Workshop on Molecular Characterization of *Theileria* Isolates
19-20 January 2017, Nairobi Kenya.

RECOMMENDATIONS:

The meeting made the following recommendations:

1. That a metadata questionnaire be created to obtain the background of the Farmers/farms where the isolates are made. (see attached).
2. That a data bank be created to house all the sequences generated by all research teams. This bank would facilitate ease comparisons among the isolates from various endemic areas. A team comprising Vish Nene, Phil Toye, Roger Pelle and Hannecke Hemmink to examine the feasibility of this idea and suggest possible location of the data bank.
3. That the characterization should not be limited to new isolates but rather encompass all those strains/stocks isolated in the recent past.
4. That research efforts should also be directed towards finding a marker that would differentiate cattle and buffalo type parasites.

5. That the initial screening should be performed using the p104 gene although some felt that the p67 gene could also serve the same purpose.
6. That a set of markers be recommended for use by the various researchers engaged in the project. These markers would include the two vaccine antigens, TP 1 and TP2 plus micro- and mini-satellite genes. The complete list of the recommended markers and their location on the four *Theileria* chromosomes compiled by Drs Walter Muleya, Phil Toye and Hannecke Hemmick is attached for your ease of reference.
7. That TPR gene, although initially appeared suitable, is extremely unstable for any conclusions to be drawn. For example, a clone could re-arrange during infection and produce inconclusive results.
8. That whole genome and deep sequencing will be done by specialized Laboratories such as ILRI.
9. That UNZA Laboratory, Lusaka, Zambia would serve as the laboratory of choice for the characterization of strains/stocks isolated from GALVmed sponsored projects. However, there will be close collaboration between UNZA and ILRI in terms of exchanging reagents and sharing information on the markers.

10. That the two students from Burundi work closely with Dr Muleya to complete their PhD theses based on the characterization of isolates from Burundi. Dr Muleya will assist the two students to develop appropriate projects for their theses. Modalities are being worked out to register the students at UNZA