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Leiden**  
The Netherlands

**Bioengineering and biophysics of viral hemorrhagic fever**  
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**Citation**

Tang, H. (2023, September 19). *Bioengineering and biophysics of viral hemorrhagic fever*. Retrieved from <https://hdl.handle.net/1887/3641674>

Version: Publisher's Version

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

## **Acknowledgements**

This thesis is the result of many experiences I have encountered at Leiden University from dozens of remarkable people who I wish to acknowledge.

First and foremost, I would like to thank my esteemed supervisor, Assoc. Prof. Alireza Mashaghi for his invaluable advice, continuous support, and patience during my PhD. His immense knowledge and plentiful experience have encouraged me in all the time of my academic research life. Thanks to him I had the opportunity to get the CSC scholarship and work with cutting edge technology in a world leading institute. Although I doubted myself and had thought about giving up several times, he encouraged me to continue and helped me to overcome the homesick. Especially during the most difficult time of covid-19 pandemic, he gave me the moral support and the freedom I needed to move on. Alireza has supported me not only to come up with the thesis topic, but also academically and emotionally through the rough road to finish. His treasured notion ‘small assay to answer vital questions’ was influential in shaping my views to academic research. The experience learnt from him over the past five years will be an asset for the rest of my life.

My PhD committee guided me through all these years. I would also like to thank the committee members, Prof. dr. Hubertus Irth and Dr. Sylvia Le Dévédec for their feedback in our yearly PhD meetings.

Dozens of people have helped me immensely. I would like to express special gratitude to Prof. dr. Tom Ottenhoff, Dr. Mariëlle Haks, Kimberley Walburg, and Arthur Eibergen from Infectious Diseases Department of Leiden University Medical Center for giving me access to their laboratory and research facilities, and the stimulating discussions.

I also want to take this opportunity to thank all members of our division, including our chair, UDs, and our support staff, in particular Faisa Guled, Gerwin Spijksma and Tim Kloots.

A special group is not mentioned yet because they deserve their own part: the Medical Systems Biophysics and Bioengineering team. Huge gratitude goes out to Abidemi Junaid,

Yasmine Abouleila, Tom Evers, Vahid Sheikhhassani, Mehrad Babaei, Ahmed Ali and all the past and present members. All of you supported me greatly in my work and together we produced wonderful results. I still remember the days spent together with my organ chip 'tutor' Abidemi for our Ebola project, and my 'comrade-in-arms' Tom in the 'fight' with macrophages, as well as Vahid 'a versatile person' for starting up the 3D bioprinting platform. I really enjoyed the cherished time we had together in our first floor MSBB lab as well as Cell Observatory. It is your kind help that has made my research and life in Leiden a wonderful time.

My gratitude extends to the China Scholarship Council for the CSC scholarship that gave me the opportunity to undertake PhD work at Leiden University.

Finally, my appreciation also goes out to my parents Lihua and Tianyan, my wife Xinyue, rest of my family and my friends. Without their tremendous understanding and encouragement, it would be impossible for me to complete my PhD.

## Curriculum Vitae

Huaqi Tang was born on November, 1992 in Chifeng, China. He obtained his Bachelor in Pharmacy at the Inner Mongolia Medical University in 2014.

Subsequently, between 2014–2017, Huaqi pursued a Master in Pharmaceutical Analysis at the Beijing University of Chinese Medicine under supervision of Prof. dr. Yikun Sun, specifically to identify the main chemical constituents in an herbal formula Xuanhusuosan by UPLC-Q-TOF MS, and uncover its pharmacological mechanism on osteoarthritis by network pharmacology approach, *in vitro* and *in vivo* experiments.

In September 2017, Huaqi started his PhD at the Medical Systems Biophysics and Bioengineering group, Leiden Academic Centre for Drug Research, Leiden University. Huaqi was financially supported by the CSC Scholarship offered by the China Scholarship Council and this research was performed under the supervision of Assoc. Prof. Alireza Mashaghi. The project was focused on developing bioanalytical, lab-on-chip and single cell assays to investigate viral hemorrhagic fever viruses induced changes in vascular biology and macrophage immunometabolism. Work described in this thesis has been published in multiple peer-reviewed journals and presented at several conferences, including an oral talk at NWO Biophysics and a prize-winning poster presentation at the 2019 LACDR symposium.

Currently, Huaqi continues working at Alireza's group for the development of 3D bioprinted skin models to investigate the effect of Dengue viral proteins *in vitro*.

## List of Publications

1. **Huaqi Tang**, Yasmine Abouleila, Longlong Si, Ana Maria Ortega-Prieto, Christine L. Mummery, Donald E. Ingber, Alireza Mashaghi. Human Organs-on-Chips for Virology. *Trends in Microbiology*, 2020, 28(11): 934 - 946.
2. Abidemi Junaid†, **Huaqi Tang†**, Anne van Reeuwijk, Yasmine Abouleila, Petra Wuelfroth, Vincent van Duinen, Wendy Stam, Anton Jan van Zonneveld, Thomas Hankemeier, Alireza Mashaghi. Ebola Hemorrhagic Shock Syndrome-on-a-Chip. *iScience*, 2020, 23(1): 100765. (†equal contributions)
3. **Huaqi Tang**, Yasmine Abouleila, Alireza Mashaghi. Lassa Hemorrhagic Shock Syndrome-on-a-Chip. *Biotechnology & Bioengineering*, 2021, 118 (3): 1405–1410.
4. **Huaqi Tang**, Yasmine Abouleila, Anno Saris, Yoshihiro Shimizu, Tom H.M. Ottenhoff, Alireza Mashaghi. Ebola virus-like particles reprogram cellular metabolism. *Journal of Molecular Medicine*, 2023.
5. **Huaqi Tang**, Ahmed Ali, Eman Abdelazem, Tom H. M. Ottenhoff, Ron M. A. Heeren, Alireza Mashaghi. Random forest and live single-cell metabolomics reveal metabolic profiles of human macrophages upon polarization. *Biotechnology & Bioengineering*, under review.
6. Tom M. J. Evers, Vahid Sheikhhassani, **Huaqi Tang**, Mariëlle C. Haks, Tom H. M. Ottenhoff, Alireza Mashaghi. Single cell mechanical characterization of human macrophages. *Advanced NanoBiomed Research*, 2022: 2100133.