Curriculum Vitae Professor Marcus A. Mall, M.D., FERS

Professor and Director, Department of Pediatric Pulmonology, Immunology and Critical Care Medicine
Medical Director, CharitéCenter 17 for Obstetrics and Gynecology, and Child and Adolescent Medicine with Perinatal Center and Human Genetics
Charité - Universitätsmedizin Berlin

Scientific Vita

Since 2020	Medical Director, CharitéCenter 17 for Obstetrics and Gynecology, and Child and Adolescent Medicine with Perinatal Center and Human Genetics
Since 2018	W3-Professor of Pediatric Pulmonology and Immunology and Director of the Department of Pediatric Pulmonology, Immunology and Critical Care Medicine & Cystic Fibrosis Center, Charité - Universitätsmedizin Berlin
Since 2018	BIH Professor, Berlin Institute of Health (BIH)
2012 - 2018	Director of the Translational Lung Research Center (TLRC) and Department of Translational Pulmonology, University of Heidelberg
2009 - 2018	W3-Professor and Head of the Division of Pediatric Pulmonology & Allergy and Cystic Fibrosis Center, Department of Pediatrics, University of Heidelberg
2009 - 2012	W3-Heisenberg Professor of Translational Pediatric Pulmonology
2007 - 2018	Attending Physician and Head of the Cystic Fibrosis Center, Department of Pediatrics, University of Heidelberg
2007	Habilitation and venia legendi, University of Heidelberg, Germany
2006 - 2018	Group leader at the Molecular Medicine Partnership Unit (MMPU) of the University of Heidelberg and the European Molecular Biology Laboratory (EMBL)
2006 - 2018	Faculty Member of the Hartmut Hoffmann-Berling International Graduate School of Molecular & Cellular Biology Heidelberg (HBIGS)
2005-2009	Group leader of EU-funded Independent Junior Research Group “Cystic Fibrosis / Chronic Airway Disease” (Marie Curie Excellence Team)
2004 - 2006	Fellow in Pediatric Pulmonology, Department of Pediatrics, University of Heidelberg
2003 - 2004	Assistant Professor, CF/Pulmonary Research and Treatment Center, School of Medicine, University of North Carolina at Chapel Hill, Chapel Hill, NC, USA
2000 - 2003	Postdoc and Research Associate, CF/Pulmonary Research and Treatment Center, School of Medicine, University of North Carolina at Chapel Hill, Chapel Hill, NC, USA
1997 - 2000	Resident, University Children’s Hospital, University of Freiburg

1997	Dissertation (M.D.), University Freiburg
1990 – 1997	Medical School, University of Freiburg, Germany and University College London School of Medicine, UK

Clinical Qualifications

2017	Licensed for Allergology
2011	Licensed for Infectious Diseases
2008	Licensed for Pediatric Pulmonology
2006	Licensed for Pediatrics and Adolescent Medicine

Other Professional Activities

2018-2020	Vice President of the European Cystic Fibrosis Society (ECFS)
2017 - 2018	Chair and Co-Chair of the ECFS Basic Science Conference
Since 2017	Member of the Program Planning Committee of the North American Cystic Fibrosis Conference (NACFC)
2016	Conference President of the 19th German Cystic Fibrosis Conference, Würzburg, Germany
Since 2015	Member of the Scientific Advisory Board for the SickKids-Cystic Fibrosis Canada Program for Individualized CF Therapy (CFIT), Toronto, Canada
2014-2020	Member of the Board of the European Cystic Fibrosis Society (ECFS)
2011	Conference Vice-President, 34th ECFS Conference, Hamburg, Germany
2009 - 2012	Member of the ECFS Conference Scientific Steering Committee
2006 - 2012	Elected Member (2006-2009) and Chairman (2010-2012) of the Research Council of the Germany Cystic Fibrosis Association

Project Coordination and Membership in Collaborative Research Projects

Since 2021	Coordinator of the Berlin site of the German Center for Child and Youth Health (DZKJ)
Since 2021	Deputy Speaker of the SFB 1449 „Dynamic Hydrogels at Biointerfaces“
Since 2019	Coordinator and Speaker of the Innovationsfonds project “conneCT CF: Coaching and Telemonitoring for Patients with Cystic Fibrosis”
2018 - 2022	Principal Investigator of the SFB-TR 84 “Innate Immunity of the Lung: Mechanisms of Pathogen Attack and Host Defence in Pneumonia“
2013-2016	Principal Investigator of the EU collaborative project CFMATTERS - Cystic Fibrosis Microbiome-determined Antimicrobial Therapy Trial in Exacerbations: Results Stratified (7. Framework Programme)
Since 2012	Director, Disease Area Cystic Fibrosis, German Center for Lung Research (DZL)
2011 – 2018	Founding Director and Member of the Executive Board, German Centre for Lung Research (DZL)

