

## **STSM at the Swedish University of Agricultural Sciences (13<sup>th</sup> – 17<sup>th</sup> January, 2020)**

In January 2020 I took part in a Short-Term Scientific Mission to the Swedish University of Agricultural Sciences (SLU) in order to obtain experience with molecular methods, especially droplet digital PCR (ddPCR). The group at SLU, lead by Professor Johan Höglund, have developed numerous molecular assays (both qPCR and ddPCR) in order to both diagnose and quantify gastrointestinal nematode (GIN) infections in ruminants. The work conducted by this group was highly relevant to the project I am involved in at the Norwegian University of Life Sciences (NMBU), and considering an emphasis on animal welfare in the RIBMIS Cost Action I deemed it worthwhile applying for the STSM.

During my 5-day stay at Uppsala, I received guidance on the entire workflow process involved in ddPCR assays focused on detecting GIN infections in ruminants, from DNA extractions, assay plate design and interpretation of results. Numerous discussions, both planned and spontaneous, with other researchers and technicians were also very beneficial to the work I am currently conducting, and I gained a great deal of insight into the field which would have been difficult to obtain had I not been physically present with a group working directly with such protocols. In addition, there were other aspects of my work that I had not gone specifically for, but turned out to be very beneficial subsequently. These included refinements to larval culture and fieldwork protocols.

This trip was incredibly useful for me for several reasons: I connected with numerous researchers in a field that I was relatively new to which will no doubt be beneficial in the coming months and years that I am working on my current project, and of course longer term, in light of project applications and so forth. Secondly, I received a very good introduction to ddPCR, a technique that is likely to be highly relevant to numerous fields, including parasitology for at least the next decade but most likely longer.



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