# 7 Vacancies within EC Marie Curie Research Training Network:
## Chromatin in Plants – European Training and Mobility (CHIP-ET)
## http://www.chip-et.eu

**Positions, starting date and duration of contract**
Six PhD positions (Early-stage researcher, ESR): starting date October-December 2013 (3 years)
One Post-doc position (Experienced researcher, ER): starting date October-December 2014 (2 years)

**Partners and contacts**
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Please apply electronically including a letter of motivation and CV to the email address of the partner/project of interest before 30 September.

**Abstract**
The Research Training Network CHIP-ET will focus on the study of protein complexes that modulate chromatin structure to activate RNA polymerase II–mediated transcription. Research will address how developmental and environmental stimuli such as light and circadian rhythm signal to these complexes to modulate transcription. The interactome of the complexes will be determined, as well as their genome-wide target genes and the common and specific components in their molecular networks. The impact of perturbation of complex components or regulators on plant development and stress tolerance will be analyzed in the Arabidopsis plant model and will then be further tested in maize in order to generate Intellectual Property and licensing opportunities. The Bayer Crop Science industrial partner will modulate these genes in canola (oilseed rape) in order to improve field performance and yield. Four research objectives have been defined: (1) Biochemistry and nuclear architecture of chromatin complexes (2) Chromatin complex components and regulator's function in plant development, circadian clock and stress tolerance (3) Chromatin complex target genes (4) Chromatin and crop improvement. As central part of the project, six pre-docs and one PostDoc will be trained by five academic and one industrial partner. In addition to training through research projects, workshops, visiting experts and secondments in the partner laboratories, the trainees will attend courses/seminars promoting the development of complementary skills. Existing bilateral collaboration amongst some of the network partners will form the basis from which the network will be consolidated. The partners provide multi-disciplinary cutting-edge technologies and know-how in chromatin research that will create synergy and added value for Europe. Full participation of the industrial partner will make trainees aware of exploitation of research results and the importance of molecular breeding for a sustainable agriculture.

**Projects**

- Epigenetic analysis of rice lines and their progenies selected for energy use efficiency and high yield (ESR1, Gent-VIB)
- Epigenomics of chromatin modification complexes and interactors and their cross-talk with the environment (ESR2, Gent-VIB)
- Chromatin-mediated regulation of gene expression by transcript elongation factors (ESR3, Regensburg)
- Nuclear architecture of chromatin-related complexes (ESR4, Gatersleben)
- Characterization of composition and function of Arabidopsis TrxG complexes (ESR5, Strasbourg)
- Functional characterization of histone modifications at the core of the Arabidopsis circadian clock (ESR6, Barcelona)
- To be announced later (ER1, Gent – Bayer)

**Eligibility criteria**

Early Stage Researchers **(ESR):** No PhD and research experience ≤ 4 years*
Experienced Researchers **(ER):** PhD **or** Research experience ≥ 4 years,but ≤ 5 years*
***from the diploma date that gives the right to embark on a doctoral degree until the day of recruitment*

The researcher can be of any nationality, but must **not** have resided or carried out his/her main activity (work, studies, etc) in the country of his/her host organisation for more than 12 months in the three years immediately prior to his/her recruitment. Short stays, such as holidays, are not taken into account. For more information, contact Christine Tiré at chtir@psb.ugent.be.