

Personal Data	
Name	Christoph Lange
Place/date of birth	Essen/ 22.06.1962
Academic titles	Prof. Dr. med. Dr. h. c. Dipl- Biol. FESCMID, FIDSA, FERS
Affiliations	
Main employment	Medical Director, Research Center Borstel, Borstel, Germany
Address	Parkallee 35, D-23845 Borstel
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Education/Training	
2022	Board certification „Internal Medicine and Infectious Diseases“
2009	Board certification „Sleep Medicine“
2008	Board certification „Critical Care Medicine“
2008	Board certification „Allergology“
2006	Board certification „Infectious Diseases“
2003	Board certification „Pulmonology“
2001-2009	Subspeciality training, Medical Clinic, Research Center Borstel
2001	Board certification „Internal Medicine“
1999-2001	Fellowship in Infectious Diseases (CWRU, Cleveland, Ohio, USA)
1994-1999	Training in Internal Medicine (Cape Town, RSA; Preetz and Rendsburg)
1988-1994	Medicine, Board Licensing Examination (University of Witten-Herdecke)
1983-1988	Biology Diploma (University of Kiel)
Academic Appointments	
2023-	Member of the Board of Directors, Secretary General, The UNION
2021-	Affiliated Professor, Baylor College of Medicine, Houston, TX, USA
2018-	Medical Director, Research Center Borstel, Borstel, Germany
2018-2021	Affiliated Professor, Umeå University, Umeå (Sweden)
2017-2021	Chief of Medicine, Research Center Borstel, Borstel, Germany
2014-2020	Foreign Adjunct Professor, Karolinska Institutet, Stockholm (Sweden)
2014-	Professor (W3) Respiratory Medicine/Int. Health, University Lübeck
2013-2017	Adjunct Professor of Medicine, University of Namibia, Windhoek, Namibia
2012-	Adjunct Professor of Medicine, USMF, Chisinau, Republic of Moldova
Important Scientific Prizes/Functions	
2023	Hinduja Hospital TB Oration, India
2018	Memento Research Award for Neglected Diseases, Germany
2017	Spinoza Chair in Medicine, University of Amsterdam, The Netherlands
2014	Science Award, Doner´s Association for Research in Germany
2013	Doctor honoris causa, USMF, Chisinau, R Moldova
2011-2014	Assembly Head (Respiratory Infections) European Respiratory Society
2006-2012	Chair: Tuberculosis Network European Trialsgroup (TBNET)
2003	Hector Research Award, Germany
h-factor: 84	Citations (life time) 27467
I10 index: 235	Key words: tuberculosis, MDR-TB, NTMs, personalized medicine, clinical management
Public Grants (2018-2023): > 7.000.000 €	
Current Projects	
2021-2027	EU-IMI UNITE4TB, Clinical lead
2019-2025	Excellence Cluster Personalized Medicine, CD3; WP co-leader
2019-2023	EDCTP: ClicTB; WP leader
2017-2021	EU H2020: anTBiotic; WP leader
2016-2025	DZIF ClinTB; head
2016-2025	DZIF TTU TB: Personalized Medicine; co-coordinator
2016-2025	DZIF TTU TB: East. European Study Site; co-coordinator

Key publications 2020-2023:

Abidi S, et al. Standardised shorter regimens versus individualised longer regimens for multidrug-resistant TB. **Eur Respir J.** **2020** Mar 20;55(3):1901467. doi: 10.1183/13993003.01467-2019.

Andres S, et al. Bedaquiline-resistant Tuberculosis: Dark Clouds on the Horizon. **Am J Respir Crit Care Med.** **2020** Feb 13. doi: 10.1164/rccm.201909-1819LE.

Bergeron A et al. European Conference on Infections in Leukaemia group. Mycobacterial infections in adults with haematological malignancies and haematopoietic stem cell transplants: guidelines from the 8th European Conference on Infections in Leukaemia. **Lancet Infect Dis.** **2022** May 27:S1473-3099(22)00227-4. doi: 10.1016/S1473-3099(22)00227-4.

Bernardes JP, et al. HCA Lung Biological Network and the Deutsche COVID-19 Omics Initiative (DeCOI). Longitudinal multi-omics analysis of peripheral blood identifies responses of plasmablasts, megakaryocytes and erythroid cells as specific hallmarks of severe COVID-19. **Immunity.** **2020** Dec 15;53(6):1296-1314.e9. doi: 10.1016/j.immuni.2020.11.017.

Bisson GP, et al. Mortality in Adults with MDR-TB and HIV by ART and TB Drug Use: Individual Patient Data Meta-Analysis. **Lancet.** **2020** Aug 8;396(10248):402-411. doi: 10.1016/S0140-6736(20)31316-7.

