

Post-doctoral position on cytonuclear coadaptation in *Arabidopsis thaliana*

Place of work: Institut Jean-Pierre Bourgin, Versailles, research group “Organelles and Reproduction”

<http://www-ijpb.versailles.inra.fr/en/bs/equipes/organites/index.htm>

Contract: Temporary (3 years)

Employer: INRA

Salary range: ~1,900 – 2,050 €/month (net, includes health coverage)

Application deadline: 30th September 2012

Starting: early 2013

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The Jean-Pierre Bourgin Institute is an internationally recognized laboratory in Plant Biology of INRA (French National Institute for Agriculture Research). It holds the *Arabidopsis thaliana* Resource Centre for Genomics (http://www-ijpb.versailles.inra.fr/en/cra/cra_accueil.htm) and possesses updated technical platforms in biochemistry, cytology and metabolomics, as well as one of European largest park of greenhouses and culture chambers for controlled plant growth. It is part of the new Laboratory of Excellence ‘Saclay Plant Science’ (http://www6.inra.fr/saclay-plant-sciences_eng/) launched in 2010. The research group working on organelles and reproduction is interested in understanding the coevolution of nuclear and cytoplasmic genomes and how it contributes at shaping the phenotype of the plant.

Mission:

We constructed new genetic resources dedicated to the study of cytonuclear interaction in *Arabidopsis thaliana*. We observed that the combination of the nuclear genome from a natural accession with the cytoplasm (mitochondrial and chloroplast genomes) of another one can lead to strong phenotypes such as sterility and germination deficiencies.

In the frame of a project funded by ANR (French National Research Agency), the hired post-doc fellow will be in charge of the identification of cytoplasmic and nuclear genetic factors involved in the sterility observed in a particular cytonuclear combination, and will investigate the physiological impact of this new genetic combination. He/she will also address the following questions: (i) are the same factors also causing germination deficiencies? (ii) are the same factors causing similar phenotypes observed in other cytonuclear combinations?

Applicant profile:

Applicants must hold a recent PhD (≤ 5 years) in plant biology. Good experience in plant organelle genetics and physiology is required. Good knowledge in flower development and in germination physiology will be appreciated as well as experience in genetic mapping.

Applicants should send an updated CV with contact information of two reference scientists, and a letter of motivation to Francoise.Budar@versailles.inra.fr