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Assistant Professor

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Professor; Director of Graduate Studies

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Associate Professor

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Professor; Weaver Endowed Chair; Director, Center for Orphan Drug Research

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Assistant Professor

Jeannine M. Conway, PharmD
Associate Professor; Associate Dean for Professional Education

Esam El-Fakahany, PhD
Professor

Elizabeth Hirsch, PharmD
Associate Professor

R. Stephanie Huang, PhD
Associate Professor

Pamala A. Jacobson, PharmD
Professor; Director, Institute of Personalized Medicine

L'Aurelle A. Johnson, PhD
Assistant Professor; Associate Director of Graduate Studies

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Associate Professor

Michael Kotlyar, PharmD
Associate Professor

Ilo E. Leppik, MD
Professor

Ling Li, PhD
Professor; VFW Endowed Chair

Susan E. Marino, PhD
Associate Professor; Director, Center for Clinical and Cognitive Neuropharmacology

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Leo Sioris, PharmD
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DEAR FRIENDS,

This fall marks a new start and new approaches to our teaching, research and service roles under the current state of the Covid-19 pandemic. Efforts to return to in-person teaching include options for students to connect virtually, expanding our connectivity to professional and graduate students compared to spring semester of 2021. Vaccinations, mask wearing indoors on campus, and other precautionary measures have facilitated a gradual return to safe, yet engaged, instruction and expanded options for the conduct of translational research. Although we have further to go to achieve normalcy, progress towards our teaching, research and service missions continues with some exciting news and developments to highlight.

ECP’s Diversity, Equity and Inclusion (DEI) committee hosted the College’s faculty, staff and students for a virtual presentation by Dr. Ahmar Zaidi entitled, “The Sickle Caste: from a single mutation to victimization and the road back,” on November 4th. His presentation was followed by breakout sessions to reflect on his presentation and to consider actions each of us can take regarding this important topic.

As you will read in this newsletter, our department continues to succeed in advancing its research agenda. Our graduate program remains robust with the addition of 7 PhD students to our existing cohort of 19 PhD and MS students.

Finally, a fully functioning department requires an engaging and competent team that addresses any number of administrative challenges we encounter. Importantly, as we acknowledge the hard and sustained contributions of our ECP staff, including Becky Palapala, Katherine Goffin, Susan Williford and Lori Endsley, I wish to thank Lindsay Bork Nichols for her outstanding contributions to our department for the past 2 years as our Department Administrator. Since joining our team, Lindsay has engaged in all the essential elements of our department’s operations and has brought her creative problem solving skills to bear on the unique and larger challenges ECP has faced in executing on its mission during the COVID-19 pandemic. It is bittersweet to see Lindsay leave, but we are excited for her as she takes on a new role as the Administrative Director for the new Center for Learning Health Systems Sciences. A big thank you from all of us!

Also on the horizon is the retirement of ECP senior faculty member William Oetting, who will complete his phased retirement on December 30, 2021. Dr. Oetting’s contributions to education and research in the area of genomics has helped accelerate our Department and College’s reputation as a leader in pharmacogenomics. We wish him the very best going forward.

As you review the contents of this newsletter, be assured that exciting news will continue to come from ECP as we continue our work with all of you as alumni, donors, and friends of the department and college.

Energized by the fall weather, I bid you all a safe, healthy, and productive fall.

Sincerely,

Robert Straka, PharmD
Professor and Department Head
What is your current position title, name of organization? Briefly describe your professional path to this point.

My current title at Nuventra Pharma Sciences LLC is Project Manager and Clinical Pharmacology Specialist. Nuventra is a clinical pharmacology, pharmacokinetic, and pharmacometric consulting company based in North Carolina with several satellite offices.

