Curriculum Vitae

Burkhard Tümmler Professor, Dr. med. Dr.rer.nat.
d.o.b. December 1st, 1952, in Bramsche, Germany

University Education

1991	Habilitation Biochemistry, MHH
1984	Doctorate Medicine, MHH
1979	Doctorate Natural Sciences (Physical Chemistry), LUH
1974–1981	Study of Medicine, Hannover Medical School (MHH)
1971- 1976	Study of Biochemistry, Leibniz University Hannover (LUH)

Scientific Career

Since 2014	Member of the 'Faculty of 1000'
Since 2011	Coordinator, Disease Area 'Cystic Fibrosis', German Center for Lung Research (DZL)
2006 – 2012	Substitute Chair ,Forschungsgemeinschaft Mukoviszidose'
2002 – 2004	Editor, *Genome Letters*
2000 – 2010	Speaker, DFG IRTG 'Pseudomonas: Pathogenicity and Biotechnology'
Since 1993	Head, Clinical Research Group 'Molecular pathology of cystic fibrosis'
Since 1998	Research group integrated into the Department of Pediatric Pneumology, MHH
1992 – 1998	Research group affiliated with the Children's Clinic and the Department of Biochemistry, MHH, and the Max-Planck-Society
Since 1992	Member of the Editorial Boards of *Electrophoresis* (1992-2002), *Biochimica Biophysica Acta Molecular Basis of Disease* (1994-2000), *environmental microbiology* (since 1999), *Journal of Cystic Fibrosis* (2004-2011), *Journal of Bacteriology* (2005-2014), *Microbes and Infection* (since 2015), *International Journal of Medical Microbiology* (since 2017)
1983-1993	Research Associate, Institute for Biophysical Chemistry, MHH
Since 1983	Consultant of the Cystic Fibrosis Clinic, Children's Clinic, MHH
1981-1983	Postdoctoral fellow, Hospital for Sick Children, Toronto
1976-1979	Scientific Assistant, Institute for Biophysical Chemistry, MHH

Awards and Honors

1994	Rudolf-Schoen-Prize for Clinical Research
1993	Schülke Prize for Hygiene
1992	Windorfer Prize for Cystic Fibrosis Research
1971-1976	German National Scholarship Foundation (Studienstiftung des Deutschen Volkes)

Citation Record

Total citations: 18,539; *h-index: 82* (Google Scholar July 21st, 2022)

Top-10 selected Publications

Pust MM, ***Tümmler B***. Bacterial low-abundant taxa are key determinants of a healthy airway metagenome in the early years of human life. **Comput Struct Biotechnol J** 2021;20:175-186. doi: 10.1016/j.csbj.2021.12.008.

Guan S, Munder A, Hedtfeld S, Braubach P, Glage S, Zhang L, Lienenklaus S, Schultze A, Hasenpusch G, Garrels W, Stanke F, Miskey C, Johler SM, Kumar Y, ***Tümmler B***, Rudolph C, Ivics Z, Rosenecker J. Self-assembled peptide-poloxamine nanoparticles enable in vitro and in vivo genome restoration for cystic fibrosis. **Nat Nanotechnol** 2019;14(3):287-297. doi: 10.1038/s41565-018-0358-x.

Graeber SY, Dopfer C, Naehrlich L, Gyulumyan L, Scheuermann H, Hirtz S, Wege S, Mairbäurl H, Dorda M, Hyde R, Bagheri-Hanson A, Rueckes-Nilges C, Fischer S, Mall MA, ***Tümmler B***. Effects of Lumacaftor-Ivacaftor Therapy on Cystic Fibrosis Transmembrane Conductance Regulator Function in Phe508del Homozygous Patients with Cystic Fibrosis. **Am J Respir Crit Care Med** 2018;197(11):1433-1442. doi: 10.1164/rccm.201710-1983OC.

Hilker R, Munder A, Klockgether J, Losada PM, Chouvarine P, Cramer N, Davenport CF, Dethlefsen S, Fischer S, Peng H, Schönfelder T, Türk O, Wiehlmann L, Wölbeling F, Gulbins E, Goesmann A, ***Tümmler B***. Interclonal gradient of virulence in the *Pseudomonas aeruginosa* pangenome from disease and environment. **Environ Microbiol** 2015;17(1):29-46. doi: 10.1111/1462-2920.12606.

Moura-Alves P, Faé K, Houthuys E, Dorhoi A, Kreuchwig A, Furkert J, Barison N, Diehl A, Munder A, Constant P, Skrahina T, Guhlich-Bornhof U, Klemm M, Koehler AB, Bandermann S, Goosmann C, Mollenkopf HJ, Hurwitz R, Brinkmann V, Fillatreau S, Daffe M, ***Tümmler B***, Kolbe M, Oschkinat H, Krause G, Kaufmann SH. AhR sensing of bacterial pigments regulates antibacterial defence. **Nature** 2014;512(7515):387-92. doi: 10.1038/nature13684.

Teichgräber V, Ulrich M, Endlich N, Riethmüller J, Wilker B, De Oliveira-Munding CC, van Heeckeren AM, Barr ML, von Kürthy G, Schmid KW, Weller M, ***Tümmler B***, Lang F, Grassme H, Döring G, Gulbins E. Ceramide accumulation mediates inflammation, cell death and infection susceptibility in cystic fibrosis. **Nat Med** 2008;14(4):382-91. doi: 10.1038/nm1748.

Wiehlmann L, Wagner G, Cramer N, Siebert B, Gudowius P, Morales G, Köhler T, van Delden C, Weinel C, Slickers P, ***Tümmler B***. Population structure of *Pseudomonas aeruginosa*. **Proc Natl Acad Sci U S A** 2007;104(19):8101-6. doi: 10.1073/pnas.0609213104.

Bronsveld I, Mekus F, Bijman J, Ballmann M, de Jonge HR, Laabs U, Halley DJ, Ellemunter H, Mastella G, Thomas S, Veeze HJ, ***Tümmler B***. Chloride conductance and genetic background modulate the cystic fibrosis phenotype of Delta F508 homozygous twins and siblings. **J Clin Invest** 2001;108(11): 1705-15. doi: 10.1172/JCI12108.

Kälin N, Claass A, Sommer M, Puchelle E, ***Tümmler B***. DeltaF508 CFTR protein expression in tissues from patients with cystic fibrosis. **J Clin Invest** 1999;103(10):1379-89. doi: 10.1172/JCI5731.

Römling U, Grothues D, Bautsch W, ***Tümmler B***. A physical genome map of *Pseudomonas aeruginosa* PAO. **EMBO J** 1989;8(13):4081-9. doi: 10.1002/j.1460-2075.1989.tb08592.x.