UC San Diego Skaggs School of Pharmacy & Pharmaceutical Sciences Newsletter

Spring 2016

A Message from the Dean – James H. McKerrow, PhD, MD



Since our last newsletter, SSPPS has grown and received several awards. A complete summary follows in the newsletter, but earlier highlights include:

Katharerina Brandl received a UC San Diego Distinguished Teaching Award which includes having her photo hung in the Faculty Club. This is the third one we have received - Brookie Best and Linda Awdishu won the last two years!

Our student team was one of only eight national finalists for the annual Academy of Managed Care Pharmacy P&T contest. They won the contest!! This is Pharmacy's March Madness.

We have a new Pharmacy Management Fellow - Mitch Vitale.

With the help of Christina Mnatzaganian we have launched the first SSPPS Community Pharmacy Residency.

Jeremiah Momper and Conor Caffrey won the inaugural SSPPS Interdisciplinary Translational Research Awards.

Conor Caffrey also was awarded a Translational and Clinical Pilot Grant from the CTRI.

Anjan Debnath has received a CTRI Scholar KL2 Award. This is a major three year grant.

SSPPS now boasts three UC San Diego designated Core Facilities. We already had the NMR Facility run by Brendan Duggan. We now have the Crystal Lab run by Larissa Podust and the UC San Diego Drug Development Pipeline run by Jeremiah Momper.

One of the most exciting new SSPPS initiatives is being launched by medicinal chemist, Dio Siegel. It is called "Californian Shaman, A Study of the Chemistry and Conservation of Native Californian Plants" and will focus on increasing the participation of groups currently underrepresented in science and demonstrate to those students that science can be inspiring, accessible, and enjoyable. The program is conducted in conjunction with the Grossmont, Orange County and San Diego Unified School Districts, SDUSD being the second largest school district in California with the majority of the student body from groups currently underrepresented in sciences. Californian Shaman will expose precollege students to a number of scientific disciplines, ranging from botany to analytical chemistry. This will provide opportunities for the students to connect with scientific disciplines to which they may not have otherwise been introduced. Student involvement in research design and project ownership will be encouraged by the participants conducting experiments that are based on their own hypotheses, and the plants they personally selected at the beginning of the program. [Continued on page 14]



SSPPS News

SSPPS Community Pharmacy Residency By Christina Mnatzaganian, PharmD, BCACP

With the help of Christina Mnatzaganian, Pharm.D., BCACP, we have launched the first SSPPS Community Pharmacy Residency. This one-year, postgraduate training program in community practice will prepare residents to be community-based advanced practice pharmacists with direct patient care skills. This includes comprehensive medication management, innovative clinical programs, leadership in pharmacy practice management, education, and practice based research. Graduates will be prepared to provide patient care services to meet the needs of members of the community and be eligible for board certification and postgraduate year two (PGY2) pharmacy residency training. A teaching certificate will be offered through participation in the San Diego Pharmacy Residency Leadership Program. This residency will be affiliated with a national pharmacy chain offering unique clinical community experiences in medication therapy management, HIV, travel medicine, smoking cessation, immunizations, hospice, compounding, and diabetes management and education. Additional experiences available to the resident include primary care and specialty clinics. The resident will be expected to complete a research project with manuscript prepared by the end of their training year.



We are excited to welcome Jairus Mahoe, from the University of Hawaii-Hilo, as our inaugural resident, starting July 1st, 2016. He will receive his doctor of pharmacy degree in May 2016 and has a Bachelor's degree in Economics (2011) from the University of Hawaii-Manoa. Jairus will have shared learning experiences with both UC San Diego Health Systems clinics and Ralphs Pharmacy in addition to teaching and research responsibilities. Please look for him in July and extend a warm welcome on behalf of the SSPPS family!

2016 Applied Pharmacoeconomics and Outcomes Research Forum 3By Jan Hirsch, PhD

The twelfth Applied Pharmacoeconomics and Outcomes Research Forum was held March 7th, 2016 at the UC San Diego Faculty Club.

The topic for the Forum was "Health Services Research Applications and Challenges Across Healthcare Systems"

Continuing our theme of kicking off the Forum by testing the audience knowledge we challenged participants with a series of trivia questions related to the pharmaceutical industry.

Our speakers were:

Overview Health Services Research Umbrella & Inclusion of Pharmacoeconomic Principles
Anthony P Morreale, PharmD, MBA, BCPS
Assistant Chief Consultant for Clinical Pharmacy Services and Healthcare Services Research
Pharmacy Benefits Management, Department of Veterans Affair



Did you know...