After graduating from Dr. Ling Li’s lab in 2017, I followed my wife to Philadelphia after she matched into her internal medicine program at University of Pennsylvania. Philadelphia had a lot to offer, from highly esteemed academic institutions to several major pharma companies and startups. I knew I didn’t want to limit my education to Alzheimer’s disease and Philadelphia allowed for several different career options. I decided to do a post-doc in Dr. Sarah Tasians’ lab, focusing on pediatric leukemias. My post-doc lab used patient derived xenografts to test a variety of experimental and previously approved treatments, including CAR-T cell therapies.

What is your primary role in your current position?

My current role is an entry-level position designed to facilitate a better understanding of clinical drug development from a consultant’s perspective. My time is split between project management and clinical pharmacology tasks. The project management responsibilities include tracking project scope, budgets, and timelines. The clinical pharmacology responsibilities include assisting with the preparation, review, and formatting of clinical protocols, clinical study reports, INDs, clinical pharmacology and safety sections of NDAs, and Investigator Brochures. The clinical pharmacology tasks are done in parallel with more experienced consultants at Nuventra. Additionally, Nuventra is a training focused company and there are opportunities to specialize in several other areas, including noncompartmental analysis, pharmacometrics, and consulting on regulatory strategies.

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

My graduate research focused primarily on small molecule and biologic (peptides) preclinical drug development for treatments aimed at addressing Alzheimer’s diseases. After graduation, I worked as a post-doc in a lab researching kinase inhibitors and CAR-T cell therapies for the treatment of a prevalent subtype of pediatric leukemia.

Both these training positions gave a well-rounded experience across multiple stages of drug development, patient populations, and drug modalities. Unfortunately, around March of 2020 I became a wet-bench researcher ordered to work from home for several weeks. I started reviewing my ECP coursework and relearning some basic R coding to do simple noncompartmental analysis to prepare...
for a transition into a to-be-determined industry position. Once we learned that my wife matched (a recurring story!) at UNC for her Rheumatology fellowship, I began applying to industry positions in North Carolina. While I didn’t expect remote work to last quite this long, it’s been a great transition. I do hope to meet my co-workers in person at some point!

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?

My most significant professional accomplishment was successfully transitioning from academic research labs to an entry-level industry position. Change is always hard and there were tons of unknown variables involved. Fortunately, my job hunt went well and I was able to select an offer that I felt best aligned with my long-term career goals.

Nuventra is an education-focused company that has several training trajectories available such as FDA regulatory support, pharmacometrics, and preclinical/clinical consulting. I plan to continue developing my skills and working towards becoming a more independent clinical pharmacology consultant and technical writer.

Reflecting back on your experiences as an ECP Graduate Student: What are your fondest memories from that time?

I loved the time spent in the TA office, particularly in my first year in the ECP program. Thinking back at that windowless, fluorescent light filled room with a bamboo plant that was always somewhere between alive and dead - It’s not the space that I miss, but the other students in the program. We helped each other stay on top of meetings, TAing, and training opportunities.

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

I think a summer internship or training opportunity outside the lab would benefit any ECP student. I didn’t do any summer internships because I thought that time would be better spent getting ahead on manuscript authoring and research. Looking back, I think a diversity of experience would have been more helpful than diving even further into your primary research topic.

A second piece of advice is to be as organized as possible - which is something I still work on daily! There will be times when multiple professors ask for your help with grading and proctoring on top of your regular research responsibilities. Also, keep track of your short and long-term goals. You will be given more research projects and opportunities than you will be able to finish in your short time in the program. Try to focus on what interests you and will give the experience you will use after graduation.
Several ECP faculty, students and staff donated their time, talents, and expertise to the battle against COVID-19 by volunteering in Minnesota’s vaccination efforts when vaccines initially became available in spring of 2021. From greeting and orienting vaccination patients to administering the vaccines themselves, ECP members share, in their own words, what motivated them to volunteer, and what they found most rewarding about their experiences.

**Jeannine Conway, PharmD, BCPS, Associate Professor in ECP, Associate Dean for Professional Education, College of Pharmacy**

Dr. Conway volunteered administering vaccinations at the MHealth Interstate vaccination clinic and several Medical Reserve Corp Clinics for a total of 95 hours. “This whole pandemic has left me feeling like there wasn’t a lot I could personally do. So when the vaccines became available, I committed to volunteering as something I could control: I can put needles in arms. And also as a way to pay back getting the vaccine on the earlier side as a pharmacist.”

