## Department of Biology presents

## "Signal perception and virulence factor regulation in phytopathogenic bacteria"

**ABSTRACT.** Plants are in constant interaction with microorganisms. Their surfaces and surroundings form nutrient-rich habitats for complex microbial populations that can positively or negatively influence plant health and growth. In order to gain access to a unique habitat, pathogens must overcome several challenging steps from surviving the often harsh soil conditions, competing with other microbes, identification of a suitable host, attachment, penetration and colonization of plant tissue, to escaping or protecting themselves against the defense mechanisms of the plant. It is clear that plant pathogenic bacteria are highly specialized microorganisms able to sense and adequately respond to their changing environment. Our lab focusses on soil-borne plant pathogenic bacteria. More specifically, we study the Gram-positive bacteria *Streptomyces scabies* and *Rhodococcus fascians* to answer fundamental and ecological questions related to bacterial communication and regulatory networks during the interaction of these bacteria and their host(s).

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## Friday, October 21, 2016 3:00 PM Science 2, Room 109

**For further information:** <u>www.csufresno.edu/biology or phone 278-2001</u>. If you need a disability-related accommodation or wheelchair access information, please contact Lindasue Garner at the Department of Biology @ 278-2001 or email <u>lgarner@csufresno.edu</u> (at least one week in advance of event).