

One who mixes ingredients, drugs or medications: a pharmacist

Kāwili Lā'au

The Daniel K. Inouye College of Pharmacy at the University of Hawai'i at Hilo

Fall 2016 • Volume 9, Issue 1



UNIVERSITY
of HAWAII®
HILO

Progress!

Dean's Message



I am a pharmacist. It's my professional identity that began forming even before I was a student earning my Pharm.D. at UC San Francisco. When I was in high school, an older sister returned home to Hawai'i and I admirably watched her passion and commitment as she began her career as a pharmacist. This example was my first exposure to a profession that is viewed by the public at the highest level of integrity and trust. A profession that helps others in need and works with other health colleagues to better care for their patients. Amazingly, now decades after I donned my first white coat as a student, I believe even moreso in the purpose of my profession.

I am now a Dean. I believe the Pharm.D. students recognize our common bond, that I've been through the same things they're going through and understand the steep learning curve they face on a daily basis. I'm on a similar learning curve. Although my administrative duties may pull me away from the students, I am committed to not becoming a "distance dean." But it is with our students, faculty and staff in mind, that I am compelled to continue the work of advocacy for our school and my profession in my home state so that our 'ohana continue to benefit from the highest level of pharmaceutical care and research. My approach to this leadership position is the same as it has always been: open, direct communication with the goal to be fair and balanced while keeping a sense of humor in what can be often a serious, life and death profession.

In Hawaiian, 'he huliau' translates as 'turning point' and as I begin on this personal new path, I am appreciative of all the visionaries who worked tirelessly to begin this College with the vision to build a pharmacy school for our state. For those of us who had to leave our island home in order to gain the education to practice in this profession, this dream of building our own pharmacy school that would train our kama'aina keiki and welcome malihini (newcomers) students has come true. I am reminded of the Isaac Newton quote, "if I have seen further it is by standing on the shoulders of giants." My goal in this first Kawili La'au of my tenure as dean is to show the continuity of those who before me put sweat equity into the Daniel K. Inouye College of Pharmacy. We show this with the announcement of my appointment, with the blessing ceremony that serves as a demonstration of our deep respect for our host culture, and with proof of shovels hitting the ground as progress is being made on the construction of our permanent building. Our faculty continues to build international reputations while our students' work throughout the world continues to remind us why we're here.

Please enjoy our stories and let me know how we're doing. I wouldn't be here without you all.

Mahalo Nui Loa,

A handwritten signature in black ink that reads "Carolyn Ma". The signature is fluid and cursive, with a long horizontal flourish at the end.

Carolyn Ma
Dean



Kāwili Lā'au

Fall, 2016

Volume 9, Issue 1

Administration

Carolyn Ma

Dean

Supakit Wongwiwatthananutit

Interim Associate Dean
for Academic Affairs

Linda Connelly

Chair, Pharmaceutical
Sciences

Roy Goo

Chair, Pharmacy Practice

Karen Pellegrin

Director, Strategic Planning
and Continuing Education

Daryl Masanda

Director, Student Services

Lara Gomez

Director, Clinical Education

Kāwili Lā'au Editor

Maggie Morris

Graphic Production

UH Hilo Graphic Services

Published by the College of Pharmacy

University of Hawai'i at Hilo
200 W. Kāwili St. Hilo, Hawai'i 96720

Phone: 808-933-2909

Fax: 808-933-2974

<http://pharmacy.uhh.hawaii.edu>

Pharmacy@hawaii.edu

Kāwili Lā'au is the magazine for the only
College of Pharmacy in the Pacific region,
the University of Hawai'i at Hilo



UNIVERSITY of HAWAII®
HILO

Contents

Carolyn Ma is second dean of DKICP	2
Pharmaceutical Sciences, Pharmacy Practice gain new chairs	3
Welcome Back Ceremony combines intimacy with tradition	4
Alumni gather in Honolulu for reunion	6
Class Notes	7
Class of 2020, new PhD share students orientation	8
Shugeng Cao builds pharm sci lab	10
Thai visit solidifies connections	11
Pharmacists provide transistions of care services	12
Chad Kawakami leads unique training in Tropic Care	14
Elective gives students exposure to diverse academic option	16
Micah Glasgow becomes DKCIP's third PhD grad	19
<u>Regular Features</u>	
Student Organizations	20
Faculty Briefs	25
Special Package on 5 Minute Pharmacy	28
Rotation Report	28
Alumni/Preceptor Update	29
Champions Corner	30

On the Cover: New Department Chairs Roy Goo and Linda Connelly stand with Dean Carolyn Ma and Interim Associate Dean for Academic Affairs Supakit Wongwiwatthananutit at the newly cleared site of the permanent building. (Photo by Tracey Niimi)

BOR votes to appoint Carolyn Ma dean



Photo by Tracey Niimi

Carolyn Ma has been appointed the second dean of the Daniel K. Inouye College of Pharmacy after a vote by the University of Hawai'i Board of Regents September 22.

Dr. Ma has served as interim dean since Founding Dean John Pezzuto left UH Hilo in August 2015. UH Hilo Chancellor Donald Straney said he asked UH President David Lassner to appoint Dr. Ma as permanent dean because "important work will be required" to prepare for an accreditation visit in March 2017 as well as to "continue ongoing efforts to enhance recruitment."

"The Daniel K. Inouye College of Pharmacy plays a critical role for our campus, our communities and our state. I appreciate all that you do to create its vibrant success," the chancellor wrote in a letter to DKICP faculty and staff about the decision. "Dr. Ma has successfully guided the college in her year as interim dean. The college finances are secure and construction of a permanent facility is imminent."

Born and raised on O'ahu, she earned her bachelor's degree in biology from the University of Santa Clara in California, and her doctor in pharmacy (PharmD) degree from the University of California-San Francisco. She was awarded a residency in clinical pharmacy practice at Thomas Jefferson University Hospital's Department of Pharmacy in Philadelphia. She went on to become an advanced oncology resident in the Department of Pharmacy and Drug Information at the Hospital of the University of Pennsylvania.

Dean Ma's sister was a pharmacist, so she says she followed in her footsteps just as there was a revolution in clinical pharmacy to develop more of a team approach in health care. Her job experiences include building an oncology program as well as a new oncology unit and developing pain

management. It was when she was vice president for clinical programs of a startup company in Hong Kong where she realized she liked to build things.

She joined DKICP in 2007 as the clinical education coordinator and became the chair for pharmacy practice in 2009. She designed, constructed and implemented 4200-square feet of space in the Gold Bond building in Honolulu that includes seven cubicles, two offices, kitchen, one conference room, two polycom classroom systems and classroom seating for 40 students with audio-visual and polycom multiple screens.

With an extensive background in clinical and pharmaceutical administration, Dr. Ma is a registered pharmacist with a license in Hawai'i. Former Governor Neil Abercrombie appointed her Director for Oahu on the Hawai'i State Board of Pharmacy from 2011- 2015. She also is past president of the Hawai'i Pharmacists Association (HPhA), where she continues to serve on the board.

Chancellor Straney noted: "Dr. Ma has forged new educational relationships with the other health professional colleges in the state. Under her leadership, the college has welcomed new faculty members and a robust class of new Doctor of Pharmacy and Pharmacy Science students."

Meet the new department chairs



Linda Connelly

Dr. Linda Connelly has been elected chair of the Department of Pharmaceutical Sciences, effective Oct. 1. Dr. Connelly was born and educated in the UK but has spent much of her research career in the U.S. Her lab at DKICP, which has received funding from the Hawai'i Community Foundation and the National Institutes of Health (NIH), seeks to identify new drug targets for

inhibiting the progression of breast cancer.

She received her bachelor's degree in biochemistry at the University of Glasgow, where she graduated at the top of the class and was awarded the Davidson Prize for Biochemistry. Her undergraduate program included work placement experience at Merck, Sharp and Dohme Neuroscience Research Center in Harlow, UK. She went on to complete her Ph.D. in Molecular Pharmacology at the Wolfson Institute for Biomedical Research at University College London, UK.

Following completion of her Ph.D., Dr. Connelly was awarded an International Travelling Post-Doctoral Fellowship from the Wellcome Trust, which she completed at the University of California, Los Angeles and University College, London, UK. Dr Connelly completed further post-doctoral training at Vanderbilt University in Nashville, TN, and was later promoted to research instructor. In June 2009, she joined the Department of Pharmaceutical Sciences at UH Hilo where she is now an associate professor with tenure.

Dr. Connelly teaches in the Pre-Pharmacy, Pharm.D. and Ph.D. programs and has been elected by the Pharm.D. students to receive a teaching award on five separate occasions. Outside of class, Dr Connelly serves as faculty advisor to the Pre-Pharmacy Club and the Pharm.D. Class of 2018 Student Council.

Dr. Connelly has published research in the areas of inflammation and cancer and her work has been cited in more than 1,000 articles. Since establishing her laboratory at DKICP Dr. Connelly has mentored undergraduate, Ph.D. and Pharm.D. students as well as post-doctoral researchers. Her research team has presented at local and national conferences and has published in peer-reviewed scientific journals. Dr. Connelly enjoys the opportunity to introduce local elementary, middle and high school students to the field of biomedical research and has participated in Upward Bound Program presentations and has been host to visits to DKICP laboratories by the Na Pua No'eau Gifted and Talented Native Hawaiian Student Program

Dr. Connelly lives in Hilo with her husband Dr. Aaron Jacobs, also an associate professor at DKICP, and their two Cavalier King Charles Spaniels, Finlay and Poppy.



Roy Goo

Dr. Roy Goo has been named chair of the Department of Pharmacy Practice, effective Oct. 1. A seasoned clinical pharmacist with a background in military health care, Dr. Goo is based on the garden island of Kaua'i since joining DKICP in 2010. He has taken the lead in helping the Hawai'i Department of Health establish a statewide

Antimicrobial Stewardship Program (ASP) that creates hospital and health care facility protocols that will benefit anyone who enters a doctor's care in Hawai'i.

Born and raised on O'ahu, Dr. Goo went to high school at Punahou and went on to earned his Doctor of Pharmacy (Pharm.D.) degree at the Thomas J. Long College of Pharmacy and Health Sciences, University of Pacific in Stockton, CA. He completed a Pharmacy Practice Residency at Tripler Army Medical Center in Honolulu under the direction of Dr. Paige Shimamoto. He was hired on at Tripler as lead pharmacist in the Emergency Department/ Progressive Care Unit, and also worked as an inpatient pharmacist at Pali Momi Medical Center.

Dr. Goo is the senior clinical pharmacist on DKICP's rural health initiative Pharm2Pharm CMS Innovative Grant. As faculty preceptor at Wilcox Medical Center in Lihue, Dr. Goo has served on many committees, including for ASPs, pharmacy and therapeutics, and palliative care. He served on the planning committee for the Association for Professionals in Infection Control and Epidemiology/ Hawaii State Department of Health Conference as well as on the statewide antibiogram, Health care associated infections and sepsis advisory committees, and was on the Board of Directors (Health Systems) at the Hawai'i Pharmacists Association (HPhA) for two years. Among the many committees he has served on at UH Hilo are post-graduation education, operations, clinical education, bylaws and awards and scholarship committees.

A captain in the United States Army Reserve, some of the ways Dr. Goo serves the community are through membership on the Mayor's Advisory Committee on Drug Prevention and several appearances at educational wellness events throughout Hawai'i. He is the president of the Kapaia Foundation, a historical preservation society that provides scholarships as well as environmental conservation.

Dr. Goo lives with his wife, Mia, their son Titus and his two dogs in Waimea, Kaua'i.



