Host defence peptides (HDPs) are produced by parasitic nematodes to combat potentially pathogenic bacteria that co-habit their host niche and the host immune response. They are known to possess antimicrobial and immunomodulatory properties to promote parasitic survival. Functional characterisation of helminth HDPs is restricted to a handful of species, which do not include any from the *Trichuris* (whipworm) genus, which are the focus of my PhD.

The *Trichuris* genus includes *T. trichiura*, which causes the neglected tropical disease trichuriasis, *T. muris,* the mouse whipworm used as a laboratory model for human trichuriasis, and the pig whipworm species, *T. suis*. Published data identified 183 HDPs that are encoded within the genomes of these three nematode species which poses potential antimicrobial and/or immunomodulatory properties. As all three species are known to modulate the composition of the host gut microbiota and host immune response to infection, this project focuses on characterising HDPs produced by different parasitic lifecycle stages using a variety of techniques including 'omics methods, microbiological assays to identify those with antimicrobial activity and cell culture to explore their effects on host cells. Enhanced understanding of whipworm HDPs may inform future treatment methods and vaccine discovery for pathogen control.