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## **JOB OFFER – *Student***

**A scholarship position is available to participate in a research that has been designed to better characterize the role of purinergic signaling in hematopoiesis**

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### **Project Title:**

*Purinergic signaling as important regulator of hematopoietic system*

### **Project Background:**

Hematopoiesis is an exciting and extensively studied topic. Nevertheless, there are still many questions that need to be addressed. For many years, regulation of hematopoiesis has been viewed through the prism of regulatory effects of peptide-based growth factors, cytokines, and chemokines. More recently, attention has been paid to the regulatory effects of bioactive lipids. What is important for this proposal, evidence has accumulated that small **extracellular nucleotides (EXNs)**, when released from the cells, act as signaling molecules, and EXNs have emerged as a new potential group of hematopoiesis regulatory factors. EXNs are released in response to certain stimuli, and they may also be secreted from damaged, leaky cells as **danger-associated molecular pattern (DAMP)** molecules or alarmines — as seen for example in bone marrow exposed to *i*) inflammation, *ii*) hypoxia, or *iii*) radio-chemotherapy. Nevertheless, several questions still need to be addressed, as EXN-mediated purinergic signaling in hematopoiesis has mainly been investigated in terminally differentiated cells. Deciphering mechanisms operating in HSPCs regulating their proliferation and trafficking will allow to better understand regulation of hematopoiesis and to propose new treatment strategies.

A scholarship position is available to participate in a research that has been designed to better characterize the role of purinergic signaling in hematopoiesis. We want to shed more light on the role of EXN *i*) in normal hematopoiesis, *ii*) during pharmacological mobilization of HSPCs and finally *iii*) in the homing/engraftment of HSPCs into bone marrow niches. Our results may lead to development of better stem cells expansion, mobilization and HSPCs engraftment protocols in the future. These major exciting goals of our project will be achieved by execution of research proposal driven by specialists with the complementary areas of expertise. Knowledge gained in this proposal will be also relevant to other areas of medicine including cardiology, pulmonology and neurology.

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**We are looking for a highly motivated person to participate as student within scientific project at the Medical University of Warsaw in Department of Regenerative Medicine.**

**Supervisors:** Mariusz Ratajczak, MD, PhD, DSci

**Type of employment relationship:** scholarship position, student

**Employing entity:** Medical University of Warsaw, Warsaw, Faculty of Medicine

**Application deadline:** 10.11.2021

**Expected start date:** November/December 2021

**Duration:** 6-month position

**Salary:** 3000 PLN/month

**Eligibility:**

A suitable applicant should have the following qualifications:

1. MS degree in Biology or Biotechnology
2. Basic previous experience in at least two of the following cellular/molecular biology techniques: PCR, qRT-PCR, western-blotting, ELISA chromatin immunoprecipitation, flow cytometry, western blott, imaging
3. Academic background in cell biology, molecular biology, and/or genetics.
4. The candidate is required to have knowledge of cancer cell biology
5. Good knowledge of English
6. Strong interest in science

**How to apply:**

Please send:

1. Letter of interest
2. CV
3. Publication list
4. Photo
5. Contact details of 2-4 potential referees

to: [mariusz.ratajczak@wum.edu.pl](mailto:mariusz.ratajczak@wum.edu.pl)  
[medycyna.regeneracyjna@wum.edu.pl](mailto:medycyna.regeneracyjna@wum.edu.pl)

All documents should be sent as PDF files.

The e-mail heading should be: „**Student –OPUS15 grant**”.

Please provide also the statement that you grant us a permission to process your personal details for the recruitment process:

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**The rules for the protection of personal data used by the Medical University of Warsaw:**

1. The administrator of personal data is the Medical University of Warsaw located in Warsaw, Żwirki i Wigury 61, 02-091 Warszawa,
2. Contact to the Data Protection Officer - email address: [iod@wum.edu.pl](mailto:iod@wum.edu.pl).
3. Personal data will be processed in order to implement the recruitment process pursuant to art. 221 of the Labor Code, and in the case of providing a broader scope of data pursuant to art. 6 § 1a GDPR - consent expressed by the candidate.
4. Access to personal data within the University's organizational structure shall only have employees authorized by the Administrator in the necessary scope.
5. Personal data will not be disclosed to other entities, except for entities authorized by law.
6. Personal data will be stored for the period necessary to carry out the recruitment process, up to 12 months from the settlement of the recruitment process. After this period, they will be removed.

7. You have the right to access your data, the right to rectify, delete, limit processing, the right to transfer data, the right to object to the processing, the right to withdraw consent.
8. You have the right to withdraw consent to the processing of your personal data at any time, which will not affect the lawfulness of the processing that was carried out on the basis of consent before its withdrawal.
9. You have the right to lodge a complaint with the Office for Personal Data Protection when it is justified that his personal data are processed by the Administrator in breach of the general regulation on the protection of personal data of April 27, 2016.
10. Providing personal data is voluntary, but necessary to participate in the recruitment process to the extent specified in art. 221 § 1 of the Labor Code, voluntary in the remaining scope.
11. Decisions will not be taken in an automated manner and personal data will not be subject to profiling.

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Project "*Purinergic signaling as important regulator of hematopoietic system*" is funded by the National Science Centre under the *OPUS* scheme.

