Department of Population Medicine, University of Guelph, Guelph, ON. Canada. Office: 519-824-4120 ext. 54070 Email: agreer@uoguelph.ca Website: www.mathepilab.org

EXPERTISE

I have broad theoretical and practical knowledge in infectious disease ecology, epidemiology, mathematical modeling, and public health. My research program explores the introduction, spread, dynamics, and control of infectious diseases in populations. I use epidemiological data to develop models that can be used to examine the effectiveness of health interventions in order to make informed decisions regarding health policy. I am a highly effective knowledge translator who has extensive experience communicating modeling methods and findings to both technical and non-technical audiences.

APPOINTMENTS

Canada Research Chair in Population Disease Modeling and Associate Professor.

2018 - present (Awarded tenure in July 2018) Department of Population Medicine *University of Guelph* Guelph, ON

Adjunct Associate Professor. 2019- present

School of Public Health and Health Systems *University of Waterloo* Waterloo, ON

Adjunct Associate Professor. 2019- present

Division of Epidemiology, Dalla Lana School of Public Health, Faculty of Medicine *University of Toronto* Toronto, ON

Canada Research Chair in Population Disease Modeling and Assistant Professor. 2014 - 2018

Department of Population Medicine University of Guelph Guelph, ON

Director, Math.Epi.Lab Inc. 2013 - 2019.

The Math.Epi.Lab Inc. provides mathematical modeling and epidemiology consulting services to a wide range of companies, government departments, and other organizations.

Assistant Professor. 2010 – 2014.

Division of Epidemiology, Dalla Lana School of Public Health, Faculty of Medicine Associate Member, School of Graduate Studies *University of Toronto* Toronto, ON

Senior Mathematician, 2009 – 2014.

Modeling and Projection Section, Professional Guidelines and Public Health Practice Division Centre for Communicable Diseases and Infection Control *Public Health Agency of Canada* Ottawa, ON

EDUCATION

Research Institute of the Hospital for Sick Children, Child Health Evaluative Sciences, Toronto, ON. Postdoctoral Research Fellow, 2007 – 2009.

Arizona State University, Tempe, AZ, PhD, Biology (Infectious Disease Ecology), 2007.

Trent University, Peterborough, ON, MSc, Biology (Infectious Disease Ecology), 2003.

Mount Allison University, Sackville, NB, BSc (Honours), Biology, 2000.

GRANTS AWARDED

University of Guelph, \$20,000 Role: primary investigator Project: Quantifying Canadian physical distancing measures for COVID-19

National Collaborating Centre for Infectious Diseases (NCCID), \$8,000 Role: primary investigator Project: Quantifying Canadian physical distancing measures for COVID-19

Public Health Agency of Canada (PHAC), \$20,000 Role: primary investigator Project: Quantifying Canadian physical distancing measures for COVID-19

NSERC Discovery Grant, \$200,000 Role: primary investigator June 2020 – May 2025 (5 years) Project: Disease dynamics across complex agricultural networks

Agriculture Canada, Agri-Risk Initiatives Program – Research and Development Stream, \$281,374 Role: primary investigator

September 2019 – March 2022 (2.5 years) Project: Equine Disease Financial Risk Transfer Options

NSERC Collaborative Research and Development Grant, \$97,000 Role: Co-applicant with Dr. Shayan Sharif (PI)

April 2019 – April 2022 (3 years) Project: Is it possible to control transmission of avian influenza virus?

Canada First Research Excellence Fund – University of Guelph, Food from Thought, \$41,000

Role: primary investigator January 2019 – January 2021 (2 years) Project: The use of big data to predict the emergence of foodborne outbreaks

Canada First Research Excellence Fund – University of Guelph, Food from Thought, \$45,000

Role: primary investigator January 2019 – January 2021 (2 years) Project: Is it possible to control transmission of avian influenza virus?

Canada Research Chairs Program (renewal), \$500,000

Role: primary investigator January 2019 – January 2024 (5 years) Project: Population disease modeling.

CIHR Operating Grant, \$248,624

Role: Co-applicant with Dr. Julie Arsenault and Dr. Andre Ravel January 2018 – January 2022 (4 years) Project: Modelling campylobacteriosis risk in Canada through the various environmental and foodborne sources of exposure in a climate change perspective

Joint Programming Initiative in Antimicrobial Resistance (JPIAMR), through the Canadian Institutes for Health Research (CIHR), \$1,500,000.00 (\$450,000 to ALG)

Role: Co-applicant with Dr. Derek McFadden (PI) January 2018 – January 2021 (3 years) Project: OPEN Stewardship – my team is responsible for the veterinary component of this project.

Canada First Research Excellence Fund – University of Guelph, Food from Thought, \$320,000

Role: Collaborator January 2017 – January 2020 (3 years) Project: Production Limiting Diseases: Streptococcus suis

CIHR Operating Grant, \$100,000

Role: Co-primary investigator with Dr. David Fisman May 2015 – May 2016 (1 year) Project: One Health In Action: Mathematical and Epidemiological Tools to Prevent Illness at the Human-Animal Interface in Ontario

OMAFRA – University of Guelph Partnership, \$119,588

Role: Co-primary investigator with Dr. Terri O'Sullivan May 2015 – May 2018 (3 years) Project: Using network analysis and dynamic models to develop an understanding of the opportunities and challenges for disease control in equine populations.

Equine Guelph, \$52,354.00

Role: Co-primary investigator with Dr. Terri O'Sullivan September 2014-August 2016 (2 years) Project: Using network analysis and dynamic models to develop an understanding of the opportunities and challenges for disease control in equine populations.

NSERC Discovery Grant, \$125,000

Role: primary investigator August 2014 – August 2020 (5 + 1 years) Project: Threshold theory as a framework for understanding infectious disease dynamics in livestock populations: implications for the control of agriculturally important pathogens.

Medicago, Unrestricted Research Funds, \$36,982

Role: primary investigator May 2014 – May 2015 Project: Seasonal influenza vaccine modeling.

Canada Research Chairs Program, \$500,000

Role: primary investigator January 2014 – January 2019 Project: Population disease modeling.

Canadian Institutes of Health Research, \$300,000

Role: Co-primary investigator with Dr. David Fisman October 2011 – October 2014 Project: Untangling the web: Understanding the abrupt increase in Chlamydia risk in Ontario through applied epidemiology and mathematical modeling

Canadian Institutes of Health Research, \$315,260

Role: Co-primary investigator with Dr. Seyed Moghadas October 2011 – October 2013 Project: Strategies for protecting vulnerable Canadian populations from emerging infectious diseases

Public Health Agency of Canada, \$25,000

Role: Co-primary investigator with Dr. David Fisman 2009-2010 Project: Using individual based models to identify novel interventions for the control of *Chlamydia trachomatis*

Ontario Ministry of Research and Innovation & University of Toronto, \$25,000

Role: primary investigator 2009-2010 Project: Using individual based models to identify novel interventions for the control of *Chlamydia trachomatis* 2009

MATH.EPI.LAB CONSULTING SERVICES

Public Health Agency of Canada, November 2018 – January 2019 (\$9,000)

Provide modeling support to the Centre for Immunization and Respiratory Infectious Diseases (CIRID) related to plant based, pandemic influenza vaccines.

Inuit Tapiriit Kanatami (ITK), December 2017 – April 2018 (\$25,000)

Provide modeling support to the Canadian Inuit TB elimination work group. Provide scientific support to the setting of interim TB elimination goals to be announced jointly by the Federal Minister of Indigenous Affairs, Dr. Jane Philpott and ITK President Natan Obed in March 2018 (on World TB Day).

Public Health Agency of Canada, May 2016 – September 2016 (\$9,000)

Provide modeling support to the Canadian Pandemic Influenza Plan Task Group (CPIP-TG) related to the renewal of the National Antiviral Stockpile.

Medicago Inc., July 2014 – December 2014 (\$46,104)

This engagement was to develop a Java applet "front-end" to the existing pandemic influenza vaccine model we developed in 2013 for knowledge translation purposes.

Medicago Inc., March 2013 – July 2013 (\$55,935)

This engagement was to evaluate the potential impact of the novel Medicago pandemic influenza vaccine candidate on pandemic influenza morbidity and mortality within the Canadian population compared to existing pandemic influenza vaccine and under different assumptions regarding pandemic severity.

FELLOWSHIPS AND AWARDS

- Research Excellence Award, University of Guelph. August 2019.
- Guelph Life Magazine, 40 under 40 Award. September 2016.
- Research Excellence Award, Centre for Communicable Diseases and Infection Control, Public Health Agency of Canada. 2011.
- Senior Lupina Prize for Dynamic Modelling in Health Policy. 2011.
- Beverly Antle Outstanding Trainee Award, Hospital for Sick Children, Child Health Evaluative Sciences. 2009.
- Hospital for Sick Children, Travel Award to attend a meeting at the Pasteur Institute, France. 2008.

PEER-REVIEWED PUBLICATIONS

* denotes trainee under my direct supervision

+ denotes trainee collaborator

74. A.R. Tuite, and **A.L. Greer.** (2020). Shaping the future of the COVID-19 pandemic in Canada. Canadian Medical Association Journal.

73. Fisman, D.N., **A.L. Greer**, and A.R. Tuite. (2020). Age is Just a Number: A Critically Important Number for COVID-19 Case Fatality. Annals of Internal Medicine.

72. Fisman, D.N, **A.L. Greer**, and A.R. Tuite. (2020). Bidirectional Impact of Imperfect Mask Use on Reproduction Number of COVID-19: A Next Generation Matrix Approach. Infectious Disease Modelling 5:405-408.

71. Tuite, AR, **A.L. Greer**, S De Keninck, and DN Fisman. (2020). Risk of COVID-19-Resurgence Related to Duration of and Effectiveness of Physical Distancing in Ontario, Canada. Annals of Internal Medicine.

70. Ogden, N.H., A. Fazil, J. Arino, P. Berthiaume, D.N. Fisman, **A.L. Greer**, A. Ludwig, V. Ng, A.R. Tuite, L.A. Waddell, and J. Wu. (2020). Non-pharmaceutical interventions to control COVID-19 in Canada; modelling scenarios. Canadian Communicable Disease Report 46 (6):198-204.

69. ·Xie, X-T, A. Bekele-Yitbarek, S.U. Khan, Z. Poljak, S. Sharif, and **A.L. Greer.** (2020). A within-host mathematical model of H9N2 avian influenza infection and type-I interferon response pathways in chickens. Journal of Theoretical Biology 499: 110320

68. Tuite, A.R., D.N. Fisman, and **A.L. Greer** (2020). Mathematical modelling of COVID-19 transmission and mitigation strategies in the population of Ontario, Canada. Canadian Medical Association Journal. April 09, 2020 cmaj.200476; DOI: https://doi.org/10.1503/cmaj.200476

67. •Cousins, M. D.N. Fisman, J. Sargeant, and **A.L. Greer**. (2020). Identifying environmental drivers of *Campylobacter* infection risk in Ontario, Canada using a One Health approach. Zoonoses and Public Health https://doi.org/10.1111/zph.12715

66. Brankston, G., **A.L. Greer**, Q. Marshall, B. Lang, K. Moore, D. Hodgins, and J. Beeler-Marfisi. (2020). Air Quality Health Index and Temperature do not Predict Exacerbation of Mild Equine Asthma in Ontario Horses. Frontiers in Veterinary Science. https://doi.org/10.3389/fvets.2020.00185

65. •Khan, S.U., N. Ogden, A. Faizel, P. Gachon, G. Deuymes, **A.L. Greer**, and V. Ng. (2020). Current and projected distributions of *Aedes aegypti* and *Ae. albopictus* in Canada and the US. Environmental Health Perspectives 128(5).

64. Rossi, T., R.M. Milwid, A. Moore, T. O'Sullivan, and **A.L. Greer**. (In press). Descriptive network analysis of a Standardbred training facility contact network: implications for disease transmission. Canadian Veterinary Journal.

63. +Perret, J., C. Best, , J. Coe, A.L. Greer, D. Khosa, and A. Jones-Bitton. (In press). Resilience in veterinarians in

Canada: associations with personal factors and mental health outcomes. JAVMA.

62. Giang, E., B.M. Hetman, J.M. Sargeant, Z. Poljak, and **A.L. Greer**. (2020). Examining the Effect of Host Recruitment Rates on the Transmission of *Streptococcus suis* in Nursery Swine Populations. Pathogens 9 (174):1-16.

61. Helmer, D., T. O'Sullivan, **A.L. Greer**, L. Moser, and Z. Poljak. (2020). An investigation of transportation practices in an Ontario swine system using descriptive network analysis. PLoS ONE 15 (1): e0226813.

60. +Perret, J., C. Best, J. Coe , **A.L. Greer**, D. Khosa, and A. Jones-Bitton. (2019) Prevalence of mental health outcomes among a sample of Veterinarians. Journal of the American Veterinary Medical Association 256 (3): 365-375.

59. Rossi, T., A. Moore, T. O'Sullivan, and **A.L. Greer**. (2019) Risk factors for duration of Equine Rhinitis A Virus respiratory disease. Equine Veterinary Journal. doi: 10.1111/evj.13204

58. ·Gardner, E.G., S. Kiambi, R. Sitawa, D. Kelton, J. Kimutai, Z. Poljak, Z. Tadesse, S. von Dobschuetz, L. Wiresma, and **A.L. Greer.** (2019). Force of infection of Middle East respiratory syndrome in dromedary camels in Kenya. Epidemiology and Infection 147, e275, p1-6. https://doi.org/10.1017/S0950268819001663

57. ·Spence, K., T. O'Sullivan, Z. Poljak, and **A.L. Greer.** (2019). Descriptive analysis of horse movement networks during the 2015 equestrian season in Ontario, Canada. PLoS ONE 14(7): e0219771. https://doi.org/10.1371/journal.pone.0219771

56. Mihaljevic, J.R., **A.L. Greer**, and J.L. Brunner. (2019). Evaluating the within host dynamics of Ranavirus infection with mechanistic disease models and experimental data. Viruses 11 (5):396.

