One who mixes ingredients, drugs or medications: a pharmacist

Kāwili Lāʻau

The Daniel K. Inouye College of Pharmacy at the University of Hawaiʻi at Hilo

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Passing of the Torch
At Hard Hat Tour
“Mana” is a Polynesian word that describes an origin of sacred force that embodies a spiritual quality. To have mana also suggests influence or energy. Chancellor Emerita Rose Tseng and former Director of University Relations Gerald De Mello were two of the very first people to infuse mana into the idea of a College of Pharmacy on Hawai‘i Island. They had the will and determination to invest the endless hours to educate the community and the legislature that this state deserved a pharmacy school that would help care for the health of our citizens with science, education and service.

It was incredibly fitting, therefore, that they were two of the first people to grace the halls of our not-quite-finished permanent building in our first “Hard Hat Tour.” To be joined by our current Interim Chancellor Marcia Sakai helped bridge the gap between our history and future. I was proud to share that moment with them and two of our current second-year students. Here’s to sharing more milestones to celebrate together!

Even though we finish up our 11th year in existence, our college continues to create inaugural events. Held in the same community venue as our fall DKICP Health Fair, this spring our first Research Day at Prince Kuhio Plaza showcased the college’s discoveries in both the laboratory and patient-care setting. The community came out in force to show their support. Even more exciting, our faculty, post-doctoral fellows, Ph.D. and Pharm.D. students were able to show their unique personalities and talk with interested keiki who came to the event, some specifically to seek out a science mentor or explore ideas for their own STEM projects. These interactions have encouraged us to forge ahead with building more opportunities for our youth interested in science and health care.

A different kind of exposure to our College was offered in various tours, as we opened our labs, clinical sites and classrooms to separate visits from students from Japan as well as high school students from Maui. Our student pharmacists also took the message of health to O‘ahu at a middle school health fair.

We also shine the light on the University of Hawai‘i Foundation, great partners who connect us to supporters who share our college’s vision of a heritage-place based program noted for their work in indigenous health, education, service and science. We’re happy to single out Senior Director of Community and Alumni Relation for Hawai‘i Island Nico Leilani Verissimo to be awarded the Spring Champion of Pharmacy. Her ideas and events help us to bridge our growing body of alumni who themselves describe their alma mater as venerable.

And mahalo to our current students who showed up in force to write their notes to our alumni and supporters, expressing their gratitude for paving the path of curriculum, student organizations, service projects and the continuing quest to erect our permanent building. The mana that our students, faculty and staff have to carry on the work continues to light the way for an optimistic future.

Carolyn Ma
Dean
# Contents

- Hard Hat Tour gives VIPs first look  2

- DKICP labs bring research to public  4

- Pharm2Pharm technology aids state-wide providers  8

- Compounding pharmacy training still critical  9

- Campus tours show what we do  10

- DKICP affects change in educational pharmacy  12

- Students meet government at D.C. conference  14

- UH Hilo hosts another successful blood drive  15

- Future health care professionals excel at leadership  16

## Regular Features

- Faculty Briefs  19

- Student Organizations  22

- Rotation Report  25

- Alumni Update  26

- Champion's Corner  28

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ABOUT THE COVER: Dean Carolyn Ma (right) leads Interim Chancellor Marcia Sakai (left) and Chancellor Emeritas Rose Tseng on Hard Hat Tour to show progress of construction on new permanent home to DKICP. (Photo by Tracey Niimi)
Tour of construction site puts building in perspective

Wearing a green plastic construction hat and a grin from ear to ear, Dean Carolyn Ma had the chance to lead several dignitaries on a sneak peek of DKCIP’s new building in a “Hard Hat Tour” on March 14.

“I was ready to show people that the building is coming along even though they need to wait to seal the ceiling and are working on the interior spaces once they are able -- a hard task with all the rain we’ve had this winter,” Dean Ma said. “I’m ready to buy rubber rain boots but hope to hold off. We need collective energy to wish for sunnier weather.”

The first group to take the tour included UH Hilo Chancellor Emerita Rose Tseng and Interim Chancellor Marcia Sakai. Dr. Tseng, who now lives in California, was in Hilo for the naming ceremony of the UCB terrace room on campus that will now honor her along with her late husband, Dr. Raymond Tseng. They were each pivotal players along with our namesake, the late Sen. Daniel K. Inouye, in opening of the first College of Pharmacy in the Pacific region.

“I was sorry to leave Hilo without this project being fulfilled, but had confidence from my experience building ‘Imliloa from the bottom up that we would have a suitable home for what Sen. Inouye called the “Center of Excellence” for the Big Island of Hawai’i,” Dr. Tseng said. “I cannot express my gratitude and excitement for being able to take part in this exciting development.”

Construction manager Jerry Watanabe from Isemoto Contracting Co. led the walk through, which included former Director of University Relations Gerald DeMello and two second-year students, Shaina Saiki and Ethan Slusher, both from the Class of 2020.

“I have taken part in the construction of many buildings at UH Hilo, but this one holds the memories of many hard-working people who put their own sweat equity in making sure it gets done in a manner that positively reflects on the people of the State of Hawai’i,” said De Mello, who not only worked with Sen. Inouye and Dr. Tseng to get the College on the radar of the Legislature but guided DKICP through years establishing validity for funding. The State approved funding of the building in 2015.

The two-story, 45,000-square-foot structure will consolidate student laboratories, faculty offices, student affairs, lounges, private study rooms, two lecture halls, and several outdoor gathering spaces. The $31.3 million building, located in University Research Park near the ‘Imliloa Astronomy Center, is tentatively scheduled to open by spring 2019.

Delays on the construction were caused by clarifications/corrections to the project plans and specification, Watanabe said. Also, user agency requested changes delayed the project. He says the project is still on budget.

Remaining work to be done include the HVAC system, plumbing/electrical work, exterior wall, windows, interior drywall system, painting, ceilings, flooring, elevators, furniture and the audio visual system. (Photos of tour by Tracey Niimi, photos of construction provided by Hawai’i Department of Accounting and General Services.)
College of Pharmacy presents inaugural Research Day to eager public

Members of the community were invited to learn more about research conducted at UH Hilo’s Daniel K. Inouye College of Pharmacy at the Inaugural DKICP Research Day held at Prince Kuhio Plaza March 17.

The successful event, which was spread throughout the mall from 10 a.m.-3 p.m., showcased research on health issues such as cancer and infectious diseases. Faculty members from the Department of Pharmaceutical Sciences and Pharmacy Practice were on hand to a fantastic turnout of community supporters to explain the potential benefits their research will bring, along with graduate students working on their Ph.D. degrees in pharmaceutical sciences and student pharmacists from the professional Pharm.D. program.

“While the researchers are constantly explaining this high-level data to their scientific peers throughout the world, they re-configured their presentations in order to discuss their findings to a wider audience,” said Ghee Tan, director of the Ph.D. program and organizer of the community outreach. “This exercise brought them out of their labs and clinical sites and out to meet the people who might benefit from the research outcomes. We are grateful to Professor Gordon T.H. Ching from Hawai‘i Community College, who was the major motivating force that launched this inaugural DKICP Research Day celebration.”

Two student organizations participated in keiki activities on Research Day: DKICP Tobacco Prevention Project - “Harmful effects of smoking” and the National Community Pharmacist Association’s Compounding for Kids booth.

Dean Carolyn Ma expressed her appreciation to faculty and students who participated in the Saturday event. “We were happy to see many students and other DKICP supporters at the event and appreciate everyone taking the time on a long-awaited sunny day in Hilo.

“Professor Ching displayed his love of research and the community by being the engine that drove this inaugural Research Day. We are grateful for his guidance and support, and look forward to continue the tradition of bringing our research to our neighbors in the greater Hilo community and beyond.”

(Photos by Tracey Niimi)
Below is a list of the research that was presented that day.

Shugeng Cao, Associate Professor, Pharmaceutical Sciences  
**Drug Discovery for Cancer**
“Rapid ‘ōhi’a death” caused by fungi Ceratocystis fimbriata and other Ceratocystis species is a new fungal disease that is currently attacking and killing the ‘ōhi’a tree (Metrosideros polymorpha), the most abundant native tree in the state of Hawai‘i. New findings showed that about three quarters of the dust spread from the beetles (for example, the Ambrosia beetles) that bore into infected ‘ōhi’a trees contain disease spores, which may play a role in spreading the fungal disease that has affected 50,000 acres of ‘ōhi’a forests. Ambrosia beetles and some Hawaiian plants are not infected by Ceratocystis fimbriata, so we believe that microorganisms inside the Ambrosia beetles and healthy plants may produce natural products that can kill Ceratocystis fimbriata. The Cao Lab has been isolating endophytic fungi from Hawaiian plants and beetles, and testing their inhibitory activity against Ceratocystis fimbriata.

