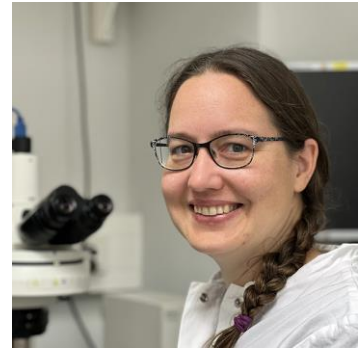


1. General information

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2. University education

2002-2008 Study of Biology at the Justus-Liebig-University Giessen
Diploma, grade 1.2
2005 Exchange semester at the National University of Singapore

3. Stages of academic/professional career Advanced academic qualifications

Doctorate: Dr. rer. nat. (2012), Graduate College „Molecular Biology and Medicine of the Lung“, Justus-Liebig-University Giessen, Scholarship of the Konrad Adenauer Foundation, supervisors: Prof. Dr. Wolfgang Clauss and Dr. Martin Fronius, grade: *summa cum laude*

Professional career

2017 – present Research Associate, Krasteva-Christ Lab, Institute for Anatomy and Cell Biology, Saarland University Homburg
2014-2016 Postdoctoral Fellow, Institute Necker, Paris, Inserm U1151
2012-2013 Postdoctoral Fellow, National Children’s Research Centre / Royal College of Surgeons of Ireland, Dublin
2012 Postdoctoral scholarship, LOEWE research group “non neuronal cholinergic systems”, Justus-Liebig-University Giessen

4. Activities in the Research System

5. Academic Distinctions

2023 Science Award of the City of Homburg
2016 Poster Award at the 6th European Workshop on Lipid Mediators in Frankfurt

6. Scientific Results

- Hollenhorst MI, Krasteva-Christ G. Chemosensory cells in the respiratory tract as crucial regulators of innate immune responses. *J Physiol.* 2023 May;601(9):1555-1572.
- Hollenhorst MI*, Nandigama R*, Evers SB*, Gamayun I, Abdel Wadood N, Salah A, Pieper M, Wyatt A, Stukalov A, Gebhardt A, Nadolni W, Burow W, Herr C, Beisswenger C, Kusumakshi S, Ectors F, Kichko TI, Hübner L, Reeh P, Munder A, Wienhold SM, Witzenrath M, Bals R, Flockerzi V, Gudermann T, Bischoff M, Lipp P, Zierler S, Chubanov V, Pichlmair A, König P, Boehm U, Krasteva-Christ G (2022). Bitter taste signaling in tra-cheal epithelial brush cells elicits innate immune responses to bacterial infection. *J Clin Invest.* 132(13):e150951. *equal contribution.
- Hollenhorst MI*, Kumar P*, Zimmer M, Salah A, Maxeiner S, Elhawy MI, Evers SB, Flockerzi V, Gudermann T, Chubanov V, Boehm U, Krasteva-Christ G. Taste Receptor Activation in Tracheal Brush Cells by Denatonium Modulates ENaC Channels via Ca²⁺, cAMP and ACh. *Cells.* 2022 Aug 4;11(15):2411.*equal contribution
- Kumar P, Scholze P, Fronius M, Krasteva-Christ G*, Hollenhorst MI* (2020). Nicotine stimulates ion transport via metabotropic β_4 subunit containing nicotinic acetylcholine receptors. *Br J Pharmacol* 177(24):5595-5608. *equal contribution.

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8. Hollenhorst, MI., Lips, KS., Wolff, M., Gerbig, S., Wess, J., Takats, Z., Kummer, W., Fronius, M. Luminal cholinergic signalling in airway lining fluid: a novel mechanism for activating chloride secretion via Ca²⁺ dependent Cl⁻ and K⁺ channels. *British Journal of Pharmacology*, 2012, Jun;166(4):1388-402.
9. Hollenhorst, MI., Lips, KS., Weitz, A., Krasteva, G., Kummer, W., Fronius, M. Evidence for functional atypical nicotinic receptors that activate K⁺ dependent Cl⁻ secretion in mouse tracheal epithelium. *American Journal of Respiratory Cell and Molecular Biology*, 2012, 46: 106-114.
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7. Funding (past 5 years)

HomFor2022, Saarland University

HomFor2018, Saarland University

DAAD Conference travel Scholarship for Europhysiology 2018 in London