

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, www.dgo.ug.edu.pl)

seeks to recruit a talented and passionate individual to work in the fields of nanoengineering and immunology in the project carried out in collaboration with the University of Hong Kong, University of Oxford, University of Durham.



Project description:

Allergies occur when the immune system interprets a harmless antigen as a serious threat (e.g. pathogen invasion). The central role during the process is played by T lymphocytes, cells that can accurately identify an antigen and carry out a targeted response against it, resulting in a so-called "immune memory". If the allergen is mistakenly recognized, these cells become hyper-responsive, which wind the spiral of inflammation and contributes to the production of antibodies against the allergen. Currently, specific immunotherapy (desensitization) is the only causative treatment available, working by eliminating T-cell hypersensitivity to allergens and forcing them into a state of so-called tolerance. Within this project we plan to develop a new nanoparticle-based method of supplying allergens during desensitisation to allow targeted delivery of allergens to direct the reactivity of these cells in a very targeted way to efficiently produce immunological tolerance.

Details of employment:

Full-time, 12 months (with potential for extension) Gross salary: about 8 300 PLN/month Preferred starting date: Oct-Nov 2024 (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 necessary administrative and organizational tasks

Requirements:

- 1. Ph.D. in molecular biology, biology, biotechnology, chemistry, medical biology or similar.
- Please note that the funding institution (NCN; National Science Centre) regulations apply: the degree must be obtained no earlier than 7 years before joining the project, extended by previous sick or rehabilitation leaves granted, a childcare leave, in case of women by 18 months for every child born or adopted, whichever manner of accounting for career breaks is preferable. There are also additional conditions of employment as set out by NCN with regards to the previous employment history and PhD supervision, with further exceptions. For details, please refer to the point 2.1.2. Full-time remuneration for a post-doc type post): https://www.ncn.gov.pl/sites/default/files/pliki/koszty_edycja_33_en.pdf.
- 2. Proven hands-on experience in nucleic acid and general molecular biology techniques
- 3. Interest in nanotechnology and its biomedical applications
- 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:

- 1. Hands-on experience in nanoengineering
- 2. Experience in Atomic Force Microscopy (AFM)
- 3. Experience in SELEX

We offer:

- 1. The opportunity to contribute to the exciting and rapidly developing research in immunology and biomedical nanotechnology in collaboration with world-leading scientists
- 2. Excellent opportunity to extend and enrich personal scientific career track and acquiring multidisciplinary skills, including access to the 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:

- 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

Deadline for submitting documents: 22nd Sept 2024

Applications and informal enquires: <u>danuta.gutowska-owsiak[at]ug.edu.pl</u>; more details: <u>www.dgo.ug.edu.pl</u> 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."*

Intercollegiate Faculty of Biotechnology (IFB), established between the University of Gdansk and Medical University of Gdansk 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, beautiful city of Gdansk on the Baltic coast offers both historical town as well as great infrastructure, good transport links and an airport within easy reach. Gdansk offers both academic and cultural excitement as well as modern lifestyle with a variety of entertainment options and miles of sandy beach.