MSc position on fish personality

Hólar University College, Iceland, seeks a MSc student for an Icelandic Research Fund (RANNIS) project to study the evolution of Arctic charr (*Salvelinus alpinus*) sympatric morphs personality traits. The student will be closely collaborating with a PhD student which project will be focusing on the evolution of cognition.

Cognitive abilities are involved in the way individuals cope with their environment. To understand individual variation in cognition, it is necessary to consider the ecological and evolutionary context of the species being studied. Fishes experience a wide variety of environments, even within the same species leading to different morphs such as anadromous, benthic and pelagic morphs in arctic charr (*Salvelinus alpinus*, AC). The overall project aims to explore how environment of AC shapes their cognition. We hypothesize that cognition can be impacted by the degree of divergence i.e. divergence along an evolutionary and ecologically gradient. We will compare spatial cognition, personality traits, brain size allometry, brain morphology, molecular markers of cognitive abilities (from brain tissue) in offspring of wild-caught AC morphs along a degree of divergence raised in enriched *vs* plain environments.

The MSc student will be participating in field work collecting eggs from mature wild populations in different lakes and making crosses using several males and females. He/she will also be participating in the fish maintenance in our aquaculture facilities. He/she will specifically focus his work on assessing personality traits in various AC morphs as well as aquaculture strain. The results will be also used by the PhD student to disentangle the impact of personality traits on individual learning performances. The MSc student will carry out behavioural tests (e.g. novel object and open-field tests) in a dedicated room fully equipped with automated video tracking software.

The project is lead by Dr. David Benhaïm (lead PI, Hólar University College, Iceland) in collaboration across Hólar Univ. College (Prof. Bjarni K. Kristjánsson, Dr Camille Leblanc), University of Caen, France (Dr. Christelle Jozet-Alves), IFREMER, France (Dr. Marie-Laure Bégout, Dr. Benjamin Geffroy), INRA, France (Dr. Xavier Cousin).

Location: The students will be based at the Dept. of Aquaculture and Fish Biology (DAFB - http://holar.is/en/department_of_aquaculture_and_fish_biology) at Hólar Univ. College (North Iceland) and registered at the Univ. of Iceland (Reykjavik). HUC is situated in the beautiful village of Hólar (Skagafjördur), with offices and research laboratories in the nearby town Sauðárkrókur. DAFB is an active research centre and the students will become part of a dynamic international team of graduate students and faculty. The beautiful natural setting and easy travel allow both outdoor and cultural activities.

Requirements: The candidate must hold a BS degree in Ethology, Biology or related disciplines.

The ideal candidate has a strong interest in animal behaviour, enjoy working in a dynamic group, and have mainly experience from laboratory experiments. The student has to be able to work independently as well as a part of a team. *The position is funded for two years*.

The working language is English. Previous experience with animal behaviour experiments (fish in particular) and statistical skills (GLMM) will be a plus. A valid driving license is a requirement.

Applicants should send an application letter, with a statement of research interests and relevant experience (max 2 pages), curriculum vitae, copies of academic qualifications and the names and e-mail addresses of two referees, **as a single pdf** to benhaim@holar.is latest February 25, 2019. *Preferred starting date is April 1st 2019.*

For further information contact David Benhaïm (Dept. of Aquaculture and Fish Biology, Hólar Univ. College) (benhaim@holar.is).