What’s Inside:
New ECP Appointments p.4
Biennial Pharmacogenomics Conference p.5
Alumni Spotlight p.7
Faculty

Robert J. Straka, Pharm.D.
Department Head; Professor
Mahmoud Al-Kofahi, D.D.S., Ph.D.
Assistant Professor
Angela K. Birnbaum, Ph.D.
Professor; Director of Graduate Studies
Jeffrey Bishop, Pharm.D., M.S.
Associate Professor
Richard C. Brundage, Ph.D., Pharm.D.
Professor
Scott A. Chapman, Pharm.D.
Associate Professor
James C. Cloyd, Pharm.D.
Professor; Weaver Endowed Chair; Director, Center for Orphan Drug Research
Lisa Coles, Ph.D.
Assistant Professor
Jeannine M. Conway, Pharm.D.
Associate Professor; Assistant Dean for Professional Education
Esam El-Fakahany, Ph.D.
Professor; Associate Dean for Research and Graduate Studies
Elizabeth Hirsch, Pharm.D.
Assistant Professor
R. Stephanie Huang, Ph.D.
Associate Professor
Pamala A. Jacobson, Pharm.D.
Professor; Director, Institute of Personalized Medicine
L’Aurelle A. Johnson, Ph.D.
Assistant Professor; Associate Director of Graduate Studies
Reena Kartha, Ph.D.
Assistant Professor
Mark N. Kirstein, Pharm.D.
Associate Professor
Michael Kotlyar, Pharm.D.
Associate Professor
Ilo E. Leppik, M.D.
Professor
Ling Li, Ph.D.
Professor; VFW Endowed Chair
Susan E. Marino, Ph.D.
Associate Professor; Director, Center for Clinical and Cognitive Neuropharmacology
Melanie R. Nicol, Ph.D., Pharm.D.
Assistant Professor
William S. Oetting, Ph.D.
Professor
Swayam Prabha, Ph.D., M.B.A.
Assistant Professor
John C. Rotschafer, Pharm.D.
Professor
Shellina Scheiner, Pharm.D.
Assistant Professor
Leo Sioris, Pharm.D.
Professor
Debra J. Skaar, Pharm.D.
Associate Professor
Lynda Welage, Pharm.D.
Professor; Dean, College of Pharmacy
Beshay Zordoky, M.Sc., Ph.D.
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Dear Friends,

The academic year is launching into full swing at the U of M, and we in ECP are excited to meet the opportunities and challenges of this new cycle head-on. We have had a productive summer, creating new plans for the department's future and capitalizing on the foundations we laid in the months and years past.

In June, ECP hosted the second biennial Precision Medicine Conference at McNamara Alumni Center. I offer my sincere gratitude to the department's precision medicine group and our department staff for the successful execution of this complex and important day-long event.

ECP is delighted to welcome new staff critical to our achievement of strategic initiatives and goals the department laid out last spring, and other colleagues have moved into new roles where their unique and important skills will find fresh avenues for growth to enrich the depth and quality of teaching and research in ECP:

Diane Blumenfeld has joined ECP in the role of Administrative Specialist, and Susan Williford is ECP's new Graduate Program Coordinator. Together, they have helped us welcome seven new Ph.D. students for the 2018-19 academic year: Ibrahim Abdelgawad, Sarah Kim, Judy (Mei-Chi) Su, Joshua Mentzer, Siddhee Anand Sahasrabudhe, Fan Wang, and Rui Zhong.

Researchers Lisa Coles, Ph.D. and Reena Kartha, Ph.D. have both been appointed Research Assistant Professors in the department. Drs. Coles and Kartha have long been major contributors to the department as researchers, instructors, and mentors, and we are thrilled to have them onboard as faculty.

Please read on for details on these and other exciting developments in the department, and join me in wishing our colleagues in the department, college, and University a rewarding year.

Sincerely,

Robert J. Straka, Pharm.D.
Department Head
The Department of Experimental and Clinical Pharmacology is pleased to announce that Dr. Lisa Coles and Dr. Reena Kartha are formally appointed as Research Assistant Professors within the department. Both have been working as researchers in the Center for Orphan Drug Research and will continue to do so in their new roles.

Lisa Coles received her Ph.D. in Pharmaceutical Sciences from the University of Maryland in 2009, having also earned an MS in Biomedical Engineering in 2000 from the University of Minnesota. She returned to Minnesota in 2009 as a Post-Doctoral Fellow in the Center for Orphan Drug Research (CODR). Dr. Coles’ research program focuses on three therapeutic areas: epilepsy, Parkinson’s Disease, and diabetes, specifically the impaired awareness of hypoglycemia.

