

BI-02 level Data Management and Analytics position with the Molecular Genetics Lab – Genomics group at Fisheries and Ocean, Canada in Nanaimo

Job description

1. Work with a dynamic team of researchers and technicians from the DFO Genomics group based in Nanaimo BC and a wide array of academic, government, and ENGO clients.
2. Lead the development, curation, input, and analysis of large fisheries related genomic databases.

Duties

- Database
 - Error-check/Dataproof data submissions (usually in excel) including
 - Sample and collection info
 - Lab processes (Plate layouts)
 - Results
 - Liaise with various collaborators to obtain necessary shared data
 - Input data submitted data into an established MS Access and develop a new SQL database
 - Update and maintain records and other tables as required
 - Maintaining Linux system (Ubuntu 20)
 - Export data as needed by lab staff, researchers, and collaborators
 - Modify and/develop databases for the genomics group as needed
 - i.e.: environmental DNA and next generation sequencing databases
- Analysis
 - Using, modifying and developing R scripts
 - Performing data transformation, proofing, visualization, and preliminary analysis
 - Communicate complicated data sets effectively through effective data visualizations
- Reporting and Open Data Requirements
 - Transforming and transferring data to comply with open data and data sharing requirements and goals.
 - Provide a copy of the database to GOC Open Data or possibly to the Hakai datacenter to ensure open access to researchers outside of DFO

Essential qualifications

- **B.Sc or MSc degree from a recognized University in natural, physical or applied science**
- **Strong experience with relational databases, such as MS Access and SQL**
 - Design and development
 - Importing, updating, and exporting data
 - Designing and running queries
 - Troubleshooting and data proofing

- **Experience with R programming language and statistical analysis of data**
 - Data transformation, analysis, and visualization using various R packages (e.g. within tidyverse)
 - Experience developing code for specific applications
 - Experience with geospatial visualizations
 - Experience with statistical analysis of data, including multivariate and Bayesian statistics
- **Experience using software development and version control strategies (e.g. GitHub)**
- **Experience working on Linux systems via command line and shell scripts**
- **Experience with MS Excel**
- **Ability to develop effective visualizations to communicate large datasets**
- **Ability to work effectively with internal and external partners**
- **Ability to work both independently and as part of a team**
- **Ability to communicate effectively orally and in writing with a diverse client base.**
- **Ability to work under pressure and to meet tight deadlines**
- **Ability to plan, organize and establish priorities**
- **Ability to document work in detailed and reproducible manner**
- **Possession of a valid driver's license.**

If this is an opportunity that may interest you and you have the required experience, please send a CV and a letter outlining how you meet these essential qualifications to **Dr. Kristi Miller-Saunders** (Kristi.Saunders@dfo-mpo.gc.ca).