

**Stevan Lauriault**  
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**416-283-4066**

**Career Objective:**

Entrepreneur, Indeterminate Executive, Scientist or Technologist position.

**Employment Experience:**

**Sunnybrook Health Sciences Centre**

**On site: Defence Research and Development Canada - Toronto**

**Department of National Defence, Canada**

Contractor: Research Assistant/Technician/Technologist

April 1, 2006 - April 1, 2008 (temp. volunteer October, 2005 - April 2005)

- Research, development and optimization of flow cytometric assays for the Resuscitation Outcomes Consortium (ROC); a multi-centre clinical trial to test the effects of hypertonic saline infusion in trauma patients and healthy subject volunteers.
- Developed assays and established instrument settings using single-channel stained controls for intracellular cytokines, phagoburst, apoptosis, adhesion, degranulation, TLRs and chemokine receptor biomarkers on PMNs, monocytes and CD16/CD14 monocyte subsets.
- On-call days and nights to routinely process human whole blood clinical samples from hospital, purify serum/plasma/PAXGene, acquire whole blood on hematology analyzer, and leukocytes on cytometers.
- Routinely prepared solutions, operated pipettes, micropipettes, repeaters, centrifuges, vortexes, water baths, incubators, **BD FACSCalibur** (w/ sorter) and **BD FACSCanto** flow cytometers. **BD FACSComp, FACSCanto, CellQuest Pro, FACSDiva** software for QC/acquisition. **FlowJo 8.7, CellQuest Pro and FACSDiva 5.2** software for analysis.
- Obtained **BD FACSCanto training certificate Oct., 2007, Billerica, MA.**
- Performed machine calibration, maintenance, trouble-shooting, experiment/template design, test antibody research/ordering, control antibody ordering, isotype/concentration matching, antibody titrations, fluorescence compensation, data acquisition, analysis, patient-specific boolean gating, iterations, population comparisons (simple **M1 gates, Overton subtraction, SED subtraction %+ve, ChiT, Central Tendencies, significance tests**), and **export of bulk/batch statistics to database.**
- Upgraded Software and Hardware.
- Conducted further analysis of trial results using **StatView statistical analysis software.**
- Trained users in universal safety precautions, solution preparation, diverse staining techniques (intracellular/surface/DNA), flow cytometry troubleshooting, data acquisition and analysis.
- Researched advanced cytometry techniques, experimental design (normal cytometry, FACS and **ImageStream**), purchasing quote generation, group scheduling, hardware/software upgrades, LWA, **PC/Mac**, carousel setup (automation), **MS Windows/OSX**, Internet web-browsers, online literature search using **EndNotes and full-text search, publication review, MS Outlook, Word, Excel, Powerpoint.**
- Took leadership role in designing and implementing human whole blood staining experiments On **Amnis ImageStream** Cellular Imaging device. Also analyzed and interpreted experimental results. Coordinated off-site FACS experiments and presented assay development data/results to ROC staff.
- Made recommendations for the enhancement of biocontainment and on-site chemical/biological specimen handling safety precautions.

### **RESEARCH TECHNOLOGIST I**

The Hospital for Sick Children  
Flow Cytometry Core Facility  
TORONTO, ON

March 2005 - Sept. 2005 (part-time, temp. contract)

- Daily maintenance, calibration and operation of the **BD FACScan** and **FACSCalibur** Flow Cytometers.
- Acquired and analyzed flow cytometry data (1-4 colour) from multiple laboratories using **CellQuest Pro** and **FlowJo** software.
- Emulated/Constructed batch analysis template and performed batch analysis using FlowJo software.
- Scheduled and managed assay appointments using **FileMaker Pro**. Trained users how to acquire and analyze data.

### **SCIENTIST II (TN Visa title)**

Aastrom Biosciences  
ANN ARBOR, MI

Sept. - Nov. 2004 (full-time, temp. contract)

- 4-colour analysis of human bone-marrow using **Coulter Epics XLMCL** flow cytometry with windows-based **Expo32** software.
- Complex sample staining, molecular-fluorescence staining matrices, data analysis and archiving.

### **SCIENTIST II (TN Visa title)**

Pfizer Inc. - Global Research and Development  
ANN ARBOR, MI

April - Sept. 2004 (full-time, temp. contract)

- Optimization of 4-color Lymphocyte sub-setting assay.
- Rodent euthanasia and surgery.
- Single-cell suspensions from tissue, fl-mAb staining, flow cytometry using **FACSCalibur** with **CellQuest Pro** software, mAb preparations, dilutions, SOPs, databook and notebook recordings, data analysis, validation and PowerPoint presentation.
- Training: Chemical spill safety, General Site Safety, Animal Welfare training.

