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Overlapping patterns and unique differences: a study into immunological variation within and between populations

Dorst, M.M.A.R. van

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Curriculum vitae

Marloes van Dorst was born on 9 February 1996 in Maarssen, the Netherlands. She completed her primary and secondary education in Oudewater. She studied Biomedical Sciences at Leiden University, the Netherlands and obtained her Bachelor's degree in 2016 cum laude (with honour). Thereafter, she obtained the Master's degree in International Public Health at the Vrije Universiteit in Amsterdam cum laude (with honour). As part of this Master's she conducted an internship in South Nepal studying the effect of Leprosy on mental health. In 2017 she returned to the Leiden University to complete the Master's program of Biomedical Sciences in Leiden, which she completed with cum laude (with honour). During this Master's, Marloes conducted an internship in the department of Infectious diseases in the Leiden University Medical Center (LUMC) and did her final internship at the Department of Parasitology of the LUMC, under supervision of Prof. Dr. Maria Yazdanbakhsh and Dr. Simon Jochems. In addition, Marloes performed field work in Makassar, Indonesia in collaboration with the Hasanuddin University of Makassar and co-supervised the Half minor program of the LUMC that took place in Makassar. After graduating, Marloes obtained a PhD scholarship for talented students from LUMC and started a PhD project at the Department of Parasitology under the supervision Prof. Dr. Maria Yazdanbakhsh. This PhD project was a collaborative research project between Kilimanjaro Christian Medical Centre (KCMC) and LUMC, for which she often travelled to Tanzania and conducted a large immunoepidemiology field study in the Kilimanjaro region, North Tanzania. Her field work performed in Indonesia and in Tanzania culminated in the work presented in this thesis.

List of publications

In this thesis

Marloes M. A. R. van Dorst*, Jeremia J. Pyuza*, Gyaviira Nkurunungi, Vesla I. Kullaya, Hermelijn H. Smits, Pancras C. W. Hogendoorn, Linda J. Wammes, Bart Everts, Alison M. Elliott, Simon P. Jochems & Maria Yazdanbakhsh (2024). Immunological factors linked to geographical variation in vaccine responses. *Nature Reviews Immunology*, 24(4), 250-263.

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Jeremia J. Pyuza*, **Marloes M.A.R. van Dorst***, Koen Stam, Linda Wammes, Marion König, Vesla I. Kullaya, Yvonne Kruize, Wesley Huisman, Nikuntufya Andongolile, Anastazia Ngowi, Elichilia R. Shao, Alex Mremi, Pancras C.W. Hogendoorn, Sia E. Msuya, Simon P. Jochems, Wouter A.A. de Steenhuijsen Piters, Maria Yazdanbakhsh (2024). Lifestyle score is associated with cellular immune profiles in healthy Tanzanian adults. *Brain, Behavior, & Immunity-Health*, 41, 100863.

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Jeremia J. Pyuza*, **Marloes M.A.R. van Dorst***, David Barnett, Koen Stam, Mikhael Manurung, Linda Wammes, Marion König, Yvonne Kruize, Nikuntufya Andongolile, Anastazia Ngowi, Elichilia R. Shao, Vesla I. Kullaya, Alex Mremi, Pancras C.W. Hogendoorn, Sia E. Msuya, Simon P. Jochems, John Penders, Maria Yazdanbakhsh, Wouter A.A. de Steenhuijsen Piters: (2025). Tanzanian gut microbiota profiles linked to high but rapidly waning yellow fever antibody titers. *npj Biofilms and Microbiomes*, 11(1), 1-15.

*authors contributed equally