



# Justyna Gatkowska

ASSOCIATE PROFESSOR – UNIVERSITY OF LODZ

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## Currently held positions

**Department of Molecular Microbiology, Faculty of Biology and Environmental Protection**

University of Lodz

ASSOCIATE PROFESSOR

**Local Ethical Committee for Experiments on Animals · Faculty's Animal Welfare Committee · Faculty's Committee for Training, Internships and Apprenticeships in the use of experimental animals**

Łódź

MEMBER

## Scientific profile and collaborations

My main scientific interests involve **immunology, parasitology, microbiology** and **biotechnology**, both in term of fundamental knowledge and practical application of new discoveries and technologies.

I am conducting research in the field of specific **immunoprophylaxis of toxoplasmosis**, which aims to develop an effective and **universal vaccine** based on recombinant proteins of the parasite or plasmids encoding *Toxoplasma gondii* antigens, important for protozoan invasion and intracellular survival. I am also involved in the search for new **diagnostic antigens to improve detection of *T. gondii* infection** in farm animals and humans. This research is carried out in collaboration with the **Institute of Maritime and Tropical Medicine in Gdynia, Medical University of Gdańsk, Poland**.

I am also involved in experiments aimed at studying the **interaction of *Mycobacterium tuberculosis* with components of host innate immunity** and searching for **compounds with antiprotozoal and antimycobacterial activity**. This work is conducted in cooperation with **Institute of Medical Biology of the Polish Academy of Sciences, Poland**.

I have also been engaged in research of implementation of **biomaterials for peripheral nerve tissue regeneration** in collaboration with **Centre for Advanced Materials and Technologies CEZAMAT, Warsaw University of Technology, Poland**.

## Selected publications

- 2024 ***Immunogenicity and protective efficacy of recombinant chimeric antigens based on surface proteins of Toxoplasma gondii*** [\[link\]](#)
- 2023 ***Evaluation of long-term immunity and protection against *T. gondii* after immunization with multivalent recombinant chimeric *T. gondii* proteins*** [\[link\]](#)
- 2022 ***4-Arylthiosemicarbazide derivatives - Pharmacokinetics, toxicity and anti-Toxoplasma gondii activity in vivo*** [\[link\]](#)

## Research grants

**Project Manager:** 3 grants: NCN and 2 commercial projects

**Project Coordinator:** 2 grants: NCN

**Co-Investigator:** 10 grants: Polpharma, MNiSW, NCN, NCBiR

## Obtained patents

1 patent given by the Polish Patent Office

## International research stays

**Germany** Düsseldorf, Heinrich Heine University Düsseldorf, in the team of Prof. Hans-Georg Fischer