Which class of drug was extracted from the venom of the Brazilian Arrow-headed viper?



Why should the African Clawed frog be famous?



Answers to these two questions can be found on Page 6 of this newsletter. Answers to 8 more "must-know" fun facts, can be found in the PE Forum Introductory slide set posted along with the speaker slides at the link here: http://pharmacy.ucsd.edu/faculty/pharmacoeconomics forum.shtml

Perspectives and Case Examples

Integrated Healthcare System

Value Clinical Pharmacy Services: case of the cardiovascular and diabetes opportunity

Heather Ourth, Pharm.D., BCPS, CGP

Program Manager: Clinical Pharmacy Practice Program and Outcomes Assessment

Pharmacy Benefits Management, Department of Veterans Affairs

Health System

Silo vs. The Farm, drug impact vs. other moving parts: case of post-surgery quality indicators

Katie Derry, Pharm.D., BCPS

Pharmacy Specialist, Clinical Pharmacoeconomics and Outcomes

UC San Diego Health System

Medical Group

Evaluating Program Outcomes in the Real World: competing success definitions & resource challenges

Andrea De Coro, PharmD

Executive Director, Clinical Pharmacy Services and Performance Improvement

MemorialCare Medical Foundation

Speaker slides are available via the link here: http://pharmacy.ucsd.edu/faculty/pharmacoeconomics forum.shtml

MANY THANKS TO OUR SPONSORS AND EXIBITORS













Current PE Forum Steering Committee members are:

Michael S. Broder, MD, MSHS

Jan D. Hirsch, RPh, PhD

UC San Diego, Skaggs School of Pharmacy & Pharmaceutical Sciences

Charles Daniels, RPh, PhD

Partnership for Health Analytic Research UC San Diego, Skaggs School of Pharmacy & Pharmaceutical Sciences

Michael Pollock

PPD

Robert Schoenhaus, PharmD

Sharp Healthcare

Mirta Millares, PharmD, FCSHP, FASHP

Kaiser Permanente

Anthony P. Morreale, PharmD, MBA, BCPS

Pharmacy Benefit Management VA Central Office

New Pharmacy Management Fellow

A warm welcome to our new Pharmacy Management Fellow, Mitch Vitale, Pharm.D., who graduated from SSPPS in 2015. He has been doing a residency with the UC San Diego Health System since graduation.



UC San Diego Endocrinologists Team with Pharmacists to Offer Diabetes "Tune Up" Clinic

Department of Medicine endocrinologists <u>Steven V. Edelman, MD</u>, and <u>Robert R. Henry, MD</u> collaborate with <u>Candis Morello, Pharm D</u>, and students in the Skaggs School of Pharmacy and Pharmaceutical Sciences to offer a six-month Diabetes Intensive Medical Management (DIMM) "tune up" clinic for patients with complex cases of diabetes at the VA San Diego Healthcare System.

At each visit, a patient receives an hour of personalized attention to medication management, diet, exercise, controlling blood sugar levels and other necessities that may be involved in a complex case of diabetes. The aim is to achieve glycemic control within the six-month period of the "tune up" clinic. In a preliminary study, Drs. Morello, Evans, Henry and coworkers have assessed the outcomes of the clinic, and the findings indicate that this pharmacist-endocrinologist collaborative approach is effective. The study report was published online in November 2015, and in print in January 2016.

SSPPS Fellow and Faculty Present at University of Southern California's Innovations of Medical Education Conference By Paula Park, PharmD

On February 19, 2016, Dr. Jonathan Watanabe and I had the privilege of presenting at the Innovations of Medical Education conference at USC. We talked about our involvement with the San Diego Geriatrics Workforce Enhancement Program (SDGWEP), which is an interdisciplinary curriculum designed to serve the elderly and underserved communities of San Diego. SDGWEP is funded by a \$876,000 grant from the Health Resources and Services Administration, and collaborates with San Ysidro Health Center, a federally qualified health center; Veterans Affairs San Diego Health System; UC San Diego School of Medicine; and Skaggs School of Pharmacy and Pharmaceutical Sciences.

