

Thriving within the host: *Candida* spp. interactions with phagocytic cells.

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Abstract

Certain *Candida* spp. (e.g. *C. albicans*, *C. tropicalis*, *C. parapsilosis* and *C. glabrata*) are not only well-adapted fungal commensals of humans, but are also able to cause superficial mucosal infections or even systemic disease. Professional phagocytes (neutrophils, macrophages and dendritic cells) constitute the first line of defence against *Candida* spp. Here, we review the interactions of phagocytes with pathogenic *Candida* spp., focusing on macrophages and neutrophils. We discuss the mechanisms involved in recognition, uptake and killing of these fungi. We go on to analyse the cellular responses of these yeasts towards phagocyte-imposed stresses, including metabolic flexibility, robust oxidative stress response and ability to cope with nitrosative stress. Finally, we address strategies that allow these opportunistic pathogens to thrive within the host, evading and escaping from the phagocyte attack.

Beteiligte Forschungseinheiten

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[Interaktion mit Immunzellen \(MPM\)](#)

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