

2018 IETS Foundation Early Career Achievement Award (Scientist)

Kiho Lee

Kiho Lee graduated from Seoul National University with a Bachelor's degree in Animal Sciences. Then, he received MS and PhD from Purdue University, and Postdoc training from University of Missouri-Columbia. While at University of Missouri, he generated first immune-deficient pigs that could support growth and proliferation of human induced pluripotent stem cells. He joined Virginia Tech in 2013 and is currently an assistant professor in the Department of Animal and Poultry Sciences. Dr. Lee's lab currently focuses on early embryonic development using the pig as a model. Understanding mechanisms underlying the dynamic changes that occur during embryonic development can lead us to develop more efficient ways to generate and manipulate embryos *in vitro*. One of his main research interests is to identify the mechanism of epigenetic reprogramming by oocytes after fertilization. Specifically, he is interested in how oocytes can modulate the status of DNA methylation during early embryo development. His group also focuses on developing optimal use of gene-editing systems to introduce targeted modifications during embryogenesis in pigs and cattle. Using this approach, his group has generated various types of genetically engineered pigs for agriculture and medicine.

