Billy Wang – University of Alberta

Project: Implementation and evaluation of novel patient-centered initiatives in a multidisciplinary Heart Function Clinic

Biography
Billy began his MSc in Medicine at the University of Alberta following the completion of his BSc honors degree in Physiology. His undergraduate experience is enriched by the broad scope of research activities he was exposed to encompassing both basic and clinical research. He joined Dr. Oudit’s group during his undergraduate thesis investigating the prognostic value of Renin-angiotensin system biomarkers in heart failure patients.

These experiences provided him incredible opportunities to work directly in outpatient and acute inpatient care settings, from which he developed a passion for patient-oriented research. Originally from Calgary, Billy enjoys hiking, kayaking and skiing in the mountains and is often found planning for his next travelling destination.

For his Master’s thesis, he will participate in the Heart Function Clinic at the Mazankowski Alberta Heart Institute, which utilizes a multidisciplinary care model, consisting of cardiologists, nurses, pharmacists, dieticians and geneticists centred around patients and their caregivers. Through empowering patients to participate in the implementation of novel patient-oriented initiatives to integrative supportive care and genetic consultation into routine clinical practice, Billy will assist in developing and evaluating an approach for future referrals that is guided by patient-identified priorities.

He hopes to develop his capacity to conduct patient-oriented research by seeking new ways to engage patients and learning methodologies to evaluate healthcare initiatives. Ultimately, Billy hopes to better understand patient experiences for those suffering from heart failure and intends to use his investigations to augment the patient care process for improved outcomes.

Project Summary
Over 600,000 Canadians are suffering from heart failure (HF), with 50,000 new diagnoses
each year, causing an enormous burden on patients and our healthcare system. Medical treatment for HF has seen remarkable advancements over the past several decades. However, there is presently no cure for HF, and despite optimal medical therapy, patients continue to deteriorate in waves, with initial recovery from medication changes followed by rapid deterioration, leaving patients disheartened and causing enormous stress for HF caregivers.

At our multidisciplinary Heart Function Clinic (HFC), we are beginning to implement two novel patient-centered initiatives to integrate supportive care and genetic consultation into routine clinical practice for advanced HF patients to reduce stressors and improve their quality of life. However, before these initiatives can become incorporated into routine clinical practice, several key factors including identification of patients in need, timing of referrals, efficiency and efficacy of these initiatives require further investigation.

A longitudinal design will be utilized for the study. Where demographics, etiology, diagnostics and management plans of patients frequently vising the clinic will be collected with patient’s informed consent. In-person interviews will be conducted with patients to assess the impact of HF on the quality of life, which will initially be used to optimize the patient identification and referral process. Referred patients will be subsequently followed for 5 years with repeated evaluations at the 1, 3- and 5-year mark. Findings from Billy’s study will help shape future guidelines on the management of advanced HF patients by implementation patient-centered initiatives in the HFCs.