POSTDOCTORAL / RESEARCH SCIENTIST POSITION:
Investigating peptide ligand-receptor kinase dynamics during stomatal development

Keiko Torii Lab; Howard Hughes Medical Institute and University of Washington, Seattle

Postdoctoral positions are available immediately to investigate dynamics of cell-cell interactions during plant epidermal development. We have identified that signal transduction cascades mediated by peptide ligands and receptor kinases controls proper spacing and patterning of stomata, microscopic valves on the plant epidermis.

A successful candidate will use the sophisticated live imaging techniques, such as FRAP, FRET, FLIM, and developing new optical/imaging tools for caging/uncaging signaling components, to investigate and manipulate the dynamics of cell-cell interactions leading to functional tissue patterning, specifically the roles of receptor endocytosis and exocytosis. Alternatively, the candidate will explore peptide ligand-receptor kinase signaling enforcing proper stomatal patterns using combinations of biochemical, materials engineering, and proteomic approaches.

For recent references see:
Pillitteri et al. (2011) Plant Cell 23, 3260- ; Guseman et al. (2010) Development 137, 1731-

A candidate must be proficient in live imaging techniques at tissue-, cellular- or subcellular levels. Solid background in basic molecular biology is required. Candidates with strong quantitative skills and engineering backgrounds are most highly desired. Previous experience in Arabidopsis/plants is not required. A candidate must be strong in communication- and analytical skills, motivated and interested in to succeed, and able to work as a team as well as independently.

Salary is commensurate with qualifications and experience. The position will be initially available for one year, with the renewal (up to 4-5 years) based on the performance and funding availability. The successful candidate will be encouraged to apply for independent fellowships to gain independent programs for his/her future career path. Due to the guideline of the funding agency, preference will be given to candidates within two years of postdoctoral experience.

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:

Prof. Keiko Torii
Department of Biology, University of Washington
Box 351800 Seattle, WA 98195-1800
ktorii@u.washington.edu http://faculty.washington.edu/ktorii