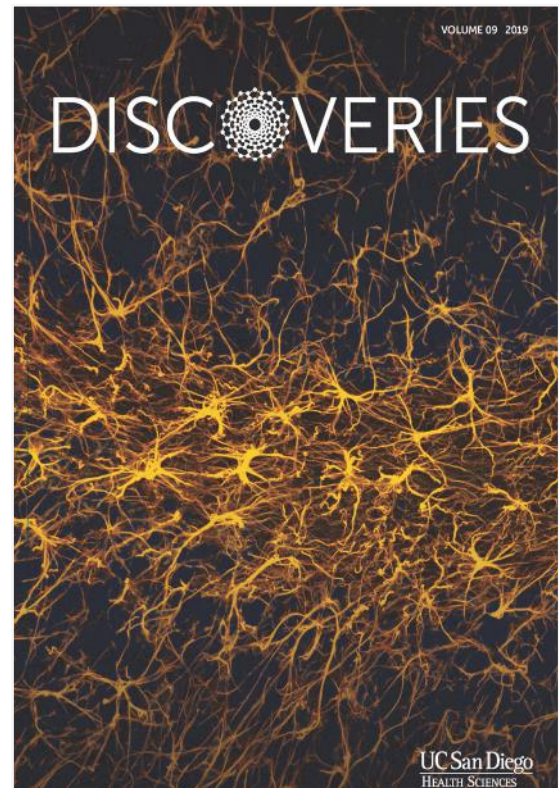
MORE DEPARTMENT NEWS

- Congratulations to DEM Faculty members Drs. Alicia Minns and Christopher Coyne for receiving the UC San Diego Health Sciences Academy of CLinician Scholars Faculty Development Awards.
- UCSD DEM part of San Diego regional coalition selected by US Department of Transportation as one of 10 sites nationwide to test unmanned aircraft (drone) systems and advance aerial innovation in the community.
- DEM Professor Dr. Radhika Sundararajan for being awarded the UCSD Equal Opportunity / Affirmative Action and Diversity Award.

Department In the News

- EM Professors Dr. Ted Chan and Dr. Vaishal Tolia were featured in San Diego Business Journal's article "ER's Try Senior Focus For Proactive Medicine."
- Dr. Rick Clark featured in San Diego Union Tribune article, "Sale of recreational marijuana doesn't lead to spike in patients at UC San Diego Health."
- Several EM Faculty named "Top Docs" in *San Diego Magazine's* "Physician's of Excellence" survey
 - Dr. Ted Chan** - Emergency Medicine
 - Dr. Rick Clark** - Emergency Medicine
 - Dr. Paul Ishimine** - Pediatric Emergency Medicine
 - Dr. Binh Ly** - Emergency Medicine
 - Dr. Aaron Schneir** - Emergency Medicine
 - Dr. Christian Sloane** - Emergency Medicine
 - Dr. Christopher Tainter** - Emergency Medicine
 - Dr. Vaishal Tolia** - Emergency Medicine
 - Dr. Gary Vilke** - Emergency Medicine
- Dr. Shaun Carstairs of the Division of Medical Toxicology was recently in the news for CNN commenting on the use of ondansetron in pregnancy.
- A BuzzFeed article titled "A Former Border Patrol Chief Said You Could Put Pepper Spray On Your Nachos, And Actual Medical Experts Said No, Nope, You Cannot" features DEM Chair, Dr. Ted Chan.
- Dr. Christian Dameff, EM Clinical Informatics Division, featured in AMCC News article on medical device cyber security.
- Congratulations to PGY3 Ashely Alker for her most recent publication in AAEM's Magazine, Common Sense on the topic of Gender Equality in Emergency Medicine.
- Dr. Christian Dameff, DEM Clinical Informatics Fellow, featured in an article on hospital cybersecurity.
- UCSD DEM Ultrasound faculty Dr. Sukh Singh featured in article by the Clairemont Connection.
- UCSD Clinical Informatics Fellow Christian Dameff featured in Healthcare IT news article on security threats to medical devices.
- DEM Professor Dr. Vaishal Tolia interviewed by KOGO News Radio to discuss the new Geriatric Emergency department at UCSD.

DEM Residents Kelly Diloranzo, Nancy Glover and attending Chuck O'Connell featured in UCSD Discoveries Magazine for amazing life-saving case at the beach! See timeline on page 28-29



5 hours & 57 minutes

IN THE LIFE AND NEAR DEATH OF JOHN LOZICK

CHRONICLED BY MICHELLE BRUBAKER AND GABRIELLE JOHNSTON, MPH

ON A SUNNY AFTERNOON last year, 25-year-old John Lozick, an avid cyclist, was riding his bike toward Pacific Beach. And then he wasn't, crashing to the pavement, the victim of what would turn out to be a massive heart attack.

