

ECO-INNOVATIVE AQUACULTURE SYSTEM TRAINING FOR EUROPEAN INDUSTRIAL DOCTORATES

EASYTRAIN ESR PROFILE

ESR₆

1) RECRUITING AND PhD ENROLMENT

- Host institution (beneficiary): University of Murcia UMU (Spain), Department of Physiology
- Supervisory committee: FJ Sánchez Vázquez (UMU), C Bertolucci (UniFe) and L Conceicao (SPAROS)
- **PhD awarding entity:** Universities of Murcia and Ferrara (UniFe) (this is a <u>co-tutelled PhD Thesis</u>)
- Duration: 36 months

2) DESCRIPTION OF PhD RESEARCH PROJECT

- **Title:** Improving feeding protocols of fish in aquaponic
- **Objective:** To research on fish feeding behaviour using a self-feeding system in which fish can choose freely their preferred feeding time and meal size. The underlying mechanisms involved in food intake control will be also investigated .
- **Secondments:** 9 months in LANDING (The Netherlands), 9 months in SPAROS (Portugal) and 9 months in UniFe (Italy)

3) REQUIREMENTS AND SELECTION CRITERIA

- Mobility and academic rules
- Knowledge and experience in fish aquaculture
- MSc-degree in Aquaculture or a related discipline
- Theoretical knowledge of zoology, animal physiology and behaviour
- Practical experience in molecular and cellular biology
- Affinity and preferably experience in fish management
- Good level of English proficiency (understood, spoken and written)
- Skills in scientific writing (reports, papers, etc.) and data presentation
- Be highly motivated
- Creativity and high level of independency
- Team spirit and collaborative predisposition
- Reference letters

4) ADDITIONAL INFO

The PhD programme at Murcia and Ferrara Universities:

The normal duration of a PhD in Spain and Italy is 3 years. All our PhD students are embedded in the PhD Programme in "Integration and Modulation of Signals in Biomedicine" at UMU, and "Evolutionary Biology and Ecology" at Unife. The ESR will be also provided with training organized by the International School of Doctorate (UMU) and Institute for Higher Studies (UniFe), which is a structure that offers complementary and interdisciplinary activities to PhD students.

Research at the UMU research group:

Both freshwater and marine facilities will be available to investigate fish physiology in chronolabs where the main environmental signals (light and temperature) will be tightly controlled. Self-feeding systems and fish behavioural analysis tools will be also available. A research support service (ACTI) brings together the units and sections with instruments on molecular biology, image analysis, tissue cultivation, etc. Additional information about the research carried out by the IP can be found here: https://orcid.org/0000-0002-2366-9714

Research at the UniFe research group:

The research facilities that University of Ferrara (Unife) has available are molecular and cellular biology laboratories, chronolabs to maintain animals in controlled photo-thermoperiodic conditions, set-ups to recording locomotor activity in adult and larvae specimens, facilities for animal breeding and reproduction, including a fish-house authorized by Italian Ministry of Health, and a fully equipped workshop. Additional information about the research carried out by the IP can be found here: https://orcid.org/0000-0003-0252-3107. For more information about the Unife Research group: http://sveb.unife.it/it/ricerca-1/laboratori/behavioural-biology/bertolucci