

Regulation of embryo development by the oviductal environment

Abstract: Environmental exposures, particularly during developmentally sensitive time windows, can impact on later health outcomes in children and adults. Although this was a novel idea that encountered widespread skepticism when first proposed more than 25 years ago, it is now generally accepted due to robust documentation of these effects in both animal models and humans. Now known as DOHaD (Developmental Origins of Health and Disease), the field is moving toward defining the mechanisms by which early exposures modulate long-term physiology. A major window of developmental sensitivity is the very beginning of embryo development: during fertilization and preimplantation development within the oviduct as the embryo moves toward the uterus. This talk will provide data regarding how the oviduct responds to environmental cues in modulating survival and development of the early embryo.