

## JOB OFFER

Position in the project:	PhD student
Scientific discipline:	Biology, biotechnology, biochemistry
Job type (employment contract/stipend):	employment contract: scholarship
Number of job offers:	2
Remuneration/stipend amount/month ("X0 000 PLN of full remuneration cost, i.e. expected net salary at X 000 PLN"):	expected stipend ~4 000 PLN
Position starts on:	01.10.2021
Maximum period of contract/stipend agreement:	4 years
Institution:	Institute of Molecular Biology and Biotechnology, Faculty of Biology, Adam Mickiewicz University in Poznań
Project leader:	Krzysztof Sobczak, PhD
Project title:	<i>Pathogenesis driven by RNAs with expansion of trinucleotide repeats: mechanisms and therapeutic strategies</i>  Project is carried out within the MAESTRO programme of the National Science Center
Project description:	<p>The PhD candidate position is available in the Department of Gene Expression, Institute of Molecular Biology and Biotechnology, Faculty of Biology (category A+) of Adam Mickiewicz University in Poznan which is the largest institution of higher education in Poznan and one of the largest and best institutions of higher education in Poland (status ID-UB).</p> <p>A highly motivated researcher is sought to join the human molecular genetic research team under the supervision of Krzysztof Sobczak, PhD. We focus on studying the molecular pathomechanism and experimental therapy of hereditary neuro-muscular disease (myotonic dystrophy; DM) and neurodegenerative disorders (fragile X-associated tremor/ataxia syndrome; FXTAS).</p> <p>DM1 is an RNA dominant disorder caused by expansion of a CTG repeat in the 3'-UTR of the DMPK gene. The DMPK transcripts containing highly expanded CUG repeats (CUG<sup>exp</sup>) are retained in the nucleus in discrete foci. Their nuclear retention is partly a function of the interaction of CUG<sup>exp</sup> RNA with poly(CUG) binding proteins, such as, splicing factors in the Muscleblind-like (MBNL) family. The pathogenic effects of CUG<sup>exp</sup> RNA are due in part to sequestration of MBNL proteins, which results in is regulated alternative splicing that these proteins normally regulate.</p> <p>In our research we focus on deeper understanding of some aspects of molecular pathomechanism of DM and FXTAS, especially associated with miRNA metabolism, function of specific splicing factors, abnormalities in translation (RAN translation) as well as application of antisense oligonucleotides (ASOs) or small compounds to disrupt pathogenic interaction of CUG<sup>exp</sup> (DM) or CGG<sup>exp</sup> (FXTAS) with proteins in vitro and in vivo.</p>

