



# SUMMARY

- 4 Education Updates
- 6 Meet our New Residency Class of 2021
- 7 Resident Accolades
- 8 Academic Affairs: Meet our New Academic Faculty
- 10 Clinical Care
- 11 Division Updates
- 14 A Tribute: Dr. James Dunford Retires as SD Medical Director
- **16** Alumni: Classes of 1997 & 2007
- 17 Alumni Updates
- 20 Research and Scholarly Activities
- 22 Publications, Grants & Presentations

# UCSD Department of Emergency Medicine

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#### Chair

Dr. Ted Chan

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#### Contact us!

Please contact Mey Pflaum with any updates.

mpflaum@ucsd.edu

# Dear DEM Staff, Alumni & Friends:

On behalf of the UCSD Department of Emergency Medicine, I want to wish all of our alumni, friends, and family a happy new year!

Looking back on 2017, our Department continues to grow and enjoy success in every measure of our tri-part mission – clinical care, education, and research. The Department now oversees 3 EDs – UCSD-Hillcrest, UCSD-La Jolla (now Jacobs Medical Center), and El Centro Regional Medical Center, caring for nearly 150,000 patients visits annually. In addition, this past year, we've opened a busy urgent care near



Ted Chan, MD Chair

the medical school, and the Department now has contracts to provide EMS medical direction for the City of San Diego, Carlsbad, and Chula Vista Fire Departments, as well as Mercy Air. Our residency expanded

this past year to 10 residents per year, and our trainees continue to win accolades in California and nationally (see below). We also now have subspecialty training in 9 fields including an NIH-sponsored informatics and critical care fellowships.

Our research portfolio continues to grow with a marked increase in extramural funding, unique collaborations with our partners on general campus (like Computer Science Engineering), and our designation as a subhub for the NIH SIREN project, the largest Emergency Medicine research network.

# SAVE THE DATE - ACEP 18 REUNION!



This year marks the 50th anniversary of ACEP's founding with plans for a "blowout" celebration at ACEP18 Scientific Assembly this Fall right here in San Diego! 2018 also marks a major milestone for the UCSD DEM with the 25th anniversary of the graduation of our first residency class (in 1993 of Drs. Lev, Kingsland, Milne, and Van Hoesen). To celebrate, we are planning our next DEM alumni reunion/get together to be held at the Petco Park Skybox on Sunday evening, September 30th, just before the start of the ACEP Scientific Assembly (October 1-4). Our last reunion had over 150 attendees, and we look forward to seeing all of you again to catch up and reminisce. So make sure to save the date with more details to follow in the coming months!

#### EDUCATION

# From the Vice-Chair of Education



Binh Ly, MD Vice-Chair, Education

changés happening with educational offerings from the UCSD DEM. Dr Jim Dunford started this residency program in 1990 with a class comprising of 4 residents and this past July we graduated our 25th class now with 9 residents per class and we continue to grow as the medical center and educational opportunities, expand In March opportunities expand. In March 2017, the residency program successfully matched 10 residents for the class of 2021 and we just received approval from the ACGME to recruit for 11 residents in this year's upcoming match. year's upcoming match.

#### The Residency

The residents continue to enjoy rotations with very long-term community hospital partners at TriCity and Palomar/Pomerado Medical Centers. Mercy Air also continues to be an important partner offering, the regidents. offering the residents a unique aeromedical EMS experience rarely offered by any program in the country. Several years ago a rural experience at El Centro Regional Medical Center (ECRMC) was incorporated into our curriculum as part of a larger affiliation with UC San Diego Health. In fact, the ED at ECRMC is managed by UCSD DEM leadership and the CMO is

am delighted to update Dr. Chris Tomaszewski, one of our all of you on the exciting core DEM faculty. Leadership for the residency does not stop with faculty. The residents themselves are recognized for the contributions to the specialty at a national level in particular Dr. Ashely Alker (PGY-3) was elected by her peers and is currently serving as the 2017-2018 President of the American Academy of Emergency Medicine (AAEM)/Resident Student Association (RSA). Additionally, Dr. Jack Storey was also elected to the 2017-2018 AAEM/RSA Board of Directors. Strong leadership from our many faculty, graduates, and current residents at the very top of these various hospitals, partners, and national organizations has paved the way for an already excellent residency program to be an exceptional training environment in every respect.

#### The Fellowships

When I arrived at UCSD in 1999, the DEM had two fellowships, Medical Toxicology and Undersea and Hyperbaric Medicine (HBO) each with 4 graduates from the programs. We now have nine active tellowship offerings with Medical fellowship offerings with Medical Toxicology, Pediatric Emergency Medicine, HBO, EMS/Disaster, and an NIH-funded Clinical Informatics fellowship maturing into premier programs nationally with ACGME accreditation. Altogether the UCSD



**EM RESIDENCY PROGRAM DIRECTORS EMERITI** Dr. Steve Hayden, Dr. Peter Rosen, Dr. Binh Ly, and Dr. Jim Dunford.

DEM fellowships have graduated 113 fellows with 20 currently enrolled trainees. Each of our fellowships boasts at least 3 core faculty members allowing our fellows to achieve expert training from multiple vantage points. The variety of EM fellowship offerings available at UCSD and the number of graduates from our programs is rivaled by few other institutions in the country.

