Position Offered: POSTDOCTORAL RESEARCHER

Project: *DigiAcuaSOS: Application of digital tools and artificial intelligence techniques for the development of sustainable and precise aquaculture in the context of climate change*

Technological and scientific fields: Aquaculture, Digital tools for aquaculture, Computational biology, Bioinformatics, Massive data integration, Artificial Intelligence

Location: Cabanes, Castellón, Institute of Aquaculture Torre de la Sal (IATS), https://iats.csic.es/, https://nutrigroup-iats.org/

Research Group/PI: Nutrigenomics and Fish Growth Endocrinology Group, PI: Jaume Pérez Sánchez, https://nutrigroup-iats.org/; Co-PI: Juan Alberto Falcó Graciá

PROJECT SUMMARY

Aquaculture is the fastest growing animal production sector in the world, but it faces threats such as production intensification, climate change and pollution. The diversity and confluence of factors involved widen the range of possible scenarios, requiring holistic and versatile solutions to address this complexity. One approach to meet this challenge is the implementation of new (micro)electronic and digital technologies, already available by the PI of this proposal, for the development of advanced tools with massive, automated and continuous capacity for the acquisition, recording, integration and analysis of multifactorial data, with the ultimate goal of improving the monitoring, management and forecasting of aquaculture production in real time.

PROFESSIONAL PROFILE

Minimum requirements:

- Ph.D. in Bioinformatics, Biostatistics or equivalent.
- At least 5 years of proven experience in bioinformatics and data analysis.
- Knowledge of programming languages (Python, R, SQL, Java).

Merits to be considered:

- Demonstrated experience in omics data analysis and integration.
- Demonstrated experience using Bayesian networks and membrane computing.
- Ability to understand, communicate and write documentation in English.

WHAT IS OFFERED

Selected candidate will be offered an employment contract under the conditions described here, in order to carry out and teach the use of digital tools and to lead the decision making from data analysis in the context of this project. In addition, this person will receive a complete official specialized training in digital skills to generate new knowledge in the field through multi-omics analysis, Bayesian networks, membrane computing and artificial intelligence. He/she will also carry out several stays of at least 3 months in national and international reference institutions, as well as attend specialized congresses in aquaculture, hologenomics and bioinformatics. He/she will also be provided with the necessary support and tools to organize a specialized course on data digitization in aquaculture.

Contract conditions:

Indefinite contract for a Postdoctoral Researcher associated to the Momentum Project of 4 years' duration according to Spanish science law. Gross annual salary (41.000 € - 52.000 €).

Start of contract: before 31 December 2024

PRINCIPAL INVESTIGATOR CONTACT

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