

**DEPARTMENT OF CHEMISTRY AND ENVIRONMENTAL SCIENCE**  
**SEMINAR SERIES**  
**SPRING 2018**

**DATE:** THURSDAY, FEBRUARY 8, 2018

**WHERE:** CENTRAL KING BUILDING - 116

**TIME:** 11:30AM

**GUEST SPEAKER**

**Dr. Rachel Steinhardt**

**Postdoctoral Researcher**

**Professor Aaron Esser-Khan Group**

**University of Chicago**

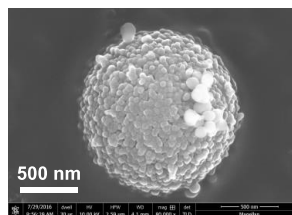
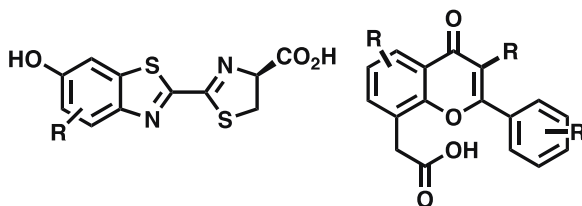
**Chicago, IL**

**TOPIC**

**Chemical strategies to profile cell-cell interactions: from molecules to particles**

**ABSTRACT**

Directing the immune system to fight cancer or develop immunity to a pathogen remains a daunting task. To control the immune system, we need new technologies to monitor individual cells and decode the messages they send. I am developing chemical tools that allow us to visualize cell-cell interactions *in vivo*, modify the responses of immune cells in the tumor microenvironment, and profile the entire mRNA transcriptome of single cells. These technologies assist in the goal of learning which cells to target and what signals to use to achieve the optimal immune response.



**Committee members:**

**Dr. Tamara Gund, Dr. Yong-Ick Kim, Dr. Yuanwei Zhang**