Daryl Masanda (center), director of student services, is directed by Kahu Moses K. Crabbe (left) as Kupuna Herring Kalua assisted in the traditional Hawaiian blessing. (Photos by Tracey Niimi)

Welcome back to the future

Returning students joined DKICP faculty, staff and other key UH Hilo administrators in a Fall 2016 welcome ceremony and private blessing of the new building's construction site on August 21 and 22.

In Hawaiian culture, the land (aina) is considered sacred and it is tradition to perform a blessing to bring positive energy as well as protection to the construction workers. A representative for David Haraguchi from the Isemoto Contracting Company joined in the celebration for the next phase of DKICP's discovery and growth. Also attending were Vice Chancellor for Academic Affairs Matthew Platz and Marcia Sakai, vice chancellor for administrative affairs.

Speakers included Dean-designate Carolyn Ma as well as class presidents Athena Borhauer (Class of 2019) and Niaz Nafisi (Class of 2018).

Kahu Moses K. Crabbe performed the traditional Hawaiian ceremony. He began on Sunday August 21 with a blessing of the four corners of the property by directing four DKICP administrators to throw Hawaiian sea salt and sea water to cleanse the area. Participants included Kahu Moses, who blessed the first corner next to the modular parking lots for our aumakua and kupuna; Carolyn Ma blessed the second corner, at Nowelo and A'ohuhoku streets for the faculty and staff as well as UH Hilo Chancellor Donald Straney; Supakit Wongwiwatthananukit blessed the

third corner, at Nowelo and Komohana streets, for all students; and Gerald De Mello blessed the fourth site on Komohana Street, for the community.

Kahu Crabbe continued the next day in front of an audience of about 80 people (see brief bio on Kahu Crabbe below). Assisting in the protocol ceremony was Kupuna Herring Kalua. The ceremony honors the commonality between the traditional Hawaiian rituals and ancient customs with other universally held beliefs.

The UH Alumni Association-DKICP Chapter provided cake and juice following the blessing.



Snapshot of Kahu Moses K. Crabbe

Moses K. Crabbe began his journey to become Kumu Hula, Hālauolaokalani as well as a Cultural Practitioner and Hawaiian Resource Specialist at Kamehameha Schools-Kapālama Campus, where he was a graduate of the class of 1977. He says he first became interested in Hawaiian culture thanks to many teachers who made an impact on his initial journey toward learning chant and language, including Violet-Marie Rosehill, Winona Beamer, Nu'ulani Atkins, Kiolani Mitchell, Ho'oulu Cambra and Lurline Salvador. He received a bachelor's degree in Hawaiian studies from UH-Manoa in 1986, and worked at the City and County Parks and Recreation Hawaiiana Unit.

He explains: "I am a chanter and prayer warrior. I have to come to know through the kihei ceremony that prayer and traditional practices are important to blend together such

as what is experienced at the 'aha ho'omola ceremony for the graduation classes at Ke Kulu o Nawahiokalani 'opu'u."

During the beginning of the Department of Education's Hawaiian Language Immersion program, he moved to the Big Island and has blessed many Hilo classrooms and homes.

He continues: "I am, I believe, humbled by the respect for the teachers I have had in my lifetime who have guided me in the spiritual work that I do. My gratitude and aloha remains whole-heartedly with Mr. Gerald De Mello, Dr. Carolyn Ma and Dr. Supakit Wongwiwatthananutit."



A message from Senator Kai Kahele

'A'ohē pau ka 'ike i ka hālau ho'okahi -- One learns from many sources

My Dad, the Late Senator Gilbert Kahele believed wholeheartedly in the Daniel K. Inouye College of Pharmacy (DKICP). He never wavered in his efforts to seek funding for its permanent home. The capitol improvement initiative was always his highest priority in the Senate and he worked tirelessly in concert with his colleagues in the State House. He strived to make Hawai'i a better place for us all and his memory and legacy will live on in our hearts, minds and in the place we call HILO, "my home town." I'm confident that the achievements made to move forward in the completion of the DKICP building will benefit the Hawai'i island community, our State and the world.

Prior to 2007, Hawai'i was one of only a few states in the nation that did not provide pharmacy education. The construction of the DKICP building will allow local students to remain in Hawai'i and eventually help the State's need for more professionals in this field.

The college has admitted students



since 2007, initially sharing classrooms and laboratories with other departments at UH Hilo. A group of four temporary modular buildings resembling trailers allowed the college to have a presence on the UH Hilo campus since 2009, but faculty and staff were required to travel up to 7 miles away for lab and office space in three separate locations. The construction of the new 35,000-square foot building will include classrooms, teaching and research laboratories, offices and related spaces in accordance with the Accreditation Council of Pharmacy Education standards and guidelines. When complete, it will house UH Hilo's largest graduate program.

Since taking office in February, four significant events occurred during my tenure with the Senate concerning DKICP:

Complete the re-design phase and secure adequate funding;

Assigning a local Hawai'i Island construction company, Isemoto Contracting Company;

Starting the construction; and Board of Regents approves the appointment of Dean Carolyn Ma, second dean of the DKICP.

The construction project began last month with the clearing, grubbing and mass excavation. It will be followed by the building of underground utilities and footing which is estimated to be completed between February or March of 2017. The entire project is expected to be completed by May 2018. The Governor of the State of Hawai'i, David Y. Ige, has issued a proclamation recognizing October as American Pharmacists Month! American Pharmacists Month is an annual celebration that serves to promote pharmacists as medication experts that are an integral part of the health care team and are directly involved in patient care. Their job as patient-oriented healthcare practitioners, benefits patients by ensuring that the drugs they take are safe, affordable, effective, and tailored to their specific needs.

Let's move forward together!

Alum gather in Honolulu to reminisce, reconnect

DKICP organized the first Alumni Reunion Dinner on O'ahu on September 10. This milestone event brought DKICP alumni together for a social gathering and updates on what's new at their alma mater.

"We as faculty continue to be amazed and impressed by the tight-knit camaraderie developed among each class that has passed through pharmacy school at UH Hilo," said Dean Carolyn Ma, who helped pull together the event with Cherie Chu, an alum from the inaugural Class of 2011 as well as now a DKICP faculty member. "Once work and family gets underway after graduation, it becomes harder and harder to maintain that closeness, so we wanted to give them a boost."

The family friendly evening, which was coordinated by the University of Hawai'i Foundation, mixed a little business with pleasure by offering a continuing education course on "Pharmacy Crime and Corresponding Liability" presented by Jared Redullia. The course provided ACPE credits and helped the pharmacists identify common diversion schemes along with ways to handle and prevent it as well as identify common red flags for managing a pharmacist's corresponding liability.

The course was followed by a lively dinner at a popular Honolulu restaurant. Participants were able to reconnect with other alumni and exchange stories with one another. Many current and former faculty members were able to attend, including former Director of Community Relations Ron Taniguchi and Elwin Goo, who helped found the first College of Pharmacy alumni organization.

"It was nice to reconnect with some of my classmates and to network with other alumni who now work at other facilities in state and nationwide," said Dr. Chu, who is an assistant professor in the Department of Pharmacy Practice based on O'ahu.

Net proceeds of the event will benefit the opening of a fund supporting the UH Hilo Daniel K. Inouye College of Pharmacy Alumni & Student Event Enrichment Fund.

(Photos by Tyler Shortt, UH Foundation)



CLASS NOTES

The following are some updates from some of the people who came to the reunion. If you would like to add your own data to let people know where you are, please email morrismm@hawaii.edu.

Class of 2011

Rochelle Grieger

Employed: Fagen Pharmacy
Valparaiso, Indiana
Other Jobs Since Graduation: CVS
Pharmacy (2011 – March, 2016)
Favorite DKICP Memory: Walking to
class
Contact: rochellegrieger@gmail.com, 808-315-5294, 696 E 200
Street, Valparaiso IN 46383

Paul Narciso

Employed (since graduation):
Wilcox Medical Center, Kaua'i
Favorite DKICP Memory: The
journey and relationships he made
at the college of pharmacy.
Family Update: Two "beautiful"
daughters

Mandy Medina

Employed: Costco, Visalia, Ca
Ellen (Annie) Perreira
Employed (since graduation):
Safeway, Kahului, Mau'i
Family Update: built a house!

Nicole (Warner) Rodriguez

Employed: Walmart, in Indiana
Jobs Since Graduation: Manager,
Diabetes Educator, Sears Holding
Corporation
Favorite DKICP Memories: Dr
Pezzuto's luau and all the fun
dinners with classmates as well
as learning but at the same time
enjoying the beautiful culture.
She says: Our 'ohana would love
to move back to the Big Island in
upcoming years.

Family Update: has two "beautiful
girls" -- Jayda 3½ and Jazmine 1½

Jessica (Toyama) Watanabe

Employed (since graduation):
Walgreens, Wahiawa, Oah'u
Favorite DKICP Memory: The last
day of final exams, we videotaped
everyone as they walked out and
got to hear everyone's reflections of
the College.
Family Update: Married Blaine
Watanabe and has 10-month old
daughter, Taya.

Class of 2013

Chris Lai Hipp

Employed (since graduation):
Emergency Medicine Clinical
Pharmacist at the Queen's
Medical Center, West Oahu
Favorite DKICP Memory:
Graduation
Contact: [Chris Lai Hipp](mailto:claihipp@gmail.com),
claihipp@gmail.com, 808-561-
7488, 1452 Ala Hekili Place,
Honolulu, HI 96819

Cassie Kim

Employed: Schofield Barracks
/ Queens Medical Center West
Experiences since graduation:
Resident, Veteran's
Administration, Southern
Nevada
Contact: clkim63@gmail.com

Robert Veileux

Employed: Walmart Lihue HI
Jobs Since Graduation: Moved
to California after graduation
to work for Walmart as
grad intern, floater, staff
pharmacist, and opening a
brand new store as Manager
before moving back to Hawai'i
in 2015.

Favorite DKICP Memory: Being
with friends in Hilo
Family Update: Got engaged
to classmate Torrey Ikeda

Class of 2014

Maurina Bartlett

Employed since graduation:
Community Health Centers
Jaymie Kanda
Employed since graduation:
PHI Pharmacy (Saipan, MP)
Favorite DKICP Memories:
meeting husband, Josh Wise
(Class of 2014) and creating
life-long friendships
Family Update: Expecting first
baby in November

Class of 2015

Davis Hanai

Employed (since graduation): US Public Health
Service detailed at Bureau of Prisons, Federal
Medical Center Carswell in Fort Worth, TX
Favorite DKICP Memories: Hanging out with
classmates and being in Hilo. He would like to
"encourage any student interested in US Public
Health Service to reach out to me if they want to
learn more. Benefits are great (same as active duty
military) and there is a lot of room to move around
the country.

Family Update: Wife gave birth to second child on
July 31: Landon Kenji Hanai

Jin Pak

Employed since graduation: Longs Drugs, Waianae,
HI
Favorite DKICP Memories: Hanging out and
studying with friends. Student organization events.
Family Update: Newly engaged
Nicole Young
Employed: UHH PGY2 Critical Care Pharmacy
Resident at The Queens Medical Center
Favorite DKICP Memories: Research with Dr. Borris
and Dr. Supakit, and having Dr. Chang as faculty
advisor.

Class of 2016

Amy Anderson

Employed (since graduation): CVS Indianapolis, IN
Family Update: Having a baby boy in December

Nancy Le

Employed (since graduation): CVS Pharmacy,
Lancaster, CA
Favorite DKICP Memories: I really enjoyed
volunteering for APHA Operation Heart and
Operation Diabetes. It was such a great experience
to be able to meet people from the community
and make a difference in their lives. Thank you
DKICP for the great memories. I look forward to
seeing the new pharmacy building soon.
Family Update: Two babies: Faylynn is 3 and Ally is
1.

