Image credit to: Leah Marie Dorion

Did you know that...

... Indigenous people are not represented in publicly available reference databases used for the interpretation of genetic sequencing?

... and this gap may prevent a precise diagnosis in Indigenous patients!

How does this gap affect genetic diagnosis?

- It means that the healthcare provider is less likely to provide a definitive answer about the presence or absence of a disease causing variant.
- There will be more variants of uncertain significance (VUS) reported instead.
- Reference databases reflective of the patient's population/ethnic background are an essential tool for DNA variant interpretation.

Variants are interpreted better if accurate population frequencies are available

Photo 213554384 © Gregory Johnston | Dreamstime.com

How has this been addressed?

A reference database for Canadian First Nations people has been developed and is ready to use!

INTRODUCING THE INDIGENOUS BACKGROUND VARIANT LIBRARY (IBVL)

IBVL is ...

- a reference database with the population frequency of DNA variants present in Indigenous participants from diverse communities across Canada;
- accessible to registered, approved users (across Canada and beyond) for the purpose of improving genetic diagnosis for First Nations patients;
- guided by an Indigenous Governance Committee, taking into consideration Indigenous sovereignty principles;
- housed on secure servers at the BC Children's Hospital Research Institute with restricted and monitored access;
- a deliverable of the Silent Genomes Project.

BC Children's Hospital Research Institute

Which patients will benefit?

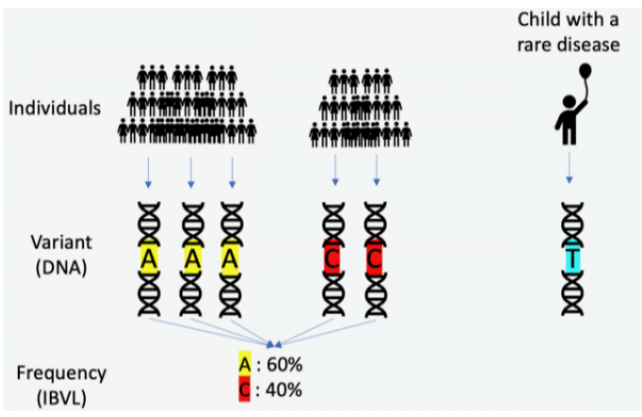
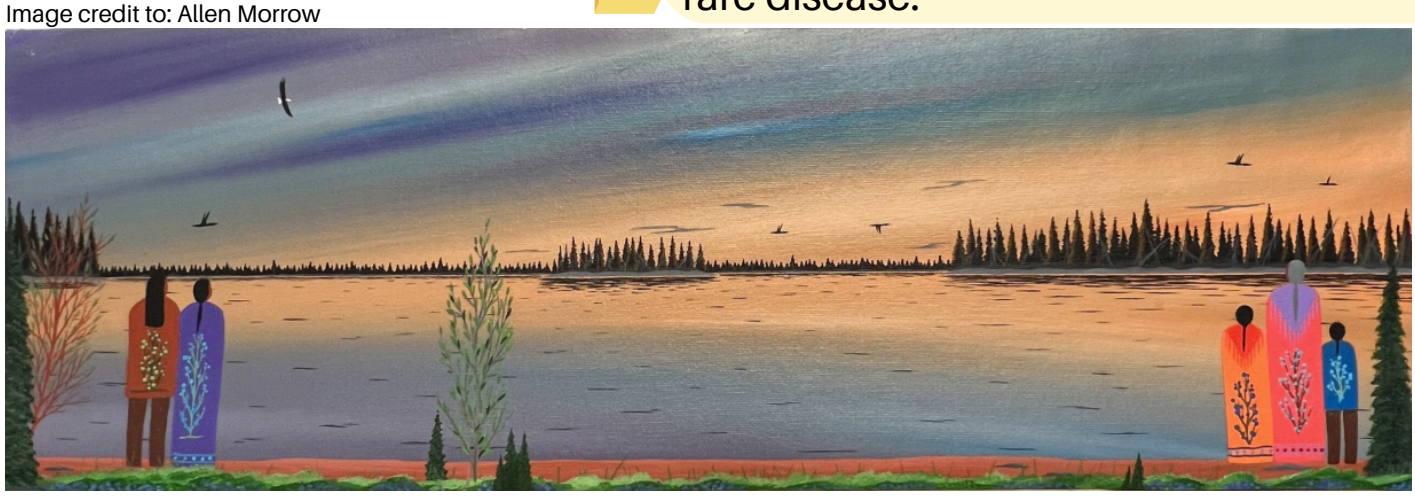


Image credit to: Allen Morrow

Any First Nations patient undergoing DNA sequencing to find the cause of genetic conditions such as:

- hereditary cancers,
- inherited cardiac arrhythmias or cardiomyopathies,
- rare disease.



How can my patients benefit from the IBVL?
It's easy as 1-2-3

1. If you are a healthcare provider who needs information about a variant of uncertain significance,you need to register to the portal.
2. After your request is approved,
3. DNA variant frequencies can be reviewed to aid variant interpretation.

Modified from https://en.wikipedia.org/wiki/File:Difference_DNA_RNA-EN.svg

How can I learn more about the IBVL?

IBVL webpage

Information for the patients

Created for the online distribution