One of SDGWEP's objectives is to recruit healthcare professionals and clinical students from their respective fields and train them through an intensive yearlong curriculum in order to provide culturally appropriate, evidence-based geriatrics care, and improve health outcomes for older adults. Currently, we have nine inter-professional scholars, including three primary care physicians, three nurses, two social workers, one pharmacy student (Sammi Tam, P3), and one pharmacist fellow (Paula Park, PharmD, PhD). The scholars receive 120 hours of training that uses a combination of lectures, workshops, outreach activities, clinical work, and conferences. Lectures are given in topics such as demography & epidemiology, chronic disease state management, and high-risk medication use. Workshops employ hands-on training and include topics such as communication & cultural competency, telemedicine & wound care, and fall prevention. Outreach activities promote community service and care for the underserved, veteran communities. Clinical activities are held in outpatient clinics and primary care clinics. Further dissemination will be accomplished through presentations at symposiums & conferences, submission of manuscripts, and composition of a Latino geriatrics textbook.

We presented in the Professionalism and Health Disparities block, and many physicians were concerned with the fact that older adults above 65 are taking more than ten medications on average, and showed interest in how to better communicate with interdisciplinary teams to reduce inappropriate prescribing and improve care. The elderly population is expected to grow at more than double the rate as the general population, and by 2030, 20% of the population will be 65 or older. However, there is a shortage of healthcare professionals trained to care for this frail population. In order to tackle this issue, the Committee on the Future Health Care Workforce for Older Americans proposed that we enhance the geriatric competence of the workforce, increase the recruitment and retention of geriatric specialists and caregivers, and



improve the way care is delivered. Through programs such as SDGWEP, we can tackle all aspects of these needs and increase involvement of pharmacists in serving this growing population.

Hyperlinks here:

Aging and Independence Services.

Retooling for an Aging America: Building the Health Care Workforce - Institute of Medicine.

CSHP – UC San Diego Culture Fusion



The 8th Annual Culture Fusion, a fundraiser for cultural diversity outreach projects was held at the Price Center Ballroom on Thursday, May 12th. This year's theme, "Culture of Love" was put on by CSHP, organized by Fundraising Chair Celeste Sage, and featured samples of the ever popular student chef competition, a fashion show highlighting traditional clothes from many different countries, and amazing performances by our SSPPS students and faculty. In fact, our own Dean showed his love of music and performance by playing as the front man of "The Drug Lords" comprised of his faculty band members and back up singers. What an amazing night celebrating our multi-cultural, multi-talented and all

around awesome faculty and student pharmacists while raising funds for a worthy cause, all rolled up into one fun night!

Faculty News

UC San Diego Distinguished Teaching Award

Katerina Brandl has received a UC San Diego Distinguished Teaching Award.

The Distinguished Teaching Award is a prestigious award bestowed upon up to five members of the Academic Senate, three non-Senate faculty members, and three graduate students at UC San Diego each year. The Distinguished Teaching Award was created because UC San Diego faculty recognize the important role excellent teaching plays at the University. This Award is a tangible expression of UC San Diego's commitment to excellence in teaching and to ensuring that this commitment is maintained. The Committee on Distinguished Teaching seeks to select those who exhibit creativity, innovative teaching methods, the ability to motivate students to actively seek out knowledge, and an extraordinary level of teaching commitment.



Morreale is AMCP Foundation's 2016 Steven G. Avey Award Recipient

SSPPS Preceptor and Assistant Chief Consultant for Clinical Pharmacy Services and Healthcare Services Research for the Department of Veterans Affairs (VA) Pharmacy Benefits Management Dr. Anthony P. Morreale, PharmD, MBA, BCPS, FASHP, was selected by the AMCP Past Presidents and Founders Advisory Council as the 2016 recipient of the prestigious Steven G. Avey Award. The highest honor in managed care pharmacy, the award, bestowed by the AMCP Foundation, recognizes sustained, exemplary and distinguished service to the profession. The Steven G. Avey Award was presented at the AMCP-AMCP Foundation awards ceremony, April 20, at AMCP's Managed Care & Specialty Pharmacy Annual Meeting in San Francisco.

Caffrey Receives a 2016 CTRI Translational and Clinical Pilot Grant

Dr. Conor Caffrey has been chosen as the recipient of a 2016 CTRI Translational and Clinical Pilot Grant for the project "Rapid, point-of-care diagnosis of schistosomiasis".

