# RESEARCH PROFILE

**Personal data:**

| | |
|---|---|
| **Name, academic title** | **Vielmuth, Franziska** – Dr. med. |
| **Date of birth** | 1st January 1988 |
| **Current position** | Postdoc and Junior group leader at Department of Anatomy and Cell Biology I; Faculty of Medicine, Ludwig-Maximilians-Universität (LMU) Munich, Germany |
| **Official address** | |
| **Institution** | Ludwig-Maximilians-Universität (LMU), Faculty of Medicine, Munich |
| **Address** | Pettenkoferstr. 11, 80336 Munich |
| | Phone: +49-89-2180-72700 Fax: 089-2180-72602 |
| | Email: Franziska.Vielmuth@med.uni-muenchen.de |
| **Education** | |
| 2006-2012 | Medical School at the University of Würzburg, Germany |
| **Academic Qualification** | |
| 2012 | Degree in human medicine (in Germany: 2. Staatsexamen) and license to practice medicine (in Germany: Approbation) |
| 2015 | Medical thesis entitled “The role of cAMP in Pemphigus vulgaris” at Institute of Anatomy and Cell Biology, Würzburg |
| 2017 | Specialist for Anatomy (Fachanatom) of the German Anatomical Society |
| 2019 | Specialist for Anatomy (Facharzt) of the Bavarian State Chamber of Physicians |
| **Professional Career** | |
| 2012-2017 | researcher and Post-Doc at Institute of Anatomy and Cell Biology I, LMU Munich |
| 10/2017-09/2018 | Representation of W2 position (“Biophysical characterization of desmoglein interactions”) at Institute of Anatomy and Cell Biology I, LMU Munich |
| Since 2017 | Junior Group leader at Institute of Anatomy and Cell Biology I, LMU Munich |
| 05/2019 | Acceptance as “Habilitandin” for anatomy and cell biology at LMU Munich |

## Memberships/ Awards

Studienstiftung des Deutschen Volkes (Alumni)

Anatomische Gesellschaft (since 2013)

American Society of Investigative Pathology (ASIP, since 2015)

Young Investigator Award of Anatomische Gesellschaft (2016)

## Most important publications

Protective endogenous cyclic adenosine 5'-monophosphate signaling triggered by pemphigus autoantibodies. Spindler V*, **Vielmuth F***, Schmidt E, Rubenstein DS, Waschke J. (*=authors contributed equally), J Immunol. 2010 Dec 1;185(11):6831-8. Epub 2010 Oct 29.

Atomic force microscopy identifies regions of distinct desmoglein 3 adhesive properties on living keratinocytes. **Vielmuth F**, Hartlieb E, Kugelmann D, Waschke J, Spindler V. Nanomedicine. 2015 Apr;11(3):511-20. doi: 10.1016/j.nano.2014.10.006. Epub 2014 Dec 12

Loss of Desmoglein Binding Is Not Sufficient for Keratinocyte Dissociation in Pemphigus. **Vielmuth F**, Waschke J, Spindler V. J Invest Dermatol. 2015 Dec;135(12):3068-3077. doi: 10.1038/jid.2015.324. Epub 2015 Aug 19.

Pemphigus autoantibodies induce blistering in human conjunctiva
**F Vielmuth**, V Rötzer, E Hartlieb, C Hirneiß, J Waschke, V Spindler
Invest Ophthalmol Vis Sci. 2016 Aug 1;57(10):4442-4449. doi: 0.1167/iovs.16-19582

Keratins Regulate the Adhesive Properties of Desmosomal Cadherins through Signaling. **Vielmuth F**, Wanuske MT, Radeva MY, Hiermaier M, Kugelmann D, Walter E, Buechau F, Magin TM, Waschke J, Spindler V. J Invest Dermatol. 2018 Jan;138(1):121-131. doi: 10.1016/j.jid.2017.08.033. Epub 2017 Sep 9.

Keratins Regulate p38MAPK-Dependent Desmoglein Binding Properties in Pemphigus. **Vielmuth F,** Walter E, Fuchs M, Radeva MY, Buechau F, Magin TM, Spindler V, Waschke J. Front Immunol. 2018 Mar 19;9:528. doi: 10.3389/fimmu.2018.00528. eCollection 2018.

Atomic Force Microscopy Provides New Mechanistic Insights into the Pathogenesis of Pemphigus. **Vielmuth F**, Spindler V, Waschke J.
Front Immunol. 2018 Mar 28;9:485. doi: 10.3389/fimmu.2018.00485. eCollection 2018. Review.

Plakophilin 1 but not plakophilin 3 regulates desmoglein clustering.
Fuchs M, Foresti M, Radeva MY, Kugelmann D, Keil R, Hatzfeld M, Spindler V, Waschke J, **Vielmuth F**.
Cell Mol Life Sci. 2019 Apr 4. doi: 10.1007/s00018-019-03083-8.