**Katherine Goffin, Administrative Specialist, ECP**

Katherine heard about volunteering opportunities through MHealth and volunteered as a greeter and observer for MHealth vaccine clinics because she wanted to do her part for community health. “I volunteered in different roles on 8 occasions. This included handing out forms, answering questions, and monitoring patients for allergic reactions. I enjoyed helping elderly people orient themselves. I also liked getting my vaccination!”

**Betsy Hirsch, PharmD, BCPS, Associate Professor, ECP**

Dr. Hirsch volunteered administering vaccinations at multiple clinics for Boynton on campus and at Open Cities Health Center in St. Paul through the UMN Medical Reserve Corps. She volunteered approximately 57 hours between March and May 2021, giving approximately 413 vaccinations. “It was most rewarding to feel like I was contributing to control of the pandemic and people were genuinely happy and relieved to be getting vaccinated. It was especially rewarding to play a role in helping to vaccinate underrepresented patient populations served by Open Cities Health Center as we know that COVID-19 has disproportionately affected minoritized populations as a result of systemic racism.”
Melanie Nicol, PharmD, PhD, Associate Professor, ECP
Dr. Nicol volunteered to administer vaccines at Fairview clinics (Interstate and Woodwinds Clinics); Ramsey County Medical Reserve Corps (multiple clinics), and through UMN Medical Reserve Corps (Campus clinics and deployed to La Clinica/FQHC). “I began seeking opportunities before the vaccines were even approved. I felt that getting as many people vaccinated as quickly as possible was the most impactful thing we could do to combat the pandemic. Vaccinating the entire country was by definition going to be a historic event and I was drawn to being a part of that. When I worked in community pharmacy, administering vaccines was one of my favorite parts of the job. Being involved with a variety of clinics, in a variety of settings that targeted various populations was very interesting. I got to see multiple approaches different organizations took to the process—all with the same goal of making things as efficient and safe as possible.”

Ya-Feng “Jay” Wen, PharmD, ECP Graduate Student
Dr. Wen volunteered to administer vaccines after hearing about recruitment efforts for the UMN Medical Reserve Corps. “[I was] able to provide timely vaccinations to diverse populations at Minnesota Community Care and to students at the University. I hope my contribution can result in reducing the COVID-19 cases in our community.”

Susan Williford, Graduate Program Coordinator
Susan volunteered for MHealth vaccination clinics after hearing about the need for volunteers through the College of Pharmacy. She was motivated by the opportunity to aid in the pandemic response and give back to the community. “I felt like I was contributing to the global pandemic response in a small way and that felt very rewarding. Interestingly, I witnessed many different behaviors in people, displaying the good and bad parts of humanity.”
GRANTS

**Angela Birnbaum** received a new R01 grant from NIH/NICHD titled: “Physiological-based Pharmacokinetics Approach to Determine the Extent of Drug Exposure of Antiseizure Medications During Pregnancy and Breastfeeding.” Dr. Birnbaum is also a co-investigator on a 2021 CTRS Pilot Funding Program grant titled: “Use of topical cannabinoids for treatment of aromatase inhibitor-associated musculoskeletal syndrome (AIMSS) in women with hormone receptor-positive breast cancer (CanAroma): A pilot and feasibility study” (PI: Anne Blaes).

**R. Stephanie Huang** is a co-I and will serve as a preceptor for a newly awarded NIH NIGMS T32 Genetics and genomics training grant.

**Pamala Jacobson**, Jacob Brown (UMD) and **Erin McGonagle** received a $300K Minnesota Department of Health Workforce Education Grant for their proposal, “Pharmacogenomics Clinical Training Program for Pharmacists in Rural and Underserved Areas in Minnesota.”

