## Bacteria engineered to sniff out tumors could help cancer diagnosis

<u>Probiotics</u> are hot. Bacteria that we consume in foods like yogurt, miso and pickles can help our gut microbiomes stay happy and healthy. Now there might be another role for those probiotic bacteria: <u>cancer</u> detection. Two papers in the journal *Science Translational Medicine* explain how researchers hope to get bacteria to be diagnostic tools.

Sangeeta Bhatia of MIT is a liver expert and senior author of one of the papers. Her lab had been trying to figure out how to get nanoparticles to the liver that would send a signal detectable in urine if they encountered a tumor. Cancers that start in the colon or pancreas can metastasize to the liver, which can be deadly.

SB: "And one of the students on the team had the idea that if you can imagine that there's a material, a diagnostic material, that would grow itself then you wouldn't need very much of it to arrive at the tumor and sort of self-amplify. And we realized that bacteria are in many ways just such a device. That they can naturally home in on tumors...so we thought maybe we can hijack that ability of bacteria to home in on tumors and self-amplify to create a urinary diagnostic."

The GLP aggregated and excerpted this blog/article to reflect the diversity of news, opinion and analysis. Read full, original post: Programmed Bacteria Can Detect Tumors