

## **Research Focus 2 – Clarification of Basic Questions on the Interaction of Allergens/Allergen-containing Biomedical Products and the Organism:**

- **Epitope recognition of model allergens and clinical severity of allergy manifestation**

Increasing knowledge of molecular structures of allergens and IgE-binding epitopes allows for a better understanding of patient sensitization patterns. Sensitization to specific allergens and epitopes may be linked to characteristic clinical reaction patterns which have an impact on allergen immunotherapy decisions. Furthermore, sensitization patterns may be influenced by different exposures: e.g. regional differences based on climatic influence or due to different sensitization routes. This can play a decisive role for the suitability of test and therapy allergens for specific (sub)groups of allergic individuals. In cooperation with our clinical cooperation partners we investigate epitope recognition of model allergens and clinical severity of allergy manifestation in defined, well-characterized patient cohorts to identify relevant target structures for adequate patient tailored allergy diagnosis and treatment.