



## List of scientific articles, & reviews produced by UR SIMPA

The name of the members of the research unit are underlined

Articles whose first and/or last author is a member of the research unit are in bold

### List of scientific articles:

#### 2016

1. Aissa N., Mayer N., Bert F., Labia R., Lozniewski A., Nicolas-Chanoine M.H. (2016). A new mechanism to render clinical isolates of *Escherichia coli* non-susceptible to imipenem: substitutions in the PBP2 penicillin-binding domain. *Journal of Antimicrobial Chemotherapy*, 71:76-79. HAL Id: hal-01488973
2. **Back A.**, Borges F., Mangavel C., Paris C., Rondags E., Kapel R., Aymes A., Rogniaux H., **Pavlović M.**, van Heel A.J., Kuipers O.P., Revol-Junelles A.-M., Cailliez-Grimal C. (2016). Recombinant pediocin in *Lactococcus lactis*: increased production by propeptide fusion and improved potency by co-production with PedC. *Microbial Biotechnology*, 9:466–477. HAL Id: hal-03183303
3. Filali M., Lalonde R. (2016). Neurobehavioral anomalies in the Pitx3/ak murine model of Parkinson's disease. *Behavior Genetics*, 46: 228-241. HAL Id: hal-03221348
4. Iskandar C.F., Cailliez-Grimal C., Rahman A., Rondags E., Remenant B., Zagorec M., Leisner J.J., Borges F., Revol-Junelles A.-M. (2016). Genes associated to lactose metabolism illustrate the high diversity of *Carnobacterium maltaromaticum*. *Food Microbiology*, 58:79-86. HAL Id: hal-02498293
5. Remenant B., Borges F., Cailliez-Grimal C., Revol-Junelles A.-M., Marché L., Lajus A., Médigue C., Pilet M.-F., Prévost H., Zagorec M. (2016). Draft Genome Sequence of *Carnobacterium divergens* V41, a Bacteriocin-Producing Strain. *Genome Announcements*, 4:e01109-16. HAL Id: hal-02498294
6. **Velay A.**, **Jeulin H.**, **Eschlimann M.**, Malvé B., Goehringer F., Bensenane M., **Frippiat J.-P.**, Abraham P., Ismail A.M., Murray J.M., Combet C., Zoulim F., Bronowicki J.-P., **Schvoerer E.** (2016). Characterization of hepatitis B virus surface antigen variability and impact on HBs antigen clearance under nucleos(t)ide analogue therapy. *Journal of Viral Hepatitis*, 23:387-398. HAL Id: hal-01482132
7. Yang J., Kou J., Lim J.E., Lalonde R., Fukuchi K.I. (2016). Intracranial delivery of interleukin-17A via adeno-associated virus fails to induce physical and learning disabilities and neuroinflammation in mice but improves glucose metabolism through AKT pathway. *Brain, Behavior and Immunity*, 53: 84-89. HAL Id: hal-03216172

#### 2017

8. **Alauzet C.**, Berger S., Jean-Pierre H., Dubreuil L., Jumas-Bilak E., Lozniewski A., Marchandin H. (2017). *nimH*, a novel nitroimidazole resistance gene contributing to metronidazole resistance in *Bacteroides fragilis*. *Journal of Antimicrobial Chemotherapy*, 72:2673-2675. HAL Id: hal-01895500
9. Charollais A., Meyer S., Lempereur A., Ponty C., Stumpf M.H., Berquin P., Bannier D., Lalonde R., Rebai M. (2017). Comparative electrophysiological study of word reading in French: does the P1-N1 temporal window reveal a neurodevelopmental anomaly? *Austin Neurology and Neurosciences*, 2:1019. HAL Id: hal-03220014
10. **Eschlimann M.**, Malvé B., **Velay A.**, Fenaux H., Berger S., **Frippiat J.-P.**, Zoulim F., Bensenane M., Bronowicki J.-P., Goehringer F., May T., **Jeulin H.**, **Schvoerer E.** (2017). The variability of hepatitis B envelope is associated with HBs antigen persistence in either chronic or acute HBV genotype A infection. *Journal of Clinical Virology*, 94:115-122. HAL Id: hal-01903775
11. **Harlé G.**, **Lalonde R.**, **Fonte C.**, **Ropars A.**, **Frippiat J.-P.**, **Strazielle C.** (2017). Repeated corticosterone injections in adult mice alter stress hormonal receptor expression in the cerebellum and motor coordination without affecting spatial learning. *Behavioural Brain Research*, 326:121-131. HAL Id: hal-01903874
12. Iskandar C.F., Borges F., Taminiau B., Daube G., Zagorec M., Remenant B., Leisner J.J., Hansen M.A., Sørensen S.J., Mangavel C., Cailliez-Grimal C., Revol-Junelles A.-M. (2017). Comparative Genomic Analysis Reveals Ecological Differentiation in the Genus *Carnobacterium*. *Frontiers in Microbiology*, 8:357. HAL Id: hal-01606737

