

Studijní obor: Biomedical Sciences - Cell and Tissue Morphology
Pracoviště: Ústav histologie a embryologie, Lékařská fakulta, Masarykova univerzita

Školitel: doc. RNDr. Petr Vaňhara, PhD.
Vedoucí pracoviště: doc. MVDr. Aleš Hampl, CSc.

Počet stipendijních míst: 1
Forma studia: prezenční studium

Title: In vitro histogenesis for production of functional epithelial tissues

Annotation

Histogenesis in vitro represents a state-of-the-art concept with clear applications in regenerative medicine and tissue engineering, as well as in experimental research addressing molecular and cellular dynamics in developing organs.

This work will contribute to development of three-dimensional cellular models addressing formation of epithelial tissues in selected histogenetic trajectories, and identification of critical molecular circuitries involved in acquisition of morphological and functional hallmarks of differentiated tissues.

The applicant during his/her studies will become familiar with multiple lab techniques including working with various somatic and stem cell models, state-of-the-art visualization techniques (confocal and high-res microscopy, transmission and scanning electron microscopy) and advanced molecular or bioanalytical tools. Student will join an established research team and during studies will have an opportunity to contribute to teaching of medical and life science students.

Požadavky na uchazeče:

Vzdělání: Ukončené magisterské studium (nebo letos plánované obhajoby) se zaměřením na buněčnou, molekulární nebo vývojovou biologii nebo ekvivalent oboru

Master degree in cell, molecular or developmental biology, or equivalent.

Jazyky: Angličtina

English

Ostatní: Schopnost laboratorní práce, schopnost pracovat v týmu, motivace pracovat v oblasti tkáňové biologie a inženýrství.

Laboratory skill, team work, motivation to do research in tissue biology and engineering

Informace o školiteli:

Aktuální informace o školiteli lze najít na
Supervisor info:

<https://histology.med.muni.cz/petr-vanhara>