Post-doctoral research fellowship:
Large scale atlasing and modeling of cell dynamics during leaf morphogenesis

The Institut Jean-Pierre Bourgin (IJPB) at INRA Versailles is looking for a talented and strongly motivated post-doctoral fellow to work on a project aiming at a large scale description and modeling of cellular events involved in leaf morphogenesis.

The fellowship is funded by the Lidex Institut de Modélisation des Systèmes Vivants (Institute for Modeling Leaving Systems) from University Paris-Saclay. The project involves two research teams at IJPB (*Modeling and Computational Imaging* and *Transcription Factors and Architecture)* and one at IPS2 Gif-sur-Yvette (*Regulatory Non-Coding RNAs in Root Plasticity*). The three partners have been used to work together for several years and have complementary and multi-disciplinary expertises, from microscopic imaging and leaf developmental biology to image analysis and computer modeling.

The recruited candidate will develop advanced 3D image analysis and computer modeling methods for processing cell-resolved images of whole leaves and to generate atlases and models of cellular parameters at organ scale. Candidates should have a PhD in bio- or applied mathematics, computational biology, systems biology, or computer science, with a strong background or experience in image processing and analysis. Good programming skills, ideally in C++, are required. Candidates should also demonstrate a real interest for working in multidisciplinary contexts at the interface with biology.

The candidate will join the Modeling and Computational Imaging group at IJPB. The institute is one of the largest research units in Plant Sciences in Europe, gathering a unique ensemble of experimental resources and pluridisciplinary expertise in biology, chemistry and modeling. IJPB is located near Paris in the INRA Versailles-Grignon research center, right next to the wonderful gardens of the Palace of Versailles.

The duration of the post-doctoral fellowship is 12-14 months and is expected to start no later than June 2016. The salary (indexed on the INRA Research Engineer salary grid) will be commensurate with experience.

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IJPB/Modeling and Computational Imaging:
http://www-ijpb.versailles.inra.fr/en/bc/equipes/modelisation-imagerie/index.html

IJPB/Transcription Factors and Architecture:
http://www-ijpb.versailles.inra.fr/en/bc/equipes/Meristeme2/index.html

IPS2/Regulatory Non-Coding RNAs in Root Plasticity:
http://www.ips2.u-psud.fr/spip.php?article310

Lidex IMSV:
http://www.universite-paris-saclay.fr/en/research/project/lidex-imsv