EASYTRAIN ESR PROFILE

ESR 2

1) RECRUITING AND PhD ENROLMENT

- **Host institution (beneficiary):** TILAMUR (Spain)
- **Supervisory committee:** M Vidal (TILAMUR), C Bertolucci (UniFe) and Tyron Lucon Xiccato (UniFe)
- **PhD awarding entity:** University of Ferrara - UniFe (Italy)
- **Duration**: 36 months

2) DESCRIPTION OF PhD RESEARCH PROJECT

- **Title:** Synchronisation of fish and plant rhythms in aquaponics: matching rhythms of excretion and nutrient uptake. Extraction and purification of C-Phycocyanin from spirulina.
- **Objective:** To research the circadian rhythms of fish and plants in order to match them. Extract and purify biliproteins from spirulina for further study
- **Secondments*:*** 18 months in UniFe (Italy)

3) REQUIREMENTS AND SELECTION CRITERIA

- *Mobility and academic rules*
- *Knowledge and experience in* biochemistry, molecular biology and chemical engineering
- *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 Ferrara University:

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

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*