Junior researcher awarded £1.5 million fellowship to explore the role of the human microbiome in health and disease

Dr Alexandre Almeida, Principal Investigator at the Department of Veterinary Medicine, has been awarded a £1.5 million fellowship by the Medical Research Council (MRC) to explore the beneficial role and antimicrobial potential of novel human gut bacteria.

The complex community of microorganisms living in and on us, known as the human microbiota, is strongly linked with many different aspects of health and disease. However, a substantial portion of this diverse group of microbes cannot yet be cultured in the lab and hence experimentally characterized. DNA sequencing approaches enable access to this hidden microbial universe, but its biological role remains unclear.

"It is an exciting time to be working in the microbiome field. Even though we know that the microbiome is linked with the incidence of a wide range of diseases, there are still so many unknown species and biology to be explored. With this MRC Career Development Award, I will build a new research team to investigate at greater detail specific microbiome species with potential beneficial roles for human health"

Dr Almeida began his academic career in Portugal, undertaking his undergraduate and postgraduate degrees in Biochemistry and Forensic Genetics at the University of Porto. In 2013 he moved to Paris to pursue his PhD in Microbiology at the Institut Pasteur in the lab of Dr Philippe Glaser. Since 2017, he has worked at the European Bioinformatics Institute in Cambridge investigating the hidden secrets of the human gut microbiome under the supervision of Dr Rob Finn. Starting in May, Dr Almeida takes up his appointment as Principal Investigator at the Department of Veterinary Medicine funded as part of the MRC Career Development Award scheme, which enables early career researchers to transition into independent roles and establish their first research team. The £1.5 million funding will enable Dr Almeida's team to combine cutting-edge bioinformatics, microbiology and biochemistry approaches to study the gut microbiota with unprecedented detail and work towards developing new therapies for treating chronic diseases such as inflammatory bowel disease and combat multidrug-resistant pathogens.

Dr Almeida is open to discussing Postdoc/PhD opportunities and other collaborations. Further information can be found in his Departmental profile page (link: https://www.vet.cam.ac.uk/staff/dr-alexandre-almeida).