Tina Liu

Employed (since graduation): Longs Drugs

Eric Tsuji

Employed (since graduation): Walmart Pharmacy,
Pearl City, HI
Experience since graduation: Kaiser Permanente
Hawaii (PGY1 Pharmacy Resident), Honolulu, HI



Welcome Class of 2020 PharmD cohort, new PhD students

On Monday, August 15, 80 new student pharmacists and four new graduate students arrived on campus to begin a weeklong orientation. DKICP Student Ambassadors greeted the incoming first-year students in the PharmD program as they helped themselves to hot coffee and pastries donated by Hilo's Safeway pharmacy.

Throughout the week, students participated in sessions about the student handbook, professionalism, ExamSoft, the experiential program, student involvement opportunities and other topics that aimed to support a smooth transition while getting to know their classmates, faculty and the UH Hilo community.

On Thursday, August 18, each student was presented with a handmade ti-leaf lei upon entrance into the Performing

Arts Center at this year's New Student Convocation. Dr. Taupouri Tangaro opened the event and explained that the lei represented the University's educational commitment to each student. Vice Chancellor for Academic Affairs Matthew Platz along with administrators from each department also welcomed the students and their families to the UH Hilo community.

Later that evening, the students and their guests attended a welcome reception at Imiloa Astronomy Center graciously sponsored by CVS Health. Dr. Jaime Kon and Mr. Darren Ito represented CVS Health and addressed the newest pharmacy cohort.

The Class of 2020 is the tenth incoming class of pharmacy students at UH Hilo.



Successful Mentorship Program comes to aid of newcomers

By Faith Hicks (Class of 2019)

Clearing out, saying goodbye to family and friends, packing woes, new home, new beginnings and a change of pace are experiences that nearly every college student is all too familiar with. What follows is a seemingly, never ending orientation week, where students are introduced to faculty, staff, returning students and student/social organizations that reside on campus.

With so many “new” introductions and procedures, students sometimes feel overwhelmed, where feelings of anxiety and worry may take over. When you think about pharmacy school or any graduate school, the programs are said to be difficult and course loads are usually rigorous. For these reasons, each year the second year student council is responsible for putting on a Mentorship Program for the incoming class.

Here at the Daniel K Inouye College of pharmacy, we pride ourselves on family; we look to encourage and support one another to reach our ultimate goal of becoming Doctors of Pharmacy. The Mentorship Program is an informal welcome to the incoming first-year class that allows them to interact and talk with students from the second-year class. The benefits of the program is to encourage, support and assure the incoming students that they'll have a successful first semester, by allowing the second-year students to share study/organization tips and experiences from their first year. We hold this program at the end of orientation week. This year it was held by the Class of 2019 Student Council on August 21 from 2:30 to 5 p.m. at the University of Hawai'i Student Life Center (pool/patio side). The turnout was a success with the majority of students from the Class of 2020 and the Class of 2019 being present. There were many opportunities for interaction, from games to just having fun in the pool.

The icebreaker event was based on drug names. Mentees (generic drug) had to search for their Mentor (name brand drug). Once the Mentors/Mentees found one another and had a chance to introduce themselves, there was a “Name Game” implemented that would designate who ate first. Once nerves were settled and food was eaten, first-year student pharmacists were able to get the “scoop” on year one; they had the opportunity to ask any of the pressing questions like “how are the professors?” and/or “how do you balance school and work life?”

The feedback that was received from the event proved that the program was successful and is needed. Many of the incoming students expressed a sense of gratitude. They emphasized how they appreciated hearing about the personal

experiences of the second-year student pharmacists. One student was quoted by saying “I loved how the P2 students opened up and made themselves available to us. They took the time to talk, interact with us, and answer any questions we had.” Another student mentioned, “It was great hearing many of the P2 students emphasize that they were in our shoes just one year ago. They were super supportive.”

Our success is infinite when we take the time to build one another up, support and offer encouragement. In pharmacy school, we are here to reach the same goal. Why not do it together, as a team, as a unit, as one 'ohana!



Research in Shugeng Cao's lab churns out data

The newest faculty member in the Department of Pharmaceutical Sciences, Dr. Shugeng Cao has hit the ground running since he began his position as associate professor later last year (2015). He has already amassed a lab that includes five international researchers and two DKICP graduate/undergraduate students who he anticipates will help him as he carries out groundbreaking research on biologically active compounds from natural sources.

This distinguished group includes postdocs Dr. Chun-Shun Li (Chinese Academy of Sciences, China), and Dr. You-Sheng Cai (Wuhan University, China); visiting scholar Dr. Peng Huang (Anhui University of Chinese Medicine, China); visiting international graduate students Mr. Seyed Mostafa Goldansaz

National University of Singapore and went on to be awarded postdoctoral fellowships at Virginia Polytechnic Institute and State University as well as Harvard Medical School.

At DKICP, he teaches medicinal chemistry in "Integrated Therapeutics I-IV," "Drug Actions I & II," "Natural Product Structure Elucidation" and the elective "Drugs from the Ocean and Microorganisms" (Fall 2017), while maintaining an active publishing schedule. He was a co-author in an article published in the journal *Cell*, which widely recognized as one of the top peer-reviewed scientific journals in the world. The article, entitled "Paracrine Induction of HIF by Glutamate in Breast Cancer: EglN1 Senses Cysteine" (*Cell*. 2016 Jun 30;166(1):126-39) included co-authors from the Department of Medical Oncology at the Dana-Farber Cancer Institute, Brigham and Women's Hospital in Boston and Harvard Medical School, as well as from Johns Hopkins Medicine Department of Pathology in Baltimore, MD.

Most recently, research at DKICP generated an article entitled "Hawai'i Natural

Compounds are Promising to Reduce Ovarian Cancer Deaths" (*Cancer Biol. Ther.* 2016 Jul 2;17(7):709-12) published in *Cancer Biology and Therapy* in May 2016 and also on article entitled "Meroterpenoids with anti-proliferative activity from a Hawai'i-Plant Associated Fungus *Peyronella coffeae-arabicae* FT238" (*Org Lett.* 2016 May 20;18(10):2335-8.) that was published

in the American Chemical Society's publication *Organic Letters*.

The following interview explains some of the activities in the Cao labs at DKICP:

Q: What are some examples of the work you're doing in the lab?

A: We have isolated more than 2000 fungal strains from Hawai'i plants, terrestrial and marine samples around the Hawai'i islands. My lab also studies herbal medicines, including Traditional Asian Medicines and Folk Medicines in Hawai'i and other Pacific islands.

Q: Why is it important?

A: Fungi, especially endophytic fungi in Hawai'i have not been studied much. Our study in the past three years indicated that endophytic fungi from Hawai'i plants are rich in novel natural products. Some natural products showed potent biological activity, for example p53 activation and STAT3 inhibition.

Traditional medicines in Asia and Hawai'i have been used for a long time, but the active compounds and the mechanism(s) of action (MOA) in many herbal medicines are unknown. Hence it is important to identify the active compounds and study their MOAs.

Q: Where will your research be applicable?

A: We are looking for active compounds against cancer and pathogenic organisms, which might lead to the discovery of new therapeutics.

Q: Please give some examples of where you have received funding.

A: My lab has received funds from NCCIH/NIH, Hawai'i Community



From left: You-Sheng Cai, Chunshun Li, Peng Huang, Shugeng Cao, KH Ahammad Uz. Photos by Cara Suefujii

(Sari University of Agriculture Sciences & Natural Resources, Iran) and Mr. Sun-De Xu (Zhejiang University, China); graduate student Mr. KH Ahammad Uz Zaman (Daffodil International University, Bangladesh); and undergraduate student Ms Jasmine Hicking (a sophomore student at the Biology Department, University of Hawai'i at Hilo)

Dr. Cao earned his Ph.D. at the

Foundation (HCF), and Seed-Grants from UH Hilo and UH Cancer Center. We also received fund from "Gordon and Betty Moore Foundation" (PI: Michael Hadfield) to study bacterium *C. lytica* that can induce the settlement and metamorphosis of the worm *H. elegans*. Most recently, we received funding from the Jing Brand Research Institute

in China to determine the minor compounds in Jing Brand products made from Traditional Chinese Medicine at the nanogram level.

Q: What do you plan to look at in the future?

A: My lab will continue to study herbal medicines and microorganisms (including endophytic fungi and

bacteria) for anti-cancer and anti-pathogenic agents. We will also continue our collaboration with Dr. Michael Hadfield (a PI at UH Manoa) and Dr. Rosie Alegado (a PI at C-MORE at UH Manoa) to study bacteria that play important roles in our environment.

Global pharmacy educators meet in Thailand

UH Hilo advanced relations with pharmacy educators in Thailand when the two top administrators from DKICP attended the 2016 U.S.-Thai Consortium for Pharmacy Education conference in late spring. The conference offered an opportunity for faculty, staff, and students from colleges of pharmacy across Thailand and the U.S. to reflect on Consortium's past achievements and plan future initiatives.

Professor and Interim Associate Dean for Academic Affairs Supakit Wongwiwatthananukit traveled to Thailand along with Dr. Carolyn Ma, who was interim dean at the time of the visit that included tours of multiple cities in Thailand. They also met with the four deans and some preceptors from Thai schools of pharmacy where DKICP has executed Memorandums of Understandings (MOUs). Attendees came from other prestigious colleges of pharmacy such as University of Minnesota, University of Texas, Purdue University, University of Utah, University of Arizona, West Virginia University, Auburn University, University of Kentucky, Chulalongkorn University, Mahidol University, Rangsit University, Khon Kaen University and Silpakorn University.

The main conference was held from June 1-3 in the city of Khon Kaen, which is about 280 miles north-northeast of Bangkok. The scientific program included two preconference symposiums: 1) from May 30-31 at Chulalongkorn

University in Bangkok and 2) from May 31-June 1 at Khon Kaen University. US-Thai consortium excursions throughout the country were held from June 4-6.

The comprehensive program was related to global pharmacy education, updates and trends in pharmacy education, and postgraduate residency education and training. The roster included experienced speakers and a number of invited talks from U.S. and Thai schools of pharmacy, including Dean Ma. The title of her address was "Establishment and implementation of inter-professional education, U.S. experience."

Also pharmacy researchers from both U.S. and Thailand presented research from more than fifty papers from their research collaboration projects, practice and innovation collaborations and faculty and preceptor development programs.



Attendees at the 2016 US-Thai Consortium for Pharmacy Education conference



From left: Associate Dean Dr. Suchada Jongrungruangchok, Rangsit University; Professor Dr. Pornsak Sriamornsak, Silpakorn University; Dean Dr. Jurairat Nunthanid, Silpakorn University; Interim Dean Dr. Carolyn Ma; Professor and Interim Associate Dean Dr. Supakit Wongwiwatthananukit, DKICP; Dr. Sansanee Pongwai, Rangsit University, and Dr. Nalinee Pradubayat, Rangsit University.

developments in many aspects of clinical pharmacy and related fields. The last one was held in 2014 at the University of Maryland, where it was announced that DKICP was included in the consortium.

The consortium was established in May 1994 when nine schools of pharmacy from the United States and the American Association Colleges of Pharmacy (AACP) signed a Memorandum of Agreement with eight schools of pharmacy in Thailand and the Committee for Pharmacy Manpower Development of the Thailand Ministry of University Affairs. Currently, there are 18 Thai and 16 U.S. schools of pharmacy in the consortium.