Recipients of 2016 Inaugural Interdisciplinary Translational Research Award

Sponsored by the UC San Diego Skaggs School of Pharmacy and Pharmaceutical Sciences, the purpose of the Interdisciplinary Translational Research Award is to stimulate new collaborations across multiple disciplines and establish a meaningful interface between the basic and clinical sciences so that discoveries can be translated into new diagnostic and therapeutic applications. For our inaugural 2016 cycle, we proudly announce the pharmacist-investigator and a basic scientist team of Jeremiah Momper, PharmD, PhD and Conor Caffrey, PhD in their efforts to contribute to translational research. Momper is skilled in pre-clinical drug development, including ADME and *in vivo* pharmacokinetics and Caffrey is a basic research scientist specializing in molecular parasitology, early drug discovery and biochemistry. Caffrey has identified a small molecule termed 2-t-p, which may serve as an alternative therapy for schistosomiasis that affects over 200 million people globally The scope of their work is to characterize the (1) metabolic pathway of 2-t-p in human hepatocytes and (2) *in vivo* pharmacokinetics of 2-t-p in rodents.

TRIVIA ANSWERS:

The venom of the Brazilian Arrow-headed viper contributed to the new drug class of Angiotensin-Converting Enzyme Inhibitors.http://lifeinthefastlane.com/funtabulously-frivolous-friday-five-031/

The African Clawed Frog was at the beginning of the biotech age back in 1973, when Stanley Cohen & Genentech founder Herbert Boyer inserted DNA from an African Clawed Frog into E. coli bacteria. http://www.pharmexec.com/how-much-do-you-really-know-about-pharma-quiz-answers



Student News

UC San Diego AMCP: 2016 National P&T Champions
By Jonathan Watanabe, PharmD

Happy to report that the UC San Diego P&T Team took first place in the National AMCP P&T Finals. Congratulations to Joanne Chiu, Jeff He, Hannah Nguyen, and Jamie Ta who represented UC San Diego SSPPS. Their written submissions and presentation were remarked as flawless by the five team judges of pharmacists. They win a cash award, travel and registration to AMCP Nexus Conference, one year paid membership to AMCP, and plaque for the school. We have firmly cemented our position as a leading managed care pharmacy training institution in the US. Forty-three universities



competed in the largest competition to date. USC took second place and UCSF third place. Thanks to my amazing coadvisor Dr. Sara Erickson. Many thanks to local judges Drs. Jan Hirsch, Chuck Daniels, and Lisa Lam. P&T coordinator Samantha Ma (P3) and chapter president Cindy Lau (P3) and many others.

For the full announcement: http://www.amcp.org/Newsletter.aspx?id=20980

Class of 2018 Students Selected as USPHS JRCOSTEP Awardees By David Adler, PharmD

UC San Diego SSPPS is pleased to announce that three students have been selected to participate in the 2016 **Junior Commissioned Officer Student Training and Extern Program (JRCOSTEP) sponsored by the USPHS.** Assistant Surgeon General, Rear Admiral Pamela Schweitzer, PharmD, (CMS) and LCDR Stephanie Daniels, PharmD, (ICE) were present at the SPPS 202A Concepts in Pharmacy Practice course in February to congratulate Jane Chang, Sarah Graveline and Theodore Pham Nguyen and to share this summer program with the Class of 2019.

Jane Chang will be having her JRCOSTEP experience in the Indian Health Service (IHS) in Billings Montana, serving the Blackfoot, Crow and multiple smaller tribes in the surrounding area IHS Clinics. Sarah Graveline will be traveling East to the Colorado River Service Unit, including Peach and Supai Clinics, and Parker Indian Hospital in Parker, Arizona serving the Colorado River Indians (Mojave, Hopi, Navajo, and Chemehuevi), Hualapai, Havasupai, Chemehuevi, and Fort Mojave tribes. Theodore Pham Nguyen will have his clinical experience in the Wellipinit Service Unit near Spokane, Washington primarily serving the ambulatory needs of the Spokane and Kalispel Tribes.

The JRCOSTEP program usually taken during the summer between the P2 and P3 years, provides students opportunities to work in the same Federal agencies and programs as active duty Commissioned Corps officers. Opportunities exist in the U.S. Department of Health and Human Services (HHS) (e.g., Food and Drug Administration, Indian Health Service, National Institutes of Health) as well as several other Federal agencies (e.g., Environmental Protection Agency, Federal Bureau of Prisons, National Park Service).

Eligibility for health professional students includes among other requirements, at least one year of study in a professionally accredited doctoral program in medicine, dentistry, pharmacy, psychology, veterinary medicine, therapy



(occupational, physical, speech-language pathology or audiology) or research science (that requires the completion of independent and original research).

Our UC San Diego SSPPS candidates were selected from over 200 applicants across the US.

