# Vector Control Professional Placement Programme 2024



### A funded development opportunity for African vector researchers









## About Innovation to Impact

Our mission is to reduce the impact of vector-borne diseases and contribute to their eventual elimination by improving the product development landscape for vector control tools. We aim at supporting enhanced evaluation processes, facilitating sustained quality of vector control products and improving their judicious and safe use with а focus on shortening time to market.

Innovation to Impact (I2I) is a global partnership aimed at transforming the development and delivery of vector control products. I2I works closely with over 30 stakeholders, including the World Health Organization, the Bill & Melinda Gates Foundation, and LSTM's Innovative Vector Control Consortium, to find stakeholder consensus on shared challenges and to catalyse solutions.



**Our vision** is a development environment for vector control products conducive to dialogue, innovation and investment and which efficiently delivers a steady stream of new, quality tools to those who need them most, and safeguards their continued effectiveness.





### **About LSTM**

I2I is based within the Vector Biology Department at LSTM in Liverpool, UK.



Founded in 1898, LSTM was the first Institution of its kind in the world, born out of a need to address the challenges of tropical diseases.

**LSTM's mission** is to improve health outcomes in disadvantaged populations globally, through partnership in research and education.

**LSTM's vision** is healthy lives around the world.

**LSTM's strategy** is built around four core themes; Research, Education, partnerships and Investing in our future.

Research at LSTM is at the forefront of addressing some of the most pressing health issues facing the world today, including infectious diseases such as malaria, HIV/AIDS, tuberculosis and neglected tropical diseases. The school's researchers conduct cutting-edge studies to understand the causes, transmission and treatment of these diseases, with a focus on developing innovative interventions and strategies for prevention and control.

# The Vector Control Professional Placement Programme



The Vector Control Professional Placement Programme, an initiative of Innovation to Impact (I2I) and funded by the Bill & Melinda Gates Foundation, aims to identify and place qualified researchers already working in vector control at African research institutes within established vector control manufacturers to offer hands-on experience in all aspects of product development from design to launch.

This experience will confer an understanding of the process and mindset of product interventions. Moreover, it will give the opportunity to develop cross-sectorial relationships and information exchange between the companies and African research partners. Following the completion of this programme, researchers will be expected to return to their institutions to enhance understanding and capacity building and to help stimulate African led innovations to combat vector borne disease.











## The Professional Placements

### Benefits to individual researchers

Participation in the VCPPP offers a range of benefits to researchers, including:

- A fully funded placement with a locally competitive salary, accommodation, insurance, visas and support for accompanying dependants;
- The opportunity to develop in-demand skills in vector control product development, business planning, quality assurance, regulatory affairs as well as soft skills:
- Networking and the two-way sharing of knowledge with local and international researchers.

The Vector Control
Product Developent
Partnership Programme
(VCPPP) is an opportunity
for researchers to learn
best practice skills while
directly contributing to
the development of
global health
interventions.

### **Benefits to African institutes**

Researchers will be seconded to the industry partner and will complete placements of 12 months before returning to their home institute to enable knowledge transfer.

This will ensure African institutes benefit from placements and will help to increase their existing capacity to contribute to malaria and vector control discovery and produce development initiatives.

Home research institutes bear no costs associated with the programme.



### The Professional **Placements**

The placement positions will be based at a relevant office of the hosting product developer with the successful candidate working as part of the public health team. The position will be expected to experience all aspects of product development from design to development through to evaluation, manufacturing and registration of vector control tools and not focus solely on scientific aspects.

Each placement will differ slightly depending on the host company, their processes and what their development focus is, but applicants should expect each position to include relevant experience in the key stages of the product development cycle, including:



**Research and Development** 



**Business Planning** 



Product Safety



**Regulatory Affairs** 



**Manufacturing Processes** 



**Quality Assurance and Control** 



**User-centred Design Principles** 



# Industry Partner VESTERGAARD®#

IMPACTING PEOPLE

Vestergaard is one of the world's leading manufacturers of innovative, high-quality tools to improve global health outcomes in mainly low- and middle-income countries. Known for PermaNet® long-lasting insecticidal nets (LLINs) to prevent malaria, the company has manufactured over one billion LLINs. Vestergaard's core mission of innovation in disease-controlled textiles is fuelled by its humanitarian entrepreneurship to create a healthier planet.

