



Ph.D. student position in the DFG project: Class III peroxidases: Functional analysis of membrane-bound peroxidases

We are looking for a Ph.D. student to investigate the localization, structure and function of membrane-bound class III peroxidases in maize. The position can be filled at the earliest from 1st of October 2010. Applications are evaluated until a suitable candidate is found.

The university intends to increase the number of women amongst its academic personnel and expressly encourages qualified women to apply. In compliance with the Hamburg Equal Opportunity Law, preference will be given to qualified female applicants.

In the last decades plant peroxidases have been investigated as model systems due to their numerous isoforms and functions. Class III peroxidases are mainly soluble apoplastic and cell wall bound enzymes. Our group identified at least three membrane-bound class III peroxidases (pmPOX) from plasma membranes of maize roots (*Zea mays* L.). In silico analysis and proteomic approaches point to important functions of these enzymes in oxidative stress and a complex regulatory network together with soluble and cell wall bound apoplastic peroxidases. Organization of pmPOX in microdomains and putative protein-protein interactions has been suggested by our data. These studies build the basis for the present project, which will focus on the structure, localization and function of membrane-bound peroxidases during plant development and oxidative stress. Besides gene regulation a possible function of these enzymes in membrane repair and/or protection will be investigated within this project.

The team is located at the department of Plant Physiology, University of Hamburg, at the Biocenter Klein Flottbek (<http://www.biologie.uni-hamburg.de/bzf/fb4a044/fb4a044.htm>).

We are looking for a student with a Diploma/M.Sc. in plant physiology, molecular biology, or biochemistry. The candidate should have experience in protein biochemistry, expertise in heterologous expressions of membrane proteins is welcome but not mandatory.

Salary. The salary is according to [Tarifvertrag für den öffentlichen Dienst der Länder](#) (TV-L, E13/2), the short-term contract will end on September, 30<sup>th</sup> 2012 (see also § 2, Abs. 1 of the Academic Fixed-Term Contract Law (Wissenschaftszeitvertragsgesetz). Prolongation for one more year will be possible.

For further information email PD Dr. Sabine Lühje ([s.luhje@botanik.uni-hamburg.de](mailto:s.luhje@botanik.uni-hamburg.de)). Send applications (CV, names and contact information for 2-3 persons for reference) before 31<sup>st</sup> of August 2010 by email. Applications are evaluated continuously and the position may be filled before the date mentioned.