

PhD opportunity into drug absorption in koalas – from Semester 1, 2010

At Faculty of Veterinary Science, The University of Sydney

Another fantastic opportunity has arisen for a veterinarian to investigate the pharmacokinetics and pharmacodynamics of selected therapeutic agents in koalas, resulting in the award of a research Master's or PhD.

Dose rates and dosing frequencies of therapeutic agents have not been scientifically established for koalas and those being used have been extrapolated from dog and cat doses. However our preliminary studies show that oral dose rates in particular, fail to reach therapeutic concentrations in the blood and have minimal therapeutic effect and that the quantity of the drug metabolites may differ to those of other animals. Absorption of drugs by koalas by the gut may be reduced due to eucalypt ingesta, gut wall factors, increased rate of liver metabolism or all of these factors and exploring these factors is the basis of the project.

The applicant will explore aspects of koala physiology, learn pharmacological principles that can be translated to all species and learn to quantify drug concentrations in biological tissues by High Performance Liquid Chromatography (HPLC).

This project will involve living for 2-3 months a year near The Koala Preservation Society's Koala Hospital at Port Macquarie. Transport costs to Port Macquarie and accommodation will be paid for by the project. The rest of the year the researcher will be located at The Faculty of Veterinary Science, USyd, Sydney Campus

The project itself is fully funded. However the successful applicant will need to apply for an Australian Postgraduate Award (a scholarship) to support them during the project and applications for these, close 31st October 2009. To be eligible for these scholarships, the successful applicant must possess a strong first class honours degree. If you don't have a first class honours degree please don't let it stop you from contacting the chief investigator as other areas of funding you may be possible.

A panel from the Koala Infectious Diseases Research Group will consider applications.

The project is already happening, we are just waiting for a dedicated veterinarian to help us.

For expressions of interest and further information please contact

**Dr Merran Govendir BVSc, PhD, MEd, MACVSc
Senior Lecturer in Veterinary Pharmacology
The University of Sydney
M.Govendir@usyd.edu.au phone: (02) 9351-5442**