Leng Chee Chang, Associate Professor, Pharmaceutical Sciences  
**Nutritional Prevention of Cancer/ Drug Discovery for Cancer**
Medicinal plants have a long history of use in the treatment of various human diseases worldwide. Additionally, plant-derived natural products have been a promising source of novel anti-cancer drugs and drug leads. In this presentation, the health benefits of three medicinal plants and fruits, Ironweed (Vernonia cinerea), and miracle berry (Synsepalum dulcificum) will be presented. My labs presented our research Hirsutinolides inhibited breast cancer and colon cancer cells. The isolation, structure elucidation, bioactivity of hirsutinolides, which have been shown to inhibit breast and colon cancer, will be presented. Another study presented shows how miraculin of miracle fruits (MB) possesses several pharmacological activity. MB, rich in phytonutrients that have been used for improving the dysgeusia of chemotherapy patients.

Linda Connelly, Associate Professor and Department Chair, Pharmaceutical Sciences and  
Aaron Jacobs, Associate Professor, Pharmaceutical Sciences and Interim Associate Dean for  
Academic Affairs  
**Cancer Research**
We presented information about how our research works to understand the biology of disease, particularly focused on cancer. We discussed some of the basic research methods that we use in our lab, as well as how we have used a cell culture model to try to understand more about how obesity is linked to breast cancer. Abhijit Date, Assistant Professor, Pharmaceutical Sciences  
**Nanomedicine**
Nanomedicine is a field of biomedical research where principles of engineering are applied to transform the conventional medicines. Nanomedicine can significantly improve the efficacy of current medications while minimizing their side-effects. Several nanomedicine based products are currently being utilized in the healthcare profession.

Susana Jarvi, Professor, Pharmaceutical Sciences  
**Rat Lungworm Disease**
Rat lungworm disease (RLWD) is caused by a worm that reproduces in rats, and requires slugs and snails in its life cycle. Humans can become infected by ingesting infective larvae from food or water contaminated by infected slugs or snails. Our lab has been conducting RLW research and educational outreach since 2012. Our lab can provide testing for RLW parasites in slugs, snails, domestic animals and other biological samples (salads, vegetables etc…). We have demonstrated that 94% of rats in the Hilo area are infected with RLW. We are developing a blood-based diagnostic, beginning to evaluate the potential for water transmission of RLW parasites, and have developed and are integrating RLW curriculum into public schools.

Daniela Guendisch, Associate Professor, Pharmaceutical Sciences  
**Hawaiian Traditional Medicine/ Drug Discovery for Cancer**
The goal of our research is the development of new drugs for the treatment and diagnosis of brain diseases like Alzheimer’s disease, major depression, and addiction. Alzheimer’s disease is the leading unmet medical need and costly burden on public health, major depression the leading cause of disability worldwide, and addiction an increasing public health threat. In our laboratory we design and synthesize potential new drug candidates. Our design is based on natural products and computational chemistry.
Patricia Jusczak, Associate Specialist, Pharmacy Practice
Educational Research of Active Learning and Simulation Methods
Living with Diabetes – An Experiential Activity to Develop Empathy and Perspective
All students in the second professional year of the PharmD program at DKICP were provided with personal experiences of the challenges involved with adhering to diet and lifestyle recommendations for patients with diabetes. Students gained appreciation for diet, exercise and other recommendations commonly made to, and empathy for, people living with diabetes.

Tamara Kondratyuk, Laboratory Manager and Associate Specialist, Pharmaceutical Sciences
Nutritional Prevention of Cancer
Cancer is currently the second most common cause of death in the United States, and it is likely to become the most common in the near future. Many epidemiologic studies have shown positive influences of fruit- and vegetable-enriched diets in preventing cancer. Herbs and spices have a traditional history of use, with strong roles in cultural heritage of Hawai‘i. Some research data form Daniel K. Inouye College of Pharmacy were presented supporting the benefits of Hawaiian plants in the overall maintenance of health and protection from cancer.

Louis Ltief, Assistant Professor, Pharmacy Practice
Antimicrobial stewardship
“Assessment of a newly implemented ortavancin protocol in a community hospital in Hilo, Hawai‘i”
A significant portion of infections encountered in the emergency room in Hilo and Hawaii is due to skin infections. Many of these patients are re-admitted for treatment failure due to non-compliance to prescribed medications. A novel, one time dosed antibiotic, was recently adopted for use in the emergency room. This project aims to assess how effective the protocol has been thus far and if there is a need for improvement/adjustments.

Carolyn Ma, Dean and Associate Professor
Interprofessional Education
Interprofessional education (IPE) is defined by the World Health Organization (WHO) as “When students or providers from two or more professions learn about, from, and with each other to enable effective collaboration and improve health outcomes. This study describes an interprofessional simulation with pharmacy, medicine, nursing, social work and public health students in an elderly patient who is being discharged from the hospital to the home care setting. Uniquely, with the college of pharmacy on another island, the ability of a team to communicate, understand their roles and responsibilities could be hampered. This study, that utilizes distance technology, describes student and faculty satisfaction and areas of improvement noted before and after the exercise in terms of communication, increased understanding of their respect roles and responsibilities and the use of technology.

Dianqing Sun, Associate Professor, Pharmaceutical Sciences
Antibacterial Drug Discovery
Tuberculosis (TB) is a contagious airborne disease that involves the lungs and is caused by a deadly bacterium pathogen called Mycobacterium tuberculosis. TB is the second leading infectious disease in the world. In 2015, the World Health Organization reported more than 10 million new cases of TB and approximately 1.8 million deaths worldwide, predominantly in developing countries. The occurrence of cases of multidrug-resistant tuberculosis (MDR-TB) and extensively drug-resistant TB (XDR-TB) is of growing concern, highlighting the importance and clinical need for continued anti-TB drug discovery efforts.

Jarred Prudencio, Assistant Professor, Pharmacy Practice
Research Title: Impact of International Pharmaceutical Students’ Federation (IPSF) Campaigns On Student Pharmacist Knowledge
Student pharmacist Trish Huynh from the Class of 2019 presented research derived from a series of disease-focused health campaigns to educate the local community regarding various healthcare issues. Over the 7-month campaign, 6 seminars were held, each focusing on one of the following public health topics: diabetes, antibiotics, AIDS, cancer, tuberculosis, and immunizations. The purpose of the campaign is to assess the impact of these public health seminars within the student body. Results from the study demonstrated a significant impact on the baseline knowledge of those who participated in the study.
Nathan Sunada, Ph.D. Candidate, Pharmaceutical Sciences
Ko’omoa-Lange research lab
High-risk Neuroblastoma (NB) is currently one of the most difficult cancers to treat with a survival rate of only ~40%. The Ko’omoa-Lange research lab focuses on the role of calcium signaling in NB and has developed a model to compare drug sensitive and drug resistant NB in an effort to develop more effective therapies against high-risk NB. Using the model, we have successfully identified novel compounds, traditional Hawaiian plant preparations, and solvent-based extracts with potent anticancer effects against drug resistant NB.

Ghee Tan, Associate Professor, Pharmaceutical Sciences
Hawaiian Traditional Medicine/Drug Discovery for Cancer
Bacteria and fungi that live within the tissues of medicinal plants such as noni and mamaki are being investigated as a source of new drugs for cancer and other major diseases that afflict mankind. These microorganisms have been shown to produce novel chemicals, in addition to those produced by the plants themselves. This environmentally friendly approach based on endophytic microorganisms represents the future of natural product drug discovery.

Deborah Taira, Professor, Pharmacy Practice
Health Care Utilization
I presented findings from a study focused on examining to what extent having pain contributes to health care costs among patients with diabetes mellitus. Fellow DKICP faculty member Wes Sumida, Pharm.D. and I collaborated with a several cardiologists, a cardiology fellow, and a statistician to examine the impact of being in pain and having cardiovascular conditions on cost of care. We found having pain more than doubled health care costs.

Supakit Wongwiwatthanukit, Professor, Pharmacy Practice
Opioid-related deaths
Opioid abuse is an alarming national public health crisis and three out of five drug overdose deaths involve an opioid, translating to more than 115 Americans die each day from opioid overdose. This prompts the need for better patient education and easier access to naloxone, an opioid antidote. N-Quest app is designed to provide emergency response to opioid overdose incidents by locating nearby naloxone carriers for patients and bystanders and provide general education about opioid safety.

Nicole Young, Assistant Professor, Pharmacy Practice
Neurology
Migraines are a common and debilitating neurologic disorder that affects more than 37 million people in the U.S. There have not been any breakthrough medications for the treatment of migraines since the discovery of triptans, which are widely used and highly effective. Yet, there are still people who are not able to fully control their migraines, despite using triptans. With the help of fourth year pharmacy students, we searched the literature and clinical trials to see if there are any promising new classes of medications for treating migraines.
Centralizing technology between medical care teams aids patient outcome

Health care providers throughout Hawai‘i are using technology from a project led by the University of Hawai‘i at Hilo that helped pharmacists manage high-risk patients’ medications across a variety of settings.

The technology was implemented and used in the federally funded $14.3 million “Pharm2Pharm” program, operated from the Daniel K. Inouye College of Pharmacy (DKICP). Pharm2Pharm established a set of tools that were implemented through Hawai‘i Health Information Exchange (HHIE) system to communicate important clinical information to support patient care.

