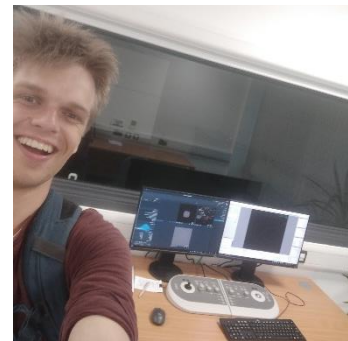


My time in the United Kingdom

Most people will never have heard of Pirbright, a small village in southern England about an hour east of London. However, it is the location of The Pirbright Institute, a world-renowned institute focussing on preventing and controlling livestock and zoonotic viruses. Thanks to the Nora Baart Foundation travel grant, I got the opportunity to perform an eight month internship at the department of *Viral Gene Expression* under the supervision of Dr. Trevor Sweeney.

Here, I focussed on the protein-RNA interaction of NS5-mediated translation regulation in flaviviruses such as Zika (ZIKV) and Dengue (DENV) virus. Flaviviruses are positive stranded RNA viruses, so that their genome consists out of a single RNA molecule that needs to be both translated and replicated at almost the same time. Due to the antiparallel direction of these process, they are inherently exclusive and need to be tightly controlled. My lab previously showed that the flavivirus RNA-dependent RNA polymerase NS5 directly inhibits viral translation by strongly binding to the genomic 5' UTR. I continued this line of research, by trying to find out more about the molecular mechanisms of these interactions, the domains needed for these interactions, and whether there was cross-reactivity between different viruses. My internship involved a range of different techniques, including recombinant protein purification, *in vitro* transcription, electrophoretic mobility shift assays, cryogenic electron microscopy, and ZIKV cell culture.



However, I also had more than enough time outside of the lab to discover the UK. Living in the middle of nowhere in England definitely had some challenges (including my 20 min bike ride to the closest supermarket), but I got rewarded with hiking paths starting from my front door and almost weekly waking up with roe deer in my backyard. But within 60 minutes I would be standing in the city centre of London, so that I spent many a weekend exploring this great city with many different museums (and musicals!) to go to. I also visited a lot of famous cities in England, walked parts of British long-distance hikes, visited ancient university towns, and strolled around the beaches of Southern England. I was also very lucky to have spent a week in Belfast for a conference, and two weeks in York for a collaborative project, two awesome cities with very interesting histories.



I had a great time in the UK, and would definitely encourage everyone to do an internship abroad. It helped me broaden my practical skill set with a range of techniques, but also allowed me to experience the cultural differences inside and outside of the lab in different countries. Thanks a lot to the Nora Baart Foundation for supporting my time in the UK!

