



POSTDOCTORAL POSITION: ARABIDOPSIS STOMATAL DEVELOPMENT

University of Washington, Seattle

A postdoctoral position (or a research technician/research scientist position) is available starting Summer 2009 to investigate cellular dynamics during stomatal patterning and differentiation. We have shown that a family of three receptor-like kinases and a putative ligand molecule enforce the proper asymmetric cell division and stomatal differentiation (Shpak et al. 2005 *Science* 309:290-; Hara et al. 2007 *Genes & Dev* 15:1720-). Our work has also led to a discovery of 'key switch' bHLH transcription factors that direct a series of cell-state transitional events during stomatal differentiation (Pillitteri et al. 2007 *Nature* 445:501-; Pillitteri and Torii 2007 *BioEssays* 29:861-; Pillitteri et al. 2008 *Plant Cell Physiol* 49:934-; Kanaoka et al. 2008 *Plant Cell* 20: 1775-).

A successful candidate will develop new methods to study ligand-receptor interactions and dynamics at cellular and subcellular levels using molecular-genetic tools readily available in my laboratory. The project seeks to unravel how cell-cell signals, specifically, ligand-receptor actions will translate into stomatal cell-type differentiation during epidermal development. Alternatively a successful candidate may study the biochemical and cellular mechanisms of how a bHLH transcription factor pair, SCREAM1/ICE1 and SCREAM2, controls both stomatal differentiation and cold-induced transcriptome.

A candidate must be proficient in Confocal microscopy and live imaging techniques at tissue-, cellular- or subcellular levels. Candidates with strong biochemistry and quantitative skills are highly desired. Previous experience in Arabidopsis/plants is not required but a plus. The position may be considered for a qualified Research Technician/Scientist, who wishes to gain experience before heading for the graduate career. A candidate must have strong communication skills and analytical skills, and be able to work as a team as well as independently.

Salary is commensurate with qualifications and experience (based on the NIH scale according to the University Guideline). The position will be renewed annually based on the performance and funding availability. The successful candidate will be encouraged to apply for independent fellowships. Due to the guideline of the funding agency, preference will be given to candidates within two years of postdoctoral experience (Ph.D. 2007 or later).

Please send a cover letter (1-2 pages) outlining your research interest and career goal, current curriculum vitae, and a name and e-mail address of three-four referees to:

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