

## **MODIFIED TECHNIQUES TO ESTABLISH A CONTINUOUS CULTURE OF *PLASMODIUM VIVAX***

**Udomsangpetch R, Socci R, Williams JL and Sattabongkot J**

The increasing incidence of drug resistant malaria parasites has complicated the treatment of malaria infections. Much knowledge on mechanism of drug resistance has been obtained from studies using *In vitro* culture of *Plasmodium falciparum*. However, continuous culture of *Plasmodium vivax* is not currently available and the biological property of the parasite cannot be investigated. Basic requirements for *In vitro* cultivation of *P. vivax* remain to be verified. Our previous study has been successful in establishing several short-term cultures. Drug sensitivity of *P. vivax* in malaria endemic areas has been studied using our short-term culture techniques. Major problems in establishing continuous culture of *P. vivax* result from human red blood cells serving as new host cells and the very low parasitaemia obtained in the initial stages culture. To overcome these problems alternative methods such as enriching parasites from infected blood at appropriate times during culture and utilizing new sources of red blood cells, besides reticulocytes, are being tried and offer promise. Additionally, appropriate methods to validate the quality of parasites in the culture and to quantify parasitized red blood cells during the culture period are being tested.

**51<sup>st</sup> Annual Meeting of the American Society of Tropical Medicine and Hygiene.  
Denver, Colorado, USA. 10-14 November 2002.**

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