

## **The Influence of the Human Gut Microbiome on Crohn's Disease**

The human gut microbiome is the collection of bacteria, fungi, and archaea that are present in the gastrointestinal system. Though previously believed that the microbiome had little effect on human health, recent studies are showing a possible connection between the microbiome and several diseases, such as Crohn's disease, a painful inflammatory bowel disease. This study is being conducted to discover what microorganisms in the gastrointestinal system are associated, positively or negatively, with Crohn's disease. The study also aims to identify which other host species the microorganisms associated with Crohn's disease are found in. Journal articles will be reviewed to gather an initial collection of potential microorganisms associated with Crohn's disease. A commonly used taxonomic biomarker (16S) for each microorganism of interest will be retrieved from the Ribosomal Database Project. Additional host species containing the same microorganisms (associated with Crohn's disease) in their gastrointestinal system will be identified using the Basic Local Alignment Search Tool (BLAST). It is hoped that by uncovering these connections our results will lead to a potential greater understanding of the role of the gut microbiome in the pathogenesis of Crohn's disease and related irritable bowel diseases.