The conference, held biannually, serves as a platform for pharmacy educators from both U.S. and Thailand to share their



Staff from Khon Kaen University greeted Drs. Ma and Wongwiwatthananukit at the Khon Kaen airport.

Examining the value of transitional care

with Dr. Elizabeth Ackerman

Assistant Professor, Department of Pharmacy Practice

Q: What is “Transitions of Care”?

A: Transitions of care is a term used to describe the facilitation of health care services to a patient as he or she moves from one healthcare setting to another. Other terms used to describe this process include transitional care management



and care transitions. Some examples of transitioning from one healthcare setting to another include when a patient is discharged from an inpatient hospital admission back to their home or to a skilled nursing facility, or when a patient who lives in a long-term care facility is admitted to the hospital for an acute illness, or when a patient's primary care provider refers the patient to a specialty care provider in a different outpatient clinic. Basically, anytime the patient's care is managed by more than one healthcare provider, a care transition must take place.

Q: Why is focusing Transitions of Care important?

A: This transitional period in health care has been linked to an increased number of hospital readmissions stemming from miscommunication, duplications of labs and tests, medication errors, inconsistent monitoring, post-procedure complications and delays in follow up. In 2009, an analysis published in the *New England Journal of Medicine* revealed that almost one-fifth (19.6%) of

Medicare patients who were discharged from a hospital were re-admitted within 30 days and approximately one-third (34%) of patients were re-admitted within 90 days. The estimated economic burden of the unplanned hospitalizations was \$17.4 billion. The analysis identified

that the care required to prevent readmissions includes close coordination between health care providers in the hospitals and those in the community.

Nearly two-thirds (66%) of adverse events resulting in a hospital readmissions are drug related. This is due to several contributing factors, including multiple changes to patients' medication regimens, incorrect or incomplete medication reconciliation during the time of admission and/or prior to discharge, inadequate patient education on medication changes and poor patient understanding of medication changes, indications and administration.

In 2010, the Patient Protection and Affordable Care Act (PPACA), commonly referred to as the Affordable Care Act (ACA) was passed. One section of the ACA, titled the “Hospital Readmissions Reduction Program” (Sec 3025), required the Centers for Medicare & Medicaid Services (CMS) to reduce reimbursement payments to hospitals with “excess readmission”.

In 2013, in response to

these increased readmissions and the requirements set forth by the ACA, two new current procedural terminology (CPT) codes (99495 and 99496) for transitional care management (TCM) were added to the physician and non-physician practitioner fee schedule. These codes could be applied to face-to-face and non-face-to-face patient visits for patients who are being discharged from the hospital, a skilled nursing facility or a community “partial” hospitalization, such as a mental health and substance abuse rehabilitation center.

Services provided under the new CPT codes are not allowed to be submitted for billing purposes until 30 days after the patient's admission. The intent of these new codes was to offer reimbursement incentive to provide improved post-discharge care in hopes that this would result in decreased readmissions and improved patient quality of life.

Q: How do Transitions of Care models work?

A: Transitions of care models can be designed to fit the needs and work flow of individual healthcare systems. Due to this, transitions of care models will be structured differently based on the type of healthcare setting in which they are implemented, but each service will include a multidisciplinary health care team approach and a patient centered focus. Members of a transitions care team include, but are not limited to, a physician, nurse, social work

and/or case manager, clinic liaison, medical assistant and pharmacist.

A large part of providing transitions of care services involves focusing on the patient's medication changes over the course of a hospital stay, then subsequent discharge back into the outpatient setting. From the medication perspective, it is very important to know what the patient was taking prior to admission, what medications were given during the hospitalization and which medications are intended to be continued upon discharge. Not only is it important to have an accurate and up-to-date medication list upon discharge, it is just as important that these medications are assessed for clinical appropriateness to match the patient's conditions. This process of reviewing the medication list for changes as well as clinical appropriateness is called medication reconciliation.

Another equally important component of transitions of care models includes reassessing the patient's condition, for which they were originally admitted, as close as possible to the date of discharge to see if the patient is recovering as expected. This proactive step can help identify any lingering issues and allow the opportunity for additional care to be provided in order to prevent the patient from being readmitted.

Finally, oftentimes, the success of a patient to recover



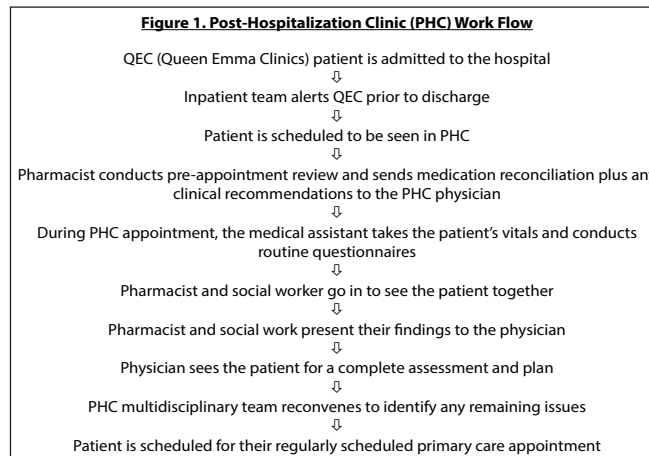
Select members of the Post-Hospitalization Clinic (PHC) team at Queen Emma Clinics (QEC) include (from left): Student pharmacists Deandra Viluan and Loc Ngo (Both from Class of 2017), Lori Bianchin (licensed clinical social worker), Elizabeth Ackerman (clinical pharmacist, DKICP assistant professor), Kathleen Butay (medical assistant), Kahula Vargas (medical assistant), Donna Sheather (licensed clinical social worker), Dr. Fritzie Igno (physician), Dr. Travis Watai (physician), Heidi Ishii (licensed clinical social worker), Dr. Tui Lauilefue (physician), Mary Ann Magdirila (medical assistant), Dr. Bradley Chun (physician).

as expected and avoid being readmitted largely depends on social factors, such as income, health insurance, prescription drug coverage, family support, as well as transportation to the pharmacy and follow-up appointments. These issues are addressed during the transitions of care process.

Q: How does the Transitions of Care clinic work at Queen Emma Clinics at The Queen's Medical Center?

A: Queen Emma Clinics (QEC) is an outpatient clinic located on the main campus of The Queen's Medical Center (QMC) in downtown Honolulu. QEC serves as both a primary care and specialty care clinic, which also offers women's health and pediatric services. The transitions of care service at QEC, which is called "Post-Hospitalization Clinic" or PHC, was implemented in May 2016. The core PHC team who conducts each visit with the patient consists of a medical assistant, social worker, pharmacist and physician. Additional individuals involved in the care linkage, triaging and scheduling of the patient include a QEC clinic liaison, a QEC nurse and inpatient medical team members. The QEC PHC workflow is outlined in Figure

1. Some members of the PHC team at QEC are pictured in Image 1.



Q: What is the role of the pharmacist on the Post-Hospitalization Clinic team?

A: My role as the pharmacist on the PHC team is broken down into two key components: the pre-appointment medication review and participation in the PHC visit at QEC. During the pre-appointment review, I review the patient's medical chart in order to better understand the patient's medication history and how his/her medications have changed over the course of the hospital admission. A completed medication reconciliation generates an updated medication list and also provides clinical recommendations on safety and efficacy measures that are related to the patient's

medications. Additionally, I contact the patient (as well as their community dispensing pharmacy) over the phone to confirm the medication list and educate the patient on the important medication changes that have taken place. If any medication errors or misunderstandings have occurred, they are often identified during the pre-appointment review. After completing this review, I type a clinical note with my findings and

the patient needs refills on any medications and enter the refills for the physician to sign. Then, once the social worker completes their portion of the interview, we report our findings to the physician, who then goes in to see the patient.

After the physician has seen the patient, I occasionally have to enter any new medication orders or help to schedule the patient's visit for follow up pharmacy appointments or lab orders.

Q: How do DKICP student pharmacists fit into this new clinic service?

A: The timing of the initiation of the PHC clinic service at QEC lined up with the first APPE (Advanced Pharmacy Practice Experience) rotation block for the 2016-2017 academic year. Therefore, the DKICP students completing their ambulatory care rotation at QEC were included into the PHC work flow as the PHC service was being created with oversight from the DKICP pharmacy practice faculty in residence at QEC. The student pharmacists function in the same role and complete the same tasks as the pharmacist on the PHC team. During the pre-appointment review, students gain experience navigating through the electronic medical record in order to develop a comprehensive understanding of the patient's medication history. Then they are in charge of drafting the clinical note which includes an updated medication reconciliation list as well as their clinical recommendations for each of the patient's disease states that involve medication

recommendations and send it to the PHC physician scheduled for the day of the patient's appointment.

The second component of the pharmacist role on the PHC team is participating in the PHC appointment. After the medical assistant takes the patient into the exam room, the social worker and I go in to see the patient. If I have already spoken to the patient over the phone during the pre-appointment review, I will quickly confirm the patient's medication list and update it in the computer. If I was not able to reach the patient ahead of time, this portion may take a bit longer. Important counseling points are reinforced. The last piece of my role during the appointment is to assess if

therapy. The students present their findings and recommendations to the pharmacist/preceptor, which allows time for topic discussions on disease states. Then, during the actual PHC appointment, the students complete the medication list confirmation, medication counseling and assessment of

needed prescription refills.

Thus far, four DKICP student pharmacists have participated on the PHC team at QEC. "Working with the entire healthcare team at Queen Emma Clinics was such a great experience – educationally, personally and professionally!" says Deandra Viluan, (Class of 2017). "I

really appreciate the clinic's team dynamic because I believe this is what leads to quality patient care. The team created an environment where I felt comfortable to learn as a student." Loc Ngo (Class of 2017) also completed the rotation and shared that "through this rotation, [I] have gained a

better understanding of transitional care, as well as an appreciation for the role of the pharmacist in this setting. My experience at the clinic has also allowed me to recognize the value of interprofessional collaboration intertwined with quality patient care."

DKICP students participate in Department of Defense's innovative readiness training: Tropic Care 2016

By Chad Kawakami

Assistant Professor, Department of Pharmacy Practice

Nine DKICP student pharmacists participated in Tropic Care 2016 where they assisted the U.S. Army Reserve pharmacists in operating a pharmacy under field conditions.

Tropic Care is one of many Innovative Readiness Training (IRT) missions across the United States that provide real-world training opportunities for service members and their units. IRT prepares service members to execute their wartime missions while supporting the needs of America's underserved communities.

Tropic Care 2016 was held on Hawai'i Island from May 31 through June 12. It was a joint effort with the Department of Defense, the state Department of Health, and the County of Hawai'i.

The 1984th United States Army Hospital – Pacific (USAH-P) was the lead element providing the planning, coordination, and execution of Tropic Care. Tropic Care was conducted at Ocean View Community Center, Ka'u High and Pahala Elementary School, and Kea'au High School.

Medications and medical supplies were shipped from Ft. Dix, New Jersey and loaded on to an Air Force C130 aircraft. The shipment arrived a week before the mission and was unloaded at Hilo International Airport. The medical supplies were taken to the various clinic sites for set up. Services rendered at the field medical clinic included, dental, optometry, medical, audiology, and pharmacy. I was involved in the planning and execution

process ensuring the medication formulary was adequate for the expected patient population. I worked with the state Department of Health and DKICP to integrate pharmacy students in Tropic Care.

Pharmacy students gained valuable hands-on experience in operating a military field pharmacy by assisting me along with Army Reserve Pharmacist Major Brainard Ordonez, Sergeant First Class Valerie Venus (Pharmacy

Technician). Operating a field pharmacy meant having to dispense prescriptions without the use of a pharmacy computer or labeling system. Prescriptions were manually entered into a spreadsheet for tracking purposes. All prescription labels were hand written.

