Special Issue

Deciphering Allergies— Structural and Immunological Characterization of Allergenic Proteins and Immunomodulatory Agents

Message from the Guest Editors

Allergies are one of today's most common immune disorders; this is mostly because of an exaggerated immunoglobulin E-mediated immune response to harmless environmental allergens. The main translational goal to study allergies is to understand immune mechanisms, improve diagnosis, find a better and reliable immunotherapy, and manage the disease. Other factors, such as exposomes (parasites, ticks, drugs, heavy metals, plastic, and other contaminants) represent novel elements that act as important immunomodulatory agents in the allergic diseases and should be further investigated. Potential topics include but are not limited to:

- Allergens: new and old epitopes enrolled in IgE binding and allergenicity;
- In silico discovery of allergens and prediction of allergenicity and allergic cross-reactivity;
- Allergenicity prediction of novel foods;
- Modulation of immune response by designed allergenic proteins;
- Allergen structure interplay with the innate immunity;
- Parasites and vectors as allergen transmitters;
- Effects of environmental pollutants on allergenicity;
- Effects of micro- and nano-plastics on protein allergenicity.

Guest Editors

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Message from the Editor-in-Chief

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