

Amy L. Greer, MSc, PhD.

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

EXPERTISE

I have broad theoretical and practical knowledge in infectious disease, epidemiology, mathematical modeling, and public health. I use epidemiological, ecological, and evolutionary data to develop models that can be used to examine the effectiveness and cost-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 (Tier II) in Population Disease Modeling and Assistant Professor* . 2014 - present

**I have been granted tenure (winter 2018) and have been promoted to Associate Professor effective July 1, 2018*

Department of Population Medicine, Ontario Veterinary College
University of Guelph
Guelph, ON

Director, Math.Epi.Lab Inc. 2013 – present.

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

Amy L. Greer, MSc, PhD.

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

CIHR Operating Grant, \$248,624 (Role: Co-A 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)
January 2018 – January 2021 (3 years)

Project: OPEN Stewardship

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-PI 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

Banff International Research Station (BIRS) for Mathematical Discovery and Innovation, ~ \$100,000 (all expenses to host an international workshop for 42 participants at the Research Station for 5 days) (Role: PI).

Workshop date: November 2016. Workshop: Mathematical Biology for Understanding Emerging Infectious Diseases at the Human-Animal-Environment Interface: a “One Health” Approach

OMAFRA – University of Guelph Partnership, \$119,588 (Role: Co-PI 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-PI 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.

Amy L. Greer, MSc, PhD.

NSERC Discovery Grant, \$125,000 (Role: PI)

August 2014 – August 2019 (5 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: PI)

May 2014 – May 2015

Project: Seasonal influenza vaccine modeling.

Canada Research Chairs Program, \$500,000 (Role: PI)

January 2014 – January 2019

Project: Population disease modeling.

Canadian Institutes of Health Research, \$300,000 (Role: Co-PI 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-PI 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-PI 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: PI), 2009-2010

Project: Using individual based models to identify novel interventions for the control of *Chlamydia trachomatis* 2009

MATH.EPI.LAB CONSULTING SERVICES

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 is to develop a Java applet “front-end” to the existing pandemic influenza vaccine model we developed in 2013 for knowledge translation purposes.

Amy L. Greer, MSc, PhD.

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

- 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.
- Outstanding Oral Paper, Annual Meeting of the Arizona State University Graduates in the Earth, Life, and Social Sciences. 2007 & 2008.
- Travel Award, Mathematical Modeling of Infectious Diseases workshop (CAIMS/MITACS), York University. 2006.
- Excellence in Teaching Award, Arizona State University Graduate and Professional Student's Association (GPSA). 2006.
- Arizona State University, Graduate Tuition Fellowship. 2005.
- Natural Science and Engineering Research Council (NSERC) Graduate Fellowship. 2003- 2005.
- Robert Darou Norris Award for Graduate Studies, Trent University. 2002.
- Ontario Graduate Scholarship (OGS) in Science and Technology. 2001-2003.
- Trent University entrance scholarship. 2001.

PEER-REVIEWED PUBLICATIONS

* denotes trainee under my direct supervision

+ denotes trainee collaborator

42. *Coffey, M, **A.L. Greer**, and H.Eberl. (In press). 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.

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 S0195-6701(18)30064-1.

40. *Khan, S.U., T. O'Sullivan, Z. Poljak, J. Alsop, and **A.L. Greer**. (2018). Generating A Synthetic Animal 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**. (In Press). A longitudinal study describing horse characteristics and movements during a competition season in Ontario, Canada in 2015.

Amy L. Greer, MSc, PhD.

Canadian Veterinary Journal.

38. *Spence, K., T. O'Sullivan, Z. Poljak, and **A.L. Greer**. (In Press). Using an agent-based modeling approach to determine the potential impact of infection prevention and control measures on a facility-level equine influenza outbreak. *Canadian Journal of Veterinary Research*.
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*.
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

Amy L. Greer, MSc, PhD.

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.

Amy L. Greer, MSc, PhD.

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

Amy L. Greer, MSc, PhD.

