Postdoctoral Fellowship

The Choe and Dukas labs, McMaster University
Hamilton, Ontario, Canada

The Choe and Dukas labs at the Department of Psychology, Neuroscience & Behaviour, McMaster University are looking for a postdoc for a collaborative ongoing project deciphering the genetic basis of natural variation in sociability.

The Dukas and Dworkin labs have artificially selected low and high sociability fruit fly lineages (https://academic.oup.com/evolut/article/76/3/541/6728481) and identified promising candidate sociability genes. We have begun the process of quantifying the effects of these genes on sociability in fruit flies and wish to expand our work to examining the role of the verified genes in mammalian sociability using mice as a model system.

The Choe Lab (http://choelab.ca) investigates neurobiological mechanisms underlying social behaviour using a multi-scale approach with a wide array of techniques including in vitro electrophysiology, molecular biology, confocal and lightsheet imaging, optogenetic and chemogenetics, in vivo fiber photometry recordings, mouse fMRI and behaviour assays.

The prospective postdoc would combine functional genetic analysis (using RNAi interference, CRISPR, or Cre-conditional knockout strategies among other genetic approaches) to examine variation in sociability and its neurobiological basis using fruit flies and mice as model systems. Qualified candidates will possess a PhD in biology, neuroscience or another relevant field.

Please send a cover letter, current CV, and a list of 3 references to Drs Katrina Choe or Reuven Dukas at choek@mcmaster.ca or dukas@mcmaster.ca. We will notify applicants before contacting any references.