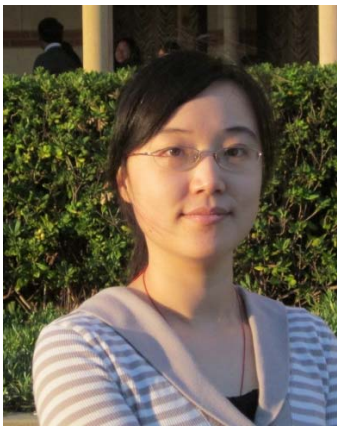
You are cordially invited to a seminar presented by a Translational Plant Sciences cluster hire Candidate



Dr. Yanran Li

Stanford University

Understanding and Harnessing Nature's Synthetic Potential to Advance Modern Drug Development

DATE: *Monday, February 22, 2016*
LOCATION: *Bourns Hall A265*
TIME: *1:00-2:00pm*

Nature endows organisms including microbes, plants and animals with enormous power to synthesize complex functional molecules from simple building blocks. These complex molecules from natural sources and of diverse bioactivities are so called natural products. Natural products play an indispensable role in modern drug discovery and development. Comprehensive understanding of the biosynthesis of these complex molecules is essential for better harnessing nature's synthetic potential to address the remaining challenges in the natural product-based drug discovery. The two major challenges are 1) difficulties in the discovery of novel natural products, and 2) sourcing of these complex molecules, which we believe bio-production is the solution. My research has been focusing on utilizing engineering approaches (such as synthetic biology, metabolic engineering, and protein engineering) to understand the biosynthesis of important natural products (including bacterial and fungal aromatic polyketides, plant benzylisoquinoline alkaloids); and utilizing this enhanced understanding of nature's synthetic power to advance discovery of novel natural products, and engineering approaches to natural product biosynthesis.

Departments of:
Botany and Plant Sciences
Chemical & Environmental Engineering
University of California, Riverside