55. Milwid, R., O'Sullivan, T.L., Poljak, Z., Laskowski, M., and **A.L. Greer**. (2019). Comparing the effects of non-homogenous mixing patterns on epidemiological outcomes in equine populations: A mathematical modelling study. Scientific Reports 9 (1): 3227.

54. •Rossi, T., A. Moore, T. O'Sullivan, and **A.L. Greer**. (2019). Equine Rhinitis A Virus Infection at a Standardbred Training Facility: Incidence, Clinical Signs, and Risk Factors for Clinical Disease. Frontiers in Veterinary Science. https://doi.org/10.3389/fvets.2019.00071

53. •Cousins, M. D.N. Fisman, J. Sargeant, and **A.L. Greer**. (2019) Modelling the transmission dynamics of Campylobacter in Ontario, Canada assuming house flies, *Musca domestica*, are a mechanical vector of disease transmission. Royal Society Open Science. https://doi.org/10.1098/rsos.181394

52. Hughes, S.L., **Greer, A.L.**, Elliot, A.J., McEwen, S.A., Young, I. and A. Papadopoulos (2019) Monitoring telehealth vomiting calls as a potential public health early warning system for seasonal norovirus activity in Ontario, Canada. Epidemiology and Infection 147 (e112).

51. Gardner, E.G., D. Kelton, Z. Poljak, S. von Dobschuetz, and **A.L. Greer**. (2019) A case-crossover analysis of the impact of weather on primary cases of Middle East respiratory syndrome. BMC Infectious Diseases 19:113.

50. Gardner, E.G., D. Kelton, Z. Poljak, S. von Dobschuetz, and **A.L. Greer**. (2019) A rapid scoping review of Middle East respiratory syndrome coronavirus in animal hosts. Zoonoses and Public Health 66(1):35-46

49. Milwid, R., O'Sullivan, T.L., Poljak, Z., Laskowski, M., and **A.L. Greer**. (2019). Validation of modified radiofrequency identification tag firmware, using an equine population case study. PLOS ONE 14(1): e0210148.

48. •Milwid, R., O'Sullivan, T.L., Poljak, Z., Laskowski, M., and **A.L. Greer**. (2019). Comparison of the dynamic networks of four equine boarding and training facilities. Preventive Veterinary Medicine 162: 84-94. https://doi.org/10.1016/j.prevetmed.2018.11.011

47. Coffey, M, A.L. Greer, and H.Eberl. (2018). Model Based Economic Assessment of Avian Influenza Vaccination in an All-in/All-out Housing System. Recent Advances in Mathematical and Statistical Methods for Scientific and Engineering Applications.

46. Brunn, A., D.N. Fisman, J.M. Sargeant, and **A.L. Greer**. (2018). The influence of climate and livestock reservoirs on human cases of giardiasis. EcoHealth https://doi.org/10.1007/s10393-018-1385-7

45. •Kisiel, L.M., A. Jones-Bitton, J.M. Sargeant, J.B. Coe, D.T.T. Flockhart, A. Reynoso Palomar, E. Canales Vargas, and **A.L. Greer.** (2018). Modeling the effect of surgical sterilization and confinement on owned dog population size in Villa de Tezontepec, Hidalgo, Mexico, using an agent-based computer simulation model. PLoS ONE 13 (6): e0198209.

44. Farrell, A., J.P. Collins, **A.L. Greer**, and H.R. Thieme. (2018). Do fatal infectious diseases eradicate host species? Journal of Mathematical Biology. https://doi.org/10.1007/s00285-018-1249-3

43. +Farrell, A., J.P. Collins, **A.L. Greer**, and H.R. Thieme. (2018). Times from infection to disease-induced death and their influence on final population sizes after epidemic outbreaks. Bulletin of Mathematical Biology 80 (10): 1937-1961.

42. Brankston, G., C. Boughen, V. Ng, D.N. Fisman, J.M. Sargeant, and **A.L. Greer.** (2018). Assessing the Impact of Environmental Exposures and *Cryptosporidium* Infection in Cattle on Human Incidence of Cryptosporidiosis. PLoS ONE 13(4): e0196573.

41. +Mallia, G., Van Toen, J., Rousseau, J., Jacob, L., Boerlin, P., **A.L. Greer**, Metcalf, D., and J.S Weese. (2018). Examining the epidemiology and microbiology of *Clostridium difficile* carriage in elderly patients and residents of a health care facility in southern Ontario, Canada. Journal of Hospital Infection Control 99(4): 461-468.

40. *Khan, S.U., T. O'Sullivan, Z. Poljak, J. Alsop, and **A.L. Greer**. (2018). Modeling livestock population structure: a geospatial database for Ontario swine farms. BMC Veterinary Research 14:31.

39. Spence, K., T. O'Sullivan, Z. Poljak, and **A.L. Greer**. (2018). A longitudinal study describing horse characteristics and movements during a competition season in Ontario, Canada in 2015. Canadian Veterinary Journal 59 (7): 783-790.

38. Spence, K., T. O'Sullivan, Z. Poljak, and **A.L. Greer**. (2018). Using a computer simulation model to examine the impact of biosecurity measures during a facility-level outbreak of equine influenza. Canadian Journal of Veterinary Research 82 (2):89-96.

37. Spence, K., T. O'Sullivan, Z. Poljak, and **A.L. Greer**. (2018). Estimating the potential for disease spread in horses associated with an equestrian show in Ontario, Canada using an agent-based model. Preventive Veterinary Medicine 151: 21-28.

36. Spence, K., T. O'Sullivan, Z. Poljak, and **A.L. Greer**. (2017). Descriptive and network analyses of the equine contact network at an equestrian show in Ontario, Canada and the application to potential disease transmission. BMC Veterinary Research 13:191.

35. Walczak, K., R. Friendship, E. Brockoff, **A.L. Greer**, Z. Poljak. (2017). Treatment rates for injectable tiamulin and lincomycin as an estimate of morbidity in a swine herd with endemic swine dysentery. The Canadian Veterinary Journal 58 (5):472-481.

34. **Greer, A.L.,** K. Spence[•], and E. Gardner[•]. (2017). Understanding the early dynamics of the 2014 porcine epidemic diarrhea virus (PEDV) outbreak in Ontario using the Incidence Decay and Exponential Adjustment (IDEA) model. BMC Veterinary Research 13 (8).

33. ₊Tuite, A.R., V. Gallant, E. Randell, A-C. Bourgeois, **A.L. Greer**. (2017). Stochastic, Agent-based modeling of Tuberculosis in Canadian Aboriginal communities. BMC Public Health 17:73.

32. +Arruda, A.G., R. Friendship, J. Carpenter, **A.L. Greer**, and Z. Poljak. (2016). Evaluation of control strategies for porcine reproductive and respiratory syndrome in breeding herds using a discrete event, agent-based model. PLoS One.

31. Kisiel, L.M., A. Jones-Bitton, J.M. Sargeant, J.B. Coe, D.T.T. Flockhart, A. Reynoso Palomar, E. Canales Vargas, and **A.L. Greer.** (2016). Owned dog ecology and demography in Villa de Tezontepec, Hidalgo, Mexico. Preventive Veterinary Medicine 135: 37-47.

30. **Greer, A.L.** (2015). Early vaccine availability represents an important public health advance for the control of pandemic influenza. BMC Research Notes 8:191. DOI: 10.1186/s13104-015-1157-1

29. +Richardson, K., B. Sander, H. Guo, **A.L. Greer**, and J. Heffernan (2014). Tuberculosis in Canada: Detection, intervention, and compliance. AIMS Public Health 1 (4): 241-255.

28. +Laskowski, M., A.L. Greer and S. Moghadas. (2014). Antiviral Strategies for Emerging Influenza Viruses in Remote Communities. PLoS ONE 9(2): e89651.

27. Fisman, D.N., •T. Hauck, ₊A.R. Tuite, and **A.L. Greer.** (2013). An IDEA for Short Term Outbreak Projection: Nearcasting Using the Basic Reproduction Number. PLOS ONE 8(12): e83622.

26. **Greer A.L.** (2013). Can informal social distancing interventions minimize demand for antiviral treatment during a severe pandemic? BMC Public Health, 13, 669.

25. **Greer A.L**, and D. Schanzer (2013). Using a Dynamic Model to Consider Optimal Antiviral Stockpile Size in the Face of Pandemic Influenza Uncertainty. PLoS ONE, 8(6), e67253.

24. ₊Tuite A.R., **A.L. Greer**, and Fisman D.N. (2013). Effect of latitude on the rate of change in incidence of Lyme disease in the United States. CMAJ Open, 1(1), E43-E47.

23. +Mostaço-Guidolin, L.C., C.S. Bowman, **A.L. Greer**, D.N. Fisman and S. M. Moghadas. (2012). Transmissibility of the 2009 H1N1 pandemic in remote and isolated Canadian communities. BMJ Open, 2(e001614).

22. +Mostaço-Guidolin, L.C., B. Sander, **A.L. Greer**, J. Wu and S. M. Moghadas. (2011). Variability in Transmissibility of the 2009 H1N1 Pandemic in Canadian Communities. BMC Research Notes 4: 537.

21. +Conway, J.M., +A.R. Tuite, D.N. Fisman, N. Hupert, R. Meza, B. Davoudi, K. English, P. van den Driessche, F. Brauer, J. Ma, L. Ancel Myers, M. Smieja, **A.L. Greer**, D. Skowronski, D. Buckeridge, J. Kwong, J. Wu, S.M. Moghadas, D. Coombs, R.C. Brunham, and B. Pourbohloul. (2011). Vaccination against 2009 pandemic H1N1 in a population dynamical model of Vancouver, Canada: timing is everything. BMC Public Health 11:934.

20. +Laskowski, M., +L.C. Mostaco-Guidolin, **A.L. Greer**, J. Wu, S.M. Moghadas. (2011). The Impact of Demographic Variables on Disease Spread: Influenza in Remote Communities. Nature: Scientific Reports 1:105.

19. **Greer, A.L.** and D.N. Fisman. (2011). Using models to identify cost effective interventions: pertussis vaccination for pediatric healthcare workers. Pediatrics. Published online August 15, 2011 (DOI: 10.1542/peds.2010-0796).

18. Arino, J., C. Bauch, F. Brauer, S.M. Driedger, **A.L. Greer**, S.M. Moghadas, N.J. Pizzi, B. Sander, +A. Tuite, P. van den Driessche, and J. Watmough. (2011). Pandemic Influenza: Modelling and Public Health Perspectives. Mathematical Biosciences & Engineering 8(1): 1-20.

17. •Tuite, A.R., D.N. Fisman, J. Kwong, and **A.L. Greer**. (2010). Optimal pandemic influenza vaccine allocation strategies for the Canadian population. PLoS ONE. 5(5): e10520. doi:10.1371/journal.pone.0010520.

16. **Greer, A.L.,** A. Tuite and D. Fisman. (2010). Age, influenza pandemics, and disease dynamics: more questions than answers. Epidemiology and Infection 138 (11): 1542 – 1549.

15. **Greer, A.L.**, S.J. Drews and D.N. Fisman. (2010). Why "winter" vomiting disease? Seasonality, hydrology, and Norovirus epidemiology in Toronto, Canada. EcoHealth 6(2): 192-199.

14. ₊Tuite, A.R., **A.L. Greer**, J. Kwong, and D.N. Fisman. (2009) Seasonal influenza vaccine allocation in the Canadian population during a pandemic. PLoS Currents Influenza. *Online*: December 11; 1: RRN1143. doi:10.1371/currents.RRN1143.

13. +Tuite, A.R., A.L. Greer, M. Whelan, A-L. Winter, B. Lee, P. Yan, J. Wu, S. Moghadas, D. Buckeridge, B.

Pourbohoul, and D.N. Fisman. (2009). Estimated epidemiologic parameters and morbidity associated with pandemic H1N1 influenza. Canadian Medical Association Journal 182 (2): 131-136.

12. **Greer, A.L.**, and D.N. Fisman. (2009). Keeping Vulnerable Children Safe from Pertussis: preventing nosocomial pertussis transmission in the neonatal intensive care unit (NICU). Infection Control and Hospital Epidemiology 30(11): 1084-1089.

11. Moghadas, S., T. Day, C.T. Bauch, F. Brauer, **A.L. Greer,** P. Yan, J. Wu, N. Pizzi, D. Fisman. (2009). Modeling of pandemic influenza: a guide for the perplexed. Canadian Medical Association Journal 181(3-4): 171-173.

10. **Greer, A.L.**, D.M. Schock, J.L. Brunner, R. Johnson, A.M. Picco and J.P. Collins. (2009). Latex and nitrile gloves do not pose a widespread threat to larval amphibians - A response to Cashins et al. (2008). Herpetological Review 40(2): 145-147.

9. **Greer, A.L.**, J.L. Brunner, and J.P. Collins. (2009). Spatial and temporal patterns of *Ambystoma tigrinum* virus (ATV) prevalence in tiger salamanders (*Ambystoma tigrinum nebulosum*). Diseases of Aquatic Organisms 85(1): 1-6.

8. Fisman, D.N., **A.L. Greer**, G. Brouhanski, and S. Drews. (2009). Of Gastro and the gold standard: Evaluation and policy implications of Norovirus test performance. Journal of Translational Medicine 7(23).

7. **Greer, A.L.** and D.N. Fisman. (2009). Punching above their weight: Males, reinfection and the limited success of Chlamydia screening programs. Sexually Transmitted Diseases 36(1): 9-10.

6. **Greer, A.L.,** C.J. Briggs and J.P. Collins. (2008) Testing a key assumption of host-pathogen theory: density and disease transmission. Oikos 117: 1667-1673.

