

## **Second Genome Raises \$5M Series A To Map Microbes**

By Timothy Hay

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Second Genome Inc., a company that has developed a platform to map the microbes in the body in a bid to further personalize medicine, says it has raised a \$5 million Series A round to continue its research and further develop its diagnostic products.

The round was co-led by new investors Advanced Technology Ventures and Morgenthaler Ventures, joined by returning backers WavePoint Ventures, Seraph Group and several individuals, Chief Executive Peter DiLaura said.

San Francisco-based Second Genome raised \$1.2 million in seed funding last year from WavePoint, Seraph and individuals, he said.

The company's name, Second Genome, is a nod to the Human Genome Project, a major scientific advancement in the last decade that has enabled scientists to fully map the genetic make-up of human beings for the first time.

Second Genome is on a similar track, the CEO said, but it is mapping the microbiome, or the full make-up of microbes within the body or within a given tissue sample.

The company is working on both diagnostic and therapeutic products. The diagnostic tests, which will determine what microbes are present in a patient or test sample, will enable doctors to refine treatments, DiLaura said, because microbes interact with other elements in the body, including genes.

The company's therapeutic products--- which are still in development--could be used to target gastrointestinal problems like Crohn's disease, as microbes play a major role in digestion.

Mike Carusi of Advanced Technology Ventures and Jason Lettmann of Morgenthaler have joined Second Genome's board of directors as a result of the Series A, the company said.

In recent years, researchers studying microscopic organisms have shifted their focus from harmful bacteria to the many types of microbes that have co-evolved with humans and can be beneficial. In 2007, the National Institutes of Health Common Fund's Roadmap for Medical Research launched the Human Microbiome Project, a formal study of these types of microorganisms and their role in human health.

A number of companies have begun to emerge further studying the links between the microbiome and health.

PureTech, a Boston firm that launches life sciences companies, has seeded Vedanta Biosciences, a company studying how microbes influence conditions like Crohn's disease, ulcerative colitis, diabetes and allergies. Vedanta is advancing work by University of Tokyo scientists, who have found that certain gut bacteria control immune cells that combat allergies and autoimmune disease, the company has told VentureWire.

A number of other companies are offering products purported to contain beneficial microbes, including New Orleans-based NuMe Health LLC, whose products are designed to promote the growth of specific bacteria in the hope of restoring better balance to the gastrointestinal tract. The company began raising a \$2 million Series A-1 round this summer from BVM Capital and other investors, VentureWire records show.