“Through the health information technology we used for the Pharm2Pharm program, we were able to support pharmacists shifting from their traditional role of dispensing drugs into becoming a part of the patient care team. We believe this represents a unique integration of prescription medication information into an HIE,” stated Francis Chan, HHIE’s Interim Executive Director.

Chan is an author of a new study published in the journal Applied Clinical Informatics entitled “A Statewide Medication Management System: Health Information Exchange to Support Drug Therapy Optimization by Pharmacists across the Continuum of Care.” Co-authors included Natalie Pagoria from the nonprofit HHIE, Sheena Jolson-Oakes from Maui Clinic Pharmacy, and Reece Uyeno, Andrew Levin, and Karen Pellegrin from DKICP.

Researchers looked at pharmacists providing services for the Pharm2Pharm model in the state of Hawai‘i, which included 50 pharmacists who were authorized by HHIE to use the technology. This includes the hospital pharmacists who enrolled patients into the Pharm2Pharm service as well as the community pharmacists assigned to manage their medications after release from the hospital.

They determined priorities that could be addressed through health information technology (IT) tools included:
- More efficient and secure ways to transmit care transition documents;
- Reliable access to outpatient translators;
- More efficient ways to identify outpatient medications for medication reconciliation;
- More efficient access to clinical information;
- A system to document and communicate reconciled medication list and drug therapy problems; and
- A system to manage the population of patients enrolled.

Technology tools that addressed those priorities, such as direct secure messaging, virtual translators, and a prescription fill history query system, were implemented. The pharmacists in the study made the transition from paper and faxes to this “suite of technology.”

“In the national effort to improve health care through the adoption of health information technology, pharmacists haven’t been included as eligible professionals under federal incentive programs. We demonstrated that pharmacists adopted and meaningfully used the technology provided by HHIE to support their role as medication experts,” said Pellegrin, DKICP’s Director of Strategic Planning/Distance Learning who directed the 4-year Pharm2Pharm project.

The researchers plan to continue to look for ways to link pharmacists with patient care teams and make health information technology more readily available to them.

This study was part of the Pharm2Pharm project, funded by the Centers for Medicare and Medicaid Services (CMS), which achieved an estimated 264% return on investment in the pharmacists through avoided medication-related hospitalizations.

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Compounding Boot Camp continues training new generation

By Kaylee Huang (Class of 2019)

For the sixth time, the Professional Compounding Centers of America (PCCA) Remote Compounding Boot Camp was held March 10-11 on campus at the Daniel K. Inouye College of Pharmacy, presented by the National Community Pharmacists Association (NCPA) Hawai‘i Student Chapter.

PCCA is a nationally recognized compounding pharmacy company in the United States that offers an introductory course on contemporary compounding. The NCPA Hawai‘i Student Chapter was thrilled to have two representatives from PCCA, Dr. Bindhu Batra and Dr. Jessica Messa, as instructors for this course. There were 25 student pharmacists who participated in a two-day (16 hours) intensive journey to learn more about the field of compounding pharmacy through lectures, hands-on laboratory experience, patient cases/counseling as they were given insight to a career path in this niche field of pharmacy.

Students completed eleven dosage forms such as lollipops, lip balms, troches, transdermal delivery systems, and much more. Student pharmacists learned to personalize their compounds from the strength, flavor, dosage form, and excipients to fit the needs of the specific patient. In addition, after completing the course, students received a certificate of completion for this introductory compounding course, which makes them eligible for additional future advance compounding courses provided by PCCA. Events such as these are a chance for student pharmacists to network with compounding pharmacy professionals. PCCA is very dedicated to educate and inspire students to a career path in compounding pharmacy, which in turn develops high-quality and well-rounded student pharmacists at DKICP.

We are very grateful for this relationship with PCCA and although there were some challenges this year, we manage to successfully pull through. Thank you to Dr. Batra and Dr. Messa for their generosity, accommodation and travel the long distance to come each year. In addition, thank you to Dean Ma and the college for their continuing support in keeping this relationship. This would not be possible without their help.

The PCCA Compounding Boot Camp is a great opportunity for student pharmacists to expand their outlook on pharmacy in terms of practice and future career path. NCPA and PCCA will continue to build a great working relationship and hope to continue the compounding course for future student pharmacists. (Photos by Kaylee Huang)
Similarities and differences equal a great experience

DKICP welcomed three students and a faculty member from Matsuyama University College of Pharmaceutical Science this past February. The group participated in site visits with some of our Hilo clinical faculty along with sitting in our didactic and hands on learning activities here on campus. Although the practice of pharmacy is somewhat different in Japan, it was a great learning experience for all participants to discuss different practice activities and laws in perspective countries. One thing we found humorous is that college students in America and in Japan are very similar, social media is VERY important and classroom-learning styles are comparable as well. (By Jennifer Aguiar, Clinical Education Support Specialist)

From left: Dr. Lara Gomez, Yume Yurita, Anzu Kadomae, Takumi Yamaguchi Sensei, Dean Carolyn Ma, Saori Baba, Dr. Linda Connelly, Jennifer Aguiar

High School students from Maui hear about a career in pharmacy

Twenty-five high school students from Maui College’s Upward Bound Program visited the DKICP campus to explore career options on March 20. This federal TRiO outreach educational program prepares low-income first-generation high school students for college. The participants from Baldwin, Maui and Molokai High Schools received an overview of pharmacists’ responsibilities from George Karvas, RPh, instructor for pharmacy practice, who explained a few compounding techniques and led a hands-on capsule activity. Student Ambassadors San Ly (Class of 2019), Shaina Saiki (Class of 2020), Johnson Tran (Class of 2020), and Preston Young (Class of 2019) answered questions about their personal experiences while providing tours of the classrooms, mock retail lab, and the mock clean room. IT Specialist Jeryd Teramoto staged the simulation manikin to breathe and speak during the campus tour while the ambassadors explained that pharmacists can be in clinical and hospital settings.

Other schools planning upcoming visits include Kamehameha Middle School Maui and Waialua High School.
Middle-school students prepare for college/career decision

For the second year, DKICP participated in the Hawai‘i P-20 Middle School Career Fair at the Hawai‘i Convention Center in Honolulu, held this year on February 15. Nearly 900 middle school students from Hawai‘i State Department of Education (HIDOE) schools in low-income communities were in attendance to explore future career pathways.

Student pharmacists from the Class of 2018 Goody Cacal, Garret Hino and Ronald Susa manned an informational table at the fair to share information about DKICP, the pharmacy profession, and give students a chance to try their hands at utilizing pill counting trays to fill a mock prescriptions.

The event is sponsored by the Hawai‘i P-20 Partnerships for Education GEAR UP Program.

When I grow up…

By Jennifer Aguiar, Clinical Education Support Specialist

As DKICP prepares to graduate its eighth doctor of pharmacy class, we also continue to inspire future students to join our program. Five Kamehameha Hawai‘i Campus juniors spent the day with three of our second-year students (Class of 2020) learning what type of work a pharmacist does.

Student pharmacists Wilson Datario, Jhoana Paula Gonzales, and Raul Flores planned and executed the curriculum for a career shadow day. This included blood pressure 101, making sunscreen from scratch, pharmacy retail operations and calculations, and pharmacy research exploration.

Prior to joining DKICP as a student, Wilson was a high school science teacher at Kamehameha Hawai‘i Campus. It was evident that his passion for teaching is still very strong.
A look back and forward: DKICP produces leaders

Hawai‘i’s only accredited College of Pharmacy admitted the first class of student pharmacists in 2007, more than 10 years ago, and it’s easy to slip into a state that takes for granted the many systems, services and activities that were milestones along the way. A notable mark of distinction for DKICP is that three early administrators who showed leadership potential were eventually chosen to become Deans of Colleges of Pharmacy.

DKICP current Dean Carolyn Ma is an example of someone who rose through the ranks to discover a higher calling. For Dean Ma, that higher calling exists within UH Hilo.

A job as a clinical coordinator at Hawai‘i’s new College of Pharmacy provided an opportunity for Dean Ma to return to Hawai‘i as a way to assure the longevity of her profession in her home state. Born and raised on O‘ahu, she earned her Pharm.D. at the renowned University of California-San Francisco College of Pharmacy, moved to Philadelphia for her residency years in clinical pharmacy and oncology pharmacy.

Away for more than a decade, she says that the opportunity to return to practice as the first Board Certified Oncology Pharmacist (BCOP) at The Queens Medical Center in Honolulu was ‘an alignment of the stars.’ At that time, she remembers, most Hawai‘i keiki didn’t have a chance to come home and practice at the level at which they were trained.

After 13 years at QMC, she became vice president for clinical program development for AmMed International in Hong Kong, China. She earned her stripes as a pharmacy management consultant for various hospitals including Stanford Hospitals and Clinics with expertise in the Joint Commission’s Medication Management Chapter, pharmacy and clinic workflow redesign and organizational development.

