

### **One-year Post-doctoral position: Evolutionary ecology of Icelandic Arctic charr**

Hólar University College, Iceland (Dr. Camille Leblanc and Pr. Bjarni Kristjánsson) seeks a Post-doctoral fellow to study how *Spatial and temporal variation in ecological resources affect fitness and phenotypic traits of multiple populations of small benthic Arctic charr*.

Numerous ecological and evolutionary processes contribute to the generation of biodiversity, and the complexity of their interactions has presented a challenge to our understanding of nature. Our knowledge of the roles of development, natural selection, genetic drift, and gene flow in shaping biodiversity is complicated by the spatial and temporal variability inherent in natural systems. A powerful approach to better understand such processes involves monitoring wild populations over generations and obtaining data including pedigrees, phenotype, and fitness, so that we can directly infer evolutionary parameters, particularly those describing selection and genetic variation. To approach such questions we study cave charr populations found in lava caves in Iceland, which are extensively replicated in space, and time. Seven years of data have been collected on individual fish from 16 populations, and preliminary results show important differences in survival, growth rate, shape, movement and ecology among these populations. The project is a collaboration between Hólar University College (Iceland), University of St. Andrews in Scotland (Dr. Michael Morrissey), University of Guelph, Canada (Prof. Moira M. Ferguson) and EAWAG in Switzerland (Dr. Katja Räsänen).

We are seeking a talented candidate to conduct analyses of existing data from the previous seven years of field work, particularly analyses of spatial variation in size-dependent growth functions and size-dependent survival. The appointee will work closely with Dr. Michael Morrissey at the University of Saint Andrews in Scotland. The post doctoral fellow will have the opportunity to join the team conducting fieldwork in summer.

The project has been funded by two successive grants from the Icelandic Research Council RANNIS. *The position is funded for one year*, but there are opportunities for the post doctoral fellow to apply for more funding to continue this work.

#### LOCATION:

The home University is Hólar Univ. College (North Iceland) in the Dept. of Aquaculture and Fish Biology (DAFB - [http://holar.is/en/department\\_of\\_aquaculture\\_and\\_fish\\_biology](http://holar.is/en/department_of_aquaculture_and_fish_biology)). HUC is situated in the beautiful village of Hólar (Skagafjörður), with offices and research laboratories in the nearby town Sauðárkrúkur. DAFB is an active research centre composed by a dynamic international team of post-doctoral fellows, graduate students and faculty. The beautiful natural setting and easy travel allow both outdoor and cultural activities. This position will include a significant amount of work with the University of Saint Andrews.

#### QUALIFICATIONS:

The candidate must hold a doctoral degree and have the ability to conduct independent work. Suitable candidates will have a strong background in evolutionary biology as demonstrated by publications in relevant fields. Previous research experience in some or all of: analysis of natural selection, evolutionary quantitative genetics, analysis of longitudinal data from populations, mark-recapture analyses, and Bayesian statistics will be desirable but not essential. The position offers a highly competitive salary of up to one year according to the Icelandic regulation.

The working language is English. A valid driving license is a requirement.

Applicants should send a single PDF file named "Cave charr position 2019" including an application letter with a statement of research interests (max 2 pages), a CV with a list of publications, copies of

academic qualifications/transcripts, and the names and e-mail addresses of three academics references, to [camille@mail.holar.is](mailto:camille@mail.holar.is) latest March 01, 2019. The position is available immediately.

For further information contact Camille A. Leblanc (Dept. of Aquaculture and Fish Biology, Hólar Univ. College) ([camille@mail.holar.is](mailto:camille@mail.holar.is)) or Dr. Michael Morrissey ([mbm5@st-andrews.ac.uk](mailto:mbm5@st-andrews.ac.uk))