

## Curriculum Vitae

**Julia Duerr**

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d.o.b. September 19, 1979, in Sigmaringen, Germany

### University Education

- 2011            Doctoral degree, Summa cum laude (A+), Department of Pediatric Pulmonology & Allergology and Cystic Fibrosis Center Ruprecht-Karls-University Heidelberg, Germany
- 2001 – 2004   Diploma in Biochemistry, University of Bayreuth, Germany
- 1999 – 2001   Biochemistry, pre-diploma, Ernst-Moritz-Arndt University, Greifswald, Germany

### Scientific Career

- Since 2018    Laboratory Leader, Pediatric Pulmonology Research Unit, Department of Pediatric Respiratory Medicine, Immunology and Critical Care Medicine, Charité Universitätsmedizin Berlin
- Since 2014    Principal investigator, German Center for Lung Research (DZL)
- 2011 – 2018   Postdoc, Department of Translational Pulmonology, Center for Translational Lung Research (TLRC), Heidelberg University
- 2005 - 2011   PhD thesis, Department of Pediatric Pulmonology & Allergology and Cystic Fibrosis Center, Ruprecht-Karls-University Heidelberg, Germany
- 2004 - 2005   Internship, Boehringer Ingelheim Pharma GmbH & Co. KG, Biberach

### Awards and Honors

- 2019           European Respiratory Society (ERS) Best Abstract, ERS International Congress
- 2019           Lung Science Conference bursary recipient, 17th ERS Lung Science Conference: 'Mechanisms of Acute Exacerbation of Respiratory Disease'
- 2010           Novartis Young Fellows Travel Award, European Cystic Fibrosis Society Basic Science Conference, Carcavelos
- 2010           Best Poster Award, European Cystic Fibrosis Society Basic Science Conference, Carcavelos

### Citation Record

*Total citations: 1,330; h-index: 17; (Web of Science, March 2026)*

### Top-10 selected Publications

1. Agircan AS, Lampe M, Scheuermann H, Albrecht T, Graeber SY, Balázs A, Baumann I, Block S, Pepperkok R, Mall MA\*, Duerr J\*. Reflection confocal microscopy for quantitative assessment of airway surface layer dysregulation and pharmacological rescue in cystic fibrosis under near-physiological conditions. *Sci Rep.* 2025 Dec 11;15(1):43659. DOI: 10.1038/s41598-025-32061-3.
2. Benke CV\*, Duerr J\*, Engel A, Dullin C, Stiller W, Horstmann H, Redenbach C, Ackermann M, Kauczor HU, Kuner T, Wielpütz MO, Mall MA, Wagner WL. High-resolution multimodal imaging reveals spatial and temporal heterogeneity of airway mucus plugging in mice with muco-obstructive lung disease. *Sci Rep.* 2025 Nov 24;15(1):41760. DOI: 10.1038/s41598-025-22537-7.
3. Leitz DHW, Konietzke P, Wagner WL, Mertiny M, Benke C, Schneider T, Morty RE, Dullin C, Stiller W, Kauczor HU, Mall MA\*, Duerr J\*, Wielpütz MO\*. Longitudinal microcomputed tomography detects onset and progression of pulmonary fibrosis in conditional Nedd4-2 deficient mice. *Am J Physiol Lung Cell Mol Physiol.* 2024 Dec 1;327(6):L917-L929. DOI: 10.1152/ajplung.00280.2023. Epub 2024 Oct 22.
4. Schaupp L, Addante A, Völler M, Fentker K, Kuppe A, Bardua M, Duerr J, Piehler L, Röhmel J, Thee S, Kirchner M, Ziehm M, Lauster D, Haag R, Gradzielski M, Stahl M, Mertins P, Boutin S, Graeber SY, Mall MA. Longitudinal effects of elexacaftor/tezacaftor/ivacaftor on sputum viscoelastic properties, airway

infection and inflammation in patients with cystic fibrosis. *Eur Respir J*. 2023 Aug 3;62(2):2202153. DOI: 10.1183/13993003.02153-2022.

5. Zhu L\*, Duerr J\*, Zhou-Suckow Z, Wagner W, Weinheimer O, Salomon J, Leitz D, Konietzke P, Yu H, Ackermann M, Stiller W, Kauczor HU, Mall MA, Wielpütz MO.  $\mu$ CT to quantify muco-obstructive lung disease and effects of neutrophil elastase knockout in mice. *Am J Physiol Lung Cell Mol Physiol*. 2022 Mar 1;322(3):L401-L411. DOI: 10.1152/ajplung.00341.2021. (\*equal contribution)

6. Leitz DHW\*, Duerr J\*, Mulugeta S, Seyhan Agircan A, Zimmermann S, Kawabe H, Dalpke AH, Beers MF, Mall MA. Congenital Deletion of Nedd4-2 in Lung Epithelial Cells Causes Progressive Alveolitis and Pulmonary Fibrosis in Neonatal Mice. *Int J Mol Sci*. 2021 Jun 7;22(11):6146. DOI: 10.3390/ijms22116146. (\*equal contribution) Open-access article

7. Duerr J\*, Leitz DHW\*, Szczygiel M\*, Dvornikov D, Fraumann SG, Kreutz C, Zadora PK, Seyhan Agircan A, Konietzke P, Engelmann TA, Hegermann J, Mulugeta S, Kawabe H, Knudsen L, Ochs M, Rotin D, Muley T, Kreuter M, Herth FJF, Wielpütz MO, Beers MF, Klingmüller U, Mall MA. Conditional deletion of Nedd4-2 in lung epithelial cells causes progressive pulmonary fibrosis in adult mice. *Nat Commun*. 2020 Apr 24;11(1):2012. DOI: 10.1038/s41467-020-15743-6. (\*equal contribution) Open-access article

8. Gehrig S, Duerr J, Weitnauer M, Wagner CJ, Graeber SY, Schatterny J, Hirtz S, Belaaouaj A, Dalpke AH, Schultz C, Mall MA. Lack of neutrophil elastase reduces inflammation, mucus hypersecretion, and emphysema, but not mucus obstruction, in mice with cystic fibrosis-like lung disease. *Am J Respir Crit Care Med*. 2014 May 1;189(9):1082-92. DOI: 10.1164/rccm.201311-1932OC.

9. Anagnostopoulou P\*, Riederer B\*, Duerr J\*, Michel S, Binia A, Agrawal R, Liu X, Kalitzki K, Xiao F, Chen M, Schatterny J, Hartmann D, Thum T, Kabesch M, Soleimani M, Seidler U, Mall MA. SLC26A9-mediated chloride secretion prevents mucus obstruction in airway inflammation. *J Clin Invest*. 2012 Oct;122(10):3629-34. DOI: 10.1172/JCI60429 (\*equal contribution)

10. Duerr J, Gruner M, Schubert SC, Haberkorn U, Bujard H, Mall MA. Use of a new-generation reverse tetracycline transactivator system for quantitative control of conditional gene expression in the murine lung. *Am J Respir Cell Mol Biol*. 2011 Feb;44(2):244-54. DOI: 10.1165/rcmb.2009-0115OC.