Candida albicans – a mucosal commensal that can cause life-threatening infections

The fungus *Candida albicans* occurs as a commensal in various warm-blooded animals, including humans were it is frequently found in healthy individuals. However, under pre-disposing conditions *C. albicans* can cause infections, ranging from superficial mucosal lesions to infection of internal organs and life-threatening disseminated candidiasis and sepsis. The latter two are still associated with high mortality rates, even if state-of-the art therapy is applied.

The Research Group Microbial Immunology investigates the interactions between *Candida* and the host, aiming at a better understanding of the interactions that lead to pathophysiological alterations. We furthermore strive to understand which process in pathogenesis lead to the development of clinical symptoms and lethal disease. In this regard, we focus on the following aspects:

- The role of fungal morphology in pathogenesis
- Molecular mechanisms contributing to Candida sepsis
- Gastrointestinal colonisation and translocation

To address these questions we use microbiological and immunological methods as well as molecular biology in combination with various infection models. We aim to contribute to a better understanding of the processes during infection. This knowledge is indispensable to develop novel strategies for preventing and treating life-threatening *Candida* infections.