

**Postdoctoral Opportunity
Reptile Genomics
Institute for Applied Ecology
University of Canberra**

Was an ancient bird-like sex chromosome system ancestral to reptiles and mammals?

Chief Investigators: Tariq Ezaz, Stephen Sarre, Arthur Georges, Jenny Marshall-Graves, Yoichi Matsuda

The Reptile Genomics team within the Institute for Applied Ecology is seeking to appoint a highly self-motivated, dynamic individual able to work with a high degree of independence and with minimal direct supervision, as a Postdoctoral Fellow in an ARC funded discovery project on the comparative genomics of sex determination in reptiles.

Project Summary: Astounding variety in animal sex chromosomes suggests that they have evolved independently many times. However, the recent discovery that a bird, a gecko lizard, and the platypus, share a genetically homologous sex chromosome, suggests the converse, that an ancient sex chromosome system has been retained in these distantly-related lineages. We propose to test these competing hypotheses by using the diverse sex chromosomes of Australian reptiles to examine sex chromosome homology across species and identify new candidate sex determining genes. This project will reveal how sex chromosomes have evolved in reptiles and will help understand the very great diversity in sex determining modes in reptiles, and in vertebrates more generally.

The successful applicant will join an internationally recognised team to work on the comparative genomics of sex chromosome evolution in amniotes and will be based at one of the leading reptile genomics labs, at the University of Canberra. This project offers opportunities to work with advanced cytogenetics, molecular genetics and transcriptome analysis using next generation sequencing.

Application procedure

For more information and position description including selection criteria on this position and how to apply, go to our website at <http://www.canberra.edu.au/hr/jobs> or call 02 6201 2607 (24 hours).

For further information about the position contact Asst Prof. Tariq Ezaz (Tariq.Ezaz@canberra.edu.au) on +61 2 6201 2297 or Prof. Arthur Georges (Arthur.Georges@iae.canberra.edu.au) on +61 6201 5786

The University is an EO employer offering excellent conditions and benefits including generous superannuation. Aboriginal and Torres Strait Islander people are encouraged to apply.

Closing Date: Friday 28 January 2011