

Prof. Amelia Goddard

BVSc, BVSc(Hons), MMedVet(CLD), PhD

Professor: Veterinary Clinical Pathology

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**Summary CV**

Prof. Amelia Goddard joined the Department in 2000 as a lecturer in the section of Clinical Pathology after having been in small animal private practice for six years. She has served as Head of the Clinical Pathology Laboratory since 2007. Prof. Goddard is registered as a specialist veterinary clinical pathologist with the South African Veterinary Council and hold a PhD based on research on the haemostatic abnormalities in canine inflammatory disease. She lectures various undergraduate modules for the veterinary students, such as Introductory Veterinary Diagnostics (3rd year) and Clinical Pathology (4th years), as well as para-veterinary students, such as Veterinary Laboratory Techniques (1st year). Prof. Goddard is also involved in postgraduate modules in Clinical Pathology and serves as coordinator for the Clinical Pathology residency programme (MMedVet). To date, Prof. Goddard has supervised 10 MMedVet residents, one MSc student and one PhD student. Her research involves researchers from the University of Copenhagen (Denmark), Ghent University (Belgium) and the University of Edinburgh (United Kingdom). She has presented over 40 international scientific, peer-reviewed congress presentations and has delivered more than 50 regional and national CPD lectures. She currently has 44 publications in peer-reviewed journals and has written one book chapter.

**Research Expertise/Interest**

Prof. Goddard’s main research focus is on the complex interaction and interdependence between the inflammatory and haemostatic systems in systemic inflammation, using various animal models such as canine babesiosis, canine parvovirus enteritis, canine spirocercosis, snake envenomation and African horse sickness. The main objective of her research is to expand on current knowledge on the host response in systemic inflammation, specifically its effect on haemostasis. It has resulted in the identification of various biomarkers that may assist with prognostication in systemic inflammatory conditions. Prof. Goddard is also involved in several wildlife projects, specifically the validation of various assays for use in wildlife and creation of normal reference intervals. In addition, she is also investigating changes of acute phase proteins in various wildlife species.

**Postgraduate Students**

* PhD
  + Dr. Emma Hooijberg has completed the following three projects as part of her PhD:
    - Analytical and quality control validation and assessment of field performance of a point-of-care chemistry analyser for use in the white rhinoceros (*Ceratotherium simum*)
    - Method comparison and generation of plasma biochemistry reference intervals for the white rhinoceros (*Ceratotherium simum*) on a point-of-care and wet chemistry analyser
    - Serum protein electrophoresis in healthy and injured white rhinoceros (*Ceratotherium simum*)
* MSc
  + Dr. Ashleigh Lemon completed her undergraduate training at the University of Pretoria in 2017. Dr. Lemon is currently working on the effects of storage time and temperature on TEG analysis in dogs and horses. The aim of the project is to determine whether prolonged storage time will affect the TEG results significantly. If not, it will make the assay more available for use by private veterinarians.
* MMedVet
  + Dr. Liesl van Rooyen completed her undergraduate training at the University of Pretoria in 2011. Dr. van Rooyen is currently working on the following project: Thromboelastographic platelet mapping in dogs with complicated *Babesia rossi* infection. The aim of this project is to investigate the role of the platelet in this disease, despite the marked thrombocytopenia observed.
  + Dr. Kelly du Preez completed her undergraduate training at the University of Pretoria in 2013. Dr. du Preez is currently working on the following project: Oxidative burst and phagocytic activities of neutrophils in canine parvo viral enteritis. The aim of this project is to investigate the possibility if decreased neutrophil function in parvo enteritis in dogs.
  + Dr. Monique Engelbrecht completed her undergraduate training at the University of Pretoria in 2015. Dr. Engelbrecht is currently working on the following project: Evaluation of platelet indices as predictors of outcome in puppies infected with parvovirus. The aim of this project is to investigate whether platelet indices can serve as predictors of outcome in parvo enteritis.