

## **Post-doctoral position (PD1) on long-term data analyses of ECO-EVO-DEVO dynamics in threespine stickleback of lake Mývatn, Iceland**

Hólar University College, Iceland, seeks a Post-doctoral fellow for a Grant of Excellence (RANNIS) project to study the dynamics of *Ecological (ECO)*, *Evolutionary (EVO)* and *Developmental (DEVO)* processes

Biodiversity is under serious threat from human activities and we lack understanding of the processes that shape it. The phenotype, including developmental plasticity, is an important determinant of the dynamic interactions between ecological and evolutionary processes. This project will study the interplay among ECO, EVO and DEVO to fill knowledge gaps in 1) the dual role of ecology in evolution (as driver of natural selection and phenotypic plasticity), 2) the molecular mechanisms underlying phenotypic variation, and 3) the feedbacks between phenotypic change and ecosystem function (eco-evolutionary dynamics). The project takes a spatio-temporal perspective, using threespine stickleback (*Gasterosteus aculeatus*) from lake Mývatn, Iceland, as a model. The project is lead by Prof. Bjarni K. Kristjánsson (lead PI, Hólar University College, Iceland) and Dr. Katja Räsänen (Swiss Federal Institute of Aquatic Sciences, Eawag, Switzerland). It is part of a large collaboration across Hólar Univ. College (Prof. Skúli Skúlason), Eawag (Dr. Blake Matthews), Univ. of Wisconsin-Madison, USA (Prof. Anthony R. Ives), Univ. of Iceland (Prof. Zophonías O. Jónsson) and the Mývatn research station (Dr. Árni Einarsson). The students will have the opportunity to conduct part of their research at the collaborative institutions.

The postdoctoral fellow will *study spatial and temporal dynamics of selection in nature, integrating our long-term data on phenotypic variation with analyses of population genetic structure over space and time*. This project is an integral part of this collaborative study which also includes experiments (laboratory, mesocosm and field), transcriptomics and genomics, and mathematical modelling.

**Location:** The candidate will be based at the Dept. of Aquaculture and Fish Biology (DAFB - [http://holar.is/en/departments\\_of\\_aquaculture\\_and\\_fish\\_biology](http://holar.is/en/departments_of_aquaculture_and_fish_biology)) at Hólar Univ. College (HUC, North Iceland). 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 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 PhD degree in Ecology, Evolution, Development or related disciplines. An ideal candidate should have a strong interest in evolutionary ecology, a solid background in molecular genetics and statistical analyses (ideally on long-term data sets), have a shown ability to publish her/his own findings, enjoy working in a dynamic group, and have experience from field work and working on large data sets. The candidate has to be able to work independently as well as a part of a team. *The position is funded for three years.*

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

Applicants should send an application letter, labelled with a name and the code 'PD1', with a statement of research interests and relevant experience (max 2 pages), *curriculum vitae* with a list of publications, copies of academic qualifications and the names and e-mail addresses of three referees, **as a single pdf** to [ecoevodevo@holar.is](mailto:ecoevodevo@holar.is) latest March 15, 2019. *Preferred starting date is May 1<sup>st</sup> 2019.*

**For further information** contact Bjarni K. Kristjánsson (Head of the Dept. of Aquaculture and Fish Biology, Hólar Univ. College) ([bjakk@holar.is](mailto:bjakk@holar.is)) or Dr. Katja Räsänen ([katja.rasanen@eawag.ch](mailto:katja.rasanen@eawag.ch)).