Wiles and wanderings: immune-evasive maneuvers of skin-penetrating parasites

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CURRICULUM VITAE

Béatrice Marguérite Françoise Winkel was born on Curaçao on August 28th 1985. She moved to the Netherlands in 1996, where she graduated high school (Dalton Vatel Gymnasium, Voorburg, the Netherlands) in 2002. After a period of travelling she started medical school at the Leiden University in 2004 and obtained both her medical degree and master diploma in Biomedical Sciences in 2014. During her master she employed imaging techniques to map the spatial distribution of hematopoietic stem cells in the bone marrow microenvironment at the laboratory of Prof. Silberstein (Children's Hospital, Harvard university, Boston, USA), and at the Interventional Molecular Imaging group of Dr. van Leeuwen (Leiden University medical Center (LUMC), the Netherlands) she studied novel nuclear navigation technologies in the context of sentinel node surgery. A longstanding interest in tropical infectious diseases led her to continue with a PhD in the field of immuno-parasitology at the Parasitology department of the LUMC, where the work in this thesis was conducted. After a residency period at the internal medicine department of the HMC in The Hague, Béatrice started formal training in clinical microbiology at the UMC Utrecht in 2020. She plans to pursue a career in infectious diseases as a medical specialist and hopes to continue to do research in the field of parasitology.

LIST OF ABBREVIATIONS

ANOVA	Analysis of variance
APC	Antigen presenting cell
aSPZ	attenuated sporozoites
$Cy5M_2$	Cy5-Methyl-Methyl
DC	Dendritic cell
ELISA	Enzyme-linked immunosorbent assay
FACS	Flow cytometric cell sorting
GFP	Green Fluorescent Protein
GMO	Genetically modified organism
ID	Intradermal
IV	Intravenous
MΦ	Macrophage
MFI	Fluorescence Intensity
MoDC	Monocyte-derived dendritic cell
MoMΦ	Monocyte-derived macrophage
Pb	*Plasmodium berghei*
PCR	Polymerase chain reaction
Pf	*Plasmodium falciparum*
Pv	*Plasmodium vivax*
Py	*Plasmodium yoelii*
RAS	Radiation attenuated sporozoites
Sm	*Schistosoma mansoni*
SPZ	Sporozoites
WT	Wild type

LIST OF PUBLICATIONS

1. **B. Winkel**, L. Pelgrom, R. van Schuijlenburg, E. Baalbergen, M.S. Ganesh, H. Gerritsma, C.M. de Korne, N. Duszenko, M.C.C. Langenberg, S.C. Chevalley-Maurel, H.H. Smits, E.C. de Jong, B. Everts, B. Franke-Fayard, M. Roestenberg. *Plasmodium* sporozoites induce regulatory macrophages. *PLOS pathogens, 2020*

2. M.C.C. Langenberg, M. Hoogerwerf, J.R. Koopman, J.J. Janse, J. Kos-van Oosterhoud, C. Feit, S.P. Jochems, C.J. de Dood, R van Schuijlenburg, A Ozir-Fazalalikhan, M.D. Manurung, E. Sartono, M.T. van der Beek, **B. Winkel**, P.H. Verbeek-Menken, K.A. Stam, F.W.B. van Leeuwen, P.Meij, A. van Diepen, L. van Lieshout, G.J. van Dam, P.L.A.M. Corstjens, C.H. Hokke, M. Yazdanbakhsh, L.G. Visser, M. Roestenberg. A controlled human *Schistosoma mansoni* infection model to accelerate the development of novel drugs, vaccines and diagnostics. *Nature medicine 2020*

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