Acknowledgements
It has been almost four years since I moved to Groningen to pursue my PhD. I want to take this special moment to express my gratefulness to many people who have been supporting me during this unforgettable journey of my life.

First and foremost, I would like to express my deepest gratitude to my promotor, Prof. Lubbert Dijkhuizen. Thank you for giving me this great opportunity working at the group of Microbial physiology at the University of Groningen for last four years. Thank you for your patient guidance and continuous support throughout my 4 years PhD period. Your enthusiastic and positive encouragement has given me more confidence and optimism to pursue my research. I feel myself very lucky and honor to be one of your PhD students.

I would like to express my gratefulness to Dr. Sander S. van Leeuwen for being my co-promotor. Thank you for your instant and daily support for last four years of my PhD. Thank you for teaching me with NMR and other aspects of carbohydrate research. I really appreciate your valuable suggestions for my research, without your help I could not make it this far with my PhD.

I would like to thank the members of the reading committee Prof. G.J.P.H. Boons, Prof. O.P. Kuipers and Prof. M.W. Fraaije for your valuable time reading my thesis and your positive comments enabling me to improve my thesis.

I would like to thank Prof. Johannis P. Kamerling for your critical comments and suggestions for my research at the beginning stage.

I would like to thank the R&D people from FrieslandCampina for the interesting and useful discussions during my PhD.

I would like to thank people from Campus Fryslân for the interesting activities organized for the PhD students like PhD lunch, PhD conferences, especially thank to Liisa Heiman, Tonny Mulder, Joop Houtman, Githe van der Meulen.

I would like to thank Dr. Tjaard Pijning for his enthusiastic collaboration with us on the docking experiments and his great contribution to our manuscript.

I would like to thank Alicia Brandt for her guidance on working with commensal bacteria and useful discussions about Bifidobacteria.
I would like to thank Susana Figueroa and her supervisor Prof. Paul de Vos for their collaboration to test my mixture GL34.

I would like to show my grateful to our secretaries Bea and Anmara for their kind and instant help. I also want to show my thankful to Pieter, Geralt and Cecile for your great supports with all aspects relating to lab materials and equipment, that made my research more fruitful.

I would like to thank all of my colleagues who provided me a very friendly and positive working environment: Markus, Huifang, Ana, Mirjan, Hans-Jorg, Sahar, Vincent, Laura, Joana, Tim, Evelien, Rivca, Geralt, Cecile, Pieter, Sebas, Ahmed, Xiangfeng, Yuxiang, Willem, Stevan, Valantou, Palmela, Bara, Carmen.

I especially want to express my thankfulness to Cecile and Rivca for being my Paranymphs. Thank you two for your support and nice time at Micfys.

I would like to express my gratitude to Markus and Huifang for our collaborations and for your great companies. Thank Huifang for our great travelling time together. I also want to thank Huifang, Sebas, Ahmed and Palmela for being my kind office mates during the time at Micfys.

I also want to thank my friend Misun, thank you for your great support when I first moved in Groningen, and gave me a great time to get familiar with this city.

I would like to thank all of my Vietnamese friends in Groningen for the fun and memorable time with you all: TuanAnh-Hoa-Alice, Phú-Hương, Bây-Mai, Tinh-A.TuanAnh, Tuấn, Lâm, Hàng, Việt Phương. And my great thankful to my dear friends Gia-Tien and my little friend Bean to be always supporting me and make me feel home in Groningen.

I also want to thank my friends from Wageningen for their warm welcome when I’m back to my first place in the Netherlands: Nga, Nguyễn, Nguyên, Kim, Phương Hà, Tiến-Phương, Phương Nguyễn, Huyên.

And I especially would like to express my thankfulness to my best friend Diệp who made all of my trips to Wageningen great. Thank you for being with me at the most difficult times during my PhD. Thank you for being there with me instantly, for
feeding me with Vietnamese “home-made” food and also for so much fun we have had together.

I would like to thank my best friend in Vietnam em Huyễn, thank you so much for hours we spent on messenger, thanks for listening to all of my stuffs, for being there with me.

Now, I would like to express my special gratitude to my fiancé, Johan, thank you for being in my life. Thank you for being there for me and for handling all of my up-down moods at my hard times. Together with you, all of my difficulties and challenges become easier. You are a greatest chapter of my PhD that will not be published...And thank you for helping me with translation of my thesis summary into Dutch and joining me to design my book’s cover.

I also want to express my thankful to my fiancé’s family: Trees, Wim, Hugo, Jeroen, Marieke, and my little friends: Fiep and Hannah. Thank you for your warmest welcome to your family. Thank you for great time and cozy atmosphere at your family that made me feel like home. Thank to you I learned a lot about Dutch cultures and traditions.

Last but not least, to my beloved family in Vietnam:

Con cảm ơn Mẹ, em cảm ơn chị Lan anh Thắng, em cảm ơn chị Dung anh Tùng, cảm ơn các thiên thần hội nhỏ và nhỏ của di Hín: Quốc Anh, Châu Anh, Ong bé (Linh Đan) và Ong bi (Hải Nam). Những chuyến nghỉ hè về thăm nhà luôn luôn tiếp thêm động lực để con tiếp tục công việc nghiên cứu và hoàn thành sự lựa chọn của mình. Biết lặc cách đây 5-6 mươi giờ những người yêu ruột thịt đang ở đó làm con cảm thấy bình yên hơn để bước tiếp những chương đằng khắc pha những điều mới mẻ trong cuộc sống. Cả nhà mình là điều tuyệt vời nhất trên đời mà mah con có.

All the bests to you all,

Groningen, 28 October 2018

Hien Pham
Curriculum Vitae

Pham Thi Thu Hien was born on 17th Oct 1982 in Hoabinh, Vietnam. She studied Food technology at Hanoi University of Science and Technology and obtained her B.Sc. of science in 2006. After that she had been working in the Food-related industry in Vietnam for six years. In 2012, she got a scholarship from the Dutch government for her master education in the Netherlands. She studied Food biotechnology at Wageningen University and obtained her M.Sc. of science in 2014. She started her PhD at the University of Groningen in November 2014 and worked on the project: Synthesis and characterization of lactose and lactulose derived oligosaccharides by glucansucrase and trans-sialidase enzymes, under the guidance of Prof. Lubbert Dijkhuizen and Dr. Sander S. van Leeuwen.

Publications:

Pham TTH, Dijkhuizen L, van Leeuwen SS. Structural characterization of glucosylated lactose derivatives synthesized by the Lactobacillus reuteri GtfA and Gtf180 glucansucrase enzymes. Carbohydr Res. 2017;449:59-64.


Pham TTH, Dijkhuizen L, van Leeuwen SS. Structural characterization of glucosylated GOS derivatives synthesized by the Lactobacillus reuteri GtfA and Gtf180 glucansucrase enzymes. Carbohydr Res. 2018;470:57-63.

Pham TTH, ten Kate GA, Dijkhuizen L, van Leeuwen SS. Synthesis and characterization of sialylated lactose and lactulose derived oligosaccharides by Trypanosoma cruzi trans-sialidase. submitted.