

# Research Project for PhD Student

## Project Title:

Canine molecular physiology and genomic studies in health and disease

## Project Supervisor:

PETER WILLIAMSON  
Associate Professor of Genomics.  
Faculty of Veterinary Science,  
University of Sydney  
Sydney NSW 2006  
AUSTRALIA

Phone +61 2 9351 3653  
Fax +61 2 9351 2114  
email: p.williamson@usyd.edu.au.

## One Sentence Project Summary: (single sentence for Google-style search results)

Examines the molecular basis of specific immunological and pathophysiological mechanisms in dogs using combinations of cellular, molecular, immunohistochemistry, and functional genomics methodologies.

## Project Synopsis: (about 250 words max)

This project is concerned with the molecular basis of inflammation and immunity in dogs, and the role of these systems in disease. Recent advances in canine genomics and post-genomic tool development provides a basis for multi-disciplinary approaches to the analysis of physiological mechanisms and disease processes. The candidate will focus on a relevant area of immune response, or inflammatory aspects of neurological disease.

## Other Information: (e.g. scholarships/funding available, etc.)

Candidates will apply for post-graduate research scholarships.

This project is a collaborative project with A/Prof Rosanne Taylor, and is funded in part by the Canine Research Foundation and the Peyton Bequest Fund.

---