PhD position: green algal evolution

The Phycology Research Group (UGent) and Comparative & Integrative Genomics lab (VIB-UGent) are looking for a highly motivated PhD student who is keen to work on evolution of green algal seaweeds.

Background:

Green seaweeds encompass macroscopic multicellular plants as well as several types of giant-celled organisms with unique morphological, cellular, and physiological characteristics. Little however is known about the mechanisms (cellular – molecular) that enabled this transition from small microscopic algae to large and complex seaweeds.

Study/Research project:

The project aims to elucidate the genetic correlates of key innovations in green algal seaweeds and should provide insights on the mechanisms underlying the evolutionary success of this group of organisms. The student will apply transcriptome sequencing of normalized cDNA libraries using next generation sequencing technology of a representative set of ulvophycean algae selected on the basis of their phylogenetic position, cytological characteristics, ease of culturing and ecological significance. In addition the student will develop a centralized online infrastructure (pico-PLAZA) where all information generated by green algal sequencing initiatives (genome as well as transcriptome) is integrated, in combination with advanced methods for data mining. This platform will be the green algal equivalent of PLAZA, a comparative genomics resource to study gene and genome evolution in land plants (Proost et al. *Plant Cell* 21:3718-31).

What is expected from candidates:

- 1. EU citizenship
- 2. A Master of Science degree relevant to the subject (e.g. Biology, Bioscience Engineering, Marine Biodiversity and Conservation, Geography, ...)
- 3. Computer literacy. Experience in bioinformatics is viewed as a plus.
- 4. Excellent study results and a scientific, critical attitude
- 5. English language proficiency

What we offer:

We initially offer of a fellowship of 4 years. Candidates should be willing to apply for additional external grants (e.g. IWT, FWO). Interested candidates email Olivier De Clerck (Olivier.declerck@ugent.be) with a motivation letter and CV before **1 July 2013 and are available for an interview between 1-5 July**. Preferred starting date: September 1st, 2013.

More info:

http://www.phycology.ugent.be/ https://www.facebook.com/groups/Phycology.UGent/ http://bioinformatics.psb.ugent.be/cig/