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Big Data in Metabolomics

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Deadline for manuscript submissions:

closed (30 September 2017)

Message from the Guest Editors

Dear Colleagues,

Metabolomics is an important branch of the so-called "OMICS" field, investigating small molecules and compounds, the metabolites from a system biological perspective. It serves multiple purposes. Metabolomics is producing an increasing amount of high-quality data in an ever increasing pace. This fact can be summarized under the umbrella of "Big Data" in terms of velocity (the pace data is generated), volume (the sheer amount of data) and variety (the multitude of different data sources). In addition to the huge opportunities arising from having these rich data sources at hand they pose hard challenges at the same time. This requires sophisticated computational methods for data management, analysis and the meaningful integration of a multitude of different and heterogeneous data sources. The recent advances have led to the intention to initiate this special issue of *Metabolites* with an emphasis of the challenges and solutions arising in the age of Big Data in metabolomics research.

Dr. Jan Baumbach
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Guest Editors



mdpi.com/si/7127

Special Issue



an Open Access Journal by MDPI

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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 have shown utility for elucidating 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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