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Solvent tolerance mechanisms in *Pseudomonas putida*

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Curriculum vitae

Hadiastri Kusumawardhani (Astri) was born on September 6th, 1991 in Bandung, Indonesia. She graduated from SMA Negeri 3 Bandung (high school) in 2009 and continued her study in pharmaceutical science and technology at the School of Pharmacy, Institut Teknologi Bandung (ITB) in Indonesia (2009-2013, cum laude). During her internship and final project, she became interested in the field of biotechnology. This interest motivated her to continue on her master degree (2012-2014, cum laude) in pharmaceutical biotechnology field at the School of Pharmacy, ITB, supported by a scholarship grant for fast-track program from the Ministry of Research, Technology, and Higher Education (DIKTI), Indonesia. After completing her pharmacist professional degree (2014-2015), she started her PhD with Prof. J.H. de Winde, at the Institute of Biology, Leiden University, The Netherlands, to study solvent tolerance mechanisms in industrial strains of *Pseudomonas*. This was supported by the Indonesia Endowment Fund for Education (LPDP) as scholarship provider from the Ministry of Finance, Indonesia. This work is described in this thesis. Astri is now going to continue her research trajectory as a post-doctoral fellow at Prof. Yolanda Schaerli's lab, University of Lausanne, Switzerland.

Publications

Kusumawardhani H, Hosseini R, de Winde JH. 2018. Solvent Tolerance in Bacteria: Fulfilling the Promise of the Biotech Era? *Trends Biotechnol* 36:1025–1039.

(DOI: 10.1016/j.tibtech.2018.04.007)

Kusumawardhani H, van Dijk D, Hosseini R, de Winde JH. 2020. A novel toxin-antitoxin module SlvT–SlvA regulates megaplasmid stability and incites solvent tolerance in *Pseudomonas putida* S12. *Appl Environ Microbiol* 86:e00686-20.

(DOI: 10.1128/AEM.00686-20)

Kusumawardhani H*, Hosseini R*, de Winde JH. Comparative analysis reveals the modular functional build-up of megaplasmid pTTS12 of *Pseudomonas putida* S12: a paradigm for transferable traits, plasmid stability and inheritance? *Submitted for publication*.

(DOI: 10.1101/2020.06.19.162511)

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Kusumawardhani H, Furtwängler B, Blommestijn M, Kalteny   A, van der Poel J, Kolk J, Hosseini R, de Winde J H. Adaptive laboratory evolution restores solvent tolerance in plasmid-cured *Pseudomonas putida* S12; a molecular analysis. *Submitted for publication*.

(DOI: 10.1101/2020.08.01.232264)

Kusumawardhani H, Yadav A, Kalteny   A, Furtwängler B, Hosseini R, de Winde JH. Characterization of an AraC family transcriptional regulator Afr in *Pseudomonas putida* S12. *Manuscript in preparation*.