But Lozick was lucky. In those first and following moments, a diverse team of doctors, lifeguards, nurses, paramedics and others would come together, serendipitously and planned, to pull him back from the abyss.

5:20 PM

UNRESPONSIVE

An unidentified doctor visiting from Las Vegas is driving behind Lozick when he sees the cyclist crash on West Mission Bay Drive. The doctor immediately pulls over, calls 9-1-1 and begins providing medical assistance. Lozick is unresponsive.

5:24

NO PULSE

Kelly DiLorenzo, MD, an emergency medicine resident at UC San Diego Health, is jogging and happens upon the scene. She stops to assist; determines Lozick has no pulse.

5:34

FLAT LINE

Lozick's lung function appears normal, but he displays an asystole "flat line" heart rhythm. CPR continues.

5:39

CARDIAC ARREST

En route, Lozick's asystole rhythm suddenly changes to ventricular fibrillation, or v-fib. It is the most serious of cardiac rhythm disturbances. The heart quivers and cannot pump blood.

5:20 PM

5:22

PARAMEDICS DISPATCHED

San Diego Fire-Rescue Engine 20 and AMR Medic 21 are dispatched. Engine 20 has a crew of four; Medic 21 carries two paramedics.



5:37

TRANSPORT

AMR Medic 21 begins transport of Lozick to UC San Diego Medical Center in Hillcrest. Lozick remains unresponsive with no detectable heartbeat.

5:44

EPINEPHRINE INJECTED

Paramedics inject epinephrine, a stimulant, to restart the heart.



5:25

ELECTRIC SHOCK

Rick Romero, a lieutenant lifeguard, arrives, assumes CPR duties. They apply automated external defibrillation using a device Romero carries in his truck. They give one shock.

5:29

ASSESSMENT

San Diego Fire-Rescue Engine 20 and AMR Medic 21 arrive; paramedics assess Lozick.

"IT WAS ONE OF THE BEST CASES OF MY CAREER."

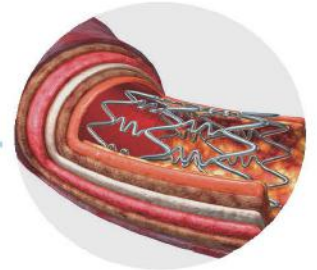
CHUCK O'CONNELL, MD



7:00

STENT INSERTED

Lozick is admitted into the hospital. A **stent** is inserted into the LAD to clear the blockage and restore blood flow.



6:21

FAMILY HISTORY

DiLorenzo had placed **Lozick's helmet** in the ambulance. Inside, there was contact information. Doctors call Lozick's sister, who says their father died from a myocardial infarction at age 32. This indicates a family history and the likelihood that Lozick may have undiagnosed heart disease.

11:17

SURVIVOR

Lozick has suffered — and survived — a massive heart attack. For almost one hour, his heart was dysfunctional. Nonetheless, he wakes up alert with all faculties intact. "I really wanted the best outcome for him, as you do with every patient, but there are some who strike you a little harder," said Glover.

5:45

AMIODARONE INJECTED

Lozick remains in cardiac arrest with v-fib. Paramedics administer amiodarone, an anti-arrhythmic drug.

6:05

PULSE RETURNS

Glover and team continue CPR and order tests, including markers for a cardiac enzyme that can help indicate arrhythmia, pulmonary embolism or myocardial infarction. Lozick's pulse returns.

5:48

EMERGENCY PHYSICIANS

Lozick arrives at UC San Diego Medical Center. He is quickly assessed by emergency physicians Nancy Glover and **Chuck O'Connell**. He is unconscious, ashen-blue with fixed pupils.

6:15

ECHO CARDIOGRAM & ELECTROCARDIOGRAM

An echocardiogram and an electrocardiogram are performed. Glover asks the cardiac team to remain in room in case Lozick loses his pulse again. Chest scans show slightly enlarged right heart ventricle. Lozick is sent to catheter lab on a hunch.

6:30

CT SCAN

To confirm a suspected diagnosis that Lozick had experienced a myocardial infarction similar to his father, a CT scan is ordered, but the results are inconclusive.