We look forward to hearing about Jane's, Sarah's and Theodore's experiences when they return in the Fall 2016. If you have an interest in this program please see details here: http://www.usphs.gov/student/jrcostep.aspx

Love Made Audible: A Serotones Charity Concert By Warren Yau (P2)



Serotones, a student organization at SSPPS with a focus in music, was founded around one goal: to bring relief to patients through music. Twice a month, we performed at the UC San Diego Moores Cancer Center, steadily building our repertoire in preparation for our end-of-the-year project – a charity concert where students and faculty from both the Skaggs School of Pharmacy and Pharmaceutical Sciences and the School of Medicine could perform together for the benefit of cancer patients. We envisioned this concert both as a means to pave a new path from our music to patients and to promote collaboration between the two schools.

On March 29th, after months of preparation, we opened our doors to friends, schoolmates, and faculty who came to show their support. We performed a variety of music, ranging from The Beatles and Disney songs to classical. Dr. Katharina Brandl and Dr. Cherry Bao made feature performances for our event, and we were joined by White Coat Noise, a student-run instrumental group from the School of Medicine. By the end of the night, we raised one thousand dollars for the benefit of Patient Support Services at the Moores Cancer Center thanks to the support of our faculty, classmates, and friends from the School of Medicine.

As an organization, we hope to continue to provide musical healing services to patients and to continue to host annual concerts at UC San Diego SSPPS as a new tradition.

<u>Performers:</u> Warren Yau (P2), Tiffany Cheng (P2), Josh Valdez (P2), Mandy Leung (P2), Wilson Liang (P2), Liu Liu (P2), Catherine Shir (MS1), Theresa Whitchurch (MS1), Aaron Bloch (MS1), Dr. Katharina Brandl, Dr. Cherry Bao.

CSHP-UC San Diego Takes Asthma Education to Ensenada, Mexico By Rachelle Roxas (P2)

This past winter marked CSHP-UC San Diego's first collaboration with the UC San Diego undergraduate Flying Samaritans organization to contribute pharmacy services to the underserved community in Ensenada, Mexico. UC San Diego Flying Samaritans partner with local healthcare providers to make monthly day-long trips to their Mexico-based clinics. As CSHP- UC San Diego President-Elect, I helped organize our student pharmacists in performing general pharmacy functions, pharmacy counseling, and asthma education in Ensenada. I worked with SSPPS Professor Panteha Kelly, Spanish-speaking pharmacist Dr. Pablina Jones, and the San Diego American Lung Association (SD ALA) to create



a patient-friendly asthma presentation, since asthma is not only a CSHP- UC San Diego educational pillar, but also an important chronic condition in underprivileged areas.

On February 27, 2016, our SSPPS team - Kaishan Ding (P2), Courtney Moc (P1), John Wang (P1), Dr. Panteha Kelly, Dr. Pablina Jones, and I joined Flying Samaritans volunteers on a caravan to Ensenada. Within two hours, we arrived to a room of 30 Spanish-speaking patients and their children already awaiting our services. CSHP- UC San Diego volunteers

began by delivering the asthma presentation to patients in the waiting room. Student pharmacists took turns teaching the group about asthma while considering cultural sensitivity (some patients had low access to water, food, etc.). We gave a basic explanation of asthma as a chronic disease, discussed asthma triggers, and focused on treating asthma by avoiding triggers and using medications, such as inhalers, with proper technique. Student pharmacists demonstrated asthma devices and Spanish posters from the SD ALA to parents and young children, and Dr. Jones translated every step of the way. It was



great seeing my peers not only use their asthma knowledge from our SPPS 202 Pharmacy Practice II course, but also step out of their comfort zones despite the language barrier.

During the second part of the day, our team managed the small, makeshift pharmacy. We checked new prescriptions, analyzed patient profiles, and filled medications while Professor Kelly quizzed us on pharmacy practice knowledge and counseling points. It was a challenging yet valuable exercise to provide the most appropriate medication for each patient given the limited clinic inventory. Finally, we counseled patients on their new medications with the help of Dr. Jones and

other volunteer translators. After packing up and closing the clinic, we joined the Flying Samaritans volunteers at a local taco shop to reward ourselves for a long day's work.



This trip could not have been possible without our preceptor Dr. Panteha Kelly and our Spanish-speaking pharmacist Dr. Pablina Jones. Many thanks to Lisa Archibald from the SD ALA for lending asthma materials for our cause. Thank you Ashley Han, pharmacy clinic manager, and the UC San Diego Flying Samaritans team for welcoming our pharmacy students to join your mission. Thank you to student pharmacists Courtney Moc and Kaishan Ding for providing us with transportation and for your hard work during this trip. Last but not least, thank you to CSHP- UC San Diego President Jenny Han and P1 Liaison John Wang for working closely with me during the planning and execution stages. We look forward to more Mexico mission trips in the future.

