George Mason Trust PhD Scholarship In Wildlife Health
Managing the nematode parasites of kiwi in Operation Nest Egg programmes

The opportunity: An opportunity exists for a high calibre veterinary or biological sciences graduate to undertake PhD study in wildlife parasitology within the Wildbase Research Centre which is part of the Institute of Veterinary Animal and Biomedical Sciences, Massey University, in Palmerston North, New Zealand.

The project: Our clinical and research experience has suggested that parasitic disease may be more common in endangered hosts that are part of intensive conservation management actions. Our major objective is to further our study of host-parasite dynamics in endangered New Zealand kiwi with the aim of improving husbandry and preventative treatment protocols to minimise the impact of parasitic disease on these conservation programmes. All five species of the iconic kiwi (Apteryx spp.) are intensively managed for conservation through a programme called Operation Nest Egg that involves the intensive rearing of young birds. The parasites that are causing disease and mortality in this system include nematodes that undergo visceral and neural larval migrans. We will study how these host-parasite systems in kiwi are affected by their intensive conservation management, and how parasitic disease may be minimised. We aim to use standard parasitology techniques and molecular investigations to characterise host-parasite dynamics and response to therapy and husbandry changes and compare this to data from wild populations. This research will enable us to develop tailored husbandry and therapeutic protocols that will address the imbalance in host-parasite dynamics that is currently occurring and directly benefit the welfare and conservation of Kiwi. Further, the results of our research will have implications and benefits to the intensive management of wild species globally.

The supervisory team: consists of established researchers at Massey University and includes Professor Brett Gartrell, Dr Wendi Roe, Dr Fernanda Castillo-Alcala and Dr Kristene Gedye.

Funding: The project has received funding from the George Mason Trust which will cover a PhD scholarship (NZD $25,000 pa) and university fees for three years, and includes some research consumables money. The successful candidate will be expected to apply for more research funds as part of their PhD programme.

Eligibility: The Scholarship is open to persons who are eligible to enrol full-time for a research paper of 120 credits during a 12 month period towards a Doctoral degree at Massey University. A full-time candidate will be expected to work 40 - 50 hours per week on their Doctoral qualification. Part-time applicants are not eligible. Applicants already holding a PhD are not eligible to apply. Consideration will normally only be given to students with a GPA of 7.5 or better (on a 9 point scale). This is above an average grade of A-.

Candidates must be, or desire to be, dedicated scientists prepared to devote time, energy and intellect to solving problems encountered in their projects. Experiments and trials may require after hours and week-end work. Knowledge of parasitology, conservation biology and molecular biology would be advantageous but is not essential.

Closing date: 30th June 2016

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