Reena Kartha received her Ph.D. in Life Sciences in 2005 from the Indian Institute of Science in Bangalore. She had previously earned an MS in Biotechnology from the Center for Plant Molecular Biology of Tamil Nadu Agricultural University in Coimbatore, India. Dr. Kartha joined the University of Minnesota in 2009 as a research associate in the Department of Pharmaceutics before moving to CODR in 2011. Her current research focuses on development of new therapies for rare neurogenerative disorders and the identification of related novel blood and brain biomarkers.

Both Dr. Coles and Dr. Kartha have been valued colleagues for many years, and we are delighted that these new positions recognize the value of their contributions to CODR, to ECP, and to the field.
On Friday, June 22nd, over 300 students, clinicians, and private and public researchers gathered at McNamara Alumni Center for the second biennial Precision Medicine Conference, titled Pharmacogenomics: Genomic Testing to Individualize Drug Therapy. The Institute of Personalized Medicine and Department of Experimental and Clinical Pharmacology, in cooperation with the Minnesota Precision Medicine Collaborative, hosted the day-long event, which brought together high-caliber experts and industry exhibitors from across the field of pharmacogenomics.

After an introduction from Pamala Jacobson, Pharm.D., F.C.C.P., Director of the Institute for Personalized Medicine, participants were welcomed to the day by Lynda Welage, Pharm.D., Dean of the College of Pharmacy at the University of Minnesota. Julie Johnson, Pharm.D., Dean and Distinguished Professor of the College of Pharmacy at the University

Continued on page 6
of Florida-Gainesville delivered the keynote speech, entitled, “Improving Clinical Outcomes Through Pharmacogenomics.” Throughout the day, nine additional regional and national experts in their fields presented on pharmacogenomics-related topics ranging from cancer treatment to insurance billing.


The first 250 registrants to the conference received complementary RightMed® pharmacogenomic testing from OneOme, and the aggregated results of the registrants’ tests were presented during a special lunchtime session by Pamala Jacobson, Jacob Brown, Pharm.D., and Brian VanNess, Ph.D. Among all the registrants who received a OneOme pharmacogenomic report, there were an average of 4.8 actionable variants per person in only 12 genes.

This emphasizes that genetic variation affecting drug therapy is common.

The next precision medicine conference will take place in 2020. Organizers are already scouting locations and considering ways to improve and expand the conference. Stay tuned for additional information in the months ahead.

For a full list of 2018 presenters and topics, including video of all presentations, as well as a full list of exhibitors, please visit the website of the Institute of Personalized Medicine at:
https://www.pharmacy.umn.edu/centers-and-institutes/institute-personalized-medicine
Alumni Spotlight: Malek Okour, Ph.D. ‘15

Where are you now and how long have you been there? 
Currently I am at GlaxoSmithKline (GSK) pharmaceutical company, where I work in the Clinical Pharmacology Modeling and Simulation (CPMS) group. I have been with GSK since I graduated, and my current position title is Manager, Clinical Pharmacology.

Have you had any recent promotions or major field changes since you began your career?
Since late last year, I started working more heavily on the submission and regulatory aspects of the drug development process. I am currently involved in a couple of submission projects.

What would you say is your primary role in your current position?
In general, my role can be divided in two major areas. In the first area, I implement clinical pharmacology concepts and pharmacometrics in the design, analysis and interpretation of clinical drug development. In the second area, I get involved with submission-related tasks to ensure we get an approval for the drug, and to answer the regulatory agencies’ questions on clinical pharmacology aspects of the drug.

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?
In addition to expanding my professional network and advancing my technical skills, my most significant accomplishments include publishing several manuscripts, getting invited as a speaker for a meeting in Bangkok, and, lastly, being interviewed by Chemistry World magazine.

Reflecting back on your experiences as an ECP Graduate Student, what are your fondest memories from that time, and what advice can you give to current and prospective students in ECP?
One of the greatest memories during my graduate student experience was when we (graduate students) would gather and study statistics together! This was a great way to learn, as everyone helped to make sure everyone else understood. We all ended up having top statistics grades, as I recall.

