

VOLUME 8 - DECEMBER 2018

The CARTaGENE Voice

AIMS TO ACCELERATE HEALTH RESEARCH

www.cartagene.qc.ca

A new milestone for CARTaGENE

This year marks a new milestone for **CARTaGENE.** It's been **10 years** since you agreed to put your trust in **CARTaGENE** and contribute to health research. This platform would not exist without you and we are grateful for your invaluable contribution.

Your continued commitment is crucial to the future of **CARTaGENE**. You are helping in making it better and more useful for health research (e.g. cancer and chronic diseases).

You may have noticed that the **CARTaGENE** newsletter has changed its name and style. We modified it FOR YOU: make your VOICE heard and send us your interests.



I AM CARTAGENES

You Are CARTaGENE!

Write to us at unite.cartagene.hsj@ssss.gouv.qc.ca, we welcome and value your feedback.

Health follow-up questionnaire: it is not too late!

Thank vou to all participants who have already completed their follow-up health questionnaire. For those of you who have not completed it yet, it's not too late! We encourage you to complete it as as possible on the Participant Portal:

https://participants.cartagene.qc.ca/

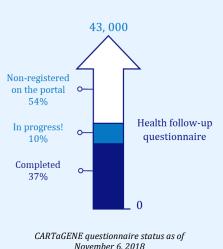
Thanks to your current and future information, researchers could identify environmental, genetic, and lifestyle factors that could make certain people develop diseases over time, and

therefore. adapt medical procedures accordingly.

In 2017, CaG launched their first online follow-up questionnaire. We thank you for taking the time to register on our portal! We are here to help you with any issues and rest assured that we are working hard to keep improving your experience.

You can reach us anytime by phone at 1-877-263-2360 or by email at:

unite.cartagene.hsj@ssss.gouv.qc.ca



November 6, 2018

Health follow-up questionnaire: It is not too late! (cont.)

Rest assured that your privacy and the confidentiality fo your information remain our top priorities. The transition from paper to digital ensures accurate and fast transmission of your answers, while avoiding paper prints and error risk in the transcription. A strong financial management ensures the long-term sustainability of CARTaGENE.

Your participation is a key factor in the success of CARTaGENE. Without you, CARTaGENE can not continue to exist.

Thank you for helping us keep your information up to date

Have you moved, retired, changed your email address or phone number?

Please take a moment to notify us of any changes or additions to your information.

Even if you move outside of Quebec or Canada, you can still remain a participant!

Staying in touch with participants is important for the project's success!

Contact us

By email:

unite.cartagene.hsj@ssss.gouv.qc.ca

By telephone (toll free calls in Quebec & Canada):

1 (877) 263-2360

By post: CARTaGENE

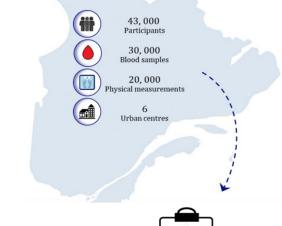
Centre de recherche du CHU Sainte-Justine 3175, Chemin de la Côte-Sainte-Catherine Montréal (Qc) H3T 1C5 Canada

For more information:

https://www.cartagene.qc.ca/

How do researchers use CARTaGENE data?

A brief visualization of CARTaGENE's long-term mission



Surveys are analyzed and data are extracted.



The data is coded, encrypted and stored in secure facilities.



Researchers are linking participants' health information with environmental and genetic factors to better understand the mechanisms behind diseases.



CARTaGENE permits to ultimately reduce the burden of diseases such as cancer and chronic diseases for future generations, and contributes to research for a healthier future.

"Researcher's column"



Dr. Rémi Goupil

Now, more than ever, we want to build bridges between researchers and CARTaGENE participants. We are proud to share the testimonials of researchers who, thanks to CARTaGENE, contribute to the advancement of health research.

A word from Dr. Rémi Goupil, researcher at "Hôpital Sacré-Coeur de Montréal":

"Thanks to your generous participation, the CARTaGENE database has become an incredible tool for researchers. In recent years, my team and I have used this data to better understand the determinants of central blood

pressure. These analyzes have been rewarded by the publication of several scientific articles in renowned scientific journals. The next step in our research program is to determine how central pressure measurement identifies patients at risk for cardiovascular disease compared to traditional blood pressure measurements (using an armband). Answering this question could justify the use of devices that can measure central pressures for the monitoring and prevention of cardiovascular disease. To do this, CARTaGENE is a powerful instrument, thanks to the large size of its cohort and the accuracy of its data."

Recent projects

For several years, CARTaGENE participants' data and biological samples have resulted in more than 50 projects. Here are 4 projects that started in 2018:

1- Guillaume Lettre - University of Montreal / Montreal Heart Institute - Genetic analyses of cardiometabolic diseases and traits in CARTaGENE

Dr. Lettre and his team will use statistical approaches to identify associations between genes and diseases in the CARTaGENE cohort. Research interests will include cardiometabolic (myocardial infarction, hypertension, diabetes), anthropometrics (height, body mass index), and blood (platelets, red and white blood cells). These results will make it possible to evaluate the potential of certain genes as therapeutic tools.

2- Patricia Tonin - McGill University - Genetic analyses of proposed new ovarian cancer predisposing gene

Although the majority of ovarian cancer cases would be attributable to mutations in the BRCA genes, the hereditary cancer ovarian would not be solely due to these genes. Dr. Tonin and her team are working on the characterization of another gene, named FANCI, that plays an important role in the development of ovarian cancer that is not attributable to BRCA genes.

3- Brent Richards - Lady Davis Institute, Jewish General Hospital - Impact of genetic variations on the response to vitamin D therapy

Dr. Richards' team uses the CARTaGENE platform to evaluate the impact of a genetic mutation on the response to vitamin D supplements. The latter may be lower in individuals carrying this mutation.

4- Josée Laganière - Héma-Québec - Prevalence study of blood group D antigen

For several years, blood banks have been turning to genetic analyzes to avoid incompatibilities and the risk of fatal reactions during transfusions. Dr. Laganière and her team are studying the prevalence of significant genetic variations in this project among the Quebec population.

To browse all current projects, visit: www.cartagene.gc.ca/en/participants/projects

Did You Know...

85% of Phase A participants are right-handed, 8.5% are left-handed, and 6.5% are ambidextrous. Ambidexterity is the ability for a person to be equally skilled with both hands. An ambidextrous person is not lateralized: they are neither right-handed nor left-handed.

The cause for this preference is still largely unknown.

According to some theories, the reason why the majority of us are right-handed is due to the areas controlled by the left hemisphere of the brain. The left hemisphere of the brain is responsible for language and controls the movements of our right hand and body. Although evolutionary there is an component to being righthanded, it is far from being the only factor. Studies suggest that dexterity may be related to genetic variations that influence the asymmetry of the body and brain.

Dexterity still alludes us!

12% of people worldwide are left-handed

Left-handed parents have a 26% chance of having a left-handed child

12,8% of Canadians are left-handed

The right side of the brain controls the left side of your body

Left-Handed or Right-Handed?

The highest % of right-handed population:
Korea (98%),
Japan (97%) &
Taïwan (97%)



Right-handed parents have a 9% chance of having a left-handed child



1% of people are ambidextrous



All vectors used in this newsletter are from Vecteezy.com



CARTaGENE is 43,000 participants devoted to advancing health research in Quebec and beyond!

The CARTaGENE team would like to thank each one of you for your continued contribution in the past 10 years!



Our financial partners:







