

Candidate Information

| Position: | Research Assistant |
|-----------------------------|---|
| School/Department: | School of Biological Sciences |
| Reference: | 22/110498 |
| Closing Date: | Monday 9 January 2023 |
| Salary: | £29,619 - £34,308 per annum |
| Anticipated Interview Date: | Thursday 19 January 2023 |
| Duration: | Fixed term available until 31 July 2023 |

JOB PURPOSE:

To be an active member of the research team working on a project entitled "Seascape Genetics of Scallop populations. This project will combine habitat modelling, oceanography, and genomics techniques to further develop a science driven approach to the management of scallops fisheries in Northern Ireland. The main objective of the project is to assess the degree of genetic connectivity and interchange between areas to establish whether distinct patches represent isolated populations of part of a network of interconnected sub-populations (metapopulations).

MAJOR DUTIES:

- 1. Support the research team working on the Scallops genetic project in the acquisition of genetic data (e.g. microsatellite and SNPs) for analyses.
- 2. Further develop and utilise genetic and genomics methodologies (e.g. microsatellite and SNP genotyping of both nuclear and mtDNA genes), and associated analytical laboratory capabilities (e.g. DNA extraction, quantification and quality assessment), in order to generate reliable data to address project objectives.
- 3. Catalogue and prepare biological material for genetics and genomics.
- 4. Assist with population genetic analyses, critical evaluations, and interpretations using methodologies and other techniques appropriate to area of population and evolutionary genetics research.
- 5. Present regular progress reports on research to members of the research team and/or to external audiences to disseminate and publicise research findings.
- 6. Assist with the preparation, in consultation with project PIs, material for publication in national and international journals.
- 7. Carry out routine administrative tasks associated with the research project to ensure that it is completed on time and within budget. These might include organisation of project/group meetings and documentation, stock management, risk assessment of research activities and development of SOPs.

ESSENTIAL CRITERIA:

- 1. Have a degree or equivalent in a relevant area such as Population Genetics, Marine Biology or Biological Sciences.
- 2. Minimum one year of proven practical experience with curation/cataloguing large number and variety of biological tissue material for genetics and genomics analyses.
- 3. Minimum one year of proven practical experience with electronic databases.
- 4. Minimum one year of proven experience with genomic DNA extraction of biological samples and electrophoretic quality assessment of resulting DNA.
- 5. Possess sufficient breadth or depth of specialist knowledge to work within the area of marine fish and shellfish population genetics.
- 6. Experience with research report writing.
- 7. Methodical approach to project management and meticulous with regard to experimental procedures and record keeping.
- 8. Contribute to general culture of the laboratory, particularly passing on skills to new members.
- 9. Highly ambitious, motivated, efficient, organised and show a commitment to, and interest in, research topic.
- 10. Ability to communicate complex information clearly.
- 11. Ability to build contacts and participate in internal and external networks.

- 12. Demonstrable intellectual ability.
- 13. Ability to assess and organise resources.
- 14. Irregular hours including evening, weekend and other out-of-hours working will be a component of the research at times.

DESIRABLE CRITERIA:

- 1. MSc or PhD in Fish Population Genetics, Genomics, Bioinformatics.
- 2. Practical experience working (i.e. DNA extraction) with shellfish.
- 3. Practical experience working with shellfish fisheries management.
- 4. Experience with bioinformatics and population genetics analyses.
- 5. Experience working in a molecular laboratory associated with high throughput genetic screening methodologies.
- 6. Experience with Research project management.
- 7. Presentation to Project Workshop and other relevant venues.