5. **Greer, A.L.**, V. Ng-Brett, and D.N. Fisman. (2008) Climate change and infectious diseases in North America: The road ahead. Canadian Medical Association Journal 178 (6): 715-722.

4. **Greer, A.L**. and J.P. Collins. (2008). Habitat fragmentation affects pathogen transmission throughout a host population. Journal of Animal Ecology 77 (2): 364-369.

3. **Greer, A.L**. and J.P. Collins. (2007) Evaluating the sensitivity and specificity of a diagnostic test for Ranavirus. Journal of Wildlife Diseases 43 (3): 525-532.

2. Fox, S.F., **A.L. Greer**, R.Torres-Cervantes and J.P. Collins. (2006). First case of ranavirus associated morbidity and mortality in natural populations of a South American frog, *Atelognathus patagonicus*. Diseases of Aquatic Organisms 72 (1):87-92.

1. **Greer, A.L.**, M. Berrill and P.J. Wilson. (2005). Five amphibian mortality events associated with Ranavirus in south central Ontario, Canada. Diseases of Aquatic Organisms 67 (1-2): 9-14.

In Review

1.+Bienentreu, J-F, D.M. Schock, A.L. Greer, and D. Lesbarrères. Species-dependent amplification of Ranavirus

prevalence and infection severity in multi-host amphibian communities. Ecology.

2. Perret, J., C. Best, J. Coe, **A.L. Greer**, D. Khosa, and A. Jones-Bitton. Veterinarian mental health outcomes and client-centred communication. Veterinary Record.

3. +Melmer, D, T. O'Sullivan, **A.L. Greer**, D. Novosel, D. Ojkic, and Z. Poljak. Understanding the Evolution of PRRS Virus in Ontario using Bayesian Phylogenetics. Viruses.

4. Milwid, R.M., T.L. O'Sullivan, Z. Poljak, M. Laskowski, and **A.L. Greer**. Use of network analysis to quantify the effect of human-equine interactions on contact network characteristics with a focus on disease transmission potential. BMC Veterinary Research.

5. •Acharya, KR, G. •Brankston, J-PR. •Soucy, A. •Cohen, A. Hulth, S. Löfmark, N. Davidovich, M. Ellen, D. Fisman, J. Moran-Gilad, A. Steinman, D.R. MacFadden, and **A.L. Greer**. Evaluation of an OPEN Stewardship Generated Feedback Intervention to Improve Antibiotic Prescribing Among Primary Care Veterinarians in Ontario, Canada and Israel: Protocol for Evaluating Usability and an Interrupted Time-Series Analysis. BMJ Open.

6. +Plishka, M. J.M. Sargeant, **A.L. Greer**, C. Winder, and S. Hookey. The Prevalence of Campylobacter in Live Cattle, Turkey, Chicken, and Swine in the United States and Canada: A Systematic Review and Meta-analysis. Foodborne Pathogens and Disease.

7. Fisman, DF, **A.L. Greer**, M. Hillmer, and A.R. Tuite. Derivation and validation of a clinical prediction rule for COVID-19 mortality in Ontario, Canada. Clinical Infectious Diseases.

PEER-REVIEWED GOVERNMENT PUBLICATIONS

Ogden, N, L. R. Lindsay, M.A. Drebot, V. Ng, A. Ludwig, C. Bouchard, G. Brankston, D.N. Fisman, **A.L. Greer**, E. Galanis, H. Wood, A. Dibernardo, P. A. Leighton, P. Corrin, L. Waddell, A-M Lowe, L. Vrbova, and E. Jenkins. (In Press). Health of Canadians in a Changing Climate: Advancing our Knowledge for Action.

NON PEER-REVIEWED PUBLICATIONS

Greer, A.L., N. Thampi, and A. Tuite. We can get children back to school full time, if we put the right strategy in place. Globe and Mail Opinion. July 10, 2020. https://www.theglobeandmail.com/opinion/article-we-can-get-children-back-to-school-full-time-if-we-put-the-right/

Greer, AL. What I've learned about being a mom in a pandemic – just let go. The National Post Special Edition. May 8, 2020. https://nationalpost.com/life/covid-19-mothers-day

CONFERENCE PRESENTATIONS

127. Acharya, K.R, G. Brankston, J. Brownstein, R. Chorney, E. Cohn, N. Davidovitch, M. Ellen, D. Fisman, A. Hulth, S. Löfmark, J. Moran-Gilad, D. MacFadden, and **A.L. Greer**. Evaluating the usability, utility, and impact of feedback reports, generated by the OPEN Stewardship platform, as a tool to promote antibiotic stewardship in veterinary clinics. Canadian Association of Veterinary Epidemiology and Preventive Medicine. June 2020. Oral (event cancelled due to COVID-19)

126. Xie, X-T, A. Bekele-Yitbarek, S.U. Khan, Z. Poljak, S. Sharif, and **A.L. Greer.** A within-host mathematical model to assess the chicken immune response to influenza A (H9N2) virus vaccination and infection. 19th International Congress on Infectious Diseases. Kuala Lumpur, Singapore. February 2020. Poster. (event cancelled due to COVID-19)

125. Xie, X-T, A. Bekele-Yitbarek, S.U. Khan, Z. Poljak, S. Sharif, and **A.L. Greer.** A within-host compartmental model of influenza A (H9N2) virus infection dynamics and immune response in chickens. Seventh International Conference on Infectious Disease Dynamics. Charleston, SC. December 2019. Poster.

124. ₊Sadeghieh, T., J. Sargeant, **A.L. Greer**, O. Berke, and V. Ng. Investigating the risk for importation of Zika virus into Canada under current and future climate. Seventh International Conference on Infectious Disease Dynamics. Charleston, SC. December 2019. Poster.

123. •Rossi, T., R. Milwid, A. Moore, T. O'Sullivan, and **A.L. Greer.** Reducing the transmission of infectious respiratory disease in horses by identifying opportunities for improved biosecurity at a Standardbred training facility. Seventh International Conference on Infectious Disease Dynamics. Charleston, SC. December 2019. Poster.

122. Acharya, K.R, G. Brankston, J. Andre, J. Brownstein, R. Chorney, E. Cohn, N. Davidovitch, M. Ellen, D. Fisman, A. Hulth, S. Löfmark, J. Moran-Gilad, J-P.R Soucy, D. MacFadden, and **A.L. Greer**. Expanding antibiotic stewardship among veterinary prescribers using an OPEN Stewardship platform. Conference for Research Workers in Animal Disease. Chicago, IL. November 2019. Oral.

121. +Plishka, M., J. Sargeant, **A.L. Greer**, and C. Winder. The prevalence of *Campylobacter* in live chicken, swine, turkey, and cattle: a systematic review and meta-analysis. Conference for Research Workers in Animal Disease. Chicago, IL. November 2019. Poster.

120. Berry, I., P. Mangtani, M. Rahman, **A.L. Greer**, S. Morris, T. Naureen, M. Azad, D. Fisman, and M.S. Flora. Live Poultry Exposure in Urban Bangladesh: evaluating poultry purchasing and contact patterns to identify avenues for avian influenza transmission at the human-poultry interface. Options X for the Control of Influenza. SUNTEC, Singapore. August 2019. Poster.

119. Mihaljevic, J.R., E.M. Hall, E.J. Crespi, **A.L. Greer**, and J.L. Brunner. Mechanistic disease models reveal important drivers of epizootic patterns in the amphibian-*Ranavirus* system. Ecological Society of America Annual Conference. Louisville, KY. August 2019. Oral.

118. Xie, X-T, A. Bekele-Yitbarek, S.U. Khan, Z. Poljak, S. Sharif, and A.L. Greer. A within-host model of H9N2 avian influenza virus infection and type-I interferon dynamics in chickens. V AMMCS International Conference. Waterloo, ON. August 2019. Oral.

117. Khan, S.U., T. O'Sullivan, Z. Poljak, J. Alsop, and **A.L. Greer**. Simulating a Classical Swine Fever Introduction into Commercial Pig Farms in Ontario. V AMMCS International Conference. Waterloo, ON. August 2019. Oral.

116. Milwid, R., O'Sullivan, T.L., Poljak, Z., Laskowski, M., and **A.L. Greer.** Assessing the impact of empirical contact patterns on disease dynamics within an equine population. Society for Mathematical Biology. Montreal, QC. July 2019. Oral.

115. Giang, E., J. Sargeant, Z. Poljak, and **A.L. Greer**. A model for assessing management-driven alternatives for disease control: A case-study on Streptococcus suis disease in nursery pigs. International Conference on Production-Limiting Diseases. Bern, Switzerland. June 2019. Oral.

114. Mihaljevic, J.R., E.M. Hall, E.J. Crespi, **A.L. Greer**, and J.L. Brunner. Mechanistic disease models reveal drivers of divergent epizootic patterns in the amphibian-*Ranavirus* system. Ecology and Evolution of Infectious Diseases, Princeton, NJ. June 2019. Oral.

113. •Xie, X-T, A. Bekele-Yitbarek, S.U. Khan, Z. Poljak, S. Sharif, and A.L. Greer. A within-host model of H9N2 avian influenza virus infection and type-I interferon dynamics in chickens. Ontario Veterinary College Graduate Research Symposium. Guelph, ON. June 2019. Oral. <u>***X-T Xie was awarded the first place student prize for the best</u> oral presentation for this presentation.

112. +Perret, J., C. Best, , J. Coe , **A.L. Greer**, D. Khosa, and A. Jones-Bitton. Mental Health of Canadian Veterinarians. Ontario Veterinary College Graduate Research Symposium. Guelph, ON. June 2019. Poster.

111. Giang, E., B. Hetman, J. Sargeant, Z. Poljak, and **A.L. Greer**. The impact of continuous birth rates on *Streptococcus suis* disease transmission and persistence in nursery swine. Ontario Veterinary College Graduate Research Symposium. Guelph, ON. June 2019. Poster.

110. Hovdey, R., J. Sargeant, D. Fisman, and **A.L. Greer.** Examining the impact of person-person transmission on VTEC outbreaks in Ontario. Ontario Veterinary College Graduate Research Symposium. Guelph, ON. June 2019. Poster.

109. Mihaljevic, J.R., **A.L. Greer**, and J.L. Brunner. Evaluating the within-host dynamics of *Ranavirus* infection with mechanistic disease models and experimental data. International Symposium on Ranaviruses. Townsville, Australia. June 2019. Oral.

108. Xie, X-T, A. Bekele-Yitbarek, S.U. Khan, Z. Poljak, S. Sharif, and A.L. Greer. A within-host model of H9N2 avian influenza virus infection and type-I interferon dynamics in chickens. Centre for Public Health and Zoonoses Annual Symposium. Guelph, ON. May 2019. Poster.

107. +Perret, J., C. Best, , J. Coe , **A.L. Greer**, D. Khosa, and A. Jones-Bitton. Mental Health of Canadian Veterinarians. Centre for Public Health and Zoonoses Annual Symposium. Guelph, ON. May 2019. Poster.

106. •Khan, S.U., T. O'Sullivan, Z. Poljak, J. Alsop, and **A.L. Greer**. Simulating a Classical Swine Fever Introduction into Commercial Pig Farms in Ontario. Canadian Association for Veterinary Epidemiology and Preventive Medicine. St-Hyacinthe, QC. May 2019. Oral.

105. +Melmer, D., T. O'Sullivan, **A.L. Greer**, L. Moser, and Z. Poljak. Incidence and clinical impact of Porcine Reproductive and Respiratory Syndrome (PRRS) in Ontario sow herds. Canadian Association for Veterinary Epidemiology and Preventive Medicine. St-Hyacinthe, QC. May 2019. Oral.

104. Giang, E., J. Sargeant, Z. Poljak, and **A.L. Greer**. The impact of continuous birth rates on *Streptococcus suis* disease transmission and persistence in nursery swine. Canadian Association for Veterinary Epidemiology and Preventive Medicine. St-Hyacinthe, QC. May 2019. Oral.

103. Xie, X-T, A. Bekele-Yitbarek, S.U. Khan, Z. Poljak, S. Sharif, and A.L. Greer. A within-host model of H9N2 avian influenza virus infection and type-I interferon dynamics in chickens. Canadian Association for Veterinary Epidemiology and Preventive Medicine. St-Hyacinthe, QC. May 2019. Poster.

102. •Khan, S.U., N. Ogden, A. Faizel, P. Gachon, G. Deuymes, **A.L. Greer**, and V. Ng. Scouring Through Overwhelming Volume of Climate Data to Project Ecological Niche of *Aedes Albopictus* and *Aedes Aegypti* Mosquitoes' in Canada and the United States, 2020 – 2100. Canadian Association for Veterinary Epidemiology and Preventive Medicine. St-Hyacinthe, QC. May 2019. Oral.

101. Hovdey, R., J. Sargeant, D. Fisman, and **A.L. Greer.** Examining the impact of person-person transmission on VTEC outbreaks in Ontario. Canadian Association for Veterinary Epidemiology and Preventive Medicine. St-Hyacinthe, QC. May 2019. Oral.

100. +Perret, J., C. Best, , J. Coe, **A.L. Greer**, D. Khosa, and A. Jones-Bitton. Mental Health of Canadian Veterinarians. Canadian Association for Veterinary Epidemiology and Preventive Medicine. St-Hyacinthe, QC. May 2019. Oral.

99. +Melmer, D., T. O'Sullivan, **A.L. Greer**, L. Moser, and Z. Poljak. Incidence and clinical impact of Porcine Reproductive and Respiratory Syndrome (PRRS) in Ontario sow herds. Swine Research Day, Guelph, ON. May 2019. Poster.

98. ₊Sadeghieh, T., J. Sargeant, **A.L. Greer**, O. Berke, and V. Ng. Investigating the potential for importation of Zika virus and yellow fever into Canada from Brazil. Annual Meeting of the Canadian Public Health Association. Ottawa, ON. April 2019. Poster.

