

Molecular recognition strategies

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Living things constantly monitor their integrity aiming for survival of the individual organism and of the species. This monitoring requires molecular recognition strategies to identify changes to self and changes in the environment. While the immune system of animals is involved in defense by definition, defense and resistance strategies of plants and simpler life forms may now be compared to immune responses thanks to our current deeper insight into the molecular machinery of innate immunity.

In this presentation I aim to overview how and why species interact, recognize each other and themselves from the immunological point of view, giving examples of immune defense on the level of recognition molecules and the responses triggered by these molecules. In the light of the recent advances in various fields of immunology some concepts and nomenclature may need revision and re-definition.