

# Research Programmer

<http://www.biol-lab.ca>

**Looking for a challenge? Work in fast-paced cutting-edge research!**

## Summary

The Genome Sciences Centre (GSC) is a leading international organization for genomics and bioinformatics research. Our mandate is to advance knowledge in those areas, and to realize the social and economic benefits of genomics research. The Research Programmer analyzes large-scale genomics data and provides support for research projects in the Bioinformatics Technology Lab (BTL) / Genome Sciences Centre - BC Cancer through developing software, data models, analysis pipelines, and documentation. The successful candidate will work independently in a multidisciplinary environment, and participate as a project team member on specific genome research projects to develop / test code and help analyze large volumes of genomics data.

## Key Accountabilities

- Develop and implement data analysis pipelines / algorithms
- Work with the BTL's Python and C/C++ code base (improve existing modules, create new ones, etc.)
- Analyze large scale genomics and next-generation sequencing datasets
- Investigate complex biological problems in which analysis of sequence data requires in-depth evaluation
- Collaborate to develop and test code, implement software and data analysis pipelines
- Prepare programming documentation in accordance with prescribed standards
- Conduct literature reviews, and provide input and recommendations to the Principal Investigator and Group Leader regarding new computer applications, bioinformatics software or statistical techniques
- Participate in weekly lab meetings and present work for review by others
- Provide contributions to the preparation and/or presentation of research manuscripts

## Qualifications

- B.A./B.S., M.S, or Ph.D. in Computer Science, Bioinformatics, Engineering or a related field
- Minimum 2 years of experience in computer programming
- Experience developing bioinformatics pipelines and/or tools is a must
- Proficient in C/C++
- Experience with at least one scripting language (Python, PERL, R, etc.)
- Experience with good software engineering and version control practices (code review, unit testing, etc.)
- Experience working in a Unix/Linux environment
- Experience with analyzing very large datasets (1TB+ scale)
- Experience with next-generation sequencing data analysis (DNA, RNA) is a must
- Knowledge of microbial and human genetics will be considered assets

**The successful applicant will be part of a team of research scientists working in a dynamic environment to primarily develop and apply data analysis algorithms and protocols to analyze genome data. You will be contributing to advancing science, cancer and genome research locally and worldwide. Send your CV with cover letter to [bcgscjobs@bcgsc.ca](mailto:bcgscjobs@bcgsc.ca) Job Code: XXXX**

### For HR Use

Date Created: August 16, 2018

Date Revised:

Job Code: RP-08-16-2018

Salary Range: R06