**Reena Kartha** received funding of $150,000 (total costs) from Ligand Pharmaceuticals Inc. for the project “Nervonic Acid-a Potential Therapy to Alleviate Disease Progression in Adrenoleukodystrophy”. This will support testing of a new formulation of nervonic acid in a mouse model.

**Ling Li** is a co-investigator on a new NIH/NIA grant U01AG073079 entitled “Causal and integrative deep learning for Alzheimer’s disease genetics” (PI: W. Pan), 09/15/2021 – 08/31/2026, with a total funding of $3,506,760.

AWARDS AND RECOGNITION

**Esam El-Fakahany** received the Distinguished Career Award for Leadership in Mentoring. This is an annual award by CTSI for outstanding senior mentors.

**R. Stephanie Huang** is a recipient of the 2020-2021 Outstanding Advisor Award by the Council of Graduate Students (COGS) at UMN. This award recognizes faculty at a university-wide level, who have gone above and beyond in their work with graduate students.

**Ramaiah Muthyala** was named a Rare Disease Difference Maker® by Engage Health.

**Melanie Nicol** was recognized as the Society of Infectious Diseases Pharmacists (SIDP) Young Investigator of the Year. She will be formally recognized at the SIDP Annual Meeting in November, 2021.
ECP pharmacogenomics and Institute of Personalized Medicine team members Pamala Jacobson (co-PI), Cathy McCarty (co-PI), Alyssa Johnson, Lusi Zhang, Jeff Bishop, Jay Wen, Abdelrahman Saqr, Erin McGonagle and Josiah Allen spent 5 days in the UMN Driven to Discover Building at the Minnesota State Fair conducting a survey entitled “How do Your Genes Fit?” for PGx research. The 73-question survey, delivered to 815 individuals, covered questions related to: Understanding of genetics and PGx, perception of PGx and willingness to have a PGx test, types of medications the survey subjects take, perceptions about genetic and PGx privacy, willingness to share their PGx data in a statewide repository, and health literacy.

The University’s Center for Orphan Drug Research (CODR) and Theater Arts and Dance Department—in collaboration with community members diagnosed with rare diseases—are producing a play that examines the challenges faced by those living with rare disorders. Over 7,000 diseases are considered rare, affecting one in ten Americans and their families who face few available effective treatments. The project aims to help a state-wide audience gain greater awareness and deeper understanding of the medical, economic, and social challenges facing people with rare diseases. The play is slated for opening next summer (2022) at venues on and off campus.
Ibrahim Abdelgawad, ECP graduate student in the lab of Beshay Zordoky, was awarded the American Society for Pharmacology and Experimental Therapeutics (ASPET) Travel Award in the graduate and post-baccalaureate student category to attend the Experimental Biology 2021 virtual meeting to present a poster entitled “Metformin Modulates Doxorubicin-induced Senescence Phenotype in Endothelial Cells.”

Josiah Allen received the 2021 President’s Student Leadership and Service Award (PSLSA). The PSLSA is presented to students for their exceptional leadership and service to the University of Minnesota and the surrounding community.

Charul Avachat, ECP graduate student in the lab of Angela Birnbaum, was appointed as a steering committee member of ASCPT’s Student and Trainee community + steering committee member of ASCPT’s Development, Regulatory, & Outcomes (DRO) Network.

ECP graduate student Jessica Barry received an Advanced Pathways to Research Program (A-PReP) award from CTSI for 2021. She was also selected to serve as the student liaison for the ISOP Statistics and Pharmacometrics Special Interest Group.

Kaylyn Billmeyer, PD2 research emphasis student in Elizabeth Hirsch’s lab, was awarded a $5,000 Melendy summer research fellowship for the project entitled “Impact of a collaborative OPAT program at UMMC”. This project is in collaboration with infectious diseases colleagues at UMN Medical School and M Health Fairview-University of MN Medical Center. Ms. Billmeyer also received the John Y. Breckenridge Memorial Award from the College of Pharmacy in spring 2021.