For ECP students, I recommend studying together. Also, don’t hesitate to ask questions, either to your mentor or colleagues. You are at a stage where you are expected to ask questions, and if you don’t ask a question, you may never know the answer! Please enjoy your time during the program.
Grants

**Angela Birnbaum** is PI of the Pharmacokinetic Laboratory Core of a study called “Maternal Outcomes and Neurodevelopmental Effects of Antiepileptic Drugs,” which was awarded an additional 5-year grant of $432,469 to follow the children of pregnant mothers with epilepsy through 2022.

**Richard Brundage** received a $1.4M, 3-year R01 from the National Institutes of Health for his project, “Ph2a SQ HC Infusion Pump in Congenital Adrenal Hyperplasia IND 125,640.”

**Pamala Jacobson** is part of a team that received a Masonic Cancer Center Chainbreaker award for their project entitled, “The Role of the Intestinal Microbiota in Cancer Pathogenesis and Clinical Care.”

**Reena Kartha** received a $30,000 grant from Pfizer for her study, “Use of Antioxidant or Anti-inflammatory Medications to Mitigate Oxidative Stress and Inflammation in Type 1 Gaucher Disease (GD1).”

**Ling Li** received a $1.884M five-year NIH/NIA RO1 grant for her project, “HDL Mimetic Peptide-Mediated Enhancement of Neurovascular Function to Mitigate Cerebral Amyloid Angiopathy and Alzheimer’s Disease.”

**Melanie Nicol** is Co-PI on a study entitled, “Pharmacology of Antiretrovirals in Anatomical Brain Tissue among persons with chronic HIV infection,” which has received a 2-year, $340,000 grant from the National Institutes of Health, National Institute of Neurological Disorders and Stroke.

**Melanie Nicol** also received a $30,000 seed grant from the University of Minnesota Academic Health Center for her project entitled “Role of the vaginal microbiome in antiretroviral disposition in the female genital tract.”

**Shellina Scheiner** will co-lead a project entitled, “Treatment of Acute Pain: An Evidence Map.” Her team has received a $200,000 grant from the Agency for Healthcare Research and Quality. Co-investigators: Michelle Brasure (co-lead), PhD, MSPH, MLIS, Mary Butler, PhD, MBA, Timothy J. Wilt, MD, MPH

**Beshay Zordoky** received a 1 year, $50,000 renewal of his grant from the Rally Foundation for his project, “Cardiac Effects of Doxorubicin Exposure in Juvenile Mice.”

Recognition

**Ramaiah Muthyala** was a guest of honor at the Delhi Telugu Academy’s (DTA) Telugu Luminaries Cultural Celebration, where he was recognized for his work with the Indian Organization on Rare Diseases (IORD) for the service it has provided to rare diseases patients for the last 15 years. DTA, based out of New Delhi, is an influential Non-Government Organization that honors accomplished individuals from India as well as abroad for their commendable contribution to their communities.

**Richard Brundage** was elected to the Board of Regents of the American College of Clinical Pharmacology for a five-year term, 2019-2023.
Angela Birnbaum’s article, “Opioid Dose- and Route-Dependent Efficacy of Oxycodone and Heroin Vaccines in Rats” was promoted by ASPET nationally and featured in the Star Tribune and Fox 9 news.

Ramaiah Muthyala was featured as a rare diseases advocate in the MN Daily article “Legislation Would Establish Rare Disease Committee.”

William Oetting was featured on the Fox9 story, “Controversial DNA Testing Technique Used in Feldman Murder Case.”

Service

Robert Straka and Ramaiah Muthyala completed the 50 mile, and Mark Kirstein, the 100 mile, Chainbreaker “Chasing Down Cancer” bicycle ride on August 11 as members of the College of Pharmacy’s peloton. The annual fundraiser supports the U of M’s Masonic Cancer Center (MCC). Last year, the event raised $1.3 million for research grants through MCC, and a portion of those awards went to “The Role of the Intestinal Microbiota in Cancer Pathogenesis and Clinical Care,” a project to which ECP’s Pamala Jacobson is a contributing team member.

Media

ECP’s Dr. Ramaiah Muthyala (second from left) at Delhi Telugu Academy’s (DTA) Telugu Luminaries Cultural Celebration

ECP Research Associate Professor Ramaiah Muthyala (rt) and his son, Brian K. Muthyala, M.D., M.P.H. at Chainbreaker’s 50-mile finish line.

