



Leonardo De La Fuente, Ph.D.

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Graduate student search:

A Graduate Research Assistantship is available for a M.S. or Ph.D. student starting in Spring 2016 or later at the De La Fuente laboratory in the Auburn University Department of Entomology and Plant Pathology (<http://enpp.auburn.edu/delafuente/>). The successful candidate will conduct fundamental research on different aspects of pathogenic bacteria-plant host interactions. The graduate student will further the knowledge of a line of research involving the role of calcium during the interactions of the plant pathogen *Xylella fastidiosa* and its host plants (see *MPMI* 27:1048 and 28:497; *Appl. Env. Microb.* 80:7176 and 78:1321). Briefly, our research has shown that calcium increases biofilm formation and movement of *X. fastidiosa*, and calcium is accumulated by the plant host during infection. Molecular characterization of this interaction will be studied through whole transcriptome and mutagenesis analyses, as well as other approaches. Other research areas ongoing in the laboratory include understanding the basic mechanism of action of novel chemical compounds against ‘*Candidatus Liberibacter* spp.’ (see *Phytopath.* 104:15). This research will allow close collaboration with multiple universities and researchers, engineers, and industry personnel with a great range of expertise. Experience in molecular biology, microbiology and bioinformatics analysis of genome and transcriptome data from next-generation sequencing is desirable but not required. The position will be ideal for a self-motivated person interested in the advancement of scientific knowledge of plant-associated bacteria. The successful candidate will work within a collaborative, diverse and multi-disciplinary environment. The student will be enrolled in a program towards obtaining a M.S. or Ph.D. in Plant Pathology. The position will remain open until filled.

Requirements:

A B.Sc. degree in a Biological Sciences-related discipline is required. Experience working in a research laboratory is preferred and skills in microbiology, molecular biology, bioinformatics and/or microscopy techniques are desired but not required. Strong communication skills and the ability to work as part of a team are essential for the successful candidate.

Instructions for sending job materials:

The candidate should contact Dr. Leonardo De La Fuente directly at lzd0005@auburn.edu, or call (334) 844-2582. After a pre-selection the candidate should apply to the Auburn University Graduate School at <http://www.grad.auburn.edu/>. Transcripts and TOEFL scores (if applicable), and letters of recommendation from 3 references need to be submitted with the application.