When We Healed Hearts Across the Border in Tijuana By Byungho (John) Wang (P1)

On February 11th, 2016, three student pharmacists from UC San Diego set about to Tijuana, Mexico along with a medical missionary organization, Healing Hearts Across Borders (HHAB). HHAB is a 100% volunteer-run organization that visits Tijuana every three months with a team of pharmacists, physicians, dentists, laboratory specialists, nurses, medical students, and pharmacy students. With limited donations and supplies, yet with an outstanding team, this medical missionary organization strives "to bring healing for the body and hope for the heart to the poor in Tijuana, Mexico."

My first volunteer work with HHAB was during my undergraduate studies at UC San Diego. When I began pharmacy school this past fall quarter, I was surprised that there was not a student organization on the pharmacy campus that



provided an opportunity for our students to volunteer in underserved Mexican communities. So, I began working towards creating such opportunity through CSHP- UC San Diego as P1 Liaison in the fall, and this was the first of many trips to Mexico to come.

On the first day, our team arrived at Colonia Grupo México, a hilltop region on the outskirts of Tijuana. It was clear from the state of the community and the lines of patients waiting for us at the clinic site that the population greatly suffers from poverty, malnutrition, and most importantly a lack of health care. Michael, Emma, and I dedicated our entire time to the pharmacy and worked alongside Dr. Kin Lam and his students from USC. As first year students, we learned a great deal just from organizing the medications into the appropriate categories for associated medical conditions. With multivitamins, we polished our counting skills by teaching the undergraduate students how to use the pill counting tray. As the prescriptions poured in, the pharmacy student volunteers translated them into Spanish using a translation cheat sheet. Then, we presented each prescription along with the patient's profile to Dr. Lam. He worked through each prescription with us, and explained the potential drug interactions and adverse effects. When the volunteer translator was available, we were even able to practice counseling with the pharmacist. Within what seemed like a few hours, we served over 250 patients by the end of the day. On the next day, we volunteered at Colonia Obrera, Tijuana. This community was literally at a dump site, where the level of poverty was even greater than what we witnessed the day before. But even then, we



were able to create our make-shift clinic, work with provisions from the previous day, and serve over another 200 patients.

As a whole, this trip was an unforgettable experience that met everything we expected: hands on pharmacy experience, patient interaction with the Spanish speaking population, a humbling sense of satisfaction, and last but most definitely not least, delicious, mouthwatering street tacos. Thank you Dr. Panteha Kelly, Rachelle Roxas, and Jenny Han, for providing me with the guidance to start this medical missionary collaboration with HHAB. Thank you Dr. Dave Rose, Marilynn Ono, and Dr. Kin Lam for the warm welcome and allowing us to join your HHAB team. Thank you Michael Yoon and Hien Huynh for joining me and for all of your hard work during this trip. There will be many more volunteer opportunities in Mexico, and again, this was just our first of many trips to come!

SSPPS First –Year Student Pharmacists and First-Year Medical Students Share in UC San Diego Health Sciences Body Donor Program Event By David Adler, PharmD



Memorial Day Weekend 2016 was the Fourth Annual UC San Diego Body Donation Program Memorial Service celebration for 700+ families and friends who provided body donation for pharmacy and medical students and the added several training and research programs supported by the Anatomical Services of the School of Medicine. Pharmacy and medical students served as hosts greeting family and friends of donors. Each student posted on the walls of the reception area a reflection sharing personal thoughts of the anatomy course experience and engaged with families and friends to hear memories and more

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about their donors' lives. The unique timing of this event occurred as the students were completing their anatomy course and came to a close on a very humanitarian and sensitive note during Memorial Day Weekend.

The memorial service program was conducted by pharmacy and medical students and an orthopedic resident. This memorial provided expressed donor selfless recognition with thought-felt words of thanks. P1s, Cara Erickson and Eric Chen, shared a piano – violin duet of "See You Again," and Michael Lam shared a personal reflection on be-half of the Class of 2019. MS1s Abishek Kumar and Sarah Watler provided personal comments, while Danien Scipio and Arjun Baneree played and sang Beatles classic "BlackBird" and a third student vocalist joined to share "Amazing Grace."

Compliments and congratulations to the Pharmacy and Medical Classes of 2019 for your participation, professionalism and humanitarian sensitivity, and contributions from Drs. Mia Savoia and Mark Whitehead.

