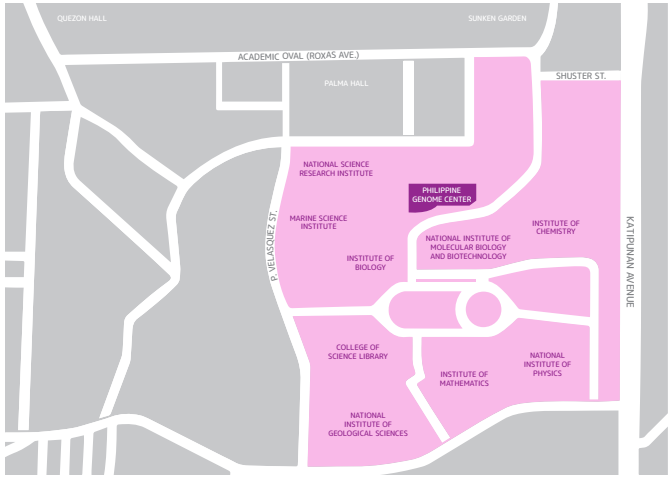
THE PHILIPPINE GENOME CENTER: *TOWARDS THE FUTURE*

Established in 2009, the Philippine Genome Center continues to provide excellence in "Omics-based" research in the country. Through its continued innovation, the center now moves towards the future by further strengthening its services with the establishment of the **Clinical Genomics Laboratory**, **Biobank and Biorepository Core Facility**, and **Integrated Laboratory Information Management System**.



Contact Us

Phone: +632 9818500 ext. 8742
Email: pgc@up.edu.ph

Website: pgc.up.edu.ph

Office Hours:
Mondays to Fridays, 8.00 AM to 5.00 PM

PGC
PHILIPPINE GENOME CENTER

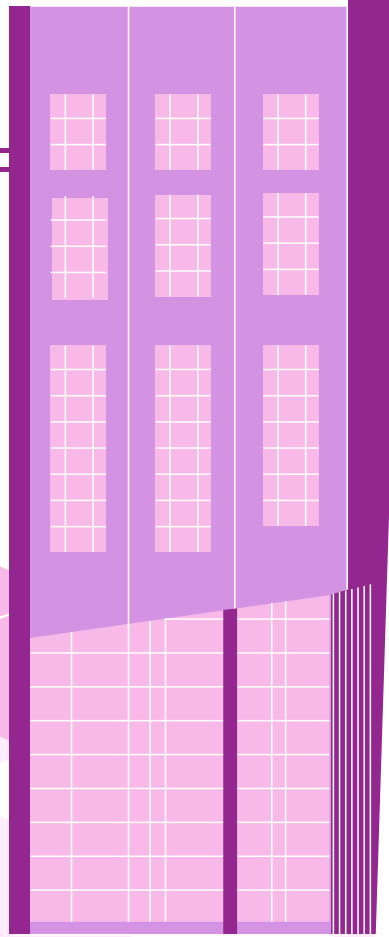
A. Ma. Regidor Street, UP Diliman, Quezon City 1101, Philippines

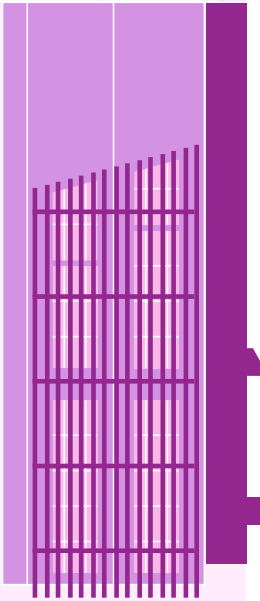
PGC
PHILIPPINE GENOME CENTER

www.pgc.up.edu.ph

FUTURE SERVICES

PHILIPPINE GENOME CENTER





CLINICAL GENOMICS LABORATORY

Clinical Genomics Laboratory
PHILIPPINE GENOME CENTER

World-class molecular diagnostic services for Filipino clinicians and families.

