

The University of Gothenburg, Faculty of Sciences announces

Ph.D. position / doctoral grant in Plant Cell and Molecular Biology

at the Department of Plant and Environmental Sciences

Ref nr U 2011/338

We are seeking a highly motivated person for PhD studies in **Plant Cell and Molecular Biology**, with emphasis on photosynthesis. A well-functional photosynthetic membrane, the so-called thylakoid membrane in plant chloroplasts, is important for biomass production in both agriculture and forestry. The PhD project aims to study transporters from *Arabidopsis thaliana*, with a role in biogenesis, optimal function and turnover of the thylakoid membrane. During the project, bioinformatics analyses, biochemical and molecular biology methods will be used to identify and characterize new thylakoid transporters. Furthermore, their role in *Arabidopsis* will be studied by following gene and protein expression pattern in various tissues as well as the stress tolerance in wild-type plants and knockout mutants.

The main task is to conduct the PhD thesis work under supervision, which includes development of the PhD student's methodology experience, analytical skills, and theoretical depth and breadth. Techniques used within the project include searching in different data banks for plants, bioinformatics analyses, molecular biology, genetics, biochemical and plant physiology methods. The studies will be conducted mostly as laborative studies. Specific research topics associated with the research project include solute transport, plant genetics, plant biochemistry, plant cell physiology.

The Department is located on the campus of the Gothenburg Botanical Garden, one of the largest and most excellent in northern Europe, and within walking distance to other Science and Medical Departments at the University of Gothenburg. The research at the Department covers a broad range of research areas: Ecology and Conservation, Ecophysiology and Biogeochemistry, Ecotoxicology, Systematics and Biodiversity, and Plant Cell and Molecular Biology. The PhD student will be a member of the research group in Plant Cell and Molecular Biology, which includes approximately 15-20 scientists; technicians and PhD students. See also www.dpes.gu.se.

Third cycle education

Admission to third cycle education is aiming at a PhD in Natural Science, specialising in Biology. The education runs for four years of full-time studies, containing three years of thesis work, and one year of academic education i.e. course work and literature studies. A selection of courses at the Department/Faculty is available, but national/international courses can also be selected. The period until 2011-12-31 will be financed via a stipend from the University (doctoral grant), while the following years will be financed as a PhD position. Usually 10-20% teaching and/or course administration are included which extends the contract to the same extent. The applicant will be expected to start on 2011-08-01 or as decided by negotiations.

Qualifications

The applicant must have a second-cycle degree or have completed studies for at least 240 higher education credits, of which at least 60 credits were awarded in the second-cycle, or have completed a corresponding programme in some other country or have equivalent qualifications within the Molecular Genetics/Biology or related areas. Good communication skills (written and spoken) in English are necessary. Specialization within Plant Biology and experience of Molecular Genetics and Plant Physiology techniques is advantageous. Basic knowledge in Molecular Cloning is a merit.

Selection criteria

The following criteria will be applied in selecting among applicants:

- Qualifications from basic education
- Qualifications of the master's program, which rely on special competence
- Qualifications of other relevant studies or employments
- The applicant's ability to absorb postgraduate training
- The applicant's ability to work within a research group

The top ranked candidates will be selected for an interview, which might be held in English and could also be performed by phone.

For more information please contact

The becoming Supervisor Prof. Cornelia Spetea Wiklund, phone +46-(0)31-7866583, email: cornelia.spetea.wiklund@dpes.gu.se; webpage: www.dpes.gu.se/forskning/vaxtmolekylarbiologi/ or Head of Department Göran Wallin, phone: +46-(0)31-7862620, email: goran.wallin@dpes.gu.se.

Application documents

- A short cover letter with the applicant's motivation for the application that describes how the applicant meets the selection criteria (max. one A4 page)
- An attested list of qualifications (CV)
- Examination certificates and a transcript of courses with grades
- A summary of the master thesis
- Employments certificates and other documents deemed important by the applicant
- Contact information for at least two references that are familiar with the applicant's qualifications

Applications should be addressed to:

Interested candidates should send their application to anstallning@gu.se. In one or two pdf-files. **Please state reference number in the subject field.**

Applications can also be sent to: Registrar, University of Gothenburg, Box 100, SE-405 30 Gothenburg, Sweden.

The application must be received **no later than 9th of June 2011.**

Mark the application with **Ref. no U 2011/338.**

Union representatives:

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DEAN