Masaryk University, Brno, Czech Republic invites excellent scientists to apply for a

POSTDOC POSITION in MAMMARY GLAND BIOLOGY

Description:
Research group of Dr. Zuzana Koledova studies processes, which govern mammary epithelial morphogenesis and homeostasis, and deregulation of which can lead to breast cancer. The main focus of the lab is on the role of mammary stromal cells in regulation of epithelial behaviour and the interplay of fibroblast growth factor signalling, cytokines and hormones in mammary gland morphogenesis and breast cancer. The approaches include advanced 3D organoid cultures of mouse and human primary tissue, genetic mouse models, state-of-the-art imaging techniques and mathematical modelling.

Recently, using primary mouse mammary organoid co-cultures with fibroblasts, Dr. Koledova’s team has uncovered a novel mechanism, by which mammary fibroblasts mediate mammary epithelial morphogenesis. The candidate will investigate this mechanism more deeply. The specific aims include, but are not limited to: 1) Investigation of this mechanism in vivo using conditional knockout mouse models; 2) Testing of the conservation of this mechanism in human using advanced co-cultures of primary human mammary organoids and fibroblasts, in combination with genetic manipulation and live cell imaging; 3) Elucidation of the regulation of this mechanism by oestrous cycle; 4) Investigation of the role of fibroblast heterogeneity in fibroblast-induced branching using transcriptomics, lineage tracing and functional analysis.

Selection of our recent publications:

The successful candidate should:
- be a researcher who has received a PhD or its equivalent within the last 7 years
- be a researcher who has worked at least two whole years in the last three outside the territory of the Czech Republic in the field of research with a working time of at least 0.5 full-time equivalent, or who has been PhD student (or equivalent) abroad
- have a publishing record – in the last three years at least two publication outputs registered in the Thomson Reuters Web of Science, Scopus or ERIH PLUS databases and at the same time publications such as “articles”, “books”, “book chapters”, “letters” and “reviews”.
Specific criteria that are desired:
- experience in the field of developmental or cell biology
- experience in 3D cell culture techniques, live cell imaging and image analysis is highly desirable and advantageous
- the ideal candidate should be intellectually curious, self-driven and productive, have excellent communication skills, and enjoy working in a committed team

Anticipated start date: The position is available from March/April 2020 or upon agreement but no later than by 30th November 2020.

The application should include:
- a CV including a summary of education and research experience, publication activity, involvement in research grants, etc.
- a scanned copy of the PhD diploma or an official letter certifying submission of a doctoral thesis for thesis defence and the planned defence date
- a motivation letter
- at least two reference letters

The submission deadline is 29th February 2020.
Please submit your application by e-mail to koledova@med.muni.cz and vrablikova@med.muni.cz
Informal enquiries are welcome at koledova@med.muni.cz
A review of applications will commence immediately after the deadline. Short-listed candidates will be invited for an interview within one month of the deadline.

Masaryk University offers:
- the opportunity to get an interesting job in a dynamically expanding university area
- diverse and challenging work in an excellent research environment
- tenure track with an initial appointment for 2 years
- a professional team and pleasant working conditions
- interaction with leading scientists in an inspiring, internationalised environment
- a welcoming service for the successful candidate and his/her family

Further information about:
- Postdoc@MUNI is available at http://postdoc.muni.cz
- Dr. Koledova’s research group is available at https://www2.med.muni.cz/histology/zuzana-koledova/
- Masaryk University is available at https://www.muni.cz/en
- Brno is available at https://www.gotobrno.cz/en/