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Assistant Professor

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Professor; Director of Graduate Studies

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Professor

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Late edit: As of this writing, we, like the rest of you, are in the middle of the unfolding COVID-19 pandemic. The changes are constant--minute to minute--and many things are uncertain and feel unsteady. We in ECP are determined to continue to do our part to contribute meaningfully in these unprecedented circumstances in ways both routine and exceptional, and we are proud of our faculty who are striving daily to continue their teaching and shift their research and professional activities toward the fight against this disease.

ECP faculty and students have answered the call in several ways, from helping to develop drug information and interaction web resources for front-line health professionals using novel treatments against COVID-19, to drug trials aimed at preventing transmission of the virus, as well as helping in the development of a unique plan to allow 4th year PharmD students to complete their rotations and their degrees despite restrictions on movement, particularly within health care settings. We will emerge from these challenges stronger as professionals, colleagues, and humans. In the meantime, please read on for some more routine news, compiled earlier this semester.

Dear Friends,

As most of you are aware, our profession is changing. In the simplest terms, colleges are facing fewer applications to professional programs, demand for pharmacists in traditional roles is shifting, and budgets reflect these trends. These and other developments represent challenges to faculty supporting the educational, research, and teaching missions of the college. ECP is committed to taking proactive measures that will position us for continued success in pharmacy’s evolving landscape. We will leverage the talent and strength of department members and alumni to pursue opportunities that ensure our continued success in our mission and that of the college.

We are eagerly anticipating engagement in our external review process, as it will inform and assist our efforts going forward. I hope to report to you on those findings in a future newsletter. In the meantime, we seize on opportunities as they come to us, and continue to build upon our many strengths.

In this newsletter, you will read about two recent outreach events: a Taiwan-USA Pharmacy Forum that took place at National Taiwan University, and the Rare Disease Day conference, which took place at McNamara Alumni Center. In personnel news, ECP said farewell to Assistant Professor Swayam Prabha, who departed ECP in January to take a position at Temple University. We also say goodbye to Administrative Manager Carolyn Chase, who began her retirement the first week of April. We wish them the very best and thank both for their contributions to our department’s mission.

I wish all of you success in 2020, and fortitude as we look forward to warmer temperatures ahead. I am eager to update you on our progress in the Fall.

Sincerely,

Robert J. Straka, Pharm.D.
Department Head
Taiwan-USA Pharmacy Forum
by Ya-Feng (Jay) Wen

It was a typical sunny day during summer break with 90-degree temperatures in Taipei city. More than 80 young pharmacists and pharmacy students gathered at GIS National Taiwan University Convention Center early in the morning on July 27th, eagerly discussing the training of future pharmacists, as well as challenges and opportunities in pharmacy, in both Taiwan and the United States.

This Taiwan-USA Pharmacy Forum was planned by two current University of Minnesota graduate students, Yu-Chia Hsu and Ya-Feng Wen (both of them also obtained their PharmD degree at the University of Minnesota) and was hosted by the Taiwan Young Pharmacist’s Group to promote communication between U.S. and Taiwan in terms of pharmacy education and practice. Dr. Robert Straka, Professor and Department Head in the Department of Experimental and Clinical Pharmacology, College of Pharmacy, University of Minnesota (UMN) was the keynote speaker, and five UMN PharmD graduates who obtained their Bachelor degree in Pharmacy in Taiwan served as panelists: Andrew Liu, Ting-Ting Wu, Ya-Feng (Jay) Wen, Yu-Chia Hsu, and Hans Shaw. Panelists compared and contrasted pharmacy education and practice models between the two countries and discussed trends, challenges, and opportunities facing the profession. This face-to-face interaction between speakers and the audience enabled participants to discuss and re-envision the role of pharmacists and how the profession in pharmacy can better serve patients and society in Taiwan and beyond.
On July 29th, Dr. Straka visited Taipei Medical University (TMU), where many students who graduated with Bachelor degrees in Pharmacy continued on to the PharmD program at UMN. To date, 12 students have graduated with a BS in Pharmacy degree from TMU and continued on to receive a PharmD degree from UMN. This visit allowed Dr. Straka to have first-hand communication with the Dean of College of Pharmacy, Dean Jing Ping Liu, PhD and Associate Dean Shawn Chen, MS, PharmD, as well as to explore potential collaboration in the future. Dr. Straka also visited three TMU affiliated hospitals: Shuang-Ho Hospital, Wanfang Hospital, and Taipei Medical University Hospital. In addition to learning about pharmacy practice in major hospitals in Taiwan, Dr. Straka met with faculty and students at TMU to share his Pharmacogenomic-Based Research in Special Populations project, which garnered a lot of interest during the hot summer break.

