

GBS NGS Service Ordering (Génomique Québec)

Prerequisites

Prior to placing an order with Génomique Québec you need to have quotes for the sequencing to be done from Génomique Québec and a purchase order from the Plant Pathology purchasing department.

How to obtain a quote from Génomique Québec

Send an email to pdaoust@genomequebec.com with the order details and copy Jesse and Shuangye.

For example, to obtain two new quotes for sequencing 8 GBS libraries the email should read:

Please generate two new quotes for us: 2 flow cells of 8 lanes. 1x100bp runs.

Be sure to request quotes at least a week in advance of shipping the GBS Libraries.
Always ask for quotes for 8 libraries per order

Génomique Québec will respond by email with PDF quote documents attached.

How to obtain a purchase order from KSU Plant Pathology Purchasing Department

Once the quotes are received, they should be forwarded to the Poland Lab Project Management department who will get the Purchase Orders generated and distributed via email as PDF PO documents.

Placing and Order for Next-Generation Sequencing from Génome Québec

1. Navigate to the Génome Québec website login page and login:
<https://genomequebec.mcgill.ca/nanuqAdministration/>
2. Select the New Request option.

General Information Page

3. In the Project Name box, enter a name to identify the order - Use GBS Project Name and any other useful identifiers such as gbs_name and plate numbers e.g. CIMMYT_YTBW_P22_P37
4. Select Jesse Poland as Principal investigator. Account Address and Billing Address will be filled out automatically.
5. Select Jesse Poland as the Contact Person for the order.

Quotes and Payments Page

6. Enter the Quote Number (identified by the SCI Number on the quote document e.g. SCI012219)
7. Enter the total cost from the quote document.
8. Ignore the Service Contract item.
9. For the Payment item, enter the following:
 - a. Payment Method – Purchase Order
 - b. Payment Details- enter PO Number
 - c. Browse for the PO document and attach the PO PDF file.

Project Page

10. Enter the following details for the Project
 - a. Category- Non-Canadian Academic
 - b. Source of Research Funding - Other
 - c. Ethics Review – **No**
 - d. Survey - Returning User
 - e. Publication Policy – I Agree

Type of Work Page

11. Enter the following details for the Type of Work
 - a. Service - Next-Generation Sequencing
 - b. Technology - Illumina HiSeq
 - c. Experiment Description - Genotyping-by-Sequencing for Wheat
 - d. Sample Description - Triticum aestivum (wheat)
 - e. Bioinformatics Service – None (raw data only)

Sample Information Page

12. Enter the following Details for the Sample Information
 - a. Sample Description:
Sample Type - Sequence-ready Library
Library Type - Genotyping-by-Sequencing
 - b. Quantification Method: PicoGreen
 - c. Custom Adapters - No
 - d. Sample Requirements - Yes (I agree...)
 - e. Send Results – Online (using my Nanuq Account)
 - f. Illumina Sample Results Type – FastQ
 - g. Sample Disposal - Sample results returned? – No

Sample Information Page

The Sample Information is submitted as an Excel Spreadsheet (.xls)

13. On the Sample information page enter the following Sample Submission information:
 - a. Do samples need extraction? – No.
 - b. Sample Category-Sequence Ready Libraries (adapters already attached)
 - c. Container - 96 well plate - column layout

Download the spreadsheet template and complete required items for the order:

- a. PI user ID – jpoland
- b. Library or Amplicon Samples – Library
- c. Type of Container and Layout – 96 well plate – Column layout
- d. Plate Type – Eppendorf twin.tec, Full Skirt (recommended for DNA)
- e. Plate Name – NA
- f. Adapter/Index Type - Custom

In the main part of the spreadsheet fill in the following columns (1 row per GBS library):

- g. Sample Type -Individual Library
- h. Client Library Name - Enter the GBS Number e.g. GBS1323
- i. Sequencing Technology-Library Type - Illumina Shotgun
- j. Species - (Usually) *Triticum aestivum*
- k. Fragment/Library Size (bp) - 250
- l. Concentration (ng/ μ l): 999
- m. Volume (μ l) - 40
- n. Type of Sequencing - Other (please comment)
- o. Number/fraction of Sequencing units - 1.000
- p. "Comments - Illumina HiSeq 4000 SR100 ; in-line barcodes; genotyping-by-sequencing; normalized to 10nM; ready to sequence"

Save the spreadsheet in .xls format - with name in the following format e.g. mpsLibraries_SCI012219 (i.e. include the quote number in name)

- q. Upload and attach the completed spreadsheet
- r. Hit the Submit Icon to the left of the Submission Information to verify the submission.

Verification Page

- 14. Verification step - check the inputs and edit as necessary
- 15. Sign and Submit
 - a. Print the request form using the Print button and Print to PDF
 - b. Sign the form /s/Jesse Poland and Save
- 16. Email a copy of the order document to Shuangye.
- 17. Shuangye will ship the samples.