ADAM MICKIEWICZ UNIVERSITY, POZNAN

ANNOUNCES

A COMPETITION

for the position of postdoc

at the Faculty of Biology

in the project NCN OPUS *U1-united: Deconstructing non-canonical functions of U1 snRNP in Arabidopsis thaliana*

project number UMO-2024/55/B/NZ2/01154

Basic information

1. **Research discipline (research field):**
   Life sciences

2. **Number of work hours per week including a task-based work schedule (if applicable):**
   Full-time, 40 hrs per week

3. **Type of an employment contract and expected duration of employment, i.e.: permanent/temporary/fixed-term contract for ..... year/...years**
   Fix-term contract for 48 months

4. **Anticipated job starting date:**
   December 1, 2025

5. **Workplace location:**
   Adam Mickiewicz University
   Faculty of Biology
   Uniwersytetu Poznańskiego 6
   61-**614 Poznań**

6. **Application deadline and process:**
   Application should be sent by e-mail to Artur Jarmołowski at: artjarmo@amu.edu.pl) no later than Thursday, November 13th, 2025

7. Required documents

- Application form/letter of the candidate addressed to the Vice-Rector announcing the competition;
- *Curriculum Vitae;*
- Diplomas or certificates issued by colleges and universities attesting to education and degrees or titles held (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 2023, item 742 Polish: Dziennik Ustaw 2024 poz. 1571 t.j.);
- Information on the Applicant's research, teaching and organizational achievements,
- Consent to the processing of personal data as follows: *In accordance with Article 6 (1) (a) of the General Data Protection Regulation of 27 April 2016. (OJ EU L 119/1 of 4 May 2016) I consent to the processing of personal data other than: first name, (first names) and surname; parents' first names; date of birth; place of residence (mailing address); education; previous employment history, included in my job offer for the purpose of the current recruitment."*

Conditions of the competition determined by the competition committee

I) Determination of qualifications: (researcher profile) according to the Euraxess guidelines

- ☐ **(R1) First Stage Researcher** (up to the point of PhD)
- ☐ **(R2) Recognised Researcher** (PhD holders or equivalent who are not yet fully independent)
- ☐ **(R3) Established Researcher** (researchers who have developed a level of independence)
- ☐ **(R4) Leading Researcher** (researchers leading their research area or field)

https://euraxess.ec.europa.eu/europe/career-development/training-researchers/research-profiles-descriptors)

II) Job Offer description

The selected candidate will work on deciphering non-canonical functions of U1 snRNP in plants. U1 is a particle composed of a short ribonucleic acid (small nuclear RNA, snRNA), seven proteins called Sm, also found in other similar to U1 particles, and three proteins specific to this ribonucleoprotein (U1-70K, U1-C, U1-A). U1 belongs to a family of ribonucleoprotein complexes found in the cell nucleus, called snRNPs (small nuclear ribonucleoproteins). Primary transcripts of genes encoding proteins (pre-mRNA) are composed of coding sections - exons, separated by non-coding sequences - introns. U1 snRNP participates in the process of cutting out introns from pre-mRNA, recognizing and binding to the place where the exon joins the intron, which is called the 5' splice site (5'ss). The binding of U1 snRNP to pre-mRNA is possible due to the complementarity of the U1 snRNA sequence with the 5'ss site. This reaction starts the process of cutting out introns called splicing. In addition to U1, four other snRNPs, U2, U4, U5 and U6, participate in pre-mRNA splicing. Together they form a large and dynamic complex called the spliceosome, catalyzing the reactions of cutting out introns and joining exonic sequences into mature mRNA. The participation of U1 in splicing is well known and is referred to as the so-called canonical function of this snRNP. Many years ago, however, it was noticed that in the cell nucleus the number of U1 is much greater than that of the other splicing snRNPs, although in the spliceosome all of these ribonucleoproteins occur in only one copy each. This suggested that U1 may have additional to participation in splicing functions.

Indeed, work carried out on human cells has shown that U1, in addition to splicing, is responsible for inhibiting premature, incorrect polyadenylation of the transcript, or so-called telescripting. U1 has also been shown to be involved in the selection of polyadenylation sites at the end of the transcript, and demonstrated to regulate the association of long non-coding RNAs (lncRNAs) with chromatin. It has also been shown that U1 influences the rate of movement of Pol II during transcription. These additional functions of U1 are known as non-canonical functions of U1, and our knowledge of the mechanisms explaining the participation of U1 in these processes is close to zero. This applies primarily to plants, where we are only beginning to describe non-canonical functions of U1. Therefore, two laboratories, one headed by Dr. hab. Szymon Swiezewski from the Institute of Biochemistry and Biophysics of the Polish Academy of Sciences in Warsaw, the other under the supervision of Prof. dr. hab. Artur Jarmolowski from the Adam Mickiewicz University in Poznan, joined forces and decided to look for a common mechanism of non-canonical functions of U1. The project concerns selected non-canonical functions of U1 in plants : (i) splicing-dependent and -independent functions of U1 snRNP in transcription termination and polyadenylation, (ii) the role of U1 in co-transcriptional control of RNA quality in the cell nucleus, (iii) the dependence of transcription elongation rate on U1 snRNP. We hypothesized that all or at least most of the noncanonical functions of U1 can be explained by the influence of this snRNP on the kinetics of RNA synthesis by Pol II. We want to propose a common model of non-canonical functions of U1 snRNP. The project is based on preliminary results obtained in both laboratories, as well as the expertise of these teams in the field of RNA (laboratory in Poznan) and seed biology (Warsaw group). It is worth noting that the results of the project are general in nature, they do not describe only the processes occurring in plants, but refer to all eukaryotic organisms.

