





Research Assistant (nascent transcriptomics)

Adam Mickiewicz University, Poznań, Poland: Center for Advanced Technology & Institute of Molecular Biology and Biotechnology, Faculty of Biology

We are seeking a highly motivated colleague for the position of a Research Assistant to join the **Genomic Regulation Lab** led by **dr hab. Kinga Kamieniarz-Gdula** at Adam Mickiewicz University, Poznań, Poland. You will be offered the opportunity to participate in cutting edge research and work on a project aiming at understanding how alternative gene ends are selected in human cells, using nascent transcriptomics methods.

The position is funded by the prestigious **ERC Starting Grant** "AlternativeEnds", for 12 months. A probation period of 3 months might be applied.

The yearly gross (brutto brutto) salary will depend on the qualifications of the successful applicant, from 120 000 up to a maximum of 140 193 PLN.

Application deadline: 12th September 2025. Early application is encouraged. Start date: from 1st October 2025.

Project: The human genome contains only ~20.000 genes, however, most of them encode multiple transcripts resulting from alternative promoter usage, splicing, and 3' end selection. Gene 3' ends can be defined by the positions of RNA 3' cleavage, or the location where RNA polymerase II terminates transcription. Widespread changes in 3' end usage are characteristic of many processes e.g. differentiation and cancer. We do not understand what drives this selectivity. In order to find out the determinants of gene end selection we will study the crosstalk of RNA cleavage and transcription termination. Ultimately, understanding the complex crosstalk between RNA cleavage and transcription termination in alternative 3' end selection will enable the manipulation of this process e.g. to alleviate human disease.

<u>Tasks:</u> Conducting nascent transcriptomics experiments (mNET-seq, POINT-seq, 4SU-3'mRNA-seq), recording and analyzing experimental data, performing bioinformatic analysis of obtained datesets, drawing preliminary conclusions, keeping detailed records of experimental work, writing and revision of scientific protocols.

<u>Qualifications:</u> Necessary: Master's or PhD degree in biology or related life science field. Experience with genomics work – both experimental and computational. Coding in R, usage of Bioconductor libraries, basics of Linux. Fluency in English.

Highly desirable: experience in nascent transcriptomics – experimental procedures and bioinformatic analysis.

<u>Interested candidates should send:</u> a cover letter, CV and the contacts of three referees <u>as a single pdf file</u> to: <u>kinga.kamieniarz-gdula@amu.edu.pl</u>.

Informal inquiries and questions welcome.

Important: please include in the CV and cover letter the following statement: 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.

Lab webpage:

https://STOPlab.org

Selected publications:

SETD2 methyltransferase activity aids gene definition by promoting correct transcription initiation and termination.

Nakayama C, Kopczyńska M, Stępień A, Ito S, Imami K, Gdula MR, Nojima T, Kamieniarz-Gdula K.

bioRxiv https://doi.org/10.1101/2025.07.14.664659

A beginners guide to Sf9 and Sf21 insect cell line culture and troubleshooting.

Kwiatkowska J, Stein E, Romanenko A, Plens-Gałąska M, Podsiadła-Białoskórska M, Szołajska E, Kühn U, Kamieniarz-Gdula K.

Sci Rep. 2025 https://doi.org/10.1038/s41598-025-99812-0

Defining gene ends: RNA polymerase II CTD threonine 4 phosphorylation marks transcription termination regions genome-wide.

Kopczyńska M, Saha U, Romanenko A, Nojima T, Gdula MR, Kamieniarz-Gdula K.

Nucleic Acids Res. 2025 https://doi.org/10.1093/nar/gkae1240

CLP1-dependent premature transcription termination opposes neurodegeneration.

Gdula MR, Kopczyńska M, Saha U, Kamieniarz-Gdula K.

Neuron. 2022 https://doi.org/10.1016/j.neuron.2022.03.012

Transcriptional Control by Premature Termination: A Forgotten Mechanism.

Kamieniarz-Gdula K, Proudfoot NJ.

Trends Genet. 2019 https://doi.org/10.1016/j.tig.2019.05.005

Selective Roles of Vertebrate PCF11 in Premature and Full-Length Transcript Termination.

Kamieniarz-Gdula K, Gdula MR, Panser K, Nojima T, Monks J, Wiśniewski JR, Riepsaame J, Brockdorff N, Pauli A, Proudfoot NJ.

Mol Cell. 2019 https://doi.org/10.1016/j.molcel.2019.01.027

WNK1 kinase and the termination factor PCF11 connect nuclear mRNA export with transcription. Volanakis A, Kamieniarz-Gdula K [joint-first & co-corresponding author], Schlackow M, Proudfoot NJ.

Genes Dev. 2017 https://doi.org/10.1101/gad.303677.117

BRCA1 recruitment to transcriptional pause sites is required for R-loop-driven DNA damage repair.

Hatchi E, Skourti-Stathaki K, Ventz S, Pinello L, Yen A, Kamieniarz-Gdula K, Dimitrov S, Pathania S, McKinney KM, Eaton ML, Kellis M, Hill SJ, Parmigiani G, Proudfoot NJ, Livingston DM.

Mol Cell. 2015 https://doi.org/10.1016/j.molcel.2015.01.011

R-loops induce repressive chromatin marks over mammalian gene terminators.

Skourti-Stathaki K, Kamieniarz-Gdula K, Proudfoot NJ.

Nature. 2014 https://doi.org/10.1038/nature13787

Funding agency (ERC) in a nutshell

The European Research Council (ERC), set up by the EU in 2007, is the premiere European funding organisation for excellent frontier research. Every year, it selects and funds the very best, creative researchers of any nationality and age, to run projects based in Europe. https://erc.europa.eu

About the host institution

The Faculty of Biology at Adam Mickiewicz University (FB AMU) has excellent organizational capability and experience in the field of project implementation. FB AMU is a leading research and education institution in Poland. It is best ranked among large classical university faculties. CWTS Leiden Ranking 2020 indicated AMU as third University in Poland in number of publications but second in number of publications belonging to top 10% in the category "Life and Earth Sciences".

According to THE World University Ranking 2020 AMU was the second best Polish university in category "Life Sciences". Since the setting-up of the National Science Centre (Narodowe Centrum Nauki, NCN) funding agency in Poland, FB AMU has been one of its main research grants beneficiaries. FB grants account for 30% of all Adam Mickiewicz University grants; on average over 100 NCN research grants are pursued at FB AMU each year.

The Institute of Molecular Biology and Biotechnology (IMBB, @UAM IBMiB) is part of the Faculty of Biology and one of top molecular biology institutes in Poland. The expertise of IMBB encompasses several major fields of modern biology that can be further subdivided into: (1) Molecular medicine and gene therapy, (2) Plant molecular biology and biotechnology, (3) Molecular microbiology, and (4) Bioinformatics and molecular evolution. IMBB is staff is international at all levels – PhD students, postdocs and Pls. Two group leaders are members of EMBO. Institute webpage: http://ibmib.amu.edu.pl/en/main-page/

The Genomic Regulation Lab together with several other IMBB labs is physically located at and affiliated with the Center for Advanced Technology at Adam Mickiewicz University (CAT AMU) located ~500m from the IMBB. CAT AMU is a collaborative multi-disciplinary institute funded with 63mln € (85% from EU funds).



The Centre for Advanced Technology, home of the Genomic Regulation Lab.

Poznań is the capital of the Wielkopolska (Greater Poland) region. It is a vibrant university city, with an urban area population of ~1 million, located only 3 hours away from Warsaw and Berlin. At the same time, it is a paradise for nature lovers, as it is surrounded by beautiful forests & lakes.

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.