### **TEACHING ASSISTANT**

University of Windsor, Department of Biology  
WINDSOR, ON

Jan. - April 2004 (part-time, semester)

- Assisted in teaching first year biology lab with the department of Biological Sciences while pursuing Hon. B. Sc. in Biochemistry and Biotechnology.

### **SOFTWARE ENGINEER/VICE PRESIDENT - startup company**

InDevPro Inc.  
WINDSOR, ON

Feb. - April 2003

- Assisted in family entrepreneurial endeavor.
- learned basics in Database-driven web programming using Dreamweaver MX, Flash MX, ColdFusion MX, HTML, Java, C++, MySQL server, MS Access.
- Database-driven Webpage design, template production, multitasking and office duties.

## **CHEMIST/BIOCHEMIST**

HydroBiotech Inc.

MIRABEL, QUEBEC

Feb. - May 2002 (full-time, contract)

- Project Management, Excel database input/functions, Chemical Preparation, **spectrophotometric analysis, ion-selective electrode maintenance and testing, pH measurement, flame photometric analysis**, blood serum analysis, basic HPLC, bilingual environment (French/English).

## **RESEARCH ASSOCIATE**

Université de Lausanne/ISREC

EPILANGES, SWITZERLAND

July - Sept. 2001 (full-time, stage)

- Assisted with experiments in tumor targeting using an innovative approach. In collaboration with ISREC and Ludwig Institute for Cancer Research.
- Bacterial culture, incubation and stimulation.
- Synthesis and purification of inclusion bodies from E.Coli and subsequent Bradford assay spectrophotometry, SDS-PAGE and BioRad chromatography.
- Performed refolding procedures of soluble MHC class I protein with flu peptide.
- Tumour cell culture, mouse maintenance, (SCID, normal), FACS analysis, ELISPOT and lab duties. For more information, see [www.cancerimmunity.org](http://www.cancerimmunity.org) vol. 3 no. 11.

## **RESEARCH ASSOCIATE**

Rigel Pharmaceuticals Inc.

S. SAN FRANCISCO, CALIFORNIA

May - Sept. 2000 (full-time, temp. contract)

- Calculated dilutions for Jurkat T-cell proliferation. Maintained cells in the biohazard cell culture room, organized cloned cells into 96 well plates, **BD FACSCalibur w/ CellQuest** software operation, analyzed data and documented results.

## **Education:**

### **Hon. B.Sc., BIOCHEMISTRY AND BIOTECHNOLOGY**

University of Windsor

Windsor, ON

Sept. 2004 - May 2005

- Completed 3<sup>rd</sup> year of program, including: Calculus I/II, Physics I, Metabolism I/II, Proteins and Nucleic Acids, Bioinformatics/Genomics/Proteomics. Biology T.A.

### **GRADUATE STUDENT - UNCLASSIFIED**

University of Calgary

Calgary, AB

Sept. - Dec., 2000

- Completed two research-intensive courses: Nucleic Acids, Cellular and Molecular Immunology, including a **grant proposal** outlining the invention of an innovative molecule for patient-specific cancer-immunotherapy (molecule is a bispecific protein consisting of a tumour antigen specific mAb on one arm, and a soluble immunodominant HLA I/flu peptide complex on the other. This molecule was proposed to be produced by a recombinant DNA vector). Original dated Letter of intent available.

**BACHELOR OF SCIENCE DEGREE, BIOLOGICAL SCIENCE**

University of Windsor

Windsor, ON

Sept. 1996 - June, 2000

- Course emphasis: Immunology, Immunochemistry, Molecular Biology, Organic Chemistry, Biochemistry, Medical Microbiology and Statistics. Varsity CIAU football athlete for four years.
- Received the Lancer Award. in 2000, for graduating as a distinguished varsity athlete and role-model.

**Volunteer Experience:**

**Defence Research and Development Canada (DRDC)**

Operational Medicine Facility, Downsview

Oct. - Dec., 2005

Toronto, Ontario

**Knights of Columbus, Council 2110, 3<sup>rd</sup> Degree Knight**

Amherstburg, Ontario, 2004-present

**Catholic Church Youth Groups and Functions**

Amherstburg, Ontario

**Cancer/MS Walkathons**

1993-1996, Amherstburg/Windsor, Ontario