

Publications

Career Total: 8

81 Citations; h-index: 6 (as per Google Scholar)

Journal Articles

Corresponding Author[#] | Equal Contribution^{*} (ordered alphabetically)

1. **Getz, L.J.^{*}**, Kratzer, K.^{*}, Peterlini, T., Masson, J-Y., Delleire, G.[#]. (2021). “Addressing the dark matter of gene therapy: technical and ethical barriers to clinical application.” *Human Genetics*. DOI: <https://doi.org/10.1007/s00439-021-02272-5>
2. **Getz, L.J.**, Delleire, G.[#] (2020). “Back to Basics: Application of the 4-principle approach to bioethics to heritable genome editing.” *Science and Engineering Ethics*. DOI: <https://doi.org/10.1007/s00439-021-02272-5>.
3. **Getz, L. J.**, Runté, C., Rainey, J., Thomas, N.A.[#] (2019). “Tyrosine phosphorylation as a widespread regulatory mechanism in prokaryotes.” *Journal of Bacteriology*. DOI: <https://doi.org/10.1128/JB.00205-19>
4. 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). “Characterization of novel lignocellulose-degrading enzymes from the porcupine microbiome using synthetic metagenomics” *PLoS One*. DOI: <https://doi.org/10.1371/journal.pone.0209221>.
5. **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>.
6. 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*. DOI: <https://doi.org/10.1111/mmi.13948>.
7. **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*. DOI: <https://doi.org/10.1128/JB.00653-17>.
8. **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*. DOI: <https://doi.org/10.1371/journal.pone.0189404>.

In Preparation

9. **Getz, L.J.**, Brown, J.M., Sobot, L., Chow, A., Mahendrarajah, J., Thomas, N.A.[#]. (2021). Resolution of DNA Cruciforms by a Conserved Regulator Directs Virulence in Pandemic *Vibrio*. Submitted to Nature Microbiology.

Theses

10. **Getz, L.J.** (2017) “A Genetic Switch Controls the Type III Secretion System Master Regulator, ExsA, in *Vibrio parahaemolyticus* RIMD2210633”. *B.Sc (Hons)*. Dalhousie University, Halifax, NS, Canada.
11. **Getz, L.J.** (In Preparation) “Whole Genome Interrogation of *Vibrio parahaemolyticus* RIMD2210633 Metabolism and Virulence Gene Regulons”. *Ph.D.* Dalhousie University, Halifax, NS, Canada.

Abstracts

1. **Getz, L.J.**, Brown, J.M., Sobot, L., Chow, A., Mahendrarajah, J., Thomas, N.A. (2021). DNA Cruciforms Regulate Virulence in Pathogenic *Vibrio* Species. 70th Annual Conference of the Canadian Society of Microbiologists, Remote - June 2021.
2. **Getz, L.J.**, Thomas, N.A. (2020). Functional genomics of *Vibrio* pathogenesis and environmental persistence. 2020 Canadian Student Health Research Forum.
3. **Getz, L.J.**, Brown, J., Thomas, N.A. (2019). Type III Secretion System Gene Expression and Virulence is Regulated by a DNA Cruciform Structure at the *exsA* promoter in *Vibrio parahaemolyticus*, Genomes to Biology: the 8th International Conference on the Biology of Vibrios, McGill University, Montreal, QC. - November 2019
4. **Getz, L.J.**, Brown, J., Thomas, N.A. (2019). A DNA junction superstructure regulates Type III Secretion System gene expression and virulence in *Vibrio parahaemolyticus*, The 69th Annual Conference of the Canadian Society of Microbiologists, Université de Sherbrooke, Sherbrooke, QC. - June 2019
5. **Getz, L.J.**, Thomas, N.A. (2018). Flipping the Switch on Bacterial Pathogenesis: How the Leading Cause of Seafood-borne Gastroenteritis - *Vibrio parahaemolyticus* - Regulates Virulence, LGBTSTEMinar 2019, Institute of Physics, London, UK. - January 2019
6. **Getz, L.J.**, Comeau, A., Langille, M.G.I., Thomas, N.A. (2018). Linking Phenotype and Pathogen Genomics: Tn-Seq and Next Generation DNA Sequencing, PREP Graduate Student Research Day, Dalhousie University, Halifax, NS. - May 2018
7. **Getz, L.J.**, Comeau, A., Langille, M.G.I., Thomas, N.A. (2018). Linking Phenotype and Pathogen Genomics: Tn-Seq and Next Generation DNA Sequencing, 23rd Annual Infectious Disease Research Day, Dalhousie University, Halifax, NS. - Apr 2018
8. **Getz, L.J.**, Thomas, N.A. (2017). HlyU and H-NS Act as a Genetic Switch for Transcriptional Control of the Type III Secretion System-I Master Regulator *exsA*, ASM Vibrio2017: The Biology of Vibrios, Chicago, IL. - November 2017
9. **Getz, L.J.**, Thomas, N.A. (2017). Discovery of a Genetic Switch in *Vibrio parahaemolyticus* That Contributes to Host Cell Death During Infection, 22nd Annual Infectious Disease Research Day, Dalhousie University, Halifax, NS. - March 2017
10. **Getz, L.J.**, Finlayson-Trick, E.C.L., Hagar, M. Slaine, P.D., Thornbury, M., Lamourerux, E., Cook, J., Langille, M.G.I., Murray, L.E., McCormick, C., Rohde, J.R., Cheng, Z.A 'spike' in biofuel production: mining the porcupine microbiome to engineer a softwood feedstock platform, Giant Jamboree Abstract Guide, iGEM Giant Jamboree, Boston, MA. - October 2016