The enduring legacy for any educator or educational program is our graduates. The success of UCSD DEM graduates as a collective is unquestionably outstanding. The breadth and depth of expert EM faculty has been our singular strength at UCSD for decades. This has allowed us to establish a rich history in education and become a world-class presence as we educate the future of emergency medicine.

the future of emergency medicine.
To celebrate this success and in conjunction with ACEP2018 (ACEP's 50th Anniversary) to be held this Fall here in San Diego, we are planning another UCSD DEM Alumni Reunion. Please save the evening of Sunday September 30th to get together with old classmates, friends, teachers, students, mentors and mentees to reminisce and catch up. More details will follow in the coming weeks.

#### **New Residency Leadership**

While I was fortunate to serve as the Residency Program Director for 9 years, the torch was recently passed to Dr. Leslie Oyama. Leslie came to UCSD in 2006 after completing her residency at Boston Medical Center. Shortly after her arrival, she immediately took on a major role in education as the 4th year emergency medicine sub-internship clerkship director and created a new course for 1st and 2nd year medical students called Introduction to Emergency Medicine. She then created a "Selective" in Emergency Medicine for 3rd year medical students. Leslie's efforts have clearly



Program Director, Dr. Leslie Oyama and Associate Program Directors, Drs. Jorge Fernandez & Pete Witucki.

revolutionized how UCSD medical students are exposed to EM at a very early stage in their education and has fostered tremendous interest in EM amongst the very best students UCSD has to offer. In 2013, Leslie was named Associate Residency Program Director and in that capacity she has re-structured the didactić curriculum incorporating hi-fidelity simulation and small group learning sessions. In that same year, Leslie was selected by our residents to receive our highest teaching honor, the Golden Apple Teaching Award. Leslie's accomplishments in education go well beyond UCSD as she has a national presence as a leader and speaker in EM education. In fact 7 months into her tenure as the Residency Program Director, Leslie was nominated by her residents and selected by the AAEM to be the recipient of the 2018 Kevin Rogers Program Director of the Year Award! Clearly, Leslie is well equipped and poised to take the residency far into the future.

Supporting Leslie in her new role are Drs. Jorge Fernandez and Pete Witucki serving as Associate Program Directors (APD). Jorge has been an APD in our program since 2014. Prior to coming to UCSD, Jorge was the medical student clerkship director at LA County/USC Medical Center for 7 years. While Pete may be a new comer to residency leadership, he is in no manner a novice educator. Pete did his residency at UC Davis and then came to UCSD for fellowship training in Undersea and Hyperbaric Medicine. Pete has also been serving as that fellowship's Program Director since 2014 but will be stepping down in July to concentrate on his duties with the residency leadership. Like Leslie, both Jorge and Pete are highly accomplished educators and also are prior recipients of the Golden Apple Teaching Award. The residency has graduated 164 residents but clearly the future for the residency is immensely bright.

## **Meet our Class of 2021**



#### Michael Self, MD

Hometown: Arlington, Texas
Medical School: Northwestern
Professional Interests: Medical education, toxicology, wilderness medicine and more to be determined

#### Max Caccese, MD

Hometown: San Luis Obispo, CA

Medical School: UCLA

**Professional Interests:** Medical education, global health, ultrasound and wilderness medicine

#### Ioan Belovarski, MD, MPH

**Hometown**: Germany

Medical School: University of New

Mexico

**Graduate School:** University of New

Mexico

Professional Interests: Internationally in resource-limited areas, using the skillsets of wilderness medicine and public health education and ultrasound as they relate to program development and resident training overseas

#### Cole Nelson, MD

**Hometown:** Albuquerque, New

Mexico

Medical School: University of New

Mexico

Professional Interests: Sports me-

dicine and toxicology

#### Craig Kutz, MD, PhD

**Hometown:** Sheboygan, Wisconsin **Medical School:** Medical University of South Carolina College of Medicine

**Professional Interests**: Aerospace Medicine, Undersea and Hyperba-

ric Medicine, HEMS

#### **Emily Sbiroli, MD**

Hometown: Queens, New York
Medical School: SUNY Downstate

College of Medicine

**Professional Interests**: Peds EM, Disaster EM, and Environmental Sustainability in Medicine

#### Dennis Liu, MD

Hometown: Easton, Pennsylvania Medical School: Northwestern Professional Interests: Critical care, toxicology, sports medicine, and medical education

#### Eileen Shi, MD

**Hometown**: Houston, Texas **Medical School**: UCSD

**Professional Interests**: Still searching... interested in ultrasound, simulation, or medical tech

#### Rahul Nene, MD

Hometown: Nairobi, Kenya Medical School: UCSD

**Professional Interests**: Clinical and translational research, oncologic emergencies, physician wellness

#### Ben Liotta, MD

Hometown: Washington, DC Medical School: UCSF

Professional Interests: Health policy & systems, pharma/device industry, international health, sports

med, wilderness med

#### **EDUCATION**

# 2017 Resident Accolades:



#### **CalACEP SIM Winners!**

Residents Megan Tresenriter, Trisha Morshed and Craig Kutz won the CalACEP SIM Competition this year at the ACEP Annual Assembly.