5:50

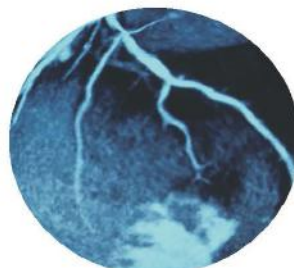
CARDIAC MONITORS

Doctors connect Lozick to cardiac monitors. Glover finds no evidence of physical trauma. Given his youthful, healthy appearance, she suspects an underlying arrhythmia or pulmonary embolism.

6:40

ARTERY BLOCKED

An emergency coronary **angiogram** is performed in the cath lab. Lawrence Ang, MD, an interventionist cardiologist, looks to identify any possible artery blockages. Lozick's left anterior descending artery (LAD) is completely blocked.



DISCHARGED

Discharged less than a week later with only residual soreness in his rib cage from the CPR, **Lozick** is feeling stronger every day, eating healthier and looking forward to getting back on his bike. "I cannot thank the individuals involved enough. It's hard to put into words. It's too emotional. It's been a wild ride."

For more Department news and updates, please visit: emergencymed.ucsd.edu

Research and Scholarly Work



Eddie Castillo, PhD

Director, Research Operations



Chris Coyne, MD

Director, Clinical Research

The UCSD DEM continues to be productive with presentations at national conferences, manuscript publications and funded projects. Faculty and Residents made presentations on a wide range of topics at SAEM and ACEP (see below) including the description and impact of an ED-based Hepatitis A vaccination program during a communitywide outbreak and improved medication management projects. The UCSD DEM will be presenting additional innovative research at these conferences in 2019. Additionally, the Research Division has been working to establish the foundation for innovative geriatric research in the recently opened Gary and Mary West Senior Emergency Care Unit at the La Jolla ED.

Congratulations to Dr. Alicia Minns and Dr. Chris Coyne, who both received funding from the Academy of Clinician Scholars for their respective research projects. Dr. Minns will be investigating EMR modifications to improve prescribing to geriatric patients, while Dr. Coyne will be investigating an EMR modification to improve cancer pain management in the ED.

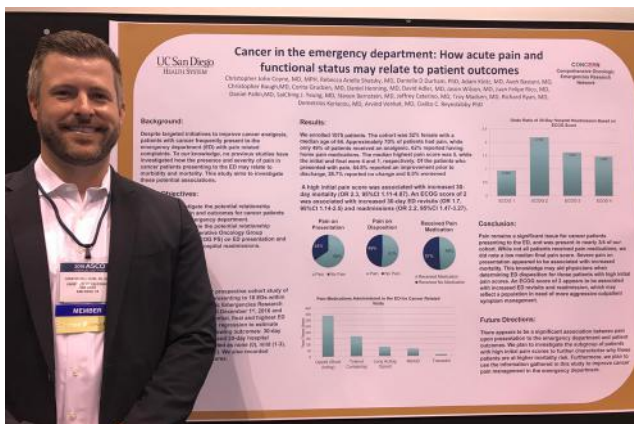
Finally, our faculty continue to engage in a wide variety of additional non-profit, government and industry-funded projects, including expanding the geriatric ED model develop by UCSD to other UC Health Systems, the multi-center NIH SIREN trials, a new study investigating a POC troponin device develop by Konica Minolta, as well as a POC ANC device from Athelas Inc.

