



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 2017!

There has been a lot of activity in the Department of Pharmaceutical Sciences these past few months, as evidenced by the stories in this newsletter. Some recent highlights include our American Association of Pharmaceutical Scientists (AAPS) student chapter being named Student Chapter of the Year at the annual AAPS meeting in November. And in January, five teams of PharmD, MD, and undergraduate students competed in the Center of Excellence in Regulatory Science and Innovation's "[America's Got Regulatory Science Talent](#)" competition. A 17-year-old undergraduate student from the University of Maryland, College Park was the winner for her proposal for a high visibility universal labeling system to communicate the risks of hazardous drugs. On Feb. 24, the School of Pharmacy is excited to host a Drug Discovery Symposium that will bring together researchers from the University of Maryland and Johns Hopkins University. I hope to see you there.



Wishing you a rewarding 2017,

[Paul Shapiro, PhD](#)
Professor and Chair
Department of Pharmaceutical Sciences

School Joins National Institute for Biopharmaceutical Manufacturing



The School of Pharmacy will be a pivotal partner in a new national institute to advance leadership in pharmaceutical manufacturing across the United States. Announced by U.S. Secretary of Commerce Penny Pritzker in December, the National Institute for Innovation in Manufacturing Biopharmaceuticals (NIIMBL) will focus on bringing safe drugs to market faster and developing workforce training. NIIMBL is the 11th institute established by Manufacturing USA, and jointly includes the School of Pharmacy and the University of Maryland, College Park (UMCP). [Stephen Hoag, PhD](#), professor in PSC and director of the [Good Manufacturing Practice \(GMP\) Facility](#) at the School of Pharmacy, and William Bentley, PhD, MEng, the Robert E. Fischell Distinguished Chair in Engineering for the A. James Clark School of Engineering at UMCP, will serve as co-principal investigators for the University of Maryland. [Read more here...](#)

CERSI Conference Explores Methods to Measure Protein Aggregation

The School of Pharmacy welcomed researchers from across academia, government, and industry to Pharmacy Hall in December for "Protein Aggregation Measurement in Biotherapeutics: Established and Emerging Techniques," a day-long conference sponsored by the [University of Maryland Center of Excellence in Regulatory Science and Innovation \(M-CERSI\)](#) and the [Bio- and Nano-technology Center](#) at the School of Pharmacy. Led by [Bruce Yu, PhD](#), professor in PSC and director of the Bio- and Nano-technology Center, the conference explored both established and emerging technologies to detect and measure protein aggregation in biologic drug products. [Read more here...](#)

PSC Faculty Member Named Associate Dean for Academic Affairs

Following more than five years of service as the associate dean for academic affairs at the University of Maryland School of Pharmacy, [Richard Dalby, PhD](#), professor in PSC, has returned to his full-time faculty position at the School. [Andrew Coop, PhD](#), professor and former chair of PSC, has been named as Dr. Dalby's successor in this role. The Office of Academic Affairs manages the School's PharmD program and policies, as well as oversees academic scheduling, instructional technology, and institutional assessment. [Read more here...](#)



AAPS Student Chapter Gains National Recognition

Congratulations to the members of the School's student chapter of the American Association of Pharmaceutical Scientists (AAPS) on their recognition as AAPS' Student Chapter of the Year, an award they received in November at the association's annual meeting. They were selected from 36 chapters who applied. With 50 members, our chapter hosts a distinguished speaker series, and participates in a wide range of volunteer outreach activities and social events, with many members taking on volunteer roles with the national AAPS organization, further promoting the School of Pharmacy and developing leadership skills. This

Regulatory Science Alumni Attend Homecoming and All Alumni Reunion Weekend

Alumni and current students from the School of Pharmacy's MS in Regulatory Science program gathered in Pharmacy Hall on Sept. 17 during the School's annual Homecoming and All Alumni Reunion Weekend to reconnect with each other and reminisce about their time in the program. The gathering featured presentations from Soo Jin Park, MS '16, regulatory compliance officer with the U.S. Public Health Service Commissioned Corps, Mark Williams, MS '16, senior manager at MedImmune, and Gary Hollenbeck, PhD, adjunct professor in PSC. [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.

