



**Thursday, April 11, 2019, 12:30 pm**  
**Seaver Science Library, Room 150**

SSC Auditorium next to the library

## **Dr. Morgan Huse**

*Immunology Research Program*

*Memorial Sloan Kettering Cancer Center*

### ***Architectural Control of Cytotoxic T Cell Function***

Cytotoxic T lymphocytes (CTLs) fight viral infections and cancer by selectively recognizing and destroying infected or cancerous target cells. CTLs kill by forming a specialized interface with their target cell known as an immunological synapse, into which they secrete a mixture of toxic proteins. Our laboratory is interested in the cytoskeletal architecture of the immunological synapse and how this architecture contributes to the potency and the specificity of effector responses like target cell killing. To this end, we have developed a multidisciplinary approach that combines single cell biophysical measurements, synthetic chemistry, fluorescence imaging, and functional assays. Our recent studies have focused on the generation of mechanical force at the immunological synapse and the implications of this force exertion for cytotoxicity and intracellular communication.

Hosted by Professor Matt Pratt

*The scientific community is invited*

**USC Department of Chemistry**

[chem.usc.edu](http://chem.usc.edu)