Research Project for PhD Student

**Project Title:**
Investigation into gastrointestinal absorption of xenobiotics by the koala

**Project Supervisor:** (name only)
Dr Merran Govendir

**Project Champion:** (name and email address)
Dr Merran Govendir
M.Govendir@vetc.usyd.edu.au

**Host unit:** (e.g., research institute, school/discipline hosting the project)
Faculty of Veterinary Science

**Host Unit’s URL:**
http://www.vetsci.usyd.edu.au/

**One Sentence Project Summary:** (single sentence for Google-style search results)
Investigation into factors that influence gastrointestinal absorption in koalas

**Project Synopsis:** (about 250 words max)
Dose rates of drugs for koalas have not been scientifically established as dose rates for dogs have been used. Preliminary studies show that dose rates that are currently used in koalas, fail to reach therapeutic concentrations in the blood and have minimal therapeutic effect. Absorption of drugs by the koala gut may be reduced due to the eucalypt ingesta, gut wall factors, increased rate of liver metabolism or all these factors. This investigation seeks to 1) to scientifically establish optimum dose rates for oral and injectable drugs used in koalas 2) to investigate why koalas appear to have reduced absorption of oral drugs across their gastrointestinal tracts.

**Keywords for Research Area and Clinical Condition** (these are needed so that people may search by key word):
Koala, veterinary pharmacology, veterinary pharmacokinetics

**Other Information:** (Optional) (e.g. techniques used in the project - e.g., electron microscopy, current PhD topics; scholarships/funding available; possible research areas for PhDs topics; etc.)
Techniques used in the project: High Performance Liquid Chromatography, immunohistochemistry
Successful applicant must be a veterinarian and eligible for full registration with the NSW Veterinary Practitioners Board.

The successful applicant will have a Honours 1 degree or equivalent.
The successful applicant must apply for and be awarded an Australian Postgraduate Award (APA) stipend.