

# PMGCG 603 : Microbial Genetics, the Microbiome, and Infectious Diseases

This course provides information on basic features of microbial genetics that are relevant to health. It covers what is known about the effects of an individual's microbiome on their health, the consequences of dysbiosis, and the effects of the microbiome on patient treatment, including metabolism of therapeutics. Methods for studying and assessing an individual's microbiome, or microbiome features of various subject groups are discussed. This course also explores the role of 'omics information from both patients and infecting microbes in the identification, targeted treatment, and control of infectious diseases in individuals and on a population basis. After successful completion of this course, students will be able to demonstrate a basic knowledge of health-relevant microbial genetics, will be able to describe the role of the microbiome in health, and will comprehend the usefulness of 'omics technologies in the management of infectious diseases.

**College**

Post Graduate Certificate in Precision Medicine

**Credits** 2.0**Prerequisites**

PMGCG 501: Introduction to Genetics and Genomics

PHIDG 1502: Integrated Sequence 2