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

Kierownik Projektu: dr Katarzyna Palińska-Żarska

Promotor: dr hab. Daniel Żarski

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 reproduction of Eurasian perch (induction of ovulation and spermation, obtaining the gametes, in vitro fertilization);
2. Incubation of Eurasian perch eggs, evaluation of the quality of embryos;
3. Rearing of larvae and juveniles and evaluation of their zootechnical indicators;
4. RNA isolation and molecular analysis;
5. Sampling of biological material and their evaluation in terms of transcriptomic research.

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

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