

Gnubiotics gains allowance of patent of microbiome markers of pet obesity from the European Patent Office

Gnubiotics Sciences SA (Gnubiotics), a Swiss biotech company pioneering novel microbiome targeted solutions for humans and companion animals, recently announced the allowance from the European Patent Office (EPO) for its patent application 19812838.1 (EPO publication 3695018). This is a key patent filing covering the microbiome-based prediction, identification, and treatment of feline obesity.

Gnubiotics has a growing pipeline of microbiome targeted candidates designed for both animals and humans. Beyond its pipeline, the company has also developed REVELAbiome™, a proprietary ultra-high resolution sequencing approach that enables detection and quantitation of bacterial taxonomy up to the strain level.

Bacteria that reside in human and animal guts are called collectively the gut microbiome. These bacteria play a vital role in the digestion of essential nutrients as well as defence against undesirable gut microbes. Imbalances in the microbiome can be correlated to a range of diseases, including obesity.

According to the Association for Pet Obesity Prevention, an estimated 56% of dogs and 60% of cats were overweight or obese in 2018. Excess weight in pets may lead to conditions such as high blood pressure, difficulty breathing, arthritis and joint health issues, as well as a weakened immune system.

"This allowed patent will be the first covering a microbiome-based paradigm to predict, diagnose and treat feline obesity; a major cause of diabetes and chronic kidney disease (CKD) in felines. We believe that early detection and predictive microbiome-based modalities could provide more effective methods for management of chronic diseases in our pets," commented Dr. Yemi Adesokan, Chief Scientific Officer and Co-Founder of Gnubiotics.

Scientists have long studied the links between the gut microbiome and body weight. However, the specific bacterial species and strains correlated to weight had remained unclear, until this filing.

"Our quest to find these species and strains brought us deep into the microbiome of these felines to gain access into what truly differentiates obese and lean phenotypes.

We are excited that, through this innovation, we can better serve our pets and monitor their weight before it becomes too late. This is a fundamental step in understanding the microbiome in general and a natural progression towards our human applications where we continue to use the same approach to understand and stratify patients," added Adesokan.

REVELAbiome™, Gnubiotics product based on these novel markers in designed to unlock the immense potential of the microbiome as a predictor of a range of conditions and paves the way for early, new and personalized care options for pets. This allowed patent by the EPO, enables a new standard in animal care.



Yemi Adesokan

Yemi Adesokan is Chief Scientific Officer and Co-Founder at Gnubiotics SA, a Lausanne, Switzerland biotech company pioneering the development of Human Milk Oligosaccharides (HMOs) for infants and adults as well as Animal Milk Oligosaccharides (AMOs) for companion animals. Yemi has been recognized for his innovative and pioneering work with awards such as the Boston Business Journal 40 under 40 award and the MIT Technology Review's annual list of 35 top global innovators under the age of 35 TR35. Yemi has a PhD in Chemistry from the University of California, Irvine and completed a post-doctoral fellowship in Genetics with George Church at Harvard Medical School.