

Recognition of herpesviruses by the innate immune system

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The ability to distinguish normal self from foreign and abnormal self is a fundamental property of the immune system. In my laboratory we are interested in understanding how the innate immune system detects viral infections to mount protective response. In recent years it has emerged that DNA, which carries the genetic code, is also a potent immune-stimulatory molecule, and we are now starting to understand the molecular and cellular mechanisms underlying this phenomenon. In this talk I will describe the role of the immunological DNA sensing system in host defense against herpes simplex virus infections in the central nervous system, and will present a novel mechanism utilized by the virus to uncouple activation of the innate immune response.