



UNIVERSITY of MARYLAND
SCHOOL OF PHARMACY

From the Chair's Desk

News from Paul Shapiro, PhD
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Dear alumni and colleagues,

Happy summer! Another academic year has come to a close, and I hope that you are all able to enjoy much deserved rest and relaxation during the summer months.

The Department of Pharmaceutical Sciences (PSC) is pleased to welcome two new faculty members - Ryan Pearson, PhD, who joins us as an assistant professor from the University of Michigan, and Ying He, PhD, who also joins us as an assistant professor from the University of Illinois at Chicago. Dr. Pearson brings expertise in the development of novel immune system modulating nanoparticles to treat life threatening sepsis and septic shock. Dr. He brings expertise in elucidating the mechanisms underlying persistent pain and addiction and the discovery of new therapeutic approaches. We are happy to have them on board and know that they will contribute to our department's mission to advance basic, translational, and clinical research across the spectrum of drug discovery and development



Several of our existing faculty members have recently further strengthened their collaborations with researchers at the University of Maryland School of Medicine through the receipt of pilot grants from the University of Maryland, Baltimore's new [Institute for Clinical and Translational Research](#) :

- [Steve Hoag, PhD](#), professor in PSC, and [Amy Fulton, PhD](#), professor of pathology - "*Translational Studies of Taro Extract for Clinical Trial Development*"
- [Richard Dalby, PhD](#), professor in PSC, and [Erik Lillehoj, PhD](#), associate professor of pediatrics - "*MUC1 Peptides as Novel Therapeutics for Pseudomonas Lung Infections*"
- [David Goodlett, PhD](#), professor in PSC, and [Mark Travassos, MD](#), assistant professor of pediatrics - "*A Metabolomics Approach to Profiling Children with Cerebral Malaria*"
- [Paul Shapiro, PhD](#), professor and chair of PSC, and [Jeffrey Hasday, MD](#), professor of medicine - "*Development of a Novel Class of Non-catalytic, Substrate-selective p38alpha Inhibitors with Anti-inflammatory Activity*"

Congratulations to them all!

Sincerely,

Hollenbeck Honored with Distinguished Alumnus Award



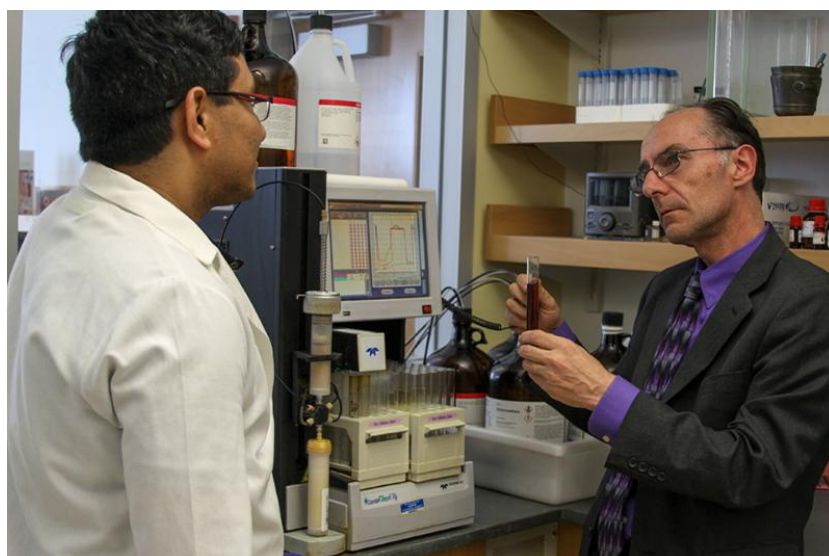
The Purdue University College of Pharmacy has named R. Gary Hollenbeck (left in above photo), PhD, affiliate professor in PSC and research fellow in the Good Manufacturing Practice (GMP) facility at the School of Pharmacy, one of its 2018 Distinguished Pharmacy Alumni. Established in 1984, the award celebrates the outstanding achievements in professional and scientific endeavors of the college's most prominent alumni. Dr. Hollenbeck is one of four alumni from the college to be recognized with the award this year. He joined the University of Maryland School of Pharmacy as an assistant professor in 1977, rising through the ranks to become a professor of pharmaceutical sciences and associate dean for academic programs. During his service as associate dean for academic programs from 1991 to 1996, Dr. Hollenbeck played a key role in the transition from the School's Bachelor of Science program to its now nationally recognized PharmD program. In 1997, Dr. Hollenbeck became a principal figure in the formation and development of UPM Pharmaceuticals, Inc., an independent contract development and manufacturing organization serving the pharmaceutical and biotechnology industries. He later joined the company as its chief scientific officer, before returning to the School of Pharmacy in 2016, where he currently participates in early-stage pharmaceutical research and development, and directs clinical supplies production in the GMP facility. [Read more here...](#)

