



Position for Master`s student

The *Laboratory of Molecular Basis of Aging and Rejuvenation* (www.topf-lab.org) headed by Dr. Ulrike Topf seeks a student to join the project entitled **“Molecular function of zinc storage in ribosomal proteins of eukaryotic cells”** funded by the Polish National Science Centre under OPUS 23 grant 2022/45/B/NZ1/03714.

This research aims to understand how ribosomal proteins help regulate zinc levels in cells as they age. Zinc is an essential nutrient, but inside cells, it is always bound to proteins. Some proteins need zinc for structural stability, while others require it for their enzymatic function.

Ribosomal proteins are abundant, and some of them bind zinc through cysteine residues. As cells age or experience stress, they produce more reactive oxygen species (ROS), which can temporarily oxidize the thiol groups in ribosomal proteins ([Topf et al., 2018](#)) ([Jonak et al., 2024](#)). The body carefully regulates zinc levels because too much zinc can be toxic to cells. However, as organisms age, extra zinc can be beneficial, which is why zinc supplements are often recommended for elderly people. The exact molecular reasons behind these benefits are still not well understood. To investigate this, we are using the small nematode *C. elegans* as a model to study how zinc supplementation affects health and lifespan. In this project, you will help conduct basic experiments to assess how zinc supplementation improves various health traits in *C. elegans*.

We offer:

Scholarship in the amount of 1500 PLN gross/ month (total 12 months)

Requirements for the candidate:

- Being a second degree student or minimum fourth year student of the master's studies of a faculty of life sciences in Poland;
- Excellent knowledge of written and spoken English;
- Communication and teamwork skills are essential;
- High motivation to do science (e.g. documented by involvement in research projects, conferences, non-curriculum course work, science club, etc.).

How to apply:

- **Applications should be sent via recruitment platform:**

<https://system.erecruiter.pl/FormTemplates/RecruitmentForm.aspx?WebID=15691a1cb8be4bf493308ffebb6e2442>

- **In case of any difficulties please contact:** recruitment@ibb.waw.pl. In the subject include **"Master`s student"** and your first and last name.
- Your application must be submitted in English and should contain:
 - Motivation letter *Curriculum vitae* (CV)
 - Recommendation letter (optional)
 - **Please include the following statement in your application:**
 - I hereby give consent for processing of my personal data included in the documents submitted for recruitment procedure to the Institute in accordance with the act of



the European Parliament and of the Council (UE) 2016/679 of 27 April, 2016 on the protection of individuals with regard to the processing of personal data and on the free flow of such data and repealing Directive 95/46 /EC (General Data Protection Regulation)." **Applications not including this statement will not be processed for legal reasons.**

The deadline for applications is **May 6th, 2025**. Short listed candidates will be invited for an interview. **Applications will be reviewed on a rolling-basis.** Applications submitted after the deadline will be still considered if the position is not filled.