

Defining Molecular Reprogramming Events at the Onset of Bovine and Porcine Development

The global onset of transcription and translation of the embryonic genome is the most critical event of early development. The embryonic genome activation (EGA) is a remarkable event in which following fertilization a number of stage specific genes are activated while maternal RNAs and proteins are degraded. Reprogramming of gene expression during embryogenesis sets the stage for later events associated with the first differentiative events, successful embryo implantation, and fetal development. How EGA is achieved and regulated in bovine and porcine still remains one of the most fundamental, unsolved questions of modern molecular embryology.

