Postdoctoral position

Postdoctoral Researcher Position at the IHSM (UMA-CIC), Málaga, España.

Project Title: "Virulence of *Pseudomonas savastanoi* pathogens of woody hosts: From genomics and global regulation to the characterization of the extracellular secretome"

Project funded by the National Plan of I+D+I (PID2020-115177RB-C21)

Group: Biology and Control of Plant Diseases (https://www.ihsm.uma-csic.es/grupos/6)

Background: Plant pathogens reduce yield and quality of agricultural production and reduce food security. Their control generally involves the use of harmful chemical pesticides, which would be difficult to substitute with safer and effective alternatives in the foreseeable future. To support the design of better disease management strategies, current research is aimed at understanding the molecular basis of pathogenicity and host specificity to better understand the plant immune system. This knowledge should facilitate developing of new management strategies that minimize the use of chemical pesticides and exploit plant resistance as a cheap, effective, and environmentally friendly control method.
Pseudomonas savastanoi pathovars of woody hosts (olive, oleander, ash, broom and dipladenia) and the bean pathogen *P. savastanoi* pv. phaseolicola (Pph) are well-established models for the study of the molecular determinants of pathogenicity of woody and herbaceous plant hosts. Their phylogenetic proximity and divergent host range makes them ideal candidates to study the molecular basis of host range definition. However, host specificity and virulence involve a complex suite of genetic determinants, and that it should be better approached from different perspectives, including the study of i) the role of T3SS effectors and their allelic variants on host-range definition, ii) the gene expression levels of virulence genes or their differential regulation through diverse global regulatory networks, and iii) the identification and characterization of the extracellular secretome via membrane vesicles (MVs), and of its role in virulence.

What we are looking: We are looking for a highly motivated researcher to analyze the genetic determinants that contribute to the virulence and host specificity in *P. savastanoi*. Expertise in molecular biology, genomics, proteomics, and biochemistry is preferred. Experience in plant-bacterial interactions is highly desirable. Good command of scientific English is required.

Duration: we offer a 2-year contract

If you are interested, please contact Cayo Ramos (crr@uma.es) or/and Luis Rodríguez (lgrodriguez@uma.es) till **20th of July** (attach **motivation letter** and **abbreviated CV**).