Curriculum vitae

Mirjam Stahl, M.D.
Date of birth: October 30, 1983
Place of birth: Bendorf, Germany
Nationality: German

Current Positions

W2 Heisenberg Professorship for Translational Pediatric Pulmonology (funded by the German Research Foundation (Deutsche Forschungsgemeinschaft, DFG)) at the Charité - Universitätsmedizin Berlin

Head of the Division of Cystic Fibrosis (CF) at the Department of Pediatric Respiratory Medicine, Immunology and Critical Care Medicine of the Charité – Universitätsmedizin Berlin

Consultant Physician (Oberärztin) at the Department of Pediatric Respiratory Medicine, Immunology and Critical Care Medicine of the Charité – Universitätsmedizin Berlin

Group Leader of the Research Group „Risk Factors and Therapy of Early CF Lung Disease“

Associated Principal Investigator of the German Center for Lung Research (Deutsches Zentrum für Lungenforschung, DZL)

Advanced Clinician Scientist at the Berlin Institute of Health (BIH)

Affiliation

Charité - Universitätsmedizin Berlin – Campus Virchow Klinikum
Department of Pediatric Respiratory Medicine, Immunology and Critical Care Medicine
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Scientific Vita

2022	Call for the W2 Professorship associated with the DFG Heisenberg Professorship at the Charité – Universitätsmedizin Berlin
2021	Call for the W2 Professorship "Pediatric Pulmonology and Allergology" at the University of Lübeck, Germany
2021	Admission to the Heisenberg program of the DFG (W2 Heisenberg Professorship for Translational Pediatric Pulmonology)
2021	Admission to the Berlin Institute of Health (BIH) clinician scientist program as an advanced clinician scientist
03/2020	*Venia legendi* for Pediatrics, Medical Faculty, Charité - Universitätsmedizin Berlin (habilitation recognition procedure)
2020-present	Head of Division of CF, Consultant Physician (Oberärztin) and Group Leader of the Research Group „Risk Factors and Therapy of Early CF Lung Disease“, Department of Pediatric Respiratory Medicine, Immunology and Intensive Care Medicine, Charité - Universitätsmedizin Berlin (Director: Prof. Dr. M. A. Mall)

09/2019	Habilitation and *venia legendi* for Pediatrics, Medical Faculty, University of Heidelberg. Title of habilitation thesis: “Investigations on onset and early progression of lung disease in cystic fibrosis (Untersuchungen zur Entstehung und frühen Progression der Lungenerkrankung bei Mukoviszidose)”
2018-2019	Consultant Physician (Oberärztin), Division of Pediatric Pulmonology & Allergy and Cystic Fibrosis Center, Department of Pediatrics, University Hospital Heidelberg (Director: Prof. Dr. A. E. Kulozik)
2017-2019	Group Leader of Junior Research Group „Early CF Lung Disease“ (funded by Federal Ministry of Education and Research (Bundesministerium für Bildung und Forschung (BMBF)/DZL), Translational Lung Research Center Heidelberg (TLRC), University of Heidelberg
2014-present	Principal Investigator of the DZL
2014-2018	Clinical and Research Fellow in Pediatric Pulmonology and Allergy, Division of Pediatric Pulmonology & Allergy and Cystic Fibrosis Center, Department of Pediatrics, Pediatric Clinic III (Director: Prof. Dr. A. E. Kulozik) and Department of Translational Pulmonology, TLRC Heidelberg, University of Heidelberg (Director: Prof. Dr. M. A. Mall)
02/2014	Dissertation (M.D.) with honors (summa cum laude), Albert-Ludwigs-University of Freiburg
2009-2014	Resident in Pediatrics and Research Fellow, Department of Pediatrics, University Hospital Heidelberg (Director of Pediatric Clinic I: Prof. Dr. G. Hoffmann, Director of Pediatric Clinic III: Prof. Dr. A. E. Kulozik)
2005-2007	Experimental Doctoral Thesis, Department of Pulmonology, Albert-Ludwigs-University of Freiburg. Title: „Die Bedeutung des Scavengerrezeptors Klasse A Typ I (CD204) als Kollagenrezeptor der Alveolarmakrophagen“ (Thesis supervisor: Prof. Dr. J. Müller-Quernheim)
2004–2008	Medical School, Albert-Ludwigs-University of Freiburg, Germany (final grade in the state examination: 1.5)
2002–2004	Medical School at the University of Rostock, Germany
03/2002	A levels passed as head of the class, Schönstätter Marienschule, Vallendar, Germany

Clinical Qualifications

2018	Board certification in Allergy
2017	Board certification in Pediatric Pulmonology
2015	Board certification in Pediatrics