Her career trajectory took her on the journey to dean as she joined the faculty in 2007 and became department head of the Department of Pharmacy Practice. Now, she serves as one of the most renowned academic pharmacy leaders in the entire state, and is becoming well known for her work on interprofessional health education on a national level.

“I view my role in health care as more than administering the College but as nurturing the broader health of relationships, among my peers, the students, the community,” Dean Ma said. “Our success as an essential part of the health management team has been our willingness to collaborate with our colleagues. It’s the heart of our profession and critical to remember this as our scope of practice continues to expand.

Two other members of the inaugural team at the College of Pharmacy were appointed as deans of colleges of pharmacy, both at the founding level. Edward Fisher is founding dean of the Marshall B. Ketchum University College of Pharmacy, and Mark Okamoto left UH Hilo to become founding dean of the School of Pharmacy of the Georgia Campus-Philadelphia College of Osteopathic Medicine.

Okamoto moved to Hilo from California in 2007 and served as the inaugural Chair of the Department of Pharmacy Practice. In 2009, he answered a call to become founding dean & professor at the Philadelphia College of Osteopathic Medicine (PCOM) School of Pharmacy in Georgia. He led the College to successfully achieve accreditation from the Accreditation Council for Pharmacy Education (ACPE) in 2014. Currently, he is exploring other academic opportunities, but he says his job at UH Hilo gave him ties to students that exists to this day.

“When I was at Walt Disney World, a former student from UH Hilo recognized me and took the time to come over and say hello. I was only there a short time, but my connection with students is why I continue to work in academia,” he notes.

He says life on Hawai‘i Island was a big change coming from a large city, but it was a unique opportunity and he’s glad to be able to spend some time in Hilo. An avid golfer, he misses the golf courses, the snorkeling and scuba opportunities and especially the culture and the people.

“I definitely felt the Ohana spirit there, and I’m glad that the School of Pharmacy has helped many to get their pharmacy education,” he says.
Continuing to help students get their pharmacy education now in California, Fisher came to UH Hilo as the first Associate Dean for Academic Affairs in the College of Pharmacy. Since 2015, he has guided a new College of Pharmacy in Fullerton, California through the first steps of accreditation, having obtained pre-candidate status, and is looking forward to their upcoming site visit this spring in preparation for achieving Candidate status next summer.

He says he is still providing continuing education seminars across the mainland as well as Alaska, and most recently on cruise ships visiting various ports of call in Europe. He says he and his wife enjoy life in California in part because they live close to the university avoiding the significant traffic and are still able to take advantage of what Southern California has to offer, such as the diversity of restaurants and cultural venues.

“I truly miss the beautiful Hawai‘i Island, but most especially the wonderful people of Hawai‘i,” he says.

Founding Dean John Pezzuto, who now serves as dean and vice president at Long Island University (LIU) in Brooklyn, said he’s proud that the distinguished careers of these early administrators are altering the world of academic pharmacy nationwide. Pezzuto, who continues his acclaimed research and recently received an honorary doctorate from Roskilde University in Denmark, said DKICP is fortunate to have benefited from the service of these individuals.
DKICP leaders meet with influential lawmakers on Capitol Hill

By Cathlyn Goo (Class of 2019)

All 50 states were represented at the 10th Annual National Association of Chain Drug Stores (NACDS) RxIMPACT Event March 7-8 in Washington D.C. Representatives from 48 colleges and schools of pharmacy attended, including the Daniel K. Inouye College of Pharmacy at UH Hilo. This amounted to representation from approximately 60 percent of all colleges and schools of pharmacy in the country.

The inaugural RxIMPACT Day took place in 2009 when 27 states were represented on Capitol Hill. NACDS is a national advocacy organization that focuses on pro-patient and pro-pharmacy policies. Its mission is to ensure that patients receive optimal care from the pharmacists at their local community pharmacies who are members of NACDS. NACDS reaches out to all branches of government, advocating for various pharmacy bills and policies that legislators have the power to vote on.

The 2018 event consisted of two parts for students. The first day served as a welcome and introduction for the student advocates as well as a chance for everyone to get to know each other. It was also an opportunity for students to learn about what to expect for the following day on Capitol Hill. Role-playing activities were conducted to simulate what it might be like to meet with legislators and members of congress and practice scenarios to prepare for the varying responses that could be received during the meetings. The second day, RxIMPACT Day on Capitol Hill, was dedicated to several 15-minute scheduled meetings with a number of senators and house representatives, with advocates reaching out to all members of the U.S. House of Representatives and the U.S. Senate.

I had the pleasure and privilege of being a part of Team Costco. Along with our team leader Anne Foley (NACDS Director of Political Affairs), Jon McArthur (AGMM Pharmacy Compliance and Internal Audit), Brian Moore (NW Regional Pharmacy Supervisor), and Gary Vita (Iwilei Pharmacy Manager), we met with six legislators to educate them about pharmacy policies and ask for their support on certain bills.

We had scheduled meetings with Congressmen Beto O’Rourke (D-Texas) and Dave Reichert (R-Washington), Congresswomen Colleen Hanabusa (D-Hawai’i) and Tulsi Gabbard (D-Hawai’i), and Senators Mazie Hirono (D-Hawai’i) and Brian Schatz (D-Hawai’i). Whether we met with legislative assistants or the legislators themselves, our main focus was on asking for support in bill H.R. 592/S. 109 to recognize pharmacists as Medicare Part B providers, bill H.R. 3528 to require electronic prescribing of controlled substances, and additional proposals to address the opioid crisis such as setting a 7-day supply limit for prescribers of initial opioid prescriptions, implementing a national prescription drug monitoring program, and establishing a manufacturer-funded mail-back opioid envelope program. Overall, the issues discussed were well-received by the legislators, which left us hopeful for their support.

Participating in the NACDS RxIMPACT Day was an enriching and inspiring experience for me. I was able to actively address issues that would impact the profession, but ultimately benefit the patients being served. My passion for helping others and positively impacting their lives was a driving factor in my pursuit of becoming a pharmacist and my experiences on Capitol Hill allowed me to advocate for just that. As cliché as it may sound, I learned not to underestimate the power of my own voice and have come to fully embrace how I can make an impact in my role as a pharmacist beyond the fundamental responsibilities of my profession. As I continue to progress into my pharmacy career, I hope to take all of the valuable things I learned from my experiences at the RxIMPACT Day and to never lose sight of what drew me to pharmacy in the first place.
Volunteers come out in force at annual blood drive

By Kaylee Huang (Class of 2019)

Every two seconds, someone in the United States needs blood and 1 in 7 people entering the hospital will use blood, reports the Blood Bank of Hawai‘i. A single blood donation takes about 45 minutes and requires one pint out of the ten pints in an average adult. Each pint of blood can save three lives. This simple act of giving can make a huge difference in someone’s life.

DKICP’s National Community Pharmacists Association (NCPA) student chapter hosted this year’s Annual Blood Drive in lower campus at the University of Hawai‘i at Hilo on March 20. This event is a tradition to NCPA as they continue to work with the Blood Bank of Hawai‘i to save lives each year.

Preparation starts in the early fall semester, as this is one of NCPA’s biggest events. Many helping hands were involved not just from NCPA or the Blood Bank of Hawai‘i staff, but as well as collaborative efforts made by other student organizations: Kappa Psi Pharmaceutical Fraternity, Inc. and American Pharmacists Association-Academy of Student Pharmacists and lower campus security and center staffs.

On the day of the blood drive, student pharmacists welcomed donors while assisting with validating parking for donors and oversaw the food/refreshment table, while the Blood Bank of Hawai‘i staff carried out prescreening checks and collected blood from donors. With the Blood Bank of Hawai‘i staff and student pharmacists’ hard work and dedication, it was indeed a successful drive with 102 donors registered, 18 were deferred, and 84 units of blood were collected which mean 252 patients will get the blood products they need from this drive alone.

The diverse group of donors ranging from the DKICP student pharmacists and staff, UH Hilo’s student body and staff, and members of the Hilo community made the drive successful. NCPA is thankful for the opportunity to work with the Blood Bank of Hawai‘i to save lives. The NCPA Student Chapter at the Daniel K. Inouye College of Pharmacy prides itself on the development and participation in community service events, which serves as one of its main focus as an organization. NCPA’s student pharmacists continue to serve their community by providing valuable public service and improve Hawai‘i’s health through education, awareness, and prevention. We cannot wait for another successful drive next year!
UH Hilo students excel at future health professionals competition

By Jarred Prudencio
Assistant Professor and HOSA adviser
Department of Pharmacy Practice

Students from the University of Hawai‘i at Hilo excelled at the 13th Annual Health Occupation Students of America (HOSA) – Future Health Professionals State Leadership Conference held in February on O‘ahu. All 10 delegates placed in competitive events, with one team taking first place in the public service announcement category.

