

Publications – CRIPA -2020

Article - revue avec comité de lecture

1. |17,452| Wu BG, Kapoor B, Cummings KJ, Stanton ML, Nett RJ, Kreiss K, Abraham JL, Colby TV, Franko AD, Green FHY, Sanyal S, Clemente JC, Gao Z, Coffre M, Meyn P, Heguy A, Li Y, Sulaiman I, Borbet TC, Korolov SB, Tallaksen RJ, Wendland D, Bachelder VD, Boylstein RJ, Park JH, Cox-Ganser JM, Virji MA, Crawford JA, Edwards NT, Veillette M, **Duchaine C**, Warren K, Lundeen S, Blaser MJ, Segal LN. Evidence for Environmental-Human Microbiota Transfer at a Manufacturing Facility with Novel Work-related Respiratory Disease. *Am J Respir Crit Care Med.* 2020 Dec 15;202(12):1678-1688. doi: 10.1164/rccm.202001-0197OC.
2. |11,062| Murray GGR, Charlesworth J, Miller EL, Casey MJ, Lloyd CT, **Gottschalk M**, Tucker AWD, Welch JJ, Weinert LA. Genome reduction is associated with bacterial pathogenicity across different scales of temporal and ecological divergence. *Mol Biol Evol.* 2020 Dec 12:msaa323. doi: 10.1093/molbev/msaa323. Online ahead of print.
3. |7,862| **Rhouma M**, Romero-Barrios P, **Gaucher ML**, Bhachoo S. Antimicrobial resistance associated with the use of antimicrobial processing aids during poultry processing operations: cause for concern? *Crit Rev Food Sci Nutr.* 2020 Aug 3:1-18. doi: 10.1080/10408398.2020.1798345.
4. |7,862| Yu Z, Jung D, Park S, Hu Y, Huang K, Rasco BA, Wang S, **Ronholm J**, Lu X, Chen J. Smart traceability for food safety. *Crit Rev Food Sci Nutr.* 2020 Oct 8:1-12. doi: 10.1080/10408398.2020.1830262. Online ahead of print.
5. |7,349| Dai X, Zhang X, Ostrikov K, **Abrahamyan L**. Host receptors: the key to establishing cells with broad viral tropism for vaccine production. *Crit Rev Microbiol.* 2020 Mar;46(2):147-168. doi: 10.1080/1040841X.2020.1735992. Epub 2020 Mar 23.
6. |7,182| Oliva C, Huang W, El Badri S, Lee MAL, **Ronholm J**, Chen L, Wang Y. Concentrated sulfuric acid aqueous solution enables rapid recycling of cellulose from waste paper into antimicrobial packaging. *Carbohydr Polym.* 2020 Aug 1;241:116256. doi: 10.1016/j.carbpol.2020.116256. Epub 2020 Apr 27.
7. |7,137| Qian MB, Xiao N, Li SZ, Abela-Ridder B, **Carabin H**, Fahrion AS, Engels D, Zhou XN. Control of taeniasis and cysticercosis in China. *Adv Parasitol.* 2020;110:289-317. doi: 10.1016/bs.apar.2020.04.005. Epub 2020 May 18.
8. |6,551| Yi L, Dong X, **Grenier D**, Wang K, Wang Y. Research progress of bacterial quorum sensing receptors: Classification, structure, function and characteristics. *Sci Total Environ.* 2021 Apr 1;763:143031. doi: 10.1016/j.scitotenv.2020.143031. Epub 2020 Oct 20. PMID: 33129525 Review.
9. |3,03| Yi L, Li J, Fan Q, Mao C, Jin M, Liu Y, Sun L, **Grenier D**, Wang Y. The otc gene of *Streptococcus suis* plays an important role in biofilm formation, adhesion, and virulence in a murine model. *Vet Microbiol.* 2020 Dec;251:108925. doi: 10.1016/j.vetmic.2020.108925. Epub 2020 Nov 6. PMID: 33181436
10. |5,897| Whole-Genome Sequencing of Porcine Reproductive and Respiratory Syndrome Virus from Field Clinical Samples Improves the Genomic Surveillance of the Virus. Lalonde C, Provost C, **Gagnon CA**. *J Clin Microbiol.* 2020 Oct 21;58(11):e00097-20. doi: 10.1128/JCM.00097-20. Print 2020 Oct 21.
11. |5,897| Matiasovic J, Zouharova M, Nedbalcova K, Kralova N, Matiaskova K, Simek B, Kucharovicova I, **Gottschalk M**. Resolution of *Streptococcus suis* Serotypes 1/2 versus 2 and 1 versus 14 by PCR-Restriction Fragment Length Polymorphism Method. *J Clin Microbiol.* 2020 Jun 24;58(7):e00480-20. doi: 10.1128/JCM.00480-20. Print 2020 Jun 24.
12. |5,465| **Archambault M**, Rubin JE. Antimicrobial Resistance in *Clostridium* and *Brachyspira* spp. and Other Anaerobes. *Microbiol Spectr.* 2020 Jan;8(1). doi: 10.1128/microbiolspec.ARBA-0020-2017.

13. |5,085| Zheng W, Zhou R, Li S, He S, Luo J, Zhu M, Chen N, Chen H, **Meurens F**, Zhu J. Porcine IFI16 Negatively Regulates cGAS Signaling Through the Restriction of DNA Binding and Stimulation. *Front Immunol.* 2020 Aug 14;11:1669. doi: 10.3389/fimmu.2020.01669. eCollection 2020.
14. |5,085| Vialard F, **Olivier M**. Thermoneutrality and Immunity: How Does Cold Stress Affect Disease? *Front Immunol.* 2020 Nov 20;11:588387. doi: 10.3389/fimmu.2020.588387. eCollection 2020.
15. |4,556| Pokharel P, Díaz JM, Bessaiah H, Houle S, Guerrero-Barrera AL, **Dozois CM**. The Serine Protease Autotransporters TagB, TagC, and Sha from Extraintestinal Pathogenic *Escherichia coli* Are Internalized by Human Bladder Epithelial Cells and Cause Actin Cytoskeletal Disruption. *Int J Mol Sci.* 2020 Apr 26;21(9):3047. doi: 10.3390/ijms21093047.