Other Professional Activities and Qualifications

2021-present	Elected treasurer of the German Society of Pediatric Pulmonology (Gesellschaft für Pädiatrische Pneumologie, GPP)
2020-present	Elected chairman of the board of the research council of the German CF association (Forschungsgemeinschaft Mukoviszidose, FGM)
2020-present	Member of the European Respiratory Society (ERS) task force Multiple-breath washout (MBW) Global Lung Function Initiative (GLI)
2020-present	Elected Secretary of Group 07.03 “Pediatric cystic fibrosis” of Assembly 7 within the ERS
2019	Member of the Steering Committee of the TLRC Heidelberg, Partner Site of the DZL
2019	Baden-Württemberg Certification for University Didactics

2018-2020	Elected member of the board of the research council of the FGM
2018	Course on education and training (DOS) III, University Heidelberg
2012-2017	Pediatric residents' representative (Assistentensprecherin), Department of Pediatrics, University Hospital Heidelberg
2016-present	Certified MBW operator for clinical trials in adults and children, European Cystic Fibrosis Society-Clinical Trial Network (ECFS-CTN)
2015	DOS I & II, University Heidelberg
2011	Certificate as trainer for asthmatic children
2010	GCP training course for clinical trial investigators, KKS Mainz (ongoing participation in refresher courses)

Editor Assignments (Peer Review Journals)
European Respiratory Review

Reviewer Assignments (Peer Review Journals)
Ad hoc review: *American Journal of Respiratory and Critical Care Medicine, BioMed Central Pulmonary Medicine, Cells, European Journal of Pediatrics, European Respiratory Journal, European Respiratory Journal Open Research, Journal of Applied Physiology, Journal of Bone and Mineral Research, Journal of Cystic Fibrosis, Journal of Magnetic Resonance Imaging, Klinische Pädiatrie, Molecular and Cellular Pediatrics, Pediatric Pulmonology, PLoS One, Respiration, Respiratory Medicine, Scientific Reports, Swiss Medical Weekly, Thorax*

Memberships in Professional Societies

2020-present	American Thoracic Society (ATS)
2017-present	German Society of Pulmonology (DGP)
2013-present	European Respiratory Society (ERS)
2012-present	German Cystic Fibrosis Association (Mukoviszidose e.V.)
2011-present	European Cystic Fibrosis Society (ECFS)
2010-present	German Society of Pediatric Pulmonology (GPP)
2010-present	German Society of Pediatric Allergy (GPA)
2010-present	German Society of Pediatrics and Adolescent Medicine (DGKJ)

Extramural Funding
Research Grants as PI

2022-2025	Independent CF Research Innovation Award with research program "Characterization of Risk Factors for Progression in Early Cystic Fibrosis Lung Disease", Vertex Pharmaceuticals; Amount: 750.000USD; Role: PI
2019-2022	DZL 2.0 Clinical Study "Inhibition of Interleukin-1 Receptor with Anakinra as a Novel Anti-inflammatory Strategy for Cystic Fibrosis Lung Disease", DZL, BMBF; Amount: 100.000€; Role: PI for central MBW analysis
2018-2021	Multicenter trial VX16-809-121 for Vertex Pharmaceuticals; Amount: 100.000€; Role: central MBW overreader
2017-2019	DZL Junior Research Group "Early CF Lung Disease", DZL, BMBF; Amount: 590.000€; Role: Group Leader
2017	Christiane Herzog Research Award for the longitudinal investigation of CF lung disease in childhood using MBW, Christiane Herzog Foundation; Amount:

50.000€; Role: PI

2016 DZL 2.0 Funding for Preparation of a Clinical Trial: “Inhibition of Interleukin-1 Receptor with Anakinra as a Novel Anti-inflammatory Strategy for Cystic Fibrosis Lung Disease”, DZL, BMBF; Amount: 15.000€; Role: PI for central MBW analysis

2015-2017 Clinician Scientist Career Development Award, Mukoviszidose e.V.; Amount: 84.000€; Role: Recipient

2013-2015 DZL 1.0 Clinical Study “Preventive Inhaled Hypertonic Saline in Cystic Fibrosis (PRESIS)”, DZL, BMBF; Amount: 200.000€; Role: PI for central MBW analysis

2011-2015 Pilot Study on Safety and Efficacy of Preventive Inhalation with Hypertonic Saline in Infants with Cystic Fibrosis, Dietmar Hopp Foundation; Amount: 190.000€; Role: PI for central MBW analysis

Research Grants as Co-PI

2019-2022 DZL 2.0 Clinical Study “Inhibition of Interleukin-1 Receptor with Anakinra as a Novel Anti-inflammatory Strategy for Cystic Fibrosis Lung Disease”, DZL, BMBF; Amount: 600.000€; Role: Co-PI

2016 DZL 2.0 Funding for Preparation of a Clinical Trial: “Inhibition of Interleukin-1 Receptor with Anakinra as a Novel Anti-inflammatory Strategy for Cystic Fibrosis Lung Disease”, DZL, BMBF; Amount: 30.000€; Role: Co-PI

