

## Malaria parasites camouflage themselves from the immune defenses of expectant mothers

## August 19 2011

Collaborative research between Liverpool School of Tropical Medicine and the University of Copenhagen, published last week in the *Proceedings of the National Academy of Sciences*, have answered a long standing mystery, why and how malaria parasites go unnoticed by the immune defences of pregnant mothers. Maternal malaria kills 10,000 women and between 10,000 to 200,000 babies every year. Malaria is a preventable and treatable disease and every life lost is needless.

The malaria parasites take on a camouflage that enables their presence to go undetected in the placenta, and therefore they are not attacked by the immune system. Ironically, the camouflage adopted is itself an antibody, although a giant example called IgM that is very different to the IgG antibodies commonly used to attack the parasite.

The findings are fundamental to understanding immunity to this dangerous form of the disease and to developing a vaccine to protect pregnant women.

Provided by Liverpool School of Tropical Medicine

Citation: Malaria parasites camouflage themselves from the immune defenses of expectant mothers (2011, August 19) retrieved 25 March 2023 from <a href="https://medicalxpress.com/news/2011-08-malaria-parasites-camouflage-immune-defenses.html">https://medicalxpress.com/news/2011-08-malaria-parasites-camouflage-immune-defenses.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.