The Clinical Genomics Laboratory of the PGC is an up-coming facility that will leverage the center's expertise in sequencing technology to provide molecular diagnostic services for clinicians and their patients. The service will begin with tumor profiling services for cancer patients and eventually expand to include molecular services for cardiology, diabetes and metabolism, among others.

APPLICATIONS

CANCER
Tumor profiling
Prognostication
Screening

CARDIOLOGY
Drug selection
Risk assessment

DIABETES AND METABOLISM
Drug selection
Metabolic screening

PHARMACO-GENOMICS
Drug interaction
Patient-drug selection
Optimal dosing

MENTAL HEALTH
Drug selection
Phenotype assessment

PLANNED WORKFLOW

PLAN
Multi-disciplinary team meeting with clinicians and patients for molecular testing

SUBMIT
Submission of patient samples to PGC-CGL

PROCESS
Processing of samples through DSCF/CFB/ PPMCF services

REPORT
Report generation

INTERPRET
Result interpretation and counseling

FACILITIES

- *DNA SEQUENCING CORE FACILITY (DCSF)*
- *CORE FACILITY FOR BIOINFORMATICS (CFB)*
- *PROTEIN PROTEOMICS METABOLOMICS CORE FACILITY (PPMCF)*
- *Planned integration with clinical genomic counseling services*
- *Planned launch by **Early 2020***
- *Initial services to include molecular cancer diagnostics*

BIOBANK AND BIOREPOSITORY CORE FACILITY

The soon-to-be established Biobank and Biorepository Core Facility (BBCF) of the PGC, is envisioned to aid various research institutions by providing a systematic and regulated storage of human tissues, animal and plant samples, and their associated data. A laboratory information management system (LIMS) will also subsequently be offered as a biobank service that will ensure efficient traceability, security, and integrity of biospecimen-associated data. The BBCF is expected to house -80°C, -40°C, and liquid nitrogen freezers to accommodate various types of biospecimens for future genomic studies. The building for the BBCF and LIMS is currently being constructed in UP Diliman.

PLANNED WORKFLOW

LIMS

"omics" researchers and PGC research programs

BIOSPECIMEN COLLECTION

Collection of biospecimens will handled by "omics" researchers and/or PGC's research programs. Collection must be accompanied by proper documentation and abide by set regulations. De-identified data must be stored in LIMS*.

PGC Core Facilities

BIOSPECIMEN PROCESSING

PGC's DNA Sequencing (DSCF), Core Facility for Bioinformatics (CFB) and Protein, Proteomics, and Metabolomics Core Facility (PPMCF) will process specimens. All resulting data will be incorporated to the LIMS*.

BBCF

STORAGE AND MANAGEMENT

Biospecimens with its associated data will be stored in PGC's Biobank and Biorepository Core Facility (BBCF) following optimal storage conditions for each sample type to preserve integrity. Samples will be de-identified and a code will be used to ensure data security.

BBCF

RETRIEVAL AND DISTRIBUTION

If allowed by the sample provider, biospecimen and data distribution may be done by the biobank to other qualified research projects.

*The PGC BCF Laboratory Information Management System (LIMS) will link all de-identified data and test results to specimens that will be stored and may be easily retrieved when needed.

LABORATORY INFORMATION MANAGEMENT SYSTEM

The Laboratory Information Management System (LIMS) offers remote data access and management to facilitate information transfer between the Philippine Genome Center (PGC) and other researchers. It aims to ease the access of data through properly documented sample history, project status reports, protocols, analysis results, and other information necessary for laboratory management. By providing an infrastructure for managing data workflows, LIMS enables the integration of a standard set of policies that ensures the integrity, security, and traceability of data.

The LIMS aims to provide an interoperable system for safe and secure data transport, management, and storage. It will subsequently be offered as a biobank service to the raw and processed data from researchers and other research institutions affiliated with PGC. Through the LIMS, PGC envisions a well-integrated system that will aid the research and development of the scientific community.