Special Issue

Nutrients (Amino Acid, Glucose and Lipid)-Mediated Signaling

Message from the Guest Editor

Physiological processes are dependent on the ability of cells to respond to extracellular cues such as nutrient availability and the composition of their external environment. The ability for single cells and multicellular organisms to sense nutrient fluctuation in the environment and to properly adjust their consumption of nutrients is critical, and involves a variety of interconnected signaling pathways. The resulting changes in signal transduction networks modulate fundamental cellular processes including metabolism, proliferation, and differentiation. Recent studies have demonstrated that nutrients such as glucose, amino acids, and lipids each evoke unique signaling patterns, and disruption of these signaling networks is implicated in human diseases including cancer. neurodegeneration, diabetes, and obesity. Contributions to this Special Issue will provide new insights into the nutrient-mediated signaling pathways present in different cell types and organs, deepening our understanding of their biological role in health and disease and revealing novel therapeutic opportunities to target nutrient signaling pathways in various pathological conditions.

Guest Editor

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Message from the Editor-in-Chief

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Editor-in-Chief

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