The students are undergraduates at UH Hilo and have varying majors and fields of interest such as nursing, pre-nursing, pre-pharmacy, and pre-medicine. HOSA (previously called Health Occupation Students of America) is a national organization focused on empowering students to become future leaders in the global health community. Students in high school and college programs are able to participate in HOSA, in order to gain exposure to various health professions and gain experience through presentations and skill competitions geared towards the healthcare field.

The Hawai‘i HOSA State Conference took place at the Hawai‘i Convention Center in Honolulu. I accompanied the 10 UH Hilo students and supported them in their competitions, as well as served as a judge in a few competitions for high school HOSA students, including Community Awareness Platforms and Healthy Lifestyle Projects.

The UH Hilo HOSA chapter was established in 2011 with the inaugural president Lauryn Mow, who recently graduated from the DKICP in May 2017. Many DKICP students and alum have participated in HOSA while in high school or undergraduate education. As UH Hilo HOSA Chapter Faculty Adviser since April 2017, I serve to guide and mentor the pre-health students.

On January 20, the UH Hilo HOSA Chapter hosted the 3rd Annual Big Island HOSA Regional Conference. There were over 100 student competitors in attendance from UH Hilo, Hawai‘i Community College, and Kamehameha, Kau, Keaau, and Waiakea High Schools. At the regional conference, students competed in health care-related competitions in order to qualify to compete at the state level, and attended seminars where they learned some healthcare skills.

DKICP student pharmacists Rene Scott Chavez, Mary Lui, & Nicolas Tsoi represented the American Pharmacists Association (APhA-ASP) and hosted a roundtable session led by first-year student Shane Naeole.
A seminar at this conference where students learned how to manually check a patient’s blood pressure and an introduction to glucometers. After the Regional Conference, a total of 10 UH Hilo students qualified to compete at the Hawai’i HOSA State Conference.

The UH Hilo students excelled at the state conference, with every student qualifying to move on to compete at the International Leadership Conference in Dallas in June 2018. This was an outstanding feat and a new record for the UH Hilo Chapter, with 100% of competitors advancing to the national round. Below is a list of the 10 students and their rankings at the State Conference. One of the UH Hilo students, Kendrick Dalmacio, will be entering the DKICP program in the fall, 2018 semester.

**Public Service Announcement - Theme: Pre-Diabetes**

1st Place - “Team A”: Kelly Gani, Lark Canico and Sheldon Cabudol (see their video at https://www.youtube.com/watch?v=1Tz_0J86xDM&feature=youtu.be)

3rd Place - “Team B”: Deserie Pagatpatan, Jeremy Villanueva, Leslie Arce and Travis Taylor (See their video at: https://www.youtube.com/watch?v=LqqT3eFdzE&feature=youtu.be)

**Pharmacology**

2nd Place - Kateleen Caye Bio

3rd Place - Kendrick Dalmacio

**Medical Terminology**

2nd Place - Daniel Kimura

In addition to competing, the Hawai’i state HOSA conference included great presentations and roundtable discussions with members from different healthcare fields. Shane Naeole, a first-year DKICP student and previous Hawai’i State HOSA Officer, led a popular roundtable discussion entitled “Jeopardy - Pharmacy Edition,” where he took an interactive approach to quiz students on pharmacy facts while also teaching them all of the things that pharmacists can do.

HOSA is a great organization that fosters professional growth and inspires students to make a difference in their communities through healthcare careers. This is also a great opportunity to mentor pre-health students and give back to the community. If anyone is interested in mentoring or helping with the HOSA chapter, please contact me at jarred.prudencio@hawaii.edu

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**Faculty pitch in at regional science fair**

Justin Brown (left), posed with DKICP’s Interim Associate Dean for Academic Affairs Aaron Jacobs at the West Hawai’i Science Fair Feb. 17. Mr. Brown is career and technical education coordinator and math teacher at Kealakehe High School and organizer of the fair, which was held at the Natural Energy Laboratory of Hawaii Authority (NELHA) in Kona. Dr. Jacobs spent the day judging students’ poster presentations. Also attending the fair was Linda Connelly, Associate Professor and Chair of the Department of Pharmaceutical Sciences, who gave a presentation about her career pathway as well as an overview of the Pharm.D. and Ph.D. programs at DKICP. Several students who competed advanced to the state science fair in Honolulu.
Dr. Ardem Patapoutian (in the center with lei), Professor with the Howard Hughes Medical Institute at The Scripps Research Institute in La Jolla, California and member of the National Academy of Sciences; Director of Discovery Research at Novartis Research Foundation. Dr. Patapoutian will be presenting a seminar, “How Do You Feel? Ion Channels That Sense Mechanical Force” on DKICP campus December 22. Shown with Dr. Patapoutian are members of the Koomoa-Lange lab.

Dr. Jennifer R. Honda (center), with the Department of Biomedical Research, Center for Genes, Environment, and Health at National Jewish Health in Denver, Colorado presented a seminar entitled “Environmental, Host, and Nontuberculous Mycobacterial Factors That Interact To Cause Lung Disease In Hawaii” on DKICP campus January 16. With Dr. Honda are Drs. Leng Chee Chang (left) and Dianqing Sun from the Department of Pharmaceutical Sciences.

Dr. Shiuan Chen (right), The Lester M. and Irene C. Finkelstein Chair for Biology, Professor and Chair with the Department of Cancer Biology at Beckman Research Institute of the City of Hope in Duarte, California, presented a seminar entitled “Screen and Characterization of Environmental Chemicals Targeting Estrogen Receptor and Aromatase” on DKICP campus September 29. His host from the Department of Pharmaceutical Sciences was Dr. Shugeng Cao.

Dr. Wei Jia (left), Professor and Associate Director for Shared Resources with the University of Hawai‘i Cancer Center in Honolulu, Hawai‘i presented a seminar entitled “Gut Microbiome - Host Metabolic Interactions in Drug Metabolism and Gastrointestinal Carcinogenesis” in the DKICP classroom on February 22. Dr. Shugeng Cao from the Department of Pharmaceutical Sciences was his host.

Keith Olson (left), Chief Science Officer and Pam Madden (second from right), Water Quality Specialist with Natural Energy Laboratory of Hawai‘i Authority, in Kailua-Kona, Hawai‘i presented a seminar entitled “Natural Energy Laboratory of Hawai‘i Authority: Nexus of Energy, Food & Water” on DKICP campus March 6. Pictured are (from left) Keith Olson, Dean Carolyn Ma, Pharmaceutical Sciences Chair Linda Connelly, Pam Madden and DKICP Instrument Specialist Justin Reinicke.

Dr. Laina King (left), Senior Program Officer with the Office of the Director at the National Institute of Health (NIH), presented a seminar entitled “The Early Career Scientist: Positioning, Programs & Grants” on DKICP campus September 27. Her host from the Department of Pharmaceutical Sciences was Dr. Dana-Lynn Kooma-Lange.

Dr. Leslie Gunatilaka (right), Professor and Director of the Natural Products Center with the School of Natural Resources & the Environment, College of Agriculture & Life Sciences at the University of Arizona in Tucson presented a seminar entitled “Harnessing Plant and Lichen-Associated Microbial Diversity for Small-Molecule Natural Products Discovery” on December 21 in Classroom #2 on the DKICP campus. Dr. Shugeng Cao from the Department of Pharmaceutical Sciences was his host.

Dr. Toru Otori (center), Associate Professor with the Department of Pharmacy at Kindai University in Osaka, Japan presented a seminar entitled “Pharmacy Student Education in Japan” on DKICP campus March 21. Posing with Dr. Otori are Dr. Aaron Jacobs, DKICP Interim Associate Dean for Academic Affairs.
DKICP appoints head of Interprofessional Education and Development

Dr. Sheri Tokumaru has been appointed Director of Interprofessional Education and Development in the Department of Pharmacy Practice by Dean Carolyn Ma. As Director of IPE, Dr. Tokumaru will oversee current IPE curriculum and events as well as lead the DKICP Pharmacy Practice team in developing new IPE curriculum in conjunction with the UH IPE Work Group.

“DKICP has become increasingly involved with other UH professional health care programs via the directive from the UH Council of Health Care Colleges and Social Work,” Dean Ma said. “Our faculty and students are involved in state-wide inter professional clinical rotations, as well as didactic and simulation type events with medicine, nursing, social work, public health and dentistry. As a result, I felt it was time to appoint a lead person in this area.”

Dr. Tokumaru came to UH Hilo in 2010 with a distinguished record in training and clinical experience. She received her Pharm.D. degree from the University of Michigan in Ann Arbor, completed a first-year residency at University of California - San Francisco, a second-year residency (Pharmacokinetics) at the University of Kentucky and was on faculty at the University of Illinois - Chicago School of Pharmacy.

Dr. Tokumaru has been faculty-in-residence at The Queens Medical Center in the Neuro-critical Intensive Care Unit and has earned a reputation as a top-notch clinician who is highly respected by an inter-professional health care team. In 2013, she created the very successful DKICP second-year Postgraduate Residency in Critical Care, a program that has graduated five exceptionally trained clinical pharmacists and educators. In the area of simulation training, Dr. Tokumaru has been heavily involved in the creation of the event Hawai’i Interprofessional Simulation for Trauma and Emergency Response (HIPSTER).

