

## PhD Studentship: Exploring fish cognition using moveable fish tanks

Applications are invited for a 3-year PhD studentship, based in the School of Psychology at the University of Auckland, to begin in 2019. The students will be supervised by Dr Alex Taylor, Dr. Craig Radford & Dr. Matthew Egbert.

**Project:** Fish cognition has become one of the fastest growing areas in comparative psychology. Recent work has established that certain fish species can divide attention during foraging (Warburton & Thomson, 2006), have episodic-like memory (Hamilton et al., 2016, Gerlai, 2017) make transitive inferences about social relationships (Grosenick et al., 2007), attend to their own reputation (Bshary & Grutter 2006), cooperate (Bshary et al 2006, Vail et al 2013) and use tools (Pasko 2010 Gerullis & Schuster, 2014). This work has important implications for not only our understanding of the evolution of intelligence, but also the ethical implications of how our society treats fish.

The project aims to extend work in the area in a new direction: the physical and spatial cognition fish use when navigating terrestrial environments. Recent advances in technology mean it is now possible for fish to drive their tanks around terrestrial environments <https://vimeo.com/104899925>. By mounting a fish tank on wheels or tracks and using an overhead camera to track fish position, it is possible for fish to learn that by swimming to one of their tank walls they can move their entire tank in that direction. This project aim to utilise this new technology to examine the flexibility of the physical and spatial cognition of fish.



**Your qualifications:** Selection will be made on a competitive basis using the following criteria:

- a strong academic background in either biology or psychology
- demonstrated experience with experimental research methods and statistical analysis involving either human or animal participants
- preference will be given to applicants who have advanced experience in designing and conducting well-controlled experiments on behaviour or cognition

**Host institution:** The School of Psychology at the University of Auckland is ranked 28th in the world. Auckland is ranked third out of 231 world cities for quality of living in the 2018 Mercer Quality of Living Survey (see [www.mercer.com/qualityofliving](http://www.mercer.com/qualityofliving)).

**Your application:** Please submit a letter of interest detailing how you meet each of the qualifications, curriculum vitae (indicating GPA/previous academic performance indicators, publication history, and prior experience), and contact information for three references to Dr. Alex Taylor ([alexander.taylor@auckland.ac.nz](mailto:alexander.taylor@auckland.ac.nz)).