

Wednesday, September 24, 2:15-2:45 p.m.

“The microbial protein, RaxX, triggers the rice XA21-mediated immune response”

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Plants and animals sense conserved microbial signatures through receptors localized to the plasma membrane and cytoplasm. These receptors, often called pattern recognition receptors (PRRs), typically confer broad-spectrum resistance to multiple strains of a pathogen. We are using a variety of molecular genetic tools to explore rice PRR-mediated immunity to diverse pathogens and to engineer resistance to disease using transgenic approaches. In particular, we are studying the molecular basis of recognition between the rice XA21 receptor and the RaxX protein encoded by the agriculturally important rice pathogen *Xanthomonas oryzae* pv. *oryzae*.