

Recent Publications – AFL Molecular Biology

1. Matthew Quinn, Nicola F. Linton, Carlos G. Leon-Velarde, Shu Chen. Application of a CRISPR Sequence-Based Method for a Large-Scale Assessment of *Salmonella* Serovars in Ontario Poultry Production Environments. *Applied and Environmental Microbiology*. 2022. At a stage of minor revision.
2. Justin M. Renkema, Wendy McFadden-Smith, Shu Chen. Semi-quantitative detection of *Drosophila suzukii* (Diptera: Drosophilidae) from bulk trap samples using PCR technology. *Journal of Economic Entomology*. 2022, 1–9.
3. Dele Ogunremi, Ruimin Gao, Rosemary Slowey, Susan Nadin-Davis, Shu Chen, Olga Andriesvakaia, Sadjia Bekal, Jane Parmley, Lawrence Goodridge, Roger C. Levesque. Tracking *Salmonella* Enteritidis in the genomics era: clade definition using a SNP-PCR assay and implications for population structure. Book Chapter, IntechOpen, Oct 14, 2021.
4. Atinuke M. Olajide, Shu Chen, and Gisèle LaPointe. Markers to rapidly distinguish *Bacillus paralicheniformis* from the very close relative, *B. licheniformis*. *Frontiers in Microbiology*. 2021. 11:596828.
5. Atinuke M. Olajide, Shu Chen, and Gisèle LaPointe. Draft genome sequences of five *Paenibacillus* species of dairy origin. *Microbiology Resource Announcement*. 2020. 9(37): e00971-20.
6. Linton N.F., Machado P.V.F., Deen B., Wagner-Riddle C., Dunfield K.E. Long-Term Diverse Rotation Alters Nitrogen Cycling Bacterial Groups and Nitrous Oxide Emissions After Nitrogen Fertilization. *Soil Biology and Biochemistry*. 2020. 149:107917.
7. Julien DA, Sargeant JM, Guy RA, Shapiro K, Imai RK, Bunce A, Sudlovenick E, Chen S, Li J, Harper SL. Prevalence and genetic characterization of *Giardia spp.* and *Cryptosporidium spp.* in dogs in Iqaluit, Nunavut, Canada. *Zoonoses Public Health*. 2019. 66(7):813-825.
8. Hanan R. Shehataa, Amanda M. Naauma, Shu Chen, Torie Murphy, Jiping Li, Kelly Shannon, David Awmack; Annie Locas, and Robert Hanner. Re-visiting the occurrence of undeclared species in sausage products sold in Canada. 2019. *Food Research International*. 122:593-598.
9. Shehata HR, Bourque D, Steinke D, Chen S, Hanner R. Survey of mislabelling across finfish supply chain reveals mislabelling both outside and within Canada. 2019. *Food Research International*. 121:723-729.
10. Anli Gao, Jennifer Fishcher-Jenssen, Colin Cooper, Honghong Li, Jiping Li, Shu Chen, and Perry Martos. 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*. 2018. 10: 1-5.
11. Saleh-Lakha S, Leon-Velarde CG, Chen S, Lee S, Shannon K, Fabri M, Downing G, Keown B. A study to assess the numbers and prevalence of *Bacillus cereus* and its toxins in pasteurized fluid milk. *Journal of Food Protection*. 2017. 80(7):1085-1089.
12. Mottawea W, Chen S, Saleh-Lakha S, Belanger S, Ogunremi D. 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*. 2017. 5(19): e00258-17.
13. Flemming, Cecily A., Vince Pileggi, Shu Chen and Susan S. Lee. Pathogen Survey of Pulp and Paper Mill Biosolids Compared to Soils, Composts and Sewage Biosolids. *Journal of Environmental Quality*. 2017. July 20.
 14. Shehata HR, 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*. 2017. 12(8): e0182872.
 15. Amanda M Naaum, Hanan R. Shehata, Shu Chen, Jiping Li, Nicole Tabujara, David Awmack, Cyril Lutze-Wallace and Robert Hanner. Complementary molecular methods detect undeclared species in sausage products at retail markets in Canada. *Food Control*. 2017. 84:339-344.
 16. Natteewan Udomsil, Shu Chen, Sureelak Rodtong and Jirawat Yongsawatdigul. Improvement of fish sauce quality by sequential inoculation with *Tetragenococcus halophilus* MS33 and *Virgibacillus* sp. SK37. *Food Control*. 2017. 73:930-938.
 17. Natteewan Udomsil, Shu Chen, Sureelak Rodtong and Jirawat Yongsawatdigul. Quantification of viable bacterial starter cultures of *Virgibacillus* sp. and *Tetragenococcus halophilus* in fish sauce fermentation by real-time quantitative PCR. *Food Microbiology*. 2016. 57:54-62.
 18. Leon-Velarde CG, Happonen L, Pajunen M, Leskinen K, Kropinski AM, Mattinen L, Rajtor M, Zur J, Smith D, Chen S, Nawaz A, Johnson RP, Odumeru JA, Griffiths MW, Skurnik M. *Yersinia enterocolitica*-Specific Infection by Bacteriophages TG1 and ϕ R1-RT Is Dependent on Temperature-Regulated Expression of the Phage Host Receptor OmpF. *Applied and Environmental Microbiology*. 2016. 82:5340-53.
 19. Mithila Jugulam, Asma Ziauddin, Kenny So, Shu Chen, J. Christopher Hall. Stable Transfer of Dicamba Tolerance from *Sinapis arvensis* to *Brassica napus* via Embryo Rescue and Recurrent Backcross Breeding. *PLoS One*. 2015. 10(11): e0141418.
 20. Carlos G Leon-Velarde, Andrew M Kropinski, Shu Chen, Arash Abbasifar, Mansel W Griffiths, and Joseph A Odumeru. Complete genome sequence of bacteriophage vB_YenP_AP5 which infects *Yersinia enterocolitica* of serotype O:3. *Virology Journal*. 2014. 11:188.
 21. Saleh-Lakha, S., V. Allen, J. Li, F. Pagotto, J. Odumeru, E. Taboada, B. Blais, D. Ogunremi, G. Downing, S. Lee, A. Gao and S. Chen. Molecular subtyping of a large collection of historical *Listeria monocytogenes* strains using an improved Multiple-Locus Variable-Number Tandem Repeat Analysis (MLVA). *Applied and Environmental Microbiology*. 2013. 79:6472-6480.
 22. Mithila J, M. D. McLean, S. Chen and J. Christopher Hall. Development of Near-Isogenic Lines and Identification of Markers Linked to Auxinic Herbicide Resistance in Wild Mustard (*Sinapis arvensis* L.). *Pest Management Science*. 2012. 68(4):548-56.

23. Chen, S., Li, J., Saleh-Lakha, S., Allen, V. and Odumeru J. Multiple-Locus Variable Number of Tandem Repeat Analysis (MLVA) of *Listeria monocytogenes* Directly in Food Samples. *International Journal of Food Microbiology*. 2011. 148:8-14.