## **Augustine D'Orta Award**

PGY III Resident Ashley Alker won the prestigious Augustine D'Orta Award, a national award from the Emergency Medicine Residents Association (EMRA) given to a single recipient each year.

#### **AAEM/RSA Board Members**

Residents Ashley Alker and Jack Storey have been elected to be AAEM/RSA Board Members. Alker will serve as the AAEM/ RSAPresident and Storey will serve as the At-Large Board Member.

## **Scholarships**

Resident Trisha Morshed is the recipient of the of the AAEM RSA FIX 2017 Scholarship. Her winning essay can be found at feminem.org

The EMRA/ACEP Critical Care Medicine Conference Scholarship was awarded to PGY IV Resident Nancy Glober this year.



### **Lobby Day at The Hill**

Residents Ashley Alker and Jack Storey traveled to Washington DC where they are working with RSA for GME funding and medical student debt reform.

#### ACADEMIC AFFAIRS

# **Meet our New Academic Faculty**



Rick Clark, MD Vice-Chair, Academic Affairs

he UCSD DEM recruited 5 new academic faculty to our Department this year, each of whom brings unique experience, skills, and expertise These new to our Department. faculty are committed to making major contributions to all of our 3 missions including clinical care, teaching, and research, and the DEM is excited to welcome them aboard!

#### **Amir Aminlari**

Dr. Amir Aminlari grew up in Hershey, Pennsylvania and graduated from Bucknell University (Biology major, Spanish minor). He attended Temple University School of Medicine in Philadelphia and King-Drew Emergency Medicine residency program in Los Angeles. During that time, Amir led two fundraisers for The American Heart Association, volunteered at the local homeless shelter, and worked in various free medical clinics. After residency, he worked for several years as an attending physician in both community and academic medicine, prior to starting a fellowship in Emergency Ultrasound here at UCSD. In his free time, Amir enjoys spending time with his family, playing tennis, and golfing.

**Christanne Coffey** 

Dr. Christanne Hoffman Coffey grew up in South Carolina and graduated from the Medical University of South Carolina in Charleston in 2009. She went on to complete a transitional internship at Scripps Mercy Hospital before completing her Emergency Medicine Residency at UCSD in 2013, during which time she served as Chief Resident. After residency, she became the inaugural fellow in Wilderness Medicine at UC San Diego. She now serves as the Wilderness Medicine Fellowship Director and co-director of the EMED 275 wilderness medicine elective and EMED 427 "Medicine in the Wild" wilderness medicine clerkship. Her interests include wilderness medicine education, travel medicine, survival at sea, diving medicine, and extreme sports.

Chris Coyne

Dr. Chris Coyne is originally from his undergraduate education here at mountain climbing.

UCSD (Human Biology major). After college, he worked in a neuroscience laboratory at USC, where he studied neuroplasticity. Chris then attended the USC Keck School of Medicine, after which he stayed on at LAC/ USC for his residency in Emergency Medicine (where he was Chief Resident of Education). He then completed his fellowship training at UCSD in Clinical Research, obtaining his MPH degree. His current research interests include oncologic emergencies, care, resuscitation, and EMS. He is also the recipient of the National Foundation of Emergency Medicine research mentee award. spare time, Chris enjoys playing the bass guitar and singing (typically in a rock band), as well as road biking, Castro Valley, California. He received hiking, long distance running, and



Amir Aminlari, Charlotte Sadler, Chris Coyne and Gabe Wardi.

# UCSD DEM IN THE NEWS

#### Charlotte Sadler

Dr. Charlotte Sadler recently graduated from the UCSDE mergency Medicine residency program where she served as a chief resident. Prior to residency she completed medical school at the University of Iowa and her undergraduate degree at Dartmouth. Dr. Sadler then went on to complete her fellowship in Hyperbaric Medicine here at UCSD. Charlotte previously worked as a dive master on a charter dive boat out of Maui. She is an avid diver, paddle-boarder, and abalone hunter.

#### Gabe Wardi

Dr. Gabriel Wardi completed his undergraduate and graduate education in Atlanta. He moved to San Diego for his residency in Emergency Medicine where he served as the education chief resident during his final year. He is the first graduate of our joint Critical Care Medicine fellowship offered by the Division of Pulmonary and Critical Care and Department of Emergency Medicine. Dr. Wardi attends in both the ED and ICU at UCSD. Dr. Wardi's research interests include sepsis, the ED-ICU interface, resuscitation, cardiac arrest management, and applications of ultrasound in the critically ill. Outside the hospital he enjoys international travel, cooking, running and reading.



UCSD Clinical Informatics Fellow, Dr. Christian Dameff was featured in an online CNBC interview on medical device hacking risks.



Emeritus Professor Dr. James Dunford was featured in a KPBS article about battling the stigma associated with mental illnes.



UCSD DEM featured in project linking EMS electronic reports to the ED and medical center featured in *Healthcare Informatics*.