16. |4,421| Carratalá JV, Brouillette E, Serna N, Sánchez-Chardi A, Sánchez JM, Villaverde A, Arís A, Garcia-Fruitós E, Ferrer-Miralles N, **Malouin F**. In Vivo Bactericidal Efficacy of GWH1 Antimicrobial Peptide Displayed on Protein Nanoparticles, a Potential Alternative to Antibiotics. *Pharmaceutics.* 2020 Dec 17;12(12):1217. doi: 10.3390/pharmaceutics12121217.
17. |4,389| Abriat C, Enriquez K, Virgilio N, Cegelski L, Fuller GG, **Daigle F**, Heuzey MC. Mechanical and microstructural insights of *Vibrio cholerae* and *Escherichia coli* dual-species biofilm at the air-liquid interface. *Colloids Surf B Biointerfaces.* 2020 Apr;188:110786. doi: 10.1016/j.colsurfb.2020.110786. Epub 2020 Jan
18. |4,324| Al-Halifa S, Zottig X, Babych M, Côté-Cyr M, **Bourgault S**, **Archambault D**. Harnessing the Activation of Toll-Like Receptor 2/6 by Self-Assembled Cross- β Fibrils to Design Adjuvanted Nanovaccines. *Nanomaterials (Basel).* 2020 Oct 7;10(10):1981. doi: 10.3390/nano10101981.
19. |4,324| Zottig X, Côté-Cyr M, Arpin D, **Archambault D**, **Bourgault S**. Protein Supramolecular Structures: From Self-Assembly to Nanovaccine Design. *Nanomaterials (Basel).* 2020 May 25;10(5):1008. doi: 10.3390/nano10051008.
20. |4,324| Al-Halifa S, Zottig X, Babych M, Côté-Cyr M, **Bourgault S**, **Archambault D**. Harnessing the Activation of Toll-Like Receptor 2/6 by Self-Assembled Cross- β Fibrils to Design Adjuvanted Nanovaccines. *Nanomaterials (Basel).* 2020 Oct 7;10(10):1981. doi: 10.3390/nano10101981.
21. |4,324| Zottig X, Côté-Cyr M, Arpin D, **Archambault D**, **Bourgault S**. Protein Supramolecular Structures: From Self-Assembly to Nanovaccine Design. *Nanomaterials (Basel).* 2020 May 25;10(5):1008. doi: 10.3390/nano10051008.
22. |4,281| Perazza LR, Daniel N, Dubois MJ, Pilon G, Varin TV, **Blais M**, Martinez Gonzales JL, Bouchard M, Asselin C, **Lessard M**, Pouliot Y, Roy D, Marette A. Distinct Effects of Milk-Derived and Fermented Dairy Protein on Gut Microbiota and Cardiometabolic Markers in Diet-Induced Obese Mice. *J Nutr.* 2020 Oct 12;150(10):2673-2686. doi: 10.1093/jn/nxaa217.
23. |4,238| Pham VD, To TA, Gagné-Thivierge C, Couture M, Lagüe P, Yao D, Picard MÈ, Lortie LA, Attéré SA, Zhu X, Levesque RC, **Charette SJ**, Shi R. Structural insights into the putative bacterial acetylcholinesterase ChoE and its substrate inhibition mechanism. *J Biol Chem.* 2020 Jun 26;295(26):8708-8724. doi: 10.1074/jbc.RA119.011809. Epub 2020 May 5.
24. |4,235| Trudeau S, **Thibodeau A**, Côté JC, **Gaucher ML**, Fravallo P. Contribution of the Broiler Breeders' Fecal Microbiota to the Establishment of the Eggshell Microbiota. *Front Microbiol.* 2020 Apr 15;11:666. doi: 10.3389/fmicb.2020.00666. eCollection 2020.
25. |4,235| Langlois JP, Millette G, Guay I, Dubé-Duquette A, Chamberland S, Jacques PÉ, Rodrigue S, Bouarab K, Marsault É, **Malouin F**. Bactericidal Activity of the Bacterial ATP Synthase Inhibitor Tomatidine and the Combination of Tomatidine and Aminoglycoside Against Persistent and Virulent Forms of *Staphylococcus aureus*. *Front Microbiol.* 2020 May 5;11:805. doi: 10.3389/fmicb.2020.00805. eCollection 2020.
26. |4,235| Li F, Zhai D, Wu Z, Zhao Y, Qiao D, **Zhao X**. Impairment of the Cell Wall Ligase, LytR-CpsA-Psr Protein (LcpC), in Methicillin Resistant *Staphylococcus aureus* Reduces Its Resistance to Antibiotics and Infection in a Mouse Model of Sepsis. *Front Microbiol.* 2020 Apr 16;11:557. doi: 10.3389/fmicb.2020.00557. eCollection 2020.

27. |4,235| Trudeau S, **Thibodeau A**, Côté JC, **Gaucher ML**, Fravallo P. Contribution of the Broiler Breeders' Fecal Microbiota to the Establishment of the Eggshell Microbiota. *Front Microbiol.* 2020 Apr 15;11:666. doi: 10.3389/fmicb.2020.00666. eCollection 2020.
28. |4,188| Delpont M, **Racicot M**, Durivage A, Fornili L, Guerin JL, **Vaillancourt JP**, Paul MC. Determinants of biosecurity practices in French duck farms after a H5N8 Highly Pathogenic Avian Influenza epidemic: The effect of farmer knowledge, attitudes and personality traits. *Transbound Emerg Dis.* 2020 Jan 20. doi: 10.1111/tbed.13462. Online ahead of print.
