

How do the bugs in your gut affect neurodegenerative and psychiatric diseases?

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Credit: Mary Ann Liebert, Inc., publishers

A growing body of scientific and medical evidence continues to shed light on the complex interaction between metabolic pathways affected by microorganisms living in the human gut and gene expression, immune function, and inflammation that can contribute to a range of cognitive, psychiatric, and neurodegenerative disorders. The Comprehensive Review article, "Microbiota & Neurological Disorders: A Gut Feeling," published in *BioResearch Open Access*, a peer-reviewed open access journal from Mary Ann Liebert, Inc., publishers, explores this rapidly evolving field of study and how it is advancing toward the development of new therapies and diagnostics across a broad spectrum of indications. The article is available to download on the *BioResearch Open Access* website.

Walter Moos and coauthors from University of California San Francisco, Boston University and BU School of Medicine (Boston, MA), McGill University (Montreal, Canada), Harvard University (Cambridge, MA), Consulate General of Greece in Boston), Advanced Dental Associates of New England (Woburn, MA), and PhenoMatriX (Boston, MA), discuss the many roles the gut microbiome plays in maintaining human health and survival and how imbalances in the microbiome may be linked to neurological disorders including autism spectrum disorder, schizophrenia, Alzheimer's disease, and Parkinson's disease. The researchers describe the emerging use of synthetic biology to develop engineered bacteria ("living pills") with potential therapeutic applications for remodeling the gut microbiota.

"This comprehensive review article provides a full resource of the most up to date information available on the linkage between brain and gut with respect to the human microbiome," says *BioResearch Open Access* Editor Jane Taylor, PhD, MRC Centre for Regenerative Medicine, University of Edinburgh, Scotland. "It will be of interest to clinicians, synthetic biologists and pharmaceutical chemists alike."

More information: Walter H. Moos et al, Microbiota and Neurological Disorders: A Gut Feeling, *BioResearch Open Access* (2016). [DOI: 10.1089/biores.2016.0010](https://doi.org/10.1089/biores.2016.0010)

Provided by Mary Ann Liebert, Inc

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