 

# **ADAM MICKIEWICZ UNIVERSITY, POZNAN**

**ANNOUNCES**

**A COMPETITION**

**for the position of Postdoctoral Researcher**

**at the NanoBioMedical Centre**

**Basic information**

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

Biology, Biophysics or Material Science

1. **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.

1. **Type of an employment contract and expected duration of employment,**

Fixed-term contract for **12 months**

1. **Anticipated job starting date:**

01.11.2022.

1. **Workplace location:**

NanoBioMedical Centre, Wszechnicy Piastowskie 3, 61-614 Poznan.

1. **Application deadline and process:**

Electronic submission to [coyeme@amu.edu.pl](mailto:coyeme@amu.edu.pl) Application deadline: 21.10.2022. Please note that the job reference number should be quoted in the application.

1. **Required documents**

* Application form/letter of the candidate (email);
* *Curriculum Vitae* (max. 5 pages A4);
* 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 2021, item 478 i.e. as amended; Polish: Dziennik Ustaw 2021 poz.478);
* Information on the Applicant's research (publication record and list of conferences attended), teaching and organisational achievements,
* Two reference letters.
* 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**

1. **Determination of qualifications: (researcher profile) according to the Euraxess guidelines**

**(R2)** **Recognised Researcher** (PhD holders or equivalent who are not yet fully independent)

(definition of qualification level and professional experience according to Euraxess guidelines https://euraxess.ec.europa.eu/europe/career-development/training-researchers/research-profiles-descriptors)

1. **Job Offer description**

The job offer refers to the position in the OPUS project (National Science Center) titled “In-Vitro Biological Fate And Protein Corona Studies Of Advanced Polymeric Nanocarriers” (Contract number: 2019/33/B/ST5/01495) under the supervision of dr hab. Emerson Coy, Prof. UAM and Dr Sergio Moya. The project is performed closely with the institute CIC-BiomaGUNE in San Sebastian.

Among all nanocarriers (NC) for drug delivery, biocompatible polymer nanoparticles (NPs) are extremely promising due to their low toxicity, tuneable characteristics, small size and ability to encapsulate drugs or other active agents. The use of polyelectrolyte assemblies brings as well as multiple possibilities for the encapsulation of large therapeutics molecules as in the case of Layer by Layer (LbL) coating or supramolecular polyamine phosphate NPs. Pre-clinical proof of efficacy studies showing an improved therapeutic capacity of some of the NCs that will be targeted in this project has been reported in the literature. However, there is limited knowledge of the in vitro and in vivo behaviour of the NCs. The interaction of the NC with biological fluids and cells, the biodistribution of the NCs, their biological fate, the kinetics of drug release in vitro/in vivo or the stability of the core and surface coating of the NCs have been scarcely studied. This project aims to synthesise and characterise different engineered polymer nanoparticles with potential biomedical applications as drug carriers and to investigate their stability, degradation kinetics and biological fate mainly in vitro and also in vivo using a combination of imaging modalities. The knowledge gained will be applied to the rational design of nanomaterials for biomedical applications.

The project aims to advance in understanding the complex interaction of polymer NC-drug conjugates with biological matter. Fundamental questions about stability in biological media and drug-delivery mechanisms at cell and body levels will be addressed. The results are expected to be published in top-ranked international journals and presented at international scientific conferences.

1. **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 20th July 2018 (Journal of Laws of 2022, item 574, i.e. as amended) and who meet the following requirements:

* + - 1. PhD in Biological, Medical (Pharmaceutical field), Chemical sciences or Materials Engineering.

1. They fulfilled formal requirements regarding the date of obtaining the doctoral degree in accordance with the regulations of the National Science Center https://www.ncn.gov.pl/sites/default/files/pliki/uchwaly-rady/2021/uchwala81\_2021-zal1.pdf. Persons who do not have a doctoral degree may apply, provided they plan their defence no later than 15 August 2022.
2. Proven record of productivity and publications in indexed journals (at least two publications on topics related to the project);
3. Experience in at least three (3) of the following topics: Celular Biology, Cytotoxicy Essays, Molecular Biology, Biotechnology, Biomaterials or Physical-chemistry.
4. Experience in the following techniques: Confocal Laser Scanning Microscopy (CLSM), Flowcytometry, Fluorescence Correlation Spectroscopy (FCS) and Fluorescence Cross Correlation Spectroscopy (FCCS);
5. **Required languages**

Language: English / Fluent

1. **Required research, teaching or mixed experience**

- Proven experience in Biological lab work and Biomaterials

- Experience in cellular studies (uptake, retention, etc..) and characterisation of materials.

- Independence, good organisation of work, ability to work in a team.

- Experience in writing scientific publications and conference presentations.

- Knowledge of biomaterials and experience in biofunctionalisation or synthesis of nanocarriers will be an additional advantage.

1. **Benefits**

* financial bonuses for high-impact publications
* an atmosphere of respect and cooperation
* supporting employees with disabilities
* flexible working hours
* remote work applicable
* 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
* subsidising children's vacations
* "13th" salary

1. **Eligibility criteria**

1. Matching the candidate's scientific profile with the advertisement.

2. Number, scientific level of the candidate's scientific publications.

3. Number, scientific level and of the candidate's scientific conference presentations.

4. Grade on the diploma.

5. Internships and participation in research projects.

1. **The selection process**
2. The competition committee begins working no later than 14 days after the deadline for the submission of documents.
3. Formal evaluation of submitted proposals.
4. Call to provide additional or missing documents if necessary.
5. Selection of candidates for the interview stage.
6. Interviews for candidates who meet the formal requirements.
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.
8. **Prospects for professional development**

* supervision in building a scientific profile through the publication in high-impact scientific journals,
* assistance in writing grant applications in domestic (FNP, NCN) and foreign (MSCA) research projects,
* establishing cooperation with renowned research centres in the world.

**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 authorised by law. Access to your data will be given to persons authorised 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.