29. |4,188| Petit K, Dunoyer C, Fischer C, Hars J, Baubet E, López-Olvera JR, Rossi S, Collin E, Le Potier MF, Belloc C, Peroz C, Rose N, **Vaillancourt JP**, Saegerman C. Assessment of the impact of forestry and leisure activities on wild boar spatial disturbance with a potential application to ASF risk of spread. *Transbound Emerg Dis.* 2020 May;67(3):1164-1176. doi: 10.1111/tbed.13447. Epub 2019 Dec 21.
30. |4,152| Durocher AF, Denoncourt AM, Paquet VE, **Charette SJ**. Evidence that Bacteria Packaging by Tetrahymena Is a Widespread Phenomenon. *Microorganisms.* 2020 Oct 7;8(10):1548. doi: 10.3390/microorganisms8101548.
31. |4,152| Murret-Labarthe C, Kerhoas M, Dufresne K, **Daigle F**. New Roles for Two-Component System Response Regulators of *Salmonella enterica* Serovar Typhi during Host Cell Interactions. *Microorganisms.* 2020 May 13;8(5):722. doi: 10.3390/microorganisms8050722.
32. |4,152| Emond-Rheault JG, Hamel J, Jeukens J, Freschi L, Kukavica-Ibrulj I, Boyle B, Tamber S, Malo D, Franz E, Burnett E, **Daigle F**, Arya G, Sanderson K, Wiedmann M, Slawson RM, Weadge JT, Stephan R, Bekal S, Gruenheid S, Goodridge LD, Levesque RC. The *Salmonella enterica* Plasmidome as a Reservoir of Antibiotic Resistance. *Microorganisms.* 2020 Jul 8;8(7):1016. doi: 10.3390/microorganisms8071016.
33. |4,123| Díaz JM, **Dozois CM**, Avelar-González FJ, Hernández-Cuellar E, Pokharel P, de Santiago AS, Guerrero-Barrera AL. The Vacuolating Autotransporter Toxin (Vat) of *Escherichia coli* Causes Cell Cytoskeleton Changes and Produces Non-lysosomal Vacuole Formation in Bladder Epithelial Cells. *Front Cell Infect Microbiol.* 2020 Jun 26;10:299. doi: 10.3389/fcimb.2020.00299. eCollection 2020.
34. |4,123| Torrecilhas AC, Soares RP, Schenkman S, **Fernández-Prada C**, **Olivier M**. Extracellular Vesicles in Trypanosomatids: Host Cell Communication. *Front Cell Infect Microbiol.* 2020 Dec 14;10:602502. doi: 10.3389/fcimb.2020.602502. eCollection 2020.
35. |4,123| The Complex Interplay of Parasites, Their Hosts, and Circadian Clocks. Carvalho Cabral P, **Olivier M**, Cermakian N. *Front Cell Infect Microbiol.* 2019 Dec 12;9:425. doi: 10.3389/fcimb.2019.00425. eCollection 2019
36. |4,086| Corsaut L, Misener M, Canning P, Beauchamp G, **Gottschalk M**, **Segura M**. Field Study on the Immunological Response and Protective Effect of a Licensed Autogenous Vaccine to Control *Streptococcus suis* Infections in Post-Weaned Piglets. *Vaccines (Basel).* 2020 Jul 14;8(3):384. doi: 10.3390/vaccines8030384. PMID: 32674276
37. |4,086| O'Dowd K, Emam M, El Khili MR, Emad A, Ibeagha-Awemu EM, **Gagnon CA**, **Barjesteh N**. Distinct miRNA Profile of Cellular and Extracellular Vesicles Released from Chicken Tracheal Cells Following Avian Influenza Virus Infection. *Vaccines (Basel).* 2020 Aug 5;8(3):438. doi: 10.3390/vaccines8030438.
38. |4,086| **Meurens F**. Flu RNA Vaccine: A Game Changer? *Vaccines (Basel).* 2020 Dec 14;8(4):760. doi: 10.3390/vaccines8040760.
39. |4,086| Saade G, Ménard D, Hivet C, Renson P, Hue E, Zhu J, Dubreil L, Paillot R, Pronost S, Bourry O, Simon G, Dupont J, Bertho N, **Meurens F**. Porcine Reproductive and Respiratory Syndrome Virus Interferes with Swine Influenza A Virus Infection of Epithelial Cells. *Vaccines (Basel).* 2020 Sep 5;8(3):508. doi: 10.3390/vaccines8030508.
40. |4,086| Li S, Yang J, Zhu Y, Ji X, Wang K, Jiang S, Luo J, Wang H, Zheng W, Chen N, Ye J, **Meurens F**, Zhu J. Chicken DNA Sensing cGAS-STING Signal Pathway Mediates Broad Spectrum Antiviral Functions. *Vaccines (Basel).* 2020 Jul 9;8(3):369. doi: 10.3390/vaccines8030369.

41. |4,006| Thippareddi H, Balamurugan S, Patel J, Singh M, **Brassard J.** Coronaviruses - Potential human threat from foodborne transmission? *Lebensm Wiss Technol.* 2020 Aug 31;110:147. doi: 10.1016/j.lwt.2020.110147. Online ahead of print.
42. |3,939| Ben Lagha A, Yang Y, Trivedi HM, Masters JG, **Grenier D.** A Dual Zinc plus Arginine formulation attenuates the pathogenic properties of *Porphyromonas gingivalis* and protects gingival keratinocyte barrier function in an in vitro model. *J Oral Microbiol.* 2020 Aug 4;12(1):1798044. doi: 10.1080/20002297.2020.1798044. PMID: 32944154.
43. |3,893| Ben Lagha A, Vaillancourt K, Maquera Huacho P, **Grenier D.** Effects of Labrador Tea, Peppermint, and Winter Savory Essential Oils on *Fusobacterium nucleatum*. *Antibiotics (Basel).* 2020 Nov 10;9(11):794. doi: 10.3390/antibiotics9110794. PMID: 33182686.
44. |3,885| White AC Jr, O'Neal S, Winkler A, Abraham A, **Carabin H.** The data are inadequate to assess safety and efficacy of mass chemotherapy for *Taenia solium* taeniasis. *PLoS Negl Trop Dis.* 2020 Jul 16;14(7):e0008294. doi: 10.1371/journal.pntd.0008294. eCollection 2020 Jul.