III) Requirments and qualifications

The competition is open to individuals who meet the requirements specified in Article 113 of the Law on Higher Education and Science of 20 July 2018 (Journal of Laws of 2024, item 1571, Article 113 as amended) and who meet the following requirements:

1. PhD in biology, biotechnology, bioinformatics, or agricultural sciences
2. Significant scientific achievements documented by publications
3. Formal requirements specified by the National Science Centre for the Opus competition:

https://ncn.gov.pl/sites/default/files/pliki/uchwaly-rady/2024/uchwala84_2024-zal1.pdf#page=39

IV) Required languages

1. Language: English
2. Level: (basic, good, fluent, native)

V) Required research, teaching or mixed experience

Knowledge of plant molecular biology techniques and bioinformatics analyses

VI) Benefits

- ✓ an atmosphere of respect and cooperation
- ✓ supporting employees with disabilities
- ✓ flexible working hours

- ✓ funding for language learning
- ✓ co-financing of training and courses
- ✓ additional days off for education
- ✓ life insurance
- ✓ pension plan
- ✓ savings and investment fund
- ✓ preferential loans
- ✓ additional social benefits
- ✓ leisure-time funding
- ✓ subsidizing children's vacations
- ✓ "13th" salary

VII) Eligibility criteria

1. Assessment of previous publications
2. Knowledge of plant molecular biology techniques
3. Knowledge of bioinformatics tools
4. Fluency in English

VIII) The selection process

1. Competition committee begins working no later than 14 days after the deadline for submission of documents.
2. Formal evaluation of submitted proposals.
3. Call to provide additional or missing documents if necessary.
4. Selection of candidates for the interview stage.
5. Interviews for candidates who meet the formal requirements.
6. The committee has the right to request external reviews of candidates' work or to ask candidates to conduct teaching assignments with an opportunity for student evaluation.
7. The chair of the competition committee announces the results and informs the candidates. This information will include justification with a reference to candidates' strengths and weaknesses. Submitted documents will be sent back to candidates.

IX) Prospects for professional development

After completing a postdoctoral fellowship, the selected candidate can begin establishing their own research group. He/she will also be prepared to work in the biotechnology industry or other companies utilizing molecular methods.

RODO Information Clause :

Pursuant to Article 13 of the General Data Protection Regulation of 27 April 2016. (Official Journal of the EU L 119 of 04.05.2016) we inform that:

1. The controller of your personal data is Adam Mickiewicz University, Poznań with the official seat: ul. Henryka Wieniawskiego 1, 61 - 712 Poznań.
2. The personal data controller has appointed a Data Protection Officer overseeing the correctness of the processing of personal data, who can be contacted via e-mail: iod@amu.edu.pl.
3. The purpose of processing your personal data is to carry out the recruitment process for the indicated job 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, with the exception of entities authorized by law. Access to your data will be given to persons authorized by the Controller to process them in the performance of their duties.
7. You have the right to access your data and, subject to the law, the right to rectification, erasure, restriction of processing, the right to data portability, the right to object to processing, the right to withdraw consent at any time.
8. You have the right to lodge a complaint to the supervisory authority - the Chairman of the Office for Personal Data Protection, ul.Stawki 2, 00 - 193 Warsaw.
9. Providing personal data is mandatory under the law, otherwise it is voluntary.
10. Your personal data will not be processed by automated means and will not be subject to profiling.

PROCEDURE FOR REPORTING VIOLATIONS OF THE LAW

Recruitment: Positions and Competitions for Academic Teachers: Information on the internal reporting procedure referred to in the Act of 14 June 2024 on the Protection of Whistleblowers (Journal of Laws, item 928), announced by Regulation No. 5/2023/2024 of the Rector of Adam Mickiewicz University, Poznań of 17 September 2024 concerning the introduction of the Internal Reporting Regulations regarding the breach of law and follow-up actions at Adam Mickiewicz University, Poznań. Below are links to the regulation together with its annexes:

Ordinance No. 520232024.pdf
Rules for submissions.pdf
Information clause - whistleblowers.pdf