

Vice President Nominee

Irina Polejaeva, PhD (USA)



Irina Polejaeva earned her MS degree in animal science, and a PhD in developmental biology from the National Institute of Animal Science in Moscow, Russia (1993). She is currently a professor in the Department of Animal, Dairy and Veterinary Sciences at Utah State University (USU) and is also a member of the USU Veterinary Diagnostics and Infectious Diseases Team. Her primary research interests are the development of genetically engineered large animal models for biomedical and agricultural applications using somatic cell nuclear transfer (SCNT) and CRISPR/Cas9 genome editing techniques; and cloning efficiency improvement through understanding the molecular mechanism of epigenetic reprogramming. She regularly mentors graduate, undergraduate, and veterinary students and maintains an active postdoctoral program. Prior to joining USU, Polejaeva worked as the project manager for the Porcine Nuclear Transfer Program at PPL Therapeutics Inc. (Blacksburg, VA, USA) and then served for eight years as the Chief Scientific Officer at ViaGen Inc. (Austin, TX, USA). Her research led to the generation of the world's first cloned pigs by SCNT and the birth of the first 1,3-galactosyltransferase-deficient pigs. More recently, her laboratory was the first to report on efficient gene knockouts in goats using the CRISPR/Cas9 and generate a novel sheep model for cystic fibrosis.

Polejaeva attended her first IETS meeting in 1995 in Calgary, Alberta, and has been an active member of the IETS since then. She has served the IETS as a member of the HASAC Food Safety Subcommittee (2005–2012) and was actively involved in the cloning technology risk assessment. She has also served as an editor and reviewer for numerous IETS conferences. Additionally, Polejaeva has been a member of the IETS Foundation board (2013–2015), where she has been chairing the Peter Farin Student Travel Award Committee. More recently, she was elected to the Board of Governors, serving for three years as the chair of the Exhibit and Sponsorship Committee (2016–2018). Since 2016, Polejaeva has been also serving as the chair of the Organizing and Scientific Committee for the Biannual International Large Animal Genetic Engineering Summit that brings together reproductive biologists, geneticists, molecular biologists, animal model developers, and representatives of federal research and regulatory agencies. She has also provided expert peer reviews for the National Institute of Health (NIH) and the European Cooperation in Science and Technology (COST Association).

Polejaeva will continue working toward increasing the influence of the IETS in guiding regulatory policies related to embryo technologies. With her experience in both industry and academia, one of Polejaeva's goals is to work with the society to continue addressing the needs of its diverse members and making the annual meetings attractive to veterinary practitioners as well as basic and applied researchers. She is also committed to strengthening outreach and educational programs to attract young professionals to the society.