

Publications

Dewi IMW, Bruno M, Janssen NAF, Gresnigt MS, van Laarhoven A, van Crevel R, van de Veerdonk FL (2025) *Aspergillus fumigatus* and *Mycobacterium tuberculosis* synergistically induce TNF and IL-1 β via different pathways in human peripheral blood mononuclear cells. *Cytokine* 195, 157018.

Gonçalves SM, Leite L, de Vasconcelos P, Pereira I, Dewi IMW, Mercier T, Aerts R, Ligeiro D, Mendes F, Freitas F, Condeço J, Vieira J, Espada E, Lagrou K, Maertens JA, Gresnigt MS, Dinarello CA, Lacerda JF, Vaz CP, Cunha C, Carvalho A, van de Veerdonk FL (2025) A functional polymorphism in IL-36 β modulates macrophage antifungal effector functions and increases susceptibility to invasive pulmonary Aspergillosis. *J Infect Dis* 232(5), 1208-1219.

Rosati D, Valentine M, Bruno M, Pradhan A, Dietschmann A, Jaeger M, Leaves I, van de Veerdonk FL, Joosten LAB, Roy S, Stappers MHT, Gow NAR, Hube B, Brown AJP, Gresnigt MS, Netea MG (2025) Lactic acid in the vaginal milieu modulates the *Candida*-host interaction. *Virulence* 16(1), 2451165.

Valentine M, Rosati D, Dietschmann A, Schille TB, Netea MG, Hube B, Gresnigt MS (2025) Probiotic *Lactobacillus* species modulate immune responses during vaginal epithelial cell colonization. *J Infect Dis* 232(3), e403-e415.

Valentine M, Wilson D, Gresnigt MS, Hube B (2025) Vaginal *Candida albicans* infections: host-pathogen-microbiome interactions. *FEMS Microbiol Rev* 49, fuaf013. (Review)

Wagener J, Wang X, Becker KL, Aimanianda V, Valsecchi I, Gresnigt MS, Netea MG, Latge JP, Gow NAR, van de Veerdonk FL (2025) Immunomodulatory function of chitosan is dependent on complement receptor 3. *Cell Surf* 14, 100146.

Cheng KO, Montañó DE, Zelante T, Dietschmann A, Gresnigt MS (2024) Inflammatory cytokine signalling in vulvovaginal candidiasis: a hot mess driving immunopathology. *Oxf Open Immunol* 5(1), iqa010. (Review)

Jaeger M, Dietschmann A, Austermeier S, Dinçer S, Porschitz P, Vornholz L, Maas RJA, Sprenkeler EGG, Ruland J, Wirtz S, Azam T, Joosten LAB, Hube B, Netea MG, Dinarello CA, Gresnigt MS (2024) Alpha1-antitrypsin impacts innate host-pathogen interactions with *Candida albicans* by stimulating fungal filamentation. *Virulence* 15(1), 2333367.

Pekmezović M, Hube B, Gresnigt MS (2024) Pathogenicity strategies of *Candida* species during interactions with epithelial cells. In: Brakhage AA, Kniemeyer O, Zipfel PF (eds.) *The Mycota - Human and Animal Relationships* 3. 6, pp. 35-49. Springer, Cham. ISBN: 978-3-031-64852. (Review)

Schaefer S, Vij R, Sprague JL, Austermeier S, Dinh H, Judzewitsch PR, Müller-Loennies S, Lopes Silva T, Seemann E, Qualmann B, Hertweck C, Scherlach K, Gutschmann T, Cain AK, Corrigan N, Gresnigt MS, Boyer C, Lenardon MD, Brunke S (2024) A synthetic peptide mimic kills *Candida albicans* and synergistically prevents infection. *Nat Commun* 15(1), 6818.

Schimanski J, Gresnigt MS, Brunner E, Werz O, Hube B, Garscha U (2024) Hyphal-associated protein expression is crucial for *Candida albicans*-induced eicosanoid biosynthesis in immune cells. *Eur J Immunol* 54(3), e2350743.