97. ⁺Perret, J., C. Best, , J. Coe **, A.L. Greer**, D. Khosa, and A. Jones-Bitton. Mental and Emotional Health in Veterinarians: Impacts on Client and Patient Care. Crossroads Interdisciplinary Health Research Conference. Halifax, NS. March 2019. Oral.

96. +DeCaluwe-Tulk,E., T. •Rossi, **A.L. Greer**, E. +Luo, and T. L. O'Sullivan. Clinical validation of an infrared thermometer in periparturient sows. American Association of Swine Veterinarians. Lake Buena Vista, FL. March 2019. Oral. <u>***E. DeCaluwe-Tulk was awarded the third place student prize for the best oral presentation for this presentation.</u>

95. Hulth, A., S. Lofmark, J. Andre, R. Chomey, E. Cohen, M. Ellen, N. Davidovitch, J. Moran-Gilad, A.L. Greer, D. Fisman, J. Brownstein, and D. MacFadden. A tool for promoting responsible antibiotic prescribing across setting and sectors. International Society for Disease Surveillance. San Diego, CA. January 2019. Oral.

94. Xie, X-T, A. Bekele-Yitbarek, S.U. Khan, Z. Poljak, S. Sharif, and **A.L. Greer.** A within-host model of H9N2 avian influenza virus infection kinetics in chickens. Conference for Research Workers in Animal Disease. Chicago, IL. December 2018. Oral.

93. Hovdey, R., J. Sargeant, D. Fisman, and **A.L. Greer**. Investigating acute environmental drivers of human verocytotoxigenic *Escherichia coli* infections in Ontario. Conference for Research Workers in Animal Disease. Chicago, IL. December 2018. Oral.

92. Giang, E., J. Sargeant, Z. Poljak, and **A.L. Greer**. Estimating the Basic Reproduction Number (R0) of a *Streptococcus suis* outbreak within a swine herd in Ontario, Canada. Conference for Research Workers in Animal Disease. Chicago, IL. December 2018. Oral.

91. +Melmer, D., T. O'Sullivan, **A.L. Greer**, L. Moser, and Z. Poljak. Understanding the Evolution of PRRS Virus in Ontario Using Bayesian Phylogenetics. Conference for Research Workers in Animal Disease. Chicago, IL. December 2018. Oral.

90. +Melmer, D., T. O'Sullivan, **A.L. Greer**, L. Moser, and Z. Poljak. Development of a system to monitor incidence and clinical impact of PRRS virus in Ontario sow herds. Conference for Research Workers in Animal Disease. Chicago, IL. December 2018. Oral.

89. ₊Sadeghieh, T., J. Sargeant, **A.L. Greer**, O. Berke, and V. Ng. A Framework for Modelling the Transmission of Yellow fever within Brazil in an Outbreak Situation under Current and Projected Climate. International Meeting on Emerging Diseases. Vienna, Austria. November 2018. Poster.

88. ·Gardner, E.G., D. Kelton, Z. Poljak, S. von Dobschuetz, and **A.L. Greer**. The influence of weather on primary Middle East respiratory syndrome coronavirus (MERS-CoV) cases in Saudi Arabia. International Society for Veterinary Epidemiology and Economics (ISVEE 15). Chiang Mai, Thailand. November 2018. Poster.

87. •Rossi, T., T. O'Sullivan, and **A.L. Greer**. Use of proximity loggers to establish contact patterns in a multi-barn standardbred training facility. International Society for Veterinary Epidemiology and Economics (ISVEE 15). Chiang Mai, Thailand. November 2018. Oral.

86. Rossi, T., T. O'Sullivan, and **A.L. Greer**. Infectious respiratory disease in a Standardbred training facility: incidence, clinical signs, and risk factors for infection. International Society for Veterinary Epidemiology and Economics (ISVEE 15). Chiang Mai, Thailand. November 2018. Oral.

85. +Perret, J., C. Best, , J. Coe , **A.L. Greer**, D. Khosa, and A. Jones-Bitton. Prevalence of Mental Health Outcomes in Canadian Veterinarians. International Society for Veterinary Epidemiology and Economics (ISVEE 15). Chiang Mai, Thailand. November 2018. Oral.

84. •Milwid, R., O'Sullivan, T.L., Poljak, Z., Laskowski, M., and **A.L. Greer.** Using a disease transmission model to examine the projected efficacy of Equine Influenza intervention strategies. Calgary International Equine Symposium. Calgary, AB. September 2018. Poster.

83. •Milwid, R., O'Sullivan, T.L., Poljak, Z., Laskowski, M., and **A.L. Greer.** Use of radio-frequency identification (RFID) technology to identify high traffic areas within equine facilities. Calgary International Equine Symposium. Calgary, AB. September 2018. Poster.

82. •Rossi, T., T. O'Sullivan, and **A.L. Greer**. Infectious respiratory disease in a Standardbred training facility: incidence, clinical signs, and risk factors for infection. Calgary International Equine Symposium. Calgary, AB. September 2018. Oral.

81. ·Spence, K., T. O'Sullivan, Z. Poljak, and **A.L. Greer**. Dynamic network analysis of horse movements during the 2015 equestrian season in Ontario, Canada. Calgary International Equine Symposium. Calgary, AB. September 2018. Oral.

80. Xie, X.T., S.U. Khan, Z. Poljak, S. Sharif, and **A.L. Greer**. Modeling in-host dynamics of H9N2 avian influenza virus in poultry. OVC Graduate Student Research Symposium. Guelph, ON. June 2018. Poster.

79. Perret, J., C. Best, **A.L. Greer**, D. Khosa, J. Coe, and A. Jones-Bitton. Mental Health and Wellness in Veterinarians: Impacts on Client and Patient Care. Centre for Public Health and Zoonoses Annual Symposium. Guelph, ON. June 2018. Poster.

78. +Perret, J., C. Best, J. Coe, D. Khosa, **A.L. Greer**, and A. Jones-Bitton. Cross-sectional study of the association between veterinarian mental wellness and veterinarian-client interaction outcomes. OVC Graduate Student Research Symposium. Guelph, ON. June 2018. Poster.

77. •Khan, S.U., N. Ogden, A. Faizel, **A.L. Greer**, and V. Ng. Environmental Suitability and Predicted Distribution of *Aedes albopictus* and *Aedes aegypti* Mosquitoes in Canada and the United States: Assessing Arboviral Risks in North America. International Conference on Emerging Infectious Diseases (ICEID), Atlanta, GA, USA, August 2018. Poster.

76. Gardner, E.G., D. Kelton, Z. Poljak, S. von Dobschuetz, and **A.L. Greer**. A scoping review of Middle East respiratory syndrome coronavirus in natural animal hosts. Centre for Public Health and Zoonoses Annual Symposium. Guelph, ON. June 2018. Poster.

75. Hovdey, R., J. Sargeant, D. Fisman, and **A.L. Greer**. Using a One Health approach to examine environmental drivers of human verocytotoxigenic *Escherichia coli* infections in Ontario. Centre for Public Health and Zoonoses Annual Symposium. Guelph, ON. June 2018. Poster.

74. Khan, S.U., **A.L. Greer**, A. Faizel, N.Ogden, and V. Ng. Climate Change and Emerging Viral Threats in Canada: Modeling the Transmission Dynamics of Chikungunya Virus. Centre for Public Health and Zoonoses Annual Symposium. Guelph, ON. June 2018. Oral.

73. •Cousins, M. D.N. Fisman, J. Sargeant, and **A.L. Greer.** Modelling multiple transmission routes of campylobacteriosis in Ontario using a One Health perspective. Centre for Public Health and Zoonoses Annual Symposium. June 2018. Oral.

72. ·Spence, K., T. O'Sullivan, Z. Poljak, and **A.L. Greer**. Using longitudinal questionnaire data to create networks of horse movements in Ontario, Canada. International Conference on Network Science (NetSci 2018) satellite symposium: Integration of Empirical data in network epidemiology. Paris, France. June 2018. Oral.

71. ·Milwid, R., T. O'Sullivan, Z. Poljak, M. Laskowski, and **A.L. Greer**. From network analysis to network models: comparing the epidemiological outcomes from 4 equine facilities in Ontario. International Conference on Network Science (NetSci 2018) satellite symposium: Integration of Empirical data in network epidemiology. Paris, France. June 2018. Oral.

70. •Kisiel, L.M., A. Jones-Bitton, J.M. Sargeant, J.B. Coe, D.T.T. Flockhart, A. Reynoso Palomar, E. Canales Vargas, and **A.L. Greer.** Modeling the effect of surgical sterilization and confinement on owned dog population size in Villa de Tezontepec, Hidalgo, Mexico, using an agent-based computer simulation model. 6th International Symposium on Non-Surgical Contraceptive Methods of Pet Population Control. Boston, MA. July 2018. Invited Oral.

69. Cousins, M. D.N. Fisman, J. Sargeant, and **A.L. Greer.** Modelling multiple transmission routes of campylobacteriosis in Ontario using a One Health perspective. International One Health Congress. Saskatoon, SK. June 2018. Poster.

68. Garder, E.G., D. Kelton, Z. Poljak, S. von Dobschuetz, and **A.L. Greer**. A scoping review of Middle East respiratory syndrome coronavirus in natural animal hosts. International One Health Congress. Saskatoon, SK. June 2018. Poster.

67. •Khan, S.U., **A.L. Greer**, A. Faizel, N.Ogden, and V. Ng. Climate Change and Emerging Viral Threats in Canada: Modeling the Transmission Dynamics of Chikungunya Virus. International One Health Congress. Saskatoon, SK. June 2018. Poster.

66. •Khan, S.U., **A.L. Greer**, A. Faizel, N.Ogden, and V. Ng. Environmental Suitability and Predicted Distribution of Aedes Albopictus Mosquitoes in Canada and the United States: Assessing Arboviral Risks in North America. International One Health Congress. Saskatoon, SK. June 2018. Poster.

65. +Perret, J., C. Best, **A.L. Greer**, D. Khosa, J. Coe, and A. Jones-Bitton. Mental Health and Wellness in Veterinarians: Impacts on Client and Patient Care. International Conference on Communications in Veterinary Medicine. Barrie, ON. March 2018. Oral

64. Milwid, R., O'Sullivan, T.L., Poljak, Z., Laskowski, M., and **A.L. Greer**. Quantifying the heterogeneity in contact patterns within an Ontario equine facility: a pilot study. Conference for Research Workers in Animal Disease. Chicago, IL. December 2017. Oral.

63. Milwid, R., O'Sullivan, T.L., Poljak, Z., Laskowski, M., and **A.L. Greer**. Using modified radio frequency identification tags to quantify contact patterns within an Ontario equine facility: a validation study.

Conference for Research Workers in Animal Disease. Chicago, IL. December 2017. Poster.

62. •Cousins, M., Fisman, D.N., Sargeant, J., and **A.L. Greer**. Using a dynamic infectious disease model to examine multiple transmission pathways for Campylobacteriosis. Conference for Research Workers in Animal Disease. Chicago, IL. December 2017. Oral.

61. Spence, K., T. O'Sullivan, Z. Poljak, and **A.L. Greer**. A longitudinal study describing horse characteristics and movements during a competition season in Ontario, Canada in 2015. Conference for Research Workers in Animal Disease. Chicago, IL. December 2017. Oral.

60. ₊Hughes, S.L., **A.L. Greer**, A.J. Elliot, S.A. McEwen, I. Young, and A. Papadopoulos. Viral gastroenteritis and prevalence of norovirus and norovirus-like illness in Ontario, Canada - 2009-2014. [abstract]. In: the European Journal of Public Health; 2017, Nov 1-4; Stockholm, Sweden. Oxford University Press, 2017.

59. ₊Hughes, S.L., **A.L. Greer**, A.J. Elliot, S.A. McEwen, I. Young, and A. Papadopoulos. Viral gastroenteritis and prevalence of norovirus and norovirus-like illness in Ontario, Canada -- 2009-2014. Sixth International Conference on Infectious Disease Dynamics. Spain. November 2017. Poster.

58. Hughes, S.L., A.J. Elliot, A.L. Greer, S.A. McEwen, I. Young, and A. Papadopoulos. Surveillance of norovirus-like illness in Ontario: Using Telehealth Ontario data to detect the onset of community activity. Sixth International Conference on Infectious Disease Dynamics. Spain. November 2017. Poster.

57. Coffey, M., **A.L. Greer**, and H. Eberl. A model of highly pathogenic avian influenza in boilers with environmental reservoir and vaccine intervention over finite time. Interdisciplinary International Conference on Applied Mathematics, Modeling and Computational Science. Waterloo, ON. August 2017. Poster

56. •Brunn, A., D.N. Fisman, J. Sargeant, and **A.L. Greer**. Temporal associations between environmental conditions and pathogen colonization of livestock on human cases of Giardia duodenalis in Waterloo region. Canadian Association of Veterinary Epidemiology and Preventive Medicine. Calgary, AB. June 2017. Oral. ***A. Brunn was awarded the first place student prize for the best oral presentation for this presentation.

55. ·Khan, S.U., T. O'Sullivan, Z. Poljak, J. Alsop, and **A.L. Greer**. Generating A Synthetic Animal Population Structure: A Geospatial Database for Ontario Swine Farms. Canadian Association of Veterinary Epidemiology and Preventive Medicine. Calgary, AB. June 2017. Poster.

54. Milwid, R., T.L. O'Sullivan, Z. Poljak, M. Laskowski, and **A.L. Greer**. Using proximity logging technology to quantify equine contact patterns within Ontario Equine facilities. Canadian Association of Veterinary Epidemiology and Preventive Medicine. Calgary, AB. June 2017. Oral.

53. Cousins, M. D.N. Fisman, J. Sargeant, and **A.L. Greer**. Identifying environmental drivers of *Campylobacter* infection risk in Ontario, Canada using a One Health approach. Canadian Association of

Veterinary Epidemiology and Preventive Medicine. Calgary, AB. June 2017. Oral. ***M. Cousins was awarded the second place student prize for the best oral presentation for this presentation.

