Two PhD Student positions in NCN OPUS-19 grant available at IBMiB

Funding source: National Science Center grant OPUS-19 nr UMO-2020/37/B/NZ5/01263 *"Therapeutic activation and signaling determinants of the autoregulatory MBNL1 expression in myotonic dystrophy"*

Principal Investigator: dr Ewa Stępniak-Konieczna

Scholarship: 5000 PLN / month, for 48 months

Application deadline: 15.03.2021

https://ncn.gov.pl/baza-ofert/?akcja=wyswietl&id=185263

Description of the project: We are interested in therapeutic aspects of myotonic dystrophy (DM), a dominantly inherited neuromuscular disease triggered by expansion of a trinucleotide CTG repeat in the 3′ untranslated region of the *DMPK* gene. One of the key molecular hallmarks of DM is sequestration and functional depletion of *Muscleblind-like* (MBNL) proteins by repeat-expanded *DMPK* transcripts. MBNLs are master regulators of alternative splicing events and cellular RNA metabolism, and their functional level is crucial to DM pathophysiology. All MBNL proteins have the ability to precisely autoregulate the cellular level of the most prominently expressed family member, MBNL1, via alternative splicing of the first coding exon in its pre-mRNA. In this project, PhD students will design and test a novel experimental strategy against DM based on therapeutic modulation of endogenous *MBNL1* expression, particularly in the context of its autoregulation. PhD students will also characterize cell signaling pathways and transcription factors regulating *MBNL1* expression, and will dissect mechanistic aspects of MBNL1 autoregulation. To address these aims, a wide range of experimental techniques will be implemented, including cloning, delivery of plasmids and modified oligonucleotides to cells and tissues, semi-quantitative and quantitative PCRs, Western blotting, co-immunoprecipitation, fluorescence microscopy and mass spectrometry.

Requirements: MSc (or equivalent) in molecular biology, biotechnology or other life sciences related area; fluency in English, both spoken and written; curiosity and self-motivation to address scientific questions and a strong commitment to laboratory research work; excellent communication and organizational skills; ability to work independently and as a team member; hands-on research experience in basic molecular biology techniques (PCR, qPCR, Western blotting, basic cloning etc.); experience in cell culture and mouse work is a plus.

Tasks and responsibilities include: leading a research project (planning and performing experiments, collecting and analyzing data); reporting project progress during regular lab meetings; discussing scientific literature during journal clubs; presenting data at scientific meetings and conferences; participating in scientific workshops and courses; preparing manuscripts for publications; additional tasks may include supervising undergraduate and graduate students throughout the course of the project.

How to apply: Apply by e-mail to esk@amu.edu.pl

In the subject field please write "PhD position - your first and last name". Your application must include:
1) Motivation letter detailing your research interests and justifying why you wish to join the project; **2) CV** with detailed information on your education, scientific career and past research experience; **3) Copy of your MSc diploma; 4) Contact details for** your MSc supervisor

In your CV, please include the following consent to the processing of personal data: "Pursuant to Article 6 (1) of the General Regulation on the Protection of Personal Data of 27 April 2016 (Journal of Laws EU L 119/1 of 4 May 2016) I agree on the processing of personal data other than: name, (names) and surname, parents' names, date of birth, place of residence (correspondence address), education, course of previous employment included in my job offer for the needs of current recruitment."

Selected candidates will be contacted via phone or e-mail and invited to an interview end of March. Following initial recruitment by the PI, successful candidates will enroll into **Doctoral School of Adam Mickiewicz University**, and position will start as soon as possible hereafter.

The competition may be extended or repeated until suitable candidates are found.

Informal enquiries prior to application are welcome!

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