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The Role of Metagenomics to Study the Microbiome in Clinical Trials

The application of omics techniques in analysing the microbiome within clinical trials has become a cornerstone in biomedical research. Genomics, transcriptomics, and metabolomics, collectively provide an intricate understanding of microbial communities and their functional roles in health and disease. By employing NGS and complementary advanced bioinformatics tools, we decipher the composition, dynamics, and functional potential of the microbiome, enabling diagnostic, therapeutic targets as well as novel LPB selection.

We present recent advances in omics technologies and how we can exploit microbiome data to gain holistic understanding of the microbiome-host interplay, informing clinical decision-making and advancing our knowledge of interplay between host and microbiome.