

UC San Diego Skaggs School of Pharmacy & Pharmaceutical Sciences Newsletter

Winter 2020

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

This past January, Associate Dean Brookie Best and I attended a meeting with deans from 22 other major schools of pharmacy in the United States.

There was a consensus that we need to keep in mind that future pharmacists will follow a variety of career paths that may be different from the role of the pharmacist in the past. We are fortunate that our curriculum already includes joint classes between our pharmacy students and students from the School of Medicine at UC San Diego. Furthermore, we have helped launch, or are in the process of developing specific certificate programs to enhance opportunities for diverse career paths in pharmacy. These include our post-sophomore (P2) Research Fellowship, an accelerated PharmD/MPH opportunity, an entrepreneurship workshop, and a certificate program in business management focused on healthcare.



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We are also pleased to announce that we have been the recipient of two joint faculty recruitment opportunities supported by the office of the Chancellor. The search for the first is complete in collaboration with the Scripps Institution of Oceanography. The second with the Department of Chemistry and Biochemistry is ongoing.

Not surprisingly, we received very high scores on the Staff@Work Survey. Our Associate Dean for Business Administration and Fiscal Affairs, Andrina Marshall, received one of the two highest scores for staff supervisors across the entire campus.

Finally, our faculty again were recipients of many awards and produced key publications in a variety of clinical and research areas. These are detailed elsewhere in this newsletter.

Student News

COVID-19 Community Service

Monica Sliwa P2

NEWS OF UC SAN DIEGO HEALTH SCIENCES



March 23, 2020, 1:00 p.m. — Student pharmacists at Skaggs School of Pharmacy and Pharmaceutical Sciences at UC San Diego are organizing volunteers to provide free grocery shopping and delivery services to people in the San Diego area who cannot leave their homes due to high risk of contracting

the COVID-19 virus. They serve anyone over the age of 60 or who are immunocompromised — especially those with language barriers. Their volunteers speak English, Arabic, Assyrian and Chaldean Neo-Aramaic, Spanish, Farsi and French.

Monica Sliwa, a second-year doctor of pharmacy student, and her sister, Milano Sliwa, are leading the effort, with assistance from Monica's classmate, Afrooz Sabouri.

If you'd like to assist them, please fill out this [volunteer intake form](#). Safety is the top priority — the team is remotely training all volunteers to follow safety guidelines provided by the Centers for Disease Control and Prevention (CDC).

In this interview, Monica Sliwa shares their motivations and efforts:

What motivated you to start this?

A Facebook post! My sister, Milano, and I were eating dinner after a long day (this was Monday, March 16, around 9:00 p.m.). She saw a Facebook post with a photo of an older man staring at empty grocery store shelves. She got emotional and wanted to make a change immediately. She said "Monica, why don't we shop for them? Look at this... they can't find anything on the shelves, that's not fair." She then posted another Facebook post, written both in English and Arabic, to reach out to our friends and family who may be struggling just like the senior she saw on Facebook. After she posted it, we received a few phone calls from our relatives living in Santee and El Cajon. The next morning, we went shopping for them and it made our day. We really made a change.

How do you find people in need?

When we started this service, we received phone calls and Facebook messages from family and friends. After a few days, Milano and I started contacting people from school and worked to reach out to those who may benefit from our service. One of our amazing mentors, Rabia Atayee, PharmD, Associate Dean for Admissions and Outreach at Skaggs School of Pharmacy and Pharmaceutical Sciences, helped us connect with various local health care providers, including UC San Diego Health and Moores Cancer Center. Now health care providers can directly provide us with the names and addresses of people in need of our shop-and-delivery services.

What have people been needing most?

Toast and eggs. We've had problems with this in some stores, where they are limiting a carton of eggs to one per shopper.

How are people reacting?

It has been all positive. Many people have expressed their gratitude. One 70-year-old said: "You cannot believe how thankful I am for you, my daughter hasn't even been able to visit me. Having your

help is a blessing!" We're actually very thankful for this opportunity. People are putting their trust in us.