45. |3,816| Perez Contreras A, van der Meer F, Checkley S, Joseph T, King R, Ravi M, Peters D, Fonseca K, **Gagnon CA,** Provost C, Ojkic D, Abdul-Careem MF. Analysis of Whole-Genome Sequences of Infectious laryngotracheitis Virus Isolates from Poultry Flocks in Canada: Evidence of Recombination. *Viruses.* 2020 Nov 12;12(11):1302. doi: 10.3390/v12111302.
46. |3,816| Palomino-Tapia V, Mitevski D, Inglis T, van der Meer F, Martin E, Brash M, Provost C, **Gagnon CA,** Abdul-Careem MF. Chicken Astrovirus (CAStV) Molecular Studies Reveal Evidence of Multiple Past Recombination Events in Sequences Originated from Clinical Samples of White Chick Syndrome (WCS) in Western Canada. *Viruses.* 2020 Sep 28;12(10):1096. doi: 10.3390/v12101096.
47. |3,816| Xia N, Wang H, Liu X, Shao Q, Ao D, Xu Y, Jiang S, Luo J, Zhang J, Chen N, **Meurens F,** Zheng W, Zhu J. African Swine Fever Virus Structural Protein p17 Inhibits Cell Proliferation through ER Stress-ROS Mediated Cell Cycle Arrest. *Viruses.* 2020 Dec 24;13(1):21. doi: 10.3390/v13010021.
48. |3,759| Bhattacharya A, Corbeil A, do Monte-Neto RL, **Fernandez-Prada C.** Of Drugs and Trypanosomatids: New Tools and Knowledge to Reduce Bottlenecks in Drug Discovery. *Genes (Basel).* 2020 Jun 29;11(7):722. doi: 10.3390/genes11070722.
49. |3,641| Ao D, Li S, Jiang S, Luo J, Chen N, **Meurens F,** Zhu J. Inter-relation analysis of signaling adaptors of porcine innate immune pathways. *Mol Immunol.* 2020 May;121:20-27. doi: 10.1016/j.molimm.2020.02.013. Epub 2020 Mar 3.
50. |3,53| Yi L, Jin M, Li J, **Grenier D,** Wang Y. Antibiotic resistance related to biofilm formation in *Streptococcus suis*. *Appl Microbiol Biotechnol.* 2020 Oct;104(20):8649-8660. doi: 10.1007/s00253-020-10873-9. Epub 2020 Sep 8. PMID: 32897417 Review.
51. |3,405| Lavagna A, Auger JP, Girardin SE, Gisch N, **Segura M, Gottschalk M.** Recognition of Lipoproteins by Toll-like Receptor 2 and DNA by the AIM2 Inflammasome Is Responsible for Production of Interleukin-1 β by Virulent Suilysin-negative *Streptococcus suis* Serotype 2. *Pathogens.* 2020 Feb 21;9(2):147. doi: 10.3390/pathogens9020147. PMID: 32098284
52. |3,405| **Segura M.** *Streptococcus suis* Research: Progress and Challenges. *Pathogens.* 2020 Aug 27;9(9):707. doi: 10.3390/pathogens9090707. PMID: 32867188 .
53. |3,405| **Segura M,** Aragon V, Brockmeier SL, Gebhart C, Greeff A, Kerdsin A, O'Dea MA, Okura M, Saléry M, Schultz C, Valentin-Weigand P, Weinert LA, Wells JM, **Gottschalk M.** Update on *Streptococcus suis* Research and Prevention in the Era of Antimicrobial Restriction: 4th International Workshop on *S. suis*. *Pathogens.* 2020 May 14;9(5):374. doi: 10.3390/pathogens9050374. PMID: 32422856
54. |3,405| Hatrongjit R, Fittipaldi N, **Gottschalk M,** Kerdsin A. Tools for Molecular Epidemiology of *Streptococcus suis*. *Pathogens.* 2020 Jan 27;9(2):81. doi: 10.3390/pathogens9020081.
55. |3,405| Denich LC, Farzan A, Friendship R, Arndt E, **Gottschalk M,** Poljak Z. A Case-Control Study to Investigate the Serotypes of *S. suis* Isolates by Multiplex PCR in Nursery Pigs in Ontario, Canada. *Pathogens.* 2020 Jan 5;9(1):44. doi: 10.3390/pathogens9010044.

56. |3,405| Kerdsin A, Takeuchi D, Nuangmek A, Akeda Y, **Gottschalk M**, Oishi K. Genotypic Comparison between *Streptococcus suis* Isolated from Pigs and Humans in Thailand. *Pathogens*. 2020 Jan 9;9(1):50. doi: 10.3390/pathogens9010050.
57. |3,357| Saade G, Deblanc C, Bougon J, Marois-Créhan C, Fablet C, Auray G, Belloc C, Leblanc-Maridor M, **Gagnon CA**, Zhu J, **Gottschalk M**, Summerfield A, Simon G, Bertho N, **Meurens F**. Coinfections and their molecular consequences in the porcine respiratory tract. *Vet Res*. 2020 Jun 16;51(1):80. doi: 10.1186/s13567-020-00807-8.
58. |3,357| Scherrer S, Rosato G, Spoerry Serrano N, Stevens MJA, Rademacher F, Schrenzel J, **Gottschalk M**, Stephan R, Peterhans S. Population structure, genetic diversity and pathotypes of *Streptococcus suis* isolated during the last 13 years from diseased pigs in Switzerland. *Vet Res*. 2020 Jul 8;51(1):85. doi: 10.1186/s13567-020-00813-w.
59. |3,357| Saade G, Deblanc C, Bougon J, Marois-Créhan C, Fablet C, Auray G, Belloc C, Leblanc-Maridor M, **Gagnon CA**, Zhu J, **Gottschalk M**, Summerfield A, Simon G, Bertho N, **Meurens F**. Coinfections and their molecular consequences in the porcine respiratory tract. *Vet Res*. 2020 Jun 16;51(1):80. doi: 10.1186/s13567-020-00807-8.
