



24.09.2024

Prof. Dr. med. Dr. h.c. Christoph Lange, FIDSA, FESCMID, FERS

### Funktion

- Medizinischer Direktor am Forschungszentrum Borstel
- Professor (W3) für Respiratory Medicine & International Health an der Universität zu Lübeck (beamtet)
- Leiter der Forschergruppe Klinische Infektiologie am Forschungszentrum Borstel.
- Leiter der klinischen Tuberkuloseeinheit im Deutschen Zentrum für Infektionsforschung
- Leitung der Medizinischen Infrastrukturen (Pathologie, MVZ, Studienzentrum und Biobank) am Forschungszentrum Borstel

### Forschungs-/Tätigkeitsprofil

- Forschungsschwerpunkt auf dem Gebiet der Tuberkulose (Antibiotika-Resistenz, Epidemiologie, Prävention, Diagnostik und Therapie)
- Stichworte: Biomarker, personalisierte Medizin, Kohortenstudien, M/XDR-TB, TBNET Osteuropa, südliches Afrika

### Berufliche Meilensteine

2022	Facharzt für Innere Medizin und Infektiologie
2018-	Medizinischer Direktor des Forschungszentrums Borstel
2017-2021	Chefarzt der Medizinische Klinik des Forschungszentrums Borstel
2014-	Professor (W3) für International Health/Infectious Diseases (umgewidmet 2018 in: Respiratory Medicine & International Health) an der Universität zu Lübeck
2009-2017	Leitender Oberarzt, Medizinische Klinik des Forschungszentrums Borstel
2004	Habilitation in Innerer Medizin
2001-2009	Schwerpunktbezeichnung in Pneumologie (2003) und Zusatzbezeichnungen in Infektiologie (2006), Allergologie (2008), Intensivmedizin (2008) und Schlafmedizin (2009); Ausbildung an der Medizinische Klinik des Forschungszentrums Borstel
2001	Facharzt Innere Medizin
1999-2001	Fellowship in Klinischer Infektiologie (CWRU, Cleveland, Ohio, USA)
1995-1999	Ausbildung in Innerer Medizin (UCT Kapstadt, KKH Preetz und KKH Rendsburg)
1995	Promotion (Dr. med.)
1994	3. Medizinisches Staatsexamen (Universität Witten Herdecke)
1988	Biologie Diplom (Christian-Albrechts-Universität zu Kiel)

### Ämter und Funktionen außerhalb des FZB

2023-	Direktor (Generalsekretär) der Int. Union against Tuberculosis & Lung Diseases
2021-	Guest Professor, Baylor College of Medicine, Texas Children's Hospital, Houston, TX, USA
2018-	Mitglied im Lenkungsausschuß der Exzellenzclusters „Precision Medicine“ der Universität zu Kiel
2018-2021	Foreign Adjunct Professor, Arctic Tuberculosis Center, University Umeå, Sweden
2015-	Mitglied im Lenkungsausschuß der Akademie des Deutschen Zentrums für Infektionsforschung (DZIF)
2014-2019	Foreign Adjunct Professor, Karolinska Institut, Stockholm, Schweden
2013-2017	Adjunct Professor of Medicine, University of Namibia, Windhoek, Namibia

2013-	Vorstand der Schleswig-Holsteinischen Gesellschaft zur Verhütung und Bekämpfung der Tuberkulose und der Lungenkrankheiten e.V., stellv. Vorsitzender
2012-	Adjunct Professor of Medicine, USMF, Chisinau, Republik Moldau
2011-2014	Sprecher: Respiratory Infections Assembly, European Respiratory Society
2006-	Mitglied des Steering Committees der Tuberculosis Network European Trialsgroup (TBNET), Sprecher von 2006-2012
2005-	Mitglied der Ethikkommission der Ärztekammer Schleswig-Holstein, stellv. Vorsitzender seit 2013

### Aktuelle Projekte

2021-2027	EU-IMI UNITE4TB, Klinischer Ko-Leiter
2019-2025	Excellence Cluster Personalized Medicine, CD3; WP Ko-Leiter
2019-2025	EDCTP: ClicTB; WP Leiter
2021-2024	EDCTP: stool4TB; WP Leiter
2016-2025	DZIF ClinTB; Leiter
2016-2025	DZIF TTU TB: Personalized Medicine; Ko-Koordinator
2016-2025	DZIF Eastern European Study Site; Bucharest, Rumänien; Ko-Koordinator

### Preise/Auszeichnungen

2023	Hinduja Hospital Oration Award, Mumbai, Indien
2018	Memento Forschungspreis für vernachlässigte Erkrankungen (Ärzte ohne Grenzen, Brot für die Welt, DAHW und Buko Pharmainitiative)
2017	Spinoza Chair of Medicine, Universität Amsterdam, Niederlande
2017	Fellow of the European Society of Clinical Microbiology and Infectious Diseases (ESCMID)
2014	Fellow of the European Respiratory Society (ERS)
2015	Wissenschaftspreis des Stifterverbandes für die Deutsche Wissenschaft
2013	Doctor honoris causa, USMF, Chisinau, Rep. Moldau
2006	Fellow of the Infectious Diseases Society of America (IDSA)
2003	Hector Forschungspreis zur Pathogenese der HIV-Infektion

### Indikatoren

h-index: 87; i10-index: 253; Zitationen: 31329, IF  $\Sigma$  = 5316 (IF von 2023)

### Ausgewählte Publikationen 2022-2024

#### 2024

Brehm TT, et al. (Re-)introduction of TNF antagonists and JAK inhibitors in patients with previous tuberculosis: a systematic review. **Clin Microbiol Infect.** **2024** Apr 23; S1198-743X(24)00206-4. doi: 10.1016/j.cmi.2024.04.011.