Chesov E, Chesov D, Reimann M, Dreyer V, Utpatel C, Gröschel MI, Ciobanu N, Crudu V, Lange C, Heyckendorf J, Matthias Merker. Impact of Mycobacterium tuberculosis strain type on multidrug-resistant tuberculosis severity, Republic of Moldova. **J Infect** **2023** (in press)

Chesov D, et al. Impact of bedaquiline on treatment outcomes of multidrug-resistant tuberculosis in a high-burden country. **Eur Respir J** **2020** doi: 10.1183/13993003.02544-2020.

Chesov E, et al. Emergence of bedaquiline resistance in a high tuberculosis burden country. **Eur Respir J.** **2022** Mar 24;59(3):2100621. doi: 10.1183/13993003.00621-2021.

Correa-Macedo W, et al. Epigenetic impairment and blunted transcriptional response to Mycobacterium tuberculosis of alveolar macrophages from persons living with HIV. **J Clin Invest.** **2021** Sep 2:148013. doi: 10.1172/JCI148013.

COVID-19 Host Genetics Initiative. Mapping the human genetic architecture of COVID-19. **Nature.** **2021** Jul 8. doi: 10.1038/s41586-021-03767-x.

COVID-19 Host Genetics Initiative. A second update on mapping the human genetic architecture of COVID-19. **Nature** **2023** Sep;621(7977):E7-E26. doi: 10.1038/s41586-023-06355-3. Epub 2023 Sep 6.

Daley CL, et al. Treatment of Nontuberculous Mycobacterial Pulmonary Disease: An Official ATS/ERS/ESCMID/IDSA Clinical Practice Guideline: Executive Summary. **Clin Infect Dis.** **2020** Jul 6:ciaa241. doi: 10.1093/cid/ciaa241.

Dheda K, Lange C. A revolution in the management of multidrug-resistant tuberculosis. **Lancet.** **2022** Nov 26;400(10366):1823-1825. doi: 10.1016/S0140-6736(22)02161-4. 18

DiNardo AR, et al. Tuberculosis endotypes to guide stratified host-directed therapy. **Med (N Y).** **2021** Mar 12;2(3):217-232. doi: 10.1016/j.medj.2020.11.003.

DiNardo AR, et al. Gene expression signatures identify biologically and clinically distinct tuberculosis endotypes. **Eur Respir J.** **2022** Feb 15:2102263. doi: 10.1183/13993003.02263-2021.

Dominguez J, et al. Clinical implications of molecular drug resistance testing for Mycobacterium tuberculosis: a 2023 TBnet/RESIST-TB consensus statement. **Lancet Infect Dis.** **2023** Feb 28:S1473-3099(22)00875-1. doi: 10.1016/S1473-3099(22)00875-1.

Grobbel HP, et al. Design of multidrug-resistant tuberculosis treatment regimens based on DNA sequencing. **Clin Infect Dis.** **2021** Apr 26:ciab359. doi: 10.1093/cid/ciab359.

Günther G, et al. Availability and costs of medicines for the treatment of tuberculosis in Europe. **Clin Microbiol Infect.** **2022** Aug 10:S1198-743X(22)00394-9. doi: 10.1016/j.cmi.2022.07.026.

Guglielmetti L, et al. Study Group on Mycobacteria of the European Society of Microbiology and Infectious Diseases (ESGMYC), European Society of Mycobacteriology (ESM), European Respiratory Society (ERS) and; Tuberculosis Network European Trials group (TBnet). Rifapentine access in Europe: growing concerns over key tuberculosis treatment component. **Eur Respir J.** **2022** May 19;59(5):2200388. doi: 10.1183/13993003.00388-2022.

Gupta RK, et al. Discovery and validation of a personalised risk predictor for incident tuberculosis in settings aiming towards pre-elimination (PERISKOPE-TB). **Nat Med.** **2020** Oct 19. doi: 10.1038/s41591-020-1076-0.

Hamada Y, et al. . Predictive performance of interferon-gamma release assays and the tuberculin skin test for incident tuberculosis: an individual participant data meta-analysis. **EClinicalMedicine.** **2023** Jan 5;56:101815. doi: 10.1016/j.eclinm.2022.101815.

Heyckendorf J, et al. Prediction of anti-tuberculosis treatment duration based on a 22-gene transcriptomic model. **Eur Respir J.** **2021** Feb 11:2003492. doi: 10.1183/13993003.03492-2020.

Heyckendorf J, et al. Pathogen-free diagnosis of tuberculosis. **Lancet Infect Dis.** **2021** Aug;21(8):1066. doi: 10.1016/S1473-3099(21)00337-6.

Koehler N, et al. Pretomanid-resistant tuberculosis. **J Infect.** **2023** Feb 2:S0163-4453(23)00069-5. doi: 10.1016/j.jinf.2023.01.039.

Kwak N, et al. Changes in treatment and outcome for multidrug-resistant/rifampicin-resistant tuberculosis according to national income 2001–2015. **Eur Respir J.** **2020** Jun 25:2001394. doi: 10.1183/13993003.01394-2020.

