

Landon Getz

B.Sc. (Hons) Microbiology and Immunology

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Education

Ph.D. Microbiology and Immunology, *Dalhousie University*

- **Currently Enrolled**
- **Nominated for Vanier Canadian Graduate Scholarship - \$50,000**
- Awarded Canadian Graduate Scholarship – Masters – \$17,500
- Awarded Nova Scotia Graduate Scholarship Recipient - \$10,000 Award
- Studying Host-Pathogen Interactions and Environmental Survival in *Vibrio parahaemolyticus*

B.Sc. First Class Honours in Microbiology and Immunology, *Dalhousie University*

- **Graduated June 2017**
- Microbiology and Immunology Award for Excellence in Undergraduate Honours Research
- Cumulative GPA: 3.93

Certificate in Genetics, *Dalhousie University*

- Received June 2017

High School Diploma, *Medicine Hat High School*

- Received June 2013
- Awarded Alexander Rutherford Scholarship - \$2,500 Award

Teaching and Mentoring

Part Time Academic, *Department of Chemistry, Dalhousie University*

- September 2018 to *Present*
- Instructor for CHEM 1011/1012 at Dalhousie University and First Year Chemistry Resource Centre Coordinator
- Duties include: Organize TAs, lecture once a week, respond to student e-mails, prepare course material, mark quizzes and exams.

Graduate Student Mentor, *Dalhousie iGEM, Dalhousie University*

- January 2017 to *Present*
- Wet-lab mentor for Dalhousie iGEM 2018. I ensure the safety of the students, teach them the appropriate molecular biology skills, and lead them through the Summer project.
- Prepared a **three-day molecular biology boot-camp**, where each student cloned a piece of DNA into the iGEM BioBrick Shipping Vector.

Senior Chemistry Resource Center Assistant, *Department of Chemistry, Dalhousie University*

- January 2017 to September 2018
- Create TA's assignment and meeting schedule, be available throughout the week to answer questions about First Year Chemistry assignments and lecture material.
- Provide Professional-Development workshops for other TA's to attend.

Teaching Assistant, *Department of Chemistry, Dalhousie University*

- September 2017 to January 2018
- MICI 2100 – Introduction to Microbiology and Immunology – Course Coordinator: Dr. Nikhil Thomas
- Be available to answer student questions in person and over e-mail; mark exams.

Bioinformatics and Web Design Mentor, *Dalhousie iGEM, Dalhousie University*

- January 2017 to *Present*.
- Be a graduate student resource for the Bioinformatics and Web Design teams.

Chemistry Resource Center Assistant, *Department of Chemistry, Dalhousie University*

- September 2015 to December 2016.
- Be available throughout the week to answer questions about First Year Chemistry assignments and lecture material and attend weekly meetings

Publications

Peer-Reviewed Publications:

- Thornbury, M.* , Sicheri, J.* , Slaine, P.D., **Getz, L.J.**, Finlayson-Trick, E.C.L., Cook, J., Guinard, C., Boudreau, N., Jakeman, D., Rohde, J.R., McCormick, C.# (2018). "Discovery and Characterization of Novel Lignocellulose-Degrading Enzymes from the Porcupine Microbiome by Synthetic Metagenomics." *PLoS One*, **Accepted**.
- Getz, L.J.**#, Delleire, G.# (2018). "Angels and Devils: Dual-Use in Biotechnology." *Trends in Biotechnology*. DOI: <https://doi.org/10.1016/j.tibtech.2018.07.016>.
- Runté, C., Jain, U., **Getz, L.J.**, Secord, S., Kuwae, A., Abe, A., Leblanc, J., Stadnyk, A.W., Kaper, J.B., Hansen, A.M., Thomas, N.A. (2018) "Tandem tyrosine phosphosites in the enteropathogenic *Escherichia coli* chaperone CesT are required for differential type III effector translocation and virulence." *Molecular Microbiology*.
- Getz, L.J.**, Thomas, N.A. (2018) "The Transcriptional Regulator HlyU is a Positive Regulator for Expression of *exsA* Leading to Type III Secretion System-1 Activation in *Vibrio parahaemolyticus*." *Journal of Bacteriology*.
- Getz, L.J.***, Finlayson-Trick, E.C.L.* , Slaine, P.D.* , Thornbury, M., Lamourerux, E., Cook, J., Langille, M.G.I., Murray, L.E., McCormick, C., Rohde, J.R., Cheng, Z. (2017). "Taxonomic differences of gut microbiomes drive cellulolytic enzymatic potential within hind-gut fermenting mammals." *PLoS One*.

