

Affiliation: Masaryk University, Faculty of Medicine

Study program: Biomedical Sciences

Specialization: Cell and Tissue Morphology

Supervisor: PharmDr. Zuzana Holubcová PhD (zholub@med.muni.cz)

Topic: Cellular and molecular determinants of early embryogenesis

Annotation:

Cellular and molecular mechanisms underlying embryonic development remain largely unexplored. A lack of fundamental understanding of basic biological events behind early human embryogenesis contrasts with the advancement of assisted reproduction techniques and the global rise of fertility issues. This PhD thesis will focus on the morphokinetics of preimplantation embryos and its clinical significance. The laboratory models will be employed to dissect molecular pathways responsible for embryonic cell division and early fate decisions. The application of state-of-the-art microscopy and advanced molecular biology methods will enable a detailed description of clinically relevant biological milestones at the very beginning of human life.

Additional information:

Visit our website to find more information about the supervisor, publication activity, current international collaborations and grants, and successful graduates:

<https://www2.med.muni.cz/histology/zuzana-holubcova/>