

## New approaches to detect invasive fish using scent-detection dogs and environmental DNA

We are seeking applications for two scholarships, one PhD and one Master's, to research dogs' ability to detect the odour of invasive freshwater fish in water samples.

Invasive fish are a significant threat to New Zealand's freshwater ecosystems, and our goal is to develop a novel, low-cost method of monitoring freshwater systems using scent-detection dogs. These two projects are part of a larger study, where we will be comparing the performance of our scent-detection dogs to environmental DNA (eDNA) analysis, and incorporating volatile organic compound analysis of water samples throughout the dog training and testing. There may be opportunity to incorporate these aspects into the projects.

The ideal candidates will have experience in the fields of animal behaviour and learning, with interests in scent-detection and conservation. Candidates will be working with dogs and teaching them to operate scent-detection equipment in the laboratory, so some animal training experience would be advantageous. Other skills sought are excellent communication skills in English (spoken and written), data management and analysis, the ability to work in a team, and general skills in laboratory and animal work.

### PhD scholarship

Applicants should have a Master's or Honours degree (or equivalent) in biology or psychology, or other relevant fields.

The start date is early 2019, and the scholarship covers NZ\$27,500/pa + NZ domestic tuition fees for three years.

Applicants should provide a short CV (5 pages max.) and cover letter, academic transcripts, and two academic letters of reference (with referees' contact details).

### Master's scholarship

Applicants should have a Bachelor's or Honours degree (or equivalent) in biology or psychology, or other relevant fields.

The start date is early 2019, and the scholarship covers NZ\$17,000 + \$6,000 towards NZ domestic tuition fees.

Applicants should provide a short CV (5 pages max.) and cover letter, academic transcripts, and two academic letters of reference (with referees' contact details).

The successful applicants should be eligible to enrol at the University of Waikato, Hamilton, New Zealand.

Reviews of applications will begin on 18 December 2018 and will continue until the positions are filled.

Contact: Dr Clare Browne, [clare.browne@waikato.ac.nz](mailto:clare.browne@waikato.ac.nz)

