The Cambridge experience

Recently, I spent five months in the city of Cambridge, UK. This visit was a part of my PhD, which I’m doing jointly at the dep. of Epidemiology & Biostatistics at the VUmc and the Mathematical Institute of Leiden University. The visit was made possible by an APH methodology travel grant, that paid for my lodging and travel expenses. Although the main purpose of the visit was to collaborate on a research project, I definitely managed to have some fun as well. I will try to describe both parts of my time in Cambridge here.

Cambridge has a reputation of being an old university town with a beautiful historical city centre... And it definitely is, but it is also a wonderful place to live and work. With its many tech companies (it is nicknamed the Silicon Valley of the UK), university, and research institutions, it is a melting pot of nationalities and cultures. Apart from its many historical buildings, Cambridge is a very green city, which is reflected in the many parks that are found throughout the city. Combined with the picturesque river Cam, Cambridge is actually kind of like a quick google image search would have you believe.

September 2018, I arrived in Cambridge with a big suitcase. I would be lodging with my landlord. During my time in Cambridge I enjoyed most of the touristy activities around. I punted on the river Cam multiple times (a punt is a type of boat, somewhat similar to the Venetian gondolas). I visited the famous Cambridge colleges such as King’s, St. Johns, and Trinity. I was invited to few Formal Halls (fancy dinners at a University college) and had a pint of IPA in the Eagle, where Watson and Crick ‘discovered the secret of life’ (the structure of DNA).

Of course I also worked on my research project. I collaborated with two researchers from the MRC biostatistics unit (BSU). The BSU is a leading institute in biostatistics, and especially in high dimensional Bayesian biostatistics, the topic of my PhD project. The aim of the project in Cambridge was to investigate drug response prediction models in cell lines data. These prediction models use the well-characterised genome and epi-genome of the cell lines to predict responses for many simultaneously screened drugs. The aim of these models is to eventually speed up drug discovery and allow for an easier investigation of novel drug combination therapies.

What was supposed to be a more applied project, quickly evolved into a big project where we developed new methodology as well. Because of the size of the project, I wasn’t able to finish during my time in Cambridge. Since we developed some novel and useful methodology, the plan is to split the project into one methodological and one applied article, hopefully to submit somewhere in 2019. Apart from the two planned articles, this excursion into the world of drug response prediction gave me a lot of new research ideas, both applied and methodological. In addition, I joined a reproducible research project at the BSU, a collaborative effort to write a book on reproducible research (https://github.com/rr-mrc-bsu/reproducible-research).

All in all, I thoroughly enjoyed my time in Cambridge, both from a research and a social perspective. I learned some new techniques to use in my future research. I got to experience a different research environment, made new friends and collaborators, and got to experience a different culture and people. I can definitely recommend an internship abroad to all PhD students. It helps you improve as a researcher and gives you the opportunity to experience a different culture to the fullest.

Magnus Münch
Figure 1: Formal Hall at St Catherine's College.
Figure 2: Punting on the river Cam.