Key responsibilities include:	<ol style="list-style-type: none"> <li>1. Experiments explaining the mechanism of RNA recognition by MBNL proteins and regulation of alternative splicing by MBNLs – whole-transcriptome approaches.</li> <li>2. Experiments explaining the mechanism of untypical RAN translation of expanded CGG repeats in 5'UTR – whole-transcriptome approaches.</li> <li>3. Genetic screening of genes regulating both processes – looking for genetic modifiers of above mentioned processes (1 and 2).</li> <li>4. Experimental therapy of DM1 and FXTAS using ASOs and small compounds in vitro and animal models of diseases.</li> <li>5. Participation in preparation of manuscripts and grant proposals.</li> </ol>
Profile of candidates/requirements:	<ol style="list-style-type: none"> <li>1. The successful candidate must have a Ms. degree in biology, biochemistry, chemistry, genetics, computational biology or related life science field (in case of academic degrees obtained abroad - the documents must meet the equivalence criteria set out in Article 328 of the Act of 20 July 2018 Law on Higher Education and Science (Journal of Laws of 2021, item 478 i.e. as amended; Polish: Dziennik Ustaw 2021 poz.478); love and enthusiasm for science, ability to work independently as well as collaboratively, strong organizational and communication skills, and a record of productive research;</li> <li>2. Very good results from graduate studies;</li> <li>3. Experience in human molecular genetics, molecular and cellular biology, and statistics;</li> <li>4. This position is ideally suited for a candidate who is primarily trained in experiments with mouse models, RNA biochemistry and biology or whole-transcriptome approaches;</li> <li>5. Solid theoretical or practical knowledge in other techniques: DNA cloning, RT-PCR, real-time PCR, northern blot and all types of electrophoresis, western blot, immuno-affinity pull down, deep sequencing and RNA-seq data analysis.</li> </ol>
Required documents:	<ol style="list-style-type: none"> <li>1. Professional CV including scientific achievements;</li> <li>2. Letter summarizing previous work experience and future interests;</li> <li>3. Contact information for 1-2 professional references.</li> </ol>
We offer:	<p>A broad range of experimental methods are employed in our laboratory, including microarray hybridization, next generation RNA/DNA sequencing, fluorescence in situ hybridization; DNA/RNA purification, cloning, genotyping, sequencing and hybridization; protein immunoblots, immunoprecipitation, and immunohistochemistry; tissue culture, transfection and transduction of cells, confocal microscopy, single molecule microscopy, drug screening, and experiments with mouse models.</p>
Please submit the following documents to:	<p><a href="mailto:praca-ibmib@amu.edu.pl">praca-ibmib@amu.edu.pl</a></p>
Application deadline:	<p>22.08.2021, 23:59:59</p>
For more details about the position please visit (website/webpage address):	<p><a href="http://ibmib.amu.edu.pl/en/main-page/">http://ibmib.amu.edu.pl/en/main-page/</a></p>

Please include in your offer:

*"I hereby give consent for my personal data included in my application to be processed for the purposes of the recruitment process under the Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation)."*

#### Information clause for jobseekers

Pursuant to Article 13 of Regulation (EU) No. 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of individuals with regard to the processing of personal data and on the free movement of such data and repealing Directive 95/46/EC - General Regulation on data protection (Official Journal of the European Union L 119/1 of 04.05.2016) I hereby inform you that.

1. The Controller of your personal data is Adam Mickiewicz University in Poznań with its registered office at 1, Henryka Wieniawskiego Street, 61-712 Poznań.
2. The controller of personal data has appointed a Data Protection Inspector to supervise the correctness of personal data processing, who can be contacted via e-mail address: iod@amu.edu.pl.
3. The purpose of the processing of your personal data is to carry out the recruitment process for the indicated position.
4. The legal basis for the processing of your personal data is Article 6(1)(a) of the General Data Protection Regulation of 27 April 2016 and the Labour Code of 26 June 1974 (Journal of Laws of 1998, N21, item 94, as amended).
5. Your personal data will be stored for a period of 6 months from the end of the recruitment process.
6. Your personal data will not be made available to other entities, except for entities authorized by law. Access to your data will be granted to persons authorized by the Controller to process them within the scope of their professional duties.
7. You have the right to access your data and, subject to the provisions of law, the right to rectify, delete, restrict the processing, the right to transfer data, the right to object to the processing, the right to withdraw consent at any time.
8. You have the right to lodge a complaint to the supervisory authority - the President of the Office for Personal Data Protection, ul. Stawki 2, 00-193 Warszawa.
9. Provision of personal data is obligatory on the basis of legal regulations, in the remaining scope it is voluntary.
10. With regard to your personal data, decisions will not be taken automatically, in accordance with Article 22 RODO.

#### Consent clause

In accordance with Article 6(1)(a) of the General Data Protection Regulation of 27 April 2016 (Journal of Laws of the EU L 119/1 of 4 May 2016) I agree to the processing of personal data other than those indicated in Article 221 of the Labour Code (name(s) and surname; parents' names; date of birth; place of residence; address for correspondence; education; previous employment), included in my job offer for the purpose of current recruitment.

- The applicant should be informed in the job application notice that his/her CV should include a clause with the required content, in which case it will be considered.

date and signature