

**Conference:** Beyond the Health Migrant Effect: Asian and Ethnic Minority Health in Aotearoa. Centre for Asian and Ethnic Minority Health Research and Evaluation (CAHRE National symposium) Friday 2 Sept 2022, FMHS, University of Auckland.

**Theme:** Genetics and Ethnicity

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**Abstract title:** Investigating the genetic underpinnings of premature cardiovascular disease among Girit-descendants living in Aotearoa

**Abstract:**

Cardiovascular disease burden has long been a concern for South Asian populations. However, the genetic heterogeneity of people within this group poses a considerable challenge for understanding genetic predisposition. Fijian Indians are a South Asian diasporic group, of whom a vast majority descend from Indentured (Girit) labourers, trafficked to Fiji between 1879-1920 to work on the British sugar plantations. Emerging analysis of the Girit legislation reveals that Girit-labourers endured 41 years of famine, causing a potential famine-induced genetic bottleneck. Every infant born during the Girit underwent severe prenatal famine exposure. High rates of consanguinity have also contributed to the potential reduction in genetic diversity among Girit-descendants. Despite forming only 2% of Aotearoa's population, Girit-descendants potentially account for 20% of heart attacks that occur under 40 years of age. This burden of premature heart disease in the Girit population living in Aotearoa demonstrates a significant and urgent unmet need and health inequity. This group also offers a taonga, as a relatively homogenous and isolated ethnic minority group with immense potential for genetics studies to reveal unique gene variants that contribute to disease aetiology. This paper will present an overview of the proposed genetic study of premature heart disease in Girit descendants. It will describe Girit-community consultation regarding the proposed genetics study and weaving of the Girit-communities preferences into custodianship and management of the genomic data. This will ensure that the study addresses the greatest unmet needs and interests of the Girit community, to stop this health inequity.