Introduction to Advanced Clinical Pathology
PA06P

October 3, 2005

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Objectives

In general: what does the clinical laboratory do?
How to use the labs properly (e.g. indications, limitations, and interpretations of lab tests)

General

General I: Introduction to the course
General II: Introduction to Laboratory Medicine
General III: Pre-analytical testing
General IV: Predictive values/Normal ranges

Genetics

Genetics I-III: Molecular Diagnosis
Genetics IV: Human Chromosomes & Mechanisms of Disease
Genetics V: Molecular Cytogenetics - Expanding the resolution of conventional cytogenetic analysis
Genetics VI: Case Presentations

Clinical Chemistry

Chemistry I: Cardiac Markers
Chemistry II: Tumor Markers: Assays & interferences
Chemistry III: B-Natriuretic Peptide: Introduction of a new assay
Chemistry IV: Toxicology
Chemistry V: Protein electrophoresis: Introduction and case studies
Chemistry VI: Diabetes testing
Microbiology

Microbiology I: Introduction to virology testing
Microbiology II: HIV and Hepatitis testing
Microbiology III: The role of the clinical microbiology lab in detecting infectious diseases
Microbiology IV: Antimicrobial resistance: How can the lab help?
Microbiology V: Sexually transmitted diseases: Cases in the city
Microbiology VI: Respiratory infections: Test algorithms
Microbiology VII: Challenging mycobacterial and fungal infections
Microbiology VIII: Miscellaneous cases: Name that pathogen!

Hematology/Coagulation

Hematology I: Introduction to the Hematology/Coagulation section
Hematology II: Screening coagulation testing
Hematology III: Diagnosis of bleeding disorders: coagulation factors
Hematology IV: Diagnosis of bleeding disorders: platelets
Hematology V: Diagnosis of prothrombotic disorders
Hematology VI: Anticoagulation therapy
Hematology VII: Heme/Coag Case Studies
Hematology VIII: Hemoglobinopathy testing/transfusion in Sickle Cell Disease

Transfusion Medicine

Trans Med I: Introduction to Transfusion Medicine/Component Preparation
Trans Med II: Immunohematology
Trans Med III: Transfusion Reactions II (Hemolytic)
Trans Med IV: Transfusion Reactions II (Non-hemolytic)
Trans Med V: Component Therapy
Trans Med VI: Introduction to therapeutic apheresis
Trans Med VII: Introduction to stem cell transplantation
Trans Med VIII: Case studies (Group Sessions)

Faculty

Phyllis Della-Latta, Ph.D. Microbiology
David Diuguid, M.D. Heme/Coag
Dan Fink, M.D. General & Chemistry
Joe Fink, M.D. Transfusion Medicine
Richard Huard, Ph.D. Microbiology
Jeffrey Jhang, M.D. Heme/Coag & Transfusion Medicine
Hai Kaplan, M.D. Transfusion Medicine
Larry Kaplan, Ph.D. Chemistry
Brynn Levy, Ph.D. Genetics: Cytogenetics
Mahesh Mansukhani, M.D. Genetics: Molecular diagnosis
Mike Pesce, Ph.D. Chemistry
Joseph Schwartz, M.D. Transfusion Medicine
Ila Singh, M.D., Ph.D. Microbiology
Susan Whittier, Ph.D. Microbiology
Fann Wu, Ph.D. Microbiology

Attendance

YES

Excused absences for important reasons: contact Elsie and/or Steve

Grading

Pass/Fail

Final examination: multiple choice, short essays
Questions from the lecture notes
Scheduled for Monday, October 31st

No papers, presentations, or quizzes
Notes and Readings

Course Manual:
Schedule
Participants: faculty, staff, and students
Lecture notes (and reprints, where appropriate)
Powerpoint lectures will be posted on the web

Textbook:
none

Questions?