Global relationships represent excellent opportunities to directly learn from one another on how contemporary challenges and opportunities facing the profession of pharmacy education, research, and provision of care may be addressed for the benefit of global society.

**Taiwan-USA Pharmacy Forum UMN Alumni Participants**

<table>
<thead>
<tr>
<th>UMN PharmD Alumni</th>
<th>Current Role</th>
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<tbody>
<tr>
<td>Andrew Liu ('13)</td>
<td>Retail Pharmacist</td>
</tr>
<tr>
<td>Ting-Ting Wu ('16)</td>
<td>ICU Pharmacist in Wanfang Hospital, Taipei, Taiwan</td>
</tr>
<tr>
<td>Ya-Feng Wen ('17)</td>
<td>PhD student in ECP, UMN</td>
</tr>
<tr>
<td>Yu-Chia Hsu ('18)</td>
<td>PhD student in SAPh, UMN</td>
</tr>
<tr>
<td>Hans Shaw ('19)</td>
<td>PGY-1 Resident at Prime Therapeutics</td>
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Alumni Spotlight: Manoj Chiney, PhD

Grad Year: 2013

Title: Associate Director in the Clinical Pharmacology and Pharmacometrics group at Bristol Myers Squibb (BMS)

What is your current position title and the name of your organization? Briefly describe your professional path.

I am currently Associate Director in the Clinical Pharmacology and Pharmacometrics (CPP) group at Bristol Myers Squibb (BMS). I graduated from ECP in 2013 and joined BMS in the preclinical Metabolism and Pharmacokinetics group. At BMS, I was part of discovery research teams in the immunology and fibrosis therapeutic areas.

In 2016, I joined the Clinical Pharmacology and Pharmacometrics group at Abbvie. At Abbvie, I had a unique opportunity to be part of a mechanistic modeling group and also lead the clinical pharmacology strategy.

In 2019, I moved back to BMS to support the development of the same molecule whose discovery I supported during my previous stint at BMS. In addition, I am also the clinical pharmacology lead for other molecules in the early phase of drug development.

What is your primary role in your current position?

As a CPP lead, my role is to oversee the activities in 3 major areas:

• Ensuring that all clinical pharmacology studies for a molecule (e.g. drug-drug interaction, special population and formulation studies, etc.) are completed in a timely manner to support Phase 2 and/or Phase 3 efficacy studies.

• Developing a mathematical modeling strategy that supports accelerating the development of the molecules, enabling quicker access of these novel therapies to patients.

• Supporting submission activities and responding to health authority queries in order to enable approval of molecules.

Have you had any major field or focus changes since beginning your career? How have your interests evolved?

As my career has progressed, I have gained more experience in mechanistic modeling and have been involved in developing systems pharmacology models and physiologically-based pharmacokinetic (PBPK) models. My experience during interactions with health authorities has been very positive when using these novel mathematical modeling techniques to support development decisions. Given this experience, I am very much interested in continuing to use much more advanced modeling techniques to support development of molecules to enable patients to avail the novel therapies at the earliest.

Since graduating from ECP’s grad program, what would you say are your most significant professional accomplishments? What particular achievement are you most proud of?

The achievement I am the most proud of involves using mechanistic modeling (spatial tumor distribution model) to modify dose and dosing regimen for an oncology molecule.
that resulted in patients responding and benefiting from this therapy. This also resulted in expanding the indications in which the molecule was being developed, which ultimately means that more patients would likely benefit from this targeted therapy. Given the novelty of the work, a patent application has been filed for the dose and dosing regimen of this molecule.

