PhD: Using genetics, physiology & modelling to improve marine ecosystem conservation (based at the Lyell Centre, Edinburgh)

In collaboration with the Royal Botanic Gardens Edinburgh and Scottish Natural Heritage, this project will combine genetics, physiology and modelling to improve the evidence-base that currently supports maerl bed conservation. Maerl beds – diverse ecosystems formed by accretions of free-living red coralline algae – are one of Europe's most ecologically and economically important marine ecosystems. Scotland is a European maerl bed stronghold, but current protection is based on a paucity of empirical data. Throughout the project, the student will work towards research objectives designed to improve management and conservation practice, forming recommendations underpinned by robust, multi-disciplinary scientific evidence. To achieve this, the student will combine field and laboratory experimentation, developing technical skills in spatial modelling, environmental genetics, bioinformatics and ecophysiology. Fieldwork will be conducted around the UK, with potential opportunities in the wider NE Atlantic (e.g. Iceland, Norway). Deadline for applications: 31st January 2018.