

Experimental and Translational Immunology group (DGO lab) at the Intercollegiate Faculty of Biotechnology in Gdansk, Poland





Offer: Post-doctoral researcher

Experimental and Translational Immunology group (DGO lab) seeks to recruit a talented and passionate individual to work in the fields of skin biology and immunology. More more details about the PI and the research group at: www.dgo.ug.edu.pl.



Project description:

In this project we will investigate the expression and distribution of the essential skin protein, profilaggrin, expressed by epidermal keratinocytes. Filaggrin gene *FLG* mutations are the strongest genetic factor leading to atopic dermatitis (AD), a common skin disease, as well as additional allergic manifestations, i.e., food allergy, hay fever and asthma.

AD patients suffer from a problem with dysfunctional, "leaky" skin barrier, resulting from low amounts of profilaggrin and filaggrin in their skin, and we want to determine the reasons behind this. The project utilizes CRISPR methodology, 2D cultures and 3D organotypic skin models, holotomography techniques as well as the assessment of secreted extracellular vesicles. This postdoctoral position primarily includes work with clinical samples, incl. genotyping, both from healthy donors and carriers of filaggrin gene *FLG* mutation and close collaboration with the other postdoctoral researcher concerning CRISPR and 3D models and epidermal barrier function assessment. The project is carried out in collaboration with Prof. Ellen van Den Bogaard (RadboundUMC, Nijmegen), Prof. Sara Brown (University of Edinburgh), and the clinical team from the Medical University in Gdańsk.

Details of employment:

Full-time, 2 years with potential extension (probatory period applies)

Gross salary: circa 9 600 PLN/month

Preferred starting date: March 2025 (negotiable)

Responsibilities:

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

Requirements:

- 1. Ph.D. in molecular biology, biology, biotechnology, biochemistry, medical biology or similar. Please note that the regulations of the funding institution (NCN; National Science Centre) apply: the degree must be obtained not earlier than 7 years before the year of the employment in the project, but this may be extended in the case of periods of long-term sick leave, childcare leave, or, in case of women, for very child born or adopted, according to the NCN regulations at point 2.1.1.: https://www.ncn.gov.pl/sites/default/files/pliki/uchwaly-rady/2022/uchwala60 2022-zal1 ang.pdf#page=53;
- 2. Proven hands-on experience in tissue culture and molecular biology techniques;
- 3. Interest in skin biology and immunology;
- 4. Passionate, ambitious and motivated for scientific development;
- 5. Ability to work independently, in a team and in collaborative projects;
- 6. Very good English language skills (written and oral) as required for scientific environment.

Desirable: Hands-on experience in isolating/culturing keratinocytes, sEV isolation, 3D organotypic models, holotomography or CRISPR editing will be advantageous.

We offer:

- The opportunity to contribute to an exciting skin research project in collaboration with world-leading scientists;
- 2. Excellent opportunity to extend and enrich personal scientific career track and acquire multidisciplinary skills, including access to cutting-edge equipment;
- 3. Opportunity to work in one of the best research institutions in Poland;
- 4. Supportive environment and opportunity to realize research ambitions;
- 5. Supervisory experience;
- 6. Personal development of transferable skills;
- 7. Flexible working time.

Required documents:

- CV (in English) documenting achievements, scientific degrees, publications, technical skills, research stays and other relevant experience;
- Document confirming the scientific degree;
- Cover letter (in English) outlining motivation to join the project and the most important scientific achievement of the candidate;
- Details of at least two individuals willing to provide references for the candidate.
- Please include in your application: "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."

Deadline for submitting documents: 17th February October 2025

Applications and informal enquires: danuta.gutowska-owsiak[at]ug.edu.pl; more details: www.dgo.ug.edu.pl

Intercollegiate Faculty of Biotechnology (IFB), established between the University of Gdansk and Medical University of Gdansk consistently ranks in the top three universities for Biotechnology and sustains productive interdisciplinary environment, fostering research and innovation. The modern Institute of Biotechnology in Oliva Campus offers excellent research provisions, with access to core facilities and equipment necessary to conduct high quality research. http://en.biotech.ug.edu.pl/.



Gdansk and the "Tri-City". Together with Sopot and Gdynia, the beautiful city of Gdansk on the Baltic coast offers both historical town as well as great infrastructure, fantastic transport links and an international airport within easy reach. Gdansk and the Tricity offer both academic and cultural excitement as well as modern lifestyle with a variety of entertainment options and miles of sandy beach.

