

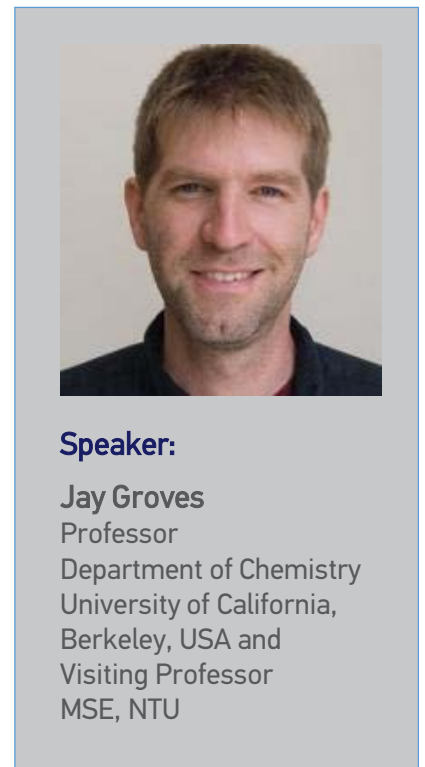


# Seminar Announcement

## Phase Transitions and Molecular Timing in T Cell Signaling

Date: 9 October 2019  
Time: 1.30 p.m. – 2.30 p.m.  
Venue: Classroom 3, SBS  
Hosted By: A/P Koh Cheng Gee

Activation of T cell receptors (TCR) by agonist peptide major histocompatibility complex (pMHC) molecules is the front line of the adaptive immune response. T cells discriminate among different pMHC based on molecular binding dwell time between pMHC and TCR, and this discrimination is widely considered to utilize a kinetic proofreading mechanism. After TCR activation, activated ZAP70 kinase at the TCR phosphorylates the scaffold molecule, LAT. It has recently been realized that LAT undergoes a protein condensation phase transition on the membrane surface, in a phosphorylation dependent manner. In this talk I will focus on the mechanism of LAT condensation and possible roles for this phase transition in the context of T cell signalling and some discussion of hopeful plans for new projects at NTU.



**Speaker:**

**Jay Groves**  
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