Commentary

1. Baylis, F., **Getz, L.J.** (2021). [Challenge studies for COVID-19: Now is still not the time](#). JME Blog
2. **Getz, L.J.**, Baylis, F. (2021). [Challenge studies for COVID-19: Now is not the time](#). JME Blog
3. **Getz, L.J.**, Baylis, F. (2020). [Canada should reject the idea of deliberately infecting vaccine volunteers](#). PolicyOptions.ca.
4. Baylis, F., **Getz, L.J.** (2020). [Why federal government should reject human challenge trials for COVID-19 vaccine](#). CBC Opinion.
5. Qaiser, F., Morriseau, T., Rilling, M., Cartile, A., Sung, M., **Getz, L.J.**, Boulanger, M-E. (2020). [Envisioning A Post-Pandemic Future in the Canadian Science Community: A Youth Perspective](#). Canadian Science Policy Conference 2020.
6. Baylis, F., **Getz, L.J.** (2020). [Rush to risky challenge trials is unethical](#). HealthyDebate.ca.

7. **Getz, L.J.** (2020). [Rushing coronavirus vaccines and treatments could do more harm than good](#). TheConversation.ca, Republished in Everything Zoomer, and Dal News.
8. Kofler, N., **Getz, L.J.**, Baylis, F., Dellaire, G. (2019). [Genetically modifying mosquitoes to control the spread of disease carries unknown risks](#). TheConversation.ca, republished in Salon, HalifaxToday.ca, SaltWire Newspapers, and Gannett Newspapers.
9. **Getz, L.J.**, Dellaire, G. (2019). [Moratorium on Human Genome Editing: Time to Get It Right](#). The Hastings Center Forum Blog.
10. **Getz, L.J.**, Dellaire, G. (2019). [CRISPR gene editing: Why we need Slow Science](#). The Conversation.ca.
11. **Getz, L.J.** (2019). [The “Value” of Consumer DNA Sequencing](#). Impact Ethics at Novel Tech Ethics.
12. **Getz, L.J.**, Dellaire, G., Baylis, F. (2018). [Jiankui He: A Sorry Tale of High-Stakes Science](#). The Hastings Center Forum Blog.
13. Baylis, F., Dellaire, G., **Getz, L.J.** (2018). [Why we are not ready for genetically designed babies](#). The Conversation.ca. Reprinted in: The National Post and the Halifax Chronicle Herald.
14. **Getz, L.J.** (2018). [Thicker Than Water: Slow Movement on Blood Policy](#). Impact Ethics at Novel Tech Ethics.
15. **Getz, L.J.** (2018). [The Privacy Implications of Human DNA Sequencing](#). Impact Ethics at Novel Tech Ethics.
16. **Getz, L.J.** (2017). [A Reflection on Blood Donation Policy in Canada](#). Impact Ethics at Novel Tech Ethics. Reprinted at the Kennedy Institute of Ethics Bioethics Blog.

