ENG

Title of the project: "Blood circulating small non-coding RNAs (c-sncRNAs) as non-lethal biomarkers of reproductive status and gamete quality in pikeperch (Akronym: sAnDeRNA)"

Competition: Opus-26

PI: dr hab. Joanna Nynca

Description of the project:

The general main aim of the project is the detailed investigation of changes in circulating sncRNA in the blood plasma of pikeperch (*Sander lucioperca*) throughout two subsequent reproductive cycles (I cycle of virgin fish and II cycle of reproductively experienced fish) to explore the connection between circulating sncRNAs and the quality of gametes (eggs and sperm) in fish. Additionally, the project will lead to the identification of new forms of small RNA molecules, their target genes and conclusions about their possible functions in the reproduction of pikeperch.

The candidate will participate in the following research tasks:

1. Controlled reproduction of pikeperch (induction of ovulation and spermation, obtaining the gametes, in vitro fertilization).
2. Evaluation of the quality of gametes.
3. Incubation of eggs, rearing of pikeperch larvae and evaluation of their zootechnical indicators.
4. Determination of hormonal level in blood plasma.
5. RNA isolation and molecular analysis.
6. 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. Fluency in English in writing and speaking.
5. Availability, good work organization, ability to work in a team and deal with stress.
6. Ability to write scientific and / or popular science papers and present the results.
7. Basic knowledge on genomic tools (mainly transcriptomics and proteomics) will be appreciated, but not prerequisite.

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: 48 months**
- **Date of position opening: Ocotberst, 2024**
- **Number of positions: 1**

Application form:

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