

Project 6 (P6): AGC Kinase Network in *Candida albicans*

PI: Ernst, Joachim, Univ.-Prof. Dr. rer.nat.

Department of Molecular Mycology
Heinrich-Heine-Universität Duesseldorf
Universitätsstr. 1, Geb. 25.02.U1
40225 Duesseldorf
Germany

http://www.biologie.uni-duesseldorf.de/Institute/Molekulare_Mykologie/Abteilungsleitung

Project Summary:

Virulence of the important human fungal pathogen *Candida albicans* depends on its surface structures and its ability to switch from a yeast to a hyphal growth form (dimorphism). A network of protein kinases (AGC kinases) controls various fungal activities including dimorphism in response to contact with human host cells. We are in the process of exploring the functions of protein kinase A isoforms Tpk1 and Tpk2, as well as the related AGC kinases Sch9 and Rim15 during dimorphism. We wish to understand the intracellular location and regulation of these kinases, as well as their respective target proteins including transcription factors. Our overall goal is to obtain a comprehensive view of the processes that allow *C. albicans* to win the battle with human host cells.