



# Tick and Tick-borne Disease Programme

Department of Biochemistry, Genetics and Microbiology

**The Tick and Tick-borne Disease Programme** focuses on the control of ticks and tick -related pathogens of agricultural importance by understanding the underlying mechanisms that enable these tick vectors to adapt and feed on their host. Moreover, we aim to develop tools that will enable robust cost-effective surveillance to screen for resistant parasite populations in the field for rational selection of chemical control, as well as vaccines that will confer host resistance to parasite infestation. In this regard, close collaboration with academic, commercial and governmental agencies is fostered to develop capacity and resources that will fast track these tools to the producer to combat ticks and their associated diseases in the field.

The Tick and Tick-borne Disease Programme is offering a **PhD** or **MSc** position on the following research areas:

- 1] To establish a rapid, high-throughput platform for the detection of pyrethroid and amitraz resistance.
- 2] Evaluation of novel compounds as second generation acaricides to overcome resistance to chemical control.

The programme is supported by bursary additions from industry and THRIP (in addition to NRF and other external student bursaries)

For more information or to submit an application, please contact the Prof. Christine Maritz-Olivier at [christine.maritz@up.ac.za](mailto:christine.maritz@up.ac.za), Tel: 012 420 3945.