Dr. Ted Chan was featured in article by *California Healthline* about increased number of falls seen in senior patients.



Dr. Rick Clark featured in San Diego Union Tribune in article on edible marijuana.



Drs. Ted Chan and Vaishal Tolia were featured in San Diego Business Journal's article "ERs Try Senior Focus For Proactive Medicine."

#### CLINICAL CARE







Vaishal Tolia, MD







Operations linical at the UCSD Department of Emergency Medicine have seen some unprecedented change and growth that will continue into the coming year. A major area of emphasis has surrounded the <u>increase in 65+ year aged patients we</u> are seeing in our La Jŏlla ED, nearing 31%. Our emergency department at La Jolla is now the UCSD Gary and Mary West Emergency Department. The DEM collaborative partnership with West Health has led to the initiation of a Senior ED with an increased focus on healthy aging and improving access to specific resources to optimize the outcome for the unique needs of our seniors. We have social workers, case managers and experience officers now at both sites helping our care teams and providing options for patients for better outpatient and community based resources. Late 2018 will see the opening of the new Senior Emergency Care Unit, a geriatric focused expansion space to our current ED that will be a beacon for how to optimally care for our ever-growing senior population. The West Health partnership has also led to areas of innovation such as the Acute Care at Home program (ACH) as well as newer areas of òpportunity in telehealth services.

Our ED Observation Unit has grown over the last several years into a robust program that helps avoid admission for over 150 patients per month, on average. It is also a mechanism to allow our DEM to use innovative care models and communication tools to provide more value-based care as we try to optimize outcomes and patient satisfaction while at the same time reducing unnecessary cost, hospitalizations, and readmissions.

Our Urgent Care in La Jolla has proven to be a needed and overdue resource to the community we serve. We have experienced unexpected growth and popularity and have been able to show great success in this model of care which will lead to the expansion to multiple other urgent care sites throughout the San Diego county area in the coming months and vears.

Nurse Practitioners and Physician Assistants are now playing an increasingly important role in ma-naging our ED Observation Unit as well as helping care for patients in urgent care with our high census and patient volume growth in all facilities.

We have begun a CODE ECMO program with access to an exciting new option for a select number of some of our sickest patients. There is a future role for our department in the upcoming year in a county wide effort to reshape how resuscitation efforts are undertaken.

Not to be forgotten is our original and primary site of patient care in Hillcrest. A stronger relationship with our nursing staff as well as an established collaborative team effort with social workers, pharmacists, case managers, and community-based resources has led to optimization of care for our vulnerable patient population. We continue to see a growing population in Hillcrest with very unique needs and continue to innovate and learn so we can achieve outstanding care for our patients while providing a positive patient experience.

UCSD The Department Emergency Medicine is poised for continued growth and innovation in the coming year and there are a lot of accomplishments we can all be proud of which gives us hope and resolve for a successful mission in the years to come.

# **DIVISION UPDATES**







#### **Ultrasound**

On January 26th and 27th, at the Westin in the Gaslamp District, the Department of Emergency Medicine and the Division of Ultrasound Summit.

This was a two-day course geared towards introducing the principles of bedside ultrasound, the course was attended by 21 healthcare providers from all over the United States. Organized by Dr. Singh, the course had lectures and hands on stations set up by the entire Division and had a heavy emphasis on fellow involvement. Special thanks to our fellows Dr. Macias and Dr. Nadolski; Dr. Macias did a stellar job on the course website and course resources (including t-shirts and reference cards...which you will soon see around the department) while Dr.

Nadolski was instrumental in his teaching, giving lectures and doing hands on stations for the attendees on both days.

The division hopes to make this Ultrasound hosted it's first annual an annual event in January and add a third day for advanced topics, with continued hope of a strong regional and national attendance. Profit goes towards the Division's mission of doing philanthropic teaching around the globe, with trips being planned for Uganda and Ghana in the coming year. Dr. Singh has already started planning the future iterations, and hopes to see you there!







Dr. Chris Sloane with DMAT CA-4 in Houston for Hurricane Harvey.

#### **EMS / Disaster Medicine**

This year, with the retirement of Dr. Dunford (see next section), the Division assumed responsibility for EMS medical direction for San Diego City Fire, the largest prehospital agency in the County. EMS Faculty now provide oversight for prehospital care in San Diego city, Chula Vista in the South, and Carlsbad Fire in the North, as well as Mercy Air regionally, and AviaMedix internationally.

In addition, our Department is leading a collaboration with Ruijin Hospital in Shanghai China for EMS aeromedical training along with our partner agency Mercy Air. In the face of multiple disasters this past year in the U.S. (such as the very active hurricane season), faculty have also stepped up their roles in disaster response, with Drs. Jacoby and Sloane responding with DMAT to Houston to provide medical support and care for those in need.