What types of things do you need volunteers to do?

The services we need are either shop only, deliver only, or shop and deliver to homes. We want to make sure to keep everyone safe. Since we have more than ten volunteers, we've created a required list of precautions for both the volunteers and people receiving the service, with the help of another school of pharmacy faculty member, Jonathan Watanabe, PharmD, PhD. Taking precautions and following the guidelines are our main priority.

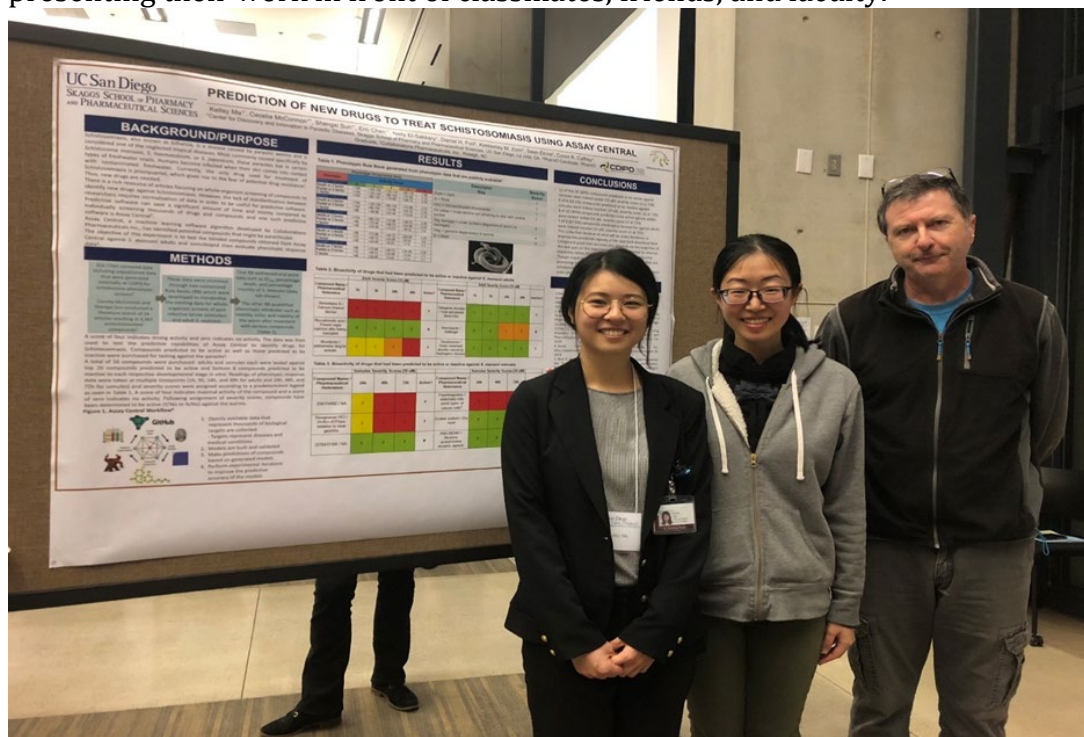
What's been the most touching moment so far?

UC San Diego Health recently had a 69-year-old who is legally blind call us. We were in tears. She had no one to help her. Her relatives have been avoiding her, as they don't want to risk spreading the virus to her. She told us that she hasn't been able to pick up her prescriptions and she has only a few days until she runs out of food again. "The moment my counselor told me that you two girls are helping us old people, I wanted to make sure you know of me. Is it ok if I call you when I run out of food?" We offered to shop for her immediately, but she refused. "I want you to help those who are in need right now, trust me I am okay for the next few days."

I just looked at Milano and hugged her. We are learning a lot from this. A lot.