52. Spence, K.L., T.L., O'Sullivan, Z. Poljak, and **A.L. Greer**. Dynamic network analysis of equine travel patterns during the 2015 competition season in Ontario, Canada. Canadian Association of Veterinary Epidemiology and Preventive Medicine. Calgary, AB. June 2017. Poster.

51. Cummings, J., A. Olpin, R. Milwid, M. Laskowski, Z. Poljak, T.L. O'Sullivan, and **A.L. Greer.** Developing a framework for quantifying real-time contact patterns in agricultural animals using OpenBeacon proximity sensing hardware. Modeling in Animal Health Conference. Nantes, France. Abstract. June 2017. Poster.

50. Milwid, R., T.L. O'Sullivan, Z. Poljak, M. Laskowski, and **A.L. Greer**. Use of proximity loggers to quantify contact patterns within an Ontario equine facility: A pilot study. Modeling in Animal Health Conference. Nantes, France. Abstract. June 2017. Poster.

49. •Khan, S.U., T. O'Sullivan, Z. Poljak, J. Alsop, and **A.L. Greer**. Generating A Synthetic Animal Population Structure: A Geospatial Database for Ontario Swine Farms. Modeling in Animal Health Conference. Nantes, France. Abstract. June 2017. Poster.

48. Spence, K.L., T.L., O'Sullivan, Z. Poljak, and **A.L. Greer**. Using an agent-based model to describe the potential spread of equine influenza within a network of horses attending an equestrian show. Modeling in Animal Health Conference. Nantes, France. June 2017. Oral.

47. Khan, S.U., T. O'Sullivan, Z. Poljak, J. Alsop, and **A.L. Greer**. Generating A Synthetic Animal Population Structure: A Geospatial Database for Ontario Swine Farms. University of Guelph Swine Research Day. Guelph, ON. May 2017. Poster.

46. Cousins, M. D.N. Fisman, J. Sargeant, and **A.L. Greer**. Identifying environmental drivers of *Campylobacter* infection risk in Ontario, Canada using a One Health approach. Centre for Public Health and Zoonoses Research Day. Guelph, ON. May 2017. Poster.

45. Brunn, A., D.N. Fisman, J. Sargeant, and **A.L. Greer**. Temporal associations between environmental conditions and pathogen colonization of livestock on human cases of Giardia duodenalis in Waterloo region. Centre for Public Health and Zoonoses Research Day. Guelph, ON. May 2017. Poster.

44. Farrell, A., J.P. Collins, **A.L. Greer**, and H.R. Thieme. Do fatal infectious diseases eradicate host species? Epidemic perspective. Joint Mathematics Meetings - Mathematical Association of America and the American Mathematical Society. Atlanta, GA. January 2017. Oral.

43. Spence, K.L., T.L., O'Sullivan, Z. Poljak, and **A.L. Greer**. Estimating potential disease spread at an equestrian show in Ontario, Canada using an agent-based network model. Conference of Research Workers in Animal Disease

(CRWAD), Chicago, IL. Abstract. December 2016. Oral.

***K. Spence was awarded the student prize for the best oral presentation in the Biosecurity section for this presentation.

42. Hughes, S., I. Young, R.V. Ackford, A.J. Elliot, S.A. McEwen, **A.L. Greer**, and A. Papadopoulos. Essential elements of human infectious disease syndromic surveillance systems: a scoping review. International Society for Disease Surveillance. Atlanta, GA. December 2016. Poster.

42. Milwid, R., T.L. O'Sullivan, Z. Poljak, M. Laskowski, and **A.L. Greer**. Using of proximity logging technology to quantify equine contact patterns within Ontario Equine facilities. OVC Graduate Student Symposium. Guelph, ON. November 2016. Poster.

41. Spence, K.L., T.L. O'Sullivan, Z. Poljak, and **A.L. Greer**. Mathematical modeling of potential disease spread within a network of horses attending an equestrian event. OVC Graduate Student Symposium. Guelph, ON. November 2016. Poster.

40. •Gardner, E., M. Ali, G. Kayali, D. Kelton, and **A.L. Greer**. Using the Incidence Decay and Exponential Adjustment (IDEA) model to understand MERS-CoV transmission dynamics in a camel herd. International Meeting on Emerging Diseases. Vienna, Austria. November 2016. Poster.

39. Kisiel, L.M., A. Jones-Bitton, J.M. Sargeant, J.B. Coe, D.T.T. Flockhart, A. Reynoso Palomar, E. Canales Vargas, and **A.L. Greer.** Domestic dog ecology in Villa de Tezontepec, Hidalgo, Mexico and implications for canine rabies transmission. International Conference on Diseases in Nature Communicable to Man. Guelph, ON. Abstract. August 2016. Oral.

38. **Greer, A.L**. K. Spence, and E. Gardner. Using the Incidence Decay and Exponential Adjustment (IDEA) model to understand the early dynamics of the 2014 porcine epidemic diarrhea virus (PEDV) outbreak in Ontario. Canadian Association for Veterinary Epidemiology and Preventive Medicine. Guelph, ON. Abstract. May 2016. Oral.

37. Milwid, R., T.L. O'Sullivan, Z. Poljak, M. Laskowski, and **A.L. Greer**. Use of novel proximity logging technology to quantify equine contact patterns in Ontario equine facilities. Canadian Association for Veterinary Epidemiology and Preventive Medicine. Guelph, ON. Abstract. May 2016. Poster.

36. •Kisiel, L.M., A. Jones-Bitton, A. Reynoso-Palomar, E. Canales-Vargas, and A.L. Greer. Domestic dog population dynamics in Villa de Tezontepec, Hidalgo, Mexico: towards improved canine population and rabies control. Canadian Association for Veterinary Epidemiology and Preventive Medicine. Guelph, ON. Abstract. May 2016. Oral.

35. Spence, K.L., T.L., O'Sullivan, Z. Poljak, and **A.L. Greer**. Describing the Ontario equine movement network to understand the risk of disease introduction and spread. Canadian Association for Veterinary Epidemiology and Preventive Medicine. Guelph, ON. Abstract. May 2016. Oral.

34. Brankston, G., C. Boughen, and **A.L. Greer**. Assessing the Impact of Environmental Exposures and *Cryptosporidium* Infection in Cattle on Human Incidence of Cryptosporidiosis. Canadian Association for Veterinary Epidemiology and Preventive Medicine. Guelph, ON. Abstract. May 2016. Poster.

33. Spence, K.L., T.L., O'Sullivan, Z. Poljak, and **A.L. Greer**. An agent-based modeling approach to determine the impact of control strategies on a facility-level equine influenza outbreak. Canadian Association for Veterinary Epidemiology and Preventive Medicine. Guelph, ON. Abstract. May 2016. Poster.

32. Spence, K.L., T.L., O'Sullivan, Z. Poljak, and **A.L. Greer**. Preventing equine disease epidemics using mathematics. Ontario Ministry of Agriculture, Food and Rural Affairs Expo. Abstract. December 2015. Poster.

31. Spence, K.L., B. Goh, T.L., O'Sullivan, Z. Poljak, and **A.L. Greer**. Characterization of the equine contact network at a single equestrian show. Graduate Student Research Symposium. Guelph, ON. Abstract. December 2015. Oral.

30 Gardner, E., D. Kelton, K. Hand, Z. Poljak, and **A.L. Greer.** Using an agent-based model to compare between two diagnostic tests for *Staphylococcus aureus* bovine mastitis. 5th International Conference on Infectious Disease Dynamics. Clearwater Beach, FL. Abstract. December 2015. Poster.

29. Spence, K., T. O'Sullivan, Z. Poljak, and **A.L. Greer**. Identifying factors influencing the probability of an equine influenza outbreak in an equine training facility. 5th International Conference on Infectious Disease Dynamics. Clearwater Beach, FL. Abstract. December 2015. Poster.

28. Greer, A.L. K. Spence, and E. Gardner. Using the Incidence Decay and Exponential Adjustment (IDEA) model to understand the early dynamics of the 2014 porcine epidemic diarrhea virus (PEDV) outbreak in Ontario. 5th International Conference on Infectious Disease Dynamics. Clearwater Beach, FL. Abstract. December 2015. Poster.

27. Beswick, A, Z. Poljak, **A.L. Greer**, A. Papadopolous, and C. Dewey. Social Media Surveillance: Using Twitter to track Influenza in Canada. Centre for Public Health and Zoonoses Annual Conference. Guelph, ON. Abstract. May 2015. Oral.

26. *Kisiel, L., A. Jones-Bitton, and **A.L. Greer**. The application of Computational Agent-Based Modelling to identify and evaluate dog population management strategies. Centre for Public Health and Zoonoses Annual Conference. Guelph, ON. Abstract. May 2015. Oral.

25. +Walczak, K., Z. Poljak, R. Friendship, **A.L. Greer**, A. Weersink. Factors associated with the antimicrobial treatment rates for swine dysentery during the grower-finisher phase of production. Centre for Public Health and Zoonoses Annual Conference. Guelph, ON. Abstract. May 2015. Poster.

24. Poljak, Z., K. Walczak₊, R. Friendship, Brockhoff, **A.L. Greer**, A. Weersink. Insight into epidemiology of swine dysentery by using analysis of treatment records and simulation modeling. International Society for Veterinary Epidemiology and Economics (ISVEE), Merida, Mexico. Abstract. November 2015. Oral.

23. +Arruda, A.G., Z. Poljak, **A.L. Greer**, R. Friendship, and J. Carpenter. Evaluation of porcine reproductive and respiratory syndrome control methods using agent-based modeling. International Society for Veterinary

Epidemiology and Economics (ISVEE), Merida, Mexico. Abstract. November 2015. Oral.

22. •Tuite, A., V. Gallant, E. Randell, and **A.L. Greer.** Controlling Tuberculosis Transmission in Canada's North: A Mathematical Modeling Study. Canadian Society for Epidemiology and Biostatistics, Toronto, ON. Abstract. June 2015. Oral.

21. Kisiel, L., A. Jones-Bitton, and **A.L. Greer**. The application of Computational Agent-Based Modelling to identify and evaluate dog population management strategies. 2nd International Conference on Dog Population Management, Istanbul, Turkey. Abstract. March 2015. Poster.

20. ·Spence, K., ·B. Goh, T. O'Sullivan, and **A.L. Greer**. Using social network analysis to understand epidemic potential in equine populations: a pilot study. Conference of Research Workers in Animal Disease (CRWAD), Chicago, IL. Abstract. December 2014. Oral.

***K. Spence was awarded the student prize for the best oral presentation in the Biosecurity section for this presentation.

19. ·Goh, B. and **A.L. Greer**. Mathematical disease transmission models for livestock populations: A scoping review. Conference of Research Workers in Animal Disease (CRWAD), Chicago, IL. Abstract. December 2014. Oral.

18. **Greer, A.L.** and D. Schanzer. Using a dynamic model to consider optimal antiviral stockpile size in the face of pandemic influenza uncertainty. Epidemics 4, Amsterdam, The Netherlands. Abstract. 2013. Poster.

17. Hauck, T., A.R. Tuite, D.N. Fisman and **A.L. Greer.** A simple model for R0 generation and short-term outbreak projection. Epidemics 3. Boston, MA. Abstract 2011. Poster.

16. **Greer, A.L.** and D.N. Fisman. Using models to identify cost effective interventions: pertussis vaccination for pediatric healthcare workers in Canada. American College of Epidemiology. San Francisco, CA. Abstract 2010. Oral.

15. Sander, B., C. Bauch, D. Fisman, **A.L. Greer**, and M. Krahn. Impact of mathematical modeling on health policy decision-making in the context of the recent novel swine-origin influenza A virus (SOIV) outbreak response in Ontario. Society for Medical Decision Making. Hollywood, CA. Abstract 2009. Poster.

14. **Greer, A.L.** and D.N. Fisman. Keeping vulnerable children safe from pertussis: preventing nosocomial pertussis transmission in the neonatal intensive care unit (NICU). Epidemics. Asilomar, CA. Abstract 2008. Poster.

13. **Greer, A.L.** and D.N. Fisman. Keeping vulnerable children safe from pertussis: preventing nosocomial pertussis transmission in the neonatal intensive care unit (NICU). Understanding and controlling infectious diseases: an agenda for the 21_{st} century. Insitut Pasteur, Paris, France. Abstract 2008. Poster.

12. **Greer, A.L.**, S.J. Drews and D.N. Fisman. Why does the "Winter Vomiting Disease" happen in winter? Unravelling the seasonality of Norovirus outbreaks in Toronto, Canada. Annual meeting of the Infectious Diseases Society of America. Washington, DC. Abstract 2008. Poster.

11. **Greer, A.L.** and J.P. Collins. Testing a key assumption of host pathogen theory: density- dependent disease transmission. Annual meeting of the Ecological Society of America. San Jose, CA. Abstract 2007. Oral.

10. **Greer, A.L.** and J.P. Collins. Habitat fragmentation affects disease transmission throughout a population. Annual meeting of Arizona State University Graduates in the Earth Life and Social Sciences. Tempe, AZ. Abstract. 2007. Oral.

9. **Greer, A.L.** and J.P. Collins. Is ATV transmission in tiger salamanders density dependent? Annual Meeting of the IRCEB Amphibian Decline and Disease Group, Tempe, AZ. Abstract. 2006. Oral.

8. **Greer, A.L**. and J.P. Collins. Spatial and temporal variation in *Ambystoma tigrinum* virus (ATV) infection prevalence in a persisting *Ambystoma tigrinum* population on the Kaibab Plateau, AZ. Annual Meeting of the Ecological Society of America. Memphis, TN. Abstract 2006. Oral.