#### **Hyperbarics**

The Division of Hyperbaric Medicine has embarked on 2 nationally funded studies. The first, in conjunction with the UCSD GI division, will focus on the utility of HBO treatment for ulcerative colitis flares. The second study will investigate the HBO treatment of severe head injuries in collaboration with our trauma division. This latter study will be the first study funded by the large NIH SIREN Network. In addition, HBO faculty have been participating in a new ACEP education video series on emergent hyperbaric oxygen therapy treatment indications. So look for Karen, Brian, Ian, Pete, Chris T, and Jake on the small screen in the near future!

#### Pediatric Emergency Medicine

The Division of Pediatric Emergency Medicine continues to play an active role in clinical care, education, and The Division oversees research. pediatric emergency medicine education, which includes didactic educational sessions and monthly pediatric simulation sessions for the residents and faculty-specific training for the DEM. The Division faculty also help lead the largest, regularly scheduled emergency medicine educational conference in the region. the San Diego Regional Pediatric Emergency Medicine Conference. The Division also serves as the academic home for the pediatric emergency medicine fellowship, which, for the first time, is training a UCSD EM residencytrained fellow, Nicholas Pokrajac.

Division faculty are also participating in important research collaborations, including studies with the Pediatric Emergency Care Applied Research Network (PECARN), National Emergency Airway Registry (NEAR) and Pediatric Emergency Medicine Clinical Research Committee (PEMCRC). This year, Division faculty members played an integral part in developing the system-wide Pediatric Code Blue response protocol for UC San Diego Health.



Chris Tomaszewski filming infront of the hyperbaric chamber.

# PR2

Professor Laurel Riek with robot.

#### **Clinical Informatics**

UCSD Associate Professor of Computer Science Engineering (and DEM Adjunct Assoc Prof) awarded an National Science Foundation grant to study robotics in uncertain and chaotic environments including the ED. With this funding, she and her study group, as well as collaborators in our Department, will study multi-human and multi-robot teamwork concepts, generating new models of how automation and robotics can facilite care and processes in a busy ED. This work will take place with observations of our EDs, as well as modelling in the UCSD Sim Center ED rooms at the Medical School. The goal is to study and better understand the future of human-robot interactions in Emergency Medicine and other settings.

