Staff Biostatistician, Alberta Children's Hospital Research Institute, Cumming School of Medicine

Job ID: 26331

Application Deadline: July 29, 2022

Please apply directly on the UCalgary Careers site using this link: https://careers.ucalgary.ca/jobs/10104602-staff-biostatistician-alberta-childrens-hospital-research-institute-cumming-school-of-medicine

Position Overview

The Alberta Children's Hospital Research Institute in the Cumming School of Medicine invites applications for a Staff Biostatistician. This Full-time Fixed Term position is for approximately 1 year (based on length of grant funding), with the possibility of extension.

This is an opportunity to contribute to high-impact research with the aim of increasing knowledge and improving outcomes for children and families. You will work to analyze and integrate data from multiple sources to improve prevention, diagnosis and treatment of pediatric diseases in direct collaboration with clinicians.

Reporting to the Program Manager, Child Health & Wellness Data Program, the Biostatistician conducts statistical analysis for ACHRI members, actively participates in research design and the presentation of results.

As an advocate for analytical rigor, your work will help support the recognition of Institute research by strengthening the methods used and in turn improving the potential for successful grant applications and dissemination of findings through publications and other outlets. This role may offer the opportunity to contribute as an author on field-relevant publications.

Position Description

Summary of Key Responsibilities (job functions include but are not limited to):

- **Analytical services:**
  - Plan and conduct statistical analysis for multiple, concurrent research projects. Develops analytic solutions for complex and challenging research questions. Documents data analysis plans and execution. Analyze large datasets, including clinical, administrative and non-health data, using advanced analytic methods. Uses a high level of scientific judgment to adapt methods and techniques by applying breadth of knowledge and prior work experience.

- **Interpretation and Visualization:**
  - Develop graphical output and deliver visualizations for inclusion in manuscripts and scientific proceedings. Prepare written reports of analysis with relevant figures, which are of high quality, accurate, and audience appropriate.

- **Advisory:**
  - Consult to ACHRI researchers on best practices for research design including power analysis and sample size calculations. Identify statistical methods best suited to answer specified research questions. Provides statistical expertise in the areas of logistic regression modelling, multivariate data analysis, survival analysis, longitudinal data analysis, and data management. Support grant and research ethics applications for the Institute by drafting or reviewing documentation for statistical plans.

- **Capacity building and Training:**
  - Serves as a knowledge expert in statistical methods and provides guidance and mentorship for other team members. Structuring and presenting workshops on a variety of themes such as the use of statistical software, statistical analysis and interpretation, hypothesis testing, assumptions of statistical tests, multiple linear regression and advanced modelling. Collaborate with researchers to develop internship opportunities for graduate students and trainees. Create a library of resources for use by Institute members.
Qualifications / Requirements:

▪ Ph. D. in Statistics, Biostatistics or Epidemiology
▪ 7+ years of experience in clinical, population health or health services research
▪ Expert working knowledge in statistical software packages such as SPSS, SAS or STATA as well as programming tools (R or Python)
▪ Publication record in peer-reviewed publications and/or contributions to open-source projects available on GitHub is an asset
▪ Deep understanding of predictive modeling and critical thinking ability to develop methods to innovate health data science
▪ Experienced in exploratory data analysis, multi-modal data linking, data quality assurance techniques and appraisal of research study design
▪ Working knowledge of data visualization tools
▪ Ability to learn and work with new databases
▪ Demonstrates creativity in problem solving and collaboration in professional relationships
▪ Communicates clearly both verbally and in writing with the ability to convey statistical concepts in lay language required
▪ Experience in supervision of junior research team members is an asset
▪ Commitment to continued learning and applying advanced analytics to solve real problems
▪ Ability to work independently with minimal direction and collaboratively as part of an interdisciplinary research team
▪ Work and research experience in the use of clinical data including codes for the International Classification of Diseases (ICD), administrative health data and/or electronic medical record is an asset
▪ Open to learning and development, and willing to accept new challenges and assignments

We would like to thank all applicants in advance for submitting their resumes. Please note, only those candidates chosen to continue on through the selection process will be contacted.

Additional Information

This position is part of the AUPE bargaining unit, and falls under the Technical Job Family, Phase 3.

To find out more about management and staff opportunities at the University of Calgary and all we have to offer, view our Management and Staff Careers website. For more information visit Careers in the Cumming School of Medicine.

The University strongly recommends all faculty and staff are fully vaccinated against COVID-19.

About the University of Calgary

The University of Calgary is Canada’s leading next-generation university – a living, growing and youthful institution that embraces change and opportunity with a can-do attitude. Located in the nation’s most enterprising city, the university is making tremendous progress on its Eyes High journey to be recognized as one of Canada’s top five research universities, grounded in innovative learning and teaching and fully integrated with the community it both serves and leads. The University of Calgary inspires and supports discovery, creativity and innovation across all disciplines.

About the Alberta Children’s Hospital Research Institute (ACHRI)

ACHRI is a partnership between the University of Calgary, Alberta Health Services and the Alberta Children's Hospital Foundation. As a multi-faculty, multi-disciplinary child health research initiative at the University of Calgary, ACHRI leads a wide range of research programs in the area of child and family health and wellbeing. Comprised of more than 350 member researchers who work in laboratories, hospitals, clinics and in the community, we make a difference in the lives of children and their families through new discoveries, better treatments and public health policies. For more information on our Child Health and Wellness Strategy, see: https://research4kids.ucalgary.ca/about/strategic-direction