7. Collins, J. P., J. Brunner, **A.L. Greer**, V. Miera, A. Picco, R. Retallick, and D. Schock. A comparison of two emerging infectious diseases caused by chytrid fungus and ranaviruses in tropical and temperate habitats. Annual meeting of the American Society of Ichthyologists and Herpetologists, New Orleans, LA. Abstract 2006. Oral.

6. **Greer, A.L**. and J.P. Collins. Mechanisms of disease transmission influence host persistence or extinction. Annual meeting of Arizona State University Graduates in the Earth Life and Social Sciences. Tempe, AZ. Abstract. 2006. Oral.

5. Fox, S.F., R.J. Torres-Cervantes, A.T. Storfer, G. Parra, **A.L. Greer**, and J.P. Collins. Ranavirus and *Batrachochytrium dendrobatidis* in endangered and diseased populations of the frog *Atelognathus patagonicus* in northern Patagonia, Argentina. Annual meeting of the American Society of Ichthyologists and Herpetologists, New Orleans, LA. Abstract 2006. Oral.

4. **Greer, A.L**. and J.P. Collins. Evaluation of a PCR diagnostic test for ranaviruses using whole carcasses and tail clips as comparison standards. Annual Meeting of the IRCEB Amphibian Decline and Disease Group, Tempe, AZ. Abstract. 2005. Oral.

3. **Greer, A.L.**, S.F. Fox, E.W. Davidson and J.P. Collins. Evidence for a ranavirus pathogen in the endangered frog, *Atelognathus patagonicus*, in Patagonia, Argentina. Annual meeting of the Research and Analysis Network for Neotropical Amphibians, San Juan, Puerto Rico. Abstract. 2004. Oral.

2. **Greer, A.L.**, M. Berrill and P.J. Wilson. The occurrence of ranavirus in wood frog and leopard frog populations in Ontario. Ontario Ecology and Ethology Conference, McMaster University. Abstract. 2003. Oral.

1. **Greer, A.L.**, M. Berrill and P.J. Wilson. The epizootiology of six amphibian mortality events in south central Ontario, Canada. Annual Meeting of the Canadian Society of Zoologists Conference, Wilfred Laurier University. Abstract. 2003. Oral.

INVITED PRESENTATIONS

• Invited speaker, Pandemic: the biology and mathematics of COVID-19 in Canada, Third Age Learning Seminar.

September 23, 2020.

- Invited speaker, Risk of COVID-19 amplification in school settings. Global Research Collaboration for Infectious Disease Preparedness (GLoPID-R), COVID Research synergies transmission. July 20, 2020.
- Invited speaker, Risk of COVID-19 chains of transmission associated with summer camp settings. Ontario Ministry of Health. May 13, 2020.
- Invited speaker, HIVE 2020 a Conference for Women in STEM, University of Guelph. March 28, 2020 (cancelled due to COVID-19)
- Invited speaker, Preparing Equine Facilities for Shelter in Place Orders. Equestrian Canada. March 25, 2020.
- Invited speaker, COVID-19 Pandemic planning for summer camp settings. Go Camp Pro Webinar. Online. March 6, 2020.
- Invited speaker, Borders in Public Health and Mathematical Epidemiology. Fields Institute, University of Toronto, Toronto, ON October 21-25, 2019.
- Invited speaker, American Society of Microbiology (ASM) Microbe 2019. San Francisco, CA. June 20-24, 2019.
- Invited speaker, Swine Research Day. Guelph, ON. May 9, 2019.
- Invited speaker, Ontario Livestock and Poultry Council. Guelph, ON. February 15, 2019.
- Invited Panelist, Café Mathematique, Fields Institute, University of Toronto, Toronto, ON (declined). November 2019.
- Invited speaker, Equestrian Canada Health and Welfare Committee. October 3, 2018.
- Invited speaker, 11th annual CRIPA Symposium, Faculté de médecine vétérinaire of the Université de Montréal, St-Hyacinthe, QC. May 15-16, 2018.
- Invited speaker, Department of Biology Seminar Series, Laurentian University, Sudbury, ON. April 6, 2018.
- Invited speaker, ITK TB elimination planning meeting, Ottawa, ON. February 26-27, 2018.
- Invited speaker, Nunavut TB Long Term Planning Meeting, Ottawa, ON. October 4-5, 2017.
- Invited speaker, Canadian Food Inspection Agency (CFIA) equine disease surveillance group. August 2017.
- Invited speaker, 2017 China-Canada International Conference on Disease Modelling (CCICDM). Shanghai University, China. June 2-6 2017.
- Invited speaker, Centre for Public Health and Zoonoses Research Day. Guelph, ON. May 23 2017.
- Invited speaker, Ontario Veterinary College, Disease Modeling Club. Guelph, ON. February 28, 2017.
- Invited speaker, Ontario Veterinary College Hebrew University Collaboration Workshop. Guelph, ON. January 5-6, 2017.
- Invited speaker, Canadian Pandemic Influenza Plan Task Group. Ottawa, ON. November 14-15, 2016.
- Invited speaker, Public Health Challenges for Modelling and Infectious Diseases: From "Communities of Practice" to "Communities of Health" hosted by National Collaborating Centre for Infectious Diseases (NCCID) and the International Centre for Infectious Diseases (ICID), York University, Toronto. October 2016.
- Invited speaker, International Workshop on Applied Probability, Toronto, ON (declined). June 2016.
- Invited Panelist, Café Mathematique, Fields Institute, University of Toronto, Toronto, ON. November 2015.
- Invited speaker, Workshop on the Mathematical Mobilization of Vaccine Discovery & Development, Fields Institute, University of Toronto. March 2015.
- Invited Speaker, University of Toronto Special Seminar Series on Ebola. Topic: The Ecological Context of the West African Ebola Outbreak. January 2015.
- Invited speaker, International Meeting on Emerging Diseases and Surveillance (IMED), Vienna, Austria. 2014.
- Invited speaker, National Collaborating Centre for Infectious Diseases (NCCID), Winnipeg, MB. 2014.

- Invited Speaker, Mathematics and Informatics for Public Health Conference. Jointly hosted by the Chern Institute of Mathematics and the Chinese Centre for Disease Control. Tianjing, China. 2014.
- Invited Working Group Participant, National Institute for Mathematical and Biological Synthesis (NimBios), Knoxville, TN. Theme: Modeling microbial contamination of fresh produce along the post-harvest supply chain. 2014.
- Invited Speaker, Biomathematics and Biostatistics Symposium, University of Guelph. 2014.
- Departmental Seminar, Department of Mathematics and Statistics, University of Guelph. 2014.
- Departmental Seminar, Department of Population Medicine, Ontario Veterinary College, University of Guelph. 2014.
- Public Health Network Council / Committee of Canadian Medical Officers of Health Meeting, Halifax, NS. 2011.
- Modelling and analysis of options for controlling persistent infectious diseases, Banff International Research Station for Mathematical Discovery and Innovation, Banff, AB. 2011.
- Ontario Agency for Health Protection and Promotion pH1N1 Workshop, Toronto, ON. 2011.
- Canada China International Conference on the Dynamics of Climate Impact and Infectious Diseases, Nanjing Normal University, Nanjing, China. 2010.
- Pandemic Planning Division, Public Health Agency of Canada, Ottawa, ON. 2010.
- Workshop in dynamic modelling for health policy: infectious and chronic disease interactions. University of Saskatchewan, Saskatcoon, SK. 2010.
- Panel on Mathematical Modeling in Epidemiology. American College of Epidemiology Annual Meeting. San Francisco, CA. 2010.
- Yukon Department of Health and Social Services, Chlamydia planning meeting. 2010.
- MITACS annual meeting, Edmonton, AB. 2010.
- Considerations for pH1N1 Planning to Respond to a "Third Wave" in 2010. Ontario and Nunavut Regional Pandemic Planning Meeting, Toronto, ON. 2009.
- Tools for Linking Human and Animal Models of Infectious Disease. Canadian Food Inspection Agency meeting, Montreal, QC. 2009.
- SickKids, CIHR Café Scientifique, It's getting hot in here: climate change and infectious disease dynamics, Toronto, ON. 2009.
- Mitigating the spread of influenza A (H1N1), Part II (Hosted by the British Columbia Centre for Disease Control), Vancouver, BC. 2009.
- Canadian Pandemic Vaccine Task Group, National Vaccine Prioritization meeting, Toronto, ON. 2009.
- H1N1 Mathematical Modeling Workshop (Hosted by the Public Health Agency of Canada), Toronto, ON. 2009.
- Canadian Pandemic Preparedness Meeting: H1N1 Outbreak Research Response (Hosted by CIHR), Toronto, ON. 2009.
- Mitigating the Spread of A H1N1 Flu: Lessons Learned From Past Outbreaks, Arizona State University, Tempe, AZ. 2009.
- Plenary speaker, Annual Meeting of ICC-AMMI-CACMID, Toronto, ON. 2009.
- MITACS Center for Disease Dynamics, York University, Toronto, ON. 2009.
- Toronto Invasive Bacterial Diseases Network education day, Mount Sinai Hospital, Toronto, ON. 2008.
- McMaster University, Mathematical Biology Seminar. 2008.
- Sunnybrook Health Sciences Centre, Toronto, ON. 2008.
- Sanofi Pasteur, Toronto, ON. 2008.
- Harvard School of Public Health, Freeman Symposium, Boston, MA. 2008.
- Department of Mathematics and Statistics. University of Guelph, Guelph, ON. 2007.

• State of Arizona Education Fair, Gilbert, AZ. 2006.

HIGHLY QUALIFIED PERSONNEL

Primary supervision (current)

30. Gabrielle Brankston, PhD student - Epidemiology	May 2020 -
29. Lindsay Obress, MSc (thesis) - Epidemiology	September 2019-
28. Thivya Naganathan, MSc (thesis) - Epidemiology	September 2019-
27. Dr. Tanya Rossi, Postdoctoral Fellow	September 2019-
26. Dr. Kamal Acharya, Postdoctoral Fellow	January 2019 -
25. J. Reilly Comper, doctoral student - Epidemiology	January 2019 -
24. Haley Weber, doctoral student (P/T) – Epidemiology	September 2017 –
	Parental leave: Jan – Dec 2020
23. Wendy Xie, doctoral candidate - Epidemiology	September 2017 -
22. Dr. Emma Gardner, doctoral candidate - Epidemiology	January 2015 –
	LOA: Jan – Sept 2017
	Parental leave: Apr 2019 - Mar
	2020
Primary Supervision (completed)	2010
21. Elissa Giang, MSc (thesis) – Epidemiology, University of Guelph	2019
20. Roksolana Hovdey, MSc (thesis) – Epidemiology, University of Guelph	2019
19. Dr. Salah Uddin Khan, Postdoctoral Fellow, University of Guelph/Public	2019
Health Agency of Canada	2010
18. Dr. Tanya Rossi, Postdoctoral Fellow, University of Guelph	2019
17. Rachael Milwid, PhD – Epidemiology, University of Guelph	2018
16. Melanie Cousins, MSc (thesis) – Epidemiology, University of Guelph	2018
15. Meagan Coffey, MSc (thesis) – Biophysics, University of Guelph	2017
14. Kelsey Spence, PhD – Epidemiology, University of Guelph	2017
13. Ariel Brunn, MSc (CW) – Epidemiology, University of Guelph	2017
12. Kamel Omer, undergraduate, University of Guelph	Summer 2017
11. Luz Maria Kisiel, MSc (thesis) – Epidemiology, University of Guelph	2017
10. Beatrice Hai, undergraduate, University of Guelph	Summer & Fall 2016
9. Enise Decaluwe-Tulk, undergraduate, University of Guelph	Summer & Fall 2016
8. Cyndi Boughen, undergraduate, University of Guelph	Winter 2015
7. Kelsey Spence, undergraduate, University of Guelph	Summer 2014
6. Beverly Goh, undergraduate, University of Guelph	Summer 2014
5. Christina Chan, MPH, University of Toronto	2011
4. Marcella Jones, MPH, University of Toronto	2010
3. Tanya Hauck, MD, University of Toronto	2012
2. Eva Wong, MPH, University of Toronto	2010
1. Karolina Machalek, MPH, University of Toronto	2010

Graduate Committee membership (current)

17. Lia Humphrey, MSc thesis, Department of Mathematics and Statistics, University of Guelph September 2019 16. Armin Orang, MSc thesis, Department of Population Medicine, University of Guelph

September 2019 15. Melanie Cousins, PhD candidate, Department of Public Health and Health Systems, University of Waterloo.
September 2018 -

14. Mikayla Plishka, MSc thesis, Department of Population Medicine, University of Guelph September 2018 -

13. Isha Berry, PhD candidate, Department of Epidemiology, Dalla Lana School of Public Health, University of Toronto.

September 2018 -

12. Dylan Melmer, PhD candidate, Department of Population Medicine, University of Guelph. September 2017 -

11. Tara Sadeghieh, PhD candidate, Department of Population Medicine, University of Guelph. September 2017 -

Graduate Committee membership (completed)

10. Matthew Wong, MSc (thesis), Department of Animal Bioscience, University of Guelph. 2020.

9. Jennifer Perret, PhD, Department of Population Medicine, University of Guelph. 2020.

8. Gabriella Mallia, PhD, Department of Pathobiology, University of Guelph. 2018.

7. Reilly Comper, MSc (thesis), Department of Biophysics, University of Guelph. 2018.

6. Stephanie Hughes, PhD, Department of Population Medicine, University of Guelph. 2018.

5. Ashleigh McGirr, PhD, Dalla Lana School of Public Health, University of Toronto. 2016.

4. Jordan Minigan, MSc (thesis), Department of Environmental Science, University of Guelph. 2016.

3. Adam Beswick, MSc (thesis), Department of Population Medicine, University of Guelph. 2016.

2. Krysia Walczak, MSc (CW), Department of Population Medicine, University of Guelph. 2016.

1. Ashleigh Tuite, PhD, Dalla Lana School of Public Health, University of Toronto. 2015.

***Awarded the Institute of Medical Science (IMS) Siminovitch-Salter Award (2016). This award is given annually to a graduating IMS doctoral student who has made outstanding scholarly contributions.

