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**Biology of parasitism – Modern Approaches 2023**

**Marine Biological Laboratory visit – Woods Hole, MA, USA**

Earlier this year I was fortunate enough to receive a RSB travel grant to in part fund my attendance to a prestigious seven-week advanced parasitology course, along with fifteen other incredible PhDs and post-docs from around the world, in Woods Hole, USA. Coming from a parasitology PhD focusing on only trypanosomes, the opportunity to widen my knowledge and practical skill set is something I cannot thank RSB enough for enabling. Every morning we would hear from a different highly regarded speaker about the recent advances in their research, followed by an in-depth discussion where we had the opportunity to ask scientific and career questions to the speaker. Following this, every afternoon (and sometimes late into the night!) we would carry out lab work to answer a new research question.



All the students and some of the course conveners outside the original Marine Biological Laboratory building.

The course was subdivided into different modules, which would allow students to learn a plethora of new techniques. To begin with, we had two amazing course conveners teaching bioinformatics for the data handling that we could utilise throughout the course. During the Cell Biology module, I was able to learn to culture *plasmodium falciparum*, as well as carry out short read and long read sequencing of real clinical malaria samples. Following this, during the Vectors module, I had the opportunity to improve my imaging skills through the

use of confocal, Light-Sheet and polarized light microscopes. In addition to this, I also had the opportunity to work with parasite vectors, which was a totally new technique for me. Finally, despite being a chemistry by training, I can now (somewhat) call myself an immunologist! The final module in immunology focused on the immune response and innate immunity following a leishmaniasis infection. This module was my first experience carrying out animal work for dissection. As well as this, this module has made me confident flow cytometry skills.

Not only did I personally learn a huge amount of new skills and knowledge, but this course has also allowed me to build amazing connections with my fellow students. With some, there is now the possibility of collaboration, as well as now having a strong connection that will persist as we all move forward in our research careers. Finally, this course has directly come multiple post-doctoral opportunities, which I am likely to take up.

Again, I would whole-heartedly like to thank the RSB for their support, which enabled my attendance at this prestigious course.



Teste fly group from the Vectors module wearing our Biology of Parasitism t-shirts (designed ourselves!)



The final day of the course, packing up the lab – a very emotional day after seven weeks together!