

## Game shows mosquito's-eye view of malaria

April 24 2015



A new game about the life cycle of malaria that can be played on Android smartphones has been created by an Oxford University developer, based on malaria research at the University's Nuffield Department of Medicine.

Officially launched on World Malaria Day (25 April) The Life Cycle of Malaria is the first game of its kind which tries to visualise the <u>life cycle</u> of the disease in 3-D. In the process players learn about why mosquito bites itch, why <u>pregnant women</u> are more likely to be bitten, and how the



parasite manages to survive.

The game is an educational app aimed at 12 to 18 year old students. Players accumulate points and progress through the game by navigating obstacles and correctly answering questions about <u>malaria</u>. For example, while playing as the <u>malaria parasite</u>, game players dodge <u>immune cells</u> in the bloodstream to get to the liver in order to begin the next stage of the <u>malaria infection</u>. They lose a 'life' each time they bump into the immune cells, and after three goes, they have to start the level again.

At the same time, players take on the role of either mosquito or malaria parasite as they progress through the game's levels, accumulating points by correctly answering pop-up bubble quiz questions relevant to the role they are playing in – for example, about the particular species of the malaria parasite (plasmodium falciparum). Other quiz questions ask about the areas of the world where malaria is common, and the times of the day when mosquitoes are most active.

Jakob Rossner of Oxford University's Nuffield Department of Medicine, who developed the game, says: 'I think that best way to understand complex, interconnected systems is to play with them, and that is why I developed this game. This was an unusual game to develop, but like Lewis Caroll's Alice, seeing the world from the perspective of a flying insect or a tropical parasite inside blood vessels gives a way to experience strange worlds, which was really tempting for me.'

By completing each level the player should gain an understanding of how mosquitoes 'think' and behave, and how malaria develops and is treated. One of the creator's aims is that the game will be distributed in countries where malaria is common and enable users to learn about how to prevent the disease.



## Provided by Oxford University

Citation: Game shows mosquito's-eye view of malaria (2015, April 24) retrieved 10 April 2024 from <a href="https://medicalxpress.com/news/2015-04-game-mosquito-eye-view-malaria.html">https://medicalxpress.com/news/2015-04-game-mosquito-eye-view-malaria.html</a>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.