Special Issue

PPARs as Key Mediators of Metabolic and Inflammatory Regulation

Message from the Guest Editors

Mounting evidence suggests a bidirectional relationship between metabolism and inflammation. Molecular crosstalk between these processes occurs at different levels with the participation of nuclear receptors, including peroxisome proliferator-activated receptors (PPARs). There are three PPAR isotypes \boxtimes , \boxtimes / \boxtimes , and \boxtimes , which modulate metabolic and inflammatory pathways. making them key for the control of cellular, organ, and systemic processes. PPAR activity is governed by fatty acids and fatty acid derivatives, and by drugs used in the clinics (glitazones and fibrates). The study of PPAR action, also modulated by posttranslational modifications, has enabled extraordinary advances in the understanding of the multifaceted roles of these receptors in metabolism, energy homeostasis, and inflammation both in health and disease. This Special Issue of IJMS welcomes a broad range of basic and translational original and review articles focused on the latest developments in the regulation of metabolic and/or inflammatory processes by PPARs in all organs and the microbiome of different vertebrate species.

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The International Journal of Molecular Sciences (*IJMS*, ISSN 1422-0067) is an open access journal, which was established in 2000. The journal aims to provide a forum for scholarly research on a range of topics, including biochemistry, molecular and cell biology, molecular biophysics, molecular medicine, and all aspects of molecular research in chemistry. *IJMS* publishes both original research and review articles, and regularly publishes special issues to highlight advances at the cutting edge of research. We invite you to read recent articles published in *IJMS* and consider publishing your next paper with us.

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