LIST OF PEER REVIEWED PUBLICATIONS (PUBMED & GOOGLE SCHOLAR)

The international peer-reviewed publications in the scientific journals can also be retrieve by clicking on the 'PubMed' and / or 'Google Scholar' link above.

Original research articles in international peer-reviewed journals

1. Katherine Johnson, Peter J Leary, Olivier Govaere, Matthew J Barter, Sarah H Charlton, Simon J Cockell, Dina Tiniakos et al. (2021). Increased serum miR-193a-5p during non-alcoholic fatty liver disease progression: diagnostic and mechanistic relevance. JHEP Reports, 100409.

2. **Sen, P**., Andrabi, S.B.A., Buchacher, T., Khan, M.M., Kalim, U.U., Lindeman, T.M., Alves, M.A., Hinkkanen, V., Kemppainen, E., Dickens, A.M., et al. (2021). Quantitative genome-scale metabolic modeling of human $CD4^+$ T cell differentiation reveals subset-specific regulation of glycosphingolipid pathways. Cell Rep 37, 109973.

3. **Sen, P**., Qadri, S., Luukkonen, P.K., Ragnarsdottir, O., McGlinchey, A., Jantti, S., Juuti, A., Arola, J., Schlezinger, J.J., Webster, T.F., et al. (2021). Exposure to environmental contaminants is associated with altered hepatic lipid metabolism in non-alcoholic fatty liver disease. J Hepatol (doi: 10.1016/j.jhep.2021.09.039).

4. Petersen, A.O., Julienne, H., Hyotylainen, T., **Sen, P**., Fan, Y., Pedersen, H.K., Jantti, S., Hansen, T.H., Nielsen, T., Jorgensen, T., et al. (2021). Conjugated C-6 hydroxylated bile acids in serum relate to human metabolic health and gut Clostridia species. Sci Rep 11, 13252.

5. Dickens, A.M., **Sen, P**., Kempton, M.J., Barrantes-Vidal, N., Iyegbe, C., Nordentoft, M., Pollak, T., Riecher-Rossler, A., Ruhrmann, S., Sachs, G., et al. (2021). Dysregulated Lipid Metabolism Precedes Onset of Psychosis. Biol Psychiatry 89, 288-297.

6. Lamichhane, S., Dickens, A.M., **Sen, P**., Laurikainen, H., Borgan, F., Suvisaari, J., Hyötyläinen, T., Howes, O., Hietala, J., and Orešič, M. (2021). Association Between Circulating Lipids and Future Weight Gain in Individuals With an At-Risk Mental State and in First-Episode Psychosis. Schizophr Bull.

7. Sinisalu, L., **Sen, P**., Salihović, S., Virtanen, S.M., Hyöty, H., Ilonen, J., Toppari, J., Veijola, R., Orešič, M., Knip, M., et al. (2020). Early-life exposure to perfluorinated alkyl substances modulates lipid metabolism in progression to celiac disease. Environ Res 188, 109864.

8. **Sen, P**., Dickens, A.M., López-Bascón, M.A., Lindeman, T., Kemppainen, E., Lamichhane, S., Rönkkö, T., Ilonen, J., Toppari, J., Veijola, R., Hyöty, H., Hyötyläinen, T., Knip, M., Orešič, M. (2020). Metabolic alterations in immune cells associate with progression to type 1 diabetes. Diabetologia 63, 1017-1031.

9. McGlinchey, A., Sinioja, T., Lamichhane, S., **Sen, P**., Bodin, J., Siljander, H., Dickens, A.M., Geng, D., Carlsson, C., Duberg, D., et al. (2020). Prenatal exposure to perfluoroalkyl substances modulates neonatal serum phospholipids, increasing risk of type 1 diabetes. Environ Int 143, 105935.

10. Khoomrung, S., Nookaew, I., **Sen, P**., Olafsdottir, T.A., Persson, J., Moritz, T., Andersen, P., Harandi, A.M., and Nielsen, J. (2020). Metabolic Profiling and Compound-Class Identification Reveal Alterations in Serum Triglyceride Levels in Mice Immunized with Human Vaccine Adjuvant Alum. J Proteome Res 19, 269-278.

11. **Sen, P**., Carlsson, C., Virtanen, S.M., Simell, S., Hyöty, H., Ilonen, J., Toppari, J., Veijola, R., Hyötyläinen, T., Knip, M., et al. (2019). Persistent Alterations in Plasma Lipid Profiles Before Introduction of Gluten in the Diet Associated With Progression to Celiac Disease. Clin Transl Gastroenterol 10, 1-10.

12. Vincent, A., Savolainen, O.I., **Sen, P**., Carlsson, N.G., Almgren, A., Lindqvist, H., Lind, M.V., Undeland, I., Sandberg, A.S., and Ross, A.B. (2017). Herring and chicken/pork meals lead to differences in plasma levels of TCA intermediates and arginine metabolites in overweight and obese men and women. Mol Nutr Food Res 61.

