

Education

- Urology Residency** **June 2024**
Dalhousie University, Halifax, Nova Scotia, Canada
- Doctor of Medicine** **May 2019**
Dalhousie University, Saint John, New Brunswick, Canada
- Master of Science in Atmospheric Science** **Dec 2015**
Colorado State University, Fort Collins, Colorado; GPA: 3.98/4.00
Dissertation: *Emission Rates of Volatile Organic Compounds from Oil and Gas Wells in Colorado*.
This project involved taking field measurements, processing the data and using computer models to predict concentrations of hazardous air pollutants downwind of well pads.
- Bachelor of Science in Physics, First Class Honours** **May 2013**
Dalhousie University Halifax, NS; GPA: 3.85/4.30
Honours Thesis I: *Understanding the Effects of Human-Generated Aerosols on Precipitation*.
Used a cloud-resolving model to perform experiments on clouds.
Honours Thesis II: *Cloud Aerosol Micro-physics Parcel Model*.
Created my own cloud-aerosol micro-physics model to perform sensitivity experiments on clouds.

Professional Experience

- Dalhousie Urology Residency** **July 2019 – Jun 2024**
Currently working as a urology resident in Halifax, NS where I care for inpatients, operate, and manage patients on an outpatient basis.
- International Federation of Medical Students SCOPE Exchange** **Jul 2017**
Worked in Riga, Latvia in a Trauma and Orthopaedic Surgery Hospital by assisting in ORs and developing surgical skills.
- Research in Medicine** **Jun 2016 – Aug 2016**
Worked with Dr. Erik Scheme and Dr. Keith Brunt to perform a single-blinded pilot study with the goal of creating an algorithm to detect adverse cardiovascular events.
- Colorado State University** **Jan 2015 – May 2015**
Graduate TA for a graduate level computer programming course taught to atmospheric scientists.
- Colorado State University** **Aug 2013 – Jul 2015**
Performed research via data collection, analysis, and computer modelling to understand the effects of hydraulic fracturing on atmospheric emissions.
- Jeffrey Pierce Group** **May 2012 – Aug 2012; May 2013 – Aug 2013**
Performed cloud-resolving model simulations to reproduce marine stratus clouds and estimate the sensitivity of precipitation to aerosol concentrations.
- Jeffrey Dahn Lab** **May 2011 – Aug 2011**
Optimized impregnation process for activated carbons with the goal of creating more efficient breathing mask material.

Horizon Health Network

Jun 2009 – Aug 2009; May 2010 – Aug 2010

Created and analyzed databases for various departments in multiple hospitals and worked with patients in Cognitive Assessment Management.

Honours and Awards

JJ Carroll Travel Fund Bursary

May 2017

Awarded for presentation of Inter-professional Education Research at the Canadian Conference on Medical Education (\$750).

DMNB Student Conference Funding

May 2017

Awarded for the presentation of original urology research at the American Urological Association Meeting in Boston, MA (\$750).

DMNB Student Conference Funding

Jul 2016

Awarded for the presentation of original urology research at the Canadian Urological Association Meeting in Vancouver, BC (\$750).

Dalhousie Medicine NB Summer Student Research Program Studentship

Jun 2016

Awarded to Dalhousie Students who perform medical research (\$5,000).

Dr. Richard & Lynne Winter Scholarship

Sep 2015

Awarded to a student accepted into Dalhousie Medical Program on the UNB Saint John campus. Based on financial need and scholastic attainment (\$5,000).

NSERC Canada Graduate Scholarship

Aug 2013

Scholarship for high calibre scholars who are engaged in eligible Masters programs (\$17,500 over 12 months).

NSERC Undergraduate Student Research Award

May 2013

Awarded to undergraduate student to stimulate interest in research in the natural sciences and engineering (\$4,500 over 1 summer).

Dean's List

Sep 2009 – May 2013

Each semester of my undergraduate degree at Dalhousie University.

Canadian Society of Exploration Geophysicists Trophy

Oct 2012

Award for best speaker in earth, ocean and atmospheric physics at Canadian Undergraduate Physics Conference in Vancouver, BC.

Darrell Montgomery Memorial Prize

May 2012

Awarded to a 3rd year student showing a love of experimentation, qualities of leadership and participation in student activities in Physics related areas.

Burgess McKittrick Summer Research Studentship

May 2011

A four month work term awarded to outstanding students in the Honours Physics Program.

Peer Reviewed Journal Articles Presentations Leadership Activities

Co-author for Dalhousie Medicine Accreditation 2017 Report Co-authored the Independent Student Analysis, a report that examined the satisfaction of students at Dalhousie Medicine New Brunswick Campus (2017).

Interviewer for Dalhousie Medicine Interviewed medical student candidates for the Dalhousie Medicine Class of 2021 as part of the Multiple Mini-Interview format (2016).

Dalhousie Medicine New Brunswick Charity Golf Classic Responsible for creation of website, poster and logistics for this 6th annual charity event (2016).

Communications and Technology Representative Part of the Dalhousie Medical Students' Society council. Responsible for all communications of the DMSS members in New Brunswick, and managing the DMSS website (2016 – 2017).

Respiratory Therapy Anatomy Instructor Developed and taught respiratory therapy students anatomy relevant to their field (2016 – 2017).

Surgery Interest Group Executive Member Organized and helped teach a suturing evening for MED1 and MED2 students at Dalhousie Medicine New Brunswick (2016 – 2017).

Atmospheric Science Department Graduate Representative Provided help and guidance to new graduate students in the Atmospheric Science Department of Colorado State University (2014 – 2015).

Colorado State Engineering Student Technology Committee Member Part of committee that decides on where to allocate technology fees from engineering students (2014 – 2015).

Local Chapter President of American Association for Aerosol Research Colorado State University Student Chapter President. I was responsible for fundraisers, organizing journal clubs, and group outings to various scientific centres in Colorado (2014 – 2015).

Organizer of “School is Cool” Summer BBQs Organized BBQs to raise money for this charity to provide much needed supplies to young students around Fort Collins, Colorado (2014).

Student Organizer of Young Scientist Symposium on Atmospheric Research Organizer for annual atmospheric science conference in Fort Collins, CO (2014).

Scientist with Earth Explorers Worked with sixth graders at Trail Ridge Middle School, Longmont, Colorado to teach the importance of science (2014).

President of Dalhousie Physics Society Responsible for organizing meetings, presenting faculty awards and managing funds (2013).

Social representative of Dalhousie Physics Society Responsible for hosting a “Physics Phryday” event every month and organizing summer BBQs to earn money for society (2012).

Member of Dalhousie Allies Provided support for other students regarding their sexuality without fear of judgment (2011 – 2013).

Volunteer at IWK Health Centre Worked at information desk to answer questions and provide directions to patients, families and visitors (2010 – 2011).

Volunteer at Saint John Regional Hospital Worked at information desk (2006 – 2008).

Individual Activities

Computer Programming Create various programs to improve my life and the lives of others. A subset of my programs can be found here: <https://github.com/lannymac> (2012 –).

Downhill Skiing Living near the Rocky Mountains provided an opportunity to ski that I could not pass up (2013 –).

Hiking The Rocky Mountains have provided many trails and mountain peaks to summit. I have also been an avid hiker throughout my childhood and undergraduate career.

Movies Alien (1979), Bladerunner (1982), Hereditary (2018), The Shining (1980), The Thing (1982).

Music Aphex Twin, Boards of Canada, Floating Points, Gas, Leon Vynehall, Nicolas Jaar, Oneohtrix Point Never, Skee Mask, Tim Hecker, Tycho.