
JOB OFFER – *PhD Student*

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).

I am looking for a highly motivated person to participate as a PhD student 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: 20th 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. 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, flow cytometry, western blott,
3. Basic experience in experimental murine model of stem mobilization and homing
4. Academic background in cell biology, molecular biology, and/or genetics.
5. The candidate is required to have knowledge of cancer cell biology
6. Good knowledge of English
7. 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

All documents should be sent as PDF files.

The e-mail heading should be: „**PhD student – 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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