Faculty Briefs

Shugeng Cao, Associate Professor, Department of Pharmaceutical Sciences, was the author on two publications: 1) “Verbenanone, an octahydro-5H-chromen-5-one from a Hawaiian-Plant Associated Fungus FT431” published in Tetrahedron Letters, 2017 with co-authors Chunshun Li, Ariel M Sarotti and James Turkson; and 2) “Anti-proliferative ambuic acid derivatives from Hawaiian endophytic fungus Pestalotiopsis sp. FT172” in Phytochemistry 2017 with co-authors Chun-Shun Li, Bao-Jun Yang and James Turkson.

Leng Chee Chang, Associate Professor, Department of Pharmaceutical Sciences, was a featured speaker at UH Hilo’s International Topics Speaker Series on March 15. She explained the health benefits of three edible plants (noni, miracle berry and Nishime Kombu). The event, held in the Student Services Center on UH Hilo campus, was sponsored by the United Nations Association USA-Hawai’i Island Chapter and UH Hilo International Student Services & Intercultural Education Program.

Susan Jarvi, professor, Department of Pharmaceutical Sciences, was awarded funding from the Hawai’i County Council to support rat lungworm disease research. The funds will be used to validate a staining assay that appears to distinguish dead larvae from live larvae. After validating this assay, the next step is to gain funding to test commercially available vegetable washes, UV light or anti-parasitic drugs to determine effectiveness in killing larvae.

Karen Pellegrin, Director of Strategic Planning/Distance Learning, was a co-author in an article entitled “A state-wide medication management system: Health information exchange to support drug therapy optimization by pharmacists across the continuum of care” published in the peer-reviewed journal Applied Clinical Informatics, 2018, with co-authors F. Chan, N. Pagoria, S. Jolson-Oakes, R. Uyeno and A. Levin. Dr. Pellegrin also presented a session entitled “Advancing patient centered care leveraging pharmacists to reduce medication-related hospitalization rates among older adults” with J. Lynn and M. Benitez-McCrery at the 2018 CMS Quality Conference in Baltimore, Maryland on February 12-14.

Jarred Prudencio, Assistant Professor, Department of Pharmacy Practice, was awarded the 2018 Alumni Professional Development Scholarship by the National Phi Delta Chi Professional Pharmacy Fraternity. Eight scholarships were given nationally, with one person in each region being selected. Dr. Prudencio was selected for the Pacific region which includes alumni in the states of California, Hawai’i, Nevada, Oregon and Washington.

Dianqing Sun, Associate Professor, Department of Pharmaceutical Sciences, was senior author of the publication “Solid-Phase Synthesis and Antibacterial Activity of Cyclohexapeptide Wollamide B Analog” in ACS Combinatorial Science, with coauthors Lissa S. Tsutsumi, John M. Elmore, Uyen T. Dang, Miranda J. Wallace, Ravikanthreddy Marreddy, Robin B. Lee, Ghee T. Tan, Julian G. Hurdle, and Richard E. Lee.
Student Honors

Jhon Michael Malabed, an undergraduate biology major at University of Hawai‘i at Manoa who is mentored by DKICP Professor Deborah Taira, was the undergraduate winner for the third annual Hawai‘i Journal of Medicine & Public Health Writing Contest. His manuscript entitled, “Pathways to Preventable Hospitalizations for Filipino Patients with Diabetes and Heart Disease in Hawai‘i” is going through an extensive peer and editorial review process and will be featured in a future edition of the Journal.

Faculty Briefs

Deborah Taira, Professor, Department of Pharmacy Practice, is a co-author of three manuscripts that were accepted for publication: 1) “Examining the Association Between Different Aspects of Socioeconomic Status, Race, and Disability” in the Journal of Racial and Ethnic Health Disparities; 2) “Depression Effects on Hospital Cost of Heart Failure Patients in California. An Analysis by ethnicity and gender” in the Indian Journal of Community Medicine; 3) Thirty-day inpatient readmissions for Asian American and Pacific Islander subgroups compared to whites in Medical Care Research and Review.


Welcome New Faculty

Dr. Youssef Roman joined DKICP as an Assistant Professor in the Department of Pharmacy Practice based on O‘ahu in October 2017. He earned his bachelor’s degree and his Pharm.D. from Portland State University in Oregon, and received a Ph.D. in the Experimental and Clinical Pharmacology Department at the University of Minnesota College of Pharmacy. Dr. Roman is the Clinical Pharmacist in Geriatric Services at The Queen’s Medical Center in Honolulu. His scholarship interests are in pharmacogenomics and health disparities.
Pacific West Province Assembly provides ways to connect

By Raul Flores (Class of 2020)

This November, students from the Epsilon Psi Chapter of Kappa Psi Pharmaceutical Fraternity, Inc. at the Daniel K. Inouye College of Pharmacy (DKICP) had the opportunity to attend the semiannual Pacific West Province Assembly in Sacramento, California. At the conference, we had the privilege to develop leadership skills through committee meetings, partake in a continuing education session, and receive advice and wisdom from brothers who are already established in the field.

The conference provided an opportunity for our brothers to reconnect with those that have graduated, or are on rotations as well as meet new brothers from across the states. Current students, Athena Borhauer, Jeffrey Tang, Natalie Chan, Nicholas Tsoi, and Raul Flores, met up with DKICP Alumni, Le Du (Class of 2015) and Pavlin Dimitrov (Class of 2015) both founding members of the Epsilon Psi Chapter, as well as Mari Cid (Class of 2017), and Jeremy Lozano (Class of 2017), current President of the Pacific West Province. Our DKICP alumni and leaders were able to dispense valuable advice regarding their time at DKICP including their motivations through Finals Week, rotation selection, and their experience as alumni and working pharmacists.

Along with our Alumni, Brothers from all across the United States, including Louisiana, Nevada, Arizona, and Virginia to name a few, assembled in Sacramento to attend this Assembly. The hosting Chapter, Epsilon Iota at California Northstate University College of Pharmacy, packed several days’ worth of activities, both professional and fun, into the three-day weekend.

Meeting day was filled with various professional breakout meetings that focused on Chapter development, team-building, and communication improvement. These committee meetings helped further two of our Fraternity’s founding principles of industry and high deals as these workshops aimed to build great pharmacists, translating to better patient care. Notable activities included this year’s Fall Philanthropy event which promoted awareness of elderly abuse through FATE, a local nonprofit organization. The Fraternity also spread the word about men’s health throughout ‘Movember,’ specifically testicular and prostate cancer, and suicide prevention and mental health. A “Clinical Toxicology” CE was also available to keep Brothers up to date with today’s trends. Philanthropic endeavors and continuing education aligned with the our other founding principles, fellowship and industry.

Despite a cold and busy weekend, the Fall 2017 Pacific West Province Assembly proved to be a memorable experience, filled with knowledge, bonding, and personal development. These various events helped strengthen the bonds of brotherhood and provided a great avenue for networking with brothers in different fields and stages in their careers, providing mentorship and guidance.
Collaborations at regional conference teach essential skills

By Cami Kanahele (Class of 2019)

From January 12-14, thirteen members of our Chapter attended the Phi Delta Chi Pacific Regional Conference held at the University of Southern California. The conference allowed us to enhance our knowledge and understanding of important fraternity ideals and rituals through attending a variety of workshops as well as hone our leadership skills through a two-part leadership seminar.

Past, present, and future members of Phi Delta Chi were given the opportunity to come together to establish connections with one another and collaborate and brainstorm ideas with each other to help further develop each Chapter individually.

Representatives from various Chapters shared activities that their Chapters engage in as a way of offering new ideas for other Chapters to implement into their own repertoires.

I had a great experience meeting new Brothers from other Chapters and solidifying bonds with Brothers from my own Chapter. My first Phi Delta Chi Conference was a memorable one and left a lasting impression. I hope that we will be able to take what we learned from this conference and utilize some of the unique ideas and advice we received to help improve upon our Chapter. We are constantly looking for ways to better our Chapter and hope that we can encourage Brothers to continue to attend conferences such as this one to allow for the continued growth of both individual members as well as the Fraternity as a whole.

Community outreach an essential role to help Pacific Islanders

By Shannon Trinh (Class of 2019)

The Pacific Islander Mobile Screening Clinic (PIMSC) has been lucky enough to participate in several community outreach events this past semester.

In February, the PIMSC collaborated with the Blue Zones Committee to provide free blood pressure, diabetes, and hyperlipidemia health screenings to the staff of the Hawaii Department of Education (DOE) Kau/Keaau/Pahoa Administrative Office, as the office had started a wellness effort that aligns with the DOE wellness guidelines and Blue Zones work site pledge. We were happy to help, especially since many of the office staff had never been screened for diabetes or hyperlipidemia before that day.