13. Lalonde R., Strazielle C. (2017). Divergent effects of haloperidol on motor versus spatial functions. *Open Journal of Parkinson's Disease and Treatment*, 1: 32-38. HAL Id: hal-03219989
14. Mossebo D.C., Essouman F.P., Machouart M., Gueidan C. (2017). Phylogenetic relationships, taxonomic revision and new taxa of Termitomyces (Lyophyllaceae, Basidiomycota) inferred from combined nLSU- and mtSSU-rDNA sequences. *Phytotaxa*, 321:71. HAL Id: hal-03209158
15. Thomas, M.H., Paris, C., Magnien, M., Colin, J., Pelleieux, S., Coste F., Escanyé, M.-C., Pillot, T., Olivier, J.-L. (2017). Dietary arachidonic acid increases deleterious effects of amyloid-beta oligomers on learning abilities and expression of AMPA receptors: putative role of the ACSL4-cPLA2 balance. *Alzheimer's Research & Therapy*, 9:69. HAL Id: inserm-01580854
16. Yang J., Kou J., Lim J.E., Lalonde R., Fukuchi K.I. (2017). Intracranial IL-17A overexpression decreases cerebral amyloid angiopathy by upregulation of ABCA1 in an animal model of Alzheimer's disease. *Brain, Behavior and Immunity*, 65: 262-273. HAL Id: hal-03220029

## 2018

17. Ariceaga C.C.G., Afzal M.I., Umer M., Shah S.M.U., Ahmed H., Jacquot M., Cailliez-Grimal C. (2018). Effect of alginate beads on olfactory sensory perception of paraffin coated cheese. *Czech Journal of Food Sciences*, 36:255-260. HAL Id: hal-03208601
18. Crucian B.E., Choukèr A., Simpson R.J., Mehta S., Marshall G., Smith S.M., Zwart S.R., Heer M., Ponomarev S., Whitmire A., Frippiat J.-P., Douglas G.L., Lorenzi H., Buchheim J.I., Makedonas G., Ginsburg G.S., Ott M.C., Pierson D.L., Krieger S.S., Baecker N., Sams C. (2018). Immune system dysregulation during spaceflight: Potential countermeasures for deep space exploration missions. *Frontiers in Immunology*, 9:1437. HAL Id: hal-01903849
19. D'Agostino M., Lemmet T., Dufay C., Luc A., Frippiat J.-P., Machouart M., Debourgogne A. (2018). Overinduction of CYP51A gene after exposure to azole antifungals provides a first clue to resistance mechanism in *Fusarium solani* species complex. *Microbial Drug Resistance*, 24:768-773. HAL Id: hal-01903998
20. Desoubeaux G., Debourgogne A., Wiederhold N.P., Zaffino M., Sutton D., Burns R.E., Frasca S. Jr., Hyatt M.W., Cray C. (2018). Multi-locus sequence typing provides epidemiological insights for diseased sharks infected with fungi belonging to the *Fusarium solani* species complex. *Medical Mycology*, 56:591-601. HAL Id: hal-02902565
21. Dubar M., Carrasco K., Gibot S., Bisson C. (2018). Effects of *Porphyromonas gingivalis* LPS and LR12 peptide on TREM-1 expression by monocytes. *Journal of Clinical Periodontology*, 45:799-805. HAL Id: hal-02988710
22. Gaignier F., Legrand-Frossi C., Stragier E., Mathiot J., Merlin J.-L., Cohen-Salmon C., Lanfumey L., Frippiat J.-P. (2018). A model of chronic exposure to unpredictable mild socio-environmental stressors replicates some spaceflight-induced immunological changes. *Frontiers in Physiology*, 9:514. HAL Id: hal-01903835
23. Laroye C., Lemarié J., Boufenzler A., Labroca P., Cunat L., Alauzet C., Groubatch F., Cailac C., Jolly L., Bensoussan D., Reppel L., Gibot S. (2018). Clinical-grade mesenchymal stem cells derived from umbilical cord improve septic shock in pigs. *Intensive Care Medicine Experimental*, 6:24. HAL Id: hal-02906219
24. Harlé G., Kaminski S., Dubayle D., Frippiat J.-P., Ropars A. (2018). Murine splenic B cells express corticotropin-releasing hormone receptor 2 that affect their viability during a stress response. *Scientific Reports*, 9:143. HAL Id: hal-01903831