Ranavirus in south central Ontario, Canada. *Diseases of Aquatic Organisms* 67 (1-2): 9-14.

In Review

1. *Beswick, A., C. Dewey, A. Papadopoulos, **A.L. Greer**, and Z. Poljak. #Outbreak: Using Twitter to predict laboratory-confirmed influenza cases in Canada during the 2013-2014 influenza season.
2. *Beswick, A., C. Dewey, A. Papadopoulos, **A.L. Greer**, and Z. Poljak. The correlation between influenza-related keywords and laboratory-confirmed influenza cases in Canada during the 2013-2014 influenza season.
3. *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. *PLoS ONE*.
4. *Farrell, A., J.P. Collins, **A.L. Greer**, and H.R. Thieme. Do fatal infectious diseases eradicate host species? Epidemic perspective. *Journal of Mathematical Biology*.
5. *Farrell, A., J.P. Collins, **A.L. Greer**, and H.R. Thieme. Times from infection to disease death and their influence on the final sizes of epidemics. *Bulletin of Mathematical Biology*.
6. *Hughes, S.L., 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 narrative synthesis. *Journal of Epidemiology and Community Health*.
7. *Brankston, G., C. *Boughen, V. Ng, D.N. Fisman, J.M. Sargeant, and **A.L. Greer**. Assessing the Impact of Environmental Exposures and *Cryptosporidium* Infection in Cattle on Human Incidence of Cryptosporidiosis. *PLoS ONE*.
8. *Hughes, S.L., 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. *Journal of Epidemiology and Community Health*.
9. *Brunn, A., D.N. Fisman, J.M. Sargeant, and **A.L. Greer**. Temporal associations among selected environmental variables and livestock reservoirs on human cases of giardiasis. *EcoHealth*
10. *Hughes, S.L., **Greer, A.L.**, Elliot, A.J., McEwen, S.A., Young, I. and A. Papadopoulos. Estimating the burden of norovirus and viral gastroenteritis in Ontario, Canada -- 2009-2014.
11. *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. *Emerging Infectious Diseases*.
12. *Milwid, R., O'Sullivan, T.L., Poljak, Z., Laskowski, M., and **A.L. Greer**. Validation of modified radio-frequency identification tag firmware, using an equine population case study. *PLOS ONE*.
13. *Cousins, M. D.N. Fisman, J. Sargeant, and **A.L. Greer**. Identifying environmental drivers of

Amy L. Greer, MSc, PhD.

Campylobacter infection risk in Ontario, Canada using a One Health approach. BMC Public Health

CONFERENCE PRESENTATIONS

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-

Amy L. Greer, MSc, PhD.

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.

Amy L. Greer, MSc, PhD.

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

Amy L. Greer, MSc, PhD.

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

Amy L. Greer, MSc, PhD.

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

Amy L. Greer, MSc, PhD.

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 21st century. Institut 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.

Amy L. Greer, MSc, PhD.

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, 11th annual CRIPA Symposium, Faculté de médecine vétérinaire of the Université de Montréal, in 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.

Amy L. Greer, MSc, PhD.

- 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 Mathématique, 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, Saskatoon, SK. 2010.

Amy L. Greer, MSc, PhD.

- 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)

25. Haley Weber, doctoral student - Epidemiology	September 2017 – (part-time student)
24. Roksolana Hovdey, MSc (thesis) - Epidemiology	September 2017 -
23. Elissa Giang, MSc (thesis) - Epidemiology	September 2017 -
22. Wendy Xie, doctoral student - Epidemiology	September 2017 -

Amy L. Greer, MSc, PhD.