**Kelley Ma, P2Receives “Best Literature Review” for Summer Research Project
By Joseph Ma, PharmD, Director of Summer Research Program**

On January 23rd, 2020, students who participated in the 2019 Summer Research Program presented their work at the Annual Poster Symposium. The posters were a representation of a broad range of content and topics, including but not limited to, the prevalence of Chagas Disease in at risk populations in San Diego, clinical tolerability of tramadol in inpatient pain management, assessment of quality of life and healthcare utilization for antibiotic therapy for MRSA infections, and use of proteomics data to evaluate synaptic dysfunction in Alzheimer’s disease. The students did an outstanding job in presenting their work in front of classmates, friends, and faculty.





20th Annual National Student Pharmacist
P&T COMPETITION | 2020
HELD DURING AMCP2020 • APRIL 21–24, 2020
GEORGE R. BROWN CONVENTION CENTER • HOUSTON, TX



P&T Competition News March 9, 2020

Announcing the 2020 Finalist Teams

The AMCP Foundation extends our sincere thanks to the 51 pharmacy schools/colleges that submitted entries to the 20th Annual National Student Pharmacist P&T Competition. We know that every entry represents a considerable amount of work and is a laudable accomplishment! Please join us in congratulating the **2020 National Finalist teams** that will compete at AMCP 2020 in Houston:

- Butler University College of Pharmacy and Health Sciences
- Keck Graduate Institute School of Pharmacy and Health Sciences
- Purdue University College of Pharmacy
- Rutgers University Ernest Mario School of Pharmacy
- Temple University School of Pharmacy
- **University of California, San Diego Skaggs School of Pharmacy & Pharmaceutical Sciences**
- University of California, San Francisco School of Pharmacy
- University of North Carolina Eshelman School of Pharmacy

We also extend our congratulations to the following 2020 Honorable Mention Semi-Finalist teams:

- Lipscomb University College of Pharmacy and Health Sciences
- Mercer University College of Pharmacy
- Ohio Northern University Raabe College of Pharmacy
- University of Houston College of Pharmacy
- University of Southern California School of Pharmacy
- University of the Pacific Thomas J. Long School of Pharmacy & Health Sciences
- University of Washington School of Pharmacy
- University of Wisconsin–Madison School of Pharmacy

Congratulations

Honoring Student Achievements



The pharmacy student scholarship was awarded to **Trinh Nguyen**, PharmD candidate, Class of 2020.

The OPTUM Rx scholarship specifically recognizes students who have demonstrated academic excellence, leadership, and service and expressed an interest in managed care pharmacy while in pharmacy school.

Pharmacy Day 2020

Introduces High School Students to the Profession of Pharmacy

By Jeff Peng, P2 and Heidi Kim, P2



On February 8th, 2020, ASP's (Association of Student Pharmacists) VPs of Pharmacy Outreach, Heidi Kim and Jeff Peng, organized the 12th annual Pharmacy Day at the UC San Diego Skaggs School of Pharmacy and Pharmaceutical Sciences where seven on-campus student organizations showcased the profession of pharmacy to 150 high school students from the San Diego community. High schools that participated were Hoover HS, San Ysidro HS, Bonita Vista HS, Clairemont HS, Samuel FB Morse HS, Madison HS and Olympian HS.

Dr. Renu Singh, Assistant Dean for Experiential Education, provided a warm welcome and opening remarks to the high school students and their teachers in HSEC auditorium. In the opening remarks, we engaged the students with some fun pharmacy trivia and provided an overview on pharmacy as a career.

The students participated in three core workshops and one specialty workshop where they learned about the important role that pharmacists contribute to the healthcare system. Pharmacy student leaders designed interactive presentations and workshops. There were 97 student pharmacists who helped facilitate a core/specialty workshop that each organization designed such as, **CPNP** - Clinical Pharmacy, **ASCP** - Medication Safety, **Kappa Psi** - Compounding, **CSHP** - Organ Donation Talk, **CSHP** - Asthma, **APhA**- Hypertension, **APhA**- Diabetes, **AMCP**- Managed Care, **PILL**- Drug Development, **APhA/ASCP** - Immunizations, and **APhA** - Generation Rx. High school students were able to learn and discuss the diversity and flexibility of the pharmacy field and the different ways pharmacists can impact patients' lives. With this event, we hope we increased awareness of the pharmacy profession to the high school students of San Diego County and inspired them to consider pharmacy as a future career.