Other professional achievements include using mechanistic modeling to amend an NDA that ultimately resulted in approval of the drug and opportunities to share these experiences at various conferences.

Reflecting on your experiences as an ECP Graduate Student, what are your fondest memories from that time?

My fondest memories are the lab meetings we had every Friday. These were combined meetings of Dr. Johnson, Dr. Tracy, and Dr. Remmel’s labs, and it was an amazing learning experience. We all were in the same lab space, and the extent of support that I received from my lab friends was terrific.

What advice can you give to current and/or prospective students in ECP?

Work hard and always focus on developing new skills (technical and soft skills). The moment you feel you are comfortable with a skill, it is time to move on to something new. For those who have passed your prelims: Start looking at job postings (academic or industry), and identify the areas that you need to focus on that are outside your current scope of graduate research. Work on acquiring the skills that are needed to get the job you are passionate about. As part of the University system, you might even find courses that help you develop these skills. Be proactive and learn, learn, and learn.

“Work hard and always focus on developing new skills...The moment you feel you are comfortable with a skill, it is time to move on to something new.”
On February 28, 2020 the College of Pharmacy’s Center for Orphan Drug Research (CODR) and the Medical School’s Stem Cell Institute co-sponsored the University of Minnesota’s eighth annual Rare Disease Day event. More than 230 University of Minnesota students, staff and faculty, as well as individuals from health care organizations, patient advocacy groups, and the biomedical industry attended. We heard from Erica Barnes, Administrator of the Rare Disease Advisory Council on the Council’s pillars of focus and from Sarah Wicks, JD, MPH, on how hearing from patients about their priorities can impact the direction of drug and therapy development. Another aspect of Rare Disease Day is a competitive poster symposium to encourage trainee researchers to consider how their work and interests can help advance the understanding of rare diseases and how to treat them.

Thanks to everyone who helped organize and participated in this event, and special thanks to two of our strongest advocates—President Joan T.A. Gabel and Senator Amy Klobuchar—who sent their greetings and inspiration to start the day.
ECP graduate student Siddhee Anand Sahasrabudhe discusses her research at the Rare Disease Day poster session.

Mounds View High School Students for Rare (a student club of National Organization for Rare Disorders) hosted a booth.

Rare Disease Day attendees at McNamara Alumni Center.
**Grants and Recognition**

**Angela Birnbaum** received three 2-year grants from the National Institute of Health’s Institute on Drug Abuse (NIDA): “Novel Nanovaccines Against Opioid Use Disorder,” “Novel Nanovaccines Against Opioid Use Disorder,” and “Vaccines for Fentanyl and its Derivatives: A strategy to reduce illicit use and overdose.”

**Jeff Bishop** was named CTSI Outstanding Mentor of the Year by the Clinical and Translational Science Institute of the University of Minnesota.

**James Cloyd** was awarded a 2019 APhA Tyler Prize for Stimulation of Research by the American Pharmacists Association (APhA). This award recognizes an individual for encouraging research by peers, students, fellows, residents, and others via publications or by directing research, serving as a preceptor, or mentoring in any discipline of the pharmaceutical sciences.

**Lisa Coles** was part of a team recognized with a 2019 Academy for Excellence in Team Science award for her work with Drs. Sequist, O’z, Moheet, Mangia, and Eberly, also of the University of Minnesota. The Academy is intended to acknowledge the valuable and significant contributions made by exemplar inter-disciplinary teams conducting biomedical or health care research to address significant health challenges.

**Stephanie Huang, Angela Birnbaum, and Ling Li** completed the University of Minnesota Northern LITeS cohort leadership training. This program provides executive-level training to senior or advanced mid-career faculty and academic leaders and is tailored to the needs of experienced academics in biomedical, clinical, and health-related sciences.