Alumni News

Christopher Mapes, PharmD – Class of 2013 Associate Manager, Regulatory Affairs Gilead Sciences, Inc.

As many of you know, I am a recovering organic chemist who left a career in the Pharmaceutical Industry to join you in Pharmacy School. My plan from the start was to return to industry after obtaining my PharmD and continue my career in drug discovery and development. Well, at first it looked bleak. I left pharmacy school as a runner up for several fellowship programs and did not have a clear path forward at the time. Through contacts and connections made directly through my experiences at SSPPS I obtained a contract position at Santarus, a small pharmaceutical company in San Diego. I was in the Department of Regulatory Affairs and served as the liaison



between Santarus and the FDA for two commercial products and one investigational program. The position worked out well and I was converted to a full time employee just in time for the company to be purchased and liquidated. During my subsequent job search I was recruited by Gilead Sciences.

Three weeks from the initial phone conversation I relocated to the San Francisco Bay area and now work for Gilead Sciences at their world headquarters in Foster City. I am in the general area of HIV Commercial Regulatory Affairs, but specifically, I am an Associate Manager in the Regulatory Advertising and Promotions team. Our team is responsible for the review, approval, and FDA submission of the materials that Gilead uses to promote its commercialized HIV products. Working with medical, legal, marketing, public affairs, and commercial professionals I ensure that Gilead is developing marketing materials that are truthful and compliant with all federal rules and regulations. Although I do not directly interact with physicians or patients, the materials that we produce have the potential to be seen by thousands of people and can help influence the care of patients across the entire United States. This is a sobering fact at times and really helps you

focus when you know that as soon as you hit "approve" 10,000 copies of the material will be produced and sent out into the world.

I remain involved in pharmacy outside my work at Gilead and have served on the Editorial Advisory Board of CJHP and as a member of the CSHP Government Affairs Committee. On the local level, I have been elected as Treasurer for the Golden Gate chapter of CSHP. Outside of pharmacy, my exploration of the Bay Area continues and most weekends I enjoy a variety of activities such as shopping at the Farmers Markets, hiking the coast, visiting a yet unexplored town or neighborhood, trying a new restaurant or disappearing into Wine Country.

Mindl (Mindy) Messinger, PharmD – Class of 2011 Clinical Pharmacy Specialist – Neurology Texas Children's Hospital

After graduating in 2011, I moved back to New York City where I completed my undergrad degree for my PGY1 pharmacy practice residency at The Mount Sinai Health System. It was a lot of work, (and you need to pass a wet lab to be licensed in NY!), but being able to take a break from weekend staffing in Central Park helped. I then pursued a PGY2 pediatric pharmacy residency at Texas Children's Hospital in Houston, TX. During my residency I spent my longitudinal clinic in the comprehensive epilepsy clinic and requested a number of neurology electives. Since there wasn't a clinical pharmacist in neurology, one of my preceptors helped mentor me during these elective rotations as I became self-taught and learned from the medical team. Throughout the year in clinic and months on service I was able to prove to the neurology service how important it is to have a clinical pharmacist with them on rounds and in clinic, and was ultimately hired on as the clinical pharmacy specialist in neurology, focusing specifically in epilepsy.



My role at Texas Children's is pretty awesome – I get to round on one of the four inpatient neurology teams (neuro critical care, general neuro, neuro consult, epilepsy consult), optimize medication regimens for patients in our comprehensive epilepsy clinic, assist our ketogenic diet program, teach trainees (MD and PharmD residents/students), and perform research in topics I'm interested in (and try hard to get some of those published). It's amazing that in the few years I've had this role I've really been able to learn a lot, to the extent that others consider me an expert in the field of pediatric epilepsy – and for some reason there aren't many pediatric neurology pharmacists out there! Although I wasn't very involved as a student in pharmacy organizations, I try to stay active in ACCP, ASHP, PPAG (Pediatric Pharmacy Advocacy Group) since it's important that we continue to teach our future generation of pharmacists. I'm always humbled when an organization reaches out to me as the expert to review or write a book chapter, or speak at a meeting. I've also found a lot of benefit being active in neurology organizations such as the American Epilepsy Society, as this pertains much more to my day to day work.

Advice that I would have for anyone wanting to complete a residency...or two:

- 1) Don't give up! It may seem overwhelming, and you might be concerned you won't be making a lot of money, but it's all worth it. I continue to get job offers whether from industry or other institutions because of my position and training.
- 2) Take some hard rotations as a student don't be scared. This is the time you have to really learn and have a preceptor mentor you. You won't always have that! And you may get into a field where no one is teaching you the knowledge (like mine), but if you learned the skillset of how to be a clinical pharmacist, you can apply it to any field.



