



**Rita Müller**

## **Elucidating the role of *Candida albicans* Ece1 peptides**

*Candida albicans* expresses the hypha-associated gene ECE1 during invasion of epithelial cells and after phagocytosis by macrophages. ECE1 encodes a polyprotein with eight peptides. One of these, Candidalysin, the first peptide toxin identified in a human pathogenic fungus, is crucial for hypha-associated damage and mucosal infections. However, the role of the seven other, mostly highly conserved peptides is unknown. Interestingly, ECE1 is also expressed during commensal growth in the gut of mice and Ece1 epitopes are among the most serodominant antigens identified in both healthy individuals and candidaemia patients, hinting towards a possible role of Candidalysin and non-Candidalysin Ece1 peptides (NCEPs) also as commensal factors. The main objective of this study is therefore to investigate the role of NCEPs in *C. albicans* biology, commensalism and pathogenicity.

### **Publications**

König A, Müller R, Mogavero S, Hube B (2020) Fungal factors involved in host immune evasion, modulation and exploitation during infection. *Cell Microbiol* , [Details](#) [PubMed](#)

**Supervisor**

[Bernhard Hube](#)

**Co-Supervisors**

[Gerald Lackner](#)

**Start of PhD**

November 15, 2018