

It is almost a year ago that I packed my bags and left to the US for a year, not knowing what to expect and prepared for the worst winter in my life. For my Master's program 'Cancer, Stem Cells and Developmental Biology' at the University of Utrecht I got the opportunity to discover cancer research abroad. Because of the excellent research and unique models I chose to perform a 1 year internship at the lab of Prof. Haber and Maheswaran at the Massachusetts General Hospital (Harvard Medical School) in Boston, MA USA.



The Haber/Maheswaran lab is specialized in a rare type of tumor cells, the circulating tumor cells. We all know that cancer unfortunately is a very deadly disease and most cancer-related deaths are due to secondary tumors. These tumors develop because some cells acquire the ability to infiltrate surrounding tissue and enter the bloodstream. From here, they can travel throughout the body and possibly form metastases. These cells in the bloodstream are called circulating tumor cells and provide a new window to spy on cancer. The Haber/Maheswaran lab developed a unique method to isolate and culture those cells. Using this, tumors can be analyzed in a non-invasive way and can be monitored over time to for example track response to treatment or analyze drug resistance methods. During my time I focused on optimizing culture methods of these cells in breast cancer and I researched the heterogeneity in drug resistance mechanisms in melanoma patients treated with BRAF inhibitors. Together with a team of a post-doc and technicians we discovered a novel drug resistance mechanism in these melanoma circulating tumor cells. Targeting this mechanisms, resistance mechanisms could potentially be overcome. Because of the great financing of cancer research in Boston I had the opportunity to work with many High-Tec techniques, I was allowed to visit a lab at Columbia University New York to learn a new technique and was I able to come up with and start my own projects. These things make my internship in Boston unique from an internship in The Netherlands. I am very grateful to my PI's, my Master's program and the Nora Baart Foundation for giving me this opportunity.

Next to the hard work in the lab, the social aspect of the lab is very big in Boston. The many cookie



hours, dinners and parties made the atmosphere in the lab very 'gezellig'. Besides the lab, Boston is a very inspiring city to live in. International and local students from all universities make the city feel very open and inspiring. The food culture, the many holidays, the many trips to islands around Boston and other states, all social events and parties, the baseball and basketball games and new friends have made my experience unforgettable. I made many friends whom I will miss incredibly once I am back. I learnt a lot about American culture, especially while closely following the presidential elections.

I am extremely grateful for all of my opportunities and experiences in Boston and I am positive this will give me a boost in my future science carrier. Boston will forever have a special place in my heart and I will definitely be going back soon!