Pharmacy students assisted prescription intake, filling, checking, and pickup. All patients were counseled on their medications. At the end of the mission, pharmacy filled over 750 prescriptions with over 430 patient uniques. Of the medications dispensed

42% were analgesics and 11% were antibiotics. Our dental provides saw on average over 150 patients per day with multiple tooth extractions that led to increased need for analgesics and antibiotics.

Many of the student pharmacists volunteered for Tropic Care because they had an interest in the military or a desire to help the underserved population. Ciarra Butts (Class of 2018)



Tropic Care team: (From left) Dr. Chad Kawakami, Megan Calderwood, Kim Roseman, Sergeant First Class Valerie Venus, Ciara Butts, Lynnette Tran, Kimberly Wu, and Major Brainard Ordonez

stated, "I saw this as a great volunteer opportunity to get involved in. I like that it reaches out to the underserved population. This experience has made me see first hand one of the many ways the military serves." Kris Yoo (Class 2018) added, "I have an interest for the military and one of its draws is the ability to practice in various locations including other countries. I also like how there are added benefits for family, loan repayment, and retirement benefits."

In addition to seeing how a military humanitarian mission works, students also gained exposure to how pharmacist can serve in the military. Many students have the perception that serving in the military means long ruck marches, firing weapons, kicking down doors, and constantly getting yelled at. Kimberly Wu (Class of 2018) stated, "My perception of the army before Tropic Care 2016 was mostly of active duty soldiers and personnel being deployed to various areas. I heard of the Army Reserve, but I didn't realize there was a medical presence."

After Tropic Care students realized that Army Medicine is not that different from what they are used to. Athena Borhauer (Class of 2019) stated, "After participating in Tropic Care, it opened my eyes to how symbiotic the army and surrounding communities are with each other." This was Megan Calderwood's (Class 2017) first real exposure to the army. She said, "I was immediately impressed by the quality and efficiency of care that was provided free of charge or a rural community without access to care. After Tropic Care I felt more connected to the army. I admired the skill, respect, and teamwork that went into the exercise."

In the end, students were able to put all of their skills together to provide pharmaceutical care in a rural field environment. Tropic Care provided pharmacy students with a unique opportunity to hone their distribution and patient counseling skills. This mission required students to counsel patients who do not speak English and who have limited formal education.

All of the students agreed that their experience in Tropic Care was beneficial. Kimberly Wu stated, "My experience with Tropic Care 2016 consisted of doing patient intake, filling prescriptions, checking prescriptions, and counseling patients on their medication. I learned that the pharmacy during a medical mission was similar to an outpatient pharmacy minus insurance issues and with a more limited formulary. I learned a lot more about the military, especially the army and the Army Reserve by talking to various officers and enlisted personnel. I was told about various benefits to joining as well as various career pathways I could take."

Participation in Tropic Care required a state application and an application by the 1984th USAH-P. It is anticipated that the 1984th USAH-P will participate and lead Tropic Care again in 2018.



Tropic Care students: (From left) Ciara Butts, Kris Yoo, and Kimberly Wu



Dr. Chad Kawakami (standing) with student pharmacists (from left) Ciara Butts and Kimberly Wu



Dr. Kawakami (left) with Athena Borhauer



New rotation focuses on understanding culturally diverse populations, rural health care needs

By Drs. Wes Sumida and Deborah Taira
Department of Pharmacy Practice

Hawai'i is unique in that there is no majority racial or ethnic group. Rather, Hawai'i is home to a diverse mix of people from many cultures and backgrounds. Moreover, due to the spread of the population across a number of mountainous islands, access to care in more rural areas is often a challenge with pockets of underserved populations.

In order to allow fourth-year students to experience some of the unique aspects of care that the islands have to offer, DKCIP faculty members Drs. Deborah Taira and Wesley Sumida offered an elective APPE rotation focused on understanding culturally diverse populations and advancing scholarly activity, with its inaugural students Ronnijean Delenia and Hannah Shin (both from the Class of 2017) this past summer.

Prior to starting this rotation, both students shared their reasons for pursuing this elective. Here are portions of their writings:

"Coming from California, I have always been immersed in many cultures and enjoy learning about the unique characteristics of each one. While mostly exciting, a challenge lies in adapting to and interpreting the various communities I serve. Specifically while working in a retail pharmacy setting, I continuously experienced the need for cultural competency to maximize patient care. This concept has only been further emphasized throughout my didactic experience at the DKCIP throughout the past two and a half years, and I hope to continue to build on this base." Hannah Shin

"As a Native Hawaiian and a current recipient of the Native Hawaiian Health Scholarship, Hawaiian health disparities are very important to me. My ultimate goal as a pharmacist is to be directly involved in the perpetuation of healthy lifestyles for Hawai'i communities, especially the Native Hawaiian population. I want to provide understanding, empathy, and

respect for all of my patients. Expanding my knowledge on health disparities throughout Hawai'i will undoubtedly strengthen my skills to provide superior care for Hawai'i's people."

Ronnijean Delenia

Rather than stay at one clinic or ambulatory care setting, students engaged in a number of community-based activities, including:

- Visiting the Wai'anae Coast Comprehensive Health Center, where they met with practitioners and traditional Native Hawaiian healers.
- Assisting with lomilomi (traditional Hawai'ian therapeutic massage) health screening at Papakolea, a community of 350 Native Hawaiian families.
- Participating in a cultural immersion program with medical students at Ka'ala Farms.
- Visiting Kalaupapa for a weekend to learn about the relation and treatment of people with Hansen's



Disease, with Dr. Kalani Brady, from the John A. Burns School of Medicine (JABSOM) at UH Manoa, personal physician to the remaining patients there.

- Attending various lectures related to Native Hawaiian health given by community leaders and JABSOM faculty.
- Assisting in upkeep of the Native Hawaiʻian Healing Garden (Mala) at JABSOM, where the Department Native Hawaiʻian Health grows Native Hawaiian traditional healing plants, including kukui, popolo, `awa and `ohi`a lehua. The students also made dye and hano (cold remedy) using plants from the mala.

In addition, the students went to the Public Access Room at the State capitol to research a current policy issue. Ronnijean researched requirements of successors of Hawaiian Homes. This topic hit home for her because her great-grandmother was waitlisted for all of her adult life and passed away before ever getting a home. Hannah researched death with dignity legislation in Hawaiʻi. Both students also researched and wrote an essay on the relationship between socioeconomic status and health.

Finally, both students conducted independent research projects using existing data and presented their findings at the Department of Native

Hawaiian Health Summer Research Intern Symposium in August of 2016.

In describing her experience, Hannah Shin said,

“This special block 2 elective is unique to our school and Hawaiʻi and an incredible opportunity for the DKICP fourth-year students. I gained a deeper appreciation for incorporating diversity in our therapeutic approach and comprehension of research. Under Dr. Taira’s guidance, I researched the pattern of opioid use in Medicare patients. Under Dr. Sumida’s guidance, I stayed up to date with the current ambulatory care topics all the while experiencing, first-hand, Hawaiʻi’s many layers of history and culture. I wish all students from our program could experience this rotation and am grateful for the once in a lifetime opportunity.”

Ronnijean Delenia echoed these sentiments, saying:

“It was a privilege participating in the Health Disparities and Policy elective during my final year of Pharmacy School. It was an enriching experience that expanded my knowledge of Hawaiʻi’s culture and history. From exploring Kalaupapa and visiting the final resting grounds of my great-great grandfather, to working with lomilomi practitioners in Papakōlea, learning from Kahuna at Waianae Coast Comprehensive Health Center, tending to and making lāʻau lapaʻau in JABSOM’s māla, and working in the loʻi fields of Waiʻanae; these were amazing opportunities that I will always treasure. I am extremely grateful to Dr. Taira, Dr. Sumida and the different mentors Hannah and I made over the course of this elective. They have undoubtedly instilled in us important values and knowledge that will allow us to be great pharmacists.”





Students take part in COPD education on O'ahu

Fourth-year students (from left) Nadine So, Kim Roseman, and Alexandria McHugh participated along with faculty member Wes Sumida from the Department of Pharmacy Practice at the 10th Annual Chronic Obstructive Pulmonary Disease (COPD) Education Day on Saturday, September 17. The Hawai'i COPD Coalition sponsored the event, which was at the Queen's Conference Center on O'ahu. DKICP offered services including inhaler education and medication reviews.

Students get hands-on experience with blood glucose meter

Jasmine Wang (right), a customer development representative from Johnson and Johnson, talked to student pharmacists in Dr. Forrest Batz's (left) class about about the importance of patients with diabetes in retail pharmacy and the impact of insurance on diabetes care products in a presentation to student pharmacists on DKICP campus in August.

She brought meters and supplies for students to gain hands-on experience with J&J's OneTouch VerioFlex home blood glucose meter. On behalf of J&J, Jasmine recently donated OneTouch Verio glucometers and testing supplies for all Class of 2019 students to be able to check their blood sugars twice daily for a week during the Spring 2017 PHPP 504 IPPE Living with Diabetes activity.



PhD grad combines industrial experience with drug design and delivery

Micah Glasgow became the third student to earn his PhD in Pharmaceutical Sciences from DKICP after successfully defending his dissertation August 5.

His research is entitled "Development and evaluation of polymeric hybrid α difluoromethylornithine (DFMO) and etoposide loaded nanocarriers for the treatment of neuroblastoma." His major professors were Drs. Mahavir Chougule and Ken Morris.

Born and raised in Hilo, Glasgow earned a bachelor of arts degree in cell and molecular biology at UH Hilo before becoming one of the inaugural PhD students in pharmaceutical sciences. In DKICP labs, he researched ways to target the delivery of drugs directly to tumors while sparing normal cells.

Glasgow has expertise in the pharmaceutical sciences field with an emphasis on design, action, delivery and disposition of drugs using nano formulations and drug crystalization.. He has more than three years of industrial experience through the National Science Foundation – Engineering Research Center on Structured Organic Particulate Solids (NSF-ERC-SOPS), a joint venture



Micah Glasgow had opportunities to work with visiting scholar Dr. Rajesh Dave (center) from the New Jersey Institute of Technology while working in Dr. Ken Morris' lab.

between Bristol-Myers Squibb, Merck, Eli Lilly, Glaxo-Smith-Kline, Purdue University, New Jersey Institute of Technology and Rutgers University.

He says: "Dr. Ken Morris was, and continues to be, my biggest influence and role-model throughout my Ph.D. tenure along with Dr. Dana Lynn Ko'omoa-Lange. Both provided valuable insight to my dissertation project and I am forever grateful for their dedicated time and sacrifice during the completion of my project."



Dr. Dana Koomoa-Lange (left) in the lab with Micah Glasgow (Photo by Laura Espana Serrano)



Photo by Alohi Glasgow



Residents complete program

(From left) Drs. Laurie Uehara, Lauren Peck and Jasmine Kimura were honored at the completion of their residency program during the 2015-2016 academic year. Dr. Peck completed her PGY-2 residency at the Queen's Medical Center, and Drs. Uehara and Kimura finished their first-year residencies at Wilcox Memorial Hospital on Kaua'i.

Student Organizations APhA-ASP

Students help teach community about threat of high blood pressure

By Nancy Wong (Class of 2019) and Matt Chen (Class of 2018)

Student pharmacists from the Daniel K. Inouye College of Pharmacy (DKICP) at the University of Hawai'i at Hilo conducted blood pressure screenings at The Physician Center at Mililani on the island of O'ahu on June 11 and June 25. In addition to measuring blood pressure, the student pharmacists educated patients on the proper techniques to measure blood pressure using a blood pressure monitor, discussed the importance of monitoring and lowering blood pressure, counseled on methods to lower blood pressure, and shared locations where patients can receive free blood pressure screenings year-round.