PSC Names New Emerson Chair



[Angela Wilks, PhD](#), professor and program chair for chemical and biological discovery in PSC, has been named the new Isaac E. Emerson Chair of Pharmaceutical Sciences. Established in 1927, the endowed chair honors faculty members who have demonstrated exemplary leadership across the School and their field of research. Dr. Wilks is the seventh recipient of the chair in its 90-year history. She received a doctorate in biochemistry at the University of Leeds in England, where her research focused on the mechanism of heme degradation. She completed a postdoctoral fellowship and served as a research assistant professor at the University of California, San Francisco before joining the School of Pharmacy as an assistant professor in 1998. Her current research, which spans multiple disciplines, aims to understand the mechanisms by which pathogenic (disease causing) bacteria acquire and utilize heme as an iron source. Her work has led to the structural characterization of several proteins involved in heme uptake and degradation, as well as the design of potential therapeutic agents that reduce a bacterium's virulence by targeting its iron metabolism. [Read more here...](#)

Panel Discussion Highlights Opioid Crisis in Maryland



[Natalie D. Eddington, PhD, FCP, FAAPS](#), dean and professor of the School of Pharmacy, and [Andrew Coop, PhD](#), associate dean for academic affairs and professor in PSC, joined Jay A. Perman, MD, president of the University of Maryland, Baltimore (UMB), and the dean of the University of Maryland School of Social Work for an

interdisciplinary panel discussion focused on the opioid crisis currently plaguing the United States. Held April 18 at Homestead Gardens in Davidsonville, Md., the panel discussion spotlighted the University's efforts to bring science to an area in which evidence-based practices are often lacking. Dr. Coop spoke about his work to develop UMB 425 - an opioid painkiller with the potential for no abuse liability. First discovered by Dr. Coop and his team in 2013, UMB 425 is as strong as morphine, but boasts a unique dual-profile that acts on two different opioid receptors in the body. When activated at the same time, these receptors work together to provide pain relief and slow the body's development of tolerance to the drug, allowing a lower dose of the opioid to be administered for a longer time period while still achieving the same level of pain relief. [Read more here...](#)

CADD Symposium Shows Collaboration is Key in Drug Discovery



The [Computer-Aided Drug Design \(CADD\) Center](#) - an organized research center at the University of Maryland, Baltimore that is housed within and led by faculty at the School of Pharmacy - welcomed researchers from across academia, government, and industry to its biennial CADD Symposium on May 23. Designed to facilitate collaborations between the CADD Center and researchers across the University System of Maryland and beyond, the symposium presented recent developments in the fields of drug design and development, and offered opportunities for researchers to network and discuss potential collaborations. The symposium was organized by [Alexander MacKerell, PhD](#), the Grollman-Glick Professor of Pharmaceutical Sciences and director of the CADD Center at the School of Pharmacy, who kicked off the event alongside David Weber, PhD, professor of biochemistry and molecular biology and director of the Center for Biomolecular Therapeutics at the University of Maryland School of Medicine. The two researchers presented an overview of the drug discovery initiatives being pursued by scientists across the University of Maryland, Baltimore. [Read more here...](#)

Symposium Highlights Value of Mass Spectrometry in Biophysics



To help celebrate Biophysics Week, which was internationally observed from March 12-16, the [Mass Spectrometry Center](#) at the School of Pharmacy hosted a day-long symposium on March 13, focused on the increasing demand and utility of mass spectrometry in structural biology and biophysical research. Titled "Mass Spectrometry: An Expanding Tool for the Biophysicist," the symposium attracted dozens of researchers from across the nation and featured presentations delivered by several leading experts in mass spectrometry-based biophysical studies. A number of faculty, staff, and graduate students from PSC delivered presentations during the symposium, including [Lisa Jones, PhD](#), assistant professor; [Patrick Wintrode, PhD](#), associate professor; Daniel Deredge, PhD, postdoctoral fellow; and Emily Hart and Wenjing Li, students in the [PhD in PSC program](#). [Read more here...](#)

Kudos!

Our department's faculty and students are regularly recognized at the local and national level for their expertise. Here is a short list of recent accomplishments.

- [Alex MacKerell, PhD](#), Grollman Glick Professor and director of the School's Computer-Aided Drug Design Center, and [Fengtian Xue, PhD](#), assistant professor, have received a U.S. Patent for "BCL6 Inhibitors as Anticancer Agents."

Grants and Fellowships

- [Andrew Coop, PhD](#), professor and associate dean for academic affairs, received an 18-month \$91,444 contract from the University of Texas Health Science Center at San Antonio for "Preclinical Identification of Better Antimuscarinic Antidepressants."
- [Stephen Hoag, PhD](#), professor, received a one-year \$58,252 contract from Maryland Industrial Partnerships for "Formulation Development for Rare Disease Therapy."
- [Alex MacKerell, PhD](#), Grollman-Glick Professor and director of the School's Computer-Aided Drug Design Center, received a two-year \$154,500 contract from Thomas Jefferson University for "Biased Agonism and Conformational Heterogeneity of Beta Adrenergic Receptors in Bronchodilation."
- [Amanda Oglesby-Sherrouse, PhD](#), assistant professor, has received a two-year \$108,000 grant from the Cystic Fibrosis Foundation for "Iron Regulation of CF Lung Pathogen Interactions."
- [Jana Shen, PhD](#), associate professor and co-director of the