Recent Scientific Journal Publications

1. Ijzerman, M. M., Raby, M., Letwin, N. V., Kudla, Y. M., Anderson, J. D., Atkinson, B. J., Rooney, R. C., Sibley, P. K., & Prosser, R. S. (2024). New insights into pesticide occurrence and multicompartmental monitoring strategies in stream ecosystems using periphyton and suspended sediment. *Science of the Total Environment, 915*, 170144. https://doi.org/10.1016/j.scitotenv.2024.170144
2. Izma, G., Raby, M., Prosser, R., & Rooney, R. (2024). Urban-use pesticides in stormwater ponds and their accumulation in biofilms. *Science of the Total Environment, 918*, 170534. https://doi.org/10.1016/j.scitotenv.2024.170534
3. French, S. K., Pepinelli, M., Conflitti, I. M., Jamieson, A., Higo, H., Common, J., Walsh, E. M., Bixby, M., Guarna, M. M., Pernal, S. F., Hoover, S. E., Currie, R. W., Giovenazzo, P., Guzman-Nova, E., Borges, D., Foster, L. J., & Zayed, A. (2024). Honey bee stressor networks are complex and dependent on crop region. *Current Biology, 34.* https://doi.org/10.1016/j.cub.2024.03.039
4. Quinn, M., Linton, N. F., Leon-Velarde, C. G., & Chen, S. (2023). Application of a CRISPR sequence-based method for a large-scale assessment of *Salmonella* serovars across Ontario poultry production environments. *Applied and Environmental Microbiology, 89*(3), 1–20. https://doi.org/10.1128/aem.01923-22
5. Chen, S., Leon-Velarde, C. G., & Linton, N. (2023, June 14). Monitoring all *Salmonella* serovars in poultry production by applying an integrated approach of PCR and high-throughput sequencing (HTS). *Food Safety Magazine.* https://digitaledition.food-safety.com/june-july-2023/
6. Burton, E. A., Atkinson, B., Salerno, J., Kahn, H. N., Prosser, R. S., & Gillis, P. L. (2023). Lethal and sub-lethal implications of sodium chloride exposure for adult unionid mussel species: *Eurynia dilatata* and *Lasmigona costata*. *Archives of Environmental Contamination and Toxicology, 85*(1). https://doi.org/10.1007/s00244-023-01006-0
7. Renkema, J. M., McFadden-Smith, W., & Chen, S. (2022). Semi-quantitative detection of *Drosophila suzukii* (Diptera: Drosophilidae) from bulk trap samples using PCR technology. *Journal of Economic Entomology, 1*, 1–9. https://doi.org/10.1093/jee/toab258
8. Melzer, M., & Shan, X. (2022). Diseases diagnosed on plant samples submitted to the Plant Disease Clinic, University of Guelph in 2021. *Canadian Plant Disease Survey* 2022.
9. Olajide, A. M., Chen, S., & LaPointe, G. (2021). Markers to rapidly distinguish *Bacillus paralicheniformis* from the very close relative *B. licheniformis*. *Frontiers in Microbiology, 11,* 596828. https://doi.org/10.3389/fmicb.2020.596828
10. Ogunremi, D., Gao, R., Slowey, R., Nadin-Davis, S., Chen, S., Andriesvakaia, O., Bekal, S., Parmley, J., Goodridge, L., & Levesque, R. C. (2021). Tracking *Salmonella Enteritidis* in the genomics era: Clade definition using a SNP-PCR assay and implications for population structure. *IntechOpen.* doi: 10.5772/intechopen.98309 https://www.intechopen.com/chapters/77305
11. Botten, N., Wood, L. J., & Werner, J. R. (2021). Glyphosate remains in forest plant tissues for a decade or more. *Forest Ecology and Management, 493,* 119259. https://doi.org/10.1016/j.foreco.2021.119259

12. Olajide, A. M., Chen, S., & LaPointe, G. (2020). Draft genome sequences of five *Paenibacillus* species of dairy origin. *Microbiology Resource Announcement, 9*(37), e00971-20.
13. Linton, N. F., Machado, P. V. F., Deen, B., Wagner-Riddle, C., & Dunfield, K. E. (2020). Long-term diverse rotation alters nitrogen cycling bacterial groups and nitrous oxide emissions after nitrogen fertilization. *Soil Biology and Biochemistry, 149,* 107917.
