

**Indiana University - Tsinghua University
Summer Research Experience 2020
Position Description**

Professor's Name	Soni Lacefield
Department	Biology Section of Genome, Cell, and Developmental Biology
Lab website	https://lacefieldlab.bio.indiana.edu/
Position Description	The Lacefield lab studies the processes of mitosis and meiosis, seeking to understand how chromosomes are properly partitioned to daughter cells and gametes. In humans, chromosome mis-segregation can cause trisomy conditions such as Down Syndrome and is a hallmark of cancer. We study these highly conserved processes in the model organism budding yeast. The project will be to determine how the spindle checkpoint regulates meiosis to ensure that chromosomes are properly attached to spindle microtubules before they segregate. The student will learn to grow and engineer budding yeast strains, and how to perform time-lapse microscopy.
Desired Skills & Background	A good knowledge of basic molecular biology and genetics are needed.