

## **PostDoc position in the Experimental and Translational Immunology group (DGO lab) at the Intercollegiate Faculty of Biotechnology of the University of Gdansk and Medical University of Gdansk**

### **Requirements:**

1. PhD in biology, immunology, molecular biology, medical biology or similar
2. Proven hands-on experience in RNA isolation, gene expression profiling, molecular biology techniques including cloning, transfection and proteomics
3. Statistical analysis of the data, including bioinformatics approaches
4. Ambitious and motivated for scientific development
5. Ability to work independently, in a team and in collaborative projects
6. Good English language skills (written and oral) as required for scientific environment

### **Desirable:**

1. Experience in processing of biological samples and cell culture, including primary cells
2. Experience in exosome isolation
3. Interest in immunology
4. Gene ontology/pathway analysis
5. Familiarity with CRISPR/Cas9 system

### **Responsibilities:**

1. Designing, planning and carrying out experimental work under the supervision of Principal Investigator, maintaining regular research notes
2. Scientific initiative and contribution through regular reporting and publishing, as well as presenting at group meetings, national and international conferences
3. Providing help and supervision to junior members of the group
4. Contribution to the efficient functioning of the lab including necessary administrative and organizational tasks

### **Additional information:**

#### Project description:

Body barriers (such as skin, gut, respiratory tract, oral and other mucosal tissues) are specific sites of the interaction between an organism and the external world. Since these sites are the points of pathogen entry, constantly exposed to microbial threats, multiple mechanisms must exist that enable fast response to the invading pathogens, in order to maintain the homeostasis and integrity of organism. For example, epithelial cells may present antigens as non-professional presenting cells thus contributing to downstream immune response from specific T cells, as it was shown for peptide antigens. Recently, novel findings were published on the recognition of lipid

antigens by skin-homing T cells, responding to antigens presented by the CD1a molecule. The skin is especially enriched in antigen presenting cell (APC) populations that can serve this purpose; in particular, Langerhans cells residing within the epidermis are highly CD1a-positive and have access to exogenous and endogenous lipid ligand sources. Using the skin as our model we wish to investigate if keratinocyte-derived exosomes can contribute to this process and mediate targeted crosstalk between the epithelial component of the barrier and the immune system.

More details: [www.dgolab.pl](http://www.dgolab.pl) and: [https://biotech.ug.edu.pl/strona/72297/ncn\\_polonez\\_3](https://biotech.ug.edu.pl/strona/72297/ncn_polonez_3)

**Conditions of employment:**

Duration of contract: Full-time 12 months (POLONEZ – NZ)

Salary: 8 000 PLN/month brutto (ca. 5 650 netto)

The deadline for submitting documents: 7 May 2018

Starting date: asap (negotiable)

**Required documents:**

1. CV (in English) documenting achievements, scientific degrees, publications, technical skills, research stays and other relevant experience
2. Document confirming the scientific degree
3. Cover letter (in English) documenting motivation and the most important scientific achievement of the candidate
4. Details of at least two individuals willing to provide references for the candidate

Please submit your application to: [danuta.gutowska-owski@ug.edu.pl](mailto:danuta.gutowska-owski@ug.edu.pl) , including the text below in your offer:

“I hereby give consent for my personal data included in my application to be processed for the purposes of the recruitment process under the Personal Data Protection Act as of 29 August 1997, consolidated text: Journal of Laws 2016, item 922 as amended.”