14. Gao, A., Fischer-Jenssen, J., Wroblewski, C., & Martos, P. (2020). Interpretation and implications of lognormal linear regression used for bacterial enumeration. *Journal of AOAC International, 103,* 1105–1111. https://doi.org/10.1093/jaoacint/qsaa005
15. Balamurugan, S., Gemmell, C., Lau, A., Arvaj, L., Strange, P., Gao, A., & Barbut, S. (2020). High-pressure processing during drying of fermented sausages can enhance safety and reduce time required to produce a dry fermented product. *Food Control, 113,* 107224. https://doi.org/10.1016/j.foodcont.2020.107224
16. Shehata, H. R., Naauma, A. M., Chen, S., Murphy, T., Li, J., Shannon, K., Awmack, D., Locas, A., & Hanner, R. (2019). Revisiting the occurrence of undeclared species in sausage products sold in Canada. *Food Research International, 122,* 593–598.
17. Shehata, H. R., Bourque, D., Steinke, D., Chen, S., & Hanner, R. (2019). Survey of mislabelling across finfish supply chain reveals mislabelling both outside and within Canada. *Food Research International, 121,* 723–729.
18. León-Velarde, C. G., Jun, J. W., & Skurnik, M. (2019). *Yersinia* phages and food safety. *Viruses, 11*(12), 1105.
19. Hylton, R. K., Sanchez-Maldonado, A. F., Peyvandi, P., Rahmany, F., Dagher, F., Leon-Velarde, C. G., Warriner, K., & Hamidi, A. M. (2019). Decontamination of chia and flax seed inoculated with *Salmonella* and surrogate *Enterococcus faecium* NRRL B-2354 using a peracetic acid sanitizing solution: Antimicrobial efficacy and impact on seed functionality. *Journal of Food Protection, 82,* 486–493. https://doi.org/10.4315/0362-028X.JFP-18-381
20. Gao, A., Fischer-Jenssen, J., Cooper, C., Li, H., Chen, S., & Martos, P. (2019). Evaluation of a multiplex PCR for detection of the top seven Shiga toxin-producing *Escherichia coli* serogroups in ready-to-eat meats, fruits, and vegetables. *Journal of AOAC International, 101,* 1828–1832. https://doi.org/10.5740/jaoacint.18-0010
21. Julien, D. A., Sargeant, J. M., Guy, R. A., Shapiro, K., Imai, R., Bunce, A., Sudlovenick, E., Chen, S., Li, J., & Harper, S. L. (2019). Prevalence and genetic characterization of *Giardia spp.* and *Cryptosporidium spp.* in dogs in Iqaluit, Nunavut, Canada. *Zoonoses and Public Health, 66*, 813–825. https://doi.org/10.1111/zph.12628
22. Gao, A., & Martos, P. (2019). Log transformation and the effect on estimation, implication, and interpretation of mean and measurement uncertainty in microbial enumeration. *Journal of AOAC International, 102*, 233–238. https://doi.org/10.5740/jaoacint.18-0161
23. Radford, D. R., Leon-Velarde, C. G., Chen, S., Hamidi Oskouei, A. M., & Balamurugan, S. (2018). Draft genome sequences of two novel *Salmonella enterica* subsp. *enterica* strains isolated from low-moisture foods with applications in food safety research. *Genome Announcements, 6*(13), e00183-18. https://doi.org/10.1128/genomeA.00183-18
24. Shehata, H., Naaum, A. M., Bourque, D., Steinke, D., Chen, S., & Hanner, R. (2018). Complementary molecular methods detect undeclared species in sausage products at retail markets in Canada. *Food Control, 84*, 339–344.

25. Melzer, M., & Shan, X. (2018). Diseases diagnosed on plant samples submitted to the Plant Disease Clinic, University of Guelph in 2017. *Canadian Plant Disease Survey* 2018.
26. Balamurugan, S., Ahmed, R., Gao, A., & Strange, P. (2017). Comparison of the fate of the top six non-O157 shiga-toxin-producing *Escherichia coli* (STEC) and *E. coli* O157 during the manufacture of dry fermented sausages. *International Journal of Food Microbiology, 259,* 14–21.
27. Mottawea, W., Chen, S., Saleh-Lakha, S., Bélanger, S., & Ogunremi, D. (2017). Complete genome sequences of 12 isolates of *Listeria monocytogenes* belonging to serotypes 1/2a, 1/2b, and 4b, obtained from food products and food-processing environments in Canada. *Genome Announcements, 5*(19), e00258-17.
28. Flemming, C. A., Pileggi, V., Chen, S., & Lee, S. S. (2017). Pathogen survey of pulp and paper mill biosolids compared to soils, composts, and sewage biosolids. *Journal of Environmental Quality, 46*, 984–993. https://doi.org/10.2134/jeq2016.12.0467
29. Shehata, H. R., Li, J., Chen, S., Redda, H., Cheng, S., Tabujara, N., Li, H., Warriner, K., & Hanner, R. (2017). Droplet digital polymerase chain reaction (ddPCR) assays integrated with an internal control for quantification of bovine, porcine, chicken, and turkey species in food and feed. *PLOS ONE, 12*(8), e0182872.