2009 – 2015 Principal Investigator of the BMBF collaborative project CARPuD: Network Cellular Approaches for Rare Pulmonary Diseases

Honors & Awards

2020 Adalbert-Czerny-Prize, German Society of Pediatrics and Adolescent Medicine (DGKJ)

2020 ERS Excellence Award for Research in Cystic Fibrosis

2018 Einstein-Professorship, Einstein Foundation Berlin

2017 Fellow of ERS (FERS)

2009 Heisenberg-Professorship for Translational Pediatric Pulmonology, German Research Foundation (DFG)

2009 Research Award, German Society of Pulmonology (DGP)

2005 Marie Curie Excellence Grant (EU 6. Framework Programme)

2005 Johannes Wenner Prize, German Society of Pediatric Pulmonology (GPP)

2005 Professor David Shmeling Research Award, German Society of Pediatric Gastroenterology and Nutrition (GPGE)

2000 -2002 Research Fellowship, German Research Foundation (DFG)

1998 Albrecht Fleckenstein Young Investigator Award, University of Freiburg

1997 Adolf Windorfer Prize for Cystic Fibrosis Research, German CF Association

1994 - 1997 Scholarship of the German Student Scholarship Foundation (Studienstiftung des deutschen Volkes)

1993 - 1994 Scholarship of the German Academic Exchange Service (DAAD)

Memberships in Professional Societies

Since 2019 Member of the Fleischner Society

Since 2010 European Respiratory Society (ERS)

Since 2010 German Society of Pulmonology (DGP)

Since 2006 American Thoracic Society (ATS)

Since 2004 German Cystic Fibrosis Association (Mukoviszidose e.V.)

Since 1999 European Cystic Fibrosis Society (ECFS)

Since 1998 German Physiological Society (DPG)

Since 1998 German Society of Pediatrics and Adolescent Medicine (DGKJ)

Since 1998 German Society of Pediatric Pulmonology (GPP)

Publications

Original Articles

Rohrich M, Leitz D, Glatting FM, Wefers AK, Weinheimer O, Flechsig P, Kahn N, **Mall MA**, Giesel FL, Kratochwil C, Huber PE, von Deimling A, Heussel CP, Kauczor HU, Kreuter M, Haberkorn UA. Fibroblast Activation Protein specific PET/CT imaging in fibrotic interstitial lung diseases and lung cancer: a translational exploratory study. *J Nucl Med* 2022; 63:127-133.

Georg P, Astaburuaga-Garcia R, Bonaguro L, Brumhard S, Michalick L, Lippert LJ, Kostevc T, Gabel C, Schneider M, Streitz M, Demichev V, Gemund I, Barone M, Tober-Lau P, Helbig ET, Hillus D, Petrov L, Stein J, Dey HP, Paclik D, Iwert C, Mulleder M, Aulakh SK, Djudjaj S, Bulow RD, Mei HE, Schulz AR, Thiel A, Hippenstiel S, Saliba AE, Eils R, Lehmann I, **Mall MA**, Stricker S, Rohmel J, Corman VM, Beule D, Wyler E, Landthaler M, Obermayer B, von Stillfried S, Boor P, Demir M, Wesselmann H, Suttorp N, Uhrig A, Muller-Redetzky H, Nattermann J, Kuebler WM, Meisel C, Ralser M, Schultze JL, Aschenbrenner AC, Thibeault C, Kurth F, Sander LE, Bluthgen N, Sawitzki B, Group P-C-S. Complement activation induces excessive T cell cytotoxicity in severe COVID-19. *Cell* 2021. [Epub ahead of print].

Ruf S, Hommes F, van Loon W, Seybold J, Kurth T, **Mall MA**, Mockenhaupt FP, Theuring S. A Retrospective Outbreak Investigation of a COVID-19 Case Cluster in a Berlin Kindergarten, November 2020. *Int J Environ Res Public Health* 2021;19:36.

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, Tummler 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. [Epub ahead of print].

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;11:763121.

Sutharsan S, McKone EF, Downey DG, Duckers J, MacGregor G, Tullis E, Van Braeckel E, Wainwright CE, Watson D, Ahluwalia N, Bruinsma BG, Harris C, Lam AP, Lou Y, Moskowitz SM, Tian S, Yuan J, Waltz D, **Mall MA**, group VXs. Efficacy and safety of elexacaftor plus tezacaftor plus ivacaftor versus tezacaftor plus ivacaftor in people with cystic fibrosis homozygous for F508del-CFTR: a 24-week, multicentre, randomised, double-blind, active-controlled, phase 3b trial. *Lancet Respir Med* 2021. [Epub ahead of print].