13. Thankaswamy-Kosalai, S.*, **Sen, P.***, and Nookaew, I. (2017). Evaluation and assessment of read-mapping by multiple next-generation sequencing aligners based on genome-wide characteristics. Genomics 109, 186-191.

14. **Sen, P**., Mardinogulu, A., and Nielsen, J. (2017). Selection of complementary foods based on optimal nutritional values. Sci Rep 7, 5413.

15. Olafsdottir, T.A., Lindqvist, M., Nookaew, I., Andersen, P., Maertzdorf, J., Persson, J., Christensen, D., Zhang, Y., Anderson, J., Khoomrung, S., **Sen, P**., et al. (2016). Comparative Systems Analyses Reveal Molecular Signatures of Clinically tested Vaccine Adjuvants. Sci Rep 6, 39097.

16. Shoaie, S., Ghaffari, P., Kovatcheva-Datchary, P., Mardinoglu, A., **Sen, P**., Pujos-Guillot, E., de Wouters, T., Juste, C., Rizkalla, S., Chilloux, J., et al. (2015). Quantifying Diet-Induced Metabolic Changes of the Human Gut Microbiome. Cell Metab 22, 320-331.

17. **Sen, P**., Vial, H.J., and Radulescu, O. (2013). Kinetic modelling of phospholipid synthesis in Plasmodium knowlesi unravels crucial steps and relative importance of multiple pathways. BMC Syst Biol 7, 123.

Review articles in international peer-reviewed scientific journals

18. **Sen, P**., Lamichhane, S., Mathema, V.B., McGlinchey, A., Dickens, A.M., Khoomrung, S., and Oresic, M. (2021). Deep learning meets metabolomics: a methodological perspective. Brief Bioinform 22, 1531-1542.

19. Lamichhane, S., **Sen, P**., Alves, M.A., Ribeiro, H.C., Raunioniemi, P., Hyotylainen, T., and Oresic, M. (2021). Linking Gut Microbiome and Lipid Metabolism: Moving beyond Associations. Metabolites 11.

20. Alves, M.A., Lamichhane, S., Dickens, A., McGlinchey, A., Ribeiro, H.C., **Sen, P**., Wei, F., Hyotylainen, T., and Oresic, M. (2021). Systems biology approaches to study lipidomes in health and disease. Biochim Biophys Acta Mol Cell Biol Lipids 1866, 158857.

21. **Sen, P**., and Orešič, M. (2019). Metabolic Modelling of Human Gut Microbiota on a Genome Scale: An Overview. Metabolites 9.

22. Lamichhane, S., **Sen, P**., Dickens, A.M., Oresic, M., and Bertram, H.C. (2018). Gut metabolome meets microbiome: A methodological perspective to understand the relationship between host and microbe. Methods 149, 3-12.

23. **Sen, P**., Kemppainen, E., and Orešič, M. (2017). Perspectives on Systems Modelling of Human Peripheral Blood Mononuclear Cells. Front Mol Biosci 4, 96.

Manuscripts available as preprints and under peer-review in scientific journals

24. Lamichhane*, S., **Sen, P**.*, Dickens, A.M., Amaral Alves, M., Karkonen, T., Honkanen, J., Vatanen, T., Xavier, R.J., Hyotylainen, T., Knip, M., et al. (2021). Dynamics of gut microbiome - mediated bile acid metabolism in progression to islet autoimmunity. medRxiv, 2021.2008.2020.21262371.

25. **Sen, P**., Govaere, O., Sinioja, T., McGlinchey, A., Geng, D., Ratziu, V., Bugianesi, E., Schattenberg, J.M., Vidal-Puig, A., Allison, M., et al. (2021). Quantitative genome-scale analysis of human liver reveals dysregulation of glycosphingolipid pathways in progressive nonalcoholic fatty liver disease. medRxiv, 2021.2002.2009.21251354.

Books and chapters

26. **Sen, P**., Lamichhane, S., Dickens, A., and Oresic, M. (2019). The Role of Omic Technologies in the Study of the Human Gut Microbiome. Reference Module in Food Science.

27. Lamichhane, S., **Sen, P**., Dickens, A.M., Hyötyläinen, T., and Orešič, M. (2018). An Overview of Metabolomics Data Analysis: Current Tools and Future Perspectives. Comprehensive analytical chemistry 82, 387-413.

28. **Sen, P**., Vial, H.J., and Radulescu, O. (2016). Mathematical modelling and omic data integration to understand dynamic adaptation of Apicomplexan parasites and identify pharmaceutical targets. Comprehensive Analysis of Parasite Biology: From Metabolism to Drug Discovery 7, 457.

Editorials in peer-reviewed scientific journals

29. **Sen, P**., Hyotylainen, T., and Oresic, M. (2021). 1-deoxyceramides - key players in lipotoxicity and progression to type 2 diabetes? Acta Physiol (Oxf), e13635.

PhD Thesis

30. **Sen, P**. (2013). Integrated modelling of lipid metabolism in Plasmodium, the causative parasite of malaria (Université Montpellier II-Sciences et Techniques du Languedoc) [weblink].

***Signifies equal contributions*