

Curriculum Vitae

Holger Heine Professor, Dr. rer.nat.
Research Center Borstel - Leibniz Lung Center
Head, Research Group Innate Immunity
Deputy Director, Priority Area Chronic Lung Diseases
d.o.b. January 13th, 1966, in Neumünster, Germany

University Education

2013 Adjunct Professor, Faculty of Mathematics and Natural Sciences, CAU Kiel
2004 Habilitation Immunology and Cell Biology, CAU Kiel
1995 Doctorate Ph.D., CAU Kiel
1987–1992 Studies of Biology, Christian-Albrechts-University (CAU) Kiel

Scientific Career

Since 2019 Deputy Director, Priority Area Chronic Lung Diseases, Research Center Borstel – Leibniz Lung Center, Borstel, Germany
Since 2004 Head, Research Group, Division of Innate Immunity, Department of Immunology and Cell Biology, Research Center Borstel, Borstel, Germany
2002–2004 Junior Research Group Leader, Division of Innate Immunity, Department of Immunology and Cell Biology, Research Center Borstel, Borstel, Germany
1999–2001 Postdoctoral Fellow, Department of Immunology and Cell Biology, Research Center Borstel, Borstel, Germany
1996–1999 Postdoctoral Fellow, Maxwell Finland Laboratory for Infectious Diseases, Boston Medical Center, Boston, USA
1993-1995 PhD student, Research Center Borstel, Borstel, Germany

Citation Record

Total citations: 11,964; h-index: 50; h-index since 2017: 33 (Google Scholar September 23rd, 2022)

Top-10 selected Publications

Przyborski JM, **Heine H**, Kaufmann A, Baumeister S, Lingelbach K, Bauer S: TLR8 is activated by 5'-methylthioinosine, a Plasmodium falciparum-derived intermediate of the purine salvage pathway. Cell Rep 2022, 39(2):110691. doi: [10.1016/j.celrep.2022.110691](https://doi.org/10.1016/j.celrep.2022.110691)

Brandenburg J, Marwitz S, Tazoll SC, Waldow F, Kalsdorf B, Vierbuchen T, Scholzen T, Gross A, Goldenbaum S, Holscher A, Hein M, Linnemann L, Reimann M, Kispert A, Leitges M, Rupp J, Lange C, Niemann S, Behrends J, Goldmann T, **Heine H**, Schaible UE, Holscher C, Schwudke D, Reiling N: WNT6/ACC2-induced storage of triacylglycerols in macrophages is exploited by Mycobacterium tuberculosis. J Clin Invest 2021, 131(16). doi: [10.1172/JCI141833](https://doi.org/10.1172/JCI141833)

Herster F, Bittner Z, Archer NK, Dickhofer S, Eisel D, Eigenbrod T, Knorpp T, Schneiderhan-Marra N, Loffler MW, Kalbacher H, Vierbuchen T, **Heine H**, Miller LS, Hartl D, Freund L, Schakel K, Heister M, Ghoreschi K, Weber ANR: Neutrophil extracellular trap-associated RNA and LL37 enable self-amplifying inflammation in psoriasis. Nat Commun 2020, 11(1):105. doi: [10.1038/s41467-019-13756-4](https://doi.org/10.1038/s41467-019-13756-4)

Stein K, Brand S, Jenckel A, Sigmund A, Chen ZJ, Kirschning CJ, Kauth M, **Heine H**: Endosomal recognition of Lactococcus lactis G121 and its RNA by dendritic cells is key to its allergy-protective effects. The Journal of allergy and clinical immunology 2017, 139(2):667-678 e665. doi: [10.1016/j.jaci.2016.06.018](https://doi.org/10.1016/j.jaci.2016.06.018)

Vierbuchen T, Bang C, Rosigkeit H, Schmitz RA, **Heine H**: The Human-Associated Archaeon Methanosphaera stadtmanae Is Recognized through Its RNA and Induces TLR8-Dependent NLRP3 Inflammasome Activation. Front Immunol 2017, 8:1535. doi: [10.3389/fimmu.2017.01535](https://doi.org/10.3389/fimmu.2017.01535)

Bang C, Weidenbach K, Gutschmann T, **Heine H**, Schmitz RA: The intestinal archaea Methanosphaera stadtmanae and Methanobrevibacter smithii activate human dendritic cells. PloS one 2014, 9(6):e99411. doi: [10.1371/journal.pone.0099411](https://doi.org/10.1371/journal.pone.0099411)

Debarry J, Hanuszkiewicz A, Stein K, Holst O, **Heine H**: The allergy-protective properties of Acinetobacter lwoffii F78 are imparted by its lipopolysaccharide. Allergy 2010, 65(6):690-697. doi: [10.1111/j.1398-9995.2009.02253.x](https://doi.org/10.1111/j.1398-9995.2009.02253.x)

Debarry J, Garn H, Hanuszkiewicz A, Dickgreber N, Blumer N, von Mutius E, Bufe A, Gattermann S, Renz H, Holst O, **Heine H**: Acinetobacter lwoffii and Lactococcus lactis strains isolated from farm cowsheds possess strong allergy-protective properties. The Journal of allergy and clinical immunology 2007, 119(6):1514-1521. doi: [10.1016/j.jaci.2007.03.023](https://doi.org/10.1016/j.jaci.2007.03.023)

Lien E, Means TK, **Heine H**, Yoshimura A, Kusumoto S, Fukase K, Fenton MJ, Oikawa M, Qureshi N, Monks B, Finberg RW, Ingalls RR, Golenbock DT: Toll-like receptor 4 imparts ligand-specific recognition of bacterial lipopolysaccharide. J Clin Invest 2000, 105(4):497-504. doi: [10.1172/JCI8541](https://doi.org/10.1172/JCI8541)

Heine H, Kirschning CJ, Lien E, Monks BG, Rothe M, Golenbock DT: Cutting edge: cells that carry a null allele for toll-like receptor 2 are capable of responding to endotoxin. J Immunol 1999, 162(12):6971-6975.