- **Ebehiremen Ayewoh**, graduate student, has been named a University of Maryland, Baltimore County Meyerhoff Graduate Fellow.
- **Heather Boyce, William Hedrich, and Soo Hyeon Shin**, all graduate students, received travel awards to attend the annual meeting of the American Association of Pharmaceutical Scientists in November in Denver.
- [Andrew Coop, PhD](#), professor and associate dean for academic affairs, has been named a Fellow of the American Association of Pharmaceutical Scientists and has been appointed to the U.S. Food and Drug Administration's Anesthetic and Analgesic Drug Products Advisory Committee.
- [Andrew Coop, PhD](#), professor and associate dean for academic affairs, and Alex MacKerell, PhD, Grollman-Glick Professor of Pharmaceutical Sciences and director of the Computer-Aided Drug Design Center, received a United States Patent for "Novel Mixed Mu Agonist/Delta Antagonist Opioid Analgesic with Reduced Tolerance Liabilities and Uses Thereof."
- [Alex MacKerell, PhD](#), Grollman-Glick Professor of Pharmaceutical Sciences and director of the Computer-Aided Drug Design Center, received a United States Patent for "Defensin-like Molecules as Novel Antimicrobial Agents."
- **Laura Murphy, MPH**, a student in the MS in Regulatory Science program, has received the School's Ellen H. Yankellow Scholarship.
- **Heather Neu, PhD**, postdoctoral fellow, received the American Chemical Society's Division of Inorganic Chemistry Young Investigator Award and received first place in the University of Maryland, Baltimore Postdoctoral Association's Three Minutes in an Elevator Pitch Contest.
- **Lt. Cmdr. Judy Park, PharmD**, a student in the MS in Regulatory Science program, has received the School's GlaxoSmithKline Scholarship.
- [James Polli, PhD](#), the Shangraw/Noxell Endowed Chair of Pharmaceutical Sciences, has been elected a member-at-large to the Board of Directors of the Association of Graduate Regulatory Educators
- [Jerry Rosen, PhD](#), professor of pharmaceutical sciences, has

received professor emeritus status at UMB.

- [Bruce Yu, PhD](#), professor and director of the Bio- and Nanotechnology Center, received United States Patents for "Noninvasive Characterization of Mechanical Properties of Materials and Tissues Using Magnetic Resonance Techniques" and "Electrostatically Controlled Hydrogels."

Grants and Fellowships

- [Andrew Coop, PhD](#), professor and associate dean for academic affairs, received an eight-month \$92,405 grant from the University of Michigan and an eight-month \$88,943 grant from the University of Texas Health Science Center at San Antonio, both for "Preclinical Identification of Better Antimuscarinic Antidepressants"
- **Brenden Drennen**, graduate student, received a one-year \$26,000 grant from the American Chemical Society for "Dual Inhibition of the Oncoproteins Mcl-1 and Bcl-2 by Rationally Designed Polypharmacology."
- [Natalie D. Eddington, PhD](#), dean and professor, received a one-year \$458,622 contract from Dimensions Health Prince George's Hospital Center for "Interprofessional Transitions of Care Services, Chronic Disease Management, and Supplemental Access to Local Primary Care."
- [Stephen Hoag, PhD](#), professor, received a one-year \$32,000 contract from the Food and Drug Administration for "Professional Service for Manufacturing an In Vitro Component of an Assessment of a Proposed In Vitro Bioequivalence Approach for Evaluating Generic and New Animal Formulations."
- **Lisa Jones, PhD**, assistant professor, received a five-year \$965,818 grant from the National Science Foundation for "CAREER: Development of an In Cell Footprinting Method for the Analysis of Protein Structure" and a one-year \$9,741 grant from Indiana University for "Mechanism of Transcription Regulations by the Mediator."
- **Maryanna Lanning**, graduate student, received a one-year \$10,000 contract from the American Foundation for Pharmaceutical Education for "Towards Targeted Antineoplastics: The Disruption of Aberrant Protein-Protein Interactions with Synthetic Alpha-Helix Mimetics."
- [Alex MacKerell, PhD](#), the Grollman/Glick Professor of Pharmaceutical Sciences and director of the Computer-Aided Drug Design Center, received a one-year \$60,319 contract from Johns Hopkins University School of Medicine for "LRRK2 Dimerization and Therapeutic Evaluation" and received a two-year \$307,220 contract from SilcsBio for "Pre-computed Free Energy Maps for Rapid Structure-based Ligand Design."
- [Amanda Oglesby-Sherrous, PhD](#), assistant professor, received a five-year \$2.1 million grant from the National Institute of Allergy and Infectious Diseases for "Role of PrrF and PrrH Regulation in Pseudomonas aeruginosa Pathogenesis."
- [Paul Shapiro, PhD](#), professor and chair, received a two-year \$440,160 grant from the National Institutes of Health for "Evaluation of Novel Substrate Specific Inhibitors of ERK1/2 in the Treatment of Asthma."
- [Jana Shen, PhD](#), associate professor and co-director of the Computer-Aided Drug Design Center, received a nine-month \$62,934 subcontract from Arizona State University for "Molecular Mechanisms of Secondary Active Transporters."
- **Peter Swaan, PhD**, professor and associate dean for research and graduate education, received a five-year \$1,749,829 grant from the National Institutes of Health for Structural Biology of the Apical Bile Acid Transporter."
- [Hongbing Wang, PhD](#), professor, received a one-year \$99,998 contract from Maryland Industrial Partnerships for "HepaChip™ Liver-on-a-Chip for Drug Hepatotoxicity."

- [Patrick Wintrobe, PhD](#), associate professor, received a four-year \$215,600 grant from Vanderbilt University Medical Center for "Mechanisms of Glycosaminoglycan Catalyzed Protease Inactivation by Serpins."