



HR EXCELLENCE IN RESEARCH



## ADAM MICKIEWICZ UNIVERSITY POZNAN

### ANNOUNCES

#### A COMPETITION

for the 2 positions of ADIUNKT POST-DOC  
NCN OPUS 27 Porcine menisci transcriptome multi-approach NGS study: investigations on zonal cell composition, human resemblance, and potential applications in xenotransplantation  
UMO- 2024/53/B/NZ4/00588

at the NanoBioMedical Center

Basic information
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**1. Competition reference number:**

Konkurs\_2xPost-Doc\_OPUS 27 JDR\_CNBM

**2. Research discipline (research field):**

Biological sciences

**3. Number of work hours per week including a task-based work schedule (if applicable):**

Full-time: 40 hours per week in a task-based work time system

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

For a fixed term from 1 July 2025 to 30 June 2027 with the possibility of extension for another 24 months (i.e. until 30 June 2029)

**5. Anticipated job starting date:**

01.07.2025

**6. Workplace location:**

NanoBioMedical Center UAM w Poznaniu, ul. Wszechnicy Piastowskiej 3, Poznań

**7. Salary:**

Ca. 8987,53 brutto

**8. Application deadline and process:**

Electronic submission to [jrybka@amu.edu.pl](mailto:jrybka@amu.edu.pl), deadline: 16.05.2025.

Please note that the job reference number should be quoted in the application.

## 9. Required documents

- Application letter of the candidate;
- *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 2024, item 1571 Polish: Dziennik Ustaw 2024 poz.1571 t.j.);
- Information on the Applicant's research, teaching and organizational achievements,
- Other documents as determined by the competition committee.
- 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)

#### II) Job Offer description

The meniscus, a fibrocartilaginous tissue, stabilizes the knee and distributes load but has limited healing capacity, making it prone to injury. Due to the low success of meniscal repair and meniscectomy, preserving its mechanical properties is crucial. Tissue engineering (TE) and xenotransplantation, particularly using pig models, offer promising solutions. This project aims to advance meniscus TE and xenotransplantation by analyzing the genetic makeup of pig menisci. Using single-cell and long/short-read sequencing, we will build a detailed reference transcriptome, compare it with human data, and explore zonal composition, healing potential, and immune responses.

In-depth analysis will be performed with the state of the art sequencing techniques - single cell approach combined with short and long-read sequencing. Merging this two types of data will allow for building a detailed pig menisci reference transcriptome, which will include whole polyA transcripts with unique splicing variants. Obtained data will be compared with publicly available human data in terms of divergent zonal composition, cell interactions, as well as chondrocyte and epithelial cell types and functions. On the other hand spatial transcriptomics will allow for unrevealing internal organization of cells and define spatial location of those involved in expressing epitopes potentially triggering immune system of the xenograft recipient.

Post doc will be responsible for designing, performing and validating experiments regarding scRNA-seq, optimization and performance of long-read based sequencing and/or spatial transcriptomics assays, NGS data analysis, manuscripts preparation

### III) Requirements 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:

- a) PhD degree in biology, biochemistry, biotechnology, agricultural sciences, chemistry or similar and fulfilled formal NCN requirements  
[https://www.ncn.gov.pl/sites/default/files/pliki/uchwaly-rady/2024/uchwala23\\_2024-za1.pdf](https://www.ncn.gov.pl/sites/default/files/pliki/uchwaly-rady/2024/uchwala23_2024-za1.pdf)
- b) knowledge of molecular biology techniques and working with in vitro cultures. Experience in Next-Generation Sequencing, DNA/RNA isolation or long-read sequencing is an advantage
- c) basic knowledge on NGS data analysis/ bioinformatic analysis is welcome

### IV) Required languages

**Language: English**

**Level: fluent**

**Language: Polish**

**Level: good**

### V) Required research, teaching or mixed experience

As in point III

### 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. Scientific achievements documented in publications and their compliance with the scope of research topics specified in the competition requirements (0-20 points);
2. Participation in research projects (0-5 points);
3. Participation in internships and training in line with the subject of the project (0-10 points);
4. Other (0-10 points)

## 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

As part of the project, the candidate for the Post-Doc position will have the opportunity to develop their skills in NGS techniques - scRNA-seq, short and long read sequencing and spatial transcriptomics. They will also gain experience in conducting bioinformatic analyses of data obtained from NGS experiments planned in the project. In addition, during the project, trips to national and/or international conferences related to the project topic are planned.

### 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.