Morgan Bixby, ECP graduate student in the lab of Elizabeth Hirsch, was awarded an IDWeek Trainee Award by the Infectious Diseases Society of America. Ms. Bixby is also the lead author on an abstract entitled “Investigation of heteroresistance among Klebsiella pneumoniae (KP) inner colonies (IC) observed during fosfomycin disk diffusion (DD) testing” accepted for poster presentation for IDWeek 2021--the Infectious Diseases Society of America national meeting.

ECP PhD student Shen Cheng received the Graduate School Doctoral Dissertation Fellowship for 2021-2022.

Lee Cheung, PharmD student in R. Stephanie Huang’s lab, completed a Melendy/Peters Summer Research Fellowship in Summer 2021.

Kadiro Gelchu, PharmD student in R. Stephanie Huang’s lab, completed
Melendy/Peters Summer Research Fellowship in Summer 2021.

**Yingbo Huang**, 3rd-year ECP graduate student in **R. Stephanie Huang's** lab, received the 2021 Bighley Graduate Fellowship. The Bighley Graduate Fellowships are awarded to full-time CoP PhD graduate students who have great potential and are conducting research in basic and applied pharmaceutical sciences. Mr. Huang's abstract entitled, “Sex differences in the expression and genetic regulation of drug metabolism and transporter genes in human liver” has been accepted for a platform (oral) presentation at the ASHG 2021 Annual Meeting, the largest human genetics and genomics meeting in the world.

**Jeffy Jeffy**, Undergraduate Chemistry Major (co-advisor: **Ramaiah Muthyala**), received an Undergraduate Physiology Research in Medicine and Education (UPRIME) summer fellowship.

**Chenxu Li**, first year ECP graduate, is the Chair Elect for AAPS-UMN Student Chapter, Fall 2021

**Xintian Lyu**, ECP graduate student, received the International Cannabinoid Research Society (ICRS) Trainee Award. Ms. Lyu also received an International Cannabinoid Research Society (ICRS) Braude Foundation Award for her poster, “Dosage and Formulations Received by Patients Within a US State Cannabis Program,” presented at the International Cannabinoid Research Society in June 2021. She was a CTSI Advanced Pathways to Research Program (A-PReP) scholar for 2021.

**Daniel Mansour**, undergraduate student, completed a Pathways to Research Program (PReP) Summer Scholarship from the UMN Clinical and Translational Science Institute (CTSI) in the lab of **Beshay Zordoky**.

**Amy Paulson**, a Pharmacology graduate student in **R. Stephanie Huang’s** lab, has been awarded the 2021 Department of Pharmacology Louise M. Nutter Academic Excellence Award.

**Siddhee Sahasrabudhe**, ECP graduate student in the lab of **Reena Kartha**, received the Riverton Community Grant. The grant opportunity was created for Riverton co-op members. It serves as a recognition for her civic leadership and community engagement activities. The award had a $1000 prize and a certificate of achievement.

**Jenna Salay**, an undergraduate chemistry student in **Betsy Hirsch’s** lab, was accepted into the University of Minnesota Summer College of Pharmacy Experience (SCoPE) Program. This program aims to provide pharmaceutical career exploration opportunities and adequate technical and professional skills enhancement opportunities to prepare scholars for post-baccalaureate PhD and PharmD program entry. She will be assigned to Dr. Betsy Hirsch’s lab for the mentored research portion of the SCoPE internship.

**Yuting Shan**, 1st year PhD student in the lab of **R. Stephanie Huang**, received the Rho Chi Izaak M. Kolthoff award.

**Boguang Sun**, ECP graduate student in **Robert Straka’s** lab, was awarded
the TA of the Semester Spring 2021 and TA of the Year 2020-2021.

**Julianne Tieu** received the Pharmacy Alumni Society Graduating Student Award, presented to a PD4 for scholastic excellence and extracurricular involvement. She was recognized for enthusiasm and promoting personal and professional growth. She also received the Dean’s Award, presented to a student who has made significant contributions to the goals of the College of Pharmacy. Julianne Tieu completed research rotations at CODR with **Reena Kartha**.

