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Editorial of Special Issue on Drug Metabolism and Disposition in Diseases



I am very happy to present you with a Thematic Issue on "Drug Metabolism and Disposition in Diseases".

Drug metabolism and disposition are essential to both drug therapy and drug safety. Besides genetic and environmental factors, it has been more and more appreciated that disease and physiological states of the patients can also impact on drug metabolism and disposition. On the other hand, the expression or activity of drug-metabolizing enzymes and transporters can have profound effect on the clinical outcome of diseases. In 2016, I edited a book of a similar title *Drug Metabolism in Diseases* (Academic Press/Elsevier 2016; ISBN: 9780128029497) that was dedicated to disease—drug interactions. The diseases and physiological conditions covered in the 2016 Elsevier book included liver and kidney diseases, inflammation, diabetes, pregnancy, and pediatric populations. However, several other areas were left uncovered, which motivated me to edit a Thematic Issue that continues focusing on the disease—drug interactions.

This Thematic Issue contains both review articles and original research articles. Examples of the areas that are covered include the effects of long non-coding RNA (lncRNA) and microRNA (miRNA) on cancer and cancer chemotherapy, metabolic homeostasis of immune cells, herb—drug interaction and herbinduced hepatotoxicity, the effects of sepsis, gut microbiota, parenteral nutrition and obesity on xenobiotic metabolism, interaction between intestinal drug metabolism and colitis, and pharmacogenetics of selected P450 enzymes.

Disease—drug interactions are highly clinically relevant, because understanding the disease and physiological effects on drug metabolism and disposition can help to guide better and safer use of drugs. In organizing this Thematic Issue, we strived to understand the mechanistic insights by which diseases and pathophysiological states affect drug metabolism. It is our belief that understanding the mechanistic insights is necessary to harness the benefits of the knowledge and improve the effective and safe use of prescription drugs and herbal medicines.

I would like to thank all of the contributing authors who are experts in their respective areas of research. Special thanks go to Prof. Ailian Zheng, Editor of APSB, who initially approached me for this Thematic Issue. I also want to thank Dr. Yin Liu from the APSB Editorial Office who has been extremely helpful in all stages of the development of this Thematic Issue.

Wen Xie

Center for Pharmacogenetics and Department of Pharmaceutical Sciences, University of Pittsburgh School of Pharmacy, Pittsburgh, PA 15261, USA E-mail address: wex6@pitt.edu