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31. Houston, D. M., Vanstone, N. P., Moore, A. E. P., Weese, H. E., & Weese, J. S. (2017). Analysis of canine urolith submissions to the Canadian Veterinary Urolith Centre, 1998–2014. *Canadian Veterinary Journal, 58,* 45–50.
32. Saleh-Lakha, S., Leon-Velarde, C. G., Chen, S., Lee, S., Shannon, K., Fabri, M., Downing, G., & Keown, B. (2017). A study to assess the numbers and prevalence of *Bacillus cereus* and its toxins in pasteurized fluid milk. *Journal of Food Protection, 80*(7), 1085–1089.
33. Melzer, M., & Shan, X. (2017). Diseases diagnosed on plant samples submitted to the Plant Disease Clinic, University of Guelph in 2016. *Canadian Plant Disease Survey.*
34. Udomsil, N., Chen, S., Rodtong, S., & Yongsawatdigul, J. (2017). Improvement of fish sauce quality by sequential inoculation with *Tetragenococcus halophilus* MS33 and *Virgibacillus sp.* SK37. *Food Control, 73,* 930–938.
35. Udomsil, N., Chen, S., Rodtong, S., & Yongsawatdigul, J. (2016). Quantification of viable bacterial starter cultures of *Virgibacillus sp.* and *Tetragenococcus halophilus* in fish sauce fermentation by real-time quantitative PCR. *Food Microbiology, 57,* 54–62.
36. Bannon, J., Melebari, M., Jordao Jr, C., Leon-Velarde, C. G., & Warriner, K. (2016). Incidence of top six Shiga toxigenic *Escherichia coli* within two Ontario beef processing facilities: Challenges in screening and confirmation testing. *AIMS Microbiology, 2*(3), 278–291.
37. Radford, D.R., Leon-Velarde, C.G., Chen, S., Hamidi Oskouei, A.M., & Balamurugan, S. (2016). Propagation method for persistent high yield of diverse *Listeria* phages on permissive hosts at refrigeration temperatures. *Research in Microbiology, 167*(8), 685–691.
38. Leon-Velarde, C.G., Happonen, L., Pajunen, M., Leskinen, K., Kropinski, A.M., Mattinen, L., Rajtor, M., Zur, J., Smith, D., Chen, S., Nawaz, A., Johnson, R.P.,

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40. Melzer, M., Yu, H., Labun, T., Dickson, A., & Boland, G.J. (2016). Characterization and pathogenicity of *Rhizoctonia* spp. from field crops in Canada. *Canadian Journal of Plant Pathology, 38*(3), 367–374.
41. Jugulam, M., Ziauddin, A., So, K.K.Y., Chen, S., & Hall, J.C. (2015). Transfer of dicamba tolerance from *Sinapis arvensis* to *Brassica napus* via embryo rescue and recurrent backcross breeding. *PLOS ONE, 10*(11), e0141418.
42. Melzer, M., & Shan, X. (2015). Diseases diagnosed on plant samples submitted to the Plant Disease Clinic, University of Guelph in 2014. *Canadian Plant Disease Survey*.
43. Balamurugan, S., Ahmed, R., & Gao, A. (2015). Survival of Shiga toxin-producing *Escherichia coli* in broth as influenced by pH, water activity, and temperature. *Letters in Applied Microbiology, 60*, 341–346.
44. Leon-Velarde, C.G., Kropinski, A.M., Chen, S., Abbasifar, A., Griffiths, M.W., & Odumeru, J.A. (2014). Complete genome sequence of bacteriophage vB_YenP_AP5, which infects *Yersinia enterocolitica* of serotype O:3. *Virology Journal, 11*(1), 188.
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48. Melzer, M., & Shan, X. (2014). Diseases diagnosed on plant samples submitted to the Pest Diagnostic Clinic, University of Guelph in 2012. *Canadian Plant Disease Survey*.
49. Cloke, J., Leon-Velarde, C., Larson, N., Dave, K., Evans, K., Crabtree, D., Hughes, A., Hopper, C., Simpson, H., Withey, S., Oleksiuk, M., Holopainen, J., Wickstrand, N., & Kauppinen, M. (2014). Evaluation of the Thermo Scientific SureTect™ *Listeria monocytogenes* assay. *Journal of AOAC International, 97*(1), 133–154.
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