Barry PJ, **Mall MA**, Polineni D, Group VXS. Triple Therapy for Cystic Fibrosis Phe508del-Gating and -Residual Function Genotypes. Reply. *N Engl J Med* 2021;385:2208.

Hey J, Paulsen M, Toth R, Weichenhan D, Butz S, Schatterny J, Liebers R, Lutsik P, Plass C*, **Mall MA***. Epigenetic reprogramming of airway macrophages promotes polarization and inflammation in muco-obstructive lung disease. *Nat Commun* 2021;12:6520. (*equal contribution)

van Loon W, Hommes F, Theuring S, von der Haar A, Korner J, Schmidt M, von Kalle C, **Mall MA**, Seybold J, Kurth T, Mockenhaupt FP. Renewed absence of SARS-CoV-2 infections in the day care context in Berlin, January 2021. *Clin Infect Dis* 2021;73:1944-1945.

Sommerburg O, Stahl M, Hammerling S, Gramer G, Muckenthaler MU, Okun J, Kohlmuller 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. [Epub ahead of print]. (*equal contribution)

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Chung J, Wunnemann F, Salomon J, Boutin S, Frey DL, Albrecht T, Joachim C, Eichinger M, **Mall MA**, Wielputz MO, Sommerburg O. Increased Inflammatory Markers Detected in Nasal Lavage Correlate with Paranasal Sinus Abnormalities at MRI in Adolescent Patients with Cystic Fibrosis. *Antioxidants (Basel)* 2021;10.

van Loon W, Theuring S, Hommes F, **Mall MA**, Seybold J, Kurth T, Mockenhaupt FP. Prevalence of SARS-CoV-2 Infections Among Students, Teachers, and Household Members During Lockdown and Split Classes in Berlin, Germany. *JAMA Netw Open* 2021;4:e2127168.

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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;20:754-760. (*equal contribution)

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Goss CH, Fajac I, Jain R, Seibold W, Gupta A, Hsu MC, Sutharsan S, Davies JC, **Mall MA**. Efficacy and safety of inhaled ENaC inhibitor BI 1265162 in patients with cystic fibrosis: BALANCE-CF 1 - a randomised, Phase II study. *Eur Respir J* 2021. [Epub ahead of print].

Theuring S, Thielecke M, van Loon W, Hommes F, Hulso C, von der Haar A, Korner J, Schmidt M, Bohringer F, **Mall MA**, Rosen A, von Kalle C, Kirchberger V, Kurth T, Seybold J, Mockenhaupt FP, Group BS. SARS-CoV-2 infection and transmission in school settings during the second COVID-19 wave: a cross-sectional study, Berlin, Germany, November 2020. *Euro Surveill* 2021;26:2100184.

Terliesner N, Rosen A, Kaindl AM, Reuter U, Lippold K, **Mall MA**, von Bernuth H, Gratopp A. Maintenance of Elective Patient Care at Berlin University Children's Hospital During the COVID-19 Pandemic. *Front Pediatr* 2021;9:694963.

Barry PJ*****, **Mall MA***, Alvarez A, Colombo C, de Winter-de Groot KM, Fajac I, McBennett KA, McKone EF, Ramsey BW, Sutharsan S, Taylor-Cousar JL, Tullis E, Ahluwalia N, Jun LS, Moskowitz SM, Prieto-Centurion V, Tian S, Waltz D, Xuan F, Zhang Y, Rowe SM, Polineni D, Group VXS. Triple Therapy for Cystic Fibrosis Phe508del-Gating and -Residual Function Genotypes. *N Engl J Med* 2021;385:815-825. (*equal contribution)

Meisel C, Akbil B, Meyer T, Lankes E, Corman VM, Staudacher O, Unterwalder N, Kolsch U, Drosten C, **Mall MA**, Kallinich T, Schnabel D, Goffinet C, von Bernuth H. Mild COVID-19 despite autoantibodies to type I IFNs in Autoimmune-Polyendocrine-Syndrome Type 1 (APS-1). *J Clin Invest* 2021;131:e150867.

