

# Laboratory Identification of Emerging Pathogenic Molds

## A Basic Course



WET  
WORKSHOP



**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 15–17, 2018

### LOCATION

Centers for Disease Control and Prevention, Atlanta, GA.

### APPLICATION & REGISTRATION

- **Application Deadline: January 23, 2018**
- The preliminary application must be completed [online](#) prior to the deadline date.
- Only completed applications received by the deadline will be considered. Application does not guarantee acceptance.
- Students will be selected according to the degree to which the applicant's job description, experience, and responsibilities are consistent with the prerequisites.
- If you are unable to complete the application online, notify NLTN at 240.485.2784 or email [marisa.barley@aphl.org](mailto:marisa.barley@aphl.org)
- All travel expenses, including transportation, lodging and food are the responsibility of the participant.
- **Notification of acceptance status and registration details will be sent via email after February 6, 2018.**
- **Registration Fee: This workshop is offered FREE of charge.**

### 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. A short introduction to common yeast will be included. 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 aleriosporic 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 *Alternaria*, *Claophialophora*, *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.

### 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 #: 588-104-18



## AGENDA *We reserve the right to change the agenda times.*

Day 1	Tuesday, May 15, 2018
8:00 a.m.	Welcome and Course Overview
8:10	Safety in the Training Laboratory
8:20	Pre-Test
8:30	<b>Lecture:</b> Introduction to Mold Identification
9:30	<b>Lecture:</b> Brief introduction to Yeasts
10:00	Break
10:15	<b>Lecture:</b> Arthrosporic and Aleurioporic Molds
11:30	Lunch (on your own at a CDC cafeteria)
12:30 p.m.	<b>Laboratory:</b> Arthrosporic and Aleurioporic Molds
	Simultaneous Practical Instruction: Setting Up Slide Cultures
2:00	Break
2:15	<b>Lecture:</b> Molds with Enteroblastic Conidia I (Aspergillus, Penicillium)
3:30	<b>Laboratory:</b> Molds with Enteroblastic Conidia I (Aspergillus, Penicillium)
5:00	Adjourn

Day 2	Wednesday, May 16, 2018
8:00 a.m.	<b>Lecture:</b> Molds with Enteroblastic Conidia II (Fusarium, Scedosporium, Phialophora)
9:15	Break
9:30	<b>Laboratory:</b> Molds with Enteroblastic Conidia II (Fusarium, Scedosporium, Phialophora)
11:00	<b>Lecture:</b> Molds with Holoblastic Conidia
12:00 p.m.	Lunch (on your own at a CDC cafeteria)
1:00	<b>Laboratory:</b> Molds with Holoblastic Conidia
2:00	Break
2:15	<b>Lecture:</b> Mucormycetes and Miscellaneous Molds
3:45	<b>Laboratory:</b> Mucormycetes and Miscellaneous Molds
5:00	Adjourn

### 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.

### QUESTIONS?

Please email [marisa.barley@aphl.org](mailto:marisa.barley@aphl.org).

Day 3	Thursday, May 17, 2018
8:00 a.m.	<b>Lecture:</b> Setting up a Clinical Mycology Laboratory
9:30	Break
9:45	<b>Lecture:</b> Case Histories
10:45	<b>Lecture:</b> Antifungal Susceptibility Testing
11:15	<b>Lecture:</b> Molecular Identification
12:00 p.m.	Lunch (on your own at a CDC cafeteria)
1