## 2019

25. Alauzet C., Aujoulat F., Lozniewski A., Marchandin H. (2019). A sequence database analysis of 5-nitroimidazole reductase and related proteins to expand knowledge on enzymes responsible for metronidazole inactivation. *Anaerobe*, 55:29-34. HAL Id: hal-01902001
26. Alauzet C., Cunat L., Wack M., Lozniewski A., Busby H., Agrinier N., Cailliez-Grimal C., Frippiat J.-P. (2019). Hypergravity disrupts murine intestinal microbiota. *Scientific Reports*, 9:9410. HAL Id: hal-02314525
27. Fonte C., Kaminski S., Vanet A., Lanfumey L., Cohen-Salmon C., Ghislin S., Frippiat J.-P. (2019). Socio-environmental stressors encountered during spaceflight partially affect the murine TCRβ repertoire and increase its self-reactivity. *FASEB Journal*, 33:896-908. HAL Id: hal-02107505
28. Guéguinou N., Jeandel J., Kaminski S., Baatout S., Ghislin S., Frippiat J.-P. (2019). Modulation of Iberian ribbed newt complement component C3 by stressors similar to those encountered during a stay onboard the International Space Station. *International Journal of Molecular Sciences*, 20:1579. HAL Id: hal-02314526
29. Laroye C., Boufenzler A., Jolly L., Cunat L., Alauzet C., Merlin J.L., Yguel C., Bensoussan D., Reppel L., Gibot S. (2019). Bone marrow vs Wharton's jelly mesenchymal stem cells in experimental sepsis: a comparative study. *Stem Cell Research and Therapy*, 10:192. HAL Id: hal-02411182
30. Makedonas G., Mehta S., Choukèr A., Simpson R.J., Marshall G., Orange J.S., Aunon-Chancellor S., Smith S.M., Zwart S.R., Stowe R.P., Heer M., Ponomarev S., Whitmire A., Frippiat J.-P., Douglas G.L., Krieger S.S., Lorenzi H., Buchheim J.-I., Ginsburg G.S., Ott C.M., Downs M., Pierson D., Baecker N., Sams C., Crucian B. (2019). Specific immunologic countermeasure protocol for deep-space exploration missions. *Frontiers in Immunology*, 10:2407. HAL Id: hal-02314534

31. Tascher G., Gerbaix M., Maes P., Chazarin B., Ghislin S., Antropova E., Vassilieva G., Ouzren-Zarhloul N., Gauquelin-Koch G., Vico L., Frippiat J.-P.\*, Bertile F\*. (2019). Analysis of femurs from mice embarked on board BION-M1 biosatellite reveals a decrease in immune cell development, including B cells, after 1 week of recovery on Earth. *FASEB Journal*, 33:3772-3783. \*Codirected this study. [Has been the subject of several press releases](#). HAL Id: hal-02107520
32. Thomas B., Contet Audonneau N., Machouart M., Debourgogne A. (2019). Molecular identification of Fusarium species complexes: Which gene and which database to choose in clinical practice? *Journal of Medical Mycology*, 29:56-58. HAL Id: hal-02902541
33. Zaffino M., Dubar M., Debourgogne A., Bisson C., Machouart M. (2019). Development of a new TaqMan PCR assay for the detection of both Entamoeba gingivalis genotypes. *Diagnostic Microbiology and Infectious Disease*, 95:114886. HAL Id: hal-02902497