Invited Seminars and Talks

1. Transposon Sequencing: Functional Genomics for Probing Bacterial Pathogenesis. Genomics in Medicine - Emerging Technologies and Bioinformatic Challenges, Dalhousie University, Halifax, NS. Invited Talk. December 2019.
2. *Vibrio parahaemolyticus* and infection: A complex relationship between environment and host. Graduate Student Research Day Excellence in Research Award, Dalhousie University, Halifax, NS. Keynote. May 2019
3. The Multimodel Lifestyle of Marine *Vibrio*. Natural History Museum Life Science Seminar Series, Natural History Museum, London, UK. January 2019

Conference Talks

1. DNA Cruciforms Regulate Virulence Gene Expression in Pathogenic *Vibrio* Species. 70th Annual Conference of the Canadian Society of Microbiologists - Remote. June 2021.
2. Build Back Better: The Chief Science Advisor’s Youth Council’s Roundtables to Envision A Post-Pandemic Future in the Canadian Science Community. Canadian Science Policy Conference, University of Ottawa, Ottawa, QC. October 2020.
3. Functional genomics of *Vibrio* pathogenesis and environmental persistence. Canadian Student Health Research Forum, University of Manitoba, Regina, MB. August 2020.
4. A DNA Cruciform Structure Regulates Virulence Gene Expression in Human Pathogenic *Vibrio* species. PREP Graduate Student Research Day, Dalhousie University, Halifax, NS. June 2020.
5. A Regulator of Sugar Metabolism Implicated in the Secretion and Virulence of *Vibrio parahaemolyticus*. Professional Research and Education Program Graduate Student Research Day, Dalhousie University, Halifax, NS. May 2019

6. Type III Secretion System Gene Expression and Virulence is Regulated by a DNA Cruciform Structure at the *exsA* promoter in *Vibrio parahaemolyticus*. Genomes to Biology: The 8th International Conference on the Biology of *Vibrios*, McGill University, Montreal, QC. November 2019.
7. Creating LGBTQ+ Inclusive Spaces for Equitable Active Learning. Dalhousie Conference on University Teaching and Learning, Dalhousie University, Halifax, NS. May 2019
8. The Multimodal Lifestyle of Marine *Vibrios*. Microbiology and Immunology Seminar Series, Dalhousie University, Halifax, NS. January 2019
9. Flipping the Switch on Bacterial Pathogenesis: How the Leading Cause of Seafood-borne Gastroenteritis - *Vibrio parahaemolyticus* - Regulates Virulence. LGBTSTEMinar 2019, Institute of Physics, London, UK January 2019
10. Linking Phenotype and Pathogen Genomics: TnSeq and Next Generation DNA Sequencing. PREP Graduate Student Research Day, Dalhousie University, Halifax, NS. May 2018
11. *Vibrio parahaemolyticus*: A Versatile Pathogen Living a Dual-Lifestyle. Microbiology and Immunology Graduate Student Seminar, Dalhousie University, Halifax, NS. February 2018
12. Biofuel Production set to Spike: Identification of Biofuel Producing Enzymes in the Porcupine Microbiome. 2016 iGEM Giant Jamboree, iGEM, Boston, MA. October, 2016

