

## Innovative Vaccine Strategy against HSV Infections

**Aziz Alami Chentoufi**

SKLM, Morocco

**H**erpes simplex virus type 1 and type 2 (HSV-1 and HSV-2) infections would be controlled by the development of an effective vaccine. However, in spite of several clinical trials, starting as early as 1920s, no vaccine has been proven sufficiently safe and efficient to warrant commercial development. Recently, great advances in cellular and molecular immunology understanding have stimulated creative approaches in controlling herpes infections and diseases. Before moving towards novel vaccine strategy, it is required to answer the important questions: (i) why past herpes vaccines were unsuccessful? (ii) Why the majority of HSV seropositive individuals naturally control HSV infections and exhibit few or no recurrent herpet-

ic disease, while few others have frequent herpes clinical episodes? We recently discovered that HSV-1 symptomatic and asymptomatic individuals develop distinct immunity to viral epitopes recognized by CD4+ and CD8+ T cells. These epitopes (protective vs pathologic) have provided a solid foundation for the development of novel herpes epitope-based vaccine strategy. In this presentation, I will provide an overview of past clinical vaccine trials and outline current progress towards developing a new generation “asymptomatic” clinical herpes vaccines and discuss future mucosal “asymptomatic” prime-boost vaccines that could optimize the protective immunity.

e: azizchentoufi@gmail.com