

**Applicant**

Dr. Alton Russell, McGill University

**E-mail Address**

alton.russell@mcgill.ca

**Project Title**

Analyzing the value of blood donor data for public health surveillance

**Project Summary**

Blood donors are an attractive cohort for population health surveillance, but they may not represent the general population due to self-selection and donor eligibility criteria. Because blood donors have been invaluable in understanding SARS-CoV-2 epidemiology, public health researchers are newly interested in using blood donor data for population health surveillance. In this study, we will assess the representativeness of older blood donors by comparing the distribution of health measures and other variables between blood donor and the CLSA cohort. We will also assess whether methods that adjust for unrepresentative samples can be used to overcome selection bias in older blood donors by using the CLSA cohort for comparison. We will focus on three health areas: COVID-19-related health measures, iron status, and general questionnaire-based health indicators.

**Keywords**

Blood donors, Population health surveillance, Selection bias, Health indicators