Postdoctoral Fellowship in the Health Economics of Genome-Wide Sequencing

Genome-wide sequencing (GWS) is a powerful new genetic test that analyzes a person’s entire genetic make-up to diagnose the cause of genetic disorders, identify risk factors for serious diseases, and tailor pharmaceutical therapies to patients’ genotypes. GWS generates unique implementation issues, however, as it may diagnose disorders or disease risk factors that are unrelated to the original reason for testing. In addition, it can generate complex results that are difficult for non-expert healthcare providers to interpret. Currently, this technology is not routinely available in Canada, but because of its diagnostic capability, the utilization of GWS is expected to increase significantly by 2030. To ensure a sustainable implementation of GWS, it is imperative to identify the types of patients and indications for which the use of GWS is most cost-effective. In addition, as more patients and families consider GWS as a test option, the demand for decisional support (e.g., genetic counselling, bioinformatics, medical genetics) for patients, families, and non-specialist healthcare providers is likely to increase dramatically. Given the current genetic counselling capacity in Canadian healthcare systems, this is likely to lead to significant unmet need for GWS decision support if cost-effective and scalable approaches to delivering genetic counselling are not developed.

GenCOUNSEL, led by international researchers in genetic counselling, genomics, ethics, health services implementation and health economics will determine the most effective and efficient methods to provide genetic counselling with clinical GWS implementation. Health economics components of GenCOUNSEL include the development of a workforce model for genetics services that projects the future demand and supply for GWS and genetic counselling in Canada, cost-effectiveness and budget impact analyses of a genetic counsellor-led utilization management service in provincial genetics laboratories, and an economic evaluation of alternative models for the delivery of pre-GWS genetic counselling services (e.g., face-to-face, telehealth, online decision aids), and the elicitation of preferences related to the method of delivery of genetic counselling to support GWS The results of the GenCOUNSEL project will contribute significant to policy development related to the provision of GWS clinical services in Canada.

Applicants will have a PhD in epidemiology, health economics, health services research, health policy, bioinformatics, human genetics, or another discipline related to the economic evaluation of genetic technologies, with some previous experience and interests in the area. The successful applicant will be responsible for health economics research related to the clinical application of genome-wide sequencing and the delivery of genetic counselling to facilitate clinically appropriate and value-consistent decision-making by patients and healthcare providers. The Fellow will have a unique opportunity to be mentored by and collaborate with leading researchers and healthcare providers at UBC, BC Children’s and Women’s Hospitals, McGill University, and the Memorial University of Newfoundland, and to mentor junior trainees.
Applications will be accepted until the position is filled.

Preferred start date is **July 1st 2018** but is negotiable. The applicant will be required to provide a rationale and justification for applying for this Fellowship in the Health Economics of Genome-Wide Sequencing, and outline their specific objectives for the duration of the fellowship. Interested and qualified applicants should send curriculum vitae, a description of your research experience and most significant research accomplishments, a statement of your research interests, and contact information for three referees via email to:

Ms. Sarah Howard  
Email: [sarah.howard@ubc.ca](mailto:sarah.howard@ubc.ca)  
Project Manager, Collaboration for Outcomes Research and Evaluation (CORE)  
Faculty of Pharmaceutical Sciences, University of British Columbia  
2405 Wesbrook Mall Vancouver, BC V6T 1Z3

Equity and diversity are essential to academic excellence. An open and diverse community fosters the inclusion of voices that have been underrepresented or discouraged. We encourage applications from members of groups that have been marginalized on any grounds enumerated under the B.C. Human Rights Code, including sex, sexual orientation, gender identity or expression, racialization, disability, political belief, religion, marital or family status, age, and/or status as a First Nation, Metis, Inuit, or Indigenous person.

All qualified candidates are encouraged to apply; however Canadians and permanent residents will be given priority.