Some ECP-affiliated members of CoP’s Chainbreaker peloton, left to right: Julie Baker (alumna), Robert Straka (dept. head), Mark Kirstein (associate professor), Ann Schwemm (Fairview pharmacist), Aaron Wood
Irene Vuu was awarded an American Foundation for Pharmaceutical Education Pre-Doctoral Fellowship. She and her mentor, Lisa Coles, are researching “Pharmacokinetic modeling and simulations of intravenous antiseizure drugs to obtain optimal dose regimens for use in clinical trials in status epilepticus.”

Samuel Callisto was selected to participate in the Uppsala University Pharmacometrics Summer School in Uppsala, Sweden from August 13th to 24th. A group of 25 international Ph.D. students studying pharmacometrics received advanced topic lectures and hands-on modeling experience throughout the two week workshop. Samuel also received a Career Development Grant from the University of Minnesota Council of Graduate Students to help cover the costs of his trip.

Angela Jeong, Pharm.D., a Ph.D.

CONGRATULATIONS to ECP’s CTSI Advanced Pathways to Research Program (APReP) and CTSI/Melendy Summer Research Scholarship recipients Bridget Curtin, Parker Johnson, An Le, Tam Nguyen, Rachel Pearson, Elizabeth Smith, Boguang Sun, and Lusi Zhang on the successful completion of their summer projects!

Dustin Chernick, a Ph.D. graduate student (Pharmacology) in Ling Li’s lab, successfully defended his dissertation on Aug. 2, 2018 and has started his new position as the Publications and Scientific Communications Manager at Adamas Pharmaceuticals in San Francisco.

Dr. Chernick is the first author on the following publication:

Annabel Cho, a junior at Minnetonka High School, received a 2018 Emperor Science Award through the American Association for Cancer Research (AACR) to conduct summer research under the mentorship of Swayam Prabha.

Paul Geeleher, University of Chicago-based post-doctoral researcher in the lab of Dr. Stephanie Huang, received an AACR-Aflac Scholar-in-Training Award for travel to the American Association for Cancer Research (AACR) annual meeting in Chicago (April 13-18th). Dr. Geeleher will graduate to his new position at St. Jude Children’s Hospital as an Assistant Professor in February 2019.

David Hottman, who received his Ph.D. in the ECP graduate program and then conducted postdoctoral research under the mentorship of Ling Li, relocated to Philadelphia in May 2018 and is currently a postdoctoral research fellow at the University of Pennsylvania, Children’s Hospital of Philadelphia.

Buddhadev Layek, post-doctoral researcher in the lab of Dr. Swayam Prabha, received a travel award from the American Association of Pharmaceutical Scientists.

Ling Li accepted three new Ph.D.

ECP gazette | Fall 2018
graduate students, Rui Zhong (ECP), Stephanie Ortis-Valle (Pharmacology), and Wenhui (Wendy) Qu (Neuroscience), into her laboratory for their dissertation research on Alzheimer’s disease.

Susheel Nethi joined the lab of Swayam Prabha as post doctoral associate. Susheel holds a Ph.D. from the Department of Applied Biology, CSIR-IICT, Hyderabad, India.

Swayam Prabha accepted two new PhD graduate students, Su Mei Chi (ECP) and Sneha Rathi (Pharmaceutics), and a Master’s graduate student, Mokshada Kumar (Pharmaceutics), into her lab. Sneha Rathi received a four year 3M science and technology doctoral fellowship for her dissertation research.

Aritro Nath, post-doctoral researcher in the lab of Dr. Stephanie Huang received a JCA-AACR Special Joint Conference travel grant for ¥100,000 for travel to the 6th annual Japanese Cancer Alliance-American Association for Cancer Research (JCA-AACR) Special Joint Conference in Kyoto, Japan from July 10 - 12, 2018. Dr. Nath also received an AACR-Aflac Scholar-in-Training Award for travel to the American Association for Cancer Research (AACR) annual meeting in Chicago (April 13-18th).

Siddhee Anand Sahasrabudhe has joined ECP as a Ph.D. graduate student under Reena Kartha (advisor) and James Cloyd (co-advisor).

ECP alumna Heather Vezina (Ph.D. ’12) was elected to the International Society of Pharmacometrics (ISoP) Board of Directors by the membership of the organization. She will join the board starting January 2, 2019.

THANK YOU to all our 2017 ACoP Alumni Reception attendees! We look forward to seeing you this year in San Diego!
ECP Summer Outing July 25th, 2018
Lakefront Park, Hudson, WI