2013-2015 DZL 1.0 Clinical Study “Preventive Inhaled Hypertonic Saline in Cystic Fibrosis (PRESIS)”, DZL, BMBF; Amount: 430.000€; Role: Co-PI

2011-2015 Pilot Study on Safety and Efficacy of Preventive Inhalation with Hypertonic Saline in Infants with Cystic Fibrosis, Dietmar Hopp Foundation; Amount: 380.000€; Role: Co-PI

Travel Grants

2018 North American Cystic Fibrosis Conference (NACFC), Denver, Colorado, USA; Mukoviszidose e.V.

2017 NACFC, Indianapolis, Indiana, USA; Mukoviszidose e.V.

2016 ERS, London, UK; Mukoviszidose e.V.

2015 NACFC, Phoenix, Arizona, USA; Cystic Fibrosis Foundation (CFF)

2013 NACFC, Salt Lake City, Utah, USA; Mukoviszidose e.V.

2013 European Young Investigator Meeting (EYIM), Paris, France; Mukoviszidose e.V.

2012 German Research Foundation (Deutsche Forschungsgemeinschaft, DFG) Winter School Rare Diseases, Göttingen; DFG

2010 NACFC, Baltimore, Maryland, USA; Cystic Fibrosis Foundation (CFF)

2010 EYIM, Lille, France; Mukoviszidose e.V.

Honors and Awards

2019 International Klosterfrau Group Grant for Research of Airway Diseases in Childhood 2019, German Society of Pediatric Pulmonology (GPP) (20.000€)

2019 Research Award for Best Clinical Work in Pulmonology, German Society of Pulmonology (DGP) (10.000€)

2018 Adolf Windorfer Award, German CF Association (Mukoviszidose e.V.) (5.000€)

2018 Young Investigators Award, European Cystic Fibrosis Society (ECFS) (750€)

2018 Poster Award, 40. Annual conference of the GPP, Wien, Austria (500€)

2015 Poster Award, 37. Annual conference of the GPP, Basel, Switzerland (500€)

2014 Poster Award, 36. Annual conference of the GPP, Bremen, Germany (500€)

2013 Poster Award, 16. Annual German CF Conference, Würzburg, Germany (250€)

2006 Award for best exam in Internal Medicine, University of Freiburg Medical School

Publications in peer-reviewed journals

Original contributions

1. **Stahl M**, Roehmel J, Eichinger M, Doellinger F, Naehrlich L, Kopp MV, Dittrich AM, Lee C, Sommerburg O, Tian S, Xu T, Wu P, Joshi A, Ray P, Duncan ME, Wielpütz MO, Mall MA. Effects of Lumacaftor/Ivacaftor on Cystic Fibrosis Disease Progression in Children 2 through 5 Years of Age Homozygous for F508del-CFTR: A Phase 2 Placebo-controlled Clinical Trial. *Ann Am Thorac Soc*. 2023 Mar 21. doi: 10.1513/AnnalsATS.202208-684OC. Online ahead of print.
2. Ardura-Garcia, Cristina; Kainz, Katharina; Mallet, Maria Christina; Petrarca, Laura; Rodman Berlot, Jasna; Slaats, Monique; Streibel, Carmen; Vijverberg, Susanne; Williams, Emma; Goutaki, Myrofora; Gray, Diane; Lavizzari, Anna; Morty, Rory; Proesmans, Marijke; Schramm, Dirk; **Stahl, Mirjam**; Zacharasiewicz, Angela; Moeller, Alexander; Pijnenburg, Mariëlle. ERS International Congress 2022: highlights from the Paediatric Assembly. ERJOR-00653-2022.R1 (accepted for publication)
