Job Title: Student Analyst, Decision Support Number of positions: One (1) Site: Sunnybrook Health Sciences Centre, Bayview campus (2075 Bayview Ave, Toronto, ON) Department: Department of Medical Imaging Reports to: Manager of Informatics Hours per week: 37.5 hrs Rate of Pay: Commensurate with experience and consistent with organizational compensation policies Length of position: 12-16months Application deadline: February 12, 2018

## **SUMMARY OF DUTIES**

The Informatics team within the Department of Medical Imaging at Sunnybrook Health Sciences Centre provides technical and analytical support to operational and clinical areas of the hospital. The focus of the Informatics team is to systematically support evidence-based process decisions and performance monitoring for the service provision of all our imaging modalities (including but not limited to ultrasound, X-ray, CT, MRI, PET, nuclear medicine etc). Informatics team also supports the medical imaging team with any IT related needs including managing PACS and RIS.

## JOB DUTIES AND RESPONSIBILITIES

- Employ data query tools as required to pull data from multiple sources and merge into new data sets for analytical and modeling purposes and evaluates key performance metrics and trends.
- Develop analytical models for data generated by a variety of systems; including data visualizations.
- Perform data mining tasks, such as anomaly detection, classification, regression, clustering, and summarization/recommendation analysis.
- Identify opportunities and solutions to better meet business needs to drive performance and optimization
- Develop and implement various types of predictive models, simulation (discrete event simulation), data mining analyses, and performs research
- Effectively communicate the findings and benefits of the analytic solution to different audiences.
- Provide support to IT team in making sure that daily operations in the department run smoothly

This posting is a wonderful and practical learning experience.

## QUALIFICATIONS

- Pursuing a degree in Industrial engineering (Would have completed 3r Year by May 2018), operations research (or other quantitative disciplines)
- Course experience in statistical analysis and simulation modeling; healthcare experience is an asset
- Knowledge of the field of Operations Research and experience working with methodologies such as predictive modeling, simulation, segmentation forecasting, operations research and data mining
- Knowledge of statistical modeling tools (e.g., SAS, R) and other data query tools (SQL); experience with BI tools, Python, Apache Hadoop, Visual Basic, Visio, and database structures is an asset;
- Experience using simulation software (Simio, SIMUL8 or equivalent)
- Knowledge of Canadian health care standard datasets, such as Discharge Abstract Database (DAD), National Ambulatory Care Reporting System (NACRS), Continuing Care Reporting System (CCRS), National Rehabilitation Reporting System (NRS), is an asset
- Experience with MS Office (specifically Word, Excel, PowerPoint)
- Strong communication skills to deal effectively with stakeholders and the ability to work effectively in a team as well as independently.

- Excellent organizational skills, experience working in a project environment, advanced analytical ability with effective troubleshooting and problem solving attributes
- Adherence to confidentiality policy for sensitive financial and clinical information

## CONTACT

If interested, please send a 1 page cover letter and resume to Henry Sinn at Sunnybrook Health Sciences Centre. <u>henry.sinn@sunnybrook.ca</u>