

# CURRICULUM VITAE · Matthias Gröschel

## Contact

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## Current employment

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since 08 / 2021      **Junior Artificial Intelligence for Health Officer**  
International Telecommunication Union, Geneva, Switzerland  
*Funded by the Junior Professional Officer Program by the Federal Republic of Germany*

since 06 / 2019      **Research Fellow in Biomedical Informatics**  
Department of Biomedical Informatics, Harvard Medical School, Boston, MA  
*Funded by German Research Foundation Postdoctoral grant GR 5643/1-1 until 07/21*

## Education

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2014 - 2019      **Ph.D., Infectious Diseases, University of Groningen, The Netherlands**  
Dissertation Advisors: Roland Brosch, Ph.D. (Institut Pasteur, Paris), Stefan Nieman, Ph.D. (Research Center Borstel, Borstel), Tjip van der Werf, MD Ph.D. (U of Groningen)

2013 - 2017      **M.Sc., Medicine, University of Groningen, The Netherlands**  
Board-registered (Approbation) as Medical Doctor in Hamburg, Germany

2010 - 2013      **B.Sc. International Medicine and Global Health, University of Groningen, The Netherlands**  
University of Groningen Honours College (45ECTS)

2011 - 2013      **BA Philosophy of Sciences, University of Groningen, The Netherlands**

## Selected Scientific Publications

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for full list see [google scholar](#) or [pubmed](#)

2021      **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 Medicine* 2021; *in press*

**Groschel MI**, van den Boom M, Dixit A, Skrahina A, Dodd PJ, Migliori GB, Seddon JA, Farhat MR. Challenges in reporting and management of childhood multidrug-resistant tuberculosis in Europe and Central Asia. 2021 *Manuscript under review*

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

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

**Groschel MI et al.** The phylogenetic landscape and nosocomial spread of the multidrug-resistant opportunist *Stenotrophomonas maltophilia*, *Nature Communications* 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. *Lancet Child & Adolesc Health* 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: *WHO Regional Office for Europe*; 2019.
- Groschel MI**, van den Boom M, Migliori GB, Dara M. Prioritising children and adolescents in the tuberculosis response of the WHO European Region. *Eur Respir Rev* 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. *ERJ Open Research* 2019; 5:00025-2019
- 2018 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. *Antimicrobial Agents Chemotherapy* 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. *PloS Pathog* 2018;14(10):e1007297
- 2017 **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. *Cell Reports* 2017;18:2752-2765
- 2016 **Groschel MI**, Sayes F, Roxane S, Majlessi L, Brosch R. ESX secretion systems: mycobacterial evolution to counter host immunity. *Nat Rev Microbiol* 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. *Am J Trop Med Hyg* 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. *Vaccine* 2014;32(26):3162-8.

## Awards

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- 2020 **Annual dissertation award**, Paul Ehrlich Society
- 2019 **Annual dissertation award**, 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 of the Faculty of Medicine, University of Groningen, Groningen, The Netherlands

Berlin, August 11th, 2021