Commentaries:

- Getz, L.J.**, Delleire, G., Baylis, F. (2018). "Jiankui He: A Sorry Tale of High-Stakes Science", *The Hastings Center Forum Blog*.
- Baylis, F., Delleire, G., **Getz, L.J.** (2018). "Why we are not ready for genetically designed babies", *The Conversation: Canada Edition*. Reprinted in: The National Post and the Halifax Chronicle Herald.
- Getz, L.J.** (2018). "Thicker Than Water: Slow Movement on Blood Policy", *Impact Ethics*, Novel Tech Ethics, Halifax, NS.
- Getz, L.J.** (2018). "The Privacy Implications of Human DNA Sequencing", *Impact Ethics*, Novel Tech Ethics, Halifax, NS.
- Getz, L.J.** (2017). "A Reflection on Blood Donation Policy in Canada." *Impact Ethics*. Halifax, NS.

Invited Presentations

Life Sciences Department Seminar Series, Natural History Museum, London, UK
January 2019.
Titled: The Multimodal Lifestyle of Marine Vibrios

Conference Presentations

- PREP Graduate Student Research Day Platform Talk, *Dalhousie University*, Halifax, NS
May 2018
Titled: Linking Phenotype and Pathogen Genomics: TnSeq and Next Generation DNA Sequencing.
- 23rd Annual Infectious Disease Research Day Poster Presentation, *Centre for Vaccinology*, Halifax, NS April 2018
Titled: Linking Phenotype and Pathogen Genomics: TnSeq and Next Generation DNA Sequencing.
- Microbiology and Immunology Graduate Student Seminar Platform Talk, *Dalhousie University*, Halifax, NS February 2018
Titled: *Vibrio parahaemolyticus*: A Versatile Pathogen Living a Dual-Lifestyle
- Vibrio2017: The Biology of *Vibrio*'s, ASM, Chicago, IL
November 2017
Titled: HlyU and H-NS act as a Genetic Switch for Transcriptional Control of the Type-III Secretion System I Master Regulator *exsA*
- Infectious Disease Research Day Poster Presentation, *Dalhousie University*, Halifax, NS
April 2017
Titled: Discovery of a Genetic Switch in *Vibrio parahaemolyticus* that Contributes to Host Cell Death during Infection.
- iGEM Giant Jamboree PowerPoint Presentation, iGEM, Boston, MA
October 2016
Titled: Biofuel Production set to Spike: Identification of Biofuel Producing Enzymes in the Porcupine Microbiome
- Microbiology and Immunology Seminar: iGEM, *Dalhousie University*, Halifax, NS
September 2016

Titled: iGEM: State of the Union.

Science Communication

- **Science Slam Halifax Participant**
 - Discussed a subset of my work, marine nutrient cycles, to a lay audience at a Grade 8 education level
 - Platform was a 5 minute talk, no slides.
- **"Ask a Scientist" Campaign, Dalhousie Faculty of Science**
 - Discussed LGBTQ+ Science, Technology, Engineering, Maths Day at Halifax Pride along with other LGBTQ+ Scientists at Dalhousie
 - Discussed Environmental Microbiology and Bacteriology to the community crowd.
- **LGBTQ+ Science, Technology, Engineering, Maths Day Discussion on Information Morning with Portia Clark**
 - Information Morning is the public broadcasters (CBC) local morning radio show in Nova Scotia
 - Discussed the importance of inclusion and diversity in STEM, along with LGBTQ+ STEM Day.

Volunteer Experience

Graduate Student Representative, Microbiology and Immunology Undergraduate Studies Committee

- September 2017 – *Present*
- Act as a liaison between undergraduate students and the faculty leads.
- Provide advice to the committee as a former undergraduate student of the department

External Coordinator, *Dalhousie Urban Garden Society*

- March 2016 – *Present*

House Co-President, Howe Hall Residence Council

- September 2013 to April 2014

Awards:

Nominated for 2019 Vanier Canadian Graduate Scholarship by Dalhousie University - \$50,000 Award

2018 Nova Scotia Health Research Foundation Scotia Scholars Award - \$10,000 Award

2018 Alexander Graham Bell Canadian Graduate Scholarship - Masters Recipient - \$17,500 Award

2018 Nova Scotia Graduate Scholarship - \$10,000

2017 Award for Excellence in Undergraduate Honours Research - \$100

2017 Nova Scotia Graduate Scholarship - \$10,000

2017 Faculty of Science Undergraduate Research Prize

2017 Honours Student Prize

2016/2017 Academic Year – Faculty of Science Dean's List

2016 NSERC University Summer Research Award - \$4,500

2015/2016 Academic Year – Faculty of Science Dean's List

2015 Dalhousie University In-Course Scholarship - \$250

2014/2015 Academic Year – Faculty of Science Dean's List

2013 Fall – Faculty of Science Dean's List

2013 Dalhousie University Entrance Scholarship - \$750

2013 Alexander Rutherford Scholarship - \$2,500

Media:

***Halifax's The Coast* - 10 urban gardens you need to know by Victoria Walton, 2017**

- Featured for work at the Dalhousie Urban Garden

***The Dalhousie Gazette* - Urban Garden is one of Dalhousie's hidden gems by Lauren Hazlewood, 2017**

- Featured for work at the Dalhousie Urban Garden