## SÉMINAIRES ET CONFÉRENCES



## **SIMON GRAVEL**

## Department of Human Genetics McGill University

"Genes, genealogy, and geography: A genetic history of Quebec"

The population of French ancestry in Quebec has been studied extensively by geneticists thanks to its particular demography and to the availability of extensive historical records.

In the first part of the talk, I will discuss how we used a pedigree compiled from 4 million parish records and genotype data from 2276 French and 20,451 French Canadian individuals to finely model and trace French Canadian ancestry through space and time[1]. The loss of ancestral French population structure and the appearance of spatial and regional structure highlights a wide range of population expansion models. Migrations were shaped by geographic features including rivers, mountains, and the occasional meteorite impact crater, providing a unique model for both recent and ancient human evolution.

In the second part of the talk, I will discuss new data available in the CARTaGENE cohort for French-Canadian, Moroccan, and Haitian ancestry populations, and some recent results using these data to track the transmission of rare disease variants though space and time.











**Lundi 4 novembre 2024, 11h30** 

Pavillon Joseph-Armand-Bombardier, Salle: 1035

ET

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