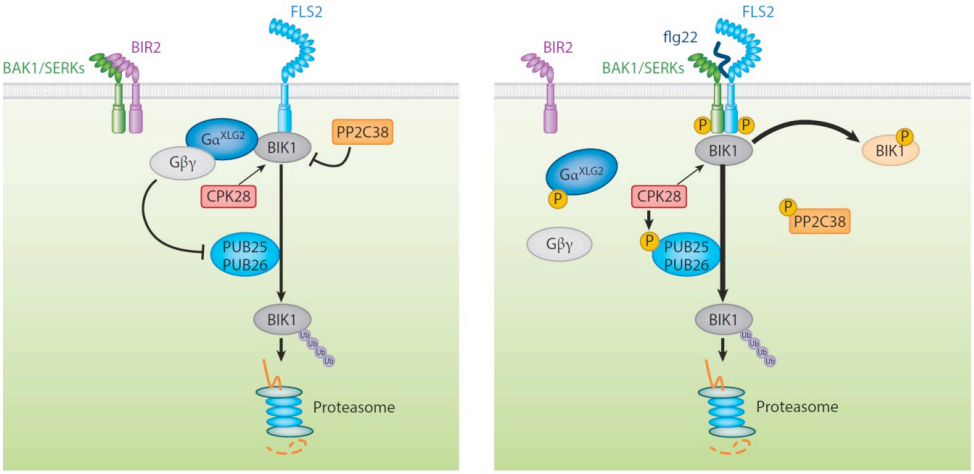
CICLO DE CONFERENCIAS DE BIOTECNOLOGÍA AVANZADA
CURSO 2018/2019

Plant immunity: insights from bacterial pathogens



Higher plants deploy a large repertoire of Pattern-Recognition Receptors (PRRs), composed of Receptor Kinases (RKs) or Receptor-Like Proteins (RLPs) localized on plant cell surface, to perceive molecular patterns that are released by the pathogen or the host plant during infection and activate pattern-triggered immunity (PTI). A growing number of bacterial pathogen effectors are found to inhibit PTI by directly targeting components of PRR complexes. However, these effector proteins can be recognized by intracellular Nucleotide-binding Leucine-rich repeat Receptors (NLRs), thereby "betray" the pathogen and activate the second layer of immunity. These findings highlight pattern-recognition as a major battleground in plant-bacterial pathogen interactions. I will discuss how our analyses of *Pseudomonas syringae* and *Xanthomonas campestris campestris* effector proteins and their host targets have led to new understanding of molecular basis of host recognition of pathogens by the two classes of immune receptors and signaling mechanisms downstream of PRRs.

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MARTES 4 de SEPTIEMBRE a las 10:00
Facultad de Ciencias· Aula M2

Organiza el Programa de Doctorado y el Máster en Biotecnología Avanzada