



## Metabolic Flexibility and Metabolic Engineering Associated with Health and Diseases

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### Message from the Guest Editors

Metabolic flexibility is the capability of a system to regulate fuel oxidation or storage (primarily glucose and fatty acids) in response to nutrient availability. Metabolic flexibility also relies on organ interplay since the liver, adipose tissue and muscles regulate energy homeostasis in a coordinated fashion depending on the caloric intake and energy demand.

Specific areas that will be addressed include the impact of metabolic flexibility on different tissues and organs, the metabolic inflexibility in diseases such as Diabetes, Obesity, Cancer, Inflammation, and Non-Alcoholic Fatty Acid Liver Disease. Manuscripts dealing with other pertinent challenging issues are also highly desired.

This Special Issue will familiarize readers with the molecular mechanisms involved in the metabolic flexibility/inflexibility ratio in different physiological or pathological situations and in different organs and tissues.





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## Editor-in-Chief

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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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