

Member of Hackensack Meridian Health

# Genomics and Epigenomics Core

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#### **Services and Instruments**





# Nextgen targeted sequencing and methyl-seq (bisulfite sequencing):

The Fluidigm Juno System uses patented microfluidics technology to perform library preparation for targeted DNA sequencing on the Illumina system using an integrated fluidic circuit (IFC). The dynamic arrays have an integrated network of channels, chambers, and valves that automatically combine the reactions, conserving time reagent and sample amount. Using the Juno system, dozens to hundreds of samples can be processed for targeted Nextgen sequencing of hundreds of amplicons, for SNP and mutation detection, and/or targeted Nextgen Methyl-seq (bisulfite sequencing) for measuring and mapping net and allele-specific CpG methylation.

#### **Fees and Scheduling**

Please complete service request form(s). You will be contacted by the GESR regarding cost and timeline estimates.

## Scheduling and billing

Idea Elan core management software will be used for scheduling and billing of services.

## **Operational Workflow**

To ensure efficiency and optimal results, resource members interact closely with investigators. In order to utilize the Shared Resource, users will follow this basic operational workflow:

- An investigator directs an initial inquiry to the GESR Director or Manager or completes the GESR Service Request Form.
- An initial meeting is held during which the feasibility of the project and the overall research plan including data analysis are discussed. The investigator is also notified of the service charges.
- Once deemed feasible, all pertinent information including laboratory personnel dedicated for the project and grant/funding account will be provided by the user through the GESR Sample Submission Form.
- After generating the data, standard reports are produced by the facility, showing quality parameters and net and allele-specific methylation levels and patterns in each biosample.
- Investigator completes the Bioinformatics Support Request Form to have the data further analyzed by informatics personnel of the LCCC DS branch of the GESR (optional).

#### **Contact Us for More Information**

Contact us at <u>angelica.castano@hmh-cdi.org</u> to discuss how we can support your research needs and drive innovation in pharmacology.