ACKNOWLEDGMENTS

After four years and half (in two different countries, on two different continents in two different hemispheres, but same planet unfortunately), also this experience has reached its conclusion. It has been an exciting trip, with its good amount of challenges, failures, and successes. Overall, I will always be fond of this adventure. I need to thank my employers and sponsors who supported me financially throughout this period: the Netherlands Organisation for Science Research (NWO), the University of Groningen (RUG), the University of Wollongong (UOW), and the Australian Research Council (ARC). I was also very lucky to find so many great people that helped me successfully overcome this endeavour and this thesis would not be complete if I did not properly acknowledge them.

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Dr. Harshad Ghodke and Dr. Slobodan Jergic (aka Boban) were fundamental for my PhD. Under their watch and guidance I grew up as a scientist and their friendship contributed to my growth as a man. They both believe in the mentorship and training of students and they are both highly skilled. I was very lucky to meet you. Harshad joined our group in Groningen and we shared the office. Even if his project was completely independent of mine, he often enquired about my progress and spent time discussing possible strategies. I learnt a lot from him, especially in terms of planning and design. Being a modest person, he played his mentorship role in the shadow, never seeking proper recognition, so I am very happy that at least one chapter of this thesis sees both our names together. His partner David was also outstanding. He hosted me when I came to Wollongong and that’s how a great friendship started. Thank you very much boys!! The possibility to rely on you was very important to me!

I met Boban in Wollongong, instead. Back in Groningen, he was regarded as a legend, the go-to-guy for the E. coli replisome. Once in Wollongong, I understood why. He taught me a lot. Being himself a biochemist, I suspect he played a major role in pushing me towards the “dark side”. We ended up working side-by-side at a project that required both biochemical and biophysical approaches to crack it. To avoid bothering the other people in the office, we were often walking around the campus discussing about the meaning of the
experiments and planning the next steps. A bit unconventional but results were great! Thank you so much, for everything!! I also would like to apologize to your wonderful wife, Marija, for I was responsible for Boban coming back home late almost every day...

My RUG and UOW experiences were enriched also by the presence of Lisanne, Flynn, and Andrew. Thank you so much guys! I would like to spend few words on Lisanne. We started our PhD essentially together. However, she was already a veteran (she already did her master project in Antoine’s group) and she was tasked to follow me in the lab and teach me my new job, starting from how to pipette. I was often lost at the beginning of each of my sporadic sessions at the fluorescence microscope. Luckily she was always patient with me. Thank you very much! (And thank you for translating my summary chapter in Dutch!)

Now, I am going to follow a chronological order, so I will first acknowledge Groningen and then Wollongong. No fights please, the order and the level of importance are not strictly related...

I would like to thank Prof. Thorben M. Cordes, Prof. Thomas T.M. Palstra, and Prof. Bert Poolman, who agreed to be my cosupervisors at RUG in these crazy years. I would like to thank Margriet Derix who always solved any bureaucratic issues I had. My 16 months in Groningen were brief but great. The group over there warmly welcomed me and I had great fun with them. I would like to thank all of them, in particular Machteld, Samaneh, Michiel, Sarah, Victor, Giorgios, Evelyn, Jasper, and Karl.

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M. Berger (John Hopkins University, Baltimore, MD, USA) for the kind supply of his DnaB mutants. They turned out to be fundamental for my PhD!!!

Wollongong’s main attraction is undoubtedly its beaches. During the weekends, there was only one place where I was likely to be: North beach! Regardless of the weather condition, season, or the strength of the wind, I was there playing beachvolley with a large group of people from anywhere in the world. It all started with some friends from the Earth School, but weekend after weekend more people came by and joined us. Furthermore, Wollongong is a small town, so it was very likely to find the same people in pubs or at parties. Or to play futsal with them. We had so much fun!! Thank you so much!! Pranav, we met each other at beachvolley, we were lethal when playing together!! Abdul, always a charge of positive energy (once you wake up...)! Karel and Laura, you guys involved me in so many things and were always ready to give me a lift home, thank you so much!! Ruth, our friendship has always been worse than a rollercoaster, we were never good at avoiding our differences, but we both survive! Kirti, the most unpredictable person on the planet, except where friendship is concerned: there she is the best! I would like also to thank Johanna, D, Sebastian, Myrto, Damien, Bobby, Jacob, Jeff, Sonia, Monika, Leo, Louise, and Christian.

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Last but not least, the POVIAmo ð faire i seri!!! group: guys you were fantastic!! You were for me a true family!!! I can always rely on you!! For anything!! Mirko, the temperamental child of our group, you required a lot of work at the beginning (and you have no idea how many arguments I had with Vale because of you :D) but it was totally worth it! You went back to Europe too soon... Davide, the loving father that always made sure we had a plate of pasta in front of us! I value our friendship way more than your best carbonara! ;) Sara, the caring mother of the group, always putting anyone else ahead of you! We could not have been more different, and yet it turned out to be our strength!! Vale, resourceful, always present, always persistent, never tired, you are the number one!! A person cannot have a better friend!! Even when you are on the other side of the planet, you never make us feel you are not here. Thank you so much!!

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Usually, people thank their parents for giving them birth, raising them, giving them all the tools and opportunities to go far in life and accomplish great results. I did that in my two previous theses. I won’t repeat it again here because I am a poor writer and I can’t reformulate the same concept a third time. Go back and read them again, I do endorse every single word. I love you, always have, always will. This time though I increased the stakes and made your job impossible by leaving not only the country, but going Down Under and living in a completely different time zone. No way you could have hidden how uncomfortable this whole situation was for you. However, you accepted it and “patiently” tolerated it. Thank you so much for being my parents!!!