November 28, 2017 - The Purdue College of Pharmacy is pleased to honor and recognize the outstanding research and scholarship generated by our faculty each month. This month we highlight Dr. Stephen Byrn, Charles B. Jordan Professor of Medicinal Chemistry, Department of Industrial and Physical Pharmacy (IPPH).

Dr. Byrn's recent publication, "Local Structure of Ion Pair Interaction in Lapatinib Amorphous Dispersions characterized by Synchrotron X-Ray diffraction and Pair Distribution Function Analysis" can be read in Scientific Reports (2017; DOI:10.1038/srep46367). Dr. Gabriel Lima Barros de Araújo, a visiting professor from the School of Pharmacy in Sao Paulo Brazil, and Dr. Chris ... in Argonne, IL, contributed significantly to this project. The study was conducted in the IPPH laboratories at ROSS Enterprise Center in West Lafayette, and at the Advanced Photon Source beamline in Argonne.

Anticancer medicines are sometimes patient unfriendly, requiring multiple tablet dosing with fasting and resulting in ... from this method can lead to formulations of anticancer drugs that are more patient friendly with fewer side effects.

"This research was exciting to me because we utilized the most powerful X-ray source in the world at a major physics ... information for the first time, and possibly using this information to improve anticancer drugs is very rewarding."