POSTDOCTORAL POSITION IN BIOINFORMATICS
Livestock Gentec/Delta Genomics

Delta Genomics is a not-for-profit genomic service provider located in downtown Edmonton that services the Canadian livestock industry and research community. Delta Genomics was created as the service arm of Livestock Gentec to facilitate the transfer of innovative technologies into the livestock industry. In April 2014, Delta spun-out of the University of Alberta to become a private company. Delta provides biobanking, genotyping, sequencing, and contract research services.

Livestock Gentec at the University of Alberta is an Alberta Innovates Bio Solutions center that conducts world-class genomics research with the intent of bringing commercial benefits to the Canadian livestock industry. Dr. Paul Stothard's group at Livestock Gentec specializes in the analysis and interpretation of large DNA sequence and genotype data sets, for the purpose of understanding the genetic underpinnings of important traits. His group has developed advanced software tools for analyzing whole genome sequences and has used these tools to characterize several important microbial and mammalian genomes.

Delta Genomics and Livestock Gentec are seeking a Post-Doctoral Fellow through the Mitacs Accelerate program to conduct the bioinformatics analysis on whole genome sequence and genotype data to develop the first genomic tool for the Canadian bison industry. This genomic tool will allow bison producers and conservationist to verify the parentage of animals, determine wood and plains sub-species composition within single animals, and measure cattle introgression. These three metrics will provide exceptional value to bison producers as the Canadian bison industry moves towards increasing supply in a sustainable manner that ensures the competitiveness and profitability of the industry as well as to conservation groups such as Parks Canada who will use this genomic tool as part of their Wood Bison Recovery Plan (2001).

The successful candidate will analyze whole genome sequence data and conduct SNP discovery activities for the three applications of this genomic tool. Following SNP discovery, the successful candidate will facilitate the construction of a custom SNP array followed by validation of the genotyping assay back to the whole genome sequence data and with expected results from the well characterized samples that were genotyped for validation. The successful candidate will conduct the majority of their work at Livestock Gentec on the University of Alberta campus, but will also spend a portion of their time at Delta Genomics understanding how and why industry applies academic research.

Qualifications:
- Completed a PhD in Bioinformatics, Biology, Genetics, Computing Science, or related fields.
- Preference will be given to those with a good understanding of molecular biology or quantitative genetics.
- Software development experience, with demonstrated expertise in Python, R, Ruby, or Perl.
- Experience working with popular bioinformatics APIs, programs, and databases.
- Proficient working with genome-scale data sets in a command-line environment.
- Vigilant about data documentation and code testing.
- Detail oriented and task focused mentality.
- Able to communicate efficiently and effectively through written and verbal means.
Requirements of Mitacs Accelerate:
• Graduated from PhD within 5 years of January 2018
• Not previously held a Mitacs Elevate award
• Canadian citizen, permanent resident, or demonstrate legal eligibility to work in Canada

To Apply:
Please send applications to Michelle Miller at michelle.miller@deltagenomics.com. Only those selected for an interview will be contacted.

Closing date:
Position open until filled

We thank all applicants for their interest; however, only those individuals selected for an interview will be contacted.

The University of Alberta offers appointments on the basis of merit. We are committed to the principle of equity in employment. We welcome diversity and encourage applications from all qualified women and men, including persons with disabilities, members of visible minorities and Aboriginal persons.