## 2020

34. Alauzet C., Cunat L., Wack M., Lanfumey L., Legrand-Frossi C., Lozniewski A., Agrinier N., Cailliez-Grimal C., Frippiat J.-P. (2020). Impact of a model used to simulate chronic socio-environmental stressors encountered during spaceflight on murine intestinal microbiota. *International Journal of Molecular Sciences*, 21:7863. HAL Id: hal-03156283
35. Buchheim J.-I.\*, Ghislin S.\*, Ouzren N., Albuissou E., Vanet A., Matzel S., Ponomarev S., Rykova M., Choukér A., Frippiat J.-P. (2020). Plasticity of the human IgM repertoire in response to long-term spaceflight. *FASEB Journal*, 34 :16144-16162. HAL Id: hal-03156297
36. Dubar M., Frippiat J.-P., Remen T., Boufenzar A., Alauzet C., Baumann C., Gibot S., Bisson C. (2020). Comparison of sTREM-1 and associated periodontal and bacterial factors before/after periodontal therapy, and impact of psychosocial factors. *Journal of Clinical Periodontology*, 47:1064-1078. HAL Id: hal-02988707
37. Dubar M., Clerc-Urmès I., Baumann C., Clément C., Alauzet C., Bisson C. (2020) Relations of psychosocial factors and cortisol with periodontal and bacterial parameters: A prospective clinical study in 30 patients with periodontitis before and after non-surgical treatment. *International Journal of Environmental Research and Public Health*, 17:7651. HAL Id: hal-02988705

## 2021

38. D'agostino M., Tesse N., Lavergne R.A., Le Pape R., Bouchara J.-L., Frippiat J.-P., Machouart M., Debourgogne A. (2021). Characterization of the antifungal effect of a plant-based compound CIN-102 on the main septal filamentous fungi involved in human pathology. *Journal of Global Antimicrobial Resistance*, 25:171-180. HAL Id: hal-0310125
39. Chamarande J., Cunat L., Caillet C., Mathieu L., Duval J.F.L., Lozniewski A., Frippiat J.-P., Alauzet C., Cailliez-Grimal C. (2021). Surface Properties of *Parabacteroides distasonis* and Impacts of Stress-Induced Molecules on Its Surface Adhesion and Biofilm Formation Capacities. *Microorganisms*, 9:1602. HAL Id: hal-03358958
40. Austermann K., Baecker N., Zwart S.R., Fimmers R., Frippiat J.-P., Stehle P., Smith S.M. and Heer M. (2021). Antioxidant supplementation does not affect bone turnover markers during 60 days of 6° head-down tilt bed rest: Results from an exploratory randomized controlled trial. *The Journal of Nutrition*, 151:1527-1538. HAL Id: hal-03224111
41. Hernandez M., Harlé G., Lalonde R., Strazielle C. (2021). Effects of corticosterone injections in mid-to-late mouse postnatal development on adult motor activity and coordination. *Neuroscience Research*, S0168-0102:30572-30573. HAL Id: hal-03219976
42. Lalonde R., Filali M., Strazielle C. (2021). SHIRPA as a Neurological Screening Battery in Mice. *Current Protocols*, 1:e135. HAL Id: hal-03629620
43. Le I.T., Ropars A., Aymes A., Frippiat J.-P.\* and Kapel R.\* (2021). Multicriteria optimization of phenolic compounds capture from a sunflower protein isolate production process by-product by adsorption column and assessment of their antioxidant and anti-inflammatory effects. *Foods*, 10:760. \*Codirected this study. HAL Id: hal-03189739
44. D'agostino M., Tesse N., Lavergne R.A., Le Pape R., Frippiat J.-P., Machouart M. and Debourgogne A. (2021). In vitro antifungal effect of a plant-based product, CIN-102, on antifungal resistant filamentous fungi and their biofilms. *Journal of Medical Microbiology*, 70: doi: 10.1099/jmm.0.001399. HAL Id: hal-03514016
45. Bonnefoy J., Ghislin S., Beyrend J., Coste F., Calcagno G., Lartaud I., Gauquelin-Koch G., Poussier S. and Frippiat J.-P. (2021). Gravitational Experimental Platform for Animal Models, a new platform at ESA's terrestrial facilities to study the effects of micro- and hypergravity on aquatic and rodent animal models. *International Journal of Molecular Sciences*, 22:2961. HAL Id: hal-03223776
46. Le I.T., Framboisier X., Aymes A., Ropars A., Frippiat J.-P.\* and Kapel R.\* (2021). Identification and capture of phenolic compounds from a rapeseed meal protein isolate production process by-product by macroporous resin and valorization their antioxidant properties. *Molecules*, 26:5853. \*Codirected this study. HAL Id: hal-03355607
47. Novy E., Laithier F.X., Riviere J., Remen T., Losser M.R., Guerci P., Machouart M. (2021). Protocol for the pBDG2 study: Prospective evaluation of 1.3-β-D-glucan in the peritoneal fluid for the diagnosis of intra-abdominal candidiasis in critically ill patients. *Microbiological Research*, 12:196-203. HAL Id: hal-03542932