Hagner M, Albrecht M, Guerra M, Braubach P, Halle O, Zhou-Suckow Z, Butz S, Jonigk D, Hansen G, Schultz C, Dittrich AM*, **Mall MA***. IL-17A from innate and adaptive lymphocytes contributes to inflammation and damage in cystic fibrosis lung disease. *Eur Respir J* 2021;57. (*equal contribution)

Engelmann TA, Knudsen L, Leitz DHW, Duerr J, Beers MF, **Mall MA**, Ochs M. Linking Fibrotic Remodeling and Ultrastructural Alterations of Alveolar Epithelial Cells after Deletion of *Nedd4-2*. *Int J Mol Sci* 2021;22:7607.

Zemanick ET, Taylor-Cousar JL, Davies J, Gibson RL, **Mall MA**, McKone EF, McNally P, Ramsey BW, Rayment JH, Rowe SM, Tullis E, Ahluwalia N, Chu C, Ho T, Moskowitz SM, Noel S, Tian S, Waltz D, Weinstock TG, Xuan F, Wainwright CE, McColley SA. A Phase 3 Open-Label Study of Elexacaftor/Tezacaftor/Ivacaftor in Children 6 through 11 Years of Age with Cystic Fibrosis and at Least One F508del Allele. *Am J Respir Crit Care Med* 2021;203:1522-1532.

Leitz DHW, Duerr J, Mulugeta S, Agircan AS, 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. *International Journal of Molecular Sciences* 2021;22:6146.

Graeber SY, Boutin S, Wielputz 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;18:971-980.

Frey DL, Guerra M, **Mall MA**, Schultz C. Monitoring Neutrophil Elastase and Cathepsin G Activity in Human Sputum Samples. *J Vis Exp* 2021.

Thee S, Stahl M, Fischer R, Sutharsan S, Ballmann M, Muller A, Lorenz D, Urbanski-Rini D, Puschner 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;21:131.

Maschmeyer P, Heinz GA, Skopnik CM, Lutter L, Mazzoni A, Heinrich F, von Stuckrad SL, Wirth LE, Tran CL, Riedel R, Lehmann K, Sakwa I, Cimaz R, Giudici F, **Mall MA**, Enghard P, Vastert B, Chang HD, Durek P, Annunziato F, van Wijk F, Radbruch A, Kallinich T, Mashreghi MF. Antigen-driven PD-1(+) TOX(+) BHLHE40(+) and PD-1(+) TOX(+) EOMES(+) T lymphocytes regulate juvenile idiopathic arthritis in situ. *Eur J Immunol* 2021;51:915-929.

Sommerburg O, Hammerling S, Schneider SP, Okun J, Langhans CD, Leutz-Schmidt P, Wielputz MO, Siems W, Graber 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;10:483. (*equal contribution)

Hommes F, van Loon W, Thielecke M, Abramovich I, Lieber S, Hammerich R, Gehrke-Beck S, Linzbach E, Schuster A, von dem Busche K, Theuring S, Gertler M, Martinez GE, Richter J, Bergmann C, Bolke A, Bohringer F, **Mall MA**, Rosen A, Krannich A, Keller J, Bethke N, Kurzmann M, Kurth T, Kirchberger V, Seybold J, Mockenhaupt FP, Study Group B. SARS-CoV-2 Infection, Risk Perception, Behaviour and Preventive Measures at Schools in Berlin, Germany, during the Early Post-Lockdown Phase: A Cross-Sectional Study. *Int J Environ Res Public Health* 2021;18:2739.

Ferreira-Gomes M, Kruglov A, Durek P, Heinrich F, Tizian C, Heinz GA, Pascual-Reguant A, Du W, Mothes R, Fan C, Frischbutter S, Habenicht K, Budzinski L, Ninnemann J, Jani PK, Guerra GM, Lehmann K, Matz M, Ostendorf L, Heiberger L, Chang HD, Bauherr S, Maurer M, Schonrich G, Raftery M, Kallinich T, **Mall MA**, Angermair S, Treskatsch S, Dorner T, Corman VM, Diefenbach A, Volk HD, Elezkurtaj S, Winkler TH, Dong J, Hauser AE, Radbruch H, Witkowski M, Melchers F, Radbruch A, Mashreghi MF. SARS-CoV-2 in severe COVID-19 induces a TGF-beta-dominated chronic immune response that does not target itself. *Nat Commun* 2021;12:1961.

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Guerra M, Halls VS, Schatterny J, Hagner M, **Mall MA***, Schultz C*. Protease FRET Reporters Targeting Neutrophil Extracellular Traps. *J Am Chem Soc* 2020;60:813-822. (*equal contribution)

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for the F508del mutation. *Am J Respir Crit Care Med* 2020;202:1589-1592. (*equal contribution)

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