

Post-doctoral Position in Comparative Neuroanatomy

A post-doctoral position is available to study the comparative vertebrate neuroanatomy in Dr. Andrew Iwaniuk's lab at the Canadian Centre for Behavioural Neuroscience. One of the main aims of Dr. Iwaniuk's lab is to gain a better understanding of how the anatomy and neurochemistry of avian and mammalian brains reflects species differences in behaviour. Current research is focused on grouse and ground squirrels. **1)** Male grouse produce a wide array of courtship displays, but unlike the displays of many other bird species, the brain regions and hormones responsible for mediating courtship displays in grouse are entirely unknown. The project involves capturing Ruffed Grouse (*Bonasa umbellus*) throughout the year in the foothills of the Canadian Rockies in order to examine seasonal variation and sex differences in neuroanatomy and neurochemistry. Opportunities also exist to examine bioacoustics and ecotoxicology of Ruffed Grouse and similar studies in Sharp-tailed Grouse (*Tympanuchus phasianellus*). **2)** Ground squirrels exhibit a wide range of social systems. As a first step towards understanding the relationship between the diversity of social systems and its neuroendocrine control, we are investigating the neuroanatomy of Richardson's Ground Squirrel (*Spermophilus richardsonii*), a polygamous and highly social species common in southern Alberta. The project involves capturing ground squirrels in the prairies of southern Alberta and processing the brains with immunofluorescent techniques. Further details on the lab's research can be found at: http://web.me.com/aniwaniuk/Bird_Brains_Lab/Welcome.html

Applicants with a record of peer-reviewed publications and a PhD in ecophysiology, behavioural endocrinology or comparative neuroanatomy will be considered. A salary will be provided for two years with a possibility of renewal for a third year. The successful candidate should be independent and self-motivated with an enthusiasm for developing new scientific ideas, training students and manuscript writing. Individuals will also be encouraged to develop their own ideas and projects complementary to the project. To apply, send: 1) a c.v.; 2) a brief description of how you see yourself fitting into the lab's research program; 3) your research interests and goals; and 4) the contact details of at least two references to Dr. Andrew Iwaniuk (andrew.iwaniuk@uleth.ca). Review of applications will begin immediately with an anticipated start date of September 2010, but the start date is flexible.