3. Schwarz C, Eschenhagen P, Schmidt H, Hohnstein T, Iwert C, Grehn C, Roehmel J, Steinke E, **Stahl M**, Lozza L, Tikhonova E, Rosati E, Stervbo U, Babel N, Mainz JG, Wisplinghoff H, Ebel F, Jia L-J, Blango MG, Hortschansky P, Brunke S, Hube B, Brakhage A, Kniemeyer O, Scheffold A, Bacher P. Antigen specificity and cross-reactivity drive functionally diverse T cell responses against Aspergillus fumigatus in cystic fibrosis patients. *J Clin Invest* 2023 Mar 1;133(5):e161593. doi: 10.1172/JCI161593.
4. Dittrich AS, Dumke M, Kapl F, Schneider P, Wege S, Gräber S, **Stahl M**, Herth FJF, Naehrlich L, Mall M, Sommerburg O. Survival-adjusted FEV1 and BMI percentiles for patients with cystic fibrosis before the era of triple CFTR modulator therapy in Germany. *Respiration* 2023 (accepted for publication)
5. Leutz-Schmidt P, Optazaite D-E, Sommerburg O, Eichinger M, Wege S, Steinke E, Graeber S, Puderbach M, Schenk J-P, Alrajab A, Triphan S, Kauczor H-U, **Stahl M**, Mall M, Wielpütz M. Magnetic Resonance Imaging Detects Onset and Association with Lung Disease Severity of Bronchial Artery Dilatation in Cystic Fibrosis. *ERJ Open Res* 2022 (accepted for publication)
6. Wucherpfennig L, Wuennemann F, Eichinger M, Schmitt N, Seitz A, Baumann I, **Stahl M**, Graeber SY, Chung J, Schenk JP, Alrajab A, Kauczor HU, Mall MA, Sommerburg O, Wielpütz MO. Longitudinal MRI Detects Onset and Progression of Chronic Rhinosinusitis from Infancy to School Age in Cystic Fibrosis. *Ann Am Thorac Soc* 2022 Dec 22. doi: 10.1513/AnnalsATS.202209-763OC. Epub ahead of print.
7. Steinke E, Sommerburg O, Graeber SY, Joachim C, Labitzke C, Nissen G, Ricklefs I, Rudolf I, Kopp MV, Dittrich AM, Mall MA, **Stahl M**. TRACK-CF prospective cohort study: Understanding early cystic fibrosis lung disease. *Front Med* (Lausanne). 2023 Jan 6;9:1034290. doi: 10.3389/fmed.2022.1034290.
8. Frey DL, Bridson C, Dittrich S, Graeber SY, **Stahl M**, Wege S, Herth F, Sommerburg O, Schultz C, Dalpke A, Mall MA, Boutin S. Changes in Microbiome Dominance Are Associated With Declining Lung Function and Fluctuating Inflammation in People With Cystic Fibrosis. *Front Microbiol*. 2022 May 13;13:885822. doi: 10.3389/fmicb.2022.885822. eCollection 2022.
9. Graeber SY*, Renz DM*, **Stahl M***, Pallenberg ST*, Sommerburg O, Naehrlich L, Berges J, Dohna M, Ringshausen FC, Doellinger F, Vitzthum C, Röhmel J, Allomba

