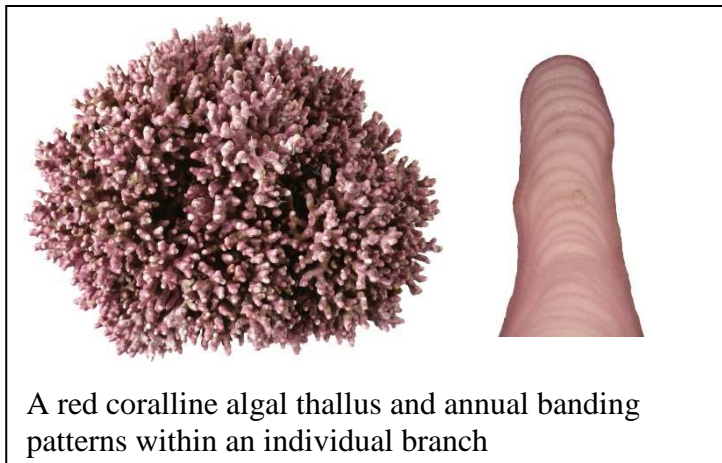


## **Filling in the gaps: Understanding seasonal North Atlantic climatic variability over the recent Holocene**

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Freshwater inflows into the North Atlantic Ocean are thought to have perturbed Thermohaline Circulation (THC) in the past, leading to cold spells lasting for hundreds of years, affecting marine ecosystems, fisheries and the climate's susceptibility to anthropogenic emissions. Attempts to model THC perturbations, which we may face in the near future due to global change, depend greatly on accurate palaeoclimatic and palaeoecological records. At present our knowledge is primarily limited by the spatiotemporal resolution of contemporary palaeoclimatic reconstructions. This research will "fill in the gaps" regarding our knowledge of recent climatic variability in the North Atlantic by focusing on seasonal scale climate responses. Annually banding marine red coralline algae will be used to determine climatic variability at sub-seasonal resolution over the recent Holocene. Samples will be collected from the NW Atlantic waters including Scotland and Iceland and palaeothermometry determined using Mg/Ca and  $\delta^{18}\text{O}$  locked within coralline algal growth bands. Reconstructions will be used to understand the spatio-temporal variability in seasonal climatic patterns across the NW Atlantic.



### **Application procedure and deadlines**

To be considered for PhD studentships to be held in the School of Geographical and Earth Sciences (GES), suitably qualified candidates should apply via the website of the College of Science and Engineering

(<http://www.gla.ac.uk/colleges/scienceengineering/graduateschool/prospectivestudents/essentialinformation/>). Closing dates for University and research council funded studentships will be in early in the new year, as stated on the GES studentships page:

<http://www.gla.ac.uk/schools/ges/research/postgraduate/>.

Non- English speakers must meet the University's English language requirements. Candidates for NERC studentships should also meet the NERC's requirements for both academic qualifications and

residential eligibility. For more information go to <http://www.nerc.ac.uk/funding/application/studentships> and please note that *non-UK European Union citizens will be awarded fees only by NERC.*

For informal enquiries about the research projects please contact the relevant supervisors. Information on the GES graduate school and the application process can be obtained from Mrs Jean McPartland, the assistant to head of the School ([Jean.McPartland@glasgow.ac.uk](mailto:Jean.McPartland@glasgow.ac.uk)).