

Dear Faculty, Postdocs, Students, and Friends:

**You are cordially invited to attend a special seminar presented by the
Institute for Integrative Genome Biology**



Dr. Jijie Chai

Max Planck Institute for Plant Breeding Research

Title:

“Biochemical functions of plant NLRs”

DATE: Friday, December 3, 2021

TIME: 12:00 pm PST

MEETING ID: 963 2886 4096

PASSCODE: 929813

Host: Dr. Hailing Jin

Abstract: *Nucleotide binding and leucine-rich repeat containing receptors (NLRs) play a critical role in innate immunity of both animals and plants. Plant NLRs mediate specific recognition of pathogen effector proteins delivered into cells, initiating effector-triggered immunity (ETI). Significant progress has been made in our understanding of ETI signaling mechanism during the past three years. Recognition of pathogen effectors results in assembly of oligomeric NLRs, forming large protein complexes termed resistosomes that act as either cation channels or NADase holoenzymes to initiate ETI signaling. I will present what we have done about reconstitution of NLR resistosomes and structural and biochemical characterization of these large protein complexes. Additionally, I will also present some unpublished data concerning new biochemical functions of plant NLRs.*