



Prof. Dr. Ilse Denise Jacobsen

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Curriculum vitae

Main Research Areas

- Immunology and infection biology of pathogenic fungi
- In vivo and ex vivo infection models
- Mucosal pathogen-host-interaction

Professional Career

since 2014	Professor for Microbial Immunology, FSU Jena
since 2013	Head of the research group "Microbial Immunology", HKI Jena
2013	Habilitation and Venia legendi in microbiology, Friedrich-Schiller-University Jena
2007-2013	Head of the working group "Infection Models" within the department of Microbial Pathogenicity Mechanisms, HKI Jena, Deputy Supervisor
2007	Veterinary surgeon specialising in microbiology
2005-2007	Research assistant (postdoc) at the Institute for Microbiology, University of Veterinary Medicine, Hanover, within the SFB 587 (immune reaction of the lungs in case of infection and allergy, project A4)
2002-2005	PhD studies at the University of Veterinary Medicine, Hanover, project: "molecular mechanisms of the adaptation of <i>Actinobacillus pleuropneumoniae</i> to the respiratory tract of pigs" (DFG Research Training Group 745: Mucosal host-pathogen-interaction), PhD degree summa cum laude
2001	Veterinary license
1995-2001	Studies in veterinary medicine in Hanover and Pretoria, South Africa

Awards · Appointments · Scientific Activities

since 2013	Note taker within the specialist group "eukaryotic pathogens", Deutsche Gesellschaft für Hygiene und Mikrobiologie (DGHM)
2013	Co-organiser FEBS Advanced Practical Course " <i>state-of-the-art infection models for human pathogenic fungi</i> "
since 2012	Academic editor for PLoS One and Medical Mycology Case Reports
2010-2013	Deputy member of the advisory panel in accordance with § 15 clause 1 Animal Welfare Act, Thuringia
2007	Partial fellowship for taking part in the course molecular mycology: current approaches to fungal pathogenesis, Woods Hole, USA
2005	Award in veterinary medicine from the Kurt-Alten-Foundation for the best PhD-thesis
2001-2004	Fellow at the DFG's research training group 745
2000	Full fellowship (The Wellcome Trust) at the summer school: fundamentals of veterinary science, University of Cambridge, UK
1998	Awards from the H. Wilhelm Schaumann Stiftung

1995-2001

zu Hamburg for the best student achievements
Fellow at the Studienstiftung des deutschen
Volkes

Publications

Böttcher B, Kienast SD, Leufken J, Eggers C, Sharma P, Leufken CM, Morgner B, Drexler HCA, Schulz D, Allert S, Jacobsen ID, Vylkova S, Leidel SA, Brunke S[#] (2024) A highly conserved tRNA modification contributes to *C. albicans* filamentation and virulence. *Microbiol Spectr* [Epub ahead of print]

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Jacobsen ID[#] (2023) The role of host and fungal factors in the commensal-to-pathogen transition of *Candida albicans*. *Curr Clin Micro Rpt* 10(2), 55-65. (Review)

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Jacobsen ID[#] (2023) Mouse models of Mucormycosis. *Methods Mol Biol* 2667, 181-196.
(Review)

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Langenhorst D, Fürst AL, Alberter K, Vilhena C, Dasari P, Daud M, Heilig L, Luther CH, Dittrich M, Reiher N, Wich M, Elmowafy M, Jacobsen ID, Jungnickel B, Zipfel PF^{*}, Beyersdorf N^{*#} (2023) Soluble enolase 1 of *Candida albicans* and *Aspergillus fumigatus* stimulates human and mouse B cells and monocytes. *J Immunol* 211(5), 804-815.

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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[#] (2023) *Escherichia coli* nissle 1917 antagonizes *Candida albicans* growth and protects intestinal cells from *C. albicans*-mediated damage. *Microorganisms* 11(8), 1929.

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Refisch A[#], Sen ZD, Klassert TE, Busch A, Besteher B, Danyeli LV, Helbing D, Schulze-Späte U, Stallmach A, Bauer M, Panagiotou G, Jacobsen ID, Slevogt H, Opel N, Walter M (2023) Microbiome and immuno-metabolic dysregulation in patients with major depressive disorder with atypical clinical presentation. *Neuropharmacology* 235, 109568. (Review)

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Schädel P, Czapka A, Gebert N, Jacobsen ID, Ori A[#], Werz O[#] (2023) Metabololipidomic and proteomic profiling reveals aberrant macrophage activation and interrelated immunomodulatory mediator release during aging. *Aging Cell* 22(7), e13856.

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Jungnickel B, Jacobsen ID (2022) Systemic Candidiasis in mice: New insights from an old model. *Front Fungal Biol* 3, 940884. (Review)

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Mentrup T, Stumpff-Niggemann AY, Leinung N, Schlosser C, Schubert K, Wehner R, Tunger A, Schatz V, Neubert P, Gradtke AC, Wolf J, Rose-John S, Saftig P, Dalpke A, Jantsch J, Schmitz M, Fluhrer R, Jacobsen ID, Schröder B (2022) Phagosomal signalling of the C-type lectin receptor Dectin-1 is terminated by intramembrane proteolysis. *Nat Commun* 13(1), 1880.

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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.

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Teachings

[Lecture Translational Medical Microbiology \(MMB2.17\) Prof. Dr. Ilse Denise Jacobsen](#)
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