Examination and Defense Committees

28. Reilly Comper - Qualifying examination committee. Department of Population Medicine, University of Guelph. May 2020.

27. Xuezhen Ge – Dissertation proposal defense committee. Department of Integrative Biology, University of Guelph. January 2020.

26. Melanie Cousins – Dissertation proposal defense committee. Department of Public Health and Health Systems, University of Waterloo. December 2019.

25. Elissa Giang - MSc thesis defense committee. Department of Population Medicine, University of Guelph. December 2019.

24. Roksolana Hovdey - MSc thesis defense committee. Department of Population Medicine, University of Guelph. October 2019.

23. Kaushalya Kuruppu – MSc thesis defense committee Chair. Department of Population Medicine, University of Guelph. August 2019.

22. Jamie Imada - Qualifying examination committee. Department of Population Medicine, University of Guelph. June 2019. 21. Nadine Vogt - Qualifying examination committee. Department of Population Medicine, University of Guelph. June 2019. 20. Amanda Perri – PhD defense examination committee. Department of Population Medicine, University of Guelph. December 2018. 19. Rachael Milwid – PhD defense examination committee. Department of Population Medicine, University of Guelph. August 2018. 18. Melanie Cousins - MSc thesis exam committee. Department of Population Medicine, University of Guelph. August 2018. 17. Reilly Comper – MSc thesis exam committee. Department of Biophysics, University of Guelph. June 2018. 16. Stephanie Hughes – PhD defense examination committee. Department of Population Medicine, University of Guelph. April 2018. 15. Tara Sadeghieh, Qualifying examination committee. Department of Population Medicine, University of Guelph. January 2018. 14. Dylan Melmer – MSc thesis exam committee. Department of Population Medicine, University of Guelph – external examiner. August 2017. 13. Kelsey Spence – PhD defense examination committee. Department of Population Medicine, University of Guelph. August 2017. 12. Ariel Brunn – MSc (CW) defense examination committee. Department of Population Medicine, University of Guelph. August 2017. 11. Aaron B. Langille - PhD defense examination committee. Department of Environmental Sciences, University of Guelph. April 2017. 10. Rachael Milwid – PhD Qualifying examination. Department of Population Medicine, University of Guelph. February 2017. 9. Luz Maria Kisiel – MSc thesis exam committee. Department of Population Medicine, University of Guelph. January 2017. 8. Emma Gardner – PhD Qualifying examination. Department of Population Medicine, University of Guelph. October 2016. 7. Sovit Chalise – MSc (thesis). Department of Biology, Memorial University, St. John's NL – external examiner. July 2016. 6. Kelsey Spence – PhD Qualifying examination. Department of Population Medicine, University of Guelph. June 2016. 5. Vanessa Morton – MSc (CW), defense examination committee. Department of Population Medicine, University of Guelph. July 2014. 4. Jue (Julie) Tang - MSc (thesis), defense examination committee. Department of Population Medicine, University of Guelph. June 2014. 3. Shannon Collinson – PhD dissertation (Department of Mathematics, York University, Toronto, ON) – external examiner. 2013. 2. Kevin Brown - PhD protocol defense examination committee. Division of Epidemiology, Dalla Lana School of Public Health, University of Toronto. 2011. 1. Marija Zivkovic Gojovic – PhD dissertation (Department of Mathematics, York University, Toronto, ON) external examiner. 2010.

INSTITUTIONAL SERVICE

- Research Advisory Committee, Ontario Veterinary College, University of Guelph. 2014 current.
- Technical advisor, University of Guelph and Ontario Veterinary College Emergency Preparedness Committee for COVID-19. March 2020 June 2020
- Invited Speaker, Data, COVID-19, and Food. Arrell Food Institute. April 30, 2020.
- Invited speaker, Ontario Veterinary College Graduate Student Wellness Seminar. Topic: Planning your semester for success. January 2020.
- Search Committee Member, Dept. of Population Medicine, assistant professor tenure-track position in Epidemiology/One Health. 2020.
- Committee member, University of Guelph, Public Health Curriculum Committee. 2019-2020.
- Committee member, Department of Population Medicine, Graduate Program Committee. 2019-2020.
- Reviewer, University of Guelph OMAFRA Emergency Management Grant Review Committee, Winter/Spring 2019
- Invited participant, OVC Horse Trust meeting. November 2018.
- Search Committee Member, Ontario Veterinary College, Director, Centre for Public Health and Zoonoses. 2018-2019.
- Search Committee Member, Dept. of Population Medicine, associate/full professor tenure-track position in One Health. 2018.
- Search Committee Member, Dept. of Population Medicine, assistant/ associate professor tenure-track position in One Health. 2018.
- Search Committee Member, Department of Integrative Biology, Department Chair. Spring 2018.
- Reviewer, OVC College Review Committee, OVC Scholarships. Summer 2017.
- Reviewer, OVC College Review Committee, OVC Scholarships. Spring 2017.
- Interviewer, OVC admissions committee, multiple mini interviews (MMI). May 2017.
- OVC College Review Committee, OVC Scholarships/Fellowships. March 2017.
- Ontario Veterinary College collaboration workshop with Hebrew University. January 3-4, 2017.
- Steering committee member, Ontario Veterinary College, Canada Excellence Research Chair proposal. 2017.
- Poster judge for the Annual OVC Graduate Research Symposium. November 2016.
- Participant, OVC Strategic Planning Committee. Fall 2016.
- Interviewer, OVC admissions committee, multiple mini interviews (MMI). 2015.
- OVC College Review Committee, Ontario Graduate Scholarships. 2015.
- Poster judge for the Annual OVC Graduate Research Symposium. November 2014.
- Dean's Advisory Council, Ontario Veterinary College, University of Guelph. 2014 2016.
- Data Boot camp Committee, Department of Population Medicine, Ontario Veterinary College, University of Guelph. 2014-2015.
- Master of Public Health (MPH) Program Committee, Ontario Veterinary College, University of Guelph. 2014current.
- Research Methods 2 Curriculum Committee, Division of Epidemiology, Dalla Lana School of Public Health, University of Toronto. 2011-2012.
- Infectious Disease Curriculum Committee, Division of Epidemiology, Dalla Lana School of Public Health, University of Toronto. 2011-2012.
- MPH Admissions Committee, Division of Epidemiology, Dalla Lana School of Public Health, University of Toronto. 2011-2012.

• Annual review committee for doctoral student progress, Division of Epidemiology, Dalla Lana School of Public Health, University of Toronto. 2009-2011.

PROFESSIONAL SERVICE

- Advisor, COVID-19 Task Force, Ontario Camping Association. March May 2020.
- Member, Public Health Agency of Canada, COVID-19 Modelling Technical Advisory Committee. February 2020 -current
- Committee Member, New Frontiers in Research Fund. Tri-agency Institutional Programs Secretariat. 2019-2020.
- Advisory Board Member (invited), National Collaborating Centre for Infectious Disease (NCCID). 2019-2024.
- Mentor, 500 Women Scientists, Guelph, ON Pod. 2019-2020.
- Invited speaker (volunteer), Let's Talk Science, Science of Witchcraft and Wizardry at the University of Guelph. November 2, 2019.
- Chair, NSERC Site Visit Committee (SVC). University of Saskatchewan Industrial Research Chair evaluation. June 2019.
- Evaluator, Graduate student oral presentation scoring. Canadian Association for Veterinary Epidemiology and Preventive Medicine. May 2019.
- Team Member, Mathematics for Public Health Lab at York University (Fields CQAM lab). https://www.cqam.ca/mathematics-for-public-health 2019 - current.
- Scientific Merit Reviewer, Canadian Nuclear Laboratories, Chalk River, ON. 2018-current.
- External Reviewer, Tenure and Promotion file for the Department of School of Epidemiology, Public Health and Preventive Medicine, University of Ottawa. Winter 2019.
- Participant, Institut de Recherche en Sante Publique at Universite de Montreal Delphi consultation on Zoonoses, Winter 2018.
- External reviewer, UK Medical Research Council (MRC) funding proposals. November 2017.
- Member, Community for Emerging and Zoonotic Diseases (CEZD), Canadian Animal Health Surveillance System (CAHSS).
- External reviewer, Discovery Grants (Mathematics and Statistics and Biological Sciences), Natural Sciences and Engineering Research Council (NSERC). December 2017.
- Moderator, Modeling and Network Analysis Section, Conference of Research Workers in Animal Disease (CRWAD). December 2017.
- Invited member, Federal Inuit TB Elimination Task Force (Modeling and health economic sub-group). 2017 2018.
- Advisory Group Member, ESRC funded pump-priming research project: "Antimicrobial resistance as a social dilemma: Approaches to reducing broad-spectrum antibiotic use in acute medical patients internationally". Led by the University of Leicester (UK). January 2017 current.
- External reviewer, Discovery Grants (Mathematics and Statistics), Natural Sciences and Engineering Research Council (NSERC). December 2016.
- Invited member, Equestrian Canada (EC) and Canadian Animal Health Surveillance System (CAHSS) working group for equine disease surveillance. November 2016 current
- Workshop Organizer, Mathematical Biology for Understanding Emerging Infectious Diseases at the Human-Animal-Environment Interface: a "One Health" Approach. Banff International Research Station for Mathematical Discovery and Innovation. November 2016.
- Technical advisor, Canadian Pandemic Influenza Plan Task Group (CPIP-TG). 2016 current.

- Certified EpiCore member (www.epicore.org), providing timely input and expertise to speed up early detection of global outbreaks in collaboration with Health Map and ProMed mail. 2016 current.
- Strategic advisor, Serecon/Canadian Agricultural Health Coalition /Canadian Food Inspection Agency project on Domestic Livestock Movement Demographic Study. 2014-2015.
- Reviewer, Wellcome Trust Sustaining Health Fund. 2015
- Moderator, Modeling for Public Health Group– National Collaborating Centre for Infectious Diseases, Winnipeg, MB. 2014-2016.
- Organizer, Community of Interest in Disease Modeling, University of Guelph. 2014 2016.
- Session Moderator, Global Development Symposium. University of Guelph. May 2014.
- Consultant, United States Institute of Medicine (IOM) SMART vaccines beta tester on behalf of the Public Health Agency of Canada, 2013-2015.
- Founding Co-Director, Decision Centre for Infectious Disease Epidemiology (DeCIDE). 2011-current.
- Associate Editor, BMC Public Health. 2011-2016.
- Core Investigator, York University, Centre for Disease Modeling. 2010 current
- Technical Advisor, Canadian Pandemic Influenza Plan (CPIP), Surveillance Annex Expert Advisory Group. 2013-2014.
- Scientific Advisory Group Member, FitzGerald Seminar Series, University of Toronto. 2011-2014.
- Technical Advisor, Canadian Sustainable Antiviral Stockpile Working Group. 2011-2013.
- Organizing Committee, Canadian Pandemic Influenza Planning Meeting: Assumptions. Public Health Agency of Canada, Winnipeg, Manitoba, February 2-3, 2011.
- Technical Advisor, Canadian Antiviral Scientific Advisory Group. 2010-2014.
- Organizing Committee, "One Health One Model: Modeling at the Animal-Human Interface". 4 day meeting on applying mathematical modeling to the "One Health" paradigm. University of Guelph, November 1-4, 2010.
- Co-organizer, Infectious Disease Epidemiology Afficionados Seminar Series. Hosted by the Fields Institute, University of Toronto. 2009-2011.
- Ontario Agency for Health Protection and Promotion Medical Officers of Health "Scientific Webinar" on Mathematical Modeling and Influenza, May 6, 2009.
- Technical Advisor, Canadian Pandemic Vaccine Task Group. 2009.
- Commentator on pandemic H1N1 waves for the Association of Public Health Epidemiologists in Ontario (APHEO). 2009.
- Workshop organizer, Keeping vulnerable populations safe from pertussis: using modeling tools to identify costeffective interventions for whooping cough. International Society for Pharmacoeconomics and Outcomes Research (ISPOR). 2009
- Contributor, Symposium on Disaster Modeling for Public Health and Emergency Preparedness. 2008.
- Co-organizer, Ontario Agency for Health Protection and Promotion --- University of Guelph Center for Public Health and Zoonosis meeting on collaborative efforts in human-veterinary health research, Ontario Central Public Health Laboratory. 2008.
- Rounds Working Group, Child Health Evaluative Sciences. The Hospital for Sick Children. 2008.
- Coordinator, School of Life Sciences, See ASU (a community outreach program). 2006-2007.