- 3) Branch out! I miss San Diego a lot, but it was great to be able to see how the world of pharmacy practices in California vs New York vs Texas and be able to apply the benefits I've learned from each location. Residency is only a year or two, so you can always move back to sunny California when you're done!
- 4) Stay open minded you don't know what you'll end up finding a passion for, or what jobs will be available, so become well-rounded and keep an open mind for the future.

Wishing you the best of luck in your future pharmacy career. Feel free to reach out if have questions: mmmessin@texaschildrens.org

Sara Carruth Erickson, PharmD – Class of 2007 Health Outcomes Researcher MedImpact Healthcare Systems, Inc.

I recently reached my 3-year anniversary as a Health Outcomes Researcher for MedImpact Healthcare Systems, Inc., a pharmacy benefits manager based in San Diego. After completing a PGY1 residency in Managed Care Pharmacy Practice at OptumRx (formerly Prescription Solutions), I stayed on as a researcher in the Pharmacoeconomics and Health Outcomes team at the same company. Although I have had the same title for the past eight years, the dynamic nature of healthcare lends to new and exciting projects year after year.

Health outcomes researchers are interested in how healthcare interventions can achieve the best outcomes: clinical, financial, quality of life, patient satisfaction, etc. Measurement is important as you can't improve what you don't measure! I am part of workgroup and advisory groups for the Pharmacy Quality Alliance, a national non-profit alliance, which develops performance measures for use by healthcare organizations.



In my role at MedImpact, I serve as the principal researcher for health outcomes, health economic and epidemiology studies conducted within the managed care setting. I have presented my research at national meetings and have published in peer-reviewed journals such as the American Journal of Managed Care (AJMC), the Journal of Managed Care and Specialty Pharmacy (JMCP), American Journal of Pharmacy Benefits (AJPB) as well as other clinical journals. Last year I received the 2014 JMCP Award of Excellence for the best paper published in the journal.

My current projects involve the development, implementation and evaluation of a novel program to shift utilization form high-cost generics to lower cost alternatives. I presented the utilization and financial outcomes of this program this past April at a continuing education session during the Academy of Managed Care Pharmacy (AMCP) Annual Spring Meeting. I also construct budget impact models for high impact pipeline agents to help our clients prepare for costly pharmaceuticals that will impact drug spending.

Since returning to San Diego, I have worked alongside students and co-faculty advisor Dr. Jonathan Watanabe, Assistant Professor of Clinical Pharmacy, to launch a student chapter of the AMCP, a local Pharmacy and Therapeutics (P&T) competition and a managed care elective at SSPPS. I also serve as the primary preceptor for the APPE elective in managed care at MedImpact.



Samar Yalda Benny, PharmD – Class of 2010 Anticoagulation, Transitions of Care and New Member Clinics Kasier Permanente

Samar Yalda Benny attended the Skaggs School of Pharmacy and Pharmaceutical Sciences and graduated in 2010. Since graduation, she was accepted into a residency at Kaiser Permanente San Diego. She completed her residency in 2011 and continued at Kaiser in the Ambulatory Care Clinical Pharmacy Department.

In 2013, Samar relocated to Seattle after getting married and worked with Genelex Co as a Clinical Prescribing Pharmacogenetics Pharmacist. Her role included screening for drugdrug, drug-gene, and drug-drug-gene interactions involving the CYP P450 system. Recommendations for monitoring or drug regimen changes were provided to the patients' physicians.

Since the birth of her daughter in 2014, Samar and family have returned to San Diego. Samar currently works in the Anticoagulation, Transitions of Care, and New Member



Clinics at Kaiser. In the telephone-based Anticoagulation clinic, patients are dosed warfarin based on INR. In the Transitions of Care clinic, patients' medication regimens are reviewed and changes made if necessary prior to discharge from the hospital. The New Member Clinic involves medication reconciliation and recommendations for Kaiser formulary alternatives for new members transitioning to Kaiser. Samar also holds various leadership roles at Kaiser involving preceptor development, the PGY1 Pharmacy Residency Program, and collaboration with the Kaiser Family Medicine Residency Program.

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[Continued from page 1] Dr. Siegel has assembled an expert team of ecologists, educators, and chemists. He will be working with San Diego County tribal leaders and has received a grant to launch the project from the UC San Diego Vice Chancellor for Equity, Diversity and Inclusion.

