Curriculum Vitae
Personal Data

Title	Dr. rer. nat.
First name	Peter
Name	Walentek
Current position	Heisenberg-Fellow (FP1 until 31.12.2026)
Current institution(s)/site(s), country	University Freiburg Medical Center, Department of Medicine, Clinic for Internal Medicine IV and IMITATE – Institute for Disease Modeling and Targeted Medicine, Breisacher Str. 113, 79106 Freiburg, Germany
Identifiers/ORCID	0000-0002-2332-6068

Qualifications and Career

Stages	**Periods and Details**
Degree programme	Studies of Biology, 10/2002 - 11/2007, University of Hohenheim, Stuttgart, Germany
Doctorate	01/2008 - 09/2012 Dr. rer. nat. in Biology (*magna cum laude*), Prof. Martin Blum, Institute of Zoology, University of Hohenheim, Stuttgart, Germany
Stages of academic/professional career	Since 01/2024: Heisenberg Fellow, University Freiburg Medical Center, Freiburg, D 10/2017 - 12/2013: Emmy-Noether-Groupleader, University Freiburg Medical Center, Freiburg, D 01/2016 - 09/2017: NHI-K99 PI, University of California, Berkeley, CA, USA (Prof. R. Harland) 10/2012 - 01/2016: Postdoctoral fellow, University of California, Berkeley, CA, USA (Prof. R. Harland) 01/2008 - 09/2012: Doctoral student, University of Hohenheim, Stuttgart, D (Prof. M. Blum) 02/2006 - 10/2006: Undergraduate Researcher, Forsyth Institute & Harvard University, Boston, MA, USA (Prof. M. Levin)

Supplementary Career Information

Since 2022	Scientific Director (Xenopus-Section) AquaCore Facility, University Freiburg Medical Center
Since 2019	PI, IMPRS-IEM Graduate School, MPI Freiburg
Since 2017	PI, Spemann Graduate School of Biology and Medicine, University Freiburg

Activities in the Research System

Since 2025	HetCCI steering committee member, Saarland University, D
Since 2024	Strategy board member, European Xenopus Resource Centre, Portsmouth, UK
Since 2024	Co-Director Cell & Developmental Biology of Xenopus course, Cold Spring Harbor Laboratories, NY, USA
2022 - 2024	Local committee, Spemann-Mangold Centennial Symposium 2024
2022 - 2023	Organizing Committee, 2023 CIBSS Signalling Meeting, Freiburg
2022 - 2023	Board Member German Society for Developmental Biology (GfE) and GfE 2022 Meeting co-organizer, Stuttgart
2022	Co-organizer 3rd EU Amphibian Meeting, Ghent
Since 2021	Co-organizer Tri-national DevStemCell Meeting, D/CH/F
Since 2021	CIBSS Equal Opportunity and Diversity Committee, Freiburg University
2019 - 2021	PI co-speaker Center for Biological Systems Analysis, Freiburg
2019	Organizer 5th German Xenopus Meeting, Freiburg

Supervision of Researchers in Early Career Phases

Supervision of 8 doctoral and 2 medical dissertations, 4 Masters dissertations, 3 Bachelor dissertations (within the last 5 years and ongoing). Hosting of 4 postdoctoral fellows.

Scientific Results

Category A

1. **Walentek P.** Mucociliary cell type compositions – bridging the gap between genes and emergent tissue functions. ***CellDev***. 2025 doi: 10.1016/j.cdev.2025.204019. [Open Access]

2. Gopalakrishnan J, Feistel K, Friedrich BM, Grapin-Botton A, Jurisch-Yaksi N, Mass E, Mick DU, Müller RU, May-Simera H, Schermer B, Schmidts M, **Walentek P**, Wachten D. Emerging principles of primary cilia dynamics in controlling tissue organization and function. ***EMBO J***. 2023 Sep 25:e113891. [Open Access]

3. Yasunaga T, Wiegel J, Bergen MD, Helmstädter M, Epting D, Paolini A, Çiçek Ö, Radziwill G, Engel C, Brox T, Ronneberger O, **Walentek P**, Ulbrich MH, Walz G. Microridge-like structures anchor motile cilia. ***Nat Commun***. 2022 Apr 19;13(1):2056. doi: 10.1038/s41467-022-29741-3 [Open Access]

4. Boecking CA*, **Walentek P***, Zlock LT, Sun DI, Wolters PJ, Ishikawa H, Jin BJ, Haggie PM, Marshall WF, Verkman AS, Finkbeiner WE. A simple method to generate human airway epithelial organoids with externally orientated apical membranes. ***Am J Physiol Lung Cell Mol Physiol***. 2022 Mar 1;322(3):L420-L437. doi: 10.1152/ajplung.00536.2020.

