

Press release

Innovative video game brings gene drive technology to life in Africa’s fight against malaria

OUAGADOUGOU, Burkina Faso, 15 April 2025 – Ahead of [World Malaria Day](#), Target Malaria, a not-for-profit research consortium pioneering genetic technologies for malaria control, hosted a live demonstration this month of its educational video game, [Target Malaria: The Game](#). This interactive tool is reshaping how science is communicated by making complex genetic technologies accessible, engaging, and fun.

Originally launched at the end of 2024, the educational game places players in the role of a lab technician working on genetically modified mosquitoes — a potential tool for vector control being explored to eliminate malaria in Africa. It introduces players of all ages and backgrounds to the real-world tools and processes of molecular biology through two modules: “Microinjection” and “Transgenic Screening.”



In “Microinjection”, players simulate injecting a DNA solution into mosquito embryos, and in “Transgenic Screening”, players sort fluorescent, genetically modified mosquito larvae.

“This isn't just a game — it's a capacity-building tool,” says Louise Marston, Senior Research Technician for Target Malaria at the Crisanti Lab, in Imperial College London and who conceived the idea for the game. “We're demonstrating how a digital experience can bring scientific discovery to life, even in low-connectivity environments.”

A tool developed for easy accessibility

Developed with independent game developer Michael Marston, the game was designed to work on low-spec systems and in low-bandwidth environments — critical for areas where internet access is limited or unreliable. This makes it a powerful tool for science educators and trainers working beyond urban centres in Africa and beyond.

According to [a recent report](#), Africa's gaming industry is the fastest growing in the world, with over 186 million gamers across the continent as of 2024. The majority of these gamers are under 30, representing a massive opportunity to educate, inspire, and engage future scientists using platforms they already enjoy.

“Gaming is a language young people understand. Target Malaria: The Game harnesses that energy to spark curiosity, give an overview of molecular biology, and build scientific literacy,” adds Marston.

A new frontier for stakeholder engagement

[Target Malaria: The Game](#) is part of a wider suite of creative tools used by Target Malaria to build awareness on the potential of gene modification for malaria control and on its gene drive technology, currently under development. Alongside tools like “[Mozzie Drive](#)” (a card game), “[Swarm](#)” (a sound art “sonification” experience), and interactive theatre in countries like Burkina Faso, the game is helping foster trust, transparency, and understanding among communities and stakeholders.

Target Malaria regularly arranges science café meetings where these tools are presented to communities impacted by, and most vulnerable to malaria.



A stakeholder meeting in Uganda. Credit: Target Malaria



A woman observing mosquito larva in a microscope in Burkina Faso. Credit: Target Malaria

We encourage universities, schools, and labs to adopt this tool not just for awareness, but for training. It brings the lab into the classroom, and demystifies many misconceptions about science and biotechnology,” adds Jean Birba, Stakeholder Engagement Officer at Target Malaria Burkina Faso.

[Target Malaria: The Game](#) is available in English and French and runs seamlessly on both gaming PCs and low-spec systems. Soon the research consortium will be offering a Beta launch on Mac and a mobile version.

“Engaging stakeholders at all levels is a key pillar of our approach to responsible research. The game reflects our commitment to transparency, inclusion, and education on gene drive technology in our fight against malaria. We want to reach as many people as possible and encourage them to download, play and share the game,” concludes Birba.

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Distributed by African Media Agency (AMA) for Target Malaria.

Notes to editors:

How to download "Target Malaria: The Game"

- Download the game from Target Malaria's page on Itch.io:
<https://targetmalaria.itch.io/target-malaria-the-game>
- Open the downloaded file "TargetMalariaTheGameInstaller" and execute it.
- A pop-up window, The Game Setup Wizard, will appear on your screen. Accept the license agreement and click on Next (several times). If you want to create a shortcut on your desktop, check the relevant box before clicking on "Finish".
- The Game will automatically launch once the setup is done. Select your preferred language and play!

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About Target Malaria

Target Malaria is a not-for-profit research consortium that aims to develop and share new, cost-effective and sustainable genetic technologies to modify mosquitoes and reduce malaria transmission. Our vision is to contribute to a world free of malaria. We aim to achieve excellence in all areas of our work, creating a path for responsible research and development of genetic technologies, such as gene drive.

www.targetmalaria.org

Target Malaria receives core funding by the Gates Foundation and Open Philanthropy. The lead grantee organization is Imperial College London with partners in Africa, Europe and North America.