60. |3,206| Lokossou AG, Toudic C, Nguyen PT, Elisseeff X, Vargas A, Rassart É, Lafond J, Leduc L, **Bourgault S**, Gilbert C, Scorza T, Tolosa J, Barbeau B. Endogenous retrovirus-encoded Syncytin-2 contributes to exosome-mediated immunosuppression of T cellst. *Biol Reprod*. 2020 Feb 12;102(1):185-198. doi: 10.1093/biolre/ioz124.
61. |3,192| Jiang S, Ao D, Ni J, Chen N, **Meurens F**, Zhu J. The signaling relations between three adaptors of porcine C-type lectin receptor pathway. *Dev Comp Immunol*. 2020 Mar;104:103555. doi: 10.1016/j.dci.2019.103555. Epub 2019 Nov 18.
62. |3,159| Goyette-Desjardins G, Auger JP, Dolbec D, Vinogradov E, Okura M, Takamatsu D, **Van Calsteren MR**, **Gottschalk M**, **Segura M**. Comparative Study of Immunogenic Properties of Purified Capsular Polysaccharides from *Streptococcus suis* Serotypes 3, 7, 8, and 9: the Serotype 3 Polysaccharide Induces an Opsonizing IgG Response. *Infect Immun*. 2020 Sep 18;88(10):e00377-20. doi: 10.1128/IAI.00377-20. Print 2020 Sep 18. PMID: 32747605
63. |3,159| Auger JP, Rivest S, **Benoit-Biancamano MO**, **Segura M**, **Gottschalk M**. Inflammatory Monocytes and Neutrophils Regulate *Streptococcus suis*-Induced Systemic Inflammation and Disease but Are Not Critical for the Development of Central Nervous System Disease in a Mouse Model of Infection. *Infect Immun*. 2020 Feb 20;88(3):e00787-19. doi: 10.1128/IAI.00787-19. Print 2020 Feb 20. PMID: 31818962
64. |3,159| Wang S, Lyu C, Duan G, Meng F, Yang Y, Yu Y, He X, Wang Z, **Gottschalk M**, Li G, Cai X, Wang G. *Streptococcus suis* Serotype 2 Infection Causes Host Immunomodulation through Induction of Thymic Atrophy. *Infect Immun*. 2020 Mar 23;88(4):e00950-19. doi: 10.1128/IAI.00950-19. Print 2020 Mar 23.
65. |2,991| Mbareche H, Dumont-Leblond N, Bilodeau GJ, **Duchaine C**. An Overview of Bioinformatics Tools for DNA Meta-Barcoding Analysis of Microbial Communities of Bioaerosols: Digest for Microbiologists. *Life (Basel)*. 2020 Sep 8;10(9):185. doi: 10.3390/life10090185.
66. |2,952| **Barjesteh N**, O'Dowd K, Vahedi SM. Antiviral responses against chicken respiratory infections: Focus on avian influenza virus and infectious bronchitis virus. *Cytokine*. 2020 Mar;127:154961. doi: 10.1016/j.cyto.2019.154961. Epub 2019 Dec 31.
67. |2,8| Development of a flow standard to enable highly reproducible measurements of deformability of stored red blood cells in a microfluidic device. Robidoux J, Laforce-Lavoie A, **Charette SJ**, Shevkoplyas SS, Yoshida T, Lewin A, Brouard D. *Transfusion*. 2020 May;60(5):1032-1041. doi: 10.1111/trf.15770. Epub 2020 Apr 1.
68. |2,788| Gauthier L, Babych M, **Segura M**, **Bourgault S**, **Archambault D**. Identification of a novel TLR5 agonist derived from the P97 protein of *Mycoplasma hyopneumoniae*. *Immunobiology*. 2020 Jul;225(4):151962. doi: 10.1016/j.imbio.2020.151962. Epub 2020 May 20. PMID: 32747018
69. |2,788| Bleuzé M, Auger JP, Lavagna A, Gisch N, **Gottschalk M**, **Segura M**. In vitro characterization of granulocyte-colony stimulating factor (G-CSF) production by dendritic cells and macrophages during

- Streptococcus suis infection. Immunobiology. 2020 Jul;225(4):151979. doi: 10.1016/j.imbio.2020.151979. Epub 2020 Jun 26. PMID: 32747024
70. [2,788] Gauthier L, Babych M, **Segura M, Bourgault S, Archambault D**. Identification of a novel TLR5 agonist derived from the P97 protein of Mycoplasma hyopneumoniae. Immunobiology. 2020 Jul;225(4):151962. doi: 10.1016/j.imbio.2020.151962. Epub 2020 May 20.
71. [2,742] Giraud A, Allard MJ, **Segura M**, Roche F, Patural H, Sébire G. Ampicillin Treatment Increases Placental Interleukin-1 Beta Concentration and Polymorphonuclear Infiltration in Group B Streptococcus-Induced Chorioamnionitis: A Preclinical Study. Neonatology. 2020;117(3):369-373. doi: 10.1159/000506906. Epub 2020 May 6. PMID: 32375156
72. [2,74] Ben Lagha A, Azelmat J, Vaillancourt K, **Grenier D**. A polyphenolic cinnamon fraction exhibits anti-inflammatory properties in a monocyte/macrophage model. PLoS One. 2021 Jan 13;16(1):e0244805. doi: 10.1371/journal.pone.0244805. eCollection 2021. PMID: 33439867.
73. [2,74] Cherifi T, **Arsenault J**, Pagotto F, Quessy S, Côté JC, Neira K, Fournaise S, Bekal S, Fravallo P. Distribution, diversity and persistence of Listeria monocytogenes in swine slaughterhouses and their association with food and human listeriosis strains. PLoS One. 2020 Aug 6;15(8):e0236807. doi: 10.1371/journal.pone.0236807. eCollection 2020.
