# **Special Issue**

## Modulating the Function of the Immune System by Thyrotropin and Thyroid Hormones

## Message from the Guest Editors

Thyrotropin (TSH) and thyroid hormones (THs), such as thyroxine (T4) and triiodothyronine (T3), are well known for regulating metabolism and energy balance. However, recent research reveals their significant role in immune regulation. TSH and THs interact with immune cells like T and B lymphocytes, macrophages, and dendritic cells, influencing their development and activity. This interaction is essential for immune homeostasis and responses to infections and autoimmune diseases. Dysregulated thyroid hormone levels can impair immune function, contributing to conditions like Hashimoto's thyroiditis and Graves' disease. Thyroid hormone imbalances are also linked to increased infection susceptibility, reduced vaccine efficacy, and alterations in the tumor microenvironment, affecting tumor growth and metastasis. This Special Issue seeks to explore the mechanisms through which TSH and THs impact immune cells and their implications for autoimmune diseases, immunotherapy, and overall immune function. By presenting current research and novel insights, it aims to advance the field of immunoendocrinology and support the development of targeted therapeutic strategies.

### **Guest Editors**

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