**Ph.D. position in Plant-Microbe Interactions**

**University of South Carolina, Columbia, USA**

A Ph.D. student position is available in the group of Dr. Zhengqing Fu at the University of South Carolina, Columbia. The area is molecular plant-pathogen interactions with a focus on salicylic acid signaling. Previous work identified the first mono-ADP-ribosyltransferase called HopU1 in plants or plant pathogens (Fu et al., 2007 Nature 447: 284). HopU1, as a type III effector from the plant bacterial pathogen *Pseudomonas syringae*, targets RNA-binding proteins to suppress plant defense. It was reported that NPR3 and NPR4 function as the salicylic acid receptors in plants (Fu et al., 2012 Nature 486: 228). Recently, we discovered that salicylic acid promotes the interaction between NPR1 and the *P. syringae* type III effector AvrPtoB. AvrPtoB mediates the degradation of NPR1 via the 26S proteasome dependent on its E3 ligase activity to subvert plant immunity (Chen et al., 2017 Cell Host & Microbe 22: 777).

The research projects focus on two topics: how we can increase our understanding of salicylic acid signaling during plant defense against pathogen infection (Chang et al., Molecular Plant under revision) and how plant pathogens modify salicylic acid pathway to cause diseases (Qi et al., 2018 Molecular Plant doi: https://doi.org/10.1016/j.molp.2018.10.002). We are seeking to recruit a creative and motivated person to fill this position. The incumbent is expected to develop innovative approaches to address fundamental questions in salicylic acid signaling and/or molecular plant-pathogen interactions.

We are part of an interactive plant group of internationally recognized faculty. Columbia is located in the Midlands of South Carolina only two to three hours away from the Appalachian Mountains and the beautiful Atlantic coast line. The position is available for up to three years, depending on performance.

**Qualifications:**

Qualifications: We are looking for a highly motivated and creative individual with strong background in molecular biology and proficiency in spoken and written English to fill this position. This individual should have competitive GRE scores.

**How to apply:**

Please apply for graduate admission to the Department of Biological Sciences from the University of South Carolina graduate school website at http://www.gradschool.sc.edu/prospective/apply.asp?page=apply. The deadline is Dec. 15th, 2018. Inquiry letter should be sent to Dr. Zhenqing Fu at zfu@mailbox.sc.edu.