Roadblocks & bypasses : protection of genome stability by translesion DNA synthesis in C. elegans

Bostelen, I. van

Acknowledgements | Dankwoord

As I write this, the final hurdle of this voyage called a PhD is in sight: my defense on December 3rd. On the twisting path there have been many roadblocks: disappointments, negative results, or other struggles. It can be hard to put those aside, forget frustrating projects and celebrate the victories, but now I am delighted about the end product. And although the journey has been challenging, it was never lonely. I feel fortunate that so many have helped me bypass the barriers I encountered.

Marcel, your enthusiasm for science is inspiring. Your drive has motivated me to persevere even when projects were seemingly not going anywhere. I owe many thanks to all other members of the Tijsterman group: Nick, Bennie, Wouter, Sophie, Robin, Ron, Jane, Jordi, Evelina, Maartje, Juliette, Joost & Hanneke. I miss your wise lessons, silly jokes and creative ideas. Juliette, you followed me as junior PhD candidate, but you are much wiser than I will ever be. Thank you for standing beside me as paranymph. I am also grateful to all other people from the department of Human Genetics, who all contributed to scientific excellence and a warm working environment.

Ik kan nogal snel afgeleid zijn, of beter: ik laat me graag afleiden. Mijn vele lieve vrienden (die ik hier niet allemaal kan noemen) zijn daar ontzettend goed in. Tegen allen zeg ik: Proost! Beste maat, Eric, bedankt voor al die jaren vriendschap en voor het strakke design van dit boek. Dank ook aan mijn cadeaufamilie: Mieke, Cor, Bas, Parmila, Marieke, Peter en kids. Dan mijn wijze broertje, Toine, ik voel me gesterkt met jou naast mij als paranymph! Lieve papa en mama, Boeddha had gelijk toen hij zei: Ook al draag je je ouders voor 100 jaar op je schouders dan nog heb je ze niet genoeg bedankt voor alles dat ze voor je gedaan hebben. Ik ben jullie voor zoveel meer dankbaar dan een set goede genen. Bedankt voor jullie steun, zelfs in lastige tijden. Ik beloof het, nu ben ik echt klaar met studeren. Liefste Jantine, wat ben ik gelukkig dat we zo'n goede symbiose zijn. Bedankt dat je mij achter mijn broek aangezeten hebt om dit boek af te maken. Ik ben blij met jou aan mijn zijde tijdens het laatste hoofdstuk van dit verhaal en de eerste hoofdstukken van nieuwe avonturen.

Salut,
Ivo

Curriculum vitae

Ivo van Bostelen was born on October 1st 1983 in Leiderdorp and grew up in Roelofarendsveen. In 2002, he successfully completed pre-university education (VWO) with a Nature and Health profile at the Bonaventura college in Leiden. With a keen interest in biology and chemistry Ivo then decided to study biotechnology at Wageningen University & Research center. When he completed his bachelor, he decided to specialize in cellular and molecular biology for his master of science. In 2008, Ivo got his first experience with scientific research by doing a short internship at the molecular biology department in the group of Prof. dr. Ton Bisseling in Wageningen, where he studied the molecular factors involved in plant-bacteria symbiosis. Shortly after, early in 2009, Ivo moved to the lab of Prof. dr. Monica Colaiácovo at the genetics department of Harvard Medical School in Boston USA, for a six months internship. At this prestigious environment he studied chromosomal paring and genome instability during meiosis. The work in Boston did not only get hem hooked on science, he also there got infected with the *C. elegans* bug. Upon return in the Netherlands Ivo decided to move somewhat more towards a medical profile; he found a great place to perform his final Master project at the department of experimental oncology in the group of Prof. dr. Susanne Lens, in the Utrecht Medical Center. Here, he got the chance to study the cellular processes and molecular factors that guide cell division in human cell cultures. Ivo successfully completed this project, and thereby his Master in Cellular and Molecular biotechnology in the summer of 2010. In March 2011, Ivo started his PhD work under the supervision of Prof. dr. Marcel Tijsterman at Leiden University Medical Center, at the former department of Toxicogenetics. After several years, Toxicogenetics became part of the department of Human Genetics where Ivo worked until 2017. As of August 2017, Ivo has made the transition from academia to industry and now works as a Project Leader at MRC Holland in Amsterdam, where he develops diagnostic tests for a wide range of human genetic diseases.

Publications

Y.B. Tzur, C.E. de Carvalho, S. Nadarajan, **I. van Bostelen**, Y. Gu, D.S. Chu, I.M. Cheeseman & M.P. Colaiácovo. LAB-1 targets PP1 and restricts Aurora B kinase upon entrance into meiosis to promote sister chromatid cohesion.
Published in PLoS Biology August 2012.

I. van Bostelen & M. Tijsterman. Combined loss of three DNA damage response pathways renders *C. elegans* intolerant to light.
Published in DNA Repair April 2017.

I. van Bostelen, R. van Schendel, S. Roerink & M. Tijsterman
Suppression of genome instability by Y-family TLS polymerase REV-1 in *C. elegans*.
Manuscript in preparation.

I. van Bostelen, R. van Schendel, R. Romeijn, M. Tijsterman. Translesion DNA synthesis of endogenous lesions protects genome integrity in *C. elegans*.
Manuscript in preparation.

R. van Schendel, **I. van Bostelen**, & M. Tijsterman. Mutagenic consequences of repair of cisplatin and psoralen interstrand crosslinks in *C. elegans*.
Manuscript in preparation.