

Tobias Dierkes, MSc



3. Kellner Y, Gödecke N, **Dierkes T**, Thieme N, Zagrebelsky M, Korte M. The BDNF effects on dendritic spines of mature hippocampal neurons depend on neuronal activity. *Front Synaptic Neurosci.* 2014 20;6:5.

DZNE and University Hospital Bonn

PhD Student

E-Mail: Tobias.Dierkes@uni-bonn.de

Research Expertise

Tobias Dierkes is a neuroimmunologist interested in pathogen-associated molecules as well as endogenous danger signals that trigger innate immune signaling receptors leading to inflammatory processes. The microbiota has emerged as a major component of human physiology and pathology, integrating influences from both host genetics and environmental impact. Therefore, Tobias is interested in determining whether microbiome changes can contribute to the development of Alzheimer's disease.

Education / Training

MSc: Technical University Braunschweig, Germany and National University Singapore (NUS), Singapore,
Master in Neurobiology and Bioinformatics, 2016
BSc: Technical University Braunschweig, Germany,
Bachelor in Biology, 2014

Appointments / Positions Held

2016 – present
PhD Student in the DZNE, Bonn

Honors/Awards

2015
PROMOS: DAAD (German Academic Exchange Service) funded program

Most Relevant Publications

1. Venegas C, Kumar S, Franklin BS, **Dierkes T**, Brinkschulte R, Tejera D, Vieira-Saecker A, Schwartz S, Santarelli F, Kummer MP, Griep A, Gelpi E, Beilharz M, Riedel D, Golenbock DT, Geyer M, Walter J, Latz E, Heneka MT. Microglia-derived ASC specks cross-seed amyloid- β in Alzheimer's disease. *Nature.* 2017 20;552(7685):355-361.

2. Sharma M, **Dierkes T**, Sajikumar S. Epigenetic regulation by G9a/GLP complex ameliorates amyloid-beta 1-42 induced deficits in long-term plasticity and synaptic tagging/capture in hippocampal pyramidal neurons. *Aging Cell.* 2017 Oct;16(5):1062-1072.