74. [2,74] Dubuis ME, Dumont-Leblond N, Laliberté C, Veillette M, Turgeon N, Jean J, **Duchaine C**. Ozone efficacy for the control of airborne viruses: Bacteriophage and norovirus models. PLoS One. 2020 Apr 10;15(4):e0231164. doi: 10.1371/journal.pone.0231164. eCollection 2020.
75. [2,74] Bernier-Lachance J, **Arsenault J**, Usongo V, Parent É, Labrie J, Jacques M, **Malouin F, Archambault M**. Prevalence and characteristics of Livestock-Associated Methicillin-Resistant Staphylococcus aureus (LA-MRSA) isolated from chicken meat in the province of Quebec, Canada. PLoS One. 2020 Jan 10;15(1):e0227183. doi: 10.1371/journal.pone.0227183. eCollection 2020.
76. [2,74] Bernier-Lachance J, **Arsenault J**, Usongo V, Parent É, Labrie J, Jacques M, **Malouin F, Archambault M**. Prevalence and characteristics of Livestock-Associated Methicillin-Resistant Staphylococcus aureus (LA-MRSA) isolated from chicken meat in the province of Quebec, Canada. PLoS One. 2020 Jan 10;15(1):e0227183. doi: 10.1371/journal.pone.0227183. eCollection 2020.
77. [2,71] Scherrer S, Rademacher F, Spoerry Serrano N, Schrenzel J, **Gottschalk M**, Stephan R, Landolt P. Rapid high resolution melting assay to differentiate Streptococcus suis serotypes 2, 1/2, 1, and 14. Microbiologyopen. 2020 Apr;9(4):e995. doi: 10.1002/mbo3.995. Epub 2020 Jan 22.
78. [2,709] Ben Lagha A, Howell A, **Grenier D**. Highbush blueberry proanthocyanidins alleviate Porphyromonas gingivalis-induced deleterious effects on oral mucosal cells. Anaerobe. 2020 Oct;65:102266. doi: 10.1016/j.anaerobe.2020.102266. Epub 2020 Aug 29. PMID: 32871243
79. [2,601] **Racicot M**, Comeau G, Leroux A, Quessy S, Ng S, Cereno T, Venne D, Hébert G, **Vaillancourt JP**, Fravallo P, Ouckama R, Mitevski D, Guerin MT, Agunos A, DeWinter L, Catford A, **Gaucher ML**. Expert Elicitation to Estimate the Relative Risk of Food Safety Criteria Included in the Establishment-Based Risk Assessment Model for Canadian Hatcheries. Foodborne Pathog Dis. 2020 Nov;17(11):641-665. doi: 10.1089/fpd.2019.2784. Epub 2020 Apr 21.
80. [2,499] **Grenier D**, Marcoux E, Azelmat J, Ben Lagha A, Gauthier P. Biocompatible combinations of nisin and licorice polyphenols exert synergistic bactericidal effects against Enterococcus faecalis and inhibit NF-κB activation in monocytes. AMB Express. 2020 Jul 6;10(1):120. doi: 10.1186/s13568-020-01056-w. PMID: 32632823
81. [2,4] Sauvant D, **Letourneau-Montminy MP**, Schmidely P, Boval M, Loncke C, Daniel JB. Review: Use and misuse of meta-analysis in Animal Science. Animal. 2020 Aug;14(S2):s207-s222. doi: 10.1017/S1751731120001688. Epub 2020 Jul 14.
82. [2,38] Mbareche H, Veillette M, Bilodeau G, **Duchaine C**. Comparison of the performance of ITS1 and ITS2 as barcodes in amplicon-based sequencing of bioaerosols. PeerJ. 2020 Feb 17;8:e8523. doi: 10.7717/peerj.8523. eCollection 2020.

83. |2,323| Barboza-Solis C, Contreras AP, Palomino-Tapia VA, Joseph T, King R, Ravi M, Peters D, Fonseca K, **Gagnon CA**, van der Meer F, Abdul-Careem MF. Genotyping of Infectious Laryngotracheitis Virus (ILTV) Isolates from Western Canadian Provinces of Alberta and British Columbia Based on Partial Open Reading Frame (ORF) a and b. *Animals (Basel)*. 2020 Sep 11;10(9):1634. doi: 10.3390/ani10091634.
84. |2,267| Crouse A, Schramm C, Emond-Rheault JG, Herod A, Kerhoas M, Rohde J, Gruenheid S, Kukavica-Ibrulj I, Boyle B, Greenwood CMT, Goodridge LD, Garduno R, Levesque RC, Malo D, **Daigle F**. Combining Whole-Genome Sequencing and Multimodel Phenotyping To Identify Genetic Predictors of Salmonella Virulence. *mSphere*. 2020 Jun 10;5(3):e00293-20. doi: 10.1128/mSphere.00293-20.
85. |2,245| Turcotte C, **Thibodeau A**, Quessy S, Topp E, Beauchamp G, Fravallo P, **Archambault M, Gaucher ML**. Impacts of Short-Term Antibiotic Withdrawal and Long-Term Judicious Antibiotic Use on Resistance Gene Abundance and Cecal Microbiota Composition on Commercial Broiler Chicken Farms in Québec. *Front Vet Sci*. 2020 Dec 21;7:547181. doi: 10.3389/fvets.2020.547181. eCollection 2020.
86. |2,245| Diarra MS, **Zhao X**, Butaye P. Editorial: Antimicrobial Use, Antimicrobial Resistance, and the Microbiome in Food Animals. *Front Vet Sci*. 2021 Jan 18;7:638781. doi: 10.3389/fvets.2020.638781. eCollection 2020.
87. |2,245| Rabhi N, **Thibodeau A**, Côté JC, Devillers N, Laplante B, Fravallo P, Larivière-Gauthier G, Thériault WP, Faucitano L, Beauchamp G, Quessy S. Association Between Tail-Biting and Intestinal Microbiota Composition in Pigs. *Front Vet Sci*. 2020 Dec 9;7:563762. doi: 10.3389/fvets.2020.563762. eCollection 2020.
