

## **Opportunity for M.Sc. Student – Insect Flight Aerodynamics**

Insect Flight Group – Dr. Jeff W. Dawson  
Department of Biology, Carleton University



The Insect Flight Group at Carleton University is seeking an enthusiastic graduate student at the M.Sc. level with an interest in studying the biomechanics and aerodynamics of insect (flapping wing) flight.

We are interested in a variety of questions that focus on lift generating mechanisms and mechanisms for generating steering torques. We use both living insects and scaled mechanical models using techniques rooted in flow visualization (stereo dPIV and dye) and high-speed cinematography. Our group is also interested in neuromuscular mechanisms underlying wing movement during flight. Our group works closely with faculty and students in Mechanical and Aerospace Engineering with interests in MAVs.

Ideal applicants will have an interest in integrative biology, biomechanics, physiology and animal behaviour. We expect candidates to have demonstrated competence in data collection, analysis, and writing. Ideal candidates will also possess skills/experience in areas not traditionally associated with biology – including computer programming, electronics and electromechanical devices. Overall candidates should possess qualities expected of graduate students – resilience, resourcefulness, autonomy, and, an enthusiasm for learning.

Admission requirements: <https://carleton.ca/biology/prospective-students/graduate/admissions/>  
Carleton Biology Department: <https://carleton.ca/biology/>  
The Carleton/OCIB program: <https://carleton.ca/biology/current-students/graduate/>

To express interest, please send:

- (1) a 1-2 page cover letter explaining your experience, long-term goals, and why you are interested in research as described above,
- (2) your CV,
- (3) a copy of your recent transcript (does not have to be official from your home university), and
- (4) contact information for 2 references to Dr. Jeff W. Dawson at [jeff\\_dawson@carleton.ca](mailto:jeff_dawson@carleton.ca)