Call for applications

Selection of a consortium of institutions for the organization of a workshop and commissioned reviews to develop an international network on surveillance of insecticide resistance and alternative methods of vector control for vectors of emerging arboviruses

Deadline for submission: 23 October 2015, 17:00 CET

Institutions working on monitoring the insecticide resistance and the development of innovative vector control approaches for the vectors of emerging arboviruses are invited to submit collaborative proposals to organize and host a workshop, as well as commissioned reviews for evidence on the current knowledge and gaps in insecticide resistance for vectors of emerging arboviruses such as dengue, chikungunya and Zika viruses. The proposal should also include a review of alternative methods of vector control, and the expected results should present the requirements and feasibility of the implementation of an international surveillance and research network on surveillance of vectors of emerging arboviruses.

The proposal should include at least two to three institutions based in low- and middle-income countries (LMICs) and in different WHO regions. The workshop will be co-organized by the consortium of institutions and hosted by one institution. The commissioned reviews can be selected by the different institutions of the consortium. However, only one or two institutions of the consortium will lead the activity.

This call is in support of the development of a new strategic activity for the Vectors, Environment and Society Unit of TDR in partnership with the Neglected Tropical Disease (NTD) Department of WHO, to better organize the surveillance of insecticide resistance of the vectors of arboviruses and to develop new vector control alternatives.

Under this call, only one multi-country proposal will be selected for funding for one year for a maximum total funding of US$ 200 000.
Background and rationale
The control of insects/arthropod vectors of emerging diseases in poor countries relies mainly on the use of chemical insecticides. As an example, for the control of vectors of arboviruses such as dengue and chikungunya, the use of larvicide and/or space spraying are the primary control tools, even if community-based source reduction of breeding sites is largely promoted. However, this almost unique vector control approach is strongly impaired by the development of resistance among the target vectors. Insecticide resistance can be chemical, physiological and behavioural, highlighting the large scale of evading mechanisms the vectors can develop.

The current knowledge and research gaps on the resistance of vectors of arboviruses at an international level is currently not organized into a network, which does not facilitate the dissemination of information on the subject. The household insecticides market, estimated at over US$ 8 billion, may also have contributed to the development of resistance. On the other hand, the insect pests in agriculture have been the target of the same chemical methods in the past and in recent years. But, because the development of resistance was threatening the food production, other technologies and methods have been developed to protect crops. These new methodologies include a large panel of approaches, from the high-standard technologies such as genetically transformed insects/plants to the more environmental friendly approaches such as agro-ecosystems, with different types of tools such as trapping, collecting and diverting from, based on insect physiology, mating behaviour, feeding preferences and others.

The monitoring of resistance for the vectors of emerging arboviruses, as well as the review of alternative methods for vector control, could begin with commissioned reviews from experts, followed by a more focused workshop, where scientists from both public health and agriculture could interact and exchange their experience. The reviews should help generate an international network, and the workshop should develop recommendations for research and implementation priorities and needs.

Objectives and expected outcomes and outputs
The overall objective of this call is better monitoring of insecticide resistance for vectors of arboviruses. This is designed to be accomplished through an international network and a review of the vector control methods that are alternatives to insecticides. Expert consultations and a workshop will provide recommendations on the research and implementation needs.

The following outcomes will be undertaken by the consortium of institutions applying for the call:

- One workshop organized and held in one of the institutions of the consortium. This institution should be based in a LMIC.
- Commissioned reviews (no less than 5) managed by the consortium on the topics of insecticide resistance of vectors or arboviruses and alternative methods for vector control.
- Proceedings of the workshop with recommendations on research needs for both insecticide resistance and alternative methods of vector control.
- A plan or proposal for future collaborations between the institutions included in the consortium.