**Elizabeth Hirsch** was voted Teacher of the Year by PharmD class of 2020 students.

**Reena Kartha** has joined the Board of Directors for IndoUSrare. Her role will be to accelerate clinical research leading to faster diagnostics, advocate for cures for rare diseases by engaging US sponsors and CROs to include India in their clinical trials, and foster collaborations between patient advocacy groups and researchers in the USA and India to help accelerate clinical research, trials and therapy access across borders. Dr. Kartha also accepted a position on the Gaucher Community Alliance’s Professional Advisory Council, a new 5-year Geriatrics Workforce Enhancement Program award from the U.S. Health Resources and Services Administration (HRSA).

**Ling Li** was voted 2019 Advisor of the Year by College of Pharmacy graduate students.

Sree Arvind Kejriwal, Chief Minister of Delhi, presented Ramaiyah Muthyalal with the “Rashtriya Vikas Siromani Puraskar” award for his contributions to the rare disease community. The event was organized by Delhi Telugu Academy.

**Melanie Nicol** received a $50,000 2019 CTSI-Ed K-R01 Transition to Independence Grant for her work on HIV prevention.

**Dr. Ahmed Salem**, an adjunct associate professor in the department, received the Abbvie President’s Award and the Abbvie Clinical Development Award for his contributions to Oncology drug development. Two of Dr. Salem’s recent articles were recognized by Journal of Clinical Pharmacology among the top cited articles in recent publication history, and his article, “Venetoclax in combination with cytarabine with or without idarubicin in children with relapsed or refractory acute myeloid leukaemia: a phase 1, dose-escalation study,” was published in *Lancet Oncology*.
Adjunct Assistant Professor Kyriakie Sarafoglou was invited to present her research program at NIH Inter-Institute Endocrine Grand Rounds in Bethesda, MD on January 24, 2020. The presentation, “Challenges in Newborn Screening and Treatment of Children with Congenital Adrenal Hyperplasia (CAH): Opportunities For Improvements,” featured her research collaborations with Richard Brundage, Mahmoud Al-Kofahi and Mutaz Jaber that include “Pulsatile (ultradian) delivery of cortisol in children with CAH” and “An integrated PK-PD model for cortisol and 17-hydroxyprogesterone and androstenedione biomarkers in children with CAH.”

Beshay Zordoky received a K-R01 Career Transition Award from the University of Minnesota’s Clinical and Translational Science Institute (CTSI). The two-year, $50,000 award is for his project, “Hypertension Exacerbates Doxorubicin-Induced Vascular Aging.” Dr. Zordoky was also named CTSI Outstanding Junior Mentor of the Year.

Angela Birnbaum and Ilpo Leppik’s recent CBD research, “Food effect on pharmacokinetics of cannabidiol oral capsules in adult patients with refractory epilepsy,” was featured in a University of Minnesota Research Brief titled, “High fat foods can increase CBD absorption into the body” that was subsequently picked up by Forbes, MSN, US News & World Report, and WholeFoods Magazine, among others.

Dr. Birnbaum’s research group paper, “Antiepileptic Drug Exposure in Children of Breastfeeding Mothers with Epilepsy,” has been featured in a UMN research brief and in the University of Minnesota’s newspaper, the Minnesota Daily. She gave a related presentation titled, “Pharmacokinetics of Antiepileptic Drugs in Pregnant Women: Latest and Emerging Data,” as part of the Presidential Symposium, American Epilepsy Society, December 7, 2019.

Contagion Live interviewed Elizabeth Hirsch and Delany Hart, PharmD (PGY-1 pharmacy practice resident at Abbott Northwestern Hospital) about their Infectious Disease Week 2019 poster, “Evaluating Ceftolozane/Tazobactam in Immunocompromised Patients with Pseudomonas Infections.”

Stephanie Huang was selected to serve as graduate faculty in the Department of Bioinformatics and Computational Biology (BICB). Dr. Huang was also selected to be a preceptor on a Cancer Biology T32 training grant and an upcoming genetics and genomics NIGMS T32 training grant, and to serve on the Genetics, Cell Biology & Development (GCD) Faculty Search Committee.