Known as the silent-killer, high blood pressure can lead to heart attack and stroke. Many who have it, do not know, and that is what

makes it so dangerous! Through our efforts we brought awareness to our community about the importance of monitoring their blood pressure. We hope our community will work closely with their pharmacists and physicians to help lower their blood pressure.

As evidenced by this event, the reach of DKICP extends beyond Hawaii Island. By spreading high blood pressure awareness on Oahu, the student pharmacists upheld DKICP's vision to "drive improvement of healthcare in Hawai'i and throughout the Pacific.

This event would not have been possible without the guidance and supervision of Dr. Camlyn Masuda



and past APhA-ASP President Dann Hirayasu. We would also like to thank the physicians and staff at The Physician Center at Mililani for allowing us to host our event at their clinic. Lastly, we would like to thank second-year student pharmacists Leslie Domingo, Dennis Le, Nicholas Tsoi, Nancy Wong, and Veronica Wong; third-year student pharmacist Matt Chen; and fourth-year medical student Kliment Bozhilov from the John A. Burns School of Medicine (JABSOM) for volunteering their time.

Pharm.D. students deliver info to pharmacy tech students on O'ahu

By Nicholas Tsoi (Class of 2019)

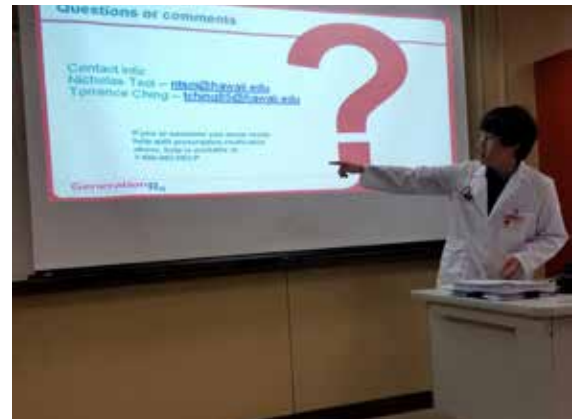
Student pharmacists from the Daniel K. Inouye College of Pharmacy (DKICP) at the University of Hawai'i at Hilo gave a presentation about prescription medication abuse and misuse at the Kapiolani Community College (KCC) on Oahu August 1.

The presentation was delivered to students enrolled in KCC's pharmacy technician program, a non-credit continuing education program designed for students pursuing careers as pharmacy technicians. Through the combined efforts of the DKICP's American Pharmacists Association – Academy of Student Pharmacists (APhA-ASP) and National Community Pharmacists Association (NCPA), chapter members educated future pharmacy technicians on matters concerning over-the-counter drug abuse, prescription medication misuse and abuse, potential legal ramifications of abusing prescription drugs, and actions

to take in the event of a drug overdose.

"The presentation at the Kapiolani Community College was very successful. This was our first time presenting to a college audience, as well as presenting outside of Hilo. Needless to say, the students and participating faculty were engaged and enthusiastic. I strongly feel that this information is invaluable to all age groups and it has therefore become our mission to expand these presentations to an older demographic." – Torrence Ching (Class of 2019).

Adapting and presenting this educational material for a college audience, as well as presenting this material outside of the island of Hawai'i, has been one of many firsts for the DKICP. However, students are still adamant in expanding their efforts



throughout the state in hopes of spreading awareness and encouraging individuals to help put a stop to this growing problem.

The opportunity to present this material would not have been possible without the outreach from the course coordinators of KCC's pharmacy technician program: Sally Pestana, Martin Chong, and course instructor Donna Toma. We would also like to thank second-year student pharmacists Torrence Ching, and Stacy Lu for volunteering their time and efforts.

Kappa Psi celebrates graduates, continues to learn in summer months

Kappa Psi

By Shannon Trinh and Gina Yoon (Both from the Class of 2019)
Historians, Epsilon Psi Chapter

As the spring semester came to a close, the Epsilon Psi Chapter of Kappa Psi welcomed back our graduating brothers to Hilo in order to celebrate their accomplishments and hard work they had put forth into four years of pharmacy school. Family and friends gathered after the commencement ceremony to take an endless slew of photos of the graduates, despite the blazing sun that had us all sweating more than we would like to admit. The end of the semester also meant our brothers were preparing to embark on their experiential rotations, which would be the first for our first-year brothers and the last long stretch for those who are freshly fourth-year students. Although summer is a time when many of us say goodbye to each other for what feels like only a short few weeks, our brothers still took advantage of various opportunities to enrich their pharmacy knowledge and skills in the community.

During the month of June, the Department of Defense's



A few Kappa Psi members from the Class of 2016. Pictured (from left): Samantha Hanabaga, Eric Tsuji, David Choe, Josen Ho, Chau Dang, John Hoang, Aryn You, Okezie Irondi, Kim Duong, Yen Dao Barnes, Venus Ho, Albert Lee, Arnold Sano, Cindy Kuo, Brandon Tuzon, Kathy Lee, Carlo Tiano. Not Pictured: Janell Penha, Ornella Fassu, Rachel Ebbett, Tina Kordkheil, Tony Huynh. (Photo by Kevin Meno)

Innovative Readiness Training Program partnered with the Hawaii Department of Health to put on Tropic Care 2016, which offered free medical services, including audiology,

Student Organizations

dental and vision care over the span of two weeks. This event was targeted towards underserved communities and gave the opportunity for student pharmacists to assist military pharmacists with various duties. The six of our brothers who attended (Kimberly Wu, Megan Calderwood, Lynnett Tran, Kris Yoo, Athena Borhauer and Janet Vu) were able to counsel patients and experience the environment of a military pharmacist but they encountered some hurdles, such as language barriers and an inventory limited to approximately 25 drugs. However, Brother Janet Vu believed that this only pushed our brothers to be creative and to learn from witnessing an interprofessional team of medical professionals work together to ensure that patients received the appropriate medication.

Before Brothers Hendrik Vong and Tram Le passed on their positions to our current Community Service Co-Chairs Gurinder Kaur and Carrie Yeung, they gave one last hurrah by organizing a clothing drive in April for a non-profit agency, HOPE Services Hawai'i Inc. The drive asked for new or gently used clothing and shoes for all ages, which would be donated to homeless families and individuals. Taking a moment to give back to our community gave us the sobriety to look past our own needs and instead, to those of others.



Newly graduated Brothers Brandon Tuzon, Yen Dao Barnes and Aryn You looking back on memories from their past four years of pharmacy school. (Photo by Shannon Trinh)

From the residents and residency director, Brother Wong learned what residency programs look for in their candidates and what she should do to become a more competitive candidate.

All in all, it has been great seeing our Epsilon Psi brothers take the initiative to explore what they can offer the profession and vice versa. Fostering brotherhood feels especially important when brothers leave for rotations or new jobs, reminding us of how the bonds of being Kappa Psi can bring us together no matter where we are.

NCPA

Students attend NCPA's annual congressional summit

By Athena Borhauer and Stephanie Ramirez (Both Class of 2019)

"Get into politics or get out of pharmacy" is the phrase coined by the National Community Pharmacists Association (NCPA) during its first Legislative Conference in 1969, and it embodies the organization's passion of advocacy for both its member pharmacists and their patients. NCPA held its 2016 Congressional Pharmacy Summit on May 24-25 in Washington D.C. Students Athena Borhauer and Stephanie Ramirez were able to attend as representatives of The Daniel K. Inouye College of Pharmacy student chapter and were recognized for being the farthest traveled.

During the first day of the

Summit, NCPA Senior Vice President of Government Affairs Steve Pfister gave a Legislative Briefing discussing the Senate and House bills that would directly affect pharmacists and independent pharmacy owners, including:

- Creating greater transparency for generic prescription drug reimbursements in government-run programs by enacting H.R. 244, *the MAC Transparency Act* ;
- Requiring Medicare Part D and pharmacy benefit manager (PBM) corporations to report pharmacy price concessions when prescription drugs are dispensed,

The Hawai'i Pharmacists Association (HPhA) Meet-n-Greet was held in Honolulu on the June 18 and some of our brothers had the opportunity to attend this event. Graduate Brother Akio Yanagisawa, who is current HPhA Treasurer, was accompanied by a residency director, residents on Oahu and pharmacists from various disciplines to confer different aspects of the pharmacy. Brother Nancy Wong stated that the Meet-n-Greet was a great opportunity for student pharmacists to network and learn more about the diversity of the profession of pharmacy. It opened her eyes to the world of Specialty Pharmacy, which deals with high cost medication therapy for patients with complex disease states, such as cancer, HIV, MS and RA.



which are called "direct and indirect remuneration" (DIR fees) ;

- Pushing to include an any willing pharmacy provision in federal programs by enacting
- H.R. 793 / S. 1190, *the Ensuring Seniors Access to Local Pharmacies Act*, which would allow community pharmacies in medically underserved areas to serve Medicare Part D beneficiaries as long as the pharmacy accepts the drug plan's terms and conditions ; and

- Increasing Medicare beneficiary access to health care services delivered by pharmacists by recognizing them as health care providers under Medicare Part B by enacting H.R. 592 / S. 314, *the Pharmacy and Medically Underserved Areas Enhancement Act*.

(Legislative Briefing descriptions are excerpted from NCPA Congressional Summit presentation materials.)

Attendees were also treated to a presentation entitled “Lobbying 101: How Congress Really Works” by Judy Schneider, Specialist on Congress, Congressional Research Service. During the presentation, Ms. Schneider explained the nuances of Capitol Hill and how to lobby your Congressmen

effectively. After the presentation, attendees gathered for lunch where Athena and Stephanie were recognized for being the farthest traveled student chapter members. After the recognition, Stephanie Ramirez was one of the four winners of a travel scholarship from the student affairs department of NCPA, which offered four \$250 scholarships to students to help with the traveling expenses.

A lively discussion regarding Medicare Part D Direct and Indirect Remuneration (DIR) Fees was led by Stephanie Trunk, Partner at Health Law Group at Arent Fox, LLP and Susan Pilch, NCPA Vice President of Policy and Regulatory Affairs. Currently, Medicare plans do not have clear guidelines

on how and when to recoup these fees, which can cause problems when pharmacies reconcile account balances.

The first day of the Summit concluded with attendees heading to Capitol Hill to reach out to their Senators and House Representatives asking them to either sponsor the presented bills or thank them for their support.

On the second day, attendees received a color commentary on the current state of the Presidential race by Stephen Hayes, senior writer at The Weekly Standard and FOX news contributor. The Summit concluded with more lobbying visits on Capitol Hill.

PLS

Student involvement mixer sparks interest in leadership and community outreach

By Kelli Goo (Class of 2018)

In early September, the Phi Lambda Sigma Pharmacy Leadership Society (PLS) helped kick off the school year by hosting the very first Student Involvement Mixer at DKICP. The College offers a wide variety of involvement opportunities on campus that foster leadership, serve the community, and enhance didactic education. This event allowed students to get to know all of the organizations and discover which ones they are most interested in dedicating their time to. Caroline Rhee, Hawai'i Student Society of Health-Systems Pharmacy (HSSHP) representative, said, “the mixer was a great opportunity for us to promote our organization’s mission and values. It allowed us to speak with potential members, one on one, and determine if our overarching goals aligned.”