We would like to recognize the following pharmacists who precepted for us: Dr. Ben Dishman, Dr. Lin Chen-Peng, Dr. Jag Rai, Dr. Jennifer Namba, Dr. Amy Rorstad, Dr. Laura Hart, Dr. Alyssa Davis, Dr. David Bao, Dr. Manijeh Pouliot, Dr. Binh Tran, Dr. Kristine Carrasco, Dr. Panteha Kelly, Dr. Brookie Best, Dr. Nathan Painter, Dr. Renu Singh, Dr. Alex Luli, Dr. Aimee Nganso, Dr. Sarah Lorentz, and Dr. Sheila Rivera.

Overall, the high school students appreciated attending and had an amazing, fun time at Pharmacy Day. Dr. Singh wrapped up Pharmacy Day by asking students to share what they had learned about the pharmacy profession during their workshops, and provided closing remarks.

A BIG thank you again to all the preceptors, student organizations, and student volunteers for making this event so successful and well-received by the high school students!

AMCP UC San Diego SSPPS 6th Annual Pharmacy and Therapeutics Competition 2020

By Vivian Pham, P2

On January 18, 2020, UC San Diego Skaggs School of Pharmacy and Pharmaceutical Sciences (SSPPS) hosted its 6th Annual Pharmacy and Therapeutics Local Competition, organized by UC San Diego Chapter Academy of Managed Care Pharmacy. Six impressive teams competed in this competition, demonstrating their ability to execute comprehensive drug reviews and industry-grade presentations with the goal of improving evidence-driven decision-making to improve patient care, population health, and affordability.

This year the six teams were judged by Dr. Mark Bounthavong (VA Palo Alto), Dr. Chuck Daniels (UC San Diego), Dr. Aryana Sepassi (Becton Dickinson), and Dr. Hannah Nguyen (Kaiser). These teams presented to the judges their evaluation and recommendation of addition of Dupilumab (Dupixent) as an add-on treatment for asthma. Skaggs' first place team will now move on to represent SSPPS at the 20th Annual National Student Pharmacist Pharmacy & Therapeutics (P&T) Competition hosted by the AMCP Foundation in Houston, Texas in April 2020. (is this canceled?)

Congratulations to My Phung (P3), Annie Chang (P3), Youngjun Yoo (P3) and Kelly Chan (P3) for advancing to the next round! All of the participating teams were outstanding and rose up to the challenge of demonstrating outstanding analytical thinking and presentation skills in both written and oral components of the competition. Thank you to all participants for their dedication and effort.

Also, many thanks to the judges, UC San Diego AMCP P&T Director Agnes Suh, and UC San Diego AMCP President Anna To for making this event a success.

If anyone is interested in the competition or has questions, please contact Student P&T Competition



Director Agnes Suh (a4suh@ucsd.edu).

Student-created YouTube Channel



We would like to take a moment to thank Drs. Courtney and Andrew Willeford of the Class of 2019 for taking the time to provide a video to our new [YouTube channel](#) about why they chose to come to UC San Diego Skaggs School of Pharmacy and Pharmaceutical Sciences! Please watch their video [here](#) and don't forget to like the video and subscribe to the channel.



