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## **Another Brick in the Wall: the role of the actinobacterial cell wall in antibiotic resistance, phylogeny and development**

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## Curriculum vitae

Lizah Tanja van der Aart was born on the 7th of August 1991 in Haarlem, the Netherlands. In 2009, she graduated with a Nature and Health profile from the Kennemer Lyceum in Overveen. That same year, she started her Bachelor's programme at the Institute of Biology, Leiden University. She finished her Bachelor's studies in 2012 with a research internship p on the topic of *Streptomyces* L-forms in the group of Dr. Dennis Claessen. Lizah then followed a Masters programme in Molecular Biotechnology and Health at the Leiden University where she did a research project on *Streptomyces* development in the lab of Prof. Gilles van Wezel. In the summer of 2014 she joined a Top Sector competition hosted by the NWO with the team "Pulp Fraction" and worked on the reduction of orange peel waste using Natural Deep Eutectic Solvents (NADES) under the supervision of Prof. Dr. Geert-Jan Witkamp and Dr. Young Choi at the Plant Sciences and Natural Products lab at the Leiden University. She obtained her Master degree, cum laude, in 2014. That same year, Lizah began as a PhD student under the supervision of Prof. Gilles van Wezel and Prof. Thomas Hankemeier; the results of this work are presented in this thesis. During her work as a PhD student, she has spent 3 weeks in Prof. Waldemar Vollmer's lab to learn about peptidoglycan isolation and analysis. She received an EMBO short-term fellowship to spend two months in the Lab of Prof. Michael Goodfellow to perform taxonomy on *Streptomyces roseifaciens*. She participated at several conferences, among which the ISBA17 in Turkey, The Great Wall Symposium 2017 in Portugal, and the GRC Cell Surface Conference at Mount Snow, USA, 2018. After her PhD, she will join the lab of Prof. Jeff Errington at the Centre for Bacterial Cell Biology in Newcastle upon Tyne (United Kingdom).

### List of publications:

Lizah T. van der Aart, Imen Nouioui, Alexander Kloosterman, Joost Willemse, Hua Zhu, Michael Goodfellow, Gilles P. van Wezel. (2019) Classification of *Streptomyces roseifaciens* sp. nov. as a novel verticillate strain with high potential for specialized metabolite production. *IJSEM*, Jan 9.

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Lizah T. van der Aart, Nicole Lemmens, Willem J van Wamel, Gilles P. van Wezel. (2016) Substrate inhibition of VanA by D-alanine reduces vancomycin resistance in a VanX-dependent manner. *Antimicrob. Agents Chemother.* vol. 60 no. 8 4930-4939

### Patent application:

Lizah T. van der Aart, Nicole Lemmens, Willem J van Wamel, Gilles P. van Wezel. (2016) Composition and method for treating infections caused by vancomycin-resistant infectious agents in a subject. European Patent Application PCT/NL2016/050919

### Popular Scientific blog posts (Dutch):

Lizah van der Aart and Anne van der Meij write about microbiology for Wetenschap.nu  
<https://wetenschap.nu/auteur/lizah-van-der-aart-en-anne-van-der-meij/>