88. |2,13| **Racicot M**, Comeau G, Tremblay A, Quessy S, Cereno T, Charron-Langlois M, Venne D, Hébert G, **Vaillancourt JP**, Fravallo P, Ouckama R, Mitevski D, Guerin MT, Agunos A, DeWinter L, Catford A, Mackay A, **Gaucher ML**. Identification and selection of food safety-related risk factors to be included in the Canadian Food Inspection Agency's Establishment-based Risk Assessment model for Hatcheries. *Zoonoses Public Health*. 2020 Feb;67(1):14-24. doi: 10.1111/zph.12650. Epub 2019 Sep 24.
89. |2,092| Lo Verso L, **Talbot G**, Morissette B, **Guay F**, Matte JJ, Farmer C, Gong J, Wang Q, Bissonnette N, Beaulieu C, **Lessard M**. The combination of nutraceuticals and functional feeds as additives modulates gut microbiota and blood markers associated with immune response and health in weanling piglets. *J Anim Sci*. 2020 Aug 1;98(8):skaa208. doi: 10.1093/jas/skaa208.
90. |2,01| Vrolyk V, Desmarais MJ, Lambert D, Haruna J, **Benoit-Biancamano MO**. Neonatal and Juvenile Ocular Development in Göttingen Minipigs and Domestic Pigs: A Histomorphological and Immunohistochemical Study. *Vet Pathol*. 2020 Nov;57(6):889-914. doi: 10.1177/0300985820954551. Epub 2020 Oct 6.
91. |1,992| Li X, Liu D, Wu Z, Li D, Cai Y, Lu Y, **Zhao X**, Xue H. Multiple Tolerance and Dye Decolorization Ability of a Novel Laccase Identified from *Staphylococcus Haemolyticus*. *J Microbiol Biotechnol*. 2020 Apr 28;30(4):615-621. doi: 10.4014/jmb.1910.10061.
92. |1,892| Shahhosseini N, Frederick C, **Letourneau-Montminy MP, Marie-Odile Benoit-Biancamano**, Kobinger GP, Wong G. Computational genomics of Torque teno sus virus and Porcine circovirus in swine samples from Canada. *Res Vet Sci*. 2020 Dec 22;134:171-180. doi: 10.1016/j.rvsc.2020.12.010. Online ahead of print.
93. |1,793| Durocher AF, Gagné-Thivierge C, **Charette SJ**. Various dictyostelids from the environment can produce multilamellar bodies. *Can J Microbiol*. 2020 Dec;66(12):679-688. doi: 10.1139/cjm-2020-0187. Epub 2020 Jul 31.
94. |1,713| Lo Verso L, Matte JJ, Lapointe J, **Talbot G**, Bissonnette N, **Blais M, Guay F, Lessard M**. Impact of birth weight and neonatal nutritional interventions with micronutrients and bovine colostrum on the development of piglet immune response during the peri-weaning period. *Vet Immunol Immunopathol*. 2020 Aug;226:110072. doi: 10.1016/j.vetimm.2020.110072. Epub 2020 Jun 13.
95. |1,713| Shojadoost B, Taha-Abdelaziz K, Alkie TN, Bekele-Yitbarek A, **Barjesteh N**, Laursen A, Smith TK, Shojadoost J, Sharif S. Supplemental dietary selenium enhances immune responses conferred by a

- vaccine against low pathogenicity avian influenza virus. *Vet Immunol Immunopathol.* 2020 Sep;227:110089. doi: 10.1016/j.vetimm.2020.110089. Epub 2020 Jun 25.
96. |1,713| Berri M, Hogan D, Saade G, Roche S, Velge P, Virlogeux-Payant I, **Meurens F**. IPEC-1 variable immune response to different serovars of *Salmonella enterica* subsp. *enterica*. *Vet Immunol Immunopathol.* 2020 Feb;220:109989. doi: 10.1016/j.vetimm.2019.109989. Epub 2019 Dec 2.
97. |1,581| Boubendir S, **Arsenault J**, Quessy S, **Thibodeau A**, Fravallo P, Thériault W, Fournaise S, **Gaucher ML**. *Salmonella* contamination of broiler chicken carcasses at critical steps of the slaughter process and in the environment of two slaughter plants: Prevalence, genetic profiles and association with the final carcass status. *J Food Prot.* 2020 Oct 1. doi: 10.4315/JFP-20-250. Online ahead of print. PMID: 33003200
98. |1,581| Expert elicitation to estimate the feed safety impact of criteria included in the Canadian Food Inspection Agency risk assessment model for feed mills. Lachapelle V, **Racicot M**, Comeau G, **Rhouma M**, Leroux A, Wafo Noubissie O, Provost F, Zanabria R, **Gaucher ML**, **Costa M**, **Chorfi Y**, Holley R, Smillie J, Bosch ML, Dumas A, Brockhoff E, Collins S, Snelgrove P, Quessy S. *J Food Prot.* 2020 Nov 24. doi: 10.4315/JFP-20-371.
99. |1,581| Boubendir S, **Arsenault J**, Quessy S, **Thibodeau A**, Fravallo P, Thériault W, Fournaise S, **Gaucher ML**. *Salmonella* contamination of broiler chicken carcasses at critical steps of the slaughter process and in the environment of two slaughter plants: Prevalence, genetic profiles and association with the final carcass status. *J Food Prot.* 2020 Oct 1. doi: 10.4315/JFP-20-250. Online ahead of print.
100. |1,487| Bessalah S, **Fairbrother JM**, Salhi I, Vanier G, Khorchani T, Seddik MM, Hammadi M. Characterization and antimicrobial susceptibility of *Escherichia coli* isolated from healthy farm animals in Tunisia. *Anim Biotechnol.* 2020 Apr 15:1-10. doi: 10.1080/10495398.2020.1752702. Online ahead of print.
