

## **BACKGROUNDER**

### **Competition Result – *Sharing Big Data for Health Care Innovation: Advancing the Objectives of the Global Alliance for Genomics and Health***

Genome Canada, in partnership with the Canadian Institutes of Health Research (CIHR), is pleased to announce the result of the funding competition *Sharing Big Data for Health Care Innovation: Advancing the Objectives of the Global Alliance for Genomics and Health*. The Canadian International Data Sharing Initiative (Can-SHARE) will receive \$3.3 million in funding from multiple sources including Genome Canada, CIHR, Génome Québec, Genome British Columbia and the Ontario Ministry of Research and Innovation.

#### **Canadian International Data Sharing Initiative to accelerate health-care innovation**

The dramatically reduced cost of DNA sequencing has led to the accumulation of vast amounts of genomic data. These data – often called “Big Data” – are to genomic and clinical research what the Internet is to social media: the platform upon which collaboration and innovation are built. This can only happen, though, if data are accessible and widely shared – a distant reality, both in Canada and internationally. Some of the barriers to achieving this goal are technical, such as ensuring interoperability across institutional, provincial and national jurisdictions; others are socioethical and legal, such as differing consent, privacy and ethics review.

The Canadian International Data Sharing Initiative (Can-SHARE) is led by P<sup>3</sup>G (the Public Population Project in Genomics and Society). It will strengthen and expand Canadian leadership in Big Data sharing through the Global Alliance for Genomics and Health (GA4GH). GA4GH was established in 2013 to encourage collaboration on the development of innovative solutions to accelerate international sharing of genomic and clinical data. Can-SHARE’s principal investigators are Drs. Bartha Maria Knoppers of McGill University, Michael Brudno of Toronto’s Hospital for Sick Children and Jan Friedman of the University of British Columbia.

Can-SHARE’s contribution to GA4GH will focus on three areas:

- supporting the work of team members on the Regulatory and Ethics Working Group (REWG) of the GA4GH, as well as on its policy task teams, thus ensuring both that Canada’s perspectives are represented and that Canadian data requirements are consistent with principles agreed upon by GA4GH;

- supporting Canadian-led demonstration projects in areas such as rare diseases and the genetic basis of breast and other cancers;
- supporting pilot projects in key areas that demonstrate the value of data sharing and create harmonized approaches to such sharing.

Can-SHARE's leadership in promoting data sharing across jurisdictions will ensure that Canadians benefit from health-care innovation for decades to come.