Expected outputs:

- Development of an effective network for monitoring insecticide resistance on vectors of arboviruses.
- Development of an effective network for developing alternative methods for the control of vectors of arboviruses.
- Research and training proposals.
- Eventual policy outputs.
- Expert recommendations on how to better enhance the insecticide resistance monitoring, development of alternative methods for vector control and overall insecticide resistance management.
Eligibility criteria

Institutions are invited to submit collaborative proposals where:

- Two or more institutions are forming an international consortium.
- The eligible consortium will be led by an institution based in a LMIC.
- The eligible Consortium can include academic institutions and health services that are working on insecticide resistance in vectors of arboviruses and have the facilities to organize the workshop.
- These institutions should also have a background in at least one of the following topics on emerging vector-borne diseases: surveillance, research, medical entomology, vector control.
- The proposal should clearly state how the workshop will be organized, the topics of the commissioned reviews and how the expected outputs are in line with the objectives of this call.

How to apply

The applications for the consortium of institutions should include (in a maximum of 15 pages, Font 10 to 12):

**Part 1** - Administrative documentation (3 to 4 pages): with names and addresses of institutions, Principal Investigator (PI) with name and references for each institution, the name and address of the coordinator for the consortium, a short description of the facilities, the experience of the institutions in the organization of workshops/meeting (for the past 5 years) and a short description of the expertise and background of the institutions on the relevant topics. One or two institutions must be designated as the lead institution(s) and the partner institutions need to agree on which institution(s) is(are) taking the lead and will receive the funds that will be re-distributed to the partners. They don’t have to create a legal consortium; usually this can be done through a partnership contract.

**Part 2** – Workshop organization (3 to 4 pages): with the objectives and agenda of the proposed workshop mentioning estimated dates/period and hosting institution, the items included in the workshops with references as well as the provisional list of speakers/participants.

**Part 3** - The expected outputs of the workshops (3 to 4 pages), relevant to expected outputs indicated above and the risk assessments and management of the project.

**Part 4** – The commissioned reviews topics and the dates at which the review will be available (1 page).

**Part 5** – The detailed budget (2 to 3 pages).

**Part 6** – The support (as a letter or statement of agreement) of the Director or Legal Representative of each institution involved in the consortium.

Proposals can be submitted in English or French.

The posted applications (submitted no later than 23 October 2015, 17:00 hours CET ) should be sent by mail or email to:

Dr Florence Fouque fouquef@who.int and with a copy to: masoudig@who.int
TDR/VES
World Health Organization
20 Avenue Appia
1211 Geneva 27, Switzerland
Evaluation criteria

An external scientific advisory group appointed by the Director of TDR will review the proposals based on criteria such as scientific merit, relevance and feasibility, taking into account gender and equity issues. Proposals will be reviewed and evaluated by an ad hoc committee which will attribute a rank from 1 to 5 for each of the criteria, with 1 the lowest score and 5 the highest.

Scientific merit
• Expertise in the related field.
• Clear and well defined objectives for the proposed workshop.
• Useful and feasible content during the workshop with detailed plans for the workshop agenda, questions, report, proceedings, following of outputs.
• Appropriate literature review to invite pertinent speakers.
• Clear and well defined topics for the commissioned reviews.

Relevance
• Institutions within the consortium have demonstrated capability to organize such workshop
• Geographic representation of the invited participants
• Potential of workshop to influence policy through policy linkages with workshop results
• Dissemination and utilization of the workshop proceedings and recommendations

Feasibility
• Feasible implementation timeline (Gantt chart)
• Quality/suitability of the institution(s)/team (composition, expertise) for the proposed tasks
• Ability of the principal investigator to manage the project based on track record
• Risk assessment and management approach to the project

Budget
• Soundness and appropriateness of budget
• Justification of budget

Selection process

Only one multi-country proposal will be selected for funding for one year for a maximum total funding of US$ 200 000. The proposal will be selected following an open competitive call for applications. The selection of projects for funding under this call will be conducted independently by an ad-hoc committee established by TDR. The committee will review and evaluate the proposals submitted based on scientific background of institutions included in the consortium, relevance to the call and feasibility.

For further information on the call, please contact:

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or

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