



IVCC

Building Partnerships
Creating Solutions
Saving Lives

Responding to the challenge of Gaps in the Malaria Vector Control Toolbox

Call for Expressions of Interest to fund Proof of Concept (PoC) projects addressing gaps in vector control interventions.

Submission Deadline Monday 16th December 2024

Introduction

IVCC is issuing this call for Expressions of Interest (EOI) to fund Proof of Concept (PoC) projects for new vector control tools, or extensions and modifications of existing tools, that target aspects of the mosquito lifecycle beyond indoor feeding and resting.

This call aims to address the challenge of what is variously called outdoor, residual and persistent transmission of malaria.

Context

Current WHO malaria vector control policy relies almost entirely on methods that target indoor feeding and/or resting mosquitoes through use of Indoor Residual Spraying (IRS) and Insecticide-Treated Nets (ITNs).

Several supplemental approaches, including spatial emanators, insecticide-treated eave tubes and targeted sugar baits have undergone large-scale trials and are under evaluation by the WHO Vector Control Advisory Group (VCAG) for public health value.

Additional tools that target aspects of the mosquito lifecycle beyond indoor feeding/resting, are still urgently needed to address gaps in malaria transmission.

There is unlikely to be a stand-alone technological solution, so new tools will have to interact with and complement existing interventions and be appropriate for use in a range of social, cultural, ecological and economic settings.

IVCC issued a similar call for proposals in 2014, which led to three PoC projects: targeted insecticidal spraying of *Anopheles* mating swarms, a push-pull approach to mosquito control, and Attractive Targeted Sugar Baits (ATSB).¹

¹ <https://www.ivcc.com/research-development/outdoor-biting-control/>

Objective

The objective of this initiative is to support applicants (including partnerships and consortia) to develop the necessary PoC evidence for new vector control interventions that address the gaps described above. If these PoC projects are deemed successful by IVCC, the interventions will be considered for further development and evaluation.

Product/Concept Scope

Support is restricted to insecticide-based products and/or those involving agents which modify mosquito behaviour.

Products/concepts should also be scalable for public health impact; interventions that would only be accessible via the consumer retail market will not be considered.

Products/concepts that may be supported include interventions that affect mosquito populations, mosquito-human interactions, or infectivity or combinations of these. IVCC envisions there may be different interventions for different transmission ecology contexts and will consider context-specific proposals, e.g., an intervention targetting *An. arabiensis* in an African village may differ from an intervention targetting *An. dirus* in the forests of Asia or *An. farauti* in a coastal village of Papua New Guinea.

Existing products and vector control approaches listed below are out of scope unless a disruptive, transformational innovation is proposed which promises to overcome the current barriers to wide scale use and cost-effectiveness of the approach. Note that genetically modified mosquitoes, *Wolbachia* and endectocides are out of scope for IVCC.

- ITNs
- IRS
- Larvicides
- Spatial emanators
- Bite-proof clothing
- Insecticide-treated clothing
- Swarm spraying
- Targeted sugar baits
- Odour baited traps
- GM mosquitoes
- Endosymbiotic organisms such as *Wolbachia*
- Endectocides
- Mosquito surveillance tools

Description of the PoC stage and Assessment Criteria

This PoC stage is intended to be a rapid (12-18 month) demonstration of the PoC.

Following IVCC’s review process, if the PoC is deemed successful, applicants may be invited to submit a follow-on proposal to further validate the approach/tool through expanded field trials and product development.

Against each of the following criteria the EoI must demonstrate:

- A clear plan of how each criterion will be addressed in the PoC project;
- An understanding of the challenges associated with each criterion;
- Solutions of how to address these challenges.

The criteria the EoI will be assessed against are as follows:

Criteria	Weighting
Entomological efficacy- <i>400 words max</i>	35%
Technological development required- <i>400 words max</i>	15%
User compliance and acceptability (acceptability)- <i>200 words max</i>	10%
Safety and regulatory profile (adoptability)- <i>200 words max</i>	10%
Manufacturing sustainability (scalability/product availability)- <i>200 words max</i>	10%
Economics (affordability)- <i>200 words max</i>	10%
Applicant’s track record of innovation/capability- <i>200 words max</i>	10%

Budget

IVCC has a total of USD \$3m for this initiative and anticipates supporting between 2-8 projects in this PoC stage. Applicants are asked to take this into consideration when drawing up their budgets

Approach

IVCC will employ a flexible approach to length of project, budget and stage-gating, i.e. a range of small to large projects may be funded with different budget sizes depending on merit and with different criteria for progressing to the next stage of development (stage gates).

Who can apply?

Individual organisations or a consortium of organisations may apply. Acknowledging that applicants may not have all the necessary capabilities to complete the requirements of the PoC stage, IVCC may suggest bringing in external expertise to support their project.

How to apply?

Application will be through the LSTM Procurement Portal.

Via the Portal, please provide written responses to all of the sections requested:

- Applicant details
- Description of the product/concept, context where/how it would be used and overview of the PoC stage proposed
- Criteria questions

You will also be asked to upload a one-page project plan or Gantt chart and a one-page proposal budget.

Deadline for submission of Expression of Interest: 16th December 2024

Review Process

All EoI applications will undergo a full screening process.

We aim to inform applicants if they have been successful or not at this EoI stage by the end of February 2025.

Applicants who are successful at the EoI stage will be invited to collaborate with IVCC on developing a Complete Project Specification. No funding will be awarded for this stage.

The Complete Project Specification will then undergo its own review process before any decision is taken to fund the project or not. IVCC is not obligated to fund the project proposals and reserves the right to terminate any collaboration at the review stage.

We aim to make awards to applicants successful at the Complete Project Specification stage by Quarter 4 2025.