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A supramolecular chemistry approach for potentiating live attenuated whole-organism vaccines

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Clichés notwithstanding: science, and the research that drives it, is a fundamentally collaborative endeavor. The work presented in this dissertation seeks to provide its own humble contribution to that endeavor, and was in itself an endeavor made possible by contributions of many. I am deeply grateful to all of you, for contributions big and small, that made this dissertation possible.

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Curriculum vitae

Nikolas Duszenko was born in Hamburg, Germany on 1 September, 1991. After shuttling back and forth across the Atlantic throughout childhood he attended Central High School in Aberdeen, South Dakota, USA, where graduated in 2010. He then headed for neighboring Nebraska to pursue an undergraduate degree in biochemistry at the University of Nebraska-Lincoln, graduating magna cum laude in 2014. Following two years of work at a clinical laboratory, he moved to the Netherlands to pursue a master's degree in biomedical science at the Leiden University Medical Center (LUMC), and obtained his degree in 2018. Here, he developed an interest in malaria vaccine research during his master's internship in the groups of Prof. Meta Roestenberg and Prof. Fijs van Leeuwen, which led him to continue the work with a PhD jointly performed at the Departments of Parasitology and Radiology of the LUMC – the results of which have been presented in this here dissertation. He plans to use the interdisciplinary competences gained during his PhD training to continue driving forward innovative scientific endeavors in the commercial sector.



List of Publications

Duszenko, N., van Schuijlenburg, R., Chevalley-Maurel, S., van Willigen, D.M., de Bes-Roeleveld, L., van der Wees, S., Naar, C., Baalbergen, E., Heicis, G., Bunschoten, A., Velders, A.H., Franke-Fayard, B., van Leeuwen, F.W.B., & Roestenberg, M. (2022). Chemically augmented malaria sporozoites display an improved immunogenic profile. *Front Immunol.* 2023 Aug 31;14:1204606. doi: 10.3389/fimmu.2023.1204606. eCollection 2023.

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