



The Department of Plant Developmental Biology at the Max Planck Institute for Plant Breeding Research in Cologne, Germany, invites applications for a

Postdoctoral position in cellular pattern formation in plants

This position will be held in the interdisciplinary group led by Dr Pau Formosa-Jordan, and will give the opportunity to an early career researcher to investigate the dynamics of cellular pattern formation in plants using quantitative approaches, combining theory and experiments. In particular, this position will consist of studying how cells become different from one another, forming spatial patterns of different cell types in plant tissues such as the leaf epidermis and the shoot meristem. The research project will involve time-lapse microscopy of plant developing tissues, quantitative image analysis and mathematical modelling of the patterning process. This position is initially for 3 years and can start from January 2021, although the start date is flexible. Salary and social benefits will be in accordance with the regulations of the German TVöD Bund (E13).

We are seeking a highly motivated candidate that is willing to combine experimental and theoretical work in plants. The ideal candidate would have a PhD in Quantitative Biology, Systems Biology, Biophysics or a related field. Applicants coming from Physics, Maths, Computer Science, Engineering background or related fields that show a high interest in Biology are also very welcome to apply. The applicant should have expertise in at least one of the following topics: quantitative image analysis, quantitative time-lapse microscopy and/or mathematical modelling. Some experience in programming is expected.

The Max Planck Society is committed to increasing the number of individuals with disabilities in its workforce and therefore encourages applications from such qualified individuals. Furthermore, the Max Planck Society seeks to increase the number of women in those areas where they are underrepresented and therefore explicitly encourages women to apply.

Applications in English should include a **cover letter** explaining the background and the motivation to apply to this position, a **CV** and the contact details of at least **two referees**. Applications should be compiled in a single pdf and should be submitted through the online system (<https://www.mpipz.mpg.de/vacancies>) **by November 18th 2020** the latest. Enquires about the position can be sent to Dr Pau Formosa-Jordan (pformosa@mpipz.mpg.de). Interviews will occur before the end of December 2020.

Relevant references:

1. Meyer HM, Teles J, Formosa-Jordan P *et al.* (2017) Fluctuations of the transcription factor ATML1 generate the pattern of giant cells in the Arabidopsis sepal. *Elife*. 6, 1–41.
2. Formosa-Jordan P, Teles J and Jönsson H (2018) Single-cell approaches for understanding morphogenesis using Computational Morphodynamics, in *Mathematical Modelling in Plant Biology*, Morris R (eds) (Springer, Cham).
3. Torii KU (2012) Two-dimensional spatial patterning in developmental systems. *Trends Cell Biol* 22(8): 438–446.