

Christine Tait-Burkard

Christine Tait-Burkard is a group leader at The Roslin Institute, University of Edinburgh, and an expert in virus–host interactions, with particular expertise in coronaviruses and arteriviruses. Her research focuses on understanding how livestock and zoonotic viruses interact with their hosts and using this knowledge to identify genetic determinants of disease susceptibility and resistance and to develop new approaches to disease control. A major focus of her work is the application of genome-editing technologies to improve disease resistance in livestock. Her research has contributed to the development of pigs resistant to porcine reproductive and respiratory syndrome virus (PRRSV), including targeted modification of the CD163 receptor, and more recently to genome-editing approaches for resistance to other important livestock viruses, including classical swine fever virus. By combining virology, functional genomics and genome editing, her research aims to translate fundamental understanding of virus–host interactions into practical approaches that improve animal health and welfare and support more resilient and sustainable livestock production.