Khan M., Nasiripour S., and Bopassa J., 2025, Parkinson disease signaling pathways molecular mechanisms and potential therapeutic strategies: a comprehensive review, International Journal of Molecular Sciences, 26(13): 6416.
https://doi.org/10.3390/ijms26136416

Klann E., Dissanayake U., Gurrala A., Farrer M., Shukla A., Ramirez-Zamora A., Mai V., and Vedam-Mai V., 2022, The gut–brain axis and its relation to Parkinson's disease: a review, Frontiers in Aging Neuroscience, 13: 782082.
https://doi.org/10.3389/fnagi.2021.782082

Klingelhoefer L., and Reichmann H., 2015, Pathogenesis of Parkinson disease-the gut–brain axis and environmental factors, Nature Reviews Neurology, 11: 625-636.
https://doi.org/10.1038/nrneurol.2015.197

Kumar D., Bishnoi M., Kondepudi K., and Sharma S., 2025, Gut microbiota-based interventions for parkinson's disease: neuroprotective mechanisms and current perspective, Probiotics and Antimicrobial Proteins, 17: 2438-2460.
https://doi.org/10.1007/s12602-024-10433-x

Lei Q., Wu T., Wu J., Hu X., Guan Y., Wang Y., Yan J., and Shi G., 2021, Roles of α-synuclein in gastrointestinal microbiome dysbiosis-related Parkinson's disease progression, Molecular Medicine Reports, 24(4): 734.
https://doi.org/10.3892/mmr.2021.12374

Longo S., Rizza S., and Federici M., 2023, Microbiota-gut-brain axis: relationships among the vagus nerve gut microbiota obesity and diabetes, Acta Diabetologica, 60: 1007-1017.
https://doi.org/10.1007/s00592-023-02088-x

Luo Y., Xiang Y., Liu J., Hu Y., and Guo J., 2025, A multi-omics framework based on machine learning as a predictor of cognitive impairment progression in early Parkinson's disease, Neurology and Therapy, 14: 643-658.
https://doi.org/10.1007/s40120-025-00716-y

Mahbub N., Islam M., Hong S., and Chung H., 2024, Dysbiosis of the gut microbiota and its effect on α-synuclein and prion protein misfolding: consequences for neurodegeneration, Frontiers in Cellular and Infection Microbiology, 14: 1348279.
https://doi.org/10.3389/fcimb.2024.1348279

Makarious M., Leonard H., Vitale D., Iwaki H., Sargent L., Dadu A., Violich I., Hutchins E., Saffo D., Bandres-Ciga S., Kim J., Song Y., Bookman M., Nojopranoto W., Campbell R., Hashemi S., Botía J., Carter J., Maleknia M., Craig D., Keuren-Jensen K., Morris H., Hardy J., Blauwendraat C., Singleton A., Faghri F., and Nalls M., 2021, Multi-modality machine learning predicting Parkinson's disease, NPJ Parkinson's Disease, 8(1): 35.
https://doi.org/10.1038/s41531-022-00288-w

Menozzi E., Schapira A., and Borghammer P., 2025, The gut-brain axis in Parkinson disease: emerging concepts and therapeutic implications, Movement Disorders Clinical Practice, 12: 904-916.
https://doi.org/10.1002/mdc3.70029

Metta V., Leta V., Mrudula K., Prashanth L., Goyal V., Borgohain R., Chung-Faye G., and Chaudhuri K., 2021, Gastrointestinal dysfunction in Parkinson's disease: molecular pathology and implications of gut microbiome probiotics and fecal microbiota transplantation, Journal of Neurology, 269: 1154-1163.
https://doi.org/10.1007/s00415-021-10567-w

Montalbán-Rodríguez A., Abalo R., and López-Gómez L., 2024, From the gut to the brain: the role of enteric glial cells and their involvement in the pathogenesis of Parkinson's disease, International Journal of Molecular Sciences, 25(2): 1294.
https://doi.org/10.3390/ijms25021294

Munoz-Pinto M., Candeias E., Melo-Marques I., Esteves A., Maranha A., Magalhães J., Carneiro D., Sant'Anna M., Pereira-Santos A., Abreu A., Nunes-Costa D., Alarico S., Tiago I., Morgadinho A., Lemos J., Figueiredo P., Januário C., Empadinhas N., and Cardoso S., 2024, Gut-first Parkinson's disease is encoded by gut dysbiome, Molecular Neurodegeneration, 19(1): 78.
https://doi.org/10.1186/s13024-024-00766-0

Nishiwaki H., Ueyama J., Ito M., Hamaguchi T., Takimoto K., Maeda T., Kashihara K., Tsuboi Y., Mori H., Kurokawa K., Katsuno M., Hirayama M., and Ohno K., 2024, Meta-analysis of shotgun sequencing of gut microbiota in Parkinson's disease, NPJ Parkinson's Disease, 10(1): 106.
https://doi.org/10.1038/s41531-024-00724-z

Oliver P., Civitelli L., and Hu M., 2025, The gut–brain axis in early Parkinson's disease: from prodrome to prevention, Journal of Neurology, 272(6): 413.
https://doi.org/10.1007/s00415-025-13138-5

Panaitescu P., Răzniceanu V., Mocrei-Rebrean Ș., Neculicioiu V., Dragoș H., Costache C., and Filip G., 2024, The effect of gut microbiota-targeted interventions on neuroinflammation and motor function in Parkinson's disease animal models-a systematic review, Current Issues in Molecular Biology, 46: 3946-3974.
https://doi.org/10.3390/cimb46050244

Porwolik H., Porwolik A., Bodera M., Szydłowski R., Porwolik A., Skrzypiec B., Hamerla A., Kaźmierska A., and Gawron J., 2025, The role of gut microbiota in neurodegenerative diseases, Journal of Education Health and Sport, 77: 56676.
https://doi.org/10.12775/jehs.2025.77.56676

Qian Y., Yang X., Xu S., Huang P., Li B., Du J., He Y., Su B., Xu L., Wang L., Huang R., Chen S., and Xiao Q., 2020, Gut metagenomics-derived genes as potential biomarkers of Parkinson's disease, Brain, 143(8): 2474-2489.
https://doi.org/10.1093/brain/awaa201