



Dr Pamela de Waal

Department of Genetics

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Key Publications

De Waal, PJ, Gous, A, Clift SJ & Greeff, JM 2012. High within-host genetic variation of the nematode *Spirocercalupi* in a high-density urban dog population. *Vet Parasitol.* 187, 259–266.

De Waal, PJ, Gous, A, Greeff, JM & Clift, S 2008. Opening a can of worms: An investigation of *Spirocercalupi*. SAGS2008, March 2008, Pretoria.

De Waal, PJ & Huismans, H 2005. Characterisation of the nucleic acid binding activity of inner core protein VP6 of African horse sickness virus. *Arch Virol.* 150(10), 2 037–2 050.

Epidemiology of parasitic nematodes

Pamela de Waal (née Turnbull) obtained a BSc honours *cum laude* in Genetics from the University of Pretoria. She upgraded from her master's to PhD and graduated in 2006 with her thesis entitled 'The characterisation of inner core protein VP6 of African horse sickness virus.' She started a new research programme in 2008 with a focus on the epidemiology of parasites. In 2009 she was appointed as a full-time, permanent lecturer in the Department of Genetics at the

University of Pretoria. Pamela has a keen interest in the research of science teaching. She belongs to the National Association for Research in Science Teaching (NARST USA) and is a member of the Parasitological Society of Southern Africa (PARSA).

Pamela's research has been presented at three international and nine national conferences. She is author of three scientific publications.

Research

The nematode parasite *Spirocercalupi* causes spirocercosis in canids. It forms nodules in the oesophagus of the dog which can become cancerous and may be fatal. Very little is known about the population genetic structure of *S. lupi*. It poses a significant risk to domestic dogs and wild canids such as wild dogs, hyenas and jackals. Knowledge of the genetic structure of parasite populations is important to understanding parasite transmission and the evolution of virulence. The main focus of the programme is to investigate the population structure, prevalence and genetic diversity of *S. lupi* in its primary, secondary and paratenic hosts.