We also participated in Ohana Day, a community event held by Mt. View Elementary School in March, where students came together to share health education about diet and exercise, and provided free health screenings. We were joined by many members of the community and were even able to enjoy student performances of taiko drumming and choir at the event.

We have also continued to provide monthly health screenings at Malia Puka O Kalani Church in hopes to serve members of our local Pacific Islander community.

The members of PIMSC are also working hard to prepare for one of our largest
The Phi Lambda Sigma (PLS) Pharmacy Leadership Society held their annual initiation ceremony and dinner at Hilo Bay Cafe on March 2. In addition to the eight student initiates, one faculty member who has exemplified leadership in the pharmacy profession was also inducted.

The student pharmacists initiated included: Jhoana Gonzales, Faith Hicks, Gurinder Kaur, Mary Lui, Vincent Manalo, Jared Toba, Johnny Tran and Johnson Tran.

This year’s initiated faculty member was Dr. Jarred Prudencio. We congratulate these new inductees for their excellence and effectiveness as leaders at our college and in our profession.

This year we were honored to have Dr. Wesley Sumida and Dean Carolyn Ma share with us some of the insights they have gained throughout their leadership experience in hopes to inspire us to continue our journey as stronger leaders.

Dr. Sumida began the event by sharing a metaphor distinguishing the different leadership styles between a herd of buffalo and pack of geese. The buffalo resembles the traditional understanding of a leader, someone who takes charge at all times while everyone else simply follows. However, he mentioned that this is a poor definition of leadership. Rather, a stronger leadership style can be exemplified by a flock of geese where each goose partakes in leading the flock. Even if one falls behind, another will take the lead to support the team. Although there are multiple leaders present, each leader works with each other cohesively to form a strong foundation. As our chapter adviser, Dr. Sumida encouraged the new members to remember to support each other as a team.

Following Dr. Sumida’s speech, the nine new members were inducted into the society with a candlelit pinning ceremony. Each member took turns reciting their pledge in front of fellow collegiate members, faculty, and guests. This beautiful evening resembled a lifelong commitment to fostering leadership development and advancing the profession of pharmacy. Afterwards, the current chapter officers transferred their duties to the newly elected officers who will serve in office until March 2019.

Our keynote speaker for the night, Dean Carolyn Ma, has dedicated her...
Phi Lambda Sigma, cont.

pharmacy career to embody leadership qualities that not only enhance the care for our patients, but also open opportunities for pharmacists to take on larger roles in the health community. Aside from her role as our college’s current dean, she is also currently serving on the Hawai‘i State Board of Pharmacy, Hawai‘i Pharmacists Association and the International Interdisciplinary Advisory and Editorial Board. During the ceremony, Dr. Ma offered words of wisdom to the PLS members about various virtues every leader should possess. One that stood out to me was humility. This virtue reminds us the importance of listening to others first especially when we take on new roles. With every new position, we will have our strengths and our weaknesses. However, by listening to others, we can learn how to improve ourselves and tackle our weaknesses.

We also took the time to recognize our 2018 Chapter Member of the Year, Nicholas Tsoi (Class of 2019). One of his nominees stated, “Nick has done a great job supporting our President Veronica and our chapter in continuing to uphold the mission of PLS. As Vice President, his work in organizing the application process was seamless. He used an innovative web-based voting platform to allow members who were not in Hilo to have a voice. Nicholas has contributed to PLS even before he was inducted as a member. He shared his knowledge of public speaking during the Leadership Seminar and was not afraid to speak up when he noticed things that needed to be improved. His dedication to PLS does not go unnoticed.”

Lastly, to finish up the ceremony, we wanted to congratulate our 2018 Alumni of the Year, Dr. Christopher Diaz, Pharm.D. (Class of 2016). His nomination reads, “Christopher has displayed leadership qualities in support of the profession of pharmacy by continuing to foster the growth of the next generation of pharmacists. He returned in Spring 2017 to help mentor us as new PLS members at the time, encouraging us to uphold the values of PLS. He was also willing to share his curriculum vitae with us to include in the CV workshop at our Fall Seminar to help further the growth of students who attended. Christopher is always willing to help us not only as a mentor, but also as a friend, despite being a busy PGY1 resident, and I believe that deserves to be recognized.” Although Dr. Diaz was busy in the rush of PGY2 residency interviews, he still managed to share a few encouraging words with the new members. We are grateful to have alumni who continue to dedicate themselves to our mission. Congratulations to the newly inducted Phi Lambda Sigma members of 2018!

Leadership skills play an important part of pharmacy education

By Shannon Trinh (Class of 2019)

In February, the Phi Lambda Sigma (PLS) Delta Lambda Chapter held a Student Involvement Mixer open to all students on campus. The purpose of the mixer was to allow student organizations and projects to showcase their available leadership positions in order to help encourage student interest in applying for these positions later in the semester. A total of eight student organizations and projects took part in the mixer, which began with each organization giving a brief introduction of what they do and their available leadership positions. Afterwards, all the organizations spread throughout the room at assigned stations with their respective informational poster boards and students had the chance to walk around, mingle, and ask questions. Our goal was to promote student interest in pursuing leadership positions during pharmacy school by providing a convenient opportunity for students to gather and learn more about their potential interests.

Since many leadership positions require applicants to write a letter of intent, PLS also held a Letter of Intent Workshop after the Student Involvement Mixer to help better prepare students for this process by sharing tips and examples on how to improve their letter of intent writing skills. We felt that the workshop would complement the mixer well and hope students were able to benefit from both leadership development events.
DKICP goes ‘down under’ to expand rotation opportunities at Blackmores Institute

By: Kelsy Kam and Katrina Kutter (Each from the Class of 2018)

The best way to describe this rotation experience with Blackmores Institute is honestly: life-changing. Working with the Institute has changed our perspective on natural medicines and how this area of health care can be incorporated into the daily lives of many. We even gained perspective on the differences between pharmacy practice and healthcare in Australia versus the United States. It was truly a joy to work with so many enthusiastic, knowledgeable, and caring individuals who all work towards a shared goal of creating a healthier world.

Blackmores Institute is the educational branch of a natural medicines company. It was established to support and drive an evidence-based approach to natural medicine. The goal of the Institute is to improve the quality of natural medicine by educating healthcare professionals, offering resources, and providing an advisory service. Another big portion of the Institute focuses on research and finding the best natural medicines to meet customer needs.

You may be wondering, why go all the way to Australia to learn about natural medicines? First, unlike in the United States, Australian dietary supplements are regulated and tested by the Therapeutic Goods Administration (TGA). The TGA is comparable to the United States Food and Drug Administration (FDA). Knowing that dietary supplements are not regulated in the United States, we wanted to gain insight into how the TGA regulates Australian dietary supplements. To top it off, Blackmores is known as Australia’s most trusted vitamin and supplement brand. Who better to learn from then the most trusted brand in Australia?

Over the course of our six-week rotation we were exposed to a variety of activities that broadened our knowledge of natural medicines and pharmacy practice in Australia. We worked on various research projects, learned about the regulatory process in Australia, received a naturopathic consultation, and spoke with pharmacists in Australia. These amazing activities were set up by our lovely preceptor, Pam Stone. She is the Educational Partnerships Director at the Institute. She, as well as Dr. Lesley Braun, were key to forming this collaborative partnership between DKICP and Blackmores Institute.

The best part about this rotation was learning what it felt like to work for an amazing company. We really cannot speak enough about how great Blackmores Institute really is. All of the employees are happy and helpful, and that definitely makes coming to work very enjoyable. The Institute really takes care of its employees with an in-house supplement store, healthy café, fitness gym, weekly tai chi, massage therapy, and beauty services. We feel extremely lucky to have been a part of the family for the short amount of time that we were there.

We truly feel that if you have the opportunity, or are the slightest bit curious about what this rotation can offer you, please take the leap to Australia. We know it is far, can be expensive, and may take you out of your comfort zone, but we guarantee that you will grow and stand out as a future pharmacist. It is opportunities like this that makes us so proud to attend the Daniel K. Inouye College of Pharmacy.

For more information and specifics about our visit to Blackmores Institute please visit our blog https://aussierotation2017.tumblr.com
Mentoring a priority to preceptor in West Hawai‘i

Melissa Bumgardner, Pharm.D. is the clinical pharmacist at West Hawai‘i Community Health Center (WHCHC), a position initially funded through the Pharm2Pharm grant initiated by the University of Hawai‘i at Hilo College of Pharmacy Center for Rural Health Science. The success of the pilot program prompted the center to fully fund the clinical pharmacist position in 2016. Dr. Bumgardner assumed the role in 2017. WHCHC is a Federally Qualified Health Center with six fully operating sites, serving approximately 15,000 patients in 2016.

Dr. Bumgardner earned both her Bachelor and Doctor of Pharmacy degrees from the University of Colorado Skaggs School of Pharmacy in 2000 and 2001 respectively. She managed a Walgreens Pharmacy for one year before continuing her education by becoming the first Community Pharmacy Practice Resident in the state of Colorado through a joint venture with Kroger and the University of Colorado. Following her residency, she went on to become one of the original faculty members the Duluth expansion of the University of Minnesota College of Pharmacy in 2003. Six years of Minnesota winters prompted a return to her husband’s Colorado roots and the start of a new adventure as the owner of an independent pharmacy in rural Colorado. Seven years and a few unexpected circumstances later found Dr. Bumgardner on the Big Island of Hawaii in her current position.

