

# **Industrial BioDevelopment Laboratory (IBDL)/NSERC Undergraduate Student Research Award (USRA) – Project IBDL/NSERC 2012D**

## **2012 Summer Research Project**

**Dates:** May 7, 2012 to August 24, 2012 (Students must be available for entirety of program). Hours are generally Monday to Friday 8:00 AM to 4:00 PM/9:00 AM to 5:00 PM with the recognition that the nature of research and development activities is such that they can occasionally extend to off hours work activities.

**Stipend:** \$5,740 for 16 week term

**Location:** Industrial BioDevelopment Laboratory ([www.ibdl.ca](http://www.ibdl.ca))

University Health Network

101 College Street

Toronto

**Background Required:** Undergraduate student having completed at least one year of university studies and no more than three years in the physical/life sciences with a minimum B cumulative average. Student will be required to submit an official transcript to NSERC confirming their grade point average. Must be a Canadian citizen or a permanent resident of Canada.

**Project Number:** IBDL/NSERC 2012D (to be quoted in application)

**Research Project Title:** Protein and Tissue Stability Project

**Research Project Outline:** Long term stability of biological samples (proteins, cells, and tissues) is an ongoing challenge that must be addressed in the biotechnology sector. This project will involve the development of protocols to improve the stability of biological samples. The student will use techniques such as stabilizer formulation development and evaluation, and freeze drying to create and evaluate preservation techniques for biological samples. The student will also learn and use analytical biochemical techniques for stability evaluation.

**Additional information:** Students will take part in summer student program consisting of undertaking and managing a research project, participating in training workshops, and presenting at scientific and journal club symposia. Students must be comfortable in working in a modern medical research facility in which experimental animal models of disease, human clinical pathogenic specimens, are a variety of chemical and biological compounds are part of the routine laboratory environment. This is a Good Laboratory Practices (GLP) facility where professional behavior and deportment is the norm.