

Seeking a PhD student to participate in OPUS project No. 2021/41/B/NZ1/03644 entitled: " The involvement of DEAD-box helicases in the SERRATE-mediated recruitment of RBPs (RNA-binding proteins) to RNA Polymerase II transcripts in plants".

**About the project:** SERRATE (SE) is an essential protein for development and proper functioning of plants. By interacting with the cap-binding complex, it is linked to RNA polymerase II transcripts from the beginning of their formation. Our preliminary data suggest that SERRATE is a protein that already interacts with the helicase that unfolds the secondary structure of RNA during transcription, as well as an RNA-binding protein that can bind a specific RNA sequence motif in the unfolded fragment. The research planned in this project focuses on the mechanism of coordination of helicase and RNA-binding protein by SE in RNA metabolism processes. In this project, we plan to confirm the interaction between RNA-binding proteins with the studied helicases as well as SE protein by methods such as FRET-FLIM, Y2Hi PLA. The next step in this project will be to analyze changes in the transcriptome and secondary RNA structure in a triple mutant in which the helicases under study are not expressed. We also plan to identify RNA motifs recognized by selected RNA-binding proteins in plants with and without helicase activity. The effect of the presented project will be to expand our knowledge of RNA processing, thereby deepening our understanding of the basic processes in eukaryotic cells. In addition, the planned experiments will allow us to discover the role of poorly described plant helicases as well as RNA-binding proteins. We will also be able to characterize the role of the ternary complex, which is capable of remodeling and binding RNA.

**Requirements:**

The competition is open to a person who:

* has the status of a doctoral student or a participant in doctoral studies at the UAM Doctoral School
* holds a master's degree in biological sciences or a related field
* is fluent in spoken and written English
* has knowledge of the basics of molecular biology
* is characterized by a strong commitment to his/her research work
* has the ability to work with a confocal microscope
* has experience in advanced microscopy techniques including FRET-FLIM technique
* is able to work in a team

**We offer:**

* Fellowship implementation time: 24 months
* Scholarship amount: 3000 PLN/month
* Planned start date: 01.05.2023

**Application:**

* By email as pdf files to: mateusz.bajczyk@amu.edu.pl by day 17.04.2023
* Applications will be evaluated by a competition committee appointed by the Project Manager
* The results of the competition will be announced no later than 24.04.2023 on the website: https://bip.amu.edu.pl/
* The terms and conditions of employment are defined in the "Regulations for the awarding of research fellowships in research projects financed from the funds of the National Science Center defined by the Resolution of the NCN Council No. 25/2019 of March 14, 2019

**Required documents:**

1. cover letter;

2. CV including information on previous scientific achievements and awards

resulting from research conducted to date;

3. a certificate confirming that the candidate is a participant in doctoral studies or a doctoral student at a doctoral school

4. consent to the processing of personal data.

*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.*

**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.