Laboratory Identification of Emerging Pathogenic Molds

A Basic Course

Sponsored by the National Laboratory Training Network (NLTN) in collaboration with the Mycotic Diseases Branch, Division of Foodborne, Waterborne and Environmental Disease, National Center for Emerging and Zoonotic Infectious Diseases, Centers for Disease Control and Prevention

May 17–19, 2016

DESCRIPTION

This basic-level, hands-on workshop on the identification of medically important molds includes both lectures and laboratory components. This workshop will cover a range of organisms commonly isolated from superficial, subcutaneous, and systemic infections of humans as well as a number of common laboratory contaminants. These organisms will include arthrospore-forming molds, aleuriosporic molds, common dermatophytes, a range of common molds that form enteroblastic and holoblastic conidia, and a range of mucoraceous molds. Methods for in-vitro susceptibility testing will also be discussed.

AUDIENCE

This basic-level workshop is intended for persons who are not experienced in the identification of medically important molds. These persons may include public health laboratorians, clinical laboratory microbiologists, medical technologists, infectious disease physicians, and pathologists.

OBJECTIVES

At the conclusion of this workshop, participants will be able to:

- Explain the classification and identification of molds based upon their macroscopic and microscopic characteristics.
- Identify the following fungi, based on macroscopic and microscopic examination: *Coccidioides* species, *Blastomyces dermatitidis*, *Histoplasma capsulatum*, and similar aleuriosporic molds.
- Common dermatophytes.
- A range of common molds that form enteroblastic conidia, including *Aspergillus*, *Exophiala*, *Fusarium*, *Penicillium*, *Phialophora*, and *Scedosporium* spp.
- A range of common molds that form holoblastic conidia, including *Bipolaris*, *Claopophilophora*, *Curvularia*, and *Sporothrix* spp.
- A range of mucoraceous molds, including *Rhizopus* and *Mucor* spp.
- Understand the basics of setting up a diagnostic mycology laboratory, including media requirements, acceptable specimens, and result reporting.

QUESTIONS?

Please email Absala Mengestab.
AGENDA  We reserve the right to change the agenda times.

Day 1   Tuesday, May 17, 2016
8.00 a.m.  Welcome and Course Overview
8:10  Safety in the Training Laboratory
8:20  Pre-Test
8:30  Lecture: Introduction to Mold Identification
10:00  Break
10:15  Lecture: Arthrosporic and Aleuriosporic Molds
11:30  Lunch (on your own at a CDC cafeteria)
12:30 p.m.  Laboratory: Arthrosporic and Aleuriosporic Molds
Simultaneous Practical Instruction: Setting Up Slide Cultures
2:00  Break
2:15  Lecture: Molds with Enteroblastic Conidia I (Aspergillus, Penicillium)
3:30  Laboratory: Molds with Enteroblastic Conidia I (Aspergillus, Penicillium)
5:00  Adjourn

Day 2   Wednesday, May 18, 2016
8:00 a.m.  Lecture: Molds with Enteroblastic Conidia II (Fusarium, Scedosporium, Phialophora)
9:15  Break
9:30  Laboratory: Molds with Enteroblastic Conidia II (Fusarium, Scedosporium, Phialophora)
11:00  Lecture: Molds with Holoblastic Conidia
12:00 p.m.  Lunch (on your own at a CDC cafeteria)
1:00  Laboratory: Molds with Holoblastic Conidia
2:00  Break
2:15  Lecture: Mucormycetes and Miscellaneous Molds
3:45  Laboratory: Mucormycetes and Miscellaneous Molds
5:00  Adjourn

Day 3  Thursday, May 19, 2016
8:00 a.m.  Lecture: Setting up a Clinical Mycology Laboratory
9:30  Break
9:45  Lecture: Antifungal Susceptibility Testing
10:45  Lecture: Case Histories
12:00 p.m.  Lunch (on your own at a CDC cafeteria)
1:00  Laboratory: Unknowns
3:00  Lecture: Review Unknowns, Final Question and Answer
3:30  Post-Test and Evaluation
4:00  Adjourn

FACULTY
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INVITED FACULTY
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CONTINUING EDUCATION
The Association of Public Health Laboratories (APHL) is approved as a provider of continuing education programs in the clinical laboratory sciences by the ASCLS P.A.C.E.® Program. Participants who successfully complete this program will be awarded 21.5 contact hours. Florida continuing education units will be offered to participants requiring FL CEU. P.A.C.E.® Course #: 588-102-16

SECURITY CLEARANCE REQUIREMENTS
NON-US CITIZENS — This course will be held at the training laboratory on the CDC Roybal campus. Due to CDC requirements for security clearance, all non-US citizens will be asked to provide information needed to obtain clearance. Detailed instructions will be provided upon acceptance into the course. Please do not make any nonrefundable travel plans until you have received confirmation of acceptance into the course and security clearance approval. The information you provide will only be used for the purposes of attending this course.
US CITIZENS - If you are a US citizen, there is no extra clearance process required.

SPECIAL NEEDS
In compliance with the Americans with Disabilities Act (ADA), individuals seeking special accommodations should submit their request in writing to APHL Customer Support or phone 240.485.2746. Please allow at least three weeks prior to start date of the workshop for APHL to make arrangements.

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