The mixer started with a slide show presentation, featuring all of the opportunities on campus. Following the presentation, representatives from each organization provided an elevator speech about the benefits of joining. Attendees were given the opportunity to walk around and get to know student leaders and peers on a personal level. National Community Pharmacist Association (NCPA) representative, Katrina Kutter, said, “the PLS mixer provided a comfortable, personal environment for students to approach our organization and ask questions about what we do. It was a fun, casual twist to a recruitment fair.” Throughout the event, there were icebreakers and raffle prize giveaways. Many new friendships were made; and a few lucky students went home with textbooks and gift cards, generously donated by participating organizations. Overall, the Student Involvement Mixer was a huge success, providing students with the perfect venue to promote leadership, solely for the purpose of personal enrichment of all those who attended.



Classes of 2018 and 2019 Student Councils speak with incoming first-year student pharmacists about their positions.



Rho Chi presents first Journal Club of the academic year

By Paolo Truong (Class of 2018)
President, The Rho Chi Society, Delta Iota Chapter

On September 21, students from the Rho Chi Society Delta Iota Chapter presented the first of three Journal Clubs planned for the Fall semester. Thirty-six people attended the event.

The purpose of Journal Club is to provide a forum for student pharmacists to develop and improve their abilities to retrieve, analyze, interpret, and present articles to peers and faculty members. Journal Club also serves as an educational tool that promotes evidence-based practice and continuing professional development at the Daniel K Inouye College of Pharmacy.

At this event, four third-year pharmacy students presented two recently published articles. Matt Chen and Irene Kao presented their analysis on an article recently published in the *New England Journal of Medicine* titled "Blood-Pressure and Cholesterol Lowering in Persons without Cardiovascular

Disease." Lauren Skorheim and Vivian Tran presented their findings on an article recently published in the *Journal of American Medical Association* titled, "Intensive vs Standard Blood Pressure Control and Cardiovascular Disease Outcomes in Adults Aged > 75 years: A Randomized Clinical Trial."

Both presentations were well received and included discussion among the audience. Drs. Goo, Lteif, Ma, Prudencio, and Wongwiwatthanakit were all in attendance and facilitated with the discussion and feedback process.

As initiated by Rho Chi advisor, Interim Associate Dean for Academic Affairs Supakit Wongwiwatthanakit in the 2015-2016 academic year, the Rho Chi Society continues to have several meetings of the Journal Club each semester. Future Journal Club presentations are scheduled for November and December.



Elizabeth Ackerman, assistant professor, **Deborah Taira**, professor and **Dean Carolyn Ma** presented research

entitled "Assessment of Faculty, Staff and Student Wellness at a College of Pharmacy" at: American Association of Colleges of Pharmacy (AACP) Annual Meeting; July 23 – 27, 2016; Anaheim, CA.



Dean Carolyn Ma is a co-principal investigator on a grant awarded to the Hawai'i Interprofessional Education and Collaborative (HIPEC)

Alliance from the Robert Wood Johnson Foundation (RWJF), one of the world's largest philanthropies dedicated solely to health. Professor Maureen Shannon is the Principal Investigator on the grant from UH-Manoa's School of Nursing and Dental Hygiene (SONDH), which will match the grant. DKICP will work in conjunction with John A. Burns School of Medicine (JABSOM) on projects intended to promote interprofessional education among health care components at the University of Hawai'i, including curricula for health professional graduate students, engaging community health care providers and improving children's health through a SONDH program called Hawai'i Keiki: Healthy and ready to learn.

Leng Chee Chang, associate professor, and **Tamara P. Kondratyuk**, laboratory manager and assistant specialist, both in the Department of Pharmaceutical Sciences, were co-authors on a paper entitled "Anti-inflammatory triterpenes from the apical bud of *Gardenia sootepensis*" published in *Fitoterapia* in August. Co-authors were Ui Joung Youn, Eun-Jung Park, Tawanun Sripisut, Surat Laphookhieo and John M. Pezzuto.



Susan Jarvi, professor, Department of Pharmaceutical Sciences, is the recipient of a \$50,000 Hawai'i Community Foundation award entitled "Isolation of the 31 kDa protein from *Angiostrongylus cantonensis* from Hawaii and comparative diagnostic efficacy with the Thailand 31 kDa *A. cantonensis* protein." Her lab also was awarded \$65,000 from the Hawai'i Invasive Species Council for a project entitled "Introducing integrated pest management strategies to Hawaii School Garden Projects to advance rat lungworm disease education and control invasive mollusks, carriers of rat lungworm parasites." This project is in collaboration with SeaGrant, CTAHR, and BISC. She was session chair speaker at the 4th Annual Rat Lungworm Workshop held in Brisbane Australia Sept 23-24 where she presented a talk entitled "A Pilot Study to Estimate Prevalence of Human Exposure to Rat Lungworm Parasites (*Angiostrongylus cantonensis*) on East Hawai'i Island.



Dana Koomoa-Lange, associate professor, and **Ingo Koomoa-Lange**, instructor, both in the Department of Pharmaceutical

Sciences, were co-authors in an article entitled "TRPM2 ion channels regulate macrophage polarization and gastric inflammation during *Helicobacter pylori* infection" that was published in the epub *Mucosal Immunology* July 20. Co-authors were Beceiro S, Radin JN, Chaturvedi R, Piazuolo MB, Horvarth DJ, Cortado H, Gu Y, Dixon B, Gu C, Wilson KT, Algood HM, Partida-Sánchez S.

Dana Koomoa-Lange was an invited speaker at the 4th International Conference on Polyamine: Biochemical, Physiological and Clinical Perspectives in Rome, Italy Sept. 4-9. The title of her talk was "Polyamines regulate TRPM7 channel and kinase activities." Dr. Koomoa-Lange also is one of three UH Hilo faculty to be named in

the University of Hawai'i's President's Emerging Leaders Program, which is a professional development opportunity that identifies and develops future campus and system leaders.

Ingo Koomoa-Lange has been offered an adjunct professorship in the Division of Natural Sciences and Mathematics at Chaminade University.



With this appointment, which was peer-reviewed favorably by senior faculty, Dr. Koomoa-Lange will continue his role as an advisor on the electrophysiology faculty and give Hawai'i Island students a place to perform summer research on their home island, fully funded by Chaminade grant funds.



Lauren Peck, assistant professor, Department of Pharmacy Practice, presented research entitled "Comparison of the Efficacy of 4-Factor and 3-Factor

Prothrombin Complex Concentrate for Reversing Warfarin in Patients with Intracranial Hemorrhages" at the 2016 Neurocritical Care Society Meeting in National Harbor, MD on Sept. 15-18. Her poster was recognized as one of the top 25 posters, and was featured digitally on a rotating kiosk at the conference.

Karen Pellegrin, director of strategic planning/distance education, had a business case accepted for publication in *SAGE Business Cases*, a peer-reviewed digital collection for librarians, faculty, and students with cases to support their curriculum and independent research. The topic is using the balanced scorecard approach to strategy implementation in the pharmacy industry. This case will be used in her new course next year as part of the new certificate program in Healthcare Leadership.



Judi Steinman,

Program coordinator of the MS Clinical Psychopharmacology Program and instructor, Department of Pharmaceutical Sciences, received a \$5000 grant from Hawai'i State Department of Labor and Industrial Relations Division of Workforce Development. The grant allowed Dr. Steinman to take two students from the UH Hilo chapter of HOSA-Future Health Professionals to the HOSA International Leadership Conference in Nashville in June. More than 9,200 attendees attended, which included middle school, high school and post secondary students. HOSA at UH Hilo President Leslie Arce and member Devin Tanaka both won bronze medals in their respective competitions of medical spelling and human growth & development.



Chemistry Letters, with coauthors H Lin, DF Bruhn, MM Maddox, AP Singh, and RE Lee. 2) "Synthesis, evaluation, and CoMFA study of fluoroquinolone derivatives as bacterial topoisomerase IA inhibitors" in *European Journal of Medicinal Chemistry*, with coauthors X Yu, M Zhang, T Annamalai, P Bansod, G Narula, and Y-C Tse-Dinh. In addition, Dr. Sun was invited to give a seminar in the Department of Chemistry at the University of Alabama at Birmingham on September 29. He also presented an invited seminar in the Department of Chemistry and Biochemistry at Florida International University on September 30, and the seminar is co-sponsored by Biomolecular Sciences Institute.

Deborah Taira,

professor, Department of Pharmacy Practice, was co-author on six manuscripts: 1) "Disparate Rates of Utilization and Progression to Combined Heart Failure and Chronic Obstructive Pulmonary Disease among Asians and Pacific Islanders in Hawai'i." *Hawaii J of Med Public Health*; 2) "Issues Affecting Medication Use Among Asian Americans, Native Hawaiians, and Pacific Islanders: A Qualitative Study." *California Journal of Health Promotion*; 3) "E-cigarette Use Related to Demographic Factors in Hawai'i."



Hawaii J Med Public Health. October 2016; 4) "Ethnic comparison of 30-day potentially preventable readmissions after stroke in Hawai'i." *Stroke* (in press); 5) "Pathways to potentially preventable hospitalizations for diabetes and heart failure: a qualitative analysis of patient perspectives." *BMC Health Serv Res*. 2016 Jul; 6) "Engaging Gatekeeper-stakeholders in Development of a Mobile Health Intervention to Improve Medication Adherence among African American and Pacific Islander Elderly Patients with Hypertension." *Journal of Healthcare Informatics Research* (in press).

Ghee Tan,

director of the PhD in Pharmaceutical Sciences program and associate professor, Department of Pharmaceutical Sciences, is the co-investigator in a NIH-funded program entitled "Students of Hawai'i Advanced Research Program" (SHARP) with Program Director Lynn Morrison, professor and chair, Department of Anthropology. The 5-year UH Hilo project, which is a part of the NIH developmental Research Initiative for Scientific Advancement (RISE) program (R25), supports the research of under-represented (UR) graduate and undergraduate students at DKICP and UH Hilo.



Dianqing Sun,

associate professor, Department of Pharmaceutical Sciences, is corresponding author for the following papers:

1) "Synthesis and antibacterial evaluation of macrocyclic diarylheptanoid derivatives" in *Bioorganic & Medicinal*



Follow rotation blogs from members of Class of 2017

Reported by Lara Gomez, Director of Clinical Education

Since mid-May, our fourth-year student pharmacists started working on the required Advanced Pharmacy Practice Experiences (APPE) that consist of six, 6-week rotations, or internships, during their final year of the professional PharmD program. Four students from the Class of 2017 recently completed elective international rotations with Thai universities where DKICP has memorandums of understandings (MOUs) for exchange programs. One of their requirements was to successfully capture their daily activities through online blogs.

Shaun Lasky and **Zi Zhang** completed a rotation at Chulalongkorn University and spent the majority of their time at Bumrungrad International Hospital in Bangkok, one of the largest private hospitals in Southeast Asia, with 580 beds and over 30 specialties. This hospital serves over 1.1 million patients annually, including over 520,00 international patients. This rotation is primarily focused on pharmacy practice in Thailand. See their blog: <https://greenpapayasalad.wordpress.com/>

If you tell them “you **HAVE TO** take this at bed time for it to work,” there’s a large chance they just won’t take it at all. So you make due with them taking it at 2. So it goes.
- Shaun Lasky and Zi Zhang

David Nguyen and **Kevin Meno** completed a rotation at Rangsit University focused on pharmaceutical technology and industrial pharmacy, where they spent the majority of their time at the Sino-Thai Traditional Medicine Research and Development Center and Sun Thai Chinese Manufacturing facility. Rangsit University is located in Pathum Thani Province, slightly north of Bangkok and is part of the Bangkok metropolitan area. See their blog: <http://kmmeno.wixsite.com/thailand>

Please visit their blogs as they share with us their six-week experience in Thailand!