C, Hämmerling S, Barth S, Rückes-Nilges C, Wielpütz MO, Hansen G, Vogel-Claussen J, Tümmler B, Mall MA, Dittrich AM. Effects of Elexacaftor/Tezacaftor/Ivacaftor Therapy on Lung Clearance Index and Magnetic Resonance Imaging in Patients with Cystic Fibrosis and One or Two F508del Alleles. *Am J Respir Crit Care Med*. 2022 Aug 1;206(3):311-320. doi: 10.1164/rccm.202201-0219OC.

10. Griese M, Panagiotou P, Manali ED, **Stahl M**, Schwerk N, Costa V, Douros K, Kallieri M, Urbantat RM, von Bernuth H, Kolilekas L, Morais L, Ramos A, Landwehr K, Knoflach K, Gothe F, Reiter K, Papaevangelou V, Kaditis AG, Kanaka-Gantenbein C, Papiris SA. Autoimmune pulmonary alveolar proteinosis in children. *ERJ Open Res.* 2022 Mar 21;8(1):00701-2021. doi: 10.1183/23120541.00701-2021. eCollection 2022 Jan.
11. Thee S, Busack LM, Mall MA, **Stahl M**. Impact of lockdown during the COVID-19 pandemic on health status in patients with cystic fibrosis: a mono-centre observational study. *ERJ Open Res*. 2022 Mar 14;8(1):00588-2021. doi: 10.1183/23120541.00588-2021. eCollection 2022 Jan.
12. Roehmel JF, Doerfler FJ, Koerner-Rettberg C, Brinkmann F, Schlegtendal A, Wetzke M, Rudolf I, Helms S, Große-Onnebrink J, Yu Y, Nuesslein T, Wojsyk-Banaszak I, Becker S, Eickmeier O, Sommerburg O, Omran H, **Stahl M**, Mall MA. Comparison of the Lung Clearance Index in Preschool Children With Primary Ciliary Dyskinesia and Cystic Fibrosis. *Chest*. 2022 Mar 7:S0012-3692(22)00421-4. doi: 10.1016/j.chest.2022.02.052. Online ahead of print.
13. Metzger MI, Graeber SY, **Stahl M**, Sommerburg O, Mall MA, Dalpke AH, Boutin S. A Volatile and Dynamic Longitudinal Microbiome Is Associated With Less Reduction in Lung Function in Adolescents With Cystic Fibrosis. *Front Cell Infect Microbiol* 2021 Dec 6;11:763121. doi: 10.3389/fcimb.2021.763121. eCollection 2021.
14. Graeber SY, Vitzthum C, Pallenberg ST, Naehrlich L, **Stahl M**, Rohrbach A, Drescher M, Minso R, Ringshausen FC, Rueckes-Nilges C, Klajda J, Berges J, Yu Y, Scheuermann H, Hirtz S, Sommerburg O, Dittrich AM, Tümmler B, Mall MA. Effects of Elexacaftor/Tezacaftor/Ivacaftor Therapy on CFTR Function in Patients with Cystic Fibrosis and One or Two F508del Alleles. *Am J Respir Crit Care Med* 2021 Dec 22. doi: 10.1164/rccm.202110-2249OC. Online ahead of print.
15. Sommerburg O, **Stahl M**, Hämmerling S, Gramer G, Muckenthaler MU, Okun J, Kohlmüller D, Happich M, Kulozik AE, Mall MA, Hoffmann GF. Final results of the southwest German pilot study on cystic fibrosis newborn screening - Evaluation of an IRT/PAP protocol with IRT-dependent safety net: Results of the Southwest German CFNBS pilot study. *J Cyst Fibros* 2021 Nov 8:S1569-1993(21)02109-3. Online ahead of print.
16. **Stahl M**, Steinke E, Graeber SY, Joachim C, Seitz C, Kauczor HU, Eichinger M, Hämmerling S, Sommerburg O, Wielpütz MO, Mall MA. Magnetic Resonance Imaging Detects Progression of Lung Disease and Impact of Newborn Screening in Preschool Children with Cystic Fibrosis. *Am J Respir Crit Care Med*. 2021 Oct 15;204(8):943-953.
17. Thee S, **Stahl M**, Fischer R, Sutharsan S, Ballmann M, Müller A, Lorenz D, Urbanski-Rini D, Püschner F, Amelung VE, Fuchs C, Mall MA. A multi-centre, randomized, controlled trial on coaching and telemonitoring in patients with cystic fibrosis: conneCT CF. *BMC Pulm Med*. 2021 Apr 21;21(1):131.
18. Sommerburg O, Hämmerling S, Schneider SP, Okun J, Langhans CD, Leutz-Schmidt P, Wielpütz MO, Siems W, Gräber SY, Mall MA, **Stahl M**. CFTR Modulator Therapy with Lumacaftor/Ivacaftor Alters Plasma Concentrations of Lipid-Soluble Vitamins A and E in Patients with Cystic Fibrosis. *Antioxidants (Basel)*. 2021 Mar 19;10(3):483.
19. Graeber SY, Boutin S, Wielpütz MO, Joachim C, Frey DL, Wege S, Sommerburg O, Kauczor HU, **Stahl M**, Dalpke AH, Mall MA. Effects of Lumacaftor-Ivacaftor on Lung Clearance Index, Magnetic Resonance Imaging and Airway Microbiome in

Phe508del Homozygous Patients with Cystic Fibrosis. *Ann Am Thorac Soc* 2021 Jun;18(6):971-980.