SSPPS News

SSPPS ACPE Self-Study and Accreditation

Accreditation

The Accreditation Council for Pharmacy Education (ACPE), with recognition by the US Department of Education, is responsible for the accreditation of programs offering the professional degree in pharmacy (PharmD). Approximately every eight years, SSPPS goes through the accreditation process, which involves a comprehensive self-study, ultimately leading to a site visit by ACPE officials to determine whether or not the program is accreditation-worthy. This process is concerned both with quality assurance and quality enhancement, and includes both quantitative and qualitative parameters in order to assure basic expectations for quality pharmacy education. According to ACPE, “a professional program is evaluated on the extent to which it accomplishes its stated goals and is consistent with the concept that pharmacy is a unique, personal service profession in the health science field.” In early 2018, SSPPS faculty began this formal self-study process.



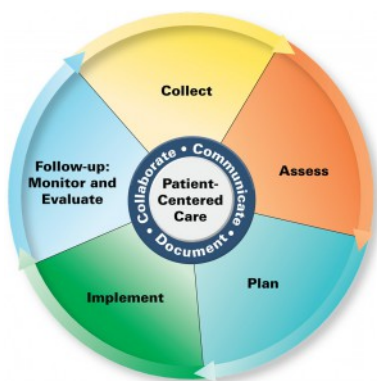
Self-Study

A self-study is an ongoing, cyclical process based on a continuous quality improvement (CQI) philosophy. It is designed to assure the quality of the professional program and to facilitate achievement of program goals. It involves a comprehensive review of programs and processes to determine levels of compliance with the 2016 ACPE Standards.

Our self-study was organized into eight sections dealing with the 25 ACPE Standards, grouped based on category, each with a section chair, and with all faculty included in the process through assignment to one of the groups listed in the table below:

Section	Standard(s)	Section Chair
Educational Outcomes and Assessment	3, 4, 24, 25	Kelly Lee
Administrative	5, 6, 7, 8, 9	Vivian Hook
Pre-APPE Curriculum	1, 2, 10, 11, 12	Pieter Dorrestein
APPE Curriculum	13, 20, 22	Renu Singh
Student Services	14, 15, 17	Jonathan Watanabe
Faculty and Staff	18, 19	Bradley Moore
Facilities and Finances	21, 23	Andrina Marshall
Admissions	16	Dionicio Siegel

The initial self-study review undertaken by the faculty is just one part of the process, however. Stakeholders, including students, preceptors, graduates, alumni, staff, and others will also be included in this review process. In January of 2020, all sections completed their first drafts for each standard of the required documentation and data, self-assessment of the program based on the standard, comments on the standard, level of compliance, and any recommended monitoring. These are currently undergoing initial review and editing, and after updates by each section will be disseminated to groups of stakeholders for review. Additional reviews and editing will take place after this, and the final full self-study report will be submitted to ACPE this summer.



Site Visit

The site visit from the ACPE evaluation team will take place on November 3 – 5, 2020. The team generally includes 4 – 5 individuals, with a team leader from ACPE, peer dean/faculty representative(s), and other individuals with pharmaceutical science and pharmacy practice expertise. During the site visit, the ACPE evaluation team will meet with the dean, faculty, students, preceptors, and committees, as well as conduct a survey of physical facilities. The major purpose of this visit is to validate the self-study and provide an external peer evaluation.

Contact

If you have any questions regarding the self-study or the upcoming ACPE site visit, please feel free to contact Dr. Kelly Lee (kellylee@health.ucsd.edu), Andrina Marshall (amarshall@health.ucsd.edu), or Laurie Nelson (lnelson@health.ucsd.edu).

SSPPS Biomedical Wet-Lab Incubator

By Geoffrey Chang

UC San Diego is in one of the country's largest biomedical research hubs for biotech and pharmaceutical activities. Over 1,000 companies have utilized technology produced at UC San Diego. There is considerable interest among certain faculty, post-docs, and, in particular, graduate students in the formation of biomedical start-up companies and entrepreneurship.

Through the leadership and support of Dean Jim McKerrow and Associate Vice Chancellor Paul Roben (Innovation and Commercialization), SSPPS took a lead and established the first wet-lab incubator on campus. This incubator provides a physical space and legal framework for a UC San Diego-intellectual property (IP)-free zone, allowing teams of students, faculty, and staff to conduct key experiments towards potential commercialization. This incubator also serves as an important bridge for students interested in entrepreneurship and helps their transition from academic research to life-changing innovation.

