Core Facility Genomics

Newsletter – September 2024

NovaSeq X Plus

As previously announced the NovaSeq X Plus sequencer arrived at the Core Facility Genomics.

The validation of the machine is almost finished for the 10B flow cell. The 1,5B and 25B flow cell will follow.

Having a NovaSeq X Plus in-house has *several important advantages*. In-house sequencing means communication lines are shorter, which makes it easier to solve potential issues or handle additional data requests. Finally, it makes the CFG more flexible in implementing novel techniques and innovations.
The CFG is almost ready for in-house sequencing on the NovaSeq X Plus. We would love to inform you about that in our upcoming CFG User meeting on September 24th. The recording of this meeting and all our previous meetings can be found on our website.

We are updating the NGS Sequencing submission form. To make sure you use the most up-to-date form, please always visit the CFG website or K2. Sequencing pools can be submitted as before.

In our previous Newsletter we introduced the new XLEAP-SBS chemistry, which is used on the NovaSeq X Plus, but can also be used on the NextSeq2000.

PromethION 2 Solo

The CFG is happy no announce that a second PromethION 2 Solo (P2 Solo) from Nanopore arrived.

Next to the MinION machine, where we run two kinds of flowcells: the MinION Flongle and MinION Flow Cell. The CFG has two P2 Solo machines, which each can run two PromethION Flow Cells.

Nanopore sequencing is a long-read sequencing method that utilizes a flow cell with nanopores. When an RNA or DNA molecule is passed through the pore, the base sequence is determined by measuring the ion current.

The CFG currently offers two types of preps for Nanopore sequencing: amplicon and shotgun. There are various additional Nanopore kits available, such as the Short Fragment Eliminator Expansion Kit, which can be used depending on fragment size and the experiment.

The output is a FASTQ file. By default, CFG will use the Sushi pipeline, which makes the output easier to interpret and provides the most accurate basecalling thanks to the GPU.

However, this technique is still under active development. CFG is happy to collaborate with researchers to further expand its capabilities.

22nd Core Facility Genomics (CFG) user webinar, September 24th

The next CFG user webinar will be on the 24th of September. Did you miss the invite and don't want to miss the next one? Please contact us.

The topic of the webinar will be our new NovaSeq X Plus sequencer and The future of HPC compute.

GeoMx® Optimization and Data Analysis Workshop at AmsterdamUMC, September 24th

On the 24th of September, from 10AM to 12AM, nanoString will be onsite at the AmsterdamUMC, location AMC, to answer any GeoMx-related questions from project design, morphology marker optimization, automated workflows or data analysis in our interactive seminar.

This event will feature a live training session from nanoString where users can learn morphology marker optimization tips and tricks and how to utilize the GeoMx Digital Spatial Profiling (DSP) Data Analysis Suite. Join us in room M3-108.

The GeoMx DSP Data Center provides an end-to-end software solution from image acquisition and region of interest selection to a fully integrated data analysis experience. The fully integrated workflow provides tracking of image data and corresponding profiling data, allowing users to easily go from data collection to data analysis.

SAVE YOUR SEAT AND AGENDA

CFG LIMS

Since this summer we are using the updated CFG LIMS system. Many CFG users are already registered in CFG LIMS. To streamline this registration, we would like to point out some information from our Registration procedure.

- Make sure you use your AmsterdamUMC username, instead of the P-number.
- Make sure the declaration number and location of registration of the number are correct.

If there are any questions about CFG LIMS, please contact us.

RDC-ADORE building

We are happy to inform you that in 2025 the CFG lab will also have a location in the new RDC-ADORE building at the VUmc. As our users at location AMC are accustomed, we will facilitate the central availability of equipment for all CFG users. In addition, all research and diagnostic labs at the RDC-ADORE and surrounding AmsterdamUMC / VU campus will be able to use these machines when needed.

All CFG users received an email with the current planning of the relocation of the services in the upcoming year. Keep in mind that a CFG service lab will also stay at location AMC, and samples can be submitted at all times at both locations (VUmc & AMC).

An update about the planning will be given during the CFG User Meeting at 24th of September.

If you have questions about this planning, please contact us.

Contact CFG at
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Or go to our website
CFG.Amsterdamumc.nl