#### PermaNet® Product Portfolio

Today, the company offers the most comprehensive portfolio of **LLINs** available in the market. This diverse portfolio includes PermaNet Dual, the company's first dual active ingredient net that provides the highest protection against pyrethroid-resistant mosquitoes, 3.0, the first piperonyl PermaNet butoxide (PBO) pyrethroid net with a unique controlled release design, and PermaNet 2.0, the most tested and deployed pyrethroid LLIN.



#### **Innovations and Partnerships**

Vestergaard is committed to harnessing the power of science, data and partnerships and engages in multiple impactful collaborations. Three notable partnerships are IR Mapper, the Vestergaard-Noguchi Memorial Institute for Medical Research Vector Labs, and an innovative tool developed jointly with the Liverpool School of Tropical Medicine.

### **Industry Partner**

### **VESTERGAARD**®##

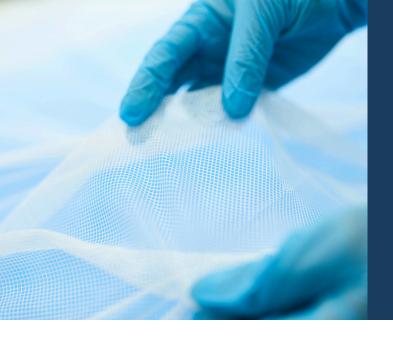
MPACTING PEOPLE



The IR Mapper platform (<u>www.irmapper.com</u>) originated from a collaborative effort between Vestergaard and the Kenya Medical Research Institute's Centre for Global Health Research (KEMRI-CGHR). Prompted by the World Health Organization's call to address insecticide resistance in malaria vectors, Vestergaard and KEMRI-CGHR partnered to develop IR Mapper in 2012. This interface offers a user-friendly tool that provides a dependable, up-to-date visualisation of published insecticide resistance data in malaria and dengue mosquito vectors worldwide.



Since 2011, Vestergaard has fostered a close collaboration with the Noguchi Memorial Institute for Medical Research (NMIMR). Together, they established the Vestergaard-NMIMR Vector Labs (VNVL) in Accra, Ghana. This collaborative initiative enables high-throughput product testing supported by a high-capacity insectary of susceptible and resistant strains Anopheles gambiae sl. The VNVL team is also engaged in research projects to monitor and enhance the understanding of insecticide resistance intensity in malaria mosquitoes. VNVL plays a crucial role in nurturing current and future generations of skilled vector control professionals who play an integral role in testing and development of LLINs and next generation vector control tools.



# Industry Partner VESTERGAARD®#

In another transformative and recognised alliance, the Liverpool School of Tropical Medicine (LSTM) and Vestergaard joined forces to combat Human African Trypanosomiasis (HAT) to develop 'Tiny Targets,' an innovative, insecticide-treated, cost-effective method that applies PermaNet LLIN technology for tsetse control. Used in large-scale programmes across Uganda, Chad, Guinea, Cote d'Ivoire, and the Democratic Republic of the Congo, Tiny Targets have safeguarded 1.7 million at-risk individuals, aiding the World Health Organization's goal to reduce gHAT cases to under 2,000 globally. Vestergaard remains committed to donating Tiny Targets until the elimination of gHAT.



Expanding beyond these collaborations, Vestergaard's commitment to innovation has contributed to other ground-breaking tools rooted in PermaNet technology. These tools address challenges ranging from Guinea worm disease to ensuring food security and monitoring health at the household and community level.

### **About Vestergaard**

Founded in 1957, the company is headquartered in Switzerland, with a collaborative vector lab in Ghana and a quality control and manufacturing lab in Vietnam. A member of the United Nations Global Compact (UNGC) since 2006, Vestergaard received B Corp certification in 2021, demonstrating the company's commitment to balance purpose and profit.

### How to apply



Candidates must currently be working in vector control at a reputable African research institute and hold a Master of Science and/or Doctor of Philosophy. Other requirements for each placement vary.

Applications will open May 2024.

Applicants will be required to:

- Provide their Curriculum Vitae (CV)
- Write a Letter of Interest in response to a specific partnership placement description with details of their skills, experience and interest in the placement; and
- Submit a letter of recommendation from the Director or Line Manager at their home research institute, providing approval for the candidate to be seconded to the industry partner;
- If they wish to, submit a second letter of recommendation from another individual in the candidate's professional network (e.g., a mentor or colleague).
- Be able to effectively communicate and work in English.

Shortlisted candidates will be invited to interview with the placement's industry partner and Innovation to Impact.

For more information please contact contact@innovation2impact.org