Since 2018, two teams have been working in this incubator space. One team is comprised of two senior BMS graduate students, Clarisse Marotz (BMS) and Alison Vrbanac (BMS), as well as Dr. Livia Zaramela (post-doctoral fellow). Their mission is to provide accessible and effective products for improving women's urogenital health. Bacterial vaginosis affects nearly one out of every three premenopausal women, and is associated with increased risk for acquiring more severe sexually transmitted infections and preterm birth. Their goal is to empower women to take control of their own healthcare by creating effective, accessible OTC treatments for bacterial vaginosis. Dr. Karsten Zengler serves as their faculty advisor/sponsor.

The second team is led by Dr. Steve Rees (BMS graduate; post-doctoral fellow) and Dr. Chang-Wook Lee (Project Scientist), sponsored by Dr. Geoffrey Chang. Their team aims to generate an antibody discovery and development platform done entirely on the benchtop, avoiding the need of animal-based selection. This pipeline is more rapid and cost-effective, generating higher-quality leads compared to traditional methods. Antibodies exist as billion-dollar markets in the research and therapeutic spaces, evolved to bind with high specificity and affinity for the full range of molecular targets. However, they are still made primarily in animal hosts, which are limited in individual antibody efficacy and affinity, and present obvious ethical and cost-based difficulties. This team is leveraging opportunities in the antibody space, for research labs, therapeutic discovery, and personalized medicine. The SSPPS incubator allows for a runway to test ideas and launch start-ups that are synergistic with and addressing the requirements of biomedical graduate education today. SSPPS, in partnership with the Office of Innovation and Commercialization has provided a path, supporting entrepreneurial activities at UC San Diego. As both of these teams are advancing towards forming start-up companies, new teams are being considered to enter this space. If interested, please contact Geoffrey Chang (g1chang@health.ucsd.edu).

Equity and Diversity

By Dr. Nelly El-Sakkary



International Women's Week

International Women's Day was March 8th. International Women's Week saw several events across the UC San Diego campus, ranging from art installments, brunches, panels and events all supporting women, diversity and for some, the sciences. I was fortunate to present and speak at three of these events:

BLOOM Art Gallery: women growing their roots in STEM

The first event, was held March 6th-18th, 2020, in the Structural & Materials Engineering (SME) building: BLOOM Art Gallery: women growing their roots in STEM. The organizer, Norah Al-Azzam, a scientist at UC San Diego, also presented her art at the event which included photography.

Opening night combined a reception with light eats and a self-guided tour of artwork collections lining the walls and displayed on bookcase-style shelves, each naming the artist with an accompanying bio and description of the art. At the far side of the room was a projected graph showing the "Gender Gap in Academic Publishing" in Italy, Canada, Peru, Iceland and Hong Kong. The artworks ranged in styles and mediums, from digital art to oil paintings.

On one wall was a portrait-style photographic display of women in STEM, their framed photographs mounted, each above an interview-style bio.

One of the standouts at the gallery was Beata Edyta Mierzwa, PhD (www.beatascienceart.com), a postdoctoral scholar at the Ludwig Institute for Cancer Research at UC San Diego. Beata combines her art of science and art in her creations which range from clothing to digital art. Her works stand out, portraying vibrantly colored renditions of dividing cells with human and animal elements.

My contribution was two paintings of animals in nature, a bluebird in a field of flowers and a unicorn-style horned whale. As a presenting artist, I appreciated the opportunity to display my work and to meet other artistic women in STEM.

The room was an ideal location for a gallery with floor-to-ceiling windows, an 18-foot ceiling, and plenty of floor space for making connections with artists and attendees and promoting discussion in a celebration of art and women in STEM. A commendable effort in the making of a gallery, perfectly executed and a step in the right direction in increasing the presence of women in the sciences and promoting gender equality and diversity.

