## **Faculty**

**ABIGAIL JOY R. ANGELIA** 

Cell and Molecular Biology

**RIAFLOR M. ALCABEDOS** 

**Animal Developmental Genetics** 

**AIMEE G. CAGALAWAN** 

**Quantitative Genetics** 

**JOAN CHRISTINE A. DERIQUITO** 

Cytogenetics

MARIA GENALEEN Q. DIAZ

Molecular/ Biochemical Genetics

**EMMANUEL T. GALANG** 

Computational Biology/Bioinformatics

**DIANA ROSE R. GONZALES** 

**Evolutionary Genetics** 

**JICKERSON P. LADO** 

Molecular Cell Biology, Omics

**APRILL P. MANALANG** 

Computational Biology/Bioinformatics

MA. CARMINA C. MANUEL

**Population Genetics** 

CECILIA DIANA C. PALAO

Cytogenetics

**EVANGELINE D. PASCUAL** 

**Epigenetics** 

**MARIA CECILIA S. REAMILLO** 

Molecular/Biochemical Genetics

JAE JOSEPH RUSSELL B. RODRIGUEZ

**Evolutionary Genetics** 

JOSEPH CARMELO K. SAN PASCUAL

Cell and Molecular Biology

**ANNA MARIEL U. TOLEDO** 

Cell and Molecular Biology

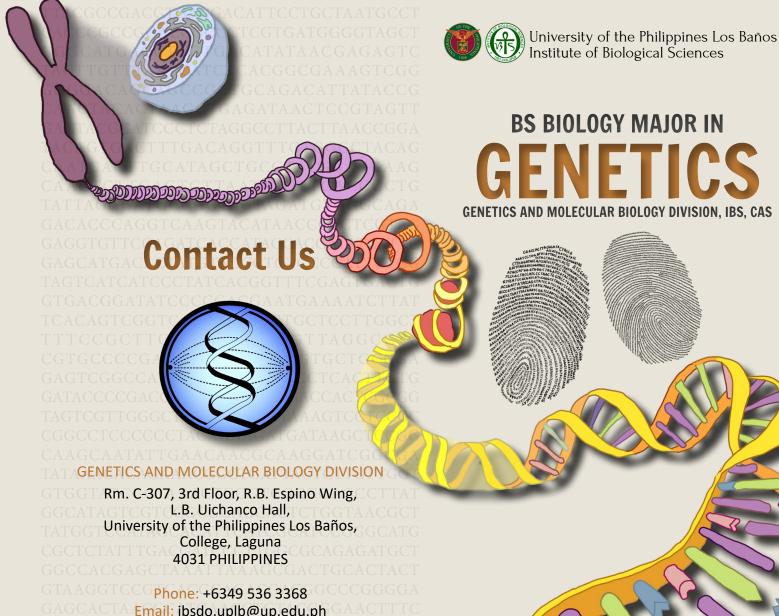
**NEILYN O. VILLA** 

Molecular/ Biochemical Genetics

**Professor Emeritus:** 

RITA P. LAUDE, PhD

**Population Genetics** 



Email: ibsdo.uplb@up.edu.ph Website: https://ibs.cas.uplb.edu.ph/



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## About Genetics Major

Genetics as a major field is designed to enhance the ability of students to understand and apply the principles of the science of heredity and variation. It is an exciting field of biology which seeks to answer questions about the nature and behavior of the genetic material as expressed in the development of individuals and in the population. With this, students will be able to explain chromosomal and molecular bases of biological phenomena, verify evolutionary relationships between and among species, and elucidate the interactions of molecules in relation to heredity.

Graduates with major in Genetics will have various career choices such as teaching, research positions in the government and private sector, technical supporters in institutions involved in biodiversity studies and conservation, molecular phylogeny, medical and forensic fields, etc.

## **Courses Offered**

All Genetics major students are required to take Practicum, Thesis, and the following courses:

BIO 130a. Intermediate Genetics I

**BIO 130b.** Intermediate Genetics II

**BIO 131.** Cytogenetics

**BIO 134.** Introduction to Genomics & Bioinformatics

**BIO 138.** Molecular Genetics

Genetics majors must also take a minimum of 9-15 units of any of the following major courses:

ABT 104. Experimental Techniques in Agricultural Biotechnology II

ABT 106. Molecular Markers

ABT 107. Recombinant DNA Technology

**CRSC 105.** Principles of Plant Breeding

AGR 150. Methods in Plant Breeding I

AGR 160. Plant Genetic Resources Conservation and Management

ANSC 103. Principles of Animal Breeding

ANSC 161. Methods in Animal Breeding

BIO 125. Principles of Cell and Molecular Biology Techniques

**BIO/ENT 137.** Insect Genetics

**BIO 139.** Human Genetics

**BOT 20.** Fundamentals of Plant Physiology

**BOT/HORT 132.** Plant Growth

**HORT 133.** Plant Tissue Culture

**CHEM 162.** Plant Biochemistry

MCB 102. General Virology

MCB 103. Introductory

Medical Microbiology

MCB 120. Microbial Physiology MCB 130. Microbial Genetics

## **Genetics** Major Application

Students must have earned at least 70 units of coursework

 Attend the major application orientation organized by the IBS Registration Committee at the time of application.

 Submit copy of grades with application form indicating preferred adviser, to be evaluated by the IBS Registration Committee.

 Meet with assigned adviser for the Plan of Study (POS).

