

Your Source for Life Sciences in Vancouver

[Subscribe Now](#) 

Publications of the Week

ntJoin: Fast and Lightweight Assembly-Guided Scaffolding Using Minimizer Graphs

Coombe, L., et al. | Bioinformatics | May 7, 2020



[Read the Publication](#)

This week we profile a recent publication in Bioinformatics from Dr. René Warren (pictured above) and Dr. Inanc Birol (below) at Canada's Michael Smith Genome Sciences Centre.

Can you provide a brief overview of your lab's current research focus?

The Bioinformatics Technology Lab at Canada's Michael Smith Genome Sciences Centre (GSC) at BC Cancer, led by GSC Distinguished Scientist **Dr. Inanc Birol**, is a computational biology research group. We develop novel algorithms, data structures and genome analysis software and offer a complete and scalable solution for *de novo* genome assembly. The bioinformatics tools



we build find applications in cancer research, and are the foundation of our genome research program at the GSC.

— Dr. Inanc Birol

What is the significance of the findings in this publication?

This publication introduces a new bioinformatics tool, ntJoin, which is now available for researchers to freely [download](#) and use. ntJoin is a rapid and lightweight tool for genome assembly scaffolding that leverages minimizer sketches, simultaneously making it faster while reducing the amount of memory needed in comparison to existing state-of-the-art tools.

What are the next steps for this research?

We are continually working on improving and developing new and exciting bioinformatics technologies with applications in genomics and transcriptomics. For ntJoin, we are exploring the development of additional features to improve its performance on highly repetitive genomes such as that of spruce, which has been the prime focus of a Genome Canada-funded large scale applied research project in collaboration with the Michael Smith Laboratories at UBC, Natural Resource Canada, Université Laval, the BC Ministry of Forests and the GSC.

This work was funded by:

This work was supported by Genome BC, Genome Canada, and the National Institutes of Health.

[Read the Publication](#)

Upcoming Events in Vancouver

May 11 - 13, 2020

Pint of Science Canada

@ Online

May 12, 2020

Women's Brain Health: Young Investigators Symposium

@ Online

May 12, 2020

One Hour @ UBC Lecture: Why it Takes So Long to Develop Treatments and Vaccines

@ Online

May 13, 2020

Stem Cells from the Sofa Speaker Series: Dr. Jim Woodgett

@ Online

May 13, 2020

BCREGMED Quarantine Sessions

@ Online

[View All Events](#)

Featured Jobs

Research Associate, Multidisciplinary Translational Research Program

UBC Department of Pediatrics

Research Associate, Bioinformatics Lab

UBC Centre for Molecular Medicine and Therapeutics

Assistant Professor, Tenure Track

UBC Department of Medical Genetics

Senior Associate, Biologics Discovery

Amgen

Sales & Marketing Assistant

Aspect Biosystems

Brought to you by



[About Science in the City](#) [Contact Us](#) [Media Partnerships](#) [Privacy](#)

[Subscribe](#)

SCIENCE IN THE CITY is an official mark of McMaster University and it is used and registered by STEMCELL Technologies Canada Inc. in Canada with the consent of McMaster University.