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## **JOB OFFER – *Post-Doc***

**A postdoctoral research position is available to participate in a research, that has been designed to develop optimal strategies to enhance homing/seeding efficiency of transplanted hematopoietic stem/progenitor cells**

### **Project Title:**

*Novel strategies to accelerate homing of HSPCs and hematopoietic reconstitution after transplantation*

### **Project Background:**

Transplantation of hematopoietic stem/progenitor cells (HSPCs) is well established and in many cases lifesaving clinical procedure. However, delayed engraftment of HSPCs and even worse its lack is still an important clinical problem in particular in situations when a number of HSPCs in graft is low (e.g., poor mobilizers of HSPCs, umbilical cord blood [UCB] transplants). In this proposal we would like to test different strategies aimed to improve homing of HSPCs to bone marrow (BM). We will employ ex vivo approaches to increase formation of membrane lipid rafts in HSPCs as mean to enhance homing potential of transplanted cells. We will also test ex vivo approaches to modulate cell surface- and intracellular-expressed enzymes that regulate responsiveness of HSPCs to BM-expressed homing factors. Finally, we will test strategies to increase BM-concentration of chemoattractants for HSPCs by performing time kinetic for expression of BM homing factors after conditioning for transplantation and subsequently modulate level of BM homing factors by inhibiting using specific inhibitors enzymes that degrade in BM microenvironment SDF-1 (MMPs), S1P and C1P (S1P-lyase) and ATP (CD39 and CD73 endonucleases).

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**I am looking for a highly motivated person to participate as a post-doctoral fellow within scientific project at the Warsaw Medical University at Department of Regenerative Medicine**

**Supervisor:** Mariusz Ratajczak, MD, PhD, DSc

**Type of employment relationship:** Contact of mandate

**Employing entity:** Warsaw Medical University, Department of Regenerative Medicine, Warsaw

**Application deadline:** 20<sup>th</sup> September, 2017

**Expected start date:** October/November 2017

**Duration:** 30-month position

**Salary:** to be discussed

**Eligibility:**

A suitable applicant should have the following qualifications:

1. PhD 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, flow cytometry
3. Basic experience in experimental murine model of stem mobilization and homing
4. Academic background in cell biology, molecular biology, and/or genetics.
5. Scientific research experience (full-text international publications, full-text articles published in Polish journals, international abstracts, active participation in (inter)national meetings, and scientific courses)
6. Ability to work independently
7. The candidate is required to have knowledge of stem cell biology
8. Good knowledge of English
9. 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)

All documents should be sent as PDF files.

The e-mail heading should be: „**Post-doc – Opus grant**”.

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

*"Wyrażam zgodę na przetwarzanie moich danych osobowych zawartych w zgłoszeniu dla potrzeb rekrutacji, zgodnie z ustawą z dnia 29 sierpnia 1997 roku o ochronie danych osobowych. (Dz. U. z 2002 r. Nr 101, poz. 926 z późn. zm.)"*

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