

Investigating potential serodiagnostic target candidates for *Strongyloides fuelleborni*, using faecal and sera samples from Non-human primates and humans

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There are a few commercialised serodiagnostic tests for *Strongyloides stercoralis* (*S. stercoralis*), a soil-transmitted helminth that causes parasitic infection in humans. *Strongyloides fuelleborni* (*S. fuelleborni*) is typically found in non-human primates but has also been found to cause of human infections in Africa and Asia. Despite there being a few serological diagnostic tests for *S. stercoralis*, these have been found to have poor sensitivity for *S. fuelleborni*. Studies have shown *S. fuelleborni* infections within Fijian migrants in the UK as well as personnel from within the armed forces, highlighting it as an overlooked burden, not only in vulnerable communities, but also travellers returning to the UK from endemic regions. Presence of *Strongyloides* infection, within both humans and baboons, shows a need for a commercial diagnostic test for *S. fuelleborni*, from a public health and one health perspective. Currently within this project, optimisation for mass culturing of *S. fuelleborni* from faecal samples has been carried out using charcoal culturing techniques. Faecal samples collected from a baboon enclosure at Knowsley Park, were obtained a non-invasive pooled floor-sampling strategy. The cultures have been used to create lysate to carry forward for BCA assay, SDS page and western blot, and ELISA analysis. The aim of this project is to identify potential serodiagnostic targets for *S. fuelleborni* infections using ELISA technique.