Carratalà Castro L, et al. Use of stool-based molecular tests for pediatric tuberculosis diagnosis: a systematic review and meta-analysis. **Lancet Microbe.** **2024** (in press)

Cirillo DM et al. Handing over the baton: A successful UN High-Level Meeting on AMR must build on the 2023 UN High-Level Meeting on TB. **Lancet Glob Health.** **2024** Aug;12(8):e1225-e1226. doi: 10.1016/S2214-109X(24)00229-8.

Dheda K, et al. Multidrug-resistant tuberculosis. **Nat Rev Dis Primers.** **2024** Mar 24;10(1):22. doi: 10.1038/s41572-024-00504-2.

Dheda K et al. Towards shorter, safer, flexible and more effective treatment regimens for drug-resistant tuberculosis. **Lancet Respir Med** **2024** (in press)

Diacon AH, et al.. Fourteen-day treatment responses in participants with rifampicin-susceptible pulmonary tuberculosis receiving the leucyl-tRNA synthetase inhibitor GSK3036656: a phase 2a open-label, randomized trial. **Nat Med** **2024** <https://doi.org/10.1038/s41591-024-02829-7>

Gillespie SH, et al. Developing biomarkers assays to accelerate tuberculosis drug development: defining target product profiles. **Lancet Microbe** **2024**, Published Online, [https://doi.org/10.1016/S2666-5247\(24\)00085-5](https://doi.org/10.1016/S2666-5247(24)00085-5)

Günther G, et al. Availability of drugs and resistance testing for BPALM regimen for rifampicin-resistant tuberculosis in Europe. **Clin Microbiol Infect.** **2024** Mar 13;S1198-743X(24)00121-6. doi: 10.1016/j.cmi.2024.03.009

Hoelscher M, et al. Candidate anti-tuberculosis medicines and regimens under clinical evaluation. **Clin Microbiol Infect.** **2024** Jun 21;S1198-743X(24)00296-9. doi: 10.1016/j.cmi.2024.06.016.

Kay A, et al. Performance of a quantitative stool polymerase chain reaction assay for the diagnosis of tuberculosis: a multinational diagnostic accuracy study. **Lancet Microbe** 2024 Mar 7: S2666-5247(23)00391-9. doi: 10.1016/S2666-5247(23)00391-9.

Lienhardt C, et al. Target regimen profiles: shaping the future of tuberculosis treatment. **Bull World Health Organ.** 2024 Aug 1;102(8):600-607. doi: 10.2471/BLT.24.291881.

Martinez L, et al. Effectiveness of preventive treatment among persons with differing age and Mycobacterium tuberculosis infection status: A systematic review and individual-participant meta-analysis of contact tracing studies **Lancet Respir Med** 2024 Published Online, [https://doi.org/10.1016/S2213-2600\(24\)00083-3](https://doi.org/10.1016/S2213-2600(24)00083-3)

Nyang'wa BT, et al. Short oral regimens for pulmonary rifampicin-resistant tuberculosis (TB-PRACTECAL): an open-label, randomised, controlled, phase 2B-3, multi-arm, multicentre, non-inferiority trial. **Lancet Respir Med.** 2024 Feb;12(2):117-128. doi: 10.1016/S2213-2600(23)00389-2

Shaw ES, et al. Bedaquiline: what might the future hold? **Lancet Microbe.** 2024 Jul 26:100909. doi: 10.1016/S2666-5247(24)00149-6

Stoycheva K, et al. Tuberculosis in people of Ukrainian origin in the European Union and the European Economic Area, 2019 to 2022. Stoycheva K, Cristea V, Ködmön C, Rosales-Klitz S, Zenner D, Vasiliu A, van der Werf M, Lange C. **Euro Surveill.** 2024 Mar;29(12). doi: 10.2807/1560-7917.ES.2024.29.12.2400094.

Wetzstein N, et al. Clinical spectrum and relevance of Mycobacterium malmoense: systematic review and meta-analysis of 859 patients. **J Infect.** 2024 Jun 19:106203. doi: 10.1016/j.jinf.2024.106203.

Zielinski N, et al. A transcriptomic biomarker predicting linezolid-associated neuropathy during treatment of drug-resistant tuberculosis. **Pathog Immun** 2024 25;9(2):25-42. doi: 10.20411/pai.v9i2.705. eCollection 2024.

## 2023

Chesov E, et al. Impact of Mycobacterium tuberculosis strain type on multidrug-resistant tuberculosis severity, Republic of Moldova. **J Infect.** 2023 Oct 10:S0163-4453(23)00532-7. doi: 10.1016/j.jinf.2023.10.001.

COVID-19 Host Genetics Initiative. A second update on mapping the human genetic architecture of COVID-19. **Nature** 2023

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.

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.

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.

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

Lange C, et al. Emerging bedaquiline-resistant tuberculosis. **Lancet Microbe** 2023 November 3, 2023 [https://doi.org/10.1016/S2666-5247\(23\)00321-X](https://doi.org/10.1016/S2666-5247(23)00321-X)

Lange C. Mission (im)possible: elimination of tuberculosis. **Clin Microbiol Infect.** 2023 Aug 4:S1198-743X(23)00361-0. doi: 10.1016/j.cmi.2023.07.033.

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.

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, et al. Limited nosocomial transmission of drug-resistant-tuberculosis, R. Moldova. **Emerg Infect Dis** 2023 May;29(5):1046-1050. doi: 10.3201/eid2905.230035.

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.

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.

Vasiliu A\*, et al. Tuberculosis in foreign-born persons in Europe. **Euro Surveill.** **2023** Oct;28(42):2300051. doi: 10.2807/1560-7917.ES.2023.28.42.2300051.

## 2022

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.

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.

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

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.

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.

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.

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.

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.

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.