# MEET OUR NEW FELLOWS



**Christian Dameff, MD**Clinical Informatics



**Jenny Farah, MD** EMS/Disaster Medicine



Kaighley Brett, MD Hyperbarics



Aaron Heerboth, MD Hyperbarics



**Liza Owen, MD** Hyperbarics



Clifford Masom, MD
Toxicology



Matthew Riddle, MD Hyperbarics



Michael Macias, MD Ultrasound



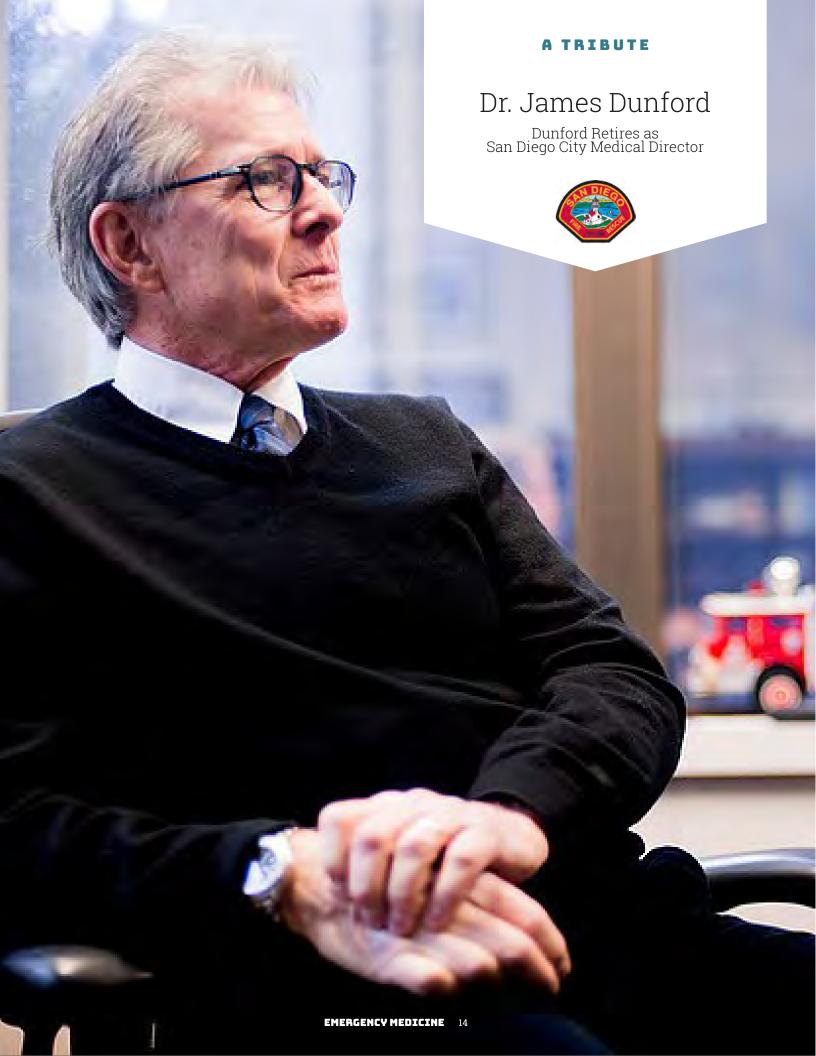
Adam Nadolski, MD Ultrasound



Michael Lindsey, MD Wilderness Medicine



Nicholas Pokrajac, MD Pediatric EM



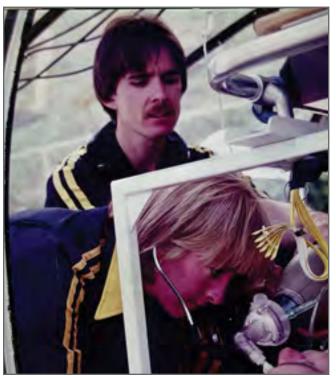
**EMS** Director in December 2017. As the inaugural city medical Access Program, and promoting director, Jim virtually created the position and set the standard as Medical Director for the region's largest EMS agency. During his tenure, he implemented numerous advancements in prehospital care in the region including the creation of STEMI and Stroke receiving centers, adoption of etCO2 in the field, implementation of automated external defibrillators by medics, as well as many others, all which revolutionized prehospital patient care in our region.

As an academician, Dr. Dunford led San Diego EMS's participation and prominence in numerous national studies funded by the likes of the NIH and AHA, including important research initiatives as part of the Resuscitation Outcomes Consortium and SPOTRIAS (Specialized Programs of Translational Research in Acute Stroke) trials.

continues to be a clinician deeply of our educational programs here at committed to our region, and in UCSD, we truly wish him well in his particular to those San Diegans who well-deserved retirement.

fter nearly 20 years, are less fortunate. He focused his UCSD DEM Emeritus tremendous energy addressing the Professor Jim Dunford needs of those often forgotten by retired as San Diego our medical care system such as the Medical homeless, implementing innovative efforts such as the Resource multidisciplinary efforts with others (law enforcement, social work, 211) like the Homeless Outreach Team and Serial Inebriate Programs. Dr. Dunford's work and passion have been recognized by the EMS community nationally and internationally. 2015, he received the prestigious ACEP EMS Award for Outstanding Contributions Emergency to Medicine; and in in 2017 the James O. Page JEMS Leadership Award.

For many of us in Emergency Medicine and EMS, Jim is and will always be a teacher of the highest order, having been the inaugural EM residency director and EMS fellowship director at UCSD. dedication, passion, and brilliance continue to inspire students. paramedics, residents, fellows, and faculty to this day. To honor that legacy, San Diego City has renamed their Teaching facility the James V. Dunford EMS Training Facility. And At heart, however, Jim was and while Jim plans to stay involved in all







# Where are they now: **Classes of** 1997 & 2007



20 Years Ago: Class of 1997

#### Now At:

**Skip Walton** Jim Larson **Chris Richards** 

**UNC Chapel Hill** 

University of Oregon Medical

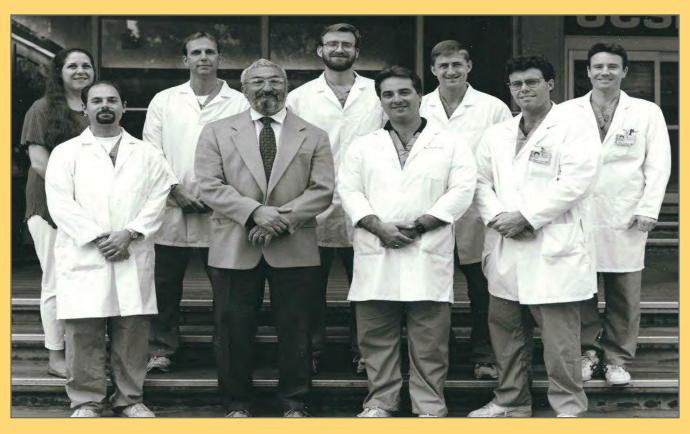
University of Michigan

**Guy Tarleton** 

Santa Inez Hospital, Santa Barbara

**Paulo Berger Shawn Evans**  Kaiser Permanente, San Diego Scripps Memorial Hospital, La

Jolla





#### 10 Years Ago: Class of 2007

#### Now At:

Aaron Pessl Kaiser Permanente,

Fremont

**Yiannis Venieris** Sharp Memorial

Hospital, San Diego

Mamata Kene Kaiser Permanente,

San Diego

**Danielle Douglas** Sharp Grossmont

Hospital, San Diego

Jennifer Johnson Kaiser Permanente,

Oakland

Lisa Lowe UCSD Medical Center &

**Sharp Memorial** 





**OF 2017** 

Rachel Post - Temecula Valley Hospital Adam Nadolski - UCSD U/S Fellowship David Benaron - Renown Regional MC, NV





# SAVE THE DATE

# ALUMNI REUNION

September 30th | San Diego | ACEP 2018

Look out for an email with details



# RESEARCH AND SCHOLARLY ACTIVITIES



Chris Coyne, MD Director, Clinical Research



Eddie Castillo, PhD Director, Research Operations

he Department has continued to be productive with research presentations, peer-re-viewed publications, book chapters, and extramural funding. Research funding has exceeded \$3 million in 2016 and 2017 with funding from state and federal government agencies as well and non-profit and industry spon-sors. One of these awards was from GE Healthcare, who is working with the National Football Legue to learn more about mild traumatic brain injury using comprehensive MRI images. Another successful research collaboration is with the Gary and Mary West Health Institute (WHI), which is continuing with the opening of the region's first senior emergency care unit. We have been working with WHI over the past several years to lay the foundation of clinical care and research to im-prove the treatment and outcomes of our senior population. Based on learnings during our collaboration, we have initiated ongoing research that will inform stakeholders about best practices for clinical operations and decision support as well Research Associates Program as patient outcomes in this growing population.