Shaun Lasky (third from left) and Zi Zhang (right) visit pharmacy in Bangkok.



Disintegration machine used by David Nguyen and Kevin Meno in Thailand.



P4 students visiting Thailand met with David Nguyen and Kevin Meno.

Rotation Reports

A special package on 5 Minute Pharmacy with “Rotation Reports,” “Alumni Updates,” and “Preceptor Focus” all from one independent pharmacy in Hawai‘i

By Krishelle Kamakeeaina-Mendoza (Class of 2019)

Community pharmacies have been providing pharmaceutical services to the public for years. The majority of community pharmacies are operated under corporations, i.e. CVS, Walgreens, Rite Aid, etc. Independently owned community pharmacies make up a small portion of the pharmaceutical industry as well. With close to 10 years of experience as a community pharmacy technician, I wanted a rotation site that offered something different from what I am used to.



5 Minute Pharmacy is a family-owned retail pharmacy with a unique perspective that optimizes overall patient care, which includes supporting the community they serve. They lead the nation in their expertise of compliance packaging, a method that promotes stress-free medication management and lowers the cost of healthcare for patients. 5 Minute Pharmacy services a variety of people throughout the state of Hawai‘i from multiple locations. The pharmacy offers free same-day delivery service, and optimizes quality assurance by contacting doctors on behalf of their patients, month to month to ensure patient compliance. Their packaging service groups prescription and over-the-counter medications as well as vitamins and packages them according to the day and time of dose. In a proactive approach, the pharmacy staff collaborates with health plans, hospitals and case managers to reduce the number of trips their patients take to hospitals and ER’s. Their success centers around their support of the community, and the pride they take in improving patient health. I witnessed and experienced firsthand the effort, care and hard work of this pharmacy and its’ staff.

During my four-week rotation, I was given many opportunities to impact patient care, outreach and medication management. On a daily basis, I worked as the link between the physician and patient by contacting doctor’s offices to get refill authorization requests and initiate prior authorizations processes on the patient’s behalf. When I wasn’t making calls, I was involved in patient care by giving Hepatitis A vaccines. Before and after the vaccine was administered, I was able to counsel and educate the patients about important health information. On a few occasions, I was able to observe basic compounding procedures that personalized hormone therapy and/or pain management treatments at the request of the patients. My last week of rotations focused on community outreach. I volunteered to team up with one of the staff pharmacists, Ihilani, to give Hepatitis A shots at a local business; about sixty shots were administered. Serving the community is just one of the distinctive outreach initiatives that separates 5 Minute Pharmacy from other pharmacies.

Under the leadership of the owner, Derek Tengan, who practiced pharmacy for years, the pharmacy staff has made it their mission to serve the community and make healthcare their top priority. I am grateful and honored to have been able to experience pharmacy in this new light where patients are treated like family. Working under passionate and enthusiastic pharmacists like, Roxane and Shantelle, encouraged me to seriously evaluate the impact I can have as a pharmacist. Lastly, I am truly thankful and appreciative for the efforts and encouragement of Derek in helping me along the path to pharmacy school, and during my rotation. His role in pharmacy is a direct reflection of what I believe; a belief where patients are treated like family. The communities we serve are often our homes; where we come from, and as pharmacist we have the power to give back and provide care for our communities.



By Vance Hill (Class of 2019)

The first pharmacy rotation is always nerve-wracking, even if you are completely prepared. Add in being a couple thousand miles from your last work experience and any familiarity, and the first day is downright frightening.

Five Minute Pharmacy's staff made me feel like I had just flown home. They were kind, patient and made me feel like I was immediately part of their staff, despite my shortcomings. My preceptor pharmacists, Emi Kawamura and

Shantelle Robinion slowly eased me into the workflow and extra responsibilities

perfectly. They made sure I never felt overwhelmed and were always teaching me, all

while still keeping their normal workflow managed. Both took the time to answer all of my questions no matter how tedious and maintained an excellent relationship with their patients and the surrounding physicians.

Being from the mainland where everything is much more spread out, I was not used to the rapport that both pharmacists had developed with the nearby physicians. Every single day of my rotation, a physician would call to converse with my pharmacists concerning a medication or a patient. This is the type of patient care that the mainland is trying to achieve, but it has already been perfected here. I could never thank them enough for teaching me so much and helping me learn, in such a short amount of time.

Most retail pharmacies are the same. They receive prescriptions from either the patient or directly from the doctor, fill it and then wait for the patient to pick it up. Five Minute Pharmacy throws that outdated outline out the window.

While they still welcome walk-ins, a significant portion of their business is done by delivery. One of their certified pharmacy technicians, CJ Ramos, takes charge of the deliveries and keeps control even in the most difficult of situations. In this day and age of delivery services, a pharmacy that delivers might be the only way to wrestle business from the corporate giants that have invaded Hawai'i. The pharmacists take a proactive role towards prescriptions by calling doctors personally and advocating for their patients directly. They never wait until



the patient is out of medication. Besides taking on student pharmacists from the Daniel K. Inouye College of Pharmacy, their pharmacy technicians like Stacey Padilla, manage to help teach pharmacy technician volunteers and trainees. They also currently offer in-house compounded prescriptions and are expanding that side of their business as well.

The primary reason that 5 Minute Pharmacy has been able to expand their business to four separate locations is their work ethic and cohesiveness. The entire staff brings their best effort every single day. They work together efficiency and poise no matter what the day brings to them. Every staff member, from the drivers to the call center to the pharmacists at multiple locations, are always on the same page. They are trained and motivated and always take charge of the situation that lies before them. They are a model pharmacy business.

I want to thank the entire staff of 5 Minute Pharmacy for welcoming me with open arms and being so kind and helpful. I wish I could go into more specifics of this amazing work environment, but that could take several more pages. I want finish by saying that, I cannot recommend this rotation enough to other first year students and I would not trade my four-week experience for anything.



Alumni Update/Preceptor Focus:

Drs. Keri Oyadamari (Class of 2014) and Shantelle Robinion (Class of 2012)

(Kawili La'au's first alumni/preceptor combo column, both pharmacists work at 5 Minute Pharmacy)

Both born and raised in Oahu, Keri and Shantelle are both proud graduates of the Daniel K. Inouye College of Pharmacy. Shantelle and Keri crossed paths when becoming employed at a family-owned independent pharmacy, 5 Minute Pharmacy. Currently with four locations on Oahu, 5 Minute Pharmacy offers a variety of services including same-day delivery, compliance packaging, compounding, and the flexibility that larger companies cannot offer. Although carrying out day-to-day retail responsibilities, both Shantelle and Keri are involved with providing unique services through the pharmacy. Shantelle works closely with a non-profit organization in providing specialty medications for HIV and Hepatitis C clients. Keri is currently providing retail and pharmacy services at a Federally Qualified Health Center in the heart of Kalihi, a neighborhood in Honolulu.

Below they share their experiences as both an alumni and preceptor for DKICP pharmacy students:

Keri and Shantelle:

Growing up in Hawai'i, it was a treat and a privilege to be able to be close to home and attend pharmacy school at the Daniel K. Inouye College of Pharmacy. During pharmacy school, we were involved with organizations that allowed us to travel to various conferences. At each of these, we met different people, learned about many different industries a pharmacist could pursue, and also had a lot of fun! We are forever grateful to the college for these opportunities that opened our eyes to the huge world of pharmacists.

Shantelle:

I became a preceptor for the first time this year for a second-year student. My student previously worked in a retail pharmacy in a different state, so it was great to show him how a small, independent pharmacy operates and the types of services that a small pharmacy is able to provide to the patients. Being a preceptor was a great experience and having a student eager to learn new things despite having lots of experience made it even more rewarding. It was great to have a new set of eyes giving me a second perspective on everything.



Shantelle Robinion



Keri:

This year was also my first time being a preceptor for a student.

It was a very rewarding and unique experience, and brought variety to the usual workflow. In the beginning of this year, through the Pharm2Pharm Grant I was able to step out of the pharmacy a few days a week to provide pharmacist-led services to two very different healthcare settings. At Rehab hospital, my fourth-year student and I were able to aid in medication management for patients discharging from Rehab hospital back home. On other days during the week, we were at the Kokua Kalihi Valley Comprehensive Health Center providing medication management for clinic patients. It was great to share these experiences with a student and demonstrate the many facets that an independent pharmacy can do other than pure retail.

Our advice:

Pharmacy is constantly changing and the role of a pharmacist is constantly evolving into more responsibilities. There are so many opportunities in retail pharmacy to customize to your interests; it's just about being open-minded and creative. Outside of retail pharmacy there are unlimited possibilities of where a pharmacist could influence healthcare. Our advice is to keep an open-mind throughout pharmacy school and don't close yourself off to any one area!



Keri Oyadamari



Champions Corner: Dr. Lucinda Maine



Dr. Lucinda Maine has been named a “Champion of Pharmacy” for fall, 2016.

Since 2002, Dr. Maine has been Executive Vice President and CEO of the American Association of Colleges of Pharmacy (AACP). Prior to that, she served in progressively demanding positions at the American Pharmaceutical Association (APhA) for 10 years. While there, she formed an alliance with Pat De Leon, former Chief of Staff for Hawai'i's

Senior Senator Daniel K. Inouye and an inaugural recipient of DKICP's Advancement of Pharmacy Excellence (APEX) Award. As a leader on the national pharmacy forefront, she has been actively aiding the founders of the University of Hawai'i at Hilo's College of Pharmacy, largely behind the scenes, since before admitting our first students. Even before the College was named after the state's senior senator, Dr. Maine encouraged and advised our teams on matters of accreditation, curriculum and the profession itself. A true mentor, she encouraged networking with other professionals in the field and she practiced what she preached, serving on multiple boards of national organizations and amassing honors from groups such as the American Pharmaceutical Association Academy of Student Pharmacists (APhA-ASP), Kappa Psi and Kappa Epsilon. Her presentation of more than 150 research and practice development programs during her time at APhA and AACP as well as countless publications and reports is proof that the expertise UH Hilo has received from her has been priceless.

Dr. Maine has been a familiar, kind face on the UH Hilo campus as she attended White Coat Ceremonies and consulted with administration. We recognize her invaluable support and guidance with this award, and are privileged for her affiliation.

The Champions Corner allows us to recognize and say mahalo to the people who have been



Dr. Lucinda Maine at DKICP White Coat Ceremony 2013.

instrumental in leaving a legacy of pharmacy education to thousands of students who have attended the Daniel K. Inouye College of Pharmacy. We encourage your input. Please send nominations to morrismm@hawaii.edu.



Check out the new DKICP site designed for mobile devices for the latest on pharmacists jobs, events, continuing education AND MORE...

Scan code for access to site
(requires QR scanner app)



or simply go to site:

<http://www.careertapp.com/careertapp/645420>



MAKE A DIFFERENCE



In your community and in the life of a student pharmacist

Give the best students the financial support they need to excel.

Since 2014, 56 Daniel K. Inouye College of Pharmacy students have benefited from scholarships funded by people like you.

There are many ways to give -- cash gifts, pledges, beneficiary designation gifts, life insurance gifts, in-kind gifts, and bequest intentions.

The University of Hawai'i Foundation is the non-profit organization that raises private gifts, manages assets, and provides alumni and donor services for all ten campuses of the UH System.

As a professional fundraising organization, the UH Foundation team can help you find the best way for you to make a difference.

Please contact Mariko Miho at mariko.miho@uhfoundation.org or (808) 564-3986 to learn more.

www.uhfoundation.org/givetopharmacy



**UNIVERSITY
of HAWAII®**
FOUNDATION