Valentine M^{*}, Rudolph P^{*}, Dietschmann A, Tsavou A, Mogavero S, Lee S, Priest EL, Zhurgenbayeva G, Jablonowski N, Timme S, Eggeling C, Allert S, Dolk E, Naglik JR, Figge MT, Gresnigt MS^{*#}, Hube B^{*#} (2024) Nanobody-mediated neutralization of candidalysin prevents epithelial damage and inflammatory responses that drive vulvovaginal candidiasis pathogenesis. *mBio* 15(3), e0340923.

Chao YY, Puhach A, Frieser D, Arunkumar M, Lehner L, Seeholzer T, Garcia-Lopez A, van der Wal M, Fibi-Smetana S, Dietschmann A, Sommermann T, Ćiković T, Taher L, Gresnigt MS, Vastert SJ, van Wijk F, Panagiotou G, Krappmann D, Groß O, Zielinski CE (2023) Human TH17 cells engage gasdermin E pores to release IL-1 α on NLRP3 inflammasome activation. *Nat Immunol* 24(2), 295-308.

Lange T, Kasper L, Gresnigt MS, Brunke S, Hube B (2023) "Under Pressure" - How fungi evade, exploit, and modulate cells of the innate immune system. *Semin Immunol* 66, 101738. (Review)

Matzaraki V, Beno A, Jaeger M, Gresnigt MS, Keur N, Boahen C, Cunha C, Gonçalves SM, Leite L, Lacerda JF, Campos A, van de Veerdonk FL, Joosten L, Netea MG, Carvalho A, Kumar V (2022) Genetic determinants of fungi-induced ROS production are associated with the risk of invasive pulmonary aspergillosis. *Redox Biol* 55, 102391.

Pekmezovic M, Dietschmann A, Gresnigt MS (2022) Type I interferons during host-fungus interactions: Is antifungal immunity going viral? *PLOS Pathog* 18(8), e1010740.

Akoumianaki T, Vaporidi K, Diamantaki E, Pène F, Beau R, Gresnigt MS, Gkoutzinopoulou M, Venichaki M, Drakos E, El-Benna J, Samonis G, Le KTT, Kumar V, Georgopoulos D, van de Veerdonk FL, Netea MG, Latge JP, Chamilos G (2021) Uncoupling of IL-6 signaling and LC3-associated phagocytosis drives immunoparalysis during sepsis. *Cell Host Microbe* 29(8), 1277-1293.

Alonso-Monge R, Gresnigt MS, Román E, Hube B, Pla J (2021) *Candida albicans* colonization of the gastrointestinal tract: A double-edged sword. *PLOS Pathog* 17(7), e1009710.

Austermeier S, Pekmezović M, Porschitz P, Lee S, Kichik N, Moyes DL, Ho J, Kotowicz NK, Naglik JR, Hube B, Gresnigt MS (2021) Albumin neutralizes hydrophobic toxins and modulates *Candida albicans* pathogenicity. *mBio* 12(3), e0053121.

Bruno M, Dewi IMW, Matzaraki V, Ter Horst R, Pekmezovic M, Rösler B, Groh L, Röring RJ, Kumar V, Li Y, Carvalho A, Netea MG, Latgé JP, Gresnigt MS, van de Veerdonk FL (2021) Comparative host transcriptome in response to pathogenic fungi identifies common and species-specific transcriptional antifungal host response pathways. *Comput Struct Biotechnol J* 19, 647-663.

Bruno M, Horst R, Pekmezovic M, Kumar V, Li Y, Netea MG, Latgé JP, Gresnigt MS, van de Veerdonk FL (2021) Data of common and species-specific transcriptional host responses to pathogenic fungi. *Data Brief* 35, 106928.

