Research project summary

My research interests are in the fields of Molecular Epidemiology and Conservation Genetics. Identification and characterisation of infectious agents in wildlife is becoming increasingly important due to the transmission of disease at the wildlife-human and wildlife-livestock interfaces and the profound effect that disease outbreaks have on vulnerable wildlife populations. The projects undertaken by the MEZ group fall into two major categories, namely: those elucidating genetic structuring within vertebrate and invertebrate taxa as a means of identifying appropriate conservation management units, and those in which temporal and geographical, host and pathogen variation, is used to clarify the persistence and spread of infectious agents, thereby assisting with the identification of suitable disease control strategies. The current research focus of the MEZ group is on vector-borne and zoonotic diseases.

Students currently under supervision

BSc (Hons)

1. Mr. Christiaan van Niekerk
   Molecular prevalence and diversity of bacteria in the spiny mouse, Acomys spinosissimus.

MSc (research)

1. Cornell Kortenhoeven

PhD

1. Mr. James van Sandwyk
   Molecular epidemiology and evolution of Cardioviruses (Picornaviridae) in endemic South African murid rodents

Post-Doctoral

1. Dr. Helene Brettschneider
   Molecular characterization, epidemiology and mathematical modeling of zoonotic diseases in South Africa.

Students currently under co-supervision

MSc (research)

1. Ms. Rolanda Julius
   Dynamics of rodent-borne zoonotic diseases and their reservoir hosts: the case of invasive Rattus in South Africa
Non-departmental students under supervision

MSc (research)

1. Dr. Tonny Kabuuka (Veterinary Faculty, University of Pretoria)
2. Dr. Charalambos Petevinos (Veterinary Faculty, University of Pretoria)

Recent Publications

2013


2012


2011


2010


2009


2008


2007


2006


2005


2004


2003


Website Links of Importance

1. World Organisation for Animal Health
2. IRRI Rodent Management Website
3. Mammal Research Institute (MRI)
4. Centre of Excellence for Invasion Biology (CIB)
5. BMAZD IRT