

My stay in Boston; all about research & road trips

January 2016, the moment was finally there. After months of preparing and a see-you-in-7-months-party, my adventure in Boston had started. Here I joined the Langenau Lab at Massachusetts General Hospital, affiliated to Harvard Medical School, to do work on a research project and fulfill the last part of my Masters program 'Cancer, Stem Cells, and Developmental Biology' at Utrecht University.



The lab of David Langenau investigates the molecular mechanisms that drive tumor initiation, progression, and relapse in pediatric cancers. The molecular mechanism is studied in zebrafish models, which are shown to recapitulate human disease. Therefore they are very useful for large *in vivo* genetic and drug screens. One of the used models is in the lab is for T-Cell Acute Lymphoblastic Leukemia (T-ALL). This disease is most prevalent in children and usually driven by the oncogene MYC. By injecting the oncogene MYC, under a thymic promoter, in one cell stage zebrafish embryo's, these zebrafish will develop T-ALL over time. By coinjecting potential oncogenes, the effect on tumor initiation and progression can be studied. A Postdoctoral Fellow in the lab found a novel collaborating oncogenic driver for T-ALL in this way. This protein is part of a bigger protein family and during my time in the lab I investigated whether they share a conserved molecular mechanism in tumor initiation. I received great mentorship from my supervisor and I am really grateful for all the time he invested to teach me a variety of techniques and about science in general. During my internship I got the chance to work together with all the other amazingly smart people in the lab, which has been really inspiring.

Besides all the hard work in the lab, I was happy to discover that my colleagues were also very social and "gezellig". They showed me the American street life and when the snow (finally) disappeared we were able to play some ball or frisbee. Sports is a huge part of American culture. In every bar you enter (after showing you are over 21 of course), at least multiple tv's are present to keep you updated about all sports you can think off. Though they love sports, biking is not one of them. Especially not for commuting. When I told them I bought a bike, they laughed, and wished me good luck being safe in Boston traffic (where the drivers are referred to as 'MAssholes'). I survived, with some little scratches, I have to say. But it was worth it. Two of my close American friends were bike lovers as well, and together we made many trips along the Charles river, to National Parks, and throughout the city on our way to the amazing museums in Boston. These trips would always end at Toscanini's, the best ice cream place in Boston.

Next to all the amazing sports in Boston, which also includes sailing and kayaking at the Charles, the city has way more to explore. There are a lot of comedy shows, good restaurants (serving famous lobster rolls), jazz bars, clubs. And most importantly: brunch spots. For my new favorite American habit: brunching. The 4 Americans I lived with introduced me to this wonderful thing. I loved it. These 7 months have been amazing. I would truly recommend everyone to go abroad if you have the possibility to do so. To get to know another scientific environment, but equally important, to get know another culture and new inspiring people.



Lab outing; with a view on Boston