Lan Z, et al. Drug-associated adverse events in the treatment of multidrug-resistant tuberculosis: an individual patient data meta-analysis. **Lancet Respir Med.** **2020** Mar 16. pii: S2213-2600(20)30047-3. doi: 10.1016/S2213-2600(20)30047-3.

Lange C, Köhler N, Günther G. Regimens for Drug-Resistant Tuberculosis. **N Engl J Med.** **2023** Jan 12;388(2):190. doi: 10.1056/NEJMc2213970.

Lange C, et al. on behalf of the expert panel group for management recommendations in NTM-PD. Consensus management recommendations for additional nontuberculous mycobacterial pulmonary diseases. **Lancet Infect Dis.** **2022** Jan 25:S1473-3099(21)00586-7. doi: 10.1016/S1473-3099(21)00586-7.

Lange C, et al. Treatments of Multidrug-Resistant Tuberculosis: Light at the End of the Tunnel. **Am J Respir Crit Care Med.** **2022** Mar 23. doi: 10.1164/rccm.202202-0393ED.

Lange C, et al. 100 years of Mycobacterium bovis bacille Calmette Guérin. **Lancet Infect Dis.** **2021** Sep 7:S1473-3099(21)00403-5. doi: 10.1016/S1473-3099(21)00403-5.

Maier C, et al. Long-term treatment outcomes in multidrug-resistant tuberculosis **Clin Microbiol Infect.** **2023** Feb 24:S1198-743X(23)00083-6. doi: 10.1016/j.cmi.2023.02.013.

Mandalakas AM, et al. Tuberculosis prevention in children: A prospective community-based study in South Africa. **Eur Respir J.** **2020** Oct 29:2003028. doi: 10.1183/13993003.03028-2020.

Martinez L, et al. The risk of tuberculosis in children after close exposure: a systematic review and individual-participant meta-analysis. **Lancet** **2020**; Mar 21;395(10228):973-984. doi: 10.1016/S0140-6736(20)30166-5.

Martinez L, et al. Childhood BCG vaccination and risk of pulmonary and extrapulmonary tuberculosis throughout the life course: An individual-participant meta-analysis of 26 Cohort Studies. **Lancet Global Health** **2022** Sep;10(9):e1307-e1316. doi: 10.1016/S2214-109X(22)00283-2.

Motta I, et al. Recent advances in the treatment of tuberculosis. **Clin Microbiol Infect.** **2023** Jul 21:S1198-743X(23)00339-7. doi: 10.1016/j.cmi.2023.07.013.

Noroc E, Chesov D, Merker M, Gröschel MI, Barilar I, Dreyer V, Ciobanu N, Reimann M, Crudu V, Lange C. Limited nosocomial transmission of drug-resistant-tuberculosis, R. Moldova. **Emerg Infect Dis** **2023** May;29(5):1046-1050. doi: 10.3201/eid2905.230035.

Otto-Knapp R, et al. Long-term MDR/RR-TB treatment outcome by new WHO definitions in Germany. **Eur Respir J.** **2022** Nov 24;60(5):2200765. doi: 10.1183/13993003.00765-2022.

Pedersen OS, et al. Global treatment outcomes of extensively drug-resistant tuberculosis in adults: A systematic review and meta-analysis. **J Infect** **2023** Jun 23:S0163-4453(23)00337-7. doi: 10.1016/j.jinf.2023.06.014.

Roelens M, et al. Evidence-based definition for extensively drug-resistant tuberculosis. **Am J Respir Crit Care Med.** **2021** Jun 9. doi: 10.1164/rccm.202009-3527OC.

Salzer HJF, et al. Aspergillus-specific IgG antibodies for diagnosing chronic pulmonary aspergillosis compared to the reference gold standard. **Clin Microbiol Infect.** **2023** Sep 7:S1198-743X(23)00416-0. doi: 10.1016/j.cmi.2023.08.032.

Sibandze D, et al. Rapid molecular diagnostics of tuberculosis resistance by targeted stool sequencing. **Genome Med.** 2022 May 19;14(1):52. doi: 10.1186/s13073-022-01054-6.

Tunesi S, et al. Co-administration of treatment for rifampicin-resistant TB and chronic HCV infection: A TBnet and ESGMYC study. **J Infect.** 2022 Jun;84(6):834-872. doi: 10.1016/j.jinf.2022.03.004.

Vasiliu A, et al. Tuberculosis in foreign-born persons in Europe. **Eurosurveillance** 2023 (in press)

v Braeckel E, et al. for CPAnet. Treatment outcome definitions in chronic pulmonary aspergillosis: a CPAnet consensus statement. **Eur Respir J.** 2022 Jun 9;59(6):2102950. doi: 10.1183/13993003.02950-2021.