Cavalli G, Tengesdal IW, Gresnigt M, Nemkov T, Arts RJW, Domínguez-Andrés J, Molteni R, Stefanoni D, Cantoni E, Cassina L, Giugliano S, Schraa K, Mills TS, Pietras EM, Eisenmenger EZ, Dagna L, Boletta A, D'Alessandro A, Joosten LAB, Netea MG, Dinarello CA (2021) The anti-inflammatory cytokine interleukin-37 is an inhibitor of trained immunity. *Cell Rep* 35(1), 108955.

Dewi IMW, Cunha C, Jaeger M, Gresnigt MS, Gkoutzinopoulou ME, Garishah FM, Duarte-

Oliveira C, Campos CF, Vanderbeke L, Sharpe AR, Brüggemann RJ, Verweij PE, Lagrou K, Vande Velde G, de Mast Q, Joosten LAB, Netea MG, van der Ven AJAM, Wauters J, Carvalho A, van de Veerdonk FL (2021) Neuraminidase and SIGLEC15 modulate the host defense against pulmonary aspergillosis. *Cell Rep Med* 2(5), 100289.

Fischer J, Gresnigt MS, Werz O, Hube B, Garscha U (2021) *Candida albicans*-induced leukotriene biosynthesis in neutrophils is restricted to the hyphal morphology. *FASEB J* 35(10), e21820.

Last A, Maurer M, Mosig AS, Gresnigt MS, Hube B (2021) *In vitro* infection models to study fungal-host interactions. *FEMS Microbiol Rev* 45(5), fuab005. (Review)

Pekmezovic M, Hovhannisyan H, Gresnigt MS, Iracane E, Oliveira-Pacheco J, Siscar-Lewin S, Seemann E, Qualmann B, Kalkreuter T, Müller S, Kamradt T, Mogavero S, Brunke S, Butler G, Gabaldón T, Hube B (2021) *Candida* pathogens induce protective mitochondria-associated type I interferon signalling and a damage-driven response in vaginal epithelial cells. *Nat Microbiol* 6(5), 643-657.

Austermeier S, Kasper L, Westman J, Gresnigt MS (2020) I want to break free - macrophage strategies to recognize and kill *Candida albicans*, and fungal counter-strategies to escape. *Curr Opin Microbiol* 58, 15-23. (Review)

Domínguez-Andrés J, Novakovic B, Li Y, Scicluna BP, Gresnigt MS, Arts RJW, Oosting M, Moorlag SJCFM, Groh LA, Zwaag J, Koch RM, Ter Horst R, Joosten LAB, Wijmenga C, Michelucci A, van der Poll T, Kox M, Pickkers P, Kumar V, Stunnenberg H, Netea MG (2019) The itaconate pathway is a central regulatory node linking innate immune tolerance and trained immunity. *Cell Metab* 29(1), 211-220.e5.

Grondman I, Arts RJW, Koch RM, Leijte GP, Gerretsen J, Bruse N, Kempkes RWM, Ter Horst R, Kox M, Pickkers P, Netea MG, Gresnigt MS (2019) Frontline science: Endotoxin-induced immunotolerance is associated with loss of monocyte metabolic plasticity and reduction of oxidative burst. *J Leukoc Biol* 106(1), 11-25.

Jaeger M, Matzaraki V, Aguirre-Gamboa R, Gresnigt MS, Chu X, Johnson MD, Oosting M, Smeekens SP, Withoff S, Jonkers I, Perfect JR, van de Veerdonk FL, Kullberg BJ, Joosten LAB, Li Y, Wijmenga C, Netea MG, Kumar V (2019) A genome-wide functional genomics approach identifies susceptibility pathways to fungal bloodstream infection in humans. *J Infect Dis* 220(5), 862-872.

Kasper L, König A, Koenig PA, Gresnigt MS, Westman J, Drummond RA, Lionakis MS, Groß O, Ruland J, Naglik JR, Hube B (2018) The fungal peptide toxin Candidalysin activates the NLRP3 inflammasome and causes cytolysis in mononuclear phagocytes. *Nat Commun* 9(1), 4260.

*equal contribution #corresponding author