PhD scholarship on pig vaccination and immunology

A full-time PhD scholarship in animal health and immunology is being funded by an ARC Linkage-Project grant for 3 years. The project seeks to improve the health of pigs in Australia and reduce antibiotic use for the disease proliferative enteropathy (PE). The project is a collaboration between the University of Sydney, NSW Department of Primary Industries and the German pharmaceutical company, Boehringer Ingelheim, and will be based primarily at the University of Sydney, Camden campus.

The problem
Proliferative enteropathy (PE) is a major profit-limiting disease for pig producers globally. The disease costs pork producers in Australia up to $7.00 per pig, adding almost 5% to the total cost of production. Much of this cost is due to the widespread use of antibiotics in the grower and finisher diets to treat and prevent PE, and veterinarians and producers are reticent to remove or change the medication as this often results in an increased occurrence of PE. Increasing public concern regarding the amplification of antibiotic resistant bacteria and the impact on human health has motivated the need to find alternatives for the control of PE.

Boehringer Ingelheim have recently developed and registered a vaccine (Enterisol® Ileitis) to aid in the control of PE in pigs. The student will work as part of an international research team to study ways to improve the efficacy of the vaccine by understanding pigs’ immune response to infection and vaccination under Australian conditions as well as to develop strategies to optimise the vaccine’s efficacy on Australian farms.

The PhD candidate will have opportunities to attend conferences and collaborate with experts in the field in Australia and overseas.

Supervisors:
Dr Trish Holyoake (02) 93511617 trishh@camden.usyd.edu.au
Dr Alison Collins (02) 46406306 alison.collins@dpi.nsw.gov.au
Dr David Emery (02) 9351 3102 david.emery@vetp.usyd.edu.au

Applicants should have an Honours 1 or 2A degree in veterinary science, animal science, science or agricultural science. An interest in immunology and how it applies to pig health and production would be an advantage. The scholarship stipend is $25,118 p.a. (tax exempt). International students are welcome to apply but will need to pay their own tuition fees. For further information, contact Dr Trish Holyoake, Dr David Emery or Dr Alison Collins. Applications, including a curriculum vitae, copy of an academic transcript and the names and contact details of at least two referees should be sent to Dr Trish Holyoake, Faculty of Veterinary Science, University of Sydney, 425 Werombi Rd, Camden NSW 2550. Closing date for applications is Feb 26th, 2007.