

Dr. Hannah Scheiblich

Institute of clinical chemistry and clinical pharmacology



Rheinische Friedrich-Wilhelms-Universität Bonn

Institute

Institute of Clinical Chemistry and Clinical Pharmacology
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Research Expertise

Hannah Scheiblich completed her *Bachelor of Science* at the Philipps-University of Marburg in 2009 and her *Master of Science* at the University of Veterinary Medicine in Hannover in 2011. She obtained her *doctoral degree* in 2015 at the Department of Cell Biology at the University of Veterinary Medicine in Hannover in the lab of Prof. Gerd Bicker on the topic "Nitric oxide (NO)- and carbon monoxide (CO)-mediated signal transduction in a co-culture system of microglia and human model neurons". Thereafter she worked as a postdoc in the lab of Dr. Joern Steinert at the Medical Research Council Toxicology Unit in Leicester, England. In 2016, she joined the lab of Prof. Michael T. Heneka at the Department of Neurodegenerative Diseases and Gerontopsychiatry at the University Hospital Bonn and the German Center for neurodegenerative diseases with a focus on Parkinson's and Alzheimer's disease. Since 2023 she is working as a junior group leader within the ImmunoSensation² cluster at the Institute of clinical chemistry and clinical pharmacology. Her current research focuses on several aspects of neuroinflammation with the aim of understanding the molecular and cellular mechanisms that contribute to neurodegenerative diseases.

Education / Training

University of Veterinary Medicine Hannover, Dr. rer. nat., 2015
University of Veterinary Medicine Hannover, Master of Science, 2011
Philipps-University of Marburg, Bachelor of Science, 2009

Appointments / Positions Held

since 05/2023
Junior Research Group Leader at the Institute of Clinical Chemistry and Clinical Pharmacology, University Hospital Bonn, Germany
01/2022 – 04/2023
Postdoctoral Research Fellow at the Institute of Innate Immunity, University Hospital Bonn, Germany
09/2016 – 12/2021
Postdoctoral Research Fellow at the Dept. of Neurodegenerative Diseases and Gerontopsychiatry, University Hospital Bonn, Germany
01/2016 – 08/2016
Postdoctoral Research Fellow at the Medical Research Council – Toxicology Unit, University of Leicester, England
08/2012 – 12/2015
Research Assistant in the Dept. of Cell Biology, University of Veterinary Medicine Hannover, Germany

Honors / Awards

2022, 3rd place winner of the "Best Paper Prize 2022" awarded by the Hans & Ilse Breuer Stiftung and the German Center for Neurodegenerative Diseases

2017, 3rd place winner of the Mark A. Smith Award

10 Most Relevant Publications for Dr. Hannah Scheiblich

- Scheiblich H**, Dansokho C, Mercan D, Schmidt SV, Bousset L, Wischhof L, Eikens F, Odainic A, Spitzer J, Griep A, Schwartz S, Bano D, Latz E, Melki R, Heneka MTH (2021) Microglia jointly degrade fibrillar alpha-synuclein cargo by distribution through tunneling nanotubes, *Cell*
- Scheiblich H**, Bousset L, Schwartz S, Griep A, Latz E, Melki R, Heneka MTH (2021) Microglial NLRP3 inflammasome activation upon TLR2 and TLR5 ligation by distinct alpha-synuclein assemblies, *J Immunol*
- Joshi P, Riffel F, Satoh K, Enomoto M, Qamar S, **Scheiblich H**, Villacampa N, Kumar S, Theil S, Parhizkar S, Haass C, Heneka MT, Fraser PE, St George-Hyslop P, Walter J (2021) Differential interaction with TREM2 modulates microglial uptake of modified Aβ species, *Glia*
- Scheiblich H**, Steinert JR (2021) Nitrergic modulation of neuronal excitability in the mouse hippocampus is mediated via regulation of Kv2 and voltage-gated sodium channels, *Hippocampus*
- Friker LL, **Scheiblich H**, Hochheiser IV, Brinkschulte R, Riedel D, Latz E, Geyer M, Heneka MT (2021) β-Amyloid Clustering around ASC Fibrils Boosts Its Toxicity in Microglia, *Cell Rep*
- Ising C, Venegas C, Zhang S, **Scheiblich H**, Schmidt SV, Vieira-Saecker A, Schwartz S, Albasset S, McManus RM, Tejera D, Griep A, Santarelli F, Brosseron F, Opitz S, Stunden J, Merten M, Kaye R, Golenbock DT, Blum D, Latz E, Buée L, Heneka MT (2019) NLRP3 inflammasome activation drives tau pathology. *Nature*
- Scheiblich H**, Schlütter A, Golenbock DT, Latz E, Martinez-Martinez P, Heneka MT (2017) Activation of the NLRP3 inflammasome in microglia: the role of ceramide, *J Neurochem*
- Scheiblich H**, Bicker G (2017) Regulation of Microglial Phagocytosis by RhoA/ROCK-Inhibiting Drugs, *Cell Mol Neurobiol*
- Scheiblich H**, Bicker G (2016) Nitric oxide regulates antagonistically phagocytic and neurite outgrowth inhibiting capacities of microglia, *Dev Neurobiol*
- Scheiblich H**, Bicker G (2015) Regulation of microglial migration, phagocytosis, and neurite outgrowth by HO-1/CO signaling, *Dev Neurobiol*