

Project 4 (P4): Characterisation of *Chlamydia pneumoniae* adhesion proteins Yaa1-3

PI: Hegemann, Johannes H., Univ.-Prof. Dr. rer.nat.

Institute for Functional Genomics of Microorganisms

Heinrich-Heine-Universitaet Duesseldorf

Universitaetsstr. 1, Geb. 25.02.U1

40225 Duesseldorf

<http://www.biologie.uni->

[duesseldorf.de/Institute/Funktionelle_Genomforschung/Arbeitsgruppe_Hegemann](http://www.biologie.uni-duesseldorf.de/Institute/Funktionelle_Genomforschung/Arbeitsgruppe_Hegemann)

Summary

Our research concentrates on the molecular interaction between the pathogenic bacterium *Chlamydia pneumoniae* and their human host cells during the early phase of infection. Using novel functional approaches we identify and characterize chlamydial cell surface proteins and their role in adhesion. In this project we will characterize the three newly identified *C. pneumoniae* proteins Yaa1, Yaa2 and Yaa3 (Yaa=yet another adhesion) with respect to their role in adhesion and infection. The knowledge of the bacterial adhesins and their functional principles are milestones for the development of a so far not available vaccine against a *Chlamydia* infection.