# Postdoctoral Position in Insect Neuroethology

## Project:

Our team studies the neural control of visually-guided insect flight behaviour. Using combinations of electrophysiological and behavioural recording techniques and associated analyses, we explore how visual motion is detected, encoded and used to guide adaptive flight steering. The data we collect contributes to development of biologically-inspired algorithms for guiding autonomous artificial systems and we are also investigating effects of sub-lethal doses of pesticides on visual processing and behavior. The project for this position will investigate neural population coding during production of closed-loop behaviours in our flight simulator.

#### **Qualifications:**

Minimum qualifications include: a Ph.D. (obtained within the past 3 years) in Biology or a related field, with expertise in Neurobiology and/or Animal Behaviour, expertise in neurophysiology, kinematics, data interpretation and publication of results in the scientific literature as well as strong written and oral communication skills.

Preferred qualifications include: experience with data acquisition and analysis software (e.g. MatLab), strong organizational skills, experience with grant writing, manuscript preparation, experience with supervising undergraduate and graduate students and a demonstrated ability to work independently and with a team of students in a collaborative research environment. Experience in intracellular neurophysiology and computer programming would be an asset.

## **Conditions:**

The position is a two-year term position starting January 1, 2017. Salary scale: \$40,000 – \$45,000 per annum (depending on qualifications and experience) and is funded through support to the supervisor, Dr. Jack Gray. There is a possibility of renewal following a two-year contract depending on performance and continued funding. Because the recipient is a trainee and not an employee of the University of Saskatchewan, the recipient is not entitled to employment benefits. Deductions for Canadian income tax will be made from the monthly stipend, but the stipend is not subject to source deductions for Employment Insurance or Canada Pension Plan.

## How to Apply:

Review of applications will begin immediately until the position is filled. Please send a covering letter detailing your background and qualifications and how they match the position. Please include full curriculum vitae (CV) detailing your education, awards, list of publications, abstracts presented at conference, and research experience when submitting your application. Attach a PDF file of two publications relevant to the neural control of animal behaviour, and arrange for two confidential reference letters (at least one of which must be from a current supervisor).

Please send application to:

Dr. Jack Gray,
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