20. Frey DL, Boutin S, Dittrich SA, Graeber SY, **Stahl M**, Wege S, Herth FJF, Sommerburg O, Schultz C, Mall MA, Dalpke AH. Relationship between airway dysbiosis, inflammation and lung function in adults with cystic fibrosis. *J Cyst Fibros* 2021 Sep;20(5):754-760.
21. **Stahl M**, Joachim C, Kirsch I, Uselmann T, Yu Y, Alfeis N, Berger C, Minso R, Rudolf I, Stolpe C, Bovermann X, Liboschik L, Steinmetz A, Tennhardt D, Dörfler F, Röhmel J, Unorji-Frank K, Rückes-Nilges C, von Stoutz B, Naehrlich L, Kopp MV, Dittrich AM, Sommerburg O, Mall MA. Multicentre feasibility of multiple-breath washout in preschool children with cystic fibrosis and other lung diseases. *ERJ Open Res* 2020;6:00408-2020.
22. Lenz D*, **Stahl M***, Seidl E*, Schöndorf D, Brennenstuhl H, Gesenhues F, Heinzmann T, Longerich T, Mendes MI, Prokisch H, Salomons GS, Schön C, Smith DEC, Sommerburg O, Wagner M, Westhoff JH, Reiter K, Staufner C, Griese M. Rescue of respiratory failure in pulmonary alveolar proteinosis due to pathogenic MARS1 variants. *Pediatr Pulmonol* 2020 Nov;55(11):3057-3066.
23. Triphan SMF, **Stahl M**, Jobst BJ, Sommerburg O, Kauczor HU, Schenk JP, Alrajab A, Eichinger M, Mall MA, Wielpütz MO. Echo Time-Dependence of Observed Lung T1 in Patients With Cystic Fibrosis and Correlation With Clinical Metrics. *J Magn Reson Imaging* 2020 Dec;52(6):1645-1654.
24. Sommerburg O, Wielpütz MO, Trame JP, Wuennemann F, Optazaite E, **Stahl M**, Puderbach MU, Kopp-Schneider A, Fritzsching E, Kauczor HU, Baumann I, Mall MA, Eichinger M. MRI detects chronic rhinosinusitis in infants and preschool children with cystic fibrosis. *Ann Am Thorac Soc* 2020;17(6):714-723.
25. Konietzke P, Mueller J, Wuennemann F, Wagner WL, Schenk JP, Alrajab A, Kauczor HU, **Stahl M**, Mall MA, Wielpütz MO, Sommerburg O. The value of chest magnetic resonance imaging compared to chest radiographs with and without additional lung ultrasound in children with complicated pneumonia. *PLoS One* 2020;19;15(3):e0230252.
26. Anagnostopoulou P, Latzin P, Jensen R, **Stahl M**, Harper A, Yammine S, Usemann J, Foong RE, Spycher B, Hall GL, Singer F, Stanojevic S, Mall M, Ratjen F, Ramsey KA. Normative data for multiple breath washout outcomes in school-aged Caucasian children. *Eur Respir J* 2020;3;55(4):1901302.
27. **Stahl M**, Wielpütz MO, Ricklefs I, Dopfer C, Barth S, Schlegtendal A, Graeber SY, Sommerburg O, Diekmann G, Hüsing J, Koerner-Rettberg C, Nährlich L, Dittrich AM, Kopp MV, Mall MA. Preventive inhalation of hypertonic saline in infants with cystic fibrosis (PRESIS): A randomized, double-blind, controlled study. *Am J Respir Crit Care Med* 2019;199(10):1238-1248.
28. **Stahl M**, Joachim C, Wielpütz MO, Mall MA. Comparison of lung clearance index determined by washout of N2 and SF6 in infants and preschool children with cystic fibrosis. *J Cyst Fibros* 2019;18(3):399-406.
29. Wielpütz MO, von Stackelberg O, **Stahl M**, Jobst BJ, Eichinger M, Puderbach MU, Nährlich L, Barth S, Schneider C, Kopp MV, Ricklefs I, Buchholz M, Tümmler B, Dopfer C, Vogel-Claussen J, Kauczor HU, Mall MA. Multicentre standardisation of chest MRI as radiation-free outcome measure of lung disease in young children with cystic fibrosis. *J Cyst Fibros* 2018;17:518-527.
30. Boutin S, Weitnauer M, Hassel S, Graeber SY, **Stahl M**, Dittrich AS, Mall MA, Dalpke AH. One time quantitative PCR detection of Pseudomonas aeruginosa to discriminate intermittent from chronic infection in cystic fibrosis. *J Cyst Fibros* 2018;17:348-355.
31. Leutz-Schmidt P, **Stahl M**, Sommerburg O, Eichinger M, Puderbach MU, Schenk JP, Alrajab A, Triphan SMF, Kauczor HU, Mall MA, Wielputz MO. Non-contrast enhanced

magnetic resonance imaging detects mosaic signal intensity in early cystic fibrosis lung disease. *Eur J Radiol* 2018;101:178-183.

