Shawn Keating

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Personal Profile

- > Self motivated, detail oriented engineering graduate with a wide range of laboratory experience.
- Unique dual training in both biological sciences and biomedical engineering allows for a detailed understanding of pure science and the technology driving it.
- Mature student with well developed skills in independent learning and timemanagement so requires minimal supervision.

Education

- Master of Science, Expected Completion, 2012.
 Medical Biophysics, University of Toronto, Toronto, ON.
- Bachelor of Engineering, 2010
 Electrical and Biomedical Engineering. McMaster University, Hamilton, ON.
- Bachelor of Science, 2006
 Cellular, Molecular, Microbial Biology. University of Calgary, Calgary, AB.
- High School Diploma, 1998
 Carlton Comprehensive High School, Prince Albert, SK.

Skill Set

Software:

➤ Proficient at programming in C, C++, C#, Java, Matlab, and Labview with the ability to learn new languages quickly.

Hardware:

- > -Microcontroller Programming and Architecture related to the PIC24 family of μC.
- -Experience with data acquisition hardware as it pertains to recording EEG, ECG, EOG, EMG, and MRI signals.

Lab Experience:

- Animal Handling/Surgeries
- Histological Techniques- fixation, sectioning, staining of tissue samples.
- Molecular Biology Techniques- PCR, gene expression, protein expression, western blotting.

Relevant Work Experience

May 2009-Aug2009

Research Assistant

USRA Summer Project-Dr. Deda Gillespie

<u>Experience Gained</u>: Designed and implemented a program in Labview for acquisition and storage of single channel spike train data from the cochlear nucleus of rats. Also developed a Matlab GUI for sound presentation in the Auditory Brainstem Response (ABR).

May 2007-Aug 2007

Research Assistant

Stem Cell and Cancer Research Institute- Dr. Chris Wynder

<u>Experience Gained</u>: Utilized biochemical and molecular biology techniques to express and purify candidate proteins in an effort to deduce the role of accessory proteins in the de-methlylation of the histone H3 protein.

Sept.2005- April 2006

Research Assistant

Undergraduate Research Project- Dr. Howard Ceri

<u>Experience Gained</u>: Set up and performed experiments to deduce the influences of various cytotoxic necrotizing factors on the virulence of E. coli using the rat prostate as a model for chronic inflammation.

May 2005-August 2005

Research Assistant

Summer Laboratory Volunteer- Dr. Greg Moorhead

<u>Experience Gained</u>: Was introduced to basic biochemical techniques such as western blots and bacterial transfections as well as the organization of a research laboratory while volunteering two days a week.

Research Awards

- Awarded an NSERC USRA, 2009 Supervisor, Dr. Deda Gillespie
- Awarded an NSERC USRA, 2006 Supervisor: Dr. Howard Ceri, Declined

Teaching Experience

- > Teaching assistant- for Dr. Fred Biddle in "Medical Genetics".
 - Organized a one hour tutorial once a week, marked student homework.

Activities and Honors

- Currently serving as President of "Bioengineering at McMaster Society", which represents all bioengineering undergrads at McMaster.
- > Served as Vice-President Internal of "Bioengineering at McMaster Society" for the 2008/09 school year where I acted as a liaison between students and faculty.
- Held Dean's Honor List distinction for all four years at McMaster as well as my final two years at the University of Calgary.
- Enjoy playing guitar, drums, and numerous sports as well as sharpening my trivia skills by learning anything and everything I can.