Gut bacteria may play vital role in Crohn's disease

The GLP aggregated and excerpted this blog/article to reflect the diversity of news, opinion and analysis.

Good gut bacteria might not help people with Crohn's disease.

Protective microbial messages go unread in mice and in human immune cells with certain defective genes, researchers report in *Science*.

The findings are the first to tie together the roles of genes and beneficial microbes in the inflammatory bowel disease, says biologist Brett Finlay of the University of British Columbia in Vancouver, who was not involved in the new work.

"This is a major step forward in this area," he says. Human genes and friendly microbes work together to control inflammation, he says. "And when you muck that up, things can go awry."

In Crohn's disease, the immune system riles up too easily, trigging chronic inflammation. Scientists don't know why exactly people's immune systems go haywire. But researchers have linked the disease to glitches in nearly 200 genes, including *ATG16L1* and *NOD2,* which typically help kill bad bacteria in the gut.

Researchers have also reported that people with Crohn's have a different collection of gut microbes compared with that of healthy people, says study coauthor and Caltech microbiologist Sarkis Mazmanian. But though "there's a huge body of literature on the genome and on the microbiome," he says, "no one knew what the interplay was between the two."

Read full, original post: Some Crohn's genes make cells deaf to messages from good gut bacteria