101. |1,306| Parent E, Gagnon-Francoeur A, Lanthier B, Hébert G, Buczinski S, **Boulianne M**. Diagnostic Accuracy of Ultrasonography to Detect False Layers in a Commercial Laying Flock Infected by an Infectious Bronchitis Virus Delmarva Genotype Causing Cystic Oviducts. *Avian Dis.* 2020 Jun;64(2):149-156. doi: 10.1637/0005-2086-64.2.149.
102. |1,306| Charlebois A, Parent E, **Létourneau-Montminy MP**, **Boulianne M**. Persistence of a *Clostridium perfringens* Strain in a Broiler Chicken Farm over a Three-Year Period. *Avian Dis.* 2020 Sep 1;64(3):415-420. doi: 10.1637/aviandiseases-D-19-00112.
103. |1,171| Miagkoff L, **Archambault M**, Bonilla AG. Antimicrobial susceptibility patterns of bacterial isolates cultured from synovial fluid samples from horses with suspected septic synovitis: 108 cases (2008-2017). *J Am Vet Med Assoc.* 2020 Apr 1;256(7):800-807. doi: 10.2460/javma.256.7.800. | impact factor date de 2003|
104. |1,135| **Gagnon CA**, Lalonde C, Provost C. Porcine reproductive and respiratory syndrome virus whole-genome sequencing efficacy with field clinical samples using a poly(A)-tail viral genome purification method. *J Vet Diagn Invest.* 2020 Aug 28:1040638720952411. doi: 10.1177/1040638720952411. Online ahead of print.
105. |1,135| **Benoit-Biancamano MO**, Langlois I. Sterile traumatic panniculitis in a captive Brent goose. *J Vet Diagn Invest.* 2020 Mar;32(2):336-338. doi: 10.1177/1040638720907586. Epub 2020 Feb 26.
106. |1,135| Lacouture S, Okura M, Takamatsu D, Corsaut L, **Gottschalk M**. Development of a mismatch amplification mutation assay to correctly serotype isolates of *Streptococcus suis* serotypes 1, 2, 1/2, and 14. *J Vet Diagn Invest.* 2020 May;32(3):490-494. doi: 10.1177/1040638720915869. Epub 2020 Apr 20.
107. |0,88| Parent E, **Archambault M**, Moore RJ, **Boulianne M**. Impacts of antibiotic reduction strategies on zootechnical performances, health control, and *Eimeria* spp. excretion compared with conventional antibiotic programs in commercial broiler chicken flocks. *Poult Sci.* 2020 Sep;99(9):4303-4313. doi: 10.1016/j.psj.2020.05.037. Epub 2020 Jun 24.
108. |0,88| Parent E, **Archambault M**, Moore RJ, **Boulianne M**. Impacts of antibiotic reduction strategies on zootechnical performances, health control, and *Eimeria* spp. excretion compared with conventional

- antibiotic programs in commercial broiler chicken flocks. *Poult Sci.* 2020 Sep;99(9):4303-4313. doi: 10.1016/j.psj.2020.05.037. Epub 2020 Jun 24.
109. |0,88| Xu Q, Si W, Mba OI, Sienkiewicz O, Ngadi M, Ross K, Kithama M, Kiarie EG, Kennes YM, Diarra MS, **Zhao X**. Research Note: Effects of supplementing cranberry and blueberry pomaces on meat quality and antioxidative capacity in broilers. *Poult Sci.* 2020 Dec 9:100900. doi: 10.1016/j.psj.2020.11.069. Online ahead of print.
110. |0,88| Bilal M, Si W, Barbe F, Chevaux E, Sienkiewicz O, **Zhao X**. Effects of novel probiotic strains of *Bacillus pumilus* and *Bacillus subtilis* on production, gut health, and immunity of broiler chickens raised under suboptimal conditions. *Poult Sci.* 2020 Nov 30:100871. doi: 10.1016/j.psj.2020.11.048. Online ahead of print.
111. |0,627| Lacouture S, **Gottschalk M**. Distribution of *Actinobacillus pleuropneumoniae* (from 2015 to June 2020) and *Glaesserella parasuis* (from 2017 to June 2020) serotypes isolated from diseased pigs in Quebec. *Can Vet J.* 2020 Dec;61(12):1261-1263.
112. |0,627| **Gottschalk M**, Lacouture S, Fecteau G, Desrochers A, Boa A, Saab ME, Okura M. Canada: Isolation of *Streptococcus ruminantium* (*Streptococcus suis*-like) from diseased ruminants in Canada. *Can Vet J.* 2020 May;61(5):473-475. PMID: 32355345 Free PMC article. No abstract available.
113. |0,627| **Klopfenstein C**. February 2020 ethical question of the month and May 2020 response – Comments. *Can Vet J.* 2020 Aug;61(8):807-808.
114. |0,59| Le Net R, Provost C, Lalonde C, Régimbald L, Vézina F, **Gagnon CA**, Lair S. Whole genome sequencing of an avipoxvirus associated with infections in a group of aviary-housed snow buntings (*Plectrophenax nivalis*). *J Zoo Wildl Med.* 2020 Jan 9;50(4):803-812. doi: 10.1638/2018-0102.
115. |0,535| Remus A, Hauschild L, **Létourneau-Montminy MP**, Andretta I, Pomar C. Feeding behavior of growing and finishing pigs fed different dietary threonine levels in a group-phase feeding and individual precision feeding system. *Transl Anim Sci.* 2020 Sep 24;4(4):txaa177. doi: 10.1093/tas/txaa177. eCollection 2020 Oct.
116. |0,432| **Dubreuil JD**. Fruit extracts to control pathogenic *Escherichia coli*: A sweet solution. *Heliyon.* 2020 Feb 13;6(2):e03410. doi: 10.1016/j.heliyon.2020.e03410. eCollection 2020 Feb.
117. |?| Trudel L, Deveau H, Gagné-Thivierge C, **Charette SJ**. J The Course "Microbes and You": A Concrete Example that Addresses the Urgent Need for Microbiology Literacy in Society. *Microbiol Biol Educ.* 2020 Aug 31;21(2):21.2.63. doi: 10.1128/jmbe.v21i2.2211. eCollection 2020.