Ph.D. STUDENT – MARINE PARASITOLOGY

Applications are invited from suitably qualified students for one Ph.D. student position to work under the supervision of Dr Haseeb Randhawa and Dr Björn Schäffner at the Faculty of Life and Environmental Sciences, University of Iceland (HI). The position is funded by the IRF project grant ("*Conservation of ancient relationships: Assessment of skates (Rajiformes: Rajidae) and their parasite fauna in Iceland"*, IRF project no. 2410498-051).

The project aims to survey the status of parasitic organisms infecting skate hosts in marine ecoregions off Iceland to aid in the future implementation of conservation efforts of threatened host-parasite systems. Research goals will assess the entire diversity of parasites infecting this host group, assess the genetic diversity of skate species and parasite lineages, and evaluate the status of host-parasite systems based on IUCN Red List criteria to support their conservation through updated conservation agendas. This large-scale project benefits from the international cooperation between the Icelandic academic institution and the Natural History Museum, London, U.K. (NHM). It offers the research basis for one PhD project.

The PhD project contributes to the unknown faunal component of marine parasites infecting skate hosts with an active engagement in the Icelandic marine biodiversity assessment. Main tasks of the Ph.D. student will include (*i*) the assessment of parasite diversity using a combination of organismal-based and molecular-based studies; (*ii*) the evaluation of factors influencing the biogeographic distribution and dispersal of marine parasites in Icelandic ecoregions; (*iii*) the assessment of molecular data of both parasites and skate hosts via targeted sequencing (Sanger sequencing) and genome skimming via next generation sequencing (NGS); (*iv*) the application of 3D imaging of the neuromuscular system of exemplar parasite species using fluorescent in situ hybridisation (FISH) in combination with confocal microscopy; and (*v*) the assessment of IUCN Red List criteria of threatened host-parasite systems. The Ph.D. student will further be responsible for producing high quality data in the field and laboratory and will lead or be involved in the preparation of international publications and presentations of research outcomes at domestic and international conferences. Molecular research components, including phylogenetic analysis and barcoding, and FISH technologies will be performed at the NHM, London for at least 12 months of the project duration under the supervision of Dr. Peter Olson (NHM).

The selected Ph.D. student will be enrolled at HI and will conduct research both at HI and the NHM benefiting from world-class scientific infrastructure in Iceland and the United Kingdom with opportunities to spotlight the research and gain valuable experience in science communication. By conducting independent investigations in multidisciplinary research areas utilising facilities both in Iceland and the UK, the student will build a research profile, become experienced in publishing and project management, and gain experience in public engagement and student supervision. The doctoral student will be responsible for leading the main investigations under

supervision to enhance and expand the professional career perspectives, highlighting transferrable strengths with lasting implications on future career prospects.

Ph.D. applicants must have been awarded the degree of B.Sc. (Honours) or M.Sc. in Parasitology, Ecology, Marine Biology or a related field, prior to the commencement of the Ph.D. project. Applicants should send a cover letter stating their interest in this position, a recent curriculum vitae and contact information of 2 academic referees. Application materials should be sent electronically to Dr Haseeb Randhawa (email: hrandhawa@hi.is) or Dr Björn Schäffner (email: bjoern@hi.is). After initial review, confidential letters of recommendation will be requested from referees. Only complete applications will be reviewed at this time. The deadline for applications is **May 31, 2024**. Applications will continue to be accepted until this date, but those received after the review date will only be considered if the position has not yet been filled.

Further details regarding the University and how to apply for admission in postgraduate programs can be found at the following homepages:
https://english.hi.is/school_of_engineering_and_natural_sciences/doctoral_studies
https://english.hi.is/university/phd_programmes
https://english.hi.is/university/international_students