

## Curriculum Vitae Anna Sigmund

### Personal Data

Title	Dr. rer. nat.
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### Selection of peer-reviewed research articles:

1. **Sigmund AM**, Bayerbach FC, Kugelmann D, *et int*, Vielmuth F. Epac1 contributes to apremilast-mediated rescue of pemphigus autoantibody-induced loss of keratinocyte adhesion. *JCI Insight*. 2025 Apr 29:e187481. doi: 10.1172/jci.insight.187481.
2. Egu DT, Schmitt T, Ernst N, *et int*, **Sigmund AM<sup>#</sup>**, Waschke J<sup>#</sup>. EGFR Inhibition by Erlotinib Rescues Desmosome Ultrastructure and Keratin Anchorage and Protects Against Pemphigus Vulgaris IgG-Induced Acantholysis in Human Epidermis. *J Invest Dermatol*. 2024 Nov;144(11):2440-2452. doi: 10.1016/j.jid.2024.03.040.
3. Steinert L, Fuchs M, **Sigmund AM**, *et int*, Vielmuth F. Desmosomal hyper-adhesion affects direct inhibition of desmoglein interactions in pemphigus. *J Invest Dermatol*. 2024 Dec;144(12):2682-2694.e10. doi: 10.1016/j.jid.2024.03.042.
4. Vielmuth F, Radeva MY, Yeruva S, **Sigmund AM**, Waschke. cAMP: A master regulator of cadherin-mediated binding in endothelium, epithelium and myocardium. *J. Acta physiol*. 2023 Aug; 238(4):e14006. doi: 10.1111/apha.14006. Review
5. **Sigmund AM<sup>\*</sup>**, Winkler M<sup>\*</sup>, Engelmayer S<sup>\*</sup>, *et int*, Waschke J. Apremilast prevents blistering in human epidermis and stabilizes keratinocyte adhesion in pemphigus. *Nat Commun*. 2023 Jan 9;14(1):116. doi: 10.1038/s41467-022-35741-0.
6. Egu DT, Schmitt T, **Sigmund AM**, Waschke J. Electron microscopy reveals that phospholipase C and Ca<sup>2+</sup> signaling regulate keratin filament uncoupling from desmosomes in Pemphigus. *Ann Anat*. 2022 Apr;241:151904. doi: 10.1016/j.aanat.2022.151904.
7. Kugelmann D, Anders M, **Sigmund AM**, *et int*, Waschke J. Role of ADAM10 and ADAM17 in the Regulation of Keratinocyte Adhesion in Pemphigus Vulgaris. *Front Immunol*. 2022 Jun 30;13:884248. doi: 10.3389/fimmu.2022.884248.
8. Schmitt T, Egu DT, Walter E, **Sigmund AM**, *et int*, Waschke J. Ca<sup>2+</sup> signalling is critical for autoantibody-induced blistering of human epidermis in pemphigus. *Br J Dermatol*. 2021 Sep;185(3):595-604. doi: 10.1111/bjd.20091.
9. Fuchs M, **Sigmund AM**, Waschke J, Vielmuth F. Desmosomal Hyperadhesion Is Accompanied with Enhanced Binding Strength of Desmoglein 3 Molecules. *Biophys J*. 2020 Oct 20;119(8):1489-1500. doi: 10.1016/j.bpj.2020.09.008.
10. **Sigmund AM**, Steinert LS, Egu DT, *et int*, Vielmuth F. Dsg2 Upregulation as a Rescue Mechanism in Pemphigus. *Front Immunol*. 2020 Oct 28;11:581370. doi: 10.3389/fimmu.2020.581370.