**Weijie Zhang**, a PhD student in Bioinformatics and Computational Biology in **R. Stephanie Huang’s** lab received a 2021 CTSI Advanced Pathways to Research Program (APReP) Scholarship.

**Dina Zheng**, undergraduate researcher entering COP this fall, was the lead author on an abstract entitled “Frequency of Pseudomonas aeruginosa Discrete Inner Colonies and Comparison of Minimal Inhibitory Concentration Values between Parent and Inner Colony Isolates Following Fosfomycin Disk Diffusion Testing” accepted for platform presentation at IDWeek 2021—the Infectious Diseases Society of America national meeting (**Elizabeth Hirsch**, PI).

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**WELCOME NEW ECP GRADUATE STUDENTS 2021-2022!**

Mohamed Dabour  
PhD student  
Advisor:  
Beshay Zordoky

Chenxu Li  
PhD student  
Advisors:  
Reena Kartha and Lisa Coles

Yuhan Long  
PhD student  
Advisor:  
Angela Birnbaum

Moataz Mohamed  
PhD student  
Advisor:  
Pamala Jacobson

Yuting Shan  
PhD student  
Advisor:  
R. Stephanie Huang

Jason Sriwijaya  
PhD student  
Advisor:  
Angela Birnbaum

Lusi Zhang  
PhD student  
Advisor:  
Jeffrey Bishop

#UMNPROUD!
Mahmoud Al-Kofahi and his wife Nour are happy to announce the birth of their two healthy boys, Kareem (over 6 pounds) and Karam (4 pounds 14 oz) in March.

ECP alumnus and Adjunct Assistant Professor Kyle Baron (2010) is a recipient of the 2021 International Society of Pharmacometrics (ISoP) Award for Innovation. Kyle is a former graduate of the ECP Ph.D. program (2010) where he specialized in the field of pharmacometrics. Currently, he works for Metrum Research Group as a Senior Scientist.

ECP and CODR Administrative Associate Lori Endsley and her family welcomed puppy Leo to their household.

Robert Galvin, a Pediatric Hem/onc Fellow, who works in Dr. Stephanie Huang’s lab has been awarded the CCRF (children’s cancer research fund) Emerging Scientist Award. Dr. Galvin was also selected to receive the Minnesota Society of Clinical Oncology (MSCO) Spring conference Outstanding Hematology/Oncology Fellow abstract achievement award (2021).

The lab group of R. Stephanie Huang had their first lab outing at Lake Phalen on 6/20/21. “We had a great time seeing each other after a year and a half of separation!”

Michael Kotlyar and family welcomed son Bennett Meline Kotlyar on March 18.

Linda Krach, MD, a member of the Center for Orphan Drug Research (CODR) and a physical medicine rehabilitation physician at Gillette Children’s Specialty Healthcare, is the PI on a grant entitled “Ketogenic Diet Following Moderate to Severe Pediatric Traumatic Brain Injury: A Pilot Study” recently funded by the MN Spinal Cord Injury and Traumatic Brain Injury Research Grant Program. ECP Adjunct Research Professor Bob Kriel, MD, also a member of CODR, is a consultant on the project.

Patty Maglalang, PharmD IV alumna (graduated May, 2021), is a recipient of an American Foundation of Pharmaceutical Education (AFPE) - Phi Lambda Sigma (PLS) First Year Graduate Research Fellowship. James Cloyd and Lisa Coles were mentors during her time as a UMN chemistry major.

Luna Musib, PhD, former Dept of Pharmacy Practice (ECP predecessor dept) post-doctoral fellow of James Cloyd, is now Executive Director, Clinical Pharmacology, Gilead.

Denise Wolff, PharmD, former Dept of Pharmacy Practice (ECP predecessor dept) post-doctoral fellow, is now Executive Director & Head of Market Access at Pear Therapeutics. She was a fellow of Nina Graves.