21. Dr. Tanya Rossi, Postdoctoral Fellow	October 2017 -
20. Dr. Salah Uddin Khan, Postdoctoral Fellow	October 2016 –
19. Melanie Cousins, MSc (thesis) - Epidemiology	September 2016-
18. Gabrielle Brankston, doctoral student - Epidemiology	September 2015 – withdrawal from program, November 2017.
17. Dr. Emma Gardner, doctoral candidate - Epidemiology	January 2015 – (LOA January 2017 – Sept 2017)
16. Rachael Milwid, doctoral candidate - Epidemiology	September 2015 -

Primary Supervision (completed)

15. Meagan Coffey, MSc (thesis) student - Biophysics	September 2015 – December 2017
14. Kelsey Spence, PhD – Epidemiology, University of Guelph	September 2014 – August, 2017
13. Ariel Brunn, MSc (CW) – Epidemiology, University of Guelph	September 2016- August 2017
12. Kamel Omer, undergraduate, University of Guelph	May 2017 – August 2017
11. Luz Maria Kisiel, MSc (thesis) – Epidemiology, University of Guelph	September 2014 - February 2017
10. Beatrice Hai, undergraduate, University of Guelph	May – December 2016
9. Enise Decaluwe-Tulk, undergraduate, University of Guelph	May – December 2016
8. Cyndi Boughen, undergraduate, University of Guelph	January – April 2015
7. Kelsey Spence, undergraduate, University of Guelph	May - August 2014
6. Beverly Goh, undergraduate, University of Guelph	May - August 2014
5. Christina Chan, MPH, University of Toronto	2011
4. Marcella Jones, MPH, University of Toronto	2010
3. Tanya Hauck, MD, University of Toronto	2010-2012
2. Eva Wong, MPH, University of Toronto	2010
1. Karolina Machalek, MPH, University of Toronto	2010

Graduate Committee membership (current)

11. Dylan Melmer, PhD student, Department of Population Medicine, University of Guelph.	September 2017 -
10. Tara Sadeghieh, PhD student, Department of Population Medicine, University of Guelph.	September 2017 -
9. Reilly Comper, MSc (thesis) student, Biophysics, University of Guelph.	September 2016 -
8. Jennifer Perret, PhD student, Department of Population Medicine, University of Guelph.	September 2016 -
7. Stephanie Hughes, Doctoral candidate, Department of Population Medicine, University of Guelph.	September 2014 -

Amy L. Greer, MSc, PhD.

6. Gabriella Mallia, PhD student, Department of Pathobiology, University of Guelph.
September 2014 -

Graduate Committee membership (completed)

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

15. Tara Sadeghieh, PhD defense 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.

Amy L. Greer, MSc, PhD.

INSTITUTIONAL SERVICE

- Reviewer, OVC College Review Committee, OVC Scholarships. Summer 2017.
- Reviewer, OVC College Review Committee, OVC Scholarships. Spring 2017.
- Research Advisory Committee, Ontario Veterinary College, University of Guelph. 2014 – current.
- 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. 2014-current.
- 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

- 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). September 2017 – present.
- 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.

Amy L. Greer, MSc, PhD.

- 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 cost-effective interventions for whooping cough. International Society for Pharmacoeconomics and Outcomes Research (ISPOR). 2009
- Contributor, Symposium on Disaster Modeling for Public Health and Emergency Preparedness.

Amy L. Greer, MSc, PhD.

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.
- Advisor, ASU Graduate College Steering Committee to reorganize the training provided to all teaching assistants. 2006.
- Member, Trent University, Research Policy Advisory Committee – including Research Ethics Committee. 2002-2003.
- President, Trent University Graduate Student Association. 2002-2003.

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

MEDIA

- “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-dressage-show/#1vFA0TqSe6GA4koU.99>
- “RFID unbridled 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.

Amy L. Greer, MSc, PhD.

<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-incredible-accuracy

TEACHING EXPERIENCE

University of Guelph, Guelph, ON

- 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, 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, Toronto, ON

- Infectious disease epidemiology (CHL 5412). 2011
- Introduction to Public Health Sciences (CHL 5004). 2011
- Research methods II (CHL 5408). 2011.
- 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

- Member, National Centre for Faculty Development and Diversity August 2017 – current.

Amy L. Greer, MSc, PhD.

- 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

- Partners in Research. 2017 – current.
- Early literacy volunteer, Waverly 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.