2021 IETS Foundation Early Career Achievement Award (Scientist)



Pablo Bermejo-Álvarez

Pablo Bermejo-Álvarez obtained his DVM and PhD degrees from the University Complutense in Madrid, Spain. After his PhD, he worked as a postdoctoral researcher at the University of Missouri and University of Maryland. Currently, he is a tenured scientist at the Animal Reproduction Department of the Spanish National Institute for Agriculture Research (INIA), where he leads the Animal

Genomics Engineering Group, funded by National and European (ERC) projects. His research interests are focused on understanding the developmental processes occurring during conceptus elongation in ungulates and the molecular roots of reproductive failures, using CRISPR technology and *in vitro* approaches. Recent advances of his group include (1) the development of a novel protocol to minimize mosaicism and boost KO generation rates following CRISPRmediated genome edition in bovine embryos, (2) a post-hatching culture system achieving epiblast survival and complete hypoblast migration of bovine conceptuses, (3) the discovery of the role of the zona pellucida protein ZP4 by generating *ZP4* KO rabbits, and (4) uncovering the role of the third sperm protein known to be required for fertilization (TMEM95).