

"Excellence by Choice" Postdoctoral Programme in Life Science

Call 1 - 2022

Project idea # 1

Project title	Elucidating the role of physical cues on cell fate determination
Short summary	We hypothesize that the positional information guiding cell fate in plants emerges from physical cues imposed by their surroundings. We aim to unravel crucial aspects of cell fate determination by investigating the roles of mechanical signals in this process for hair and non-hair cells of Arabidopsis lateral root epidermis.
Key words	Cell fate, Positional information, Plant, Root hairs, Cell wall
Main Pl (* host department)	Stéphanie Robert Umeå Plant Science Centre (UPSC)*, Swedish University of Agricultural Sciences Stephanie.Robert@slu.se https://www.upsc.se/researchers/6171-robert-stephanie-regulation-of-plant- cell-shape-acquisition.html http://srobertgroup.com/
Co-PI(s)	Peter Marhavy Umeå Plant Science Centre (UPSC), Swedish University of Agricultural Sciences https://www.upsc.se/researchers/5908-marhavy-peter-short-distance- communication-in-response-to-wound-stress.html#research Stéphane Verger Umeå Plant Science Centre (UPSC), Swedish University of Agricultural Sciences https://www.upsc.se/researchers/6177-verger-stephane-mechanics-and- dynamics-of-cell-to-cell-adhesion-in-plants.html

