

Lauren Margaret Patrick

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226-203-5704

www.laurengineer.ca

Technical Skills and Qualifications

- Extensive experience with MATLAB, Microsoft Office Suite (Word, Excel, PowerPoint and Outlook), MiniTab 16.0 statistical software and NX 7.5 modelling software
- Experience with AutoCAD, SolidWorks, Microsoft Visual Basic, MiniIDE assembly language software, Arena simulation software, LabView Virtual Instruments and GraphPad Prism statistical software
- Working knowledge of Good Manufacturing Practices (GMP), LEAN Manufacturing and HACCP
- Trained on basic machine shop equipment, including engine lathe, mill, drill press and band saw
- Possesses a valid G-Class Ontario Driver's License and access to a vehicle
- Completed Standard First Aid with CPR "C", WHMIS training, Student Risk Management (SRM) training, Equine Safety training and the Accessibility for Ontarians with Disabilities Act (AODA) training
- Received Extended French Immersion Certificate

Education

Bachelor of Engineering – Mechanical Co-op

September 2009 – April 2014 (expected)

University of Guelph, Guelph, Ontario, Canada

- Received the University of Guelph Lincoln Alexander Chancellor's Scholarship (valued at \$32,000 CDN)
- Chosen for the London Health Sciences Center (LHSC) Harvey F. Sullivan Family Scholarship (valued at \$5,000 CDN) and the Haessler Family Engineering Scholarship (valued at \$5,000 CDN)
- Obtained the highest-level University of Guelph Entrance Scholarship (valued at \$3,000 CDN)
- Awarded the General Dynamics – Land Systems Canada Scholarship (Engineering), the University of Toronto National Book Award and the Queen Elizabeth II – Aiming for the Top Scholarship (valued at \$1,400 CDN combined)
- Won Co-op Student of the Year (2011) and nominated as Co-op Student of the Year (2012) (pending)
- Profiled in the University of Guelph Admissions Handbook for the Bachelor of Engineering program (2010-2011) and the Co-operative Education program (2012-2013)

Engineering Experience

Assistant Analyst (Co-op)

January 2012 – August 2012

McNeil Consumer Healthcare, A Division of Johnson & Johnson Inc., Guelph, Ontario, Canada

- Collected liquid filler system data and used Minitab 16.0 to assess statistical process control (SPC) of the liquid filler nozzles in order to maintain accurate, cost-effective operation for Corporate Engineering
- Managed the conversion of test procedures from the Research & Development (R&D) laboratory to the Quality Sciences and Compliance (QSC) laboratory for a new product launch, as per GMP guidelines, to ensure that raw materials and finished product were tested and released for the projected launch date
- Recognized for achieving results and demonstrating customer focus with three Encore awards (including monetary compensation) for taking the documentation lead by creating, revising and implementing Standard Operating Procedures (SOPs), laboratory testing worksheets and Manufacturing Orders (MOs)

Summer Research Student (Co-op)

May 2011 – August 2011

Gastroenterology, Hepatology and Nutrition, The Hospital for Sick Children, Toronto, Ontario, Canada

- Conducted a literature review to research innovative methods of non-invasive transdermal drug delivery in order to identify the optimal method for use in a novel sweat stimulation device
- Engineered a successful drug delivery system that displayed diagnostic results in real-time via computer and designed a procedural test algorithm to optimize drug transfer during in vivo and ex vivo trials
- Authored a study protocol, instructional documents and technical report on system development

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Engineering Experience (continued)

President's Research Assistant

May 2010 – September 2010

School of Engineering, University of Guelph, Guelph, Ontario, Canada

- Constructed a customized data collection system using accelerometers, a GPS device and LabView software in order to determine the physical characteristics of the experimental model
- Effectively managed multiple aspects the project by coordinating testing sessions, acquiring required equipment and recruiting volunteers for off-site testing

Volunteer Experience

Senior Peer Helper

September 2011 – present

Co-operative Education and Career Services (CECS), University of Guelph, Guelph, Ontario, Canada

- Fulfilled the role of teaching assistant for the co-operative education class by critiquing resumes, cover letters and mock interviews for co-operative education students in one-on-one appointments
- Communicated professionally with both students and employers while staffing the CECS front desk to manage appointments and respond to visitor inquiries efficiently
- Promoted to the role of Senior Peer Helper after one semester with the unit
- Planned, coordinated and delivered advanced training to approximately 30 other Peer Helpers to teach and reiterate relevant skills with regards to resumes, cover letters, interviews and job searching

President

March 2010 – present

Women in Science and Engineering (WiSE), University of Guelph Chapter, Guelph, Ontario, Canada

- Independently revived the group after a year of inactivity by forming a new executive and planning recruitment events
- Developed a marketing campaign to raise chapter awareness, consisting of several different approaches, which included both print and social media
- Submitted detailed risk management plans for events to the SRM committee and acted as a primary organizer at outreach events in the Guelph community and on-campus events in the university community in order to ensure the safety of all participants at chapter events
- Answered questions meaningfully and informatively as a guest speaker in the Q&A Session at two Go ENG Girl events (2011 and 2012) to provide insight into the experiences of female engineering students
- Represented the Guelph Engineering Society (EngSoc) as a delegate and head delegate at the National Conference on Women in Engineering (NCWIE) (2010 and 2011) by managing the other delegates and actively participating in workshops and round tables at the conferences

Presentations

“Novel Methods of Sweat Gland Stimulation to Optimize β -Adrenergic Sweat Secretion” (Poster)

- SickKids Summer Research Program Symposium, The Research Institute, The Hospital for Sick Children (SickKids), Toronto, Ontario, Canada - - - August 4, 2011

Publications

Runciman, R. J., K. Lyle, and L. Patrick. Canoe paddle resonance and monitoring. *Journal of Sports Engineering and Technology* 2012; 226(1):42-51.