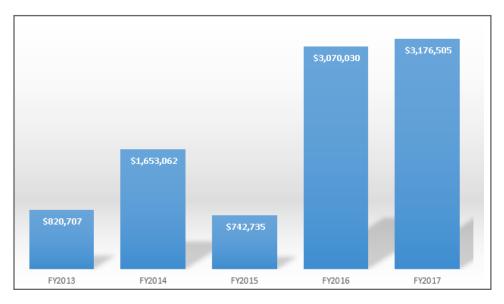
This year, UCSD was selected as a site for the Strategies to Innovate a site for the Strategies to Innovate Emergency Care Clinical Trials Network (SIREN). This will bring several clinical trials and associated grant funding to our department. The first project will be the Hyperbaric Oxygen Brain Injury Treatment (HOBIT) trial. The purpose Interested In Clinical Tesearch. RAs are provided the opportunity to have direct one-on-one patient interaction through screening, enrolling and interviewing patients for various clinical research. The RAs are provided the opportunity to have direct one-on-one patient interested In Clinical Tesearch. RAs are provided the opportunity to have direct one-on-one patient interaction through screening, enrolling and interviewing patients for various clinical Trials Ne-trong and the opportunity to have direct one-on-one patient interaction through screening, enrolling and interviewing patients for various clinical research.

of this innovative adaptive phase II trial is to determine the optimal combination of hyperbaric oxygen treatment parameters that is most likely to demonstrate improvement in the outcome of severe TBI patien-ts. Moving forward, our department also plans to be involved in the Influence of Cooling duration on Efficacy in Cardiac Arrest Patients (ICE-CAP) study, which is a multicenter, randomized, adaptive allocation clinical trial to identify the optimal duration of induced hypothermia for neuroprotection in comatose survivors of cardiac arrest. Finally, we have also submitted our letter of support for the Chest Pain Trial. This multi-center study will seek to determine whether prompt (within 7 days) outpatient follow-up for ED patients with low-risk chest pain is safe (i.e., non-inferior, by a pre-spe-cified amount) when compared to an in-hospital noninvasive cardiac testing strategy. We are very excited to be part of the SIREN network as it should bring multiple diverse clini-

The Research Associates Program continues to provide a unique opportunity for students who are interested in clinical research.



NIH SIREN Emergency Trials Network



medical literature. We have over 100 peer reviewed publications, 55 published abstracts and 13 book chapters authored by UCSD faculty, with some of publications occurring in New England Journal, JAMA, and Circulation. Additionally, UCSD EM faculty have edited a number of text books including Doing Research in Emergency and Acute Care: Making Order Out of Chaos, 5-Minute EM Consult, and Guidelines for Investigating Officer-Involved Shootings, Arrest-Related Deaths, and Deaths in Custody to name a few. The full list of publications can be found on the DEM website.

DEM Extramural Research Funding

UCSD Faculty Mentor Program, which pairs UCSD undergraduate students with a faculty member. These students earn academic credit for working on a potentially publishable research project while gaining the clinical experience of being a RA.

In January 2017, Dr. Christopher Coyne took over as Director of the Emergency Medicine Research Special Studies (EMRSS) lab, which expanded the scope of the Department of Emergency Medicine Behavioral Emergencies Research (DEMBER) lab, which was previously led by Dr. Michael Wilson. This lab

functions as a special subsection of our RA program, and has been successfully conducting several prospective, observational studies and retrospective cohort studies encompassing several different fields within emergency medicine including oncologic emergencies, HIV screening, EMS utilization, and geriatric emergency medicine. the lab Additionally, recently industry received an renewal grant for a randomized clinical trial investigating the efficacy and feasibility of an inhaled antipsychotic.

Over the past 24 months, our department has added greatly to the







#### PUBLICATIONS, GRANTS & PRESENTATIONS



#### **Oral Presentations**

The Rate and Patient Characteristics of 7-Day ED Revisits among Senior Patients. Castillo EM, Ko K, Howard J, Vilke GM, Hsia R, Killeen JP, Brennan J.

#### **Lightning Oral Presentations**

Accuracy and inter-rater agreement of pediatric soft tissue point-of-care ultrasound images. Lam SH, Alade K, Doniger S, Levine M, Rabiner J, Sivitz A, Brennan J, Castillo EM.

Injuries Associated with Law Enforcement Use-offorce Incidents with and without Subject Intoxication. Hornbeak K, Castillo EM, Sloane C, Vilke GM.

