

## **The Role of the Microbiome on health and behaviour**

This talk provides a brief overview of the current knowledge about the connection between the microbiome and its potential effect on the body, brain and behaviour of dogs and cats. This is a rapidly evolving area, with our knowledge of the gut microbiota in many species increasing rapidly, with 10 000 papers published in recent years. What do we currently know, and what are the potential clinical implications for companion animals? Nutritional management affects not only the body, but the brain and behaviour. SSRI's can affect the microbiome directly and this can affect their efficacy. The microbiota can directly influence brain function by regulating neurotransmitter production. Faecal microbial transplants, probiotics and prebiotics – are they the future? They are a part of the future, but individualised treatments, looking at microbiome signatures to predict disease incidence, progression and response to treatments are future directions for both medical and emotional health.