

American Society of Tropical Medicine and Hygiene annual meeting 2018 in New Orleans

Jaco J. Verweij, Laboratory of Medical Microbiology and Immunology, ElisabethTweesteden Hospital, Tilburg

The annual meeting of the American Society of Tropical Medicine and Hygiene is a huge event and “everybody” working in the field of tropical diseases is there. The 2018 meeting in New Orleans was attended by almost 5000 participants from 119 countries with 2500 researchers presenting their work. With topics ranging from public health to basic research, from Zika virus to cysticercosis there is something for everybody’s interests but makes it also difficult to choose.

In the ASTMH meeting in New Orleans quite some attention on new generation rapid diagnostics test for malaria. Although the new tests show increased sensitivity over microscopy and RDT, PCR remains the gold standard. In these sessions, also increased attention for Pfhrp2/3-deleted *Plasmodium falciparum* infections failing in PfHRP based tests. A very intriguing alternative diagnostic tool was presented by Steve W. Lindsay from the Durham university by using Medical-Detection Dogs. A double-blinded study was undertaken using bed socks from infected and non-infected children in Gambia to assess the diagnostic accuracy of the dogs. A possible application of this diagnostic approach could be used for mass screening of malaria cases at ports of entry.

In schistosomiasis control, new biomarkers, more sensitive diagnostic tools, precision mapping and expanded access to Praziquantel treatment was discussed in multiple sessions throughout the meeting.

In a symposium “Quality in Clinical Parasite Diagnostics- How Good is it Really?” organized by Jaya Shrivastava and Peter L. Chiodini quality assessment schemes in parasitology in complete different settings in were presented. The international UK-NEQAS scheme, the history and present scheme in the USA, and the challenges in the still very young scheme in India were discussed by Jaya Shrivastava, Bobbi Pritt, and Sitara S. Ajjampur respectively. Bernhard H. Weigl presented on the rocky road towards increasing the sensitivity of malaria RDT’s for efficient detection of low-density parasitaemia or sub-microscopic infections. My contribution to this symposium was a presentation on quality of diagnosis of intestinal parasitic infections in a clinical laboratory using molecular assays. Validation laboratory developed tests (LDTs) according to ISO15189 starts with setting validation criteria that are suitable for your setting and purpose. However ISO15189 does not end with validation of the LDT. After implementation, monitoring of the test performance is crucial. This withholds periodical reassessment of the assays, daily monitoring controls and the impact of introducing new batches of PCR components, and participating in external quality assessment schemes. Molecular diagnostics schemes for intestinal protozoa are available for several years from the QCMD and SKML and already provided valuable information to improve laboratory procedures. In this presentation and in a more elaborate way in a poster presentation by Lisette van Lieshout during this conference preliminary results of a pilot scheme for soil transmitted helminths from SKML were presented. Undoubtedly, this scheme will also lead to further improvement of molecular diagnostics in parasitic diseases.