

DISTINGUISHED LECTURE



ENGINEERING DISEASE RESISTANCE IN LIVESTOCK

DATE: August 5, 2019

TIME: 11:30 AM

VENUE: NIAB Auditorium

Prof. Bruce Whitelaw

Chairman Edinburgh Genomics

Chairman Roslin Innovation Centre

University of Edinburgh, UK

Bruce Whitelaw was awarded a BSc degree in Medical Microbiology (Virology elective) from the University of Edinburgh in 1982 and his PhD in 1987 from the University of Glasgow. Beginning with his research career with the idea of producing human pharmaceutical proteins in animal bioreactors at AFRC, Bruce held several key research positions at BBRSC's Institute of Animal Physiology and Genetics Research, Roslin Institute and, currently Bruce is the Deputy Director and Director of Partnerships at The Roslin Institute and Professor of Animal Biotechnology at the Royal (Dick) School of Veterinary Studies.

Research summary

Having pioneered the use of lentivirus vectors for transgene delivery, Bruce is currently establishing robust methodology for genome editing in livestock. His group investigates the molecular events that accompany changes in the expression status of genes in mammals. Bruce aims to develop and exploit gene transfer technology to investigate differentiation in mammals and exemplify the use of this technology through the generation of animal models of human disease, novel in vivo screening resources, and animals more able to combat infectious disease. His work advances our understanding of how cellular signals integrate to allow tissues to work normally in the whole animal, while identifying routes to intervene when normal development is perturbed through disease.