Message from the Guest Editors

Dear Colleagues,

The ability to detect changes in nutrient levels and generate an adequate response to these changes is essential for the proper functioning of living organisms. Adaptation to the high degree of variability in nutrient intake requires the precise control of metabolic pathways. Mammals have developed different mechanisms to detect the abundance of nutrients and provide an integrated response. These mechanisms include the control of gene expression (from transcription to translation).

Frequently, alterations in these pathways underlie the onset of several metabolic pathologies. In this context, the complete understanding of these mechanisms may improve our knowledge of metabolic diseases and may offer new therapeutic approaches based on nutritional interventions and individual genetic makeups.

The aim of this Special Issue is to provide an overview of the key components and main molecular mechanisms that connect nutrients' levels, gene expression, and metabolic homeostasis. This Special Issue will include a selection of research papers and review articles covering this area of research.

Dr. Diego Haro
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Guest Editors