SAEM18 | INDIANAPOLIS, IN | MAY 15-18, 2018

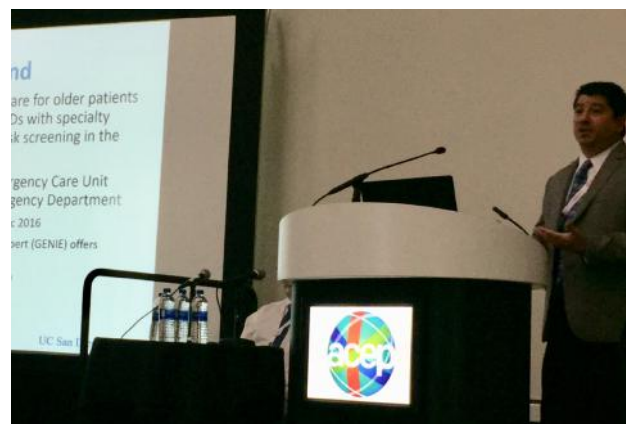
- Vilke GM, Brennan JJ, Chan TC, Hsia RY, Killeen JP, Castillo EM. Emergency Department Utilization Three Days Prior to a Septicemia Diagnosis among Geriatric Patients.
- Castillo EM, Kreshak AA, Tolia VM, Brennan JJ, Chan TC. Throughput Before and After a Geriatric Emergency Department Implementation.
- Tolia VM, Kreshak AA, Brennan JJ, Castillo EM, Trumm NA, Chan TC. Emergency Department Vaccination of an at-Risk Population during a Severe Hepatitis A Outbreak.
- Coyne CJ, Ha E, Brennan JJ, Castillo EM, Birring P, Shah S, Vilke GM. Cancer-Related Venous Thromboembolism in the Emergency Department: A Retrospective Cohort Study.
- Wardi G, Villar J, Lava M, Beitler JR. Analyzing Differences in Fluid Resuscitation in Septic Patients with Heart Failure: Results of a Multi-Center Survey Between Emergency Providers and Intensivists.
- Wardi G, Liu D, Le C. Evaluating Vancomycin and Piperacillin-Tazobactam in Patients with Severe Sepsis and Septic Shock.
- Castillo EM, Vuong CL, Vilke GM, Brennan JJ, Hsia RY, Killeen JP. 30-Day Readmissions among Elderly Patients Discharged with an Acute Myocardial Infarction.
- Coyne CJ, Brennan JJ, Castillo EM, Vilke GM. Cancer-Related Emergency Department Visits in the Elderly: Comparing Characteristics and Outcomes.
- Derksen B, Glober N, Darocki M, Klingfus M, Choi M, Brennan JJ, Chan TC, Tolia VM. Is the Highly Sensitive HemosIL D-Dimer a Valuable Screening Tool to Rule Out Aortic Dissection?
- Boynton H, Kolkowitz I, Campbell C. Is There a Safe, Inexpensive Alternative to Sterile Ultrasound Gel in Resource-Limited Settings?
- Kreshak AA, Tolia VM, Brennan JJ, Castillo EM, Chan TC. Emergency Department Patients Seen During a Severe Hepatitis A Epidemic Outbreak.

ACEP RESEARCH FORUM|SAN DIEGO, CA| OCTOBER 1-3, 2018

- Kreshak AA, Tolia VM, Chan TC, Killeen JP, Castillo EM. Insurance Coverage and Cost of Patients Enrolled in an Acute Care at Home Pilot Project for Emergency Department Patients.
- Sorge R, Li S, Fernandez J, Price C, Hern G. Implementation of Emergency Medicine Milestones: A National Survey.
- ilke G, Lutz M, Sloane C, Castillo E, Brennan J, Swift S, Coyne C. Physiological Effects of a Spit Sock.
- Kreshak AA, Tolia VM, Chan TC, Brennan JJ, Castillo EM. Emergency Department Admissions among Geriatric Medicare Patients Before and After Initiation of a Medicare Accountable Care Organizations.
- Brown J, Medak A, Nadolski A, Dilip M, Shah V, Campbell C, Lam S, Singh S, Macias M. Bedside Triple-Point Ultrasound for Suspected Pulmonary Embolism: A Strategy to Reduce the Use of Contrast Computed Tomography.
- Nene RV, Brennan JJ, Castillo EM, Hsia RY, Coyne CJ. Emergency Department Patients with Cancer: How Do Outcomes at National Cancer Institute-Designated Hospitals Compare to the General Population?
- Coyne CJ, Brennan J, Castillo EM, Killeen J, Chan T. Checkpoint Inhibitor Complications in the Emergency Department: Methods to Improve Awareness and Outcomes.
- Tolia VM, Kreshak AA, Chan TC, Brennan JJ, Vilke GM, Castillo EM. Initial Risk Screening and Impact of Evaluation for Geriatric Emergency Department Patients.
- Shi E, Kreshak AA, Chan TC, Wardi G, Castillo EM, Tolia VM. Impact of Specialized Geriatric Care Coordination within a Senior Emergency Care Unit.
- Mcglone S, Dunlay R, Castillo E, Tolia V, Killeen J, Minns A. Meclizine Prescriptions in the Emergency Department and Return Visits in an Elderly Population.
- Dunlay R, Shi E, Castillo E, Tolia V, Killeen J, Minns A. Emergency Physician Accuracy in Prescribing Medications to Elderly Patients with Renal Dysfunction.
- Kreshak AA, Tolia VM, Chan TC, Powell RA, Brennan JJ, Killeen JP, Castillo EM. The Effect of an Electronic Decision Support Tool on Emergency Department Prescribing of Naloxone.



Dr. Chris Coyne presenting his poster at the American Society of Clinical Oncology (ASCO) national meeting in Chicago.



Dr. Castillo presenting at the American College of Emergency Physicians Research Forum in San Diego, CA.

