

ENG

Title of the project:

Exploration of the development, functioning and role of circadian rhythm in early life stages of *Perca fluviatilis*

Competition: OPUS 22

PI: dr hab. Daniel Żarski

[Description of the project](#) from website of NCN

Description of the position:

General aim of this project is to verify at which developmental stage the embryos or larvae of Eurasian perch, *Perca fluviatilis*, acquiring 'sense of time' and how this ability undergoes future dynamics during the larval and/or juvenile periods. Additionally, the project will allow to answer the question 'whether' and 'to what extent' modified photoperiod and/or light spectrum, affects circadian rhythm of early life stages of the species studied.

The candidate will participate in the following research tasks:

1. Controlled breeding of perch (induction of ovulation and spermiation, gamete collection, in vitro fertilization);
2. Incubation of perch eggs, evaluation of embryo quality;
3. Rearing of perch larvae and fry, and assessment of their zootechnical indicators;
4. Isolation of RNA and protein;
5. Molecular analyses;
6. Transcriptome and proteome analyses.

Requirements:

1. A master's degree in fisheries, agriculture, biology or equivalent (expected before the deadline of this application);
2. High motivation to work in a multidisciplinary and international team with fish breeders, fish larvae as well as in molecular biology laboratory;
3. Basic knowledge on biology and animal physiology (vertebrates);
4. Basic knowledge on genomic tools (mainly transcriptomics and proteomics) will be appreciated, but not prerequisite;
5. Fluency in English in writing and speaking;
6. Availability, good work organization, ability to work in a team and deal with stress;
7. Ability to write scientific and / or popular science papers and present the results

Recruitment process:

- Applications will be assessed in accordance with the criteria set out in the regulations for awarding research scholarships in research projects financed by the National Science;
- Only on-line applications will be considered;



- Candidates evaluated with the highest score will be invited to an actual interview, which will take place face-to-face or online;
- During the interview, the candidate will be asked to deliver a 10-minute speech, presenting his/her Master thesis and research interests;
- Final results of the recruitment will be published on IAR&FR PAS webpage within 10 days after final decision.

Important information:

- **Application deadline: Jun 23rd, 2024, 23:59 (Eastern European Time)**
- **Application method:** application form
- **Interviews: 24.06-5.07.2024**
- **Location: Olsztyn, Poland**
- **Duration of the scholarship: 36 months**
- **Date of position opening: Octoberst, 2024**
- **Number of positions: 1**

Application form:

<https://pan.olsztyn.pl/interdisciplinary-doctoral-school-of-agricultural-sciences/2024-25-academic-year-recruitment/>