32. **Stahl M**, Graeber SY, Joachim C, Barth S, Ricklefs I, Diekmann G, Kopp MV, Naehrlich L, Mall MA. Three-center feasibility of lung clearance index in infants and preschool children with cystic fibrosis and other lung diseases. *J Cyst Fibros* 2018;17:249-255.
33. **Stahl M**, Holfelder C, Kneppo C, Kieser M, Kasperk C, Schoenau E, Sommerburg O, Tonshoff B. Multiple prevalent fractures in relation to macroscopic bone architecture in patients with cystic fibrosis. *J Cyst Fibros* 2018;17:114-120.
34. Boutin S, Depner M, **Stahl M**, Graeber SY, Dittrich SA, Legatzki A, von Mutius E, Mall M, Dalpke AH. Comparison of Oropharyngeal Microbiota from Children with Asthma and Cystic Fibrosis. *Mediators Inflamm* 2017.
35. Boutin S, Graeber SY, **Stahl M**, Dittrich AS, Mall MA, Dalpke AH. Chronic but not intermittent infection with Pseudomonas aeruginosa is associated with global changes of the lung microbiome in cystic fibrosis. *Eur Respir J* 2017;50:1701086.
36. Sommerburg O, **Stahl M**, Hammermann J, Okun JG, Kulozik A, Hoffmann G, Mall M. [Newborn Screening on Cystic Fibrosis in Germany: Comparison of the new Screening Protocol with an Alternative Protocol]. *Klin Padiatr* 2017;229:59-66.
37. **Stahl M**, Wielputz MO, Graeber SY, Joachim C, Sommerburg O, Kauczor HU, Puderbach M, Eichinger M, Mall MA. Comparison of Lung Clearance Index and Magnetic Resonance Imaging for Assessment of Lung Disease in Children with Cystic Fibrosis. *Am J Respir Crit Care Med* 2017;195:349-359.
38. Sommerburg O, Hammermann J, Lindner M, **Stahl M**, Muckenthaler M, Kohlmueller D, Happich M, Kulozik AE, Stopsack M, Gahr M, Hoffmann GF, Mall MA. Five years of experience with biochemical cystic fibrosis newborn screening based on IRT/PAP in Germany. *Pediatr Pulmonol* 2015;50:655-664.
39. Hector A, Schafer H, Poschel S, Fischer A, Fritzsching B, Ralhan A, Carevic M, Oz H, Zundel S, Hogardt M, Bakele M, Rieber N, Riethmueller J, Graepler-Mainka U, **Stahl M**, Bender A, Frick JS, Mall M, Hartl D. Regulatory T-cell impairment in cystic fibrosis patients with chronic pseudomonas infection. *Am J Respir Crit Care Med* 2015;191:914-923.
40. Boutin S, Graeber SY, Weitnauer M, Panitz J, **Stahl M**, Clausznitzer D, Kaderali L, Einarsson G, Tunney MM, Elborn JS, Mall MA, Dalpke AH. Comparison of microbiomes from different niches of upper and lower airways in children and adolescents with cystic fibrosis. *PLoS One* 2015;10:e0116029.
41. Wielpütz MO, Puderbach M, Kopp-Schneider A, **Stahl M**, Fritzsching E, Sommerburg O, Ley S, Sumkauskaite M, Biederer J, Kauczor HU, Eichinger M, Mall MA. Magnetic resonance imaging detects changes in structure and perfusion, and response to therapy in early cystic fibrosis lung disease. *Am J Respir Crit Care Med* 2014;189:956-965.
42. **Stahl M**, Joachim C, Blessing K, Hämmerling S, Sommerburg O, Latzin P, Mall MA. Multiple breath washout is feasible in the clinical setting and detects abnormal lung function in infants and young children with cystic fibrosis. *Respiration* 2014;87:357-363.
43. Sommerburg O, Krulisova V, Hammermann J, Lindner M, **Stahl M**, Muckenthaler M, Kohlmueller D, Happich M, Kulozik AE, Votava F, Balascakova M, Skalicka V, Stopsack M, Gahr M, Macek M, Jr., Mall MA, Hoffmann GF. Comparison of different IRT-PAP protocols to screen newborns for cystic fibrosis in three central European populations. *J Cyst Fibros* 2014;13:15-23.
44. **Stahl M**, Schupp J, Jager B, Schmid M, Zissel G, Muller-Quernheim J, Prasse A. Lung collagens perpetuate pulmonary fibrosis via CD204 and M2 macrophage activation. *PLoS One* 2013;8:e81382.
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Invited Reviews

1. **Stahl M**, Steinke E, Mall MA. Quantification of Phenotypic Variability of Lung Disease in Children with Cystic Fibrosis. Genes 2021 May 25;12(6):803. doi: 10.3390/genes12060803.
2. **Stahl M**. [Clinical presentation of lung disease in cystic fibrosis]. Radiologe. 2020;60(9):774-780.
3. Leutz-Schmidt P, Eichinger M, Sommerburg O, **Stahl M**, Triphan SMF, Gehlen S, Kauczor HU, Puderbach MU, Mall MA, Wielpütz MO. [Magnetic resonance imaging of the lungs in cystic fibrosis]. Radiologe. 2020;60(9):813-822.
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5. Leutz-Schmidt P, Eichinger M, **Stahl M**, Sommerburg O, Biederer J, Kauczor HU, Puderbach MU, Mall MA, Wielpütz MO. Ten years of chest MRI for patients with cystic fibrosis: Translation from the bench to clinical routine. Radiologe 2019;59:10-20.
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Letters to the Editor

1. Kentgens AC, Latzin P, Anagnostopoulou P, Jensen R, **Stahl M**, Harper A, Yammine S, Foong RE, Hall GL, Singer F, Stanojevic S, Mall MA, Ratjen F, Ramsey KA. Normative multiple breath washout data in school-aged children corrected for sensor error. Eur Respir J. 2022 Jun 16:2102398. doi: 10.1183/13993003.02398-2021. Online ahead of print.
2. **Stahl M**, Steinke E, Wielpütz MO, Mall MA; all authors of “Magnetic Resonance Imaging Detects Progression of Lung Disease and Impact of Newborn Screening in Preschool Children with Cystic Fibrosis”. Reply to: Contrast Enhanced Magnetic Resonance Imaging Does Not Detect a Progression in Lung Morphological Score in Preschool Children with Cystic Fibrosis. Am J Respir Crit Care Med 2021 Nov 3. Online ahead of print.
3. **Stahl M**, Joachim C, Wielpütz MO, Mall MA. Authors' response: Letter to the Editor 'Comparison of lung clearance index determined by washout of N2 and SF6 in infants

and preschool children with cystic fibrosis'. J Cyst Fibros 2019;18(3):e28-e29.