Initial Results from an Acute Care at Home Program as an Alternative to Admission. Tolia VT, Kreshak AK, Stuck AR, Casale MB, Crowley C, Killeen JP, Castillo EM.

Factors Associated With Geriatric Frequent Users of Emergency Department Resources. Castillo EM, Brennan J, Hsia R, Chalmers C, Howard J, Ko K.

Evaluating cancer-related pain management in the emergency department setting. Coyne C, Li D, Brennan J, Castillo E, Vilke GM.

Emergency department visits following hospital admissions. Brennan J, Vilke GM, Hsia R, Killeen JP, Castillo EM.

Conducting Meaningful Population-Based Research on Patients with Cancer Who Present To the Emergency Department - A Study on The Methodology of Categorization. Coyne CJ, Brennan J, Castillo EM, Vilke

#### **Posters Presentations**

Evaluation of the Risk of Carotid Artery Injury in Strangulation. Vilke GM, Holman M, Brennan B, Castillo EM.

Knowledge and Concern over Ingredients in Packaged Food and Personal Hygiene Products among Emergency Department Patients. Miller A, Brennan J, Vilke GM, Castillo EM.



#### **Oral Presentations**

Initiating and Improving ED-based processes for Acute Care at Home as an Alternative to Admission. Stuck AR, Crowley C, Tolia VT, Kreshak AA, Killeen JP, Castillo EM, Agha Z, Morita T.

Prehospital to Emergency Department Data Exchange- a SAFR Transition of Care. Killeen JP, Castillo EM, Vilke GM, Chan TC, Dunford JK, Kahn C, Powell R, Sparks J, Pringle J, Chavez DJ, Branning MD.

#### **Lightning Oral Presentations**

Assessment of Stress Markers in Restrained Individuals Following Physical Stress With and Without a Sham TASER Activation. Sloane C, Mash DC, Chan TC, Kolkhorst F, Neuman T, Castillo EM, Vilke GM.

Analysis of a multi-center survey to assess fluid resuscitation practice in patients with sepsis and heart failure. Wardi G, Villar J, Gross E, Lava M, Seethala R, Owens R, Tolia V, Sell R, Beitler J.

ED Revisits within 3 Days of an ED Discharge for Urinary Tract Infection among Geriatric Patients. Brennan JJ, Chan TC, Vilke GM, Killeen JK, Hsia RY, Castillo EM.

The Prevalence of Benzodiazepine Use in a Geriatric Emergency Department Population. Minns AB, Kreshak AA, Tolia VT, Killeen JP.

A four year descriptive analysis of geriatric patients' visits to the Emergency Department. Kreshak, Tolia VT, Chan TC, Killeen JP, Vilke GM, Castillo EM.

D-dimer Assay-Guided Moderation of Adjusted Risk (DAGMAR) Score: Improving the Specificity of the D-dimer for Pulmonary Embolism in the Emergency Department. Glober NK, Tainter CR, Brennan J, Darocki M, Klingfus M, Derksen B, Choi M, Rudolf F, Castillo E, Chan T.

Evaluation of Mobility and Fall Risk among Seniors Presenting to the Emergency Department. Tolia VT, Chan TC, Killeen JP, Vilke GM. Kreshak AA, Castillo EM.

Factors Associated with Ambulance Use in Emergency Department Patients. Nakajima Y, Brennan JJ, Castillo EM, Vilke GM.

Identification of Unrecognized Delirium in Senior Emergency Department Patients. Tolia VT, Chan TC, Killeen JP, Vilke GM, Kreshak AA, Castillo EM.

A Prospective Study of Stingray Injury and Envenomation Outcomes. Myatt T, Nguyen B, Clark R, Coffey C, O'Connell C.

Geriatric visits to California Emergency Department from 2008 through 2014. Brennan JJ, Chan TC, Vilke GM, Hsia RY, Killeen JK, Castillo EM.

The relationship between medication knowledge, perceived importance, and medication adherence. Coyne CJ, Ence T, Smyres C, Brennan J, Castillo E, Vilke GM.

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#### PUBLICATIONS & GRANTS

#### **BOOK CHAPTERS**

Coyne CJ, Ly BT, Vilke GM. Excited Delirium Syndrome (ExDS). In: Guidelines for Investigating Officer-Involved Shootings, Arrest-Related Deaths and Deaths in Custody. Ross DL, Vilke GM (Eds.); New York and London: Routledge. 2017.

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#### GRANTS

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Tolia V and Chan T. The Gary and Mary West Senior Emergency Care Unit (SECU): Phase 3 – Existing Space SECU Implementation. Funded by the Gary and Mary West Health Institute, Amount: \$2,405,584.

Sundararajan, R. "HIV-Related Knowledge and Practices Among Higher Education Students in Maputo". UCSD Center for AIDS Research, Amount: \$39,450.

Killeen J, Chan T and Tolia V. Implementation of Telehealth Services in Assisted Living. Funded by the Gary and Mary West Health Institute, 11/16-10/18, Amount: \$2.616,445 Partnered Research Project.