Generations of Womxn Brunch

The second event, a Generations of Womxn Brunch organized by Eleanor Roosevelt College (ERC), took place March 7th in the Great Hall, organized by Noon Awad, a pre-med student in ERC. The Great Hall was an ideal setting with a stage, projector screen, large windows and banquet-style seating.

I was fortunate to be a panelist in a group of four accomplished women including Maria Patrice Amon, PhD, a professor and producer with a strong presence in the Latinx community and advocate for women's rights and diversity, Patricia Scott, the Dean of Student Affairs at ERC, and Catherine Perillo, an engineer in admin in ERC. The panel answered questions ranging from who our female role models are, who influenced our careers, why only one of the UC San Diego colleges were named after a woman (ERC), what it would take to close the gender gap and what our greatest accomplishments are.

The event was such a positive experience, celebrating the accomplishments of both women on the panel, and women throughout history. The event also fostered discussion on what gender discrepancies are in the work force and in academia and was a call to be aware of what we must improve on as a society to reach the point of equality. Among the take-home points mentioned were self-advocating for your career, speaking up, striving for excellence and improving one's position as it pertains to a status or title in the workplace to increase success for all women.

Women of the World Art Gallery

The third event I participated in during International Women's Week, a Women of the World Art Gallery, at the UC San Diego Women's Center, organized by 6th College was preceded by a panel of five women from Mexico, Brazil, Spain, South Korea and India. The panel focused on what it's like to grow up in cultures around the world, how women are perceived there, what constraints are imposed on their freedoms and daily activities and the communal perception on what a woman's role is in her society.

The panel also highlighted influential women from the spotlighted countries, how they influenced the panelists and have helped in bridging the equality gap.

The Women's Center is a valuable resource at UC San Diego. The couches, literature focusing on women from varied and diverse times and walks of life, vibrant and colorful decor, open space and high ceilings make it a comfortable and interactive space. The panelists were well-spoken, insightful and did an excellent job of painting a picture of what the life of an international woman consists of in her society.

Following the panel, the Q & A session offered an opportunity to learn more about these different walks of life and the plight of women that concerns our global society as a whole. This point is highlighted by some common elements introduced by the panelists including expectations that may not include a career outside of the home, and sometimes, judgment from not only society, but also from family for women who stray from following societal norms.

The art show following the panel offered the chance to see artworks representing the roles of different women in different countries from China to Mexico to Canada. My own artwork, titled These Heels, is a commentary on materialism, and the need to not let societal norms define us.

By: Nelly El-Sakkary, PhD

Nelly El-Sakkary, PhD, is a postdoctoral scholar in Dr. Conor Caffrey's lab in the Skaggs School of Pharmacy and Pharmaceutical Sciences. Apart from making art, she researches the neglected parasite *schistosoma*, using tools in high-content imaging and RNA-Sequencing. She also seeks to help UC San Diego postdoc career development as the Postdoc Association Vice-Chair of the Exposure to Industry program.



Alumni News

By Pam McGlynn

On Friday, February 7th, 2020 the SSPPS APPE/IPPE Curriculum Committee (SAICC), Office of Experiential Education (OEE), and Office of Assessment and Accreditation (OAA) sponsored a retreat for clinical faculty and key partners. Dr. Renu Singh kicked off the event by providing a definition and background of EPAs (Entrustable Professional Activities) and their use in medical and pharmacy education. The goal was to determine the level of supervision that students require and include that information in updated APPE syllabi and evaluation rubrics. This program was conducted in preparation for the school's ACPE site visit that will occur in November of this year. The ACPE sets instructional requirements for APPE and IPPE rotations. After a main session to orient the entire group, during which a lunch buffet was served, breakout groups examined evaluation rubrics and determined the level of supervision for students performing specific tasks. We are very grateful that this talented, hard-working group was able to provide their feedback to us.



UC San Diego Biomedical Library

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