International PhD position

A 3 year PhD position is opened at IBMP (<u>http://www.ibmp.cnrs.fr</u>; Strasbourg) in the context of the IDEX International doctoral program allocated to ME Chabouté "Characterization of the nuclear envelope (NE) mechano-transduction in Arabidopsis:from supracellular stress to chromatin remodelling"

The University of Strasbourg (<u>http://www.en.unistra.fr</u>) and IBMP display an outstanding scientific environment and supports original high-quality research in different scientific fields

Eligibility of the candidate: The candidate should have graduated with a high level master degree either from institution outside France or, have completed a full degree program abroad and have integrated a master's degree in France.

Profile of the candidate : The candidate needs to have a general knowledge in cell **biology, developmental biology, plant biology.** In practical terms, he (she) should be able to manage and grow plants in greenhouses and in vitro, use as well molecular biology standard methods (genotyping, expression cloning) and have skills in microscopy (confocal and wide field, live cell imaging, immuno-localization and FISH). We wish to recruit an applicant who has an **interest in interdisciplinary approaches**, particularly in cell biology and biophysics. English read, written and spoken are essential.

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The candidate needs to send a CV, the marks obtained during the master degree, a recommandation lettre and a motivation letter-

Project Summary

We are studying a new form of tissue coordination involving the transduction of supracellular mechanical signals to the nucleus of Arabidopsis meristematic cells. Using cellular biology, 3D image analyses and micromechanics approaches, we will analyze how deformation of the nuclear envelope by tissue growth transmits mechanical signals to chromatin and involves NE proteins and cytoskeleton.

The student will be under the co-supervision of ME Chabouté (IBMP, Strasbourg) and O. Hamant (RDP-ENS, Lyon). Most of the work will be performed at IBMP (proteomics, transcriptomics and cellular approaches. Physical approaches will be performed with O. Hamant (ENS, Lyon).