TPaIDA

"Humanitarian Service with a Human Experience"

Introduction to the Clinical Pathology and Basic Science of Infectious Diseases

The Drs. Rolling and Adlish Course in Tropical Disease

Course Syllabus

Faculty/Supervising Personnel:

Dr. Lane Rolling, M.D., Director, Clinical Education, U.S. Dr. John Adlish, Ph.D., Chief Academic Officer/ Microbiology, U.S. Dr. Percy Inga, M.D., Director of Clinical Medicine, Peru Dr. Moses Sihuincha, Infectious Disease, Peru Dr. Roberto Lazo, M.D., Internal Medicine, Peru Dr. Martin Chincha, M.D., Internal Medicine, Peru Dr. Jorge Danz, M.D., Trauma, Peru Dr. Martin Diaz, M.D., Pediatrics, Peru Dra. Bessie Ferreyra, M.D., Pathology, Peru

Course Description:

This course is designed for undergraduate students in the Biological Sciences, pre-medical, medical, and students in the health professions. Professionals interested in first-hand experience with tropical diseases are also encouraged to participate. This is a short, one week, highly intensive course designed to maximize didactic and practical learning. The course is designed to give students an awareness of worldwide healthcare needs and provide a practical educational experience.

Students will be introduced to the basic biology of viruses, bacteria, protozoa, fungi, and parasites and the diseases they cause in humans.

Learning strategies include; lecture, hands-on laboratory work, roundtable discussions, clinical case conferences, and field study.

This course is equivalent 3-4 college credits, depending on the school, 2 credits for lecture and 2 for lab.

Course Objectives:

1. Understand the basic pathology of infectious disease and the major organisms responsible for human infectious disease. 2. Understand the basic, clinical treatment of infectious disease. 3. Understand and respect the affects that infectious diseases have on the geopolitical and cultural climates of the world. 4. Understand the various approaches to basic science and clinical medicine in another culture.

Academic Content and Course Curriculum Hours:

Activity Hours

Lecture 27.0 Roundtable 5.0 Case Conferences 4.0 Diagnostic Laboratory Rotation 4.0 Outpatient clinics and Ward Rounds 23.0 Evening Tutorials/Discussions 5.0 Special Activities 4.0 **Total Contact Hours 72**

Description of Teaching Formats:

Didactic lectures:

The traditional lecture format consists of: 2 hours each morning and 2.0 hours every afternoon. An additional two hours are presented during roundtable discussions.

Roundtable format:

Multiple presenters give sequential presentations on specific topics with ensuing discussion.

Diagnostic laboratory course:

Part of each day's laboratory block consists of didactic presentation pertaining to helminthology, protozoology, bacteriology, and mycology.

Laboratory practical:

Hands-on microscopy, preparation of blood films, gram stains, acid- fast stains, KOH preps, stool concentrations for O & P and triple stains.

Outpatient clinic and ward rounds:

3.5 hours each day performing ward rounds in either an outpatient clinic or at a subspecialty clinic. Clinical exposure is observations, interactive and in small groups. Each participant will experience each tropical subspecialty, observing highly illustrative patients. Students will have access to advanced diagnostics to assist in case confirmation rather than presumption only.

Course Schedule: (subject to change)

Topics to be covered include; basic biology of disease causing organisms – bacteria, fungi, protozoa, viruses, and helminths.

December 15th

Arrive in Iquitos 7:05 a.m. 10:30 – 12:30, Orientation and Morning lecture: Basic mechanisms of infectious disease, prokaryotes, eukaryotes, viruses. 1:30 – 4:30, Afternoon lectures, Cell structure of bacteria, eukaryotes, viruses 7:00 p.m., Welcome Dinner, meet faculty – Hotel restaurant Evening Discussions – clinical orientation

December 16th

8:00 – 10:30, Morning lecture, Introduction to virology, classification of viruses
11:00 – 4:30, Hospital rounds/clinical training 5:30 -7:00 p.m., Dinner, evening lecture/group discussion – Hotel restaurant Evening Lecture – Viral mechanisms Evening Roundtable case discussions

December 17th

8:00 – 10:30, Morning lecture, Introduction to parasitology, classification and general life cycles. 11:00 – 4:30, Hospital rounds/clinical training 5:30 -7:00 p.m., Dinner, evening lecture/group discussion – Hotel restaurant Evening Lecture – life cycles of parasites Evening Roundtable case discussions Evening Roundtable case discussions

December 18th

8:00 – 10:30, Transmission of Disease, field trip, visit market 11:00 – 4:30, Hospital rounds/clinical training 5:30 -7:00 p.m., Dinner, evening lecture/group discussion – Hotel restaurant Evening Lecture – Introduction to general bacteriology, bacterial patho- physiology bacterial transmission Evening Roundtable case discussions

December 19th

8:00 – 10:30, Continue lectures - general bacteriology, bacterial patho- physiology. 11:00 – 4:30, Hospital rounds/clinical training 5:30 -7:00 p.m., Dinner, evening lecture/group discussion – Hotel restaurant Evening Lecture – bacterial transmission Evening Roundtable case discussions

Jungle Trip and Clinic

YANAYACU LODGE

PROGRAMA PARA

TROPICAL PATHOLOGY AND INFECTIONS DISEASE ASSOCIATION

2 Day / 1Night

December 20th

07:00 AM Meeting at the Tourist Port of Iquitos ready for our incredible trip into the Amazon 11:00 AM We will arrive at our Amazon Lodge, we will have a short briefing and be able to check in

our cabins 12:00 PM Lunch 02:00 PM Jungle walk with our guide exploring local fauna and medicinal plants used in the
Amazon 05:00
PM Free time 07:00 PM Dinner
08:00 PM Talk with the Shaman
11:00 PM Rest

December 21st (Day 2)

07:00 AM Breakfast 08:00 AM Clinic at the native community of Yanayacu 02:00 PM Lunch 02:40 PM Time to pack the bags and do a double check of the lodge 03:00 PM Return to Iquitos 06:00 PM Arrival at Iquitos, Dinner/Awards

December 22nd

Free day Leave Hotel for airport at 8:30am.