Special Issue

OSM/OSMR and Interleukin 6 Family Cytokines in Physiological and Pathological Condition

Message from the Guest Editor

The interleukin-6 family is a group of cytokines with shared signaling properties, among which IL-6, Oncostatin M (OSM), leukemia inhibitory factor (LIF), and IL-31. They bind to a gp130/OSM receptor (OSMR) heterodimer complex or to a gp130/LIF receptor (LIFR) complex, while IL-31 binds to the OSMR/IL-31 receptor (IL-31R) complex. The receptor binding triggers several signaling pathways, among which Jak/STAT, the Ras-MAPK, the PI 3-K-Akt, the p38, and JNK MAPK pathways. Both OSM and OSMR have been implicated in a variety of biological functions, including cell growth, neuronal development, and inflammatory responses. Their role has been also reported in several inflammation-related diseases and cancers and their potential as a therapy target suggested. This Special Issue aims to uncover every aspect of IL-6 family cytokines and in particular OSM and/or OSMR functioning and signaling cascade that might unravel their role in both physiological and pathological conditions.

Guest Editor

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Message from the Editor-in-Chief

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