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**To IMAGE or to IMAGINE: visualization of  
parasite migration as a means to support  
(malaria) parasite vaccine development**

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Stellingen behorende bij het proefschrift getiteld:

# To IMAGE or to IMAGINE

## Visualization of parasite migration as a means to support (malaria) parasite vaccine development

1. Imaging has critically contributed to all aspects of basic science, translational studies and clinical medicine; a world without imaging is not imaginable.  
*Adapted from R. Weisleder and M. Nahrendorf. PNAS (2015)*
2. Sporozoite migration in the human host plays a major role in the performance of the current malaria vaccine candidates.  
*This thesis*
3. Quantitative microscopical imaging of parasite motility appeared at the interface of informatics and biomedical imaging and needs an interdisciplinary environment for further development.  
*This thesis*
4. The current challenge is to follow individual parasites on all potential paths through the host system, rather than only analyze them in specific, seemingly isolated tissues.  
*Adapted from T. Krüger et al. Trends in Parasitology (2018)*
5. Novel microvolume-based administration technologies that mimic sporozoite delivery by mosquito are a means to optimize the efficacy of intradermally delivered whole sporozoite vaccines.  
*This thesis*
6. Combining optical modalities can overcome the limitations of isolated imaging approaches and can provide unique information which is only achievable through correlated imaging.  
*Adapted from A. Walter et al. Frontiers in Physics (2020)*
7. A diverse range of experimental models, including human tissue models, are indispensable to approach the clinical reality as good as possible.  
*This thesis*
8. The power of the striking and beautiful imagery that is generated in imaging-based parasitic research is a reminder to always look on the bright side of life.  
*Adapted from L. Beattie et al. Cellular Microbiology (2011)*
9. Being outside the box as a child has been my most valuable preparation for a PhD in the lab; unorganized outdoor play should be encouraged to stop the trend of 'kid-containerization'.  
*Adapted from Richard Louv in 'Last Child in the Woods' (2005)*
10. The chief characteristic of scientists should be a sense of wonder that grows exponentially; the greater the knowledge, the deeper the mystery and the more we seek knowledge to create new mystery.  
*Adapted from E.O. Wilson in 'Biophilia' (1986)*
11. The mountains we climb during a PhD are the mountains of our mind.  
*Adapted from the documentary 'Mountain' (2017)*
12. Friendship is unnecessary, like philosophy, like art. It has no survival value; rather it is one of those things which give value to survival.  
*Adapted from C.S. Lewis in 'The Four Loves' (1960)*