

CALL FOR APPLICATIONS

Post	PhD in Innovative Monitoring Tools for Refined Vector and Pathogen Surveillance in Cameroon
Department	Medical Entomology / Vector Ecology and Molecular Biology Unit
Location	CRID, Yaoundé, Cameroon
Contract	PhD Research Fellowship – Fixed Term (36 months)
Report to	PhD Supervisor and Project Principal Investigator
Project Background:	<p>IMPACTING is a multi-country, EU-funded research programme aimed at strengthening surveillance and control of vector-borne diseases under conditions of global environmental change. The project integrates innovative vector monitoring tools, disease modelling, molecular diagnostics, and policy-oriented approaches to address arboviral diseases, malaria, and other vector-borne infections transmitted by mosquitoes and ticks.</p> <p>Within this framework, CRID is recruiting a PhD student in medical entomology and vector-borne disease surveillance to work on arboviruses in Cameroon. The PhD will focus on innovative vector surveillance systems, field entomology, vector ecology, and molecular diagnostics, with the objective of generating high-quality evidence to strengthen national surveillance systems and inform disease control strategies.</p>
Job Purpose	The PhD fellow will contribute to an international, interdisciplinary research programme investigating how environmental change, vector ecology, and human activities influence the transmission dynamics of arboviruses in Cameroon. The position will focus on the development, evaluation, and application of innovative entomological surveillance and monitoring tools for arboviral vectors (e.g. <i>Aedes</i> spp. and ticks), combining field-based research, trapping innovations, and molecular diagnostics.

Main Duties & Responsibilities

1. Vector Ecology and Innovative Trapping
Conduct field-based entomological surveys targeting <i>Aedes</i> mosquitoes and tick vectors across diverse ecological and epidemiological settings in Cameroon.
Evaluate, optimise, and compare innovative trapping systems (including odor-baited and semiochemical-based traps) for arbovirus surveillance.
Assess trap performance across seasons, transmission settings, and vector species using appropriate experimental designs (e.g. Latin square).
Contribute to identifying environmentally and operationally acceptable alternatives to conventional vector collection methods.
2. Arbovirus Surveillance in Vector Populations
Detect and monitor arboviruses (e.g. dengue, chikungunya, yellow fever) in vector populations using molecular diagnostic techniques (PCR, RT-PCR, sequencing).
Analyse spatial and temporal patterns of pathogen circulation and vector abundance to support early warning and risk assessment frameworks.
Evaluate innovative xenomonitoring strategies, including non-destructive approaches such as vector excreta analysis.
3. Microbiome and Transmission-Blocking Microorganisms
Characterise the microbiome of <i>Aedes</i> spp. mosquitoes from different ecological settings.
Contribute to the detection and analysis of microorganisms inducing pathogen-blocking effects in vectors.
4. Data Analysis, Modelling, and Integration
Manage, analyse, and interpret entomological and molecular data using appropriate statistical and spatial analysis tools.
Contribute to the integration of field data into surveillance and modelling platforms developed within the IMPACTING project.
Collaborate with epidemiologists, modellers, and public health stakeholders to translate entomological findings into actionable evidence.
5. Capacity Building and Collaboration



Work closely with CRID researchers, national disease control programmes, and IMPACTING consortium partners.

Participate in training activities, workshops, and collaborative research meetings at national and international levels.

Contribute to scientific publications, policy-relevant outputs, and dissemination activities for academic and public health audiences.

Qualifications, Skills, and Experience:

Required Qualifications

- Master's degree in Entomology, Parasitology, Vector Biology, Tropical Medicine, or a related discipline.

Desired Experience

- Field entomology and vector trapping experience.
- Experience in molecular diagnostics (PCR, RT-PCR, HRM).
- Experience working on vector-borne diseases or arboviruses is an asset.

Skills

- Strong capacity for field-based research in resource-limited settings.
- Data management and statistical analysis skills.
- Proficiency in English or French (working knowledge of both languages is an advantage).

Personal Attributes

- High motivation and ability to work independently.
- Strong organisational and interpersonal skills.
- Willingness to conduct extended fieldwork in endemic settings.

Benefits

- Supervision by experienced CRID scientists within an international consortium.
- Access to advanced molecular laboratories and entomology platforms at CRID.
- Monthly stipend and research support in line with IMPACTING fellowship conditions.
- Opportunities for international collaboration, training, and scientific publications. Health insurance plans and annual holidays.



APPLICATION INSTRUCTIONS: Applicants must submit the following documents
A cover letter expressing your interest and suitability.
A curriculum vitae (max. 3 pages).
Academic transcripts and certificates (Bachelor's and Master's degrees).
A brief research concept note aligned with arbovirus surveillance and control.
Names and contact details of two academic referees.

Working conditions	Full time, 40 hours per week.
	Contract Duration: February 2026 – February 2029
How to Apply	To apply click on this link https://forms.gle/PMH44iQi9L4wYnwt9
Deadline for applications	24 January 2026
Expected Start Date	02 February 2026

Note:

- Women, individuals with disabilities, and candidates from VBD-affected communities are strongly encouraged to apply.
- Only shortlisted candidates will be contacted. Shortlisted applicants may undergo a written assessment and interview.

For any inquiries: crid@crid-cam.net With copies to: **Dr Basile Kamgang** – basile.kamgang@crid-cam.net