Dear friends and colleagues,

We recently celebrated the graduation of eight outstanding PhD students from our program, each taking leadership positions in industry, academia, and the FDA. As we welcome them as the newest additions to our alumni family, we also welcome 13 outstanding new first year PhD students who will join us in August. Under the leadership of Sarah Michel, PhD, our PhD program director, we implemented a new extended interview weekend, allowing the candidates additional time to interact with members of the department and experience the campus and city. I was proud of the contributions by all members of the department, with 100% of our admission offers being accepted!

Enjoy your summer, and I look forward to another outstanding academic year for PSC!

Andrew Coop, PhD
Professor and Chair
Department of Pharmaceutical Sciences

New PSC PhD Program Director
Sarah Michel, PhD, an associate professor in PSC, has been named director of the department's PhD Program. As the director of the School's Spring into Maryland Science program, a workshop designed to introduce undergraduates to the cutting-edge, interdisciplinary research conducted in PSC, Dr. Michel has diligently worked to increase the visibility of our graduate program among local colleges and universities. Her ongoing efforts to establish collaborative partnerships with leading educational institutions have been instrumental in the program's success.

Kudos!

Grants
institutions in the region will help to ensure that we continue to recruit the best and brightest students to our program. Though Dr. Michel took on her new leadership responsibilities only a short time ago, she has been making great strides. Accompanied by current students, she has visited the University of Maryland, Baltimore County, Temple University, and Notre Dame of Maryland University to discuss current research opportunities available in the PhD program and promote its summer internship program. She has also worked with the Pharmacy Graduate Student Association (PGSA) to institute formal activities to promote further collaboration. Read more here...

PSC Chair Selected for AACP's Dr. James E. Wynn Memorial Award

I am flattered to have been nominated for and selected as the recipient of the American Association of Colleges of Pharmacy's (AACP) inaugural Dr. James E. Wynn Memorial Award, presented by AACP’s Chemistry Section. The award is named for the founding dean of South University School of Pharmacy, who was known for being a gifted teacher, an inspirational leader, and a visionary academic. I will be receiving the award at AACP's annual meeting in Dallas, Tex., in July.

CERSI Conference Highlights Need for Mass Spectrometry in Drug Development

On April 8, the School of Pharmacy welcomed researchers from academia, government, and industry to "MALDI-Mass Spectrometry Imaging of Drug Metabolism," a conference sponsored by the University of Maryland Center of Excellence in Regulatory Science and Innovation (M-CERSI) and the Food and Drug Administration (FDA). Organized by Maureen Kane, PhD, assistant professor in PSC, this one-day conference explored the benefits and challenges associated with using matrix-assisted laser desorption ionization-mass spectrometry imaging (MALDI-MSI) as a tool in the drug development process. Mass spectrometry plays an integral role in almost all aspects of research conducted within PSC. The department currently maintains 15 mass spectrometers in its state-of-the-art Mass Spectrometry Center, which allows researchers to continue pursuing the School's vision of advancing scientific knowledge across the spectrum of drug discovery, health services, and practice-based and translational research in the state of Maryland and beyond. Read more here...

Conference at the School Brings Together Researchers from Biology and Chemistry

The School of Pharmacy welcomed more than 200 faculty, students, and government and industry professionals from across the mid-Atlantic region to the seventh annual Frontiers at the Chemistry-Biology Interface Symposium (FCBIS) in May. Organized by Sarah Michel, PhD, associate professor in PSC and director of our PhD program, the symposium was designed to highlight regional research at the interface of chemistry and biology and offer undergraduate and graduate students, postdoctoral fellows, and early career professionals the opportunity to meet and exchange ideas with tenured researchers from academia, government, and industry. FCBIS gave our PhD students opportunities to interact with and learn from students and professionals in other programs and to establish lasting relationships that will lead to future scientific collaborations. I applaud Dr. Michel for her hard work in
Master's in Regulatory Science Hosts First Meet and Greet

James Polli, PhD, the Shangraw/Noxell Endowed Chair in Industrial Pharmacy and Pharmaceutics in PSC and director of the School's online Master of Science (MS) in Regulatory Science program, welcomed students from across the country to the program's first "meet and greet" on April 23. Held at the School of Pharmacy, the meet and greet aimed to foster a sense of community among students in the program and offered students the opportunity to network with each other, as well as with the program's instructors. Nearly half of the program's 32 students attended the event, along with 18 of the program's instructors, which include faculty from the School as well as regulatory science professionals from government and industry. The MS in Regulatory Science program offers a science-driven approach to drug product development and regulation. With its emphasis on drug discovery, drug development, clinical research, and post-approval drug regulation, the program was designed to provide professionals who currently work, or would like to work, in regulatory science with the knowledge and skills necessary to contribute to drug regulation and pharmaceutical product lifestyles. The next application deadline for this program is June 30, 2014. Current professionals with Bachelor of Science (BS) degrees or higher who now work or would like to work in regulatory science are encouraged to apply. Read more here...

