

PhD student positions – Plant biology/biochemistry/genetics

Title: A MAGIC design to study photosynthesis and nutrient homeostasis in *Chlamydomonas reinhardtii*.

Two PhD positions (4 years) are open at the University of Liège (InBioS/PhytoSystems: <http://www.phyotosystems.ulg.ac.be/en/>) under the supervision of P. Cardol (Genetics and Physiology of Microalgae) and M. Hanikenne (Functional Genomics and Plant Molecular Imaging) in collaboration with T. Druet (Unit of Animal Genomics). The positions are opened from Oct 1st 2017.

Project

The two PhD students will work in the GreenMAGIC project. The goal of this four year project is to study the genetic architecture of major metabolic traits such as photosynthesis, mineral nutrition, biomass and biofuel production in *Chlamydomonas reinhardtii* (a unicellular green algae being the reference unicellular photosynthetic eukaryote model organism). A multiparental experimental design of more than 1,000 terminal lines obtained by crossing a selection of phenotypically diverse founder lines will be implemented to that end.

Job description

They will both contribute to the construction of the experimental design, the phenotyping of the terminal lines, the bioinformatics analysis of generated data (analysis of sequence data, QTL analysis) and functional validation of candidate genes and variants. The first PhD student will focus on aspects related to the regulation of photosynthesis whereas the second PhD thesis will focus on the mineral nutrition aspects. The project will be supported by a full-time technician.

Profile

Candidates should hold a Master degree (or equivalent) and have experience in biochemistry (of photosynthesis), (plant) molecular biology and/or genetics. The candidate should be fluent in English, have good ability to work in an interdisciplinary and international environment.

Contact

Applications, including motivation letter, CV, contact details (with name, email, address, phone number) of at least 2 references and copies of relevant certificates (e.g. MSc, BSc, language), should be addressed to pierre.cardol@ulg.ac.be and marc.hanikenne@ulg.ac.be, by July 31, 2017, or contact the same addresses with any questions.