# Matthias I. Gröschel

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#### **Education**

**Ph.D.** Infectious Disease Genomics. University of Groningen, The Netherlands, 2019 (2015-2016 at Institut Pasteur, Paris, 2017-2019 at Research Center Borstel, Borstel)

- M.D. University of Groningen, The Netherlands, 2017
- B.S. International Medicine / Global Health. University of Groningen, The Netherlands, 2013
- **B.A.** Philosophy. University of Groningen, The Netherlands, 2013

### **Employment**

Resident Physician Internal Medicine, Charité – Universitätsmedizin Berlin, 2022 – present

Junior Digital Clinician Scientist, Berlin Institute of Health, 2022 – present

Research fellow at Harvard Medical School, 2019 - present

Junior Professional Officer, International Communication Union, 2021 – 2022

Consultant, World Health Organization Regional Office for Europe, 2018 – 2020

## Papers and preprints

Selected Original and Reviews (for full list see google scholar or pubmed)

- Farlow A, Hoffmann A, Tadesse GA, Mzurikwao D, Beyer R, Akogo D, Weicken E, Matika T, Nweje MI, Wamae W, Arts S, Wiegand T, Bennett C, Farhat MR, **Groschel MI**. Rethinking global digital health and AI-for-health innovation challenges. <u>PLOS Glob Public Health</u>. 2023 28;3(4):e0001844
- Groschel MI, van den Boom M, Dixit A, Skrahina A, Dodd PJ, Migliori GB, Seddon JA, Farhat MR. Management of childhood MDR-TB in Europe and Central Asia. Int J Tuberc Lung Dis 2022; 26(5):433-440
- Groschel MI, Owens M, Freschi L, Vargas Jr R, Marin MG, Phelan J, Iqbal Z, Dixit A, Farhat MR. GenTB: A user-friendly genome-based predictor for tuberculosis resistance powered by machine learning. Genome Med 2021; 13, 138

**Groschel MI** and Farhat MR. A legacy of disease. <u>Lancet Inf Dis</u> 2021; 10.1016/S1473-3099(21)00165-1

2020 Rankin NA, **Groschel MI**, Farhat MR. Mentorship at a distance. <u>Science</u> 2020; 370(6515):494

**Groschel MI** et al. The phylogenetic landscape and nosocomial spread of the multidrug-resistant opportunist Stenotrophomonas maltophilia, <u>Nature Communications</u> 2020; 10.1038/s41467-020-15123-0

2019 **Groschel MI,** Seddon JA, Prabowo SA, Migliori GB, Graham SM, van den Boom M, Dara M. European Guidance on drug-resistant tuberculosis in children and adolescents. <u>Lancet Child & Adolesc Health</u> 2019;10.1016/S2352-4642(19)30332-3.

**Lead writing and coordination of WHO guidance**: Multidrug-resistant tuberculosis in children and adolescents in the WHO European Region, Expert Opinion. Copenhagen: <a href="https://www.who.en.nd.com/who.en.nd/">WHO Regional Office for Europe</a>; 2019.

**Groschel MI**, van den Boom M, Migliori GB, Dara M. Prioritising children and adolescents in the tuberculosis response of the WHO European Region. <u>Eur Respir Rev</u> 2019;10.1183/16000617.0106-2018.

**Groschel MI**, Luz CF, Batra S, Ahuja S, Batra S, Kranzer K, van der Werf TS. Random glucose sampling as screening tool for diabetes among disadvantaged tuberculosis patients residing in urban slums in India. <u>ERI Open Research</u> 2019; 5:00025-2019

Soenke A\*, **Groschel MI**\*, Hillemann D, Niemann S, Merker M, Kranzer K. A diagnostic algorithm to investigate pyrazinamide and ethambutol resistance in rifampicin resistant Mycobacterium tuberculosis isolates in a low incidence setting. <u>Antimicrobial Agents Chemotherapy</u> 2018; DOI: 10.1128/AAC.01798-18

**Groschel MI,** Walker T, van der Werf TS, Lange C, Niemann S, Merker M. Pathogen-based precision medicine for multidrug-resistant tuberculosis. <u>PloS Pathog</u> 2018;14(10):e1007297

- **Groschel MI**, Sayes F, ..., Brosch R. Recombinant BCG expressing ESX-1 of *Mycobacterium marinum* combines low virulence with cytosolic immune signalling and improved tuberculosis protection. <u>Cell Reports</u> 2017;18:2752-2765
- 2016 **Groschel MI**, Sayes F, Roxane S, Majlessi L, Brosch R. ESX secretion systems: mycobacterial evolution to counter host immunity. <u>Nat Rev Microbiol</u> 2016 Nov;14(11):677-691

Lai FY, **Groschel MI**, van den Hende L, Diercks, GF, Rutgers A, van der Werf TS. Prolonged pyrexia and subtle skin lesions: polyarteritis nodosa. Lancet 2016;5(387):1025-6.

**Groschel MI**, Omansen TF, de Lange W, van der Werf TS, Lokate M, Bathoorn E, Akkerman OW, Stienstra Y. Multidrug-Resistant Tuberculosis Complicated by Nosocomial Infection with Multidrug-Resistant Enterobacteriaceae. <u>Am J Trop Med Hyg</u> 2016;94(3):517-8.

2015 **Groschel MI**, Prabowo SA, Cardona PJ, Stanford JL, van der Werf TS. Therapeutic Vaccines for Tuberculosis – a Systematic Review. <u>Vaccine</u> 2014;32(26):3162-8.

#### Awards

- 2020 Annual PhD Price, Paul Ehrlich Society
- 2019 Annual PhD Price, Research Center Borstel and Municipality of Bad Segeberg
- 2018 Annual Research Price, Hippocrates Foundation, Leiden, Netherlands
- 2017 **Best Translational Poster,** Innate Immunity Symposium Freiburg, Germany
- 2014 Best M.sc. Thesis of the year, Alumni Association Faculty of Medicine, University of Groningen