Conference Poster Presentations

Poster Presenter*

1. **Getz, L.J.**, Brown, J.M., Thomas, N.A.*. A DNA junction superstructure regulates Type III Secretion System gene expression and virulence in *Vibrio parahaemolyticus*. 69th Annual Conference of the Canadian Society of Microbiologists, Université de Sherbrooke, Montreal, QC. June 2019
2. **Getz, L.J.***, Brown, J.M., Thomas, N.A. Type III Secretion System Gene Expression and Virulence is Regulated by a DNA Cruciform Structure at the *exsA* promoter in *Vibrio parahaemolyticus*. Centre for Comparative Genomics and Evolutionary Bioinformatics Research Retreat, Dalhousie University, Halifax, NS. November 2019
3. **Getz, L.J.***, Thomas, N.A. "Discovery of a Genetic Switch in *Vibrio parahaemolyticus* that Contributes to Host Cell Death during Infection."
4. **Getz, L.J.***, Comeau, A., Langille, M.G.I., Thomas, N.A. Linking Phenotype and Pathogen Genomics: TnSeq and Next Generation DNA Sequencing. 23rd Annual Infectious Disease Research Day, Centre for Vaccinology, Halifax, NS. April 2018
5. **Getz, L.J.***, Thomas, N.A. HlyU and H-NS act as a Genetic Switch for Transcriptional Control of the Type-III Secretion System I Master Regulator *exsA*. ASM Vibrio2017, American Society of Microbiology, Chicago, IL. November 2017.
6. **Getz, L.J.***, Thomas, N.A. Discovery of a Genetic Switch in *Vibrio parahaemolyticus* that Contributes to Host Cell Death during Infection. 22nd Annual Infectious Disease Research Day, Dalhousie University, Halifax, NS. April, 2017
7. **Getz, L.J.***, Finlayson-Trick, E.C.L.* , Hagar, M.* , Slaine, P.D., Thornbury, M., Lamourerux, E., Cook, J., Langille, M.G.I., Murray, L.E., McCormick, C., Rohde, J.R., Cheng, Z. Biofuel Production set to Spike: Identification of Biofuel Producing Enzymes in the Porcupine Microbiome 2016 iGEM Giant Jamboree, iGEM, Boston, MA. October 2016

Knowledge Translation and Media

Dal News. Making science a better place: Student-led group expands efforts to create community for LGBTQ+ in STEM. August 18, 2021.

Dal News. EXCELLENCE IN EDUCATION: MEET THIS YEAR'S DALHOUSIE TEACHING AWARD WINNERS. June 23, 2021.

Scientists in School. Spotlight with Scientists in School: Landon Getz, Award Winning Post-Secondary Educator. March 1, 2021.

Simcoe Reformer. Why deliberately infecting healthy young volunteers with COVID-19 virus can be done ethically. October 22, 2020.

CBC News. How microbes could help clean up Nova Scotia's abandoned mines. August 6th, 2020.

980 CKNW - The Jill Bennet Show. Conversation on coronavirus vaccines and treatments. April 23rd, 2020

570 NEWS: Kitchener Today with Brian Bourke. Conversation on coronavirus vaccines and treatments. April 16th, 2020.

Dal News. CREATING A DEEPER SENSE OF COMMUNITY FOR LGBTQ+ SCIENTISTS. January 30th, 2020. **The Signal.** Halifax event connects queer voices in STEM. January 20th, 2020.

CBC Nova Scotia's Information Morning Radio Show. QAtCanSTEM Colloquium: Being Queer in STEM. January 17th, 2020.

Halifax's The Coast. A first-of-its-kind queer STEM conference is in Halifax this weekend. January 16th, 2020.

The National Post. Breakthrough or a threat? Research on genetics of same-sex behaviour ignites ethical debate. December 6th, 2019.

HalifaxToday.ca. Halifax-based group building queer community in STEM fields. November 24th, 2019.

The Sheldon McLeod Show. QAtCanSTEM and Being a Queer Scientist. November 22nd, 2019.

Dal News. PRIDE IN STEM. July 25th, 2019.

Dal News. TEACHERS WHO INSPIRE: MEET THIS YEAR'S RECIPIENTS OF DAL'S UNIVERSITY-WIDE TEACHING AWARDS. June 20th, 2019.

Current Exchange: A blog by CSHL Meetings and Courses. Visitor of the Week: Landon Getz. June 14th, 2019.

Dal News. GOVERNMENT OF CANADA SELECTS DAL PHDS AND POSTDOCS FOR ITS MOST ESTEEMED AWARDS. May 16th, 2019.

CBC Nova Scotia's Information Morning Radio Show. On the Call for a Moratorium on Germline Genome Editing. February 2019.

The Dalhousie Gazette. Urban Garden is one of Dalhousie's hidden gems by Lauren Hazlewood. September 27th, 2019.

CBC Nova Scotia's Information Morning Radio Show. LGBTSTEMDAY: Inclusion and Diversity in STEM with Portia Clarke, live in studio. July 2018.

Halifax's The Coast. 10 urban gardens you need to know by Victoria Walton. August 3rd, 2017