



GRADUATE POSITIONS AVAILABLE



5 Ph.D. Positions

As a collaborating group of academic and government scientists, we are seeking **5 Ph. D. students** to work as a part of a multidisciplinary team conducting manipulative experiments designed to examine the effects of multiple stressors in small wetland ecosystems. The focus of this NSERC funded research program will be on the potential effects of climate change on amphibians and other aquatic organisms alone and in combination with herbicide use. This would be the 3rd in a series of experiments conducted at the “Long-term Experimental Wetlands Area (LEWA),” on Canadian Forces Base Gagetown in New Brunswick Canada. All positions are contingent on funding – we will know funding decision by October 2010.

- **Guaranteed funding of \$20-22,000 annually for 3 years with a fourth year of funding likely**
- **Access to state-of-the art laboratory facilities**
- **Start Date: Preferably January, 2011 but have some flexibility. Applications accepted until filled**

1 Ph. D. position at the University of Ottawa

A Ph. D student will be examining climate change/herbicide effects on gene expression, sexual development and metamorphosis in amphibians. They will be supervised by Dr. Vance Trudeau (University of Ottawa; see www.teamendo.ca) and Dr. Vince Palace (DFO, Winnipeg, Manitoba) and work out of The University of Ottawa Centre for Advanced Research in Environmental Genomics. Qualifications: Candidates should have a background in comparative physiology or vertebrate endocrinology, and have demonstrated experience with basic molecular biology methods (PCR, gene cloning, etc). A keen interest in climate change effects on aquatic ecosystems would be an asset to the team.

3 Ph. D. positions with the Biology Department and The Canadian Rivers Institute at the University of New Brunswick Saint John (UNB Saint John)

1. One Ph. D. student will be examining climate change/herbicide effects on DOC and UV radiation attenuation. The student will be supervised by Drs. Nelson O’Driscoll and Jeff Houlahan (UNB Saint John).

Qualifications: An M. Sc. in chemistry, biology, environmental science or a related discipline is preferred. Exceptional B. Sc. students will be considered. All candidates should have good statistical skills (i.e. are comfortable with traditional analyses such as ANOVA and regression) and be comfortable with independent laboratory and field work.

2. One Ph.D. student will examine the effects of climate change/herbicide use on planktonic and benthic invertebrate communities in these experimental ponds. The student will be supervised by Dr. Karen Kidd (UNB Saint John). Qualifications: An M.Sc. in ecotoxicology, aquatic ecology or a related discipline. The student should have experience conducting field work on aquatic systems and good statistical skills. Experience in macroinvertebrate identifications is an asset.

3. One Ph. D student will be examining the effects of climate change/herbicide stressors on primary production and plant abundance and diversity. The student will be supervised by Dr. Jeff Houlahan. Qualifications: An M. Sc. in ecology, conservation biology, botany or a related discipline is preferred. We would consider a

statistics, math or computer modelling graduate if there is a strong natural history interest and background. Exceptional B. Sc. students will be considered. All candidates should have good statistical skills (i.e. are comfortable with traditional analyses such as ANOVA and regression). Experience in aquatic plant identification is an asset.

1 Ph. D. position with the Department of Physical and Environmental Sciences at the University of Toronto

One Ph. D student will be using the output from 24 Global Climate Models and four Regional Climate Models applied to Canada in conjunction with a common regression-based stochastic weather generator software to develop realistic regional climate projections under different future scenarios of climate change. The student will be supervised by Dr. Adam Fenech. Qualifications: A Masters degree in physical geography or physics with specific courses in climatology and/or meteorology. All candidates should have numerical skills, and enjoy database development and manipulation. Geographic information system experience is an asset.

For more information about specific subprojects contact: Jeff Houlahan: jeffhoul@unbsj.ca

Additional Qualifications

- Effective team player
- Excellent verbal, written, and interpersonal skills
- Ability to work effectively in a collaborative group



Duties Include

- Work with team to establish 24 experimental ponds on CFB Gagetown
- Establish testable hypotheses, study design, experimental installation, data collection, analyses
- Lead-authoring peer-reviewed publications in international journals as well as a thesis dissertation
- Work with other team members to integrate results across subprojects

TO APPLY

Send CV, graduate and undergraduate academic transcripts, cover letter and full contact information for a minimum of three academic/research references) to Jeff Houlahan at jeffhoul@unbsj.ca.

Please clearly identify the position(s) for which you are applying. After selection the candidates will also have to apply for acceptance into the graduate programs of the host universities.