

Incorporating the Australian Society for Parasitology (ASP) Annual Conference 2016 and ASID Zoonoses 2016 Conference

Conference Summary 03-10-2016

This was the nineteenth "International Congress for Tropical Medicine and Malaria". This congress is organised every four years. The previous ICTMM congress was organised in Brazil in 2012 and the next one will be organized in Thailand in 2020.

Sessions were overlapping and not only covered malaria and other tropical diseases, but also fundamental evolutionary parasitological research and other more basic science topics. On the first day there was an opening ceremony with entertaining talks from eclectic Australian researchers followed by drinks.

On the second day there were clearly more people present as the rest of the participants had had a chance to arrive in the country. Many concurrent sessions had interesting topics making it difficult to choose, causing many people to hop from session to session in between talks. Latest advances in malaria vaccinology, the use of next generation sequencing for diagnostic parasitology as well as hot new topics from young researchers given an opportunity to present entirely new areas of research were some of my selected sessions. The first poster session happened in the evening.

On the third day I was in sessions covering important advances in malaria cell and molecular biology, where I learned about "Artemisinin Induced-Dormancy" in *Plasmodium falciparum* (Qin Cheng), complicated *Plasmodium vivax* epidemiology uniquely influenced by the dormant liver stages (Kevin Baird). I also learned that there are issues in malaria diagnostics due to the parasites missing the enzyme used for their detection by rapid diagnostic tests; i.e. malaria parasites can not only become resistant to medication used to treat malaria, but also against the diagnostics of malaria. I presented a poster on *CYP2D6* genetics and *Plasmodium falciparum* gametocyte clearance at the second poster session in the evening.

In the morning of the fourth day there was a session on the emerging research on the zika virus. The session was placed in a relatively small auditorium and talks consisted on practical experiences concerning the spread of the virus, observed mainly through an increase in cases of microcephaly in new-borns. The room was very full of people. I learned many new things about this virus, including the fact that a large proportion of cases are asymptomatic, making it very difficult to track the transmission of the disease. Traces of the virus can be found in many bodily fluids (seamen, saliva, sweat and even mother's milk), but diagnostics on blood samples do not always work.

In the morning of the fifth day there were concluding talks on malaria, highlighting the huge issue of artemisinin resistance. There was also a quick mention of *CYP2D6* genetics in connection to tafenoquine metabolism (Geoffrey Dow). The morning and conference closed with an inspirational talk from Kevin Marsh after which the new IFTM (International Federation for Tropical Medicine) President was selected and the venue for the next conference in 2020 was announced.

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