Genetic regulatory networks inference: modeling, parameters estimation & model validation

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A long journey has begun since the day I have started my postgraduate research program in order to obtain my doctorate degree. I still remember the day I came for an interview in Amsterdam. I met Dr Jaap A. Kaandorp with whom I had a very engaging discussion. That day, I was not sure to really seize the magnitude of the challenges to address. Still, as soon as I received the offer of appointment I fought with the Swiss and Dutch administrations to obtain a visa, packed my luggage and moved to Amsterdam. This was the starting point of an intense learning experience: I have been constantly working and learning on wide variety of matters - the main challenge being to learn to be a good scientist. I know now that if one can acquire qualities and skills, being a good scientist is a lifetime and never ending exercise. I also know that learning to be a good scientist is a lost attempt if you do not have good mentors and companions at work and in life: I would not have achieved my objectives over these four years and half without the people who have guided me and accompanied me during this exciting period of my life.

First off all, I would like to thank my promoter, Prof. Dr. Peter Sloot, head of the Computational Science department at the University of Amsterdam for accepting me as a PhD student in his group. I have always been impressed by his ability to understand and propose solutions although his agenda was taking him all around the world.

I am endlessly thankful to my daily supervisor Dr Jaap A. Kaandorp. I think I was very fortunate to have such a supervisor. Besides being an excellent scientist, Jaap is also a true humanist who sincerely cares about the well being of his collaborators. Jaap has introduced me to the complex world of computational biology and has communicated me his passion for biology. He taught me so much on a wide range of issues. Although I was at the early stage off my career, Jaap has always respected my ideas and encouraged me to pursue my
convictions. He has been thoughtful, patient and also pushy when necessary. One of the sentences I will never forget from Jaap is probably: “when is the paper ready?” Well, his persistence has paid off and once again I would like to express him my infinite gratitude.

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The arrival of Dr Marten Postma has considerably changed and improved the course of my research. I am infinitely thankful to Marten who helped me carry on my research project and infinitely brought new perspectives. We have intensively collaborated, and shared so many thoughts. As a result working with him has made a huge difference on the orientation of my thesis. If there is something I will certainly remember from him is the “Quick and dirty!” as he used to say while keeping efficiency as a priority! Showing results is a concern in the life of a scientist. What Marten adds to that as a main motivation is the mystery behind the box.

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don’t know how i can express my gratitude. During these four years and half, your love was a true inspiration and source of comfort and happiness. With all my love, thank you.

A thesis is not only a scientific work, it is a life experience. One might loose some realities while concentrating on research priorities. I seize the opportunity of this major work to acknowledge a great person who, the same as me, crossed the world to learn and become a scientist, and with whom I collaborated: Jiangjuin. May he rest in peace.

Yves