“I’m truly living the dream, so to speak, in the world of pharmacy,” says Bumgardner. “I had the great privilege of training with Linda Strand while I was at the University of Minnesota. She pioneered the concept of pharmaceutical care (now called Medication Therapy Management) over 20 year ago. The profession of pharmacy has been slowly migrating from one that focuses on medication distribution to a profession that is centered on the optimal management of medications. Opportunities to more fully utilize pharmacists’ clinical training are becoming more plentiful in the marketplace. The profession of pharmacy has been slowly migrating from one that focuses on medication distribution to a profession that is centered on the optimal management of medications. Opportunities to more fully utilize pharmacists’ clinical training are becoming more plentiful in the marketplace. Payment structures for retail pharmacies also are shifting from distribution-based payments to clinical outcome-based payments with incentives available to pharmacies that demonstrate improvements in certain clinical measures. Dr. Bumgardner believes strongly that the practice model being developed at WHCHC is one that can be sustainable and even profitable at other ambulatory care sites.

“As much as she enjoys her current practice, Dr. Bumgardner’s passion remains rooted in investing in the future of pharmacy. “My most rewarding position was when I was actively involved in training students at the University of Minnesota,” Bumgardner states. “Students bring a sense of wonder, excitement, and passion to the practice. They still remember why they chose this profession and inspire me to do the same. Precepting students in the clinical setting is like the best both worlds!” Bumgardner goes on to reflect that she still remembers the name of everyone who has significantly influenced her career; from the pharmacy technician who first recruited her to work at Walgreens in 1995 all the way to the pharmacist mentors she still calls for advice today. She says jokingly: “I could tell you all their names if you want to know them!”

All joking aside, Bumgardner continues, “The first student pharmacist who I claim as ‘mine’ came to me during my first year of ownership in 2010 from the University of Wyoming. Her original APPE had been cancelled and the experiential coordinator assigned her to my pharmacy only three days before her APPE was scheduled to begin. It is now 2018 and this student remains one of my closest friends. In fact, she is set to take over as pharmacy manager at the last pharmacy I worked at before moving to Hawai‘i. It is this kind of mentoring that I hope to be able to continue with students from the University of Hawai‘i at Hilo.”

Dr. Bumgardner cautions students to take advantage of every moment in their educational process and to make every effort to always exhibit exceptional professional behavior. “Pharmacy is a small world – think two or three degrees of separation. The relationships and contacts you make during your schooling will impact the rest of your career, whether good or bad, so make the most of every opportunity during these four years.”
Alumni need love, too

More than 60 DKICP student pharmacists who will some day be DKICP Alumni gathered to help personally sign thank you notes to alumni at a “I Love My DKICP Alumni” thank-a-thon on March 1. The event was part of an inaugural philanthropy education initiative the week of Feb. 26-March 2 held by the Department of Alumni Engagement at the University of Hawai‘i Foundation.

Within an hour’s time, the students signed a total of 600 heartfelt cards to DKICP alumni, donors and volunteers to thank them for paving the way for the future of DKICP. The Foundation provided pizza, dessert, hot chocolate and buttons.

“The event was an effort toward building early and lifelong engagement among our future alumni and a step toward enculturating philanthropy by building connections between current students and alumni,” said Nico Verissimo, Director of Alumni Engagement – Hawai‘i Island. “It was a great reminder of the fact that students are only here for a short while but they will be alumni forever.”

Verissimo said they hope the event will become an annual philanthropy education initiative.

NOTE TO ALUMNI:

Resuscitate that sense of camaraderie and class loyalty that you built at UH Hilo by submitting to Kawili La‘au Class Notes

Share what’s new with you, from professional life to expanding your family, from adventures at home to travels near and far while providing ways to connect and network. Send whatever you want people to know about you to Kawili La‘au editor, morrismm@hawaii.edu.
Nico Leilani Verissimo has been named a Champion of Pharmacy for Winter 2018.

As a newly promoted Senior Director of Community & Alumni Relations, Hawai‘i Island, Ms. Verissimo has worked with the University of Hawai‘i Foundation for more than 14 years. Although she and her teammates are responsible for building and sustaining engagement and relationships with nearly 300,000 alumni from all over the world through the UH Foundation Alumni Relations office, DKICP benefits from her expertise to support Colleges on Hawai‘i Island on the path to success in partnership with the Dean and the staff.

Along with Dean Carolyn Ma and DKICP Alumna and Assistant Professor Cherie Chu, Ms. Verissimo put together the highly successful DKICP 5-year Inaugural Class reunion in 2016 at Dave & Busters on Oahu. Other projects have included an Alumni Focus Group, taking the pulse of alumni with surveys, coordinating the “I LOVE DKICP Alumni Week” with DKICP’s Tracey Niimi from Student Services (see related story in this issue), featuring DKICP alumni profiles on the Foundation website at UHAlumni.org, planning for an alumni, student and faculty pau hana for the end of 2018 (HiloPharm18Midyear.eventbrite.com), and planning for the DKICP all-class reunion and building grand opening in Spring 2019.

Growing up in small plantation towns along the Hamakua coast, she is a first-generation college graduate who was inspired by a chance meeting with two people at a previous job who believed in her and helped fund her education.

“That powerful philanthropic gesture continues to fuel my passion to this day,” she recalled. “My favorite part was being able to discover a different side of me. When I hear stories from our alumni whose lives have been changed because of UH, I learn so much more about what it means to give back. Our alumni teach me that success isn’t just about what you accomplish in life, it’s about what you inspire others to do. I’m lucky to serve in a role where I’m surrounded by passionate, driven professionals and alumni who inspire others to give back by selflessly giving time and talent so others can do the same.”

Ms. Verissimo is an alumna of Kapi‘olani Community College and UH Manoa, where she received a bachelor’s degree in journalism with minors in public relations and sociology. She began work at the Alumni Office for the University of Hawai‘i System on O‘ahu, but came home to Hawai‘i Island when ‘Imiloa opened in 2006 to help build their membership & private fund development program. Eventually she made the logical move back to working with alumni by directing alumni engagement with the Foundation. With their support, she works with a central team of data, communications and marketing professionals who help empower all 10 campuses to reach out to alumni and stay connected to their alma mater.

“Students are here for a short time, but they will be part of our alumni family forever, so what we do today matters and it makes a difference,” she said.

With this award, we recognize Nico Leilani Verissimo’s unwavering support and guidance to the Daniel K. Inouye College of Pharmacy, and are grateful for her continued affiliation.
“Mana” is a Polynesian word that describes an origin of sacred force that embodies a spiritual quality. To have mana also suggests influence or energy. Chancellor Emerita Rose Tseng and former Director of University Relations Gerald De Mello were two of the very first people to infuse mana into the idea of a College of Pharmacy on Hawai‘i Island. They had the will and determination to invest the endless hours to educate the community and the legislature that this state deserved a pharmacy school that would help care for the health of our citizens with science, education and service.

It was incredibly fitting, therefore, that they were two of the first people to grace the halls of our not-quite-finished permanent building in our first “Hard Hat Tour.” To be joined by our current Interim Chancellor Marcia Sakai helped bridge the gap between our history and future. I was proud to share that moment with them and two of our current second-year students. Here’s to sharing more milestones to celebrate together!

Even though we finish up our 11th year in existence, our college continues to create inaugural events. Held in the same community venue as our fall DKICP Health Fair, this spring our first Research Day at Prince Kuhio Plaza showcased the college’s discoveries in both the laboratory and patient-care setting. The community came out in force to show their support. Even more exciting, our faculty, post-doctoral fellows, Ph.D. and Pharm.D. students were able to show their unique personalities and talk with interested keiki who came to the event, some specifically to seek out a science mentor or explore ideas for their own STEM projects. These interactions have encouraged us to forge ahead with building more opportunities for our youth interested in science and health care.

A different kind of exposure to our College was offered in various tours, as we opened our labs, clinical sites and classrooms to separate visits from students from Japan as well as high school students from Maui. Our student pharmacists also took the message of health to O‘ahu at a middle school health fair.

We also shine the light on the University of Hawai‘i Foundation, great partners who connect us to supporters who share our college’s vision of a heritage-place based program noted for their work in indigenous health, education, service and science. We’re happy to single out Senior Director of Community and Alumni Relation for Hawai‘i Island Nico Leilani Verissimo to be awarded the Spring Champion of Pharmacy. Her ideas and events help us to bridge our growing body of alumni who themselves describe their alma mater as venerable.

And mahalo to our current students who showed up in force to write their notes to our alumni and supporters, expressing their gratitude for paving the path of curriculum, student organizations, service projects and the continuing quest to erect our permanent building. The mana that our students, faculty and sta...