Invitation

Inaugural Address

24 October 2019

UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

Faculty of Veterinary Science

Fakulteit Veeartsenykunde
Lefapha la Disaense tša Bongakadiruiwa

The Dean of the Faculty of Veterinary Science, Prof Vinny Naidoo, cordially invites you to the inaugural address of

Professor Tshepo Matjila

BSc (Medunsa) MSc (Vet Science) PhD (UP)
Head: Department of Veterinary Tropical Diseases

Titled:

A century of *Babesia* research: From Genesis to Genetics

Date:	Thursday, 24 October 2019
Time:	17:30 for 18:00
Venue:	University of Pretoria Faculty of Veterinary Science Sir Arnold Theiler building Lecture Hall 1-35
GPS:	S25° 38′ 52″ E28° 10′ 54″
Dress:	Business attire
RSVP:	By 18 October 2019 (click on the link below to access the online RSVP form) RSVP inaugural address
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Abstract

With this inaugural address I chronicle the development of *Babesia* research during the past 100 years and highlight how technology, especially using molecular biology, has contributed towards better understanding of genetic diversity and the relationships between different parasite isolates and disease manifestation. I highlight the future direction of research using new generation technologies in finding solutions for combating the devastating effects of babesias in selected hosts.

Babesias are parasites that invade red blood cells and are transmitted by a variety of tick species. They infect almost all living mammals, including humans, causing the destruction of red blood cells, leading to a haemolytic disease characterised by complications and organ failure which, if left untreated, may be fatal. Based on their clinical importance, babesias are recognised as a major problem in humans, various wildlife species and most production and companion animals. These parasites were discovered in 1885 by Victor Babes, a Romanian physician, who recognised that they caused “red water fever” in cattle. This “rare and severe disease” was later named after him. Ever since the first observation of these parasites using blood smears under a light microscope at the end of the nineteenth century, babesias continue to cause production and morbidity problems, especially in the tropical and subtropical regions of the world. This is regardless of the fact that there has been continuous research into the epidemiology, treatment, prevention and control of babesiosis. More than a century later, babesias remain parasites of economic importance, and evidence suggests that they are spreading in geographical areas where they were previously not known to occur.