



سمینار هفتگی ماده چگال نرم

## Elucidating the roles of IL-1RII in the regulation of human immune system

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### Abstract

IL-1 family of cytokines plays a critical role in the regulation of the human immune response. These cytokines transfer the signals to the target cells through binding to the IL-1 receptors. In this presentation, I will explain my MSc project that was carried out by all-atom Molecular Dynamic simulation to study the IL-1 Receptor type II (IL-1RII) and its ligand binding, IL-1 $\beta$ , structure, dynamics, and its functionality in the regulation of cellular immune responses. The results showed that IL-1RII must necessarily bind to its ligand IL-1 $\beta$  to maintain its stable shape on the cell surface.

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مکان (کلاس مجازی آقای دکتر اجتهادی):

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