

## Special Issue

# Obesity and Obesity-Associated Co-Morbidities: From Mechanisms to Mechanism-Based Therapies

### Message from the Guest Editor

As the prevalence of obesity continues to increase, further research is needed to understand the pathways and mechanisms linking a chronic positive energy balance to non-communicable diseases (NCDs), cancer and ageing. AT macrophages and other immune cells can be activated by pathogen-associated molecular patterns (PAMPs) that enter the blood from dysbiosis in the gut. FFAs, pro-inflammatory cytokines, oxidized macromolecules and PAMPs lead to systemic inflammation, the leading cause of obesity-associated NCDs, including neurodegenerative, metabolic and autoimmune diseases, as well as cancer and ageing, in genetically susceptible patients. Understanding the molecular basis controlling appetite, gut dysbiosis and AT inflammation will lead to better mechanism-based therapies against obesity-related NCDs. This Special Issue welcomes, but is not limited to, information on the molecular mechanisms and mechanism-based therapeutics against obesity-associated comorbidities.

This Special Issue is supervised by and assisted by Dr. Dra Sandra E. Gomez Mejiba (National University of San Luis).

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### Guest Editor

Dr. Dario C. Ramirez

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### Editor-in-Chief

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