

## **Structure-based Vaccine Antigen Design**

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Structure-based vaccine design aims to exploit knowledge of an antigen's architecture to stabilize it in a vulnerable conformation and elicit protective antibodies against one or more epitopes. Viral fusion proteins are excellent targets for structure-based vaccine design because they fold into several distinct conformations required to promote viral entry and membrane fusion. During this talk, the general principles of structure-based vaccine design and their application to the development of vaccine antigens for licensed RSV and COVID-19 vaccines will be discussed. Recent results from the McLellan lab regarding the application of this technology to other viral pathogens will also be presented.