5. Tasca A, Helmstädter M, Brislinger MM, Haas M, Mitchell B, **Walentek P**. Notch signaling induces either apoptosis or cell fate change in multiciliated cells during mucociliary tissue remodeling. ***Dev Cell***. 2021 Feb 22;56(4):525-539.e6. doi: 10.1016/j.devcel.2020.12.005.

6. Haas M, Gómez Vázquez JL, Sun DI, Tran HT, Brislinger M, Tasca A, Shomroni O, Vleminckx K, **Walentek P**. ΔN-Tp63 Mediates Wnt/β-Catenin-Induced Inhibition of Differentiation in Basal Stem Cells of Mucociliary Epithelia. ***Cell Rep***. 2019 Sep 24;28(13):3338-3352.e6. doi: 10.1016/j.celrep.2019.08.063. [Open Access]

7. **Walentek P**, Quigley IK, Sun DI, Sajjan UK, Kintner C, Harland RM. Ciliary transcription factors and miRNAs precisely regulate Cp110 levels required for ciliary adhesions and ciliogenesis. ***Elife***. 2016 Sep 13;5:e17557. doi: 10.7554/eLife.17557. [Open Access]

8. **Walentek P**, Bogusch S, Thumberger T, Vick P, Dubaissi E, Beyer T, Blum M, Schweickert A. A novel serotonin-secreting cell type regulates ciliary motility in the mucociliary epidermis of Xenopus tadpoles. ***Development***. 2014 141, 1526-33.

9. Song R*, **Walentek P***, Sponer N*, Klimke A, Lee JS, Dixon G, Harland R, Wan Y, Lishko P, Lize M, Kessel M, He L. miR-34/449 miRNAs are required for motile ciliogenesis by repressing cp110. ***Nature***. 2014 Jun 5;510(7503):115-20. doi: 10.1038/nature13413.

10. **Walentek P**, Beyer T, Thumberger T, Schweickert A, Blum M. ATP4a is required for Wnt-dependent Foxj1 expression and leftward flow in Xenopus left-right development. ***Cell Rep***. 2012 May 31;1(5):516-27. doi: 10.1016/j.celrep.2012.03.005. [Open Access]

Category B

1. Bowden S, Brislinger-Engelhardt MM, Hansen M, Temporal-Plo A, Weber D, Haegele SL, Lorenz F, Litwin T, Kreutz C, **Walentek P**. Foxi1 regulates multipotent mucociliary progenitors and ionocyte specification through transcriptional and epigenetic mechanisms. **bioRxiv**. 2024 doi: 10.1101/2024.10.27.620464. [Open Access]

2. Bouadi O, Yao C, Zeng J, Beason D, Inda N, Malone Z, Yoshihara J, Manjally AM, Ill CJ, Cherry J, Chen C-Y, Huang T-C, Popovic B, Henley M, Liu G, Kharitonova E, Zeldich E, Aichelman H, Davies AW, **Walentek P**, Tian Y, Man H, Ozsen E, Harder K, Gilmore T, Pitt D, Tay TL. AutoMorFi: Automated Whole-image Morphometry in Fiji/ImageJ for Diverse Image Analysis Needs. **bioRxiv**. 2024 doi: 10.1101/2024.07.26.605357. [Open Access]

3. Brislinger-Engelhardt, M. M., Lorenz, F., Haas, M., Bowden, S., Tasca, A., Kreutz, C., **Walentek, P**. Temporal Notch signaling regulates mucociliary cell fates through Hes-mediated competitive de-repression. ***bioRxiv***. doi:10.1101/2023.02.15.528675. [Open Access]

Academic Distinctions

Since 2025	ERC CoG
Since 2024	DFG Heisenberg-Fellow
Since 2019	Associated PI, CIBSS Excellence Cluster
2017 - 2023	DFG Emmy-Noether Research Group
2016 - 2017	NIH - Pathway to Independence Award (K99/R00)
2015	Outstanding Postdoctoral Fellow Award, UC Berkeley
2015	Hilde Mangold Postdoctoral Award, SDB
2013	PhD thesis award, Wissenschaftspreis des Universitätsbundes Hohenheim
09/2012 - 09/2014	DFG Postdoctoral Fellowship
01/2009 - 12/2010	PhD Fellowship, Landesgraduiertenförderung Baden-Württemberg
2006	Undergraduate Research Fellowship, Herzog-Carl-Stipendium