Manuscript Reviewer: Journal of Infectious Diseases, Infectious Diseases and Therapy, Journal of Swine Health and Production, Clinical Infectious Diseases, Annals of Epidemiology, BMC Public Health, European Journal of Internal Medicine, Copeia, Emerging Infectious Diseases, Journal of Wildlife Disease, Epidemiology, Trends in Parasitology, Vaccine, American Journal of Epidemiology, Nature Scientific Reports, Infection Control and Hospital Epidemiology, Psychology, Health & Medicine, PLoS ONE, Canadian Veterinary Journal, CMAJ Open, Journal of Infection and Public Health, Epidemics, BMC Veterinary Research, BMC Medicine, International Journal of Modern Physics B, Diseases of Aquatic Organisms, Herpetological Revie, Frontiers in Ecology and Evolution, Equine Veterinary Journal

MEDIA

- "What Ontario schools can learn from elsewhere about making schools safer from COVID-19. CBC News. July 17, 2020.https://www.cbc.ca/news/canada/toronto/ontario-covid-19-school-return-class-september-coronavirus-1.5649529
- "As Ontario heads into Stage 3, pressure grows for full-time school plan amid COVID-19". CBC News. July 15, 2020. https://www.cbc.ca/news/canada/toronto/covid-19-ontario-stage-3-school-reopening-1.5648796
- "Medical experts open letter to government: balance needed in COVID restrictions". Radio Canada International. July 9, 2020. https://www.rcinet.ca/en/2020/07/09/medical-experts-open-letter-to-government-balance-neededin-covid-restrictions/
- "Health experts press Ottawa for a more 'balanced approach' to tackling COVID-19 pandemic". The Globe and Mail. July 7, 2020. https://www.theglobeandmail.com/canada/article-health-experts-press-ottawa-for-a-morebalanced-approach-to-tackling/
- "Here we go: Reopening is upon us. But just remember there's still a pandemic". Toronto Star. June 22, 2020. https://www.ourwindsor.ca/opinion-story/10039656-bruce-arthur-here-we-go-reopening-is-upon-us-but-just-remember-there-s-still-a-pandemic/
- "How 'superspreading' helps drive the coronavirus pandemic". Global News. June 14, 2020. https://www.vice.com/en_ca/article/ep44ne/bryan-adams-is-the-latest-vegan-to-falsely-blame-the-pandemic-on-meat
- "The COVID-19 pandemic is remapping childhood- and the effects may linger". Maclean's. June 11, 2020. https://www.macleans.ca/society/health/covid-19-pandemic-coronavirus-canada-children-effects/
- "COVID reopening: hoping it goes right- watching carefully how it might go wrong". CBC Radio Quirks and Quarks. May 29, 2020. https://www.cbc.ca/radio/quirks/may-30-swearing-makes-pain-more-tolerable-mt-sthelens-40-years-later-and-more-1.5589125/covid-reopening-hoping-it-goes-right-watching-carefully-how-itmight-go-wrong-1.5589127
- "Infection rate continues to slide despite broader COVID-19 testing. CBC News. May 19, 2020. https://www.cbc.ca/news/canada/ottawa/covid-19-tuesday-report-1.5575679
- "Bryan Adams is the latest vegan to falsely blame the pandemic on meat". Vice. May 12, 2020. https://www.vice.com/en_ca/article/ep44ne/bryan-adams-is-the-latest-vegan-to-falsely-blame-the-pandemic-on-meat
- "Everything you need to know about her immunity. Hint: we're a long way off". Maclean's. May 8, 2020. https://www.macleans.ca/opinion/everything-you-need-to-know-about-herd-immunity-hint-were-a-long-way-off/
- "Periodic physical distancing for COVID-19 control: new modelling study". Science Daily. April 8, 2020. https://www.sciencedaily.com/releases/2020/04/200408125523.htm
- "2 new deaths, 29 new COVID-19 cases identified in Ottawa" Global News. April 9, 2020. https://globalnews.ca/news/6801078/new-deaths-covid-19-cases-ottawa-april-9/

- "What the COVID-19 'new normal' could look like" Toronto Star. April 12, 2020. https://www.toronto.com/news-story/9940057-what-the-covid-19-new-normal-could-look-like/
- "Coronavirus: Supply squeeze creates dilemma for doctors on who to test". NOW magazine. March 23, 2020. https://nowtoronto.com/news/coronavirus-testing/
- "Stopping COVID-19 could require eight months of 'aggressive social distancing,' outbreak modelling shows. National Post. March 21, 2020. https://www.thechronicleherald.ca/lifestyles/health/stopping-covid-19-could-require-eight-months-of-aggressive-social-distancing-outbreak-modelling-shows-427703/
- "Nail and Hair salons are beginning to close. How will this affect workers?" Teen Vogue. March 20, 2020. https://www.teenvogue.com/story/nail-and-hair-salon-workers-coronavirus
- "Containment if futile: is the COVID-19 coronavirus the pathogen of the century 'everyone is waiting for'? National Post. March 7, 2020. https://www.thechronicleherald.ca/lifestyles/health/containment-is-futile-is-the-covid-19-coronavirus-the-pathogen-of-the-century-everyone-is-waiting-for-420760/
- "Coronavirus testing ramps up as Ontario searches for missed cases". Toronto Star. March 5, 2020. https://www.thestar.com/news/gta/2020/03/05/coronavirus-testing-ramps-up-as-ontario-searches-for-missed-cases.html
- "COVID-19 and pandemic preparedness" CBC Kitchener Waterloo. March 5, 2020.
- "COVID-19 and pandemic preparedness" Guelph Politico podcast. March 5, 2020.
- "COVID-19 and pandemic preparedness" CTV's Your Morning. March 3, 2020. https://www.youtube.com/watch?v=1Oh49QE2vis&feature=youtu.be
- "Preparing for COVID-19" The Ryan Jespersen Show on 930 CHED (Edmonton). March 2, 2020.
- "Canada could move to more active surveillance of COVID-19. Here's what that means". Global News. February 28, 2020. https://globalnews.ca/news/6611251/coronavirus-surveillance-canada/
- "COVID-19 How to prepare at home for potential quarantine" CTV News. February 28, 2020. https://www.ctvnews.ca/mobile/health/covid-19-how-to-prepare-at-home-for-potential-quarantine-1.4832097
- "Are we prepared for a pandemic?" The Bill Kelly Morning show on 900CHML. February 27, 2020.
- "Coronavirus testing ramps up as Ontario searches for missing cases". Toronto Star. March 5, 2020. https://www.thestar.com/news/gta/2020/03/05/coronavirus-testing-ramps-up-as-ontario-searches-for-missed-cases.html
- "Containment is futile: Is the COVID-19 coronavirus the pathogen of the century everyone is waiting for?" National Post. March 7, 2020. https://nationalpost.com/health/coronavirus-covid-19-pandemic
- "Canada could move to more active surveillance of COVID-19. Here's what that means". Global News. February 28, 2020. https://globalnews.ca/news/6611251/coronavirus-surveillance-canada/
- "Social distancing could go a long way toward slowing down COVID-19, researchers say". March 11. Toronto Star. https://www.thestar.com/news/gta/2020/03/10/social-distancing-could-go-a-long-way-toward-slowing-down-covid-19-researchers-say.html
- "The landscape of One Health". Summer/Fall 2019. The Crest. https://ovc.uoguelph.ca/sites/default/files/users/k.mantel/files/CREST_SF2019_webversion_a.pdf
- "The Super Awesome Science Show podcast". August 6, 2019. <u>https://curiouscast.ca/podcast/321/super-awesome-science-show-sass/</u>
- "Tools to help predict disease spread". April 19, 2019. Harness Link Magazine. http://www.harnesslink.com/News/Guelph-research-looks-at-tools-to-help-predict-disease-spread-in-horse-population
- "Guelph research looks at tools to help predict disease spread in horse populations". March 2019. Equine Guelph News. https://www.equineguelph.ca/news/index.php?content=609

- "Warming climate implies more flies and disease". February 20, 2019. Scientific American Podcast. https://www.scientificamerican.com/podcast/episode/warming-climate-implies-more-flies-mdash-and-disease/
- "Climate change could increase foodborne illness by energizing flies". February 14, 2019. Science News. https://www.sciencenews.org/article/climate-change-increase-campylobacter-infections-flies
- "Study suggests global warming could cause more cases of food poisoning". February 13, 2019. Medical Xpress. https://medicalxpress.com/news/2019-02-global-cases-food-poisoning.html
- "Food poisoning cases could surge as climate change brings swarms of flies, scientists warn". February 13, 2019. The Independent. https://www.independent.co.uk/news/science/food-poisoning-flies-climate-change-disease-global-warming-insects-campylobacter-a8776001.html
- "University of Guelph studies barn interactions and disease patterns". May 15, 2017. American Farriers Magazine. https://www.americanfarriers.com/articles/9167
- "University researchers studying horse contact patterns". April 28, 2017. The Wellington Advertiser. http://www.wellingtonadvertiser.com/comments/index.cfm?articleID=35530
- "Connectedness of horse world revealed in study of Canadian dressage show" June 27 2017. Horse Talk Magazine NZ. http://www.horsetalk.co.nz/2017/06/23/connectedness-horse-world-dressageshow/#1vFA0TqSe6GA4koU.99
- "RFID unbridles pathogen transmission research". April 2017. RFID Journal. http://www.rfidjournal.com/articles/view?15956
- "Study tracks real-time contact between horses and humans". March 2017. Horse Talk Magazine NZ. http://www.horsetalk.co.nz/2017/03/27/real-time-contact-horses-humans/#axzz4etu2DCZL
- "Using radio frequency identification (RFID) tags to help track horses' movement and interactions". March 2017. Equine Guelph, Equine News. http://www.equineguelph.ca/news/index.php?content=503
- "Researcher wants to learn more about horse flu on PEI". CBC news. October 2016. http://www.cbc.ca/news/canada/prince-edward-island/pei-horse-flu-1.3822529
- "How to prevent the spread of equine disease". Straight from the Horse's Mouth Radio Show. March 2016.
- How a Toronto company used big data to predict the spread of Zika. Toronto Star. 22 February 2016.
- "Infectious diseases in a horse show environment". Equine Guelph Research Radio. June 2015.
- "Fighting epidemics by connecting the dots". The Horse Sport. May 2015.
- "e is for Ebola". The American Mathematical Society (AMS) blog. October 2014. http://blogs.ams.org/blogonmathblogs/2014/10/01/e-is-for-ebola/#sthash.P1SVBdtv.dpbs
- "This math model is predicting the Ebola outbreak with incredible accuracy". October 2014. https://motherboard.vice.com/en_us/article/this-math-model-is-predicting-the-ebola-outbreak-with-incredibleaccuracy

TEACHING

University of Guelph, Guelph, ON

- Course coordinator, Infectious Disease Modeling (POPM*6800). 2020.
- Course coordinator, Infectious Disease Modeling (POPM*6950-01). 2019.
- Co-course-coordinator, Seminar (POPM*6200). 2018-2019.
- Course coordinator, Infectious Disease Modeling (POPM*6950-01). 2018.
- Course coordinator, Infectious Disease Modeling (POPM*6950-01). 2017.
- Course coordinator, Mathematical Epidemiology (POPM*6950-02). 2015.

Dalla Lana School of Public Health, University of Toronto, ON

• Guest lecturer. Topic: Enteric infectious disease epidemiology and outbreak investigation. 2015.

Canadian Society for Epidemiology and Statistics

• Short course on Mathematical Modeling of Infectious Diseases: A practical introduction. 6 hour webinar. 2015

Queen's University, Kingston, ON

- Guest lecturer, Department of Public Health Sciences, Infectious Disease Epidemiology. Topic: A practical introduction to mathematical epidemiology. 2013 & 2014.
- North American Congress of Epidemiology, Montreal, QC
 - Short course in Mathematical Modeling of Infectious Diseases: Beyond the basics. 2011.

Dalla Lana School of Public Health, University of Toronto, ON

- Co-course-coordinator, Infectious disease epidemiology (CHL 5412). 2011
- Group leader, Introduction to Public Health Sciences (CHL 5004). 2011
- Co-course-coordinator, Research methods II (CHL 5408). 2011.
- Co-course-coordinator, Short course in Mathematical Modeling of Infectious Diseases: An Introduction to Agent Based Models. 2010.

Society for Medical Decision Making, Hollywood, CA

• Short course in Mathematical Modeling of Infectious Diseases: An Introduction to Agent Based Models. 2009 & 2010.

Hospital for Sick Children, Toronto, ON

- Reading group co-organizer and leader, Biostatistical Methodology Unit. 2008-2009.
- Arizona State University, Tempe, AZ
 - Teaching assistant, Introductory biology for majors. 2004-2006.
 - Teaching assistant, Introductory biology for non-majors. 2003-2004.
 - Scientific curriculum instructor. 2005-2007.
 - Lecturer, Learning Resource Centre. 2007.

Trent University, Peterborough, ON

• Sessional lecturer, Population ecology. 2003.

PROFESSIONAL DEVELOPMENT

- Unconscious Bias training module. CIHR. February 2020.
- Introduction to OneNote teacher academy. Microsoft Educator Centre. November 19, 2019.
- OneNote class notebook: a teacher's all-in-one notebook for students. Microsoft Educator Centre. November 13, 2019.
- Certified Microsoft Innovative Educator. Microsoft Educator Centre. November 13, 2019.
- Transform learning with Microsoft Teams. Microsoft Educator Centre. November 1, 2019.
- Crafting a collaborative learning environment with Class Teams. Microsoft Educator Centre. November 1, 2019.
- Participant, Introduction to Ontario's Incident Management System (IMS 100), certificate of successful completion issued by the Ministry of the Attorney General. October 2019.
- Member, National Centre for Faculty Development and Diversity August 2017 current.
- Project-based learning (PBL) as a vehicle for high impact practices: reinventing courses. Worchester Polytechnic Institute (WPI). November 2019
- Best Practices in Graduate Student Supervision, University of Guelph. April 2017.
- Challenging Traditional Assessments through Team Based Learning, University of Guelph. January 2017.
- Media training, University of Guelph. June 2016.
- Making Education Accessible, University of Guelph online module. This course provided an introduction to

universal instructional design (UIP). June 2014.

• Learner-Centred Assessment, Open Learning and Educational Support, University of Guelph. July 2014.

VOLUNTEER EXPERIENCE

- Volunteer, Waverley Drive Public School- "Waverley Weekender" Food Program, Guelph, ON. 2018 current.
- Member, Waverley Drive Public School Parent Council, Guelph, ON. 2017 current.
- Partners in Research. 2017 current.
- Early literacy volunteer, Waverley Drive Public School, Guelph, ON (1 afternoon per week). 2015-2016.
- Guest Speaker, Cobourg District Collegiate Institute West, Department of Biology, Cobourg, ON. 2009
- Volunteer, Paediatric Oncology Playroom, Phoenix Children's Hospital, Phoenix, AZ (4 hours per week). 2003-2007.
- Coordinator, Ask a Biologist Program, Arizona State University. 2005-2007.