

# BPM 501 : Basic Principles of Medicine II (BPM2)

The Basic Principles of Medicine 2 (BPM2) course is a 17-credit course delivered over 18 weeks in Term 2 of the Doctor of Medicine (MD) program of St George's University School of Medicine, Grenada, and within the St. George's University of Grenada School of Medicine/Northumbria University Program (SGU/NU), in collaboration with Northumbria University, Newcastle upon Tyne, UK.

It is part one of an organ system-based curriculum for the first academic year of the Basic Sciences program and is taught in three consecutive modules:

- Endocrine and Reproductive Systems (ER) — 3 weeks
- Digestive System and Metabolism (DM) — 4.3 weeks
- Nervous System and Behavioral Science (NB) — 10.7 weeks

Total: 18 weeks

## Endocrine and Reproductive (ER) Module

This module provides the knowledge and understanding of the gross and microscopic structure, physiology, biochemical processes and metabolic disorders in relation to the endocrine organs. This includes the study of gross and developmental anatomy, physiology, microscopic anatomy and cell biology of the male and female reproductive systems. Students will learn to integrate and apply this knowledge through examination of cadavers at wet lab sessions and, micrographs and radiological images in small group sessions. At the end of each system, pathological conditions are explained through micrographs and imaging relevant to the specific organ systems. Students will also cover developmental genetics, genetic screening techniques and facts about nutrition in relation to neonates, infants and the elderly. Students will be able to appreciate the normal structure and functions of these organ systems and will be able to correlate pathological outcome due to abnormal changes within the respective tissue.

## Digestive System and Metabolism (DM) Module

In this module students learn about the anatomy and histology of the digestive system and actively integrate it with the biochemistry and physiological function of this organ system. Students will familiarize themselves with the digestion and metabolism of the macromolecules: carbohydrates, lipids and proteins and their nutritional significance. Special emphasis is placed on the inborn errors of metabolism associated with each of these metabolic pathways and the lab tests and the molecular basis for the clinical signs and symptoms of these disorders. The module will be interspersed with clinical cases and study of imaging and histology of the gastrointestinal tract. Clinical cases on inborn errors of intermediary metabolism and metabolic disorders enhances students' understanding of the importance of these aspects of metabolism.

## Nervous System and Behavioral Sciences (NB) Module

This module is an interdisciplinary study of the structure and function of the head, neck and the peripheral and central nervous system, simultaneously addressing the anatomy, histology, physiology, biochemistry and some pharmacology and pathophysiology. Behavioral science (psychopathology), life span development and learning theory are covered, as well as the behavioral aspects of medicine. Neurological and psychiatric case studies will be presented as integral components. The overall goal is to provide students with knowledge and understanding of the effects of damage to the head, neck, spinal cord, and brain, as well as the behavioral disorders of cognition as presented in general clinical medicine and the specialties of Neurology, Neurosurgery, Psychiatry and Ophthalmology.

### **Core Course**

**Credits** 17