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## Imaging the (un)imaginable of the Barrier Immune system

Guo, N.

### Citation

Guo, N. (2023, April 18). *Imaging the (un)imaginable of the Barrier Immune system*. Retrieved from <https://hdl.handle.net/1887/3594146>

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**Note:** To cite this publication please use the final published version (if applicable).

### **Curriculum vitae**

Nannan Guo was born on the 25<sup>th</sup> of June in 1992 in Changchun, China, where she grew up. In 2010, She started her studies Biotechnology at Jilin University in Changchun, and obtained her Bachelor's degree in 2014. She then attended the Biochemistry and Molecular Biology at Jilin University as a master under the supervision of Prof. Ouyang Hongsheng. In 2017, she obtained her master degree with research project on "Screening of the paired heavy chain-light chain gene sequences from a single cell secreting neutralizing antibody of swine fever virus". After obtaining funding for a four-year PhD study abroad from the Chinese scholarship, thereby, she started her PhD study in January 2018 at the department of Immunology (IMMU) at Leiden University Medical Center (LUMC) under the supervision of Prof. Frits Koning.

As described in this thesis, her research focused on investigate immune compartmentalization in the developing human intestine, and lesional/healthy skin tissue from patients with mycosis fungoides and psoriasis by single-cell spectral flow cytometry, suspension mass cytometry, single-cell RNA-sequencing, functional assays, RNAscope and imaging mass cytometry during her PhD study. Since 2021, Nannan collaborated with the group of Prof. Dr. Stephan Weidinger from University Hospital Schleswig-Holstein for clinical trial of Atopic Dermatitis by IL-13 antibody treatment. During her PhD studies, she visited seven conferences related to Immunology, of which she attended four with an oral presentation.

## List of publications

**Guo N**, Li N, Li J, Jiang Q, Schreurs M, van Unen V, Chuva de Sousa Lopes SM, Vloemans SA, Eggermont J, Lelieveldt BPF, Staal FJT, de Miranda NFCC, Pascutti MF, Koning F. Immune subset-committed proliferating cells populate the human foetal intestine throughout the second trimester of gestation.

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**Guo N**, Jia L, Out-Luiting C, Miranda N, Willemze R, Koning F, Vermeer M, Quint K. Mass Cytometric Analysis of Early-Stage Mycosis Fungoides.

*Cells* 2022, 11(7), 1062.

**Guo N**, van Unen V, Ijsselsteijn ME, Ouboter LF, van der Meulen AE, Chuva de Sousa Lopes SM, de Miranda N, Koning F, Li N. A 34-Marker Panel for Imaging Mass Cytometric Analysis of Human Snap-Frozen Tissue.

*Frontiers in Immunology* 2020, 11:1466.

Li N, van Unen V, **Guo N**, Abdelaal T, Somarakis A, Eggermont J, Mahfouz A, Chuva de Sousa Lopes SM, Lelieveldt BPF, Koning F. Early-Life Compartmentalization of Immune Cells in Human Fetal Tissues Revealed by High-Dimensional Mass Cytometry.

*Frontiers in Immunology* 2019, 10:1932.

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*Nature Immunology* 2019, 20:301-312.

Raeber ME, Caspar D, Zurbuchen Y, **Guo N**, Schmid J, Michler J, Steiner UC, Moor AE, Koning F, Boyman O. Interleukin-2 immunotherapy reveals human regulatory T cell subsets with distinct functional and gatekeeper features.

*Submitted*

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*In preparation*



## Acknowledgments

After impressive PhD journey, I would like to express my gratitude to many people for their support and encouragement during my PhD and writing this thesis.

First and foremost, I would like to express my sincere gratitude to my promotor Frits Koning, who gives me the opportunity to perform research in our group at LUMC. You stimulate me to obtain a deeper understanding of human Immunology, and many thanks for your (timely) support and guidance not only in my research within these years, but also in improving my language, dealing with cultural differences, listening to my difficulties encountered in life and always encouraging me a lot with patience.

And my co-promotor M. Fernanda Pascutti, I greatly appreciated your positive attitudes and support towards my research during my PhD study, especially for your expertise in intestinal immune system development. Also my co-promotor Koen Quint, many thanks for your patient guidance and all your supports over the years for the studies of inflammatory skin diseases. I always feel that the dark clouds above my head went away after our meetings; my research questions and confusions were well resolved by receiving your help.

I would like to thanks my collaborators, Noel F. C. C. de Miranda, Boudewijn Lelieveldt, Frank J. T. Staal, Susana M. Chuva de Sousa Lopes, Maarten Vermeer, Andrea E. van der Meulen, and Karen M Page for sharing your knowledge and insights, which improve my research during this challenging time.

Many thanks to my sweet colleagues, LiNa, JiaLi (my paranymph), Mette (my paranymph), Vincent, Tessa, Laura, Qinyue, Natasja, Yvonne, Munisha, Juliette, Veerle, Emma, Sanne and Ciska in our group. All of you always give me help and encourage me, which makes me feel at home. I am so happy of working together with you, enjoyable for discussion during our weekly data meeting, and chatting during lunch and dinner.

Thanks Marieke, Jeroen, Antonis, Coby, Sandra, Els, Kees and Janine for your selfless experience sharing and kindly help in my research. Thanks Paul for helping with all the problems of my computer and software. I would like to express my sincere thanks to colleagues in the department of Immunology. You help me to get used to the working environment in Netherlands. And many thanks to all operators in FCF. You are always patient to help me solve practical issues when I

measure samples.

In addition, I would like to thank my dear Chinese friends in Leiden, Gangqi, Yan, Zhuang, Jiabin, Jing, Wenjun, Hongxia, Junling, Ying, Enchen, Wensen, Shengnan, Yufeng, Jin and all my friends. I enjoyed sharing experiences, drinking, having dinner and playing games together with you. Thank you for your friendship that always helped me to get back to work with full of energy. I also want to thank my dearest friends in China, Min and Yuning, who always listen to my difficulties and give me support anytime.

Last but not the least, I would like to express the depth of my gratitude to my families. Dear my dad and mom, thanks a lot for your unconditional love and support within these years. You contribute a lot to me and support me to achieve my goals in each stage of my study. Dear sister and brother in law, thanks for being there with me.

The journey comes to an end, but memories last forever.