### List of reviews:

2016

1. Debourgogne A., Dorin J., Machouart M. (2016). Emerging infections due to filamentous fungi in humans and animals: Only the tip of the iceberg? *Environmental Microbiology Reports*, 8:332-342. HAL Id: hal-02902634
2. Frippiat J.-P., Crucian B.E., de Quervain D., Grimm D., Montano N., Praun S., Roozendaal B., Schelling G., Thiel M., Ullrich O., Choukèr A. (2016). Towards Human Exploration of Space: The THESEUS review series on immunology research priorities. *NPJ Microgravity*, 2:16040. HAL Id: hal-01903866

2017

3. Afzal M.I., Gonzalez Ariceaga C., Boulahya K-A., Jacquot M., Delaunay S., Cailliez-Grimal, C. (2017). Biosynthesis and role of 3-methylbutanal in cheese by lactic acid bacteria: Major metabolic pathways, enzymes involved and strategies for control. *Critical Reviews in Food Science and Nutrition*, 57:399-406. HAL Id: hal-01304164
4. Bonnet I., Lozniewski A. (2017). Analyse des selles et translocations bactériennes chez les patients atteints d'hémopathies malignes. *Correspondances en Onco-Hématologie*, 12 :42-144. HAL Id: hal-03216160
5. Ferrand J., Aissa N., Lozniewski A.. Mécanismes de résistance aux antibiotiques : quoi de neuf en 2017 ? *Journal de biologie médicale*, 6 :104-107. HAL Id: hal-03216167
6. Lalonde R., Strazielle C. (2017). Neuroanatomical pathways underlying the effects of hypothalamo-hypophysial-adrenal hormones on exploratory activity. *Reviews in the Neurosciences*, 28: 617-648. HAL Id: hal-03219980

2019

7. Alauzet C., Lozniewski A. and Marchandin H. (2019). Metronidazole resistance and *nim* genes in anaerobes: A review. *Anaerobe*. 55:40-53. HAL Id: hal-02877467
8. Bisson C., Dridi S.M., Machouart M. (2019). Assessment of the role of *Trichomonas tenax* in the etiopathogenesis of human periodontitis: A systematic review. *PLoS One*, 14:e0226266. HAL Id: hal-03209614
9. D'agostino M., Tesse N., Frippiat J.-P., Machouart M., Debourgogne A. (2019). Essential oils and their natural active compounds presenting antifungal properties. *Molecule*, 24:3713. HAL Id: hal-02902494
10. Iskandar, C.F., Cailliez-Grimal, C., Borges, F., Revol-Junelles A.M. (2019). Review of lactose and galactose metabolism in Lactic Acid Bacteria dedicated to expert genomic annotation. *Trends in Food Science & Technology*, 88:121-132. HAL Id: hal-02498292
11. Lalonde R., Strazielle C. (2019). Motor performances of spontaneous and genetically modified mutants with cerebellar atrophy. *Cerebellum*, 18: 615-634. HAL Id: hal-03219966

2020

12. Roumani M., Duval R., Ropars A., Risler A., Robin C., Larbat R. (2020). Phenolamides: Plant specialized metabolites with a wide range of promising pharmacological and health-promoting interests. *Biomedicine & Pharmacotherapy*, 131:110762. HAL Id: hal-02954326

### List of other articles (professional journals, etc.):

2017

1. Alauzet C. (2017). Microbiote intestinal, dysbiose et pathologies. *Correspondances en Onco-Hématologie*. 13:119-124.

2019

2. Selton-Suty C., Goehringer F., Venner C., Thivillier C., Huttin O., Hoen B., membres de l'Endocarditis Team du CHU de Nancy. (2019). Complications and prognosis of infective endocarditis. *La Presse Médicale*, 48:532-538.

2020

3. Alauzet C. (2020) Modulation du microbiote intestinal : vers une médecine personnalisée. *Société Française de Microbiologie*, October Newsletter.

4. Machouart M. (2020). Réveil des talents à l'université et place de l'enseignant-coach. *Revue internationale de pédagogie de l'enseignement supérieur*, 36. Published online on April 12th 2020. <http://journals.openedition.org/ripes/2269>

2021

5. Hernandez M., Droz D. (2021). Les hypominéralisations molaires-incisives: prise en charge des hypersensibilités et programme prophylactique. *Revue Francophone d'Odontologie Pédiatrique*, 16:158-163.
6. Fanget A., Massinet T., Hernandez M. (2021). MIH: Stratégies thérapeutiques destinées aux formes légères et modères. *Revue CLINIC*, 42: 830-834.