ORGANIZATION OR DEPARTMENT DESCRIPTION:
The Centre for Phenogenomics (TCP, formerly "Toronto Centre for Phenogenomics") is owned and operated by The Hospital for Sick Children and Mount Sinai Hospital as a centralized, state-of-the-art national research facility. Since 2007, TCP has provided animal holding, model production, clinical phenotyping, imaging, pathology, and cryopreservation & recovery services to users locally, across Canada, and around the world. The Centre for Applied Genomics (TCAG) is also a core facility of The Hospital for Sick Children and is dedicated to facilitating groundbreaking research in genomics, and associated informatics and statistics through providing service and training support for academic, government, and private sector scientists.

POSITION OVERVIEW:
TCP and TCAG are recruiting for a newly established Senior Biostatistician managerial position that will work jointly and be integrated as a team member in both TCP’s Informatics Team and TCAG’s Statistics and Informatics core facility. The successful candidate will join a team of research methodologists providing statistical support and leadership for projects requiring genetic and phenotypic analyses with an emphasis on animal models.

Here’s What You Get to Do:
• Analysis of next-generation DNA sequence data;
• Analysis of genome-wide single nucleotide polymorphisms and copy number variants;
• Linkage analysis, gene expression and epigenetic analysis, and related programming and scripting activities;
• Provides consultation to client researchers to help plan and design studies to ensure consistently high quality research;
• Evaluate the feasibility of studies (selection of outcomes, parameter estimates, power and sample size calculations), drafting sample size and analysis plan sections for grant proposal applications;
• Prepare summary statistics, graphical methods, and data queries (to look for duplication, errors in logic) to ensure data quality and identify outliers and potential data errors;
• Perform the statistical analysis as well as explain and interpret the results;
• Prepare summary tables and figures;
• Review manuscripts and abstracts prior to submission;
• Prepare data for publication and/or presentation at scientific meetings,
which may include writing and/or reviewing analysis sections of manuscripts;

• Maintain documentation regarding the statistical analysis process;
• Keep abreast of current developments and issues related to consulting projects;
• Assist with grant proposal- and manuscript-level writing of software solutions, analysis methods, and data summaries;
• Create clear technical reports and documents of processes, databases, and applications as required;
• Work with the Informatics Team Lead and Service Coordinators to perform project level planning to identify the scope of particular project tasks, estimate the workload and timelines involved, and create project schedules;
• Attends courses and conferences, as needed.

Here’s What You Need:
• Must have a PhD in Statistics or Biostatistics;
• An additional degree or post-doctoral training in genetics, molecular genetics, biochemistry, or equivalent professional experience is an asset;
• Must have exceptional verbal and communication skills;
• Must have excellent critical thinking and problem-solving skills, as well as ability to prioritize and manage multiple projects with competing deadlines and work with minimal supervision;
• Must have proven ability to maintain a high level of accuracy, independent judgement, and initiative, and be results driven;
• Must have strong computer skills;
• Must have expertise with statistical software (e.g. SAS, R), including some experience with computer programming;
• Experience in the following would be considered an asset:
  ◦ R, C, perl, plink, and unix;
  ◦ Public genetic databases such as UCSC genome browser, HapMap, 1000 genomes;
• Prior experience working with large-scale genomics datasets is an asset;
• Experience with gene expression and DNA methylation would be an asset;

Employment Type: Full Time Temporary contract; possibility of permanent