Masaryk University, Brno, Czech Republic invites excellent scientists to apply for a
POSTDOC in the field of CELL/STRUCTURAL BIOLOGY
Joint position Bryja & Damborsky labs

Description:

The project will focus on the biochemical and structural biology analysis of the role of casein kinase 1 delta and/or epsilon (CK1d/e) in the Wnt signaling pathway. CK1 d/e is a crucial but still understudied component of several key developmental signaling pathways - including Wnt/beta-catenin, Wnt/PCP, Hedgehog and Hippo - that are attracting growing attention mainly due to their role in cancer and other human pathologies. Our long term interest in this kinase [https://www.ncbi.nlm.nih.gov/pubmed/?term=bryja+v+and+casein+kinase](https://www.ncbi.nlm.nih.gov/pubmed/?term=bryja+v+and+casein+kinase) has now resulted in several recent breakthrough discoveries - including validation of CK1 as a therapeutic target in leukemia (Janovska et al., Blood), production of a series of super-selective and subnanomolar dose inhibitors (unpublished) and description of CK1 effects on Dishevelled conformational dynamics uncovered by novel FRET-based system.

The proposed project will build on this work and will aim to combine proteomics, structural and molecular biology to:
- understand the mechanism of activation of CK1 in the morphogenetic signaling pathways
- obtain molecular structures of CK1 with the panel of novel inhibitors
- obtain molecular structures of complexes of full length CK1 with its key target in the Wnt pathway - Dishevelled

Relevant web pages:
- Damborsky Lab - [https://loschmidt.chemi.muni.cz/peg/](https://loschmidt.chemi.muni.cz/peg/)

Relevant recent literature:


Masaryk University

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Bank account: KB Brno, Ref. No.: 85636621/0100, ID: 00216224, Tax ID: CZ00216224
Please quote the Ref. No. in your reply.
Key facts about the position:

**Anticipated start date:** The position is available from Aug 2018.

**Salary:** Unique package with the competitive salary (granted for 48 months)

**Future career:** Successful candidate can negotiate junior group leader position at the Institute of Experimental Biology, Faculty of Science at Masaryk University

**Deadline:** The submission deadline is **15 April 2018**.

Please submit your application (or informal enquiries) by e-mail to bryja@sci.muni.cz

A review of applications will commence immediately after the deadline. Short-listed candidates will be invited for interview within one month of the deadline.

**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”. The applicant must be the principal author of at least one publication (according to the subject specificity it may be as the first author, the corresponding/reprint author, or the role of the individual authors stated in the article).
- have experience in cell biology, structural biology, molecular biology or related fields
- be highly motivated, self-driven and able to work independently
- have a collaborative attitude with good communication skills

**The application should include:**
- a CV including a summary of work experience, incl. publication activity and research grant experience
- a Cover Letter
- contact information for at least three referees

**Background information**

**Masaryk University (MU)** is the second oldest and largest university in the Czech Republic, the most dynamic and research-oriented university. MU has also attained a
leading position in competitions for research grants and is making considerable financial investments into its modern university campus to enhance its research capacity. It has effective Technology Transfer Office that supports cooperation between the scientific community and the industry and helps putting research results into practice.

**MU offers the opportunity to gain:**
- an interesting job in a dynamically-expanding university area
- diverse and challenging work in an excellent research environment
- possible tenure track with an initial appointment for two years
- a professional team and pleasant working environment
- interaction with leading scientists in an inspiring, internationalised environment
- a Welcome Service for the successful candidate and his/her family

**Information about Brno, Czech Republic**
- The capital of the South Moravian Region and the second largest city in the Czech Republic with a population of almost 400,000 people
- A modern and fast growing centre of industry, trade, science, research and innovation with business incubators and centres of excellence in science
- A city of universities with more than 86,000 students (in top 5 of student cities in the world)
- The city of Gregor Mendel, the founder of genetics; the prestigious Mendel Lectures series has taken place in Brno since 2003 (lectures by the world’s top scientists, including Nobel Prize winners)
- More than 10,000 researchers; 2,200 IF publications/year; 600+ PhD graduates/year,
- 500 mil. EUR of R&D investment per year, with more than 350 companies with in-house R&D,

**Further information about:**
- Postdoc@MUNI is available at [http://postdoc.muni.cz](http://postdoc.muni.cz)
- Masaryk University is available at [www.muni.cz/en](http://www.muni.cz/en)
- Brno is available at [http://www2.brno.cz/index.php?lan=en&nav01=20608&nav02=20617](http://www2.brno.cz/index.php?lan=en&nav01=20608&nav02=20617)