

Curriculum Vitae

Volker Winstel

Dr. rer. nat.
d.o.b. May 1st, 1983, in Mainz, Germany

University Education

2013 Dr. rer. nat. in Microbiology, University of Tübingen, Tübingen, Germany
2010-2013 Ph.D. thesis, University of Tübingen, Tübingen, Germany
2010 Diploma in Biology, University of Tübingen, Tübingen, Germany
2004–2010 Studies of Biology, University of Karlsruhe and University of Tübingen, Germany

Scientific Career

Since 2019 Independent Research Group Leader, Institute of Medical Microbiology and Hospital Epidemiology, Hannover Medical School, Hannover, Germany; and TWINCORE (Centre for Experimental and Clinical Infection Research), Hannover, Germany
2015-2019 Postdoctoral Scholar, Department of Microbiology, Cummings Life Science Center, University of Chicago, Chicago, USA
2013-2015 Postdoctoral Scholar, Interfaculty Institute of Microbiology and Infection Medicine Tübingen (IMIT), University of Tübingen, Tübingen, Germany

Awards and Honors

Since 2022 Executive Committee Member, Center for Infection Biology, Hannover Medical School, Germany
2022 BD research award, German Society for Hygiene and Microbiology (DGHM)
2015 EMBO long-term fellowship (declined due to another fellowship)
2015 Postdoctoral research fellowship, German Research Foundation (DFG), University of Chicago, Chicago, USA
2014 Ph.D. award, German Association of General and Applied Microbiology (VAAM)
2014 Ph.D. award, Reinhold-und-Maria-Teufel-Stiftung Tuttlingen
2014 Travel fellowship, German Academic Exchange Service (DAAD)

Citation Record

Total citations: 1,534; h-index: 19; h-index since 2019: 18 (Google Scholar July 24th, 2024)

Top-10 selected Publications

Winstel V*, Abt ER, Le TM, Radu CG. Targeting host deoxycytidine kinase mitigates *Staphylococcus aureus* abscess formation. **eLife**. 2024 Mar 21;12:RP91157. doi: [10.7554/eLife.91157](https://doi.org/10.7554/eLife.91157) (*corresp. author)

Schwermann N, Haller R, Koch S, Grassl GA, **Winstel V***. Pathogen-driven nucleotide overload triggers mitochondria-centered cell death in phagocytes. **PLoS Pathog**. 2023 Dec 29; 19(12):e1011892. doi: [10.1371/journal.ppat.1011892](https://doi.org/10.1371/journal.ppat.1011892) (*corresp. author)

Tantawy E, Schwermann N, Ostermeier T, Garbe A, Bähre H, Vital M, **Winstel V***. *Staphylococcus aureus* multiplexed death-effector deoxyribonucleosides to neutralize phagocytes. **Front Immunol**. 2022 Mar 10;13:847171. doi: [10.3389/fimmu.2022.847171](https://doi.org/10.3389/fimmu.2022.847171) (*corresp. author)

Du X, Larsen J, Li M, Walter A, Slavetinsky C, Both A, Sanchez Carballo PM, Stegger M, Lehmann E, Liu Y, Liu J, Slavetinsky J, Duda KA, Krismer B, Heilbronner S, Weidenmaier C, Mayer C, Rohde H, **Winstel V**, Peschel A. *Staphylococcus epidermidis* clones express *Staphylococcus aureus*-type wall teichoic acid to shift from a commensal to pathogen lifestyle. **Nat Microbiol**. 2021 Jun;6(6): 757–768. doi: [10.1038/s41564-021-00913-z](https://doi.org/10.1038/s41564-021-00913-z)

Winstel V*, Schneewind O, Missiakas D*. *Staphylococcus aureus* exploits the host apoptotic pathway to persist during infection. **mBio**. 2019 Nov 12;10(6). pii: e02270-19. doi: [10.1128/mBio.02270-19](https://doi.org/10.1128/mBio.02270-19) (*corresp. author, shared)

Winstel V, Missiakas D, Schneewind O. *Staphylococcus aureus* targets the purine salvage pathway to kill phagocytes. **Proc Natl Acad Sci USA**. 2018 Jun 26;115(26):6846-6851. doi: [10.1073/pnas.1805622115](https://doi.org/10.1073/pnas.1805622115)

Wanner S, Schade J, Keinhörster D, Weller N, George SE, Kull L, Bauer J, Grau T, **Winstel V**, Stoy H, Kretschmer D, Kolata J, Wolz C, Bröker BM, Weidenmaier C. Wall teichoic acids mediate increased virulence in *Staphylococcus aureus*. **Nat Microbiol**. 2017 Jan 23;2:16257. doi: [10.1038/nmicrobiol.2016.257](https://doi.org/10.1038/nmicrobiol.2016.257)

Winstel V, Kühner P, Rohde H, Peschel A. Genetic engineering of untransformable coagulase-negative staphylococcal pathogens. **Nat Protoc**. 2016 May;11(5):949-59. doi: [10.1038/nprot.2016.058](https://doi.org/10.1038/nprot.2016.058)

Winstel V, Kühner P, Salomon F, Larsen J, Skov R, Hoffmann W, Peschel A, Weidenmaier C. Wall teichoic acid glycosylation governs *Staphylococcus aureus* nasal colonization. **mBio**. 2015 Jun 30;6(4). pii: e00632-15. doi: [10.1128/mBio.00632-15](https://doi.org/10.1128/mBio.00632-15)

Winstel V, Liang C, Sanchez-Carballo P, Steglich M, Munar M, Bröker BM, Penades JR, Nubel U, Holst O, Dandekar T, Peschel A, Xia G. Wall teichoic acid structure governs horizontal gene transfer between major bacterial pathogens. **Nat Commun**. 2013;4:2345. doi: [10.1038/ncomms3345](https://doi.org/10.1038/ncomms3345)