

## Recent patents in microbiomes and microbial genomics

Patent number	Description	Assignee	Inventor	Date
US 9,610,307	Pharmaceutical compositions containing microbial entities; may be used in conjunction with one or more prebiotics to treat or prevent disorders of the local or systemic microbiome in a subject.	Evelo Biosciences (Cambridge, MA, USA)	Berry DW, Kaplan J, Rahman S	4/4/2017
US 9,585,920	Administration of beneficial bacteria to an individual's microbiome that have been modified so as to produce effective amounts of desired compositions, compounds, agents, e.g., tomatidine, p53 protein, etc., is employed to address cancerous conditions. The administration of such beneficial bacteria and microbes to an individual's microbiome invokes either an active (or a passive) immune response to destroy, weaken or render less invasive certain cancerous cells, and preferably maintains muscle tissue to combat cancer cachexia.	Kovarik KR, Kovarik JE	Kovarik KR, Kovarik JE	3/7/2017
US 9,486,487	Methods, systems, compositions, and kits to address the need for microbiome-related treatment of health conditions and disease.	Whole Biome (San Francisco)	Cutcliffe C, Eid JS, Bullard JH, Schicklberger MF	11/8/2016
US 9,457,077	A method and system for targeting the microbiome to promote health, involving exposing an expectant mother to immunologic agents and allergens in a fashion (e.g., via exposure to farm animal manure-containing soils) that charges their immune system and that of their fetus(es) so that their babies, once born, are provided with immunity against a variety of autoimmune diseases, including allergies commonly and increasingly experienced in modern urban environments.	Kovarik KR, Kovarik JE	Kovarik KR, Kovarik JE	10/4/2016
US 9,192,361	A fecal microbiome transplant material preparation method and apparatus for the preparation of fecal material for a fecal transplant.	Stevens CJ	Stevens CJ	11/24/2015
US 9,040,101	Compositions and methods for treating diabetes; in particular, compositions and methods for treating diabetes utilizing a gastrointestinal microbiome-modulating composition.	MicroBiome Therapeutics (Broomfield, CO, USA)	Heiman ML, Stull DP, Peno JW	5/26/2015
US 8,980,553	Compositions and methods for enriching non-target polynucleotides from a mixture of non-target and target polynucleotides where differences between the target polynucleotides and the non-target polynucleotides include the extent of modified bases that are present in a greater density in the target polynucleotides than in the non-target polynucleotides. This permits the target polynucleotides to be selectively and rapidly bound to an affinity matrix such as affinity protein-coated magnetic beads providing enrichment of the non-target polynucleotides in the supernatant. One use of this enrichment is to remove human genomic DNA from a mixture of DNAs obtained from human tissue samples to enrich for polynucleotides in a microbiome so as to characterize the microbiome by DNA sequencing.	New England BioLabs (Ipswich, MA, USA)	Feehery GR, Stewart F, McFarland J, Pradhan S	3/17/2015
US 8,713,025	A system, method and computer program product for developing an entity context frame or situation summary before using said context frame/situation summary to develop an index, perform a context search and return prioritized results. The search results may comprise a plurality of health-related data where said health-related data comprise a plurality of microbiome data.	Square Halt Solutions (Wilmington, DE, USA)	Eder JS	4/29/2014

Source: United States Patent and Trademark Office (<http://www.uspto.gov>).