

# Publications

- Rebai Y, Wagner L, Gnaïen M, Hammer ML, Kapitan M, Niemiec MJ, Mami W, Mosbah A, Messadi E, Mardassi H, Vylkova S, Jacobsen ID, Znaidi S<sup>#</sup> (2023) *Escherichia coli* nissle 1917 antagonizes *Candida albicans* growth and protects intestinal cells from *C. albicans*-mediated damage. *Microorganisms* 11(8), 1929.
- Niemiec MJ, Kapitan M, Himmel M, Döll K, Krüger T, Köllner TG, Auge I, Kage F, Alteri CJ, Mobley HLT, Monsen T, Linde S, Nietzsche S, Kniemeyer O, Brakhage AA, Jacobsen ID (2022) Augmented enterocyte damage during *Candida albicans* and *Proteus mirabilis* coinfection. *Front Cell Infect Microbiol* 12, 866416.
- Dunker C, Polke M, Schulze-Richter B, Schubert K, Rudolphi S, Gressler AE, Pawlik T, Prada Salcedo JP, Niemiec MJ, Slesiona-Künzel S, Swidergall M, Martin R, Dandekar T, Jacobsen ID (2021) Rapid proliferation due to better metabolic adaptation results in full virulence of a filament-deficient *Candida albicans* strain. *Nat Commun* 12(1), 3899.
- Shankar M, Uwamahoro N, Backman E, Holmberg S, Niemiec MJ, Roth J, Vogl T, Urban CF (2021) Immune resolution dilemma: Host antimicrobial factor S100A8/A9 modulates inflammatory collateral tissue damage during disseminated fungal peritonitis. *Front Immunol* 12, 553911.
- Sprenger M, Hartung TS, Allert S, Wisgott S, Niemiec MJ, Graf K, Jacobsen ID, Kasper L, Hube B (2020) Fungal biotin homeostasis is essential for immune evasion after macrophage phagocytosis and virulence. *Cell Microbiol* 22(7), e13197.
- Krüger W, Vielreicher S, Kapitan M, Jacobsen ID, Niemiec MJ (2019) Fungal-bacterial interactions in health and disease. *Pathogens* 8(2), 70. (Review)
- Crawford AC, Lehtovirta-Morley LE, Alamir O, Niemiec MJ, Alawfi B, Alsarraf M, Skrahina V, Costa ACBP, Anderson A, Yellagunda S, Ballou ER, Hube B, Urban CF, Wilson D (2018) Biphasic zinc compartmentalisation in a human fungal pathogen. *PLOS Pathog* 14(5), e1007013.
- Kapitan M, Niemiec MJ, Steimle A, Frick JS, Jacobsen ID (2018) Fungi as part of the microbiota and interactions with intestinal bacteria. In: Curr Top Microbiol Immunol (ed.) Current Topics in Microbiology and Immunology 422, pp. 265-301. Springer, Berlin, Heidelberg. (Review)
- Luo S, Dasari P, Reiher N, Hartmann A, Jacksch S, Wende E, Barz D, Niemiec MJ, Jacobsen I, Beyersdorf N, Hünig T, Klos A, Skerka C, Zipfel PF (2018) The secreted *Candida albicans* protein Pra1 disrupts host defense by broadly targeting and blocking complement C3 and C3 activation fragments. *Mol Immunol* 93, 266-277.
- Salzer AT, Niemiec MJ, Hosseinzadeh A, Stylianou M, Åström F, Röhm M, Ahlm C, Wahlin A, Ermert D, Urban CF (2018) Assessment of Neutrophil Chemotaxis Upon G-CSF Treatment of Healthy Stem Cell Donors and in Allogeneic Transplant Recipients *Front Immunol* (9), 1968.
- Niemiec MJ, Kapitan M, Polke M, Jacobsen ID (2017) Commensal to Pathogen Transition of *Candida albicans*. In: Elsevier (ed.) Reference Module in Life Sciences 2017 Elsevier. ISBN: 9780128096338. (Review)
- De Samber B, Niemiec MJ, Laforce B, Garrevoet J, Vergucht E, De Rycke R, Cloetens P, Urban CF, Vincze L (2016) Probing intracellular element concentration changes during neutrophil

extracellular trap formation using synchrotron radiation based X-Ray fluorescence *PLOS ONE* 11(11), e0165604.

Niemiec MJ, De Samber B, Garrevoet J, Vergucht E, Vekemans B, De Rycke R, Björn E, Sandblad L, Wellenreuther G, Falkenberg G, Cloetens P, Vincze L, Urban CF (2015) Trace element landscape of resting and activated human neutrophils on the sub-micrometer level. *Metallomics* 7(6), 996-991010.

Niemiec, MJ (2015) Neutrophils versus Pathogenic Fungi: through the magnifying glass of nutritional immunity. PhD thesis

Ermert D, Niemiec MJ, Röhm M, Glenthøj A, Borregaard N, Urban CF (2013) *Candida albicans* escapes from mouse neutrophils. *J Leukoc Biol* 94(2), 223-236.

Birkenstock T, Liebeke M, Winstel V, Krismer B, Gekeler C, Niemiec MJ, Bisswanger H, Lalk M, Peschel A (2012) Exometabolome analysis identifies pyruvate dehydrogenase as a target for the antibiotic triphenylbismuthdichloride in multiresistant bacterial pathogens. *J Biol Chem* 287(4), 2887-2895.

Bianchi M, Niemiec MJ, Siler U, Urban CF, Reichenbach J (2011) Restoration of anti-*Aspergillus* defense by neutrophil extracellular traps in human chronic granulomatous disease after gene therapy is calprotectin-dependent. *J Allergy Clin Immunol* 127(5), 1243-12452.e7.

Frick JS, Fink K, Kahl F, Niemiec MJ, Quitadamo M, Schenk K, Autenrieth IB (2007) Identification of commensal bacterial strains that modulate *Yersinia enterocolitica* and dextran sodium sulfate-induced inflammatory responses: implications for the development of probiotics. *Infect Immun* 75(7), 3490-3497.

\*equal contribution #corresponding author