Associate Professor's Entrepreneurism Recognized with Phase I Innovation Grant

Earlier this year, Bruce Yu, PhD, an associate professor in PSC, received a $100,000 grant from the Maryland Innovation Initiative for his pioneering work to develop a new test that uses inexpensive nuclear magnetic resonance (NMR) and magnetic resonance imaging (MRI) devices to detect protein aggregation in biopharmaceutical drugs - protein-based medications used to treat a wide range of illnesses, including autoimmune disorders, cancer, and diabetes, that are designed to structurally mimic compounds such as antibodies, hormones, and enzymes, naturally found in the human body. This groundbreaking technology has the potential to be implemented at more than 40,000 retail pharmacies across the United States, which currently have no way to detect protein aggregation for drugs that have already been packaged. Dr. Yu's test will use inexpensive NMR and MRI devices to detect protein aggregation through the drug's packaging. If his research proves successful, the mobility and ease with which these devices can be used offers the potential to expand testing into local retail pharmacies. This expansion would provide pharmacists with a method - apart from the expiration date printed on the packaging - to help determine if the biopharmaceutical drugs on their shelves are safe and effective for patients. Read more here...
School Hosts International Conference on Microneedles

The School of Pharmacy, under the leadership of Audra Stinchcomb, PhD, professor in PSC, hosted the Third International Conference on Microneedles, May 19-21. The conference was a lively mix of more than 200 academic, industrial, and regulatory delegates, and included networking opportunities during poster and exhibition sessions, as well as social activities. A range of invited and keynote speakers from both business and academia presented technical highlights and reviewed state-of-the-art developments in the field. Topics included: design and technology, clinical and pre-clinical results, fabrication and materials, coatings and formulation, drug and vaccine delivery, regulatory issues, and more.

Read more here...

Kudos!

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

- Tamara Borisevich, accountant, was named the University of Maryland, Baltimore's Employee of the Month for July 2013.
- Richard Dalby, PhD, professor and associate dean for academic affairs, and Lisa Lebovitz, JD, assistant dean for academic affairs, were recipients of the American Association of Colleges of Pharmacy's Excellence in Assessment Award.
- Lijia Chen and Maryanna Lanning, graduate students, won American Chemical Society Travel Grants.
- Shamia Faison, graduate student, won the Graduate Translational Research Award at UMB's Graduate Research Conference.
- Shamia Faison and Sarah Sushchy, graduate students, received Travel Awards from the Committee on Behavior, Biology, and Chemistry: Translational Research in Addiction for its annual meeting.
- Steven Fletcher, PhD, assistant professor, has been chosen by his School of Pharmacy peers as an AACP Teacher of the Year.
- Shailly Mehrotra, graduate student, received the American Society for Clinical Pharmacology and Therapeutics 2014 Presidential Trainee Award for her research on "Longitudinal Dose-response Modeling of Topical Glycopyrrole, an Anti-hyperhidrosis Agent."
- C.S. Raman, PhD, associate professor, has been chosen by his peers as an AACP Teacher of the Year.
- Hongbing Wang, PhD, associate professor, has been named a standing member of the National Institutes of Health's Xenobiotic and Nutrient Disposition and Action Study Section.

Grants

- Maureen Kane, PhD, assistant professor and co-director of the Mass Spectrometry Center, received her first NIH R01 as PI for "Molecular Determinants of Retinoid Metabolism in Embryonic
Dr. Kane also received collaborative funding from the NIH for "Environmental Factors in Fetal Alcohol Spectrum Disorder."

- **Yan Shu**, PhD, assistant professor, received funding from Millennium Pharmaceuticals, Inc. for "Novel Cellular Models for Studying Transporter-mediated Drug-Drug Interaction."

- **David Goodlett**, PhD, the Isaac E. Emerson Chair in Pharmaceutical Sciences and director of the Mass Spectrometry Center, received funding from the Maryland Innovation Initiative for "BacLib Lipid-based Mass Spectrometry Platform: A Rapid Multiplexable Clinical Diagnostic for Pathogens." He also received University of Maryland Ventures seed grant funding for " Rapid Diagnostic Platform (Microorganism Molecular Fingerprinting)."

- **Steven Fletcher**, PhD, assistant professor, received funding from Convergene for "Optimization of Small Molecule Inhibitors of the BRD4 Protein."

- **Geoff Heinzl**, graduate student, received a fellowship from the American Foundation for Pharmaceutical Education for "Discovery and Design of Antivirulants Targeting the Heme Uptake System of Pseudomonas aeruginosa." Mr. Heinzl is co-mentored by Angela Wilks, PhD, professor, and Fengtian Xue, PhD, assistant professor.

- **Jerry Rosen**, PhD, professor, received collaborative funding from the NIH for "Methamphetamine-induced Alterations in Brain Tissue Oxygenation."

- **Peter Swaan**, PhD, professor, director of the Center for Nanobiotechnology and associate dean for research and graduate education, received a competitive renewal of collaborative funding from the NIH for "Molecular Organization of Renal and Hepatic Organic Cation Transporters."

- **Jia Bei Wang**, PhD, professor, received collaborative funding from the Stanley Medical Research Institute for "Treatment of Schizophrenia with l-Tetrahydropalmatine (l-THP)."

- **Justin Lemkul**, PhD, postdoctoral fellow, received a T32 Postdoctoral NRSA from the NIH for "Exploring RNA Folding and Dynamics Using a Polarizable Force Field" under the mentorship of Alex MacKerell, PhD, professor and director of the Computer-aided Drug Design Center.

- **Steve Hoag**, PhD, professor, and **Dave Goodlett**, PhD, professor, received collaborative funding on a U19 for "Centers of Excellence for Translational Research" with the School of Medicine.

- **Audra Stinchcomb**, PhD, professor, received collaborative funding on an R03 from the NIH for "Efficacy Study of A Nicotine Barrier Cream."

- **Yan Shu**, PhD, assistant professor, and **Maureen Kane**, PhD, assistant professor, received collaborative funding from the NIH for "Role of OCT-3 on Metformin Action in Oral Carcinogenesis."

- **Paul Shapiro**, PhD, associate professor, received funding from Biomed Valley Discoveries, Inc. for "Determining Structural Interactions Between ERK2 and BVD-523."