

RE-ADVERTISEMENT

Call for Applications: Fully Funded PhD Studentship Protection Against Invasive Non-Typhoidal Salmonella (PAiNTS)-MLW Study About the Malawi Liverpool Wellcome Research Programme (MLW)

The Malawi Liverpool Wellcome Research Programme (MLW) is a leading international centre for research, training, and capacity strengthening, jointly led by Malawian and international scientists. Our mission is to generate high-quality evidence that improves health outcomes in Malawi and across the region.

MLW has a distinctive translational research portfolio spanning laboratory science, clinical trials, population-based research, and policy engagement. Research activities are organised into six thematic areas:

1. Infection Biology
2. Maternal, Neonatal and Child Health
3. Clinical and Experimental Medicine
4. Vaccines
5. Population Health
6. Social Science

These themes are supported by 22 active research groups. For more information, visit <https://www.mlw.mw>.

Background

Invasive non-typhoidal *Salmonella* (iNTS) disease is a major cause of illness and death among African children. The World Health Organization (WHO) has identified iNTS vaccination as one of the top ten vaccine development priorities for Africa. However, a critical research gap remains: the identification of correlates of protection (CoP), which are essential for accelerating vaccine development, licensure, and implementation.

The **Protection Against Invasive Non-Typhoidal *Salmonella* (PAiNTS)** project was established in response to a targeted Wellcome funding call to address this gap. The project aims to develop evidence-based, functionally validated, and internationally standardised correlates of protection against iNTS disease.

About the PAiNTS-MLW Project

PAiNTS is an international, multidisciplinary vaccinology consortium funded by Wellcome and led by the University of Edinburgh. The consortium brings together leading researchers to accelerate the development of effective vaccines against iNTS disease.

At MLW, the successful PhD candidate will work within one of the project's work packages, focusing on characterising endemic populations in Malawi and the Democratic Republic of Congo through immunological, serological, epidemiological, and mathematical modelling approaches.

This is an exceptional opportunity to contribute to a major international research programme, collaborate with leading scientists across Africa and Europe, and generate evidence that will inform national and international vaccine policy.

PhD Studentship

MLW invites applications from highly motivated candidates for a **fully funded PhD studentship** within the PAiNTS project. The successful candidate will be based in the **Salmonella Research Group** at MLW and registered for a PhD at the **University of Liverpool**.

PhD Research Focus

Working closely with the supervisory team, the successful candidate will develop a doctoral research project aligned with the objectives of PAiNTS-MLW. Activities may include:

- Supervising the collection of field epidemiological data, including age-specific disease incidence, faecal carriage, and malaria prevalence.
- Measuring anti-O-antigen (OAg) IgG antibody titres from field sites using ELISA.
- Developing additional laboratory assays to evaluate putative correlates of protection.
- Performing functional immunological assays, including ELISAs and serum bactericidal assays (SBAs).
- Contributing to scientific publications and other research outputs within the PAiNTS consortium.
- Supporting the Postdoctoral Research Associate (PDRA) in developing mathematical models to define immune protective thresholds using immunological and epidemiological data.
- Generating policy-relevant evidence to inform future iNTS vaccination strategies in Malawi and beyond.

The final PhD research questions will be developed jointly by the student and supervisory team.

Eligibility Criteria

Applicants must meet the following essential requirements:

- A Master's degree in immunology, vaccinology, epidemiology, microbiology, molecular biology and other relevant disciplines.
- A strong interest in infectious disease immunology, vaccinology, or epidemiological modelling.
- Experience in laboratory-based research, preferably in immunology.
- Demonstrated ability to collect, manage, and analyse quantitative data using statistical software such as R, Stata, or equivalent.
- Excellent analytical, scientific writing, and communication skills.
- Strong motivation to pursue a research-focused academic career.
- Evidence of the ability to work effectively within multidisciplinary teams and demonstrate leadership potential.
- Eligibility for PhD registration at the University of Liverpool, including excellent written and spoken English.

Desirable Qualifications: Preference will be given to candidates with experience in one or more of the following:

- Salmonella research.
- Genomic bioinformatics.
- Advanced statistical or mathematical modelling techniques.
- Advanced laboratory immunology methods.
- Epidemiological field research.
- Good Clinical Practice (GCP) training and certification.

What We Offer

The successful candidate will receive:

- A fully funded PhD studentship covering tuition fees, stipend, and research costs in line with MLW PhD funding packages.
- The opportunity to undertake impactful research in vaccinology with direct translational relevance.
- Close supervision and mentorship from internationally recognised researchers at MLW and the University of Liverpool.
- Overseas research and training placements with collaborators across Africa and Europe.
- Opportunities to engage directly with health policymakers in Malawi.
- Access to specialist training courses, international collaborations, and professional development opportunities.
- Support to present research at international scientific conferences.
- Mentorship in scientific writing, publishing, and grant development.
- A strong foundation for an international academic and research career.

Application Process

Interested candidates should submit the following documents by email to training@mlw.mw with the subject line:

PAiNTS-MLW PhD Application – [Your Name]

Applications should include:

1. A motivation letter (maximum two pages) describing your academic background, research interests, and career aspirations.
2. An up-to-date curriculum vitae (CV), including academic achievements and relevant research experience.
3. Certified copies of academic certificates and transcripts.

For informal enquiries, please contact training@mlw.mw.

Application Deadline: 19 October 2026

Only shortlisted candidates will be contacted.