Vacancy: 3 year postdoctoral research assistant position in Dr. Imogen Sparkes’ group, University of Exeter, UK

Project: Biophysical and molecular characterisation of ER-organelle interactions in plants.

Organelle dynamics in highly vacuolated plant epidermal cells appears erratic, yet defects in the molecular drivers (myosins) affect growth, development and response to external stimuli. The endoplasmic reticulum (ER) pervades the cortex of the cell and appears intimately associated with several organelles (Sparkes et al. Curr Opin Plant Biol. 2011 14:658-65; Sparkes Mol. Plant 2011 4:805-12). Here, we will determine if organelles are attached, and isolate and characterise the molecular components involved in tethering organelles to the ER in Arabidopsis. This could have profound implications on 'communication' within the cell.

This project will entail periods of work off site with Dr. Andy Ward at the Central Laser Facility (Oxfordshire) to carry out optical tweezer work. This powerful technique will allow us to probe for direct physical interactions between organelles and the ER (Sparkes et al. Traffic 2009 10:567-71).

This Leverhulme Trust funded project also includes funding for one other post-doctoral assistant who will work with Prof Ashwin and Dr Sparkes on the biophysical aspects of ER-organelle interactions (Lin et al. Biophys. J. 2014 107:763-72). Therefore, the successful candidate must have excellent communication skills to convey complex datasets to an interdisciplinary audience.

To view the Job Description, Person Specification document and application process please click here. Closing date 10th May.

For further information please contact Dr Imogen Sparkes, e-mail I.Sparkes@exeter.ac.uk

http://biosciences.exeter.ac.uk/staff/index.php?web_id=Imogen_Sparkes&tab=profile