4. **Stahl M**, Wielputz MO, Kauczor HU, Mall MA, all authors. Reply to Verbanck and Vanderhelst: The Respective Roles of Lung Clearance Index and Magnetic Resonance Imaging in the Clinical Management of Patients with Cystic Fibrosis. Am J Respir Crit Care Med 2018;197:410-411.

Editorials

1. **Stahl M.** Sensitive markers to detect progression of lung disease in children with cystic fibrosis. *Eur Respir J* 2021; 58: 2100236.

Book chapters

1. **Stahl M**, Wielpütz, MO. Moderne Bildgebung der CF-Lunge. In: CF-Manual, Chapter 25. 3rd Edition, 2022. Editors: Manfred Ballmann, Christina Smaczny, Sivagurunathan Sutharsan, Anna-Maria Dittrich. Georg Thieme Verlag, Stuttgart.
2. **Stahl M**. Lung function. In: Mutation-specific therapies in cystic fibrosis, Chapter 3 Endpoints of phase II and III trials with CFTR modulators. 2nd Edition, 2022. Editor: Burkard Tümmler. UNI-MED Verlag AG, Bremen.

*shared first or last authorship

Oral Presentations and Invited Lectures (selection)

Lung function testing in CF: More than FEV1? Symposium, 44th Annual Meeting of the GPP 2023, Frankfurt, Germany

Cystic fibrosis and transition in pulmonology. ERS School Rare Diseases 2022 (online)

Long-term efficacy of lumacaftor/ivacaftor in children aged 2 through 5 years with cystic fibrosis homozygous for the F508del-CFTR mutation: a phase 2, open-label extension study. Workshop, 45. European Cystic Fibrosis Conference (ECFC) 2022, Rotterdam, Netherlands

Value of LCI in early CF and correlation with imaging. LEAD Meeting Heidelberg 2022 (online)

PRO: There have to be adaptions of symptomatic CF therapy in the next months and years. CF Academy 2021 (online)

Biomarkers for disease progression in early CF lung disease. Symposium, 44. European Cystic Fibrosis Conference (ECFC) 2021 (online)

Scientific Year in Review - Lifelong effects of genetic lung diseases and their origins in childhood. ERS International Congress 2020 (online)

Overview – DZL Disease Area Cystic Fibrosis. DZL Annual Meeting 2020, Travemünde, Germany

News of the Year. German CF Conference 2019, Würzburg, Germany

Inhalation as mucolytic therapy. German CF Conference 2019, Würzburg, Germany

Follow-up on PRESIS: Long-term Efficacy of Preventive Inhalation Therapy with Hypertonic Saline in Infants with CF. NACFC 2019, Nashville, USA

Sterile Inflammation and CF. CF Academy 2019, Hohenkammer, Germany

Suitable clinical biomarkers for safety and long-term efficacy evaluation and current possibilities. FGM Scientific Meeting 2019, Montabaur, Germany

Novel clinical outcome measures in preschool children with CF - Lung Clearance Index. 42nd ECFC 2019, Liverpool, UK

Randomized, double-blind, controlled trial of preventive inhalation of hypertonic saline in infants with cystic fibrosis (PRESIS). ERS International Congress 2018, Paris, France

Randomized, double-blind, controlled trial of preventive inhalation of hypertonic saline in infants with cystic fibrosis (PRESIS). 41st ECFC 2018, Belgrade, Serbia

Randomized, double-blind, controlled trial of preventive inhalation of hypertonic saline in infants with cystic fibrosis. 40th Annual Meeting of the GPP 2018, Vienna, Austria

MBW in infants - physiological and clinical aspects. LEAD Meeting 2017, Bern, Switzerland LCI in young children with CF – N2 or SF6? 40th ECFC 2017, Sevilla, Spain

Indications for lung imaging using MRI. 112th Annual Meeting of the DGKJ 2016, Hamburg, Germany

Increased fracture rate in relation to macroscopic bone architecture in young patients with CF. 39th ECFC 2016, Basel, Switzerland

MBW and MRI as sensitive markers of stable CF lung disease and at exacerbation in children and adolescents. ERS International Congress 2015, Amsterdam, Netherlands

MBW and MRI as sensitive markers of stable CF lung disease and at exacerbation in children and adolescents. 38th ECFC 2015, Brussels, Belgium

Comparative analysis of lung disease by MBW and MRI in children and adolescents with CF.

37th Annual Meeting of the GPP 2015, Basel, Switzerland

Detection of small airway obstruction in infants and toddlers with CF via multiple breath washout. 7th EYIM 2013, Paris, France

CF-related bone disease. 6th Annual CF Meeting 2010, Linz, Austria

Ten-fold increased fracture rate in juvenile patients with cystic fibrosis. 24th NACFC 2010, Baltimore, USA

Berlin, March 28th 2023

M. Stahl