Swayam Prabha left ECP for a new opportunity at Temple University in Philadelphia.
ANGELA JEONG received a 2019-20 College of Pharmacy Bighley Fellowship for collaborative interdisciplinary work of “world class excellence.”

SARAH KIM was awarded the U of M Graduate School’s Frieda M. Kunze Fellowship for the 2020 - 2021 academic year. The Kunze Fellowship supports doctoral students conducting research in biochemistry, chemistry, or biomedical science. Sarah also gave a platform presentation to the WorldSymposium 2020 on February 10, for which she received a 2020 WorldSymposium Young Investigator award. The title of her presentation was, “Quantification of cerebrospinal fluid chitotriosidase in a clinical laboratory is validated for use in diagnosis and clinical trials.”

JENNIFER NELSON received the CTSI Advanced Pathways to Research Program (APReP) CTSI-ed Travel Award for best poster.

ABHISHEK SATHE married fiancée Ketaki Katdare in Pune, India on December 11, 2019. He was also awarded the Olsteins Graduate Fellowship for the year 2019-20.

ECP graduate students MEI-CHI (JUDY) SU and YA-FENG (JAY) WEN were married in Taoyuan, Taiwan on July 28, 2019.

LUSI ZHANG received the ACCP Student Frontiers Research Award from the American College of Clinical Pharmacy (ACCP) for her project, “Polygenic risk for cardiovascular diseases, cardiovascular medication burden and cognitive performance in patients with psychotic disorders.”
The University of Minnesota Pharmacometrics Group, comprised of ECP faculty and staff members Mahmoud Al-Kofahi, Kyle Baron, Al Berg, Dick Brundage, Samuel Callisto, Mutaz Jaber, and Ashwin Karanam is currently planning the second iteration of the Minnesota Pharmacometrics Summer School (MPSS). MPSS is a two-week, didactic/hands-on summer school covering intermediate modeling and simulation topics.

ECP Administrative Manager Carolyn Chase retired from the U of M on April 3, after nearly two decades of dedicated service to the University. Carolyn rose from Executive Assistant to Assistant Dean for Administrative Services in the Carlson School of Management between 2001-2012. She then served as Administration and Finance Manager for the Enterprise Systems Upgrade Program and as Administrative Manager in the Controller’s Office before joining ECP in 2016. We have all benefited from Carolyn’s broad experience and service-focused approach to helping ECP realize its mission. We wish her the best in her adventures now that she has graduated from the 9-5 grind!

ECP Administrative Associate Lori Endsley and her family welcomed a new addition on August 8! Welcome Lucas Collin, and congratulations to the Endsley family!

ECP alumnus Vijay Ivaturi was selected to serve on the board of the International Society of Pharmacometrics (ISOP).

Dr. Alex Ling, a researcher in the lab of Stephanie Huang, has won a Scholar-in-training award for the American Association for Cancer Research (AACR) Precision Medicine and Drug Development conference.

ECP made a good showing at the College of Pharmacy’s annual Rho Chi Research Day on February 25. ECP presented 18 of 27 posters, and Pamala Jacobson was a presenter. Graduate students Ibrahim Abdelgawad and Angela Jeong each won a best poster presentation award, and ECP faculty member Ling Li was awarded a prestigious door prize in a very competitive random drawing.
Around the Department

(Left) Ibrahim Abdelgawad (center) with faculty advisor Beshay Zordoky (lt) and researcher Marianne Grant (rt)

(Below) Angela Jeong (lt) and Associate Dean for Research Carolyn Fairbanks, PhD (rt) Photo: Rebecca Cuellar


Pamala Jacobson, PharmD, FCCP
Professor and Director of the Institute of Personalized Medicine
College of Pharmacy
Research Day
February 25, 2020

Pamala Jacobson presents at the College of Pharmacy’s Rho Chi Research Day Photo: Rebecca Cuellar
THANK YOU to everyone who attended the ECP reception at the Annual Conference on Pharmacometrics (ACoP) on October 22 in Orlando, Florida!