

EMBRYONIC DEVELOPMENT THROUGH THE LENS OF GENOMICS

Dunja Vučenović

Illumina, UK

After fertilization, an embryo develops according to a precise genetic program. Although the morphological changes that occur during the embryonic development have been known for some time, to date, little is known about the underlying molecular mechanisms. Around the turn of this century, biology witnessed a tremendous increase in the development of new technologies, one of the most important ones being genomic sequencing. This enabled surprising insights into the developmental processes. In this lecture, I will talk about how genes are activated and how their regulation in space and time influences the development of different organs and tissues.