Postdoctoral Position in Plant Phenotyping with X-ray Micro Computed Tomography

A postdoctoral position is available in the Iyer-Pascuzzi lab at Purdue University to investigate the impact of soil microbes on root architecture using x-ray micro-computed tomography (x-ray µCT). The successful candidate will be part of a team assessing 1) the function of root-associated beneficial and pathogenic microbes in shaping tomato root architecture over time and 2) the role of bacterial virulence proteins in altering root architecture. The candidate will also provide CT imaging and analysis for other researchers using x-ray µCT, including those examining maize kernels.

Purdue University and the Center for Plant Biology offer a dynamic working environment within stimulating scientific surroundings. Purdue has invested over $25 million US dollars in the Plant Science Initiative, and has world class phenotyping capabilities. The new x-ray µCT will be located within the recently opened Controlled Environment Phenotyping Facility (CEPF), which is also equipped with other plant phenotyping modalities including RGB cameras, and multispectral and hyperspectral sensors.

This is a unique opportunity to be a part of an enthusiastic team of root biologists and engineers to address fundamental questions in root-microbe biology, and to contribute to the development and refinement of root image analysis algorithms. Our research offers an ideal creative environment for interdisciplinary training in plant phenomics using state-of-the art technology.

Required qualifications:
- The candidate should hold a PhD (or expect to have one within 6 months of application)
- Demonstrated experience in computational biology; proficiency in R or Python at minimum
- Previous experience in biological image analysis
- Excellent communication skills in written and oral English
- At least one accepted, peer-reviewed, first author primary research manuscript
- Ability to work with an interdisciplinary team of biologists, engineers, and computer scientists
- Ability to work as part of a culturally diverse team
- Interest in plant root biology

The position is a 1 year contract that is renewable for up to 3 years, dependent on progress and mutual satisfaction, and includes benefits. Anticipated start date is January or February 2019.

To apply:
Send cover letter describing your interest in this position, CV, short (max 1 page) statement of research accomplishments as it relates to this opening, and names of three academic or professional references compiled as a single PDF to Dr. Anjali Iyer-Pascuzzi, asi2@purdue.edu. Applications will be considered until the position is filled.