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Biochemical Activation and Functions of Drug-Metabolizing Enzymes

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Message from the Guest Editors

Drug-metabolizing enzymes (DMEs) have a significant role in the metabolism and activation of many endogenous and exogenous chemical constituents. Biochemical activation is necessary for inducing the proper biological functions of active molecules. Genetic variations in DMEs at the interindividual level compromise the efficacy and safety of numerous drugs. Nowadays, novel advancements in computational methods and modern techniques are being harnessed for the metabolite identification and understanding metabolic mechanistic pathways and networks. The past few decades have seen several advancements in analytical techniques for the qualitative and quantitative analysis of metabolites, biomarkers, and drug-metabolizing enzymes.

This Special Issue aims to present the latest updates and findings regarding the biological functions of DMEs and their isolation, qualification, quantification, and interpersonal variations. This topic will cover the diseases in which the integrity and functionality of these enzymes are compromised, and will present novel updates or possible solutions to overcome these issues.



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Message from the Editor-in-Chief

The metabolome is the result of the combined effects of genetic and environmental influences on metabolic processes. Metabolomic studies can provide a global view of metabolism and thereby improve our understanding of the underlying biology. Advances in metabolomic technologies shown utility for elucidating have mechanisms which underlie fundamental biological processes including disease pathology. *Metabolites* is proud to be part of the development of metabolomics and we look forward to working with many of you to publish high quality metabolomic studies.

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