Special Issue

Molecular Mechanism and Regulation of Adipogenesis, Adipose Tissue Inflammation and Metabolism

Message from the Guest Editor

The obesity epidemic has spread across the world and poses a health risk to the entire globe. Obesity leads to the development of several metabolic abnormalities. including cardiovascular disease, type 2 diabetes mellitus (T2DM), and various immune-mediated disorders. Obesity is also associated with increased immune cell infiltration in the adipose tissue (AT). AT infiltrates macrophages, neutrophils, natural killer cells (NK), and T cells that exhibit distinct phenotypes in healthy and obese conditions. AT-resident macrophages synergistically coordinate with adipocytes to orchestrate the body's energy metabolism. The immune functions during AT inflammation and whether there is cross-talk between adipocytes and immune cells during obesity remains unclear. Thus, resetting the key signaling in AT during obesity and adipogenesis will provide an innovative approach to the management and therapeutics of obesity. This Special Issue aims to highlight recent advances made in the immunometabolism field that are useful in preventing the individual risk of developing metabolic disease and providing help for advancing therapeutic strategies to combat obesity and metabolic disease.

Guest Editor

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