TRMD 6070 Medical Protozoology

Professor: Mark Wiser, PhD

Credits: 2

Semester(s) Offered: Fall

Course Description:

The basic biology of protozoa capable of infecting humans as well as the clinical manifestations of the diseases they cause will be covered. Topics covered will include life cycles, morphological features, host-parasite interactions, geographical distribution, reservoir hosts, methods of transmission and control, pathology, immunological aspects, and laboratory and clinical diagnosis. The biological and clinical perspectives gained in this course will assist students in the practical recognition, evaluation, and management of problems in public health or clinical practice involving protozoa that infect humans.
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Learning Objectives:

By the end of the course students will know the names of all protozoa that infect humans and or cause diseases in humans. For each of these protozoan species they will be able to describe:

- the life cycle of the organism and how humans are infected or come in contact with the organism
- the disease caused by the particular protozoan and the salient features of the pathogenesis of that disease and any known virulence factors
- the clinical manifestations of the disease and any available treatment options
- how the infection or disease can be prevented or controlled
- the relative importance of the pathogen in regards to the prevalence and the morbidity and mortality of the associated disease
- the geographical distributions of the various protozoa
- host-parasite interactions including immunological phenomena

In general, each lecture will concentrate on a single protozoan pathogen and the disease caused by that pathogen. Therefore, each of these learning objectives will be covered in each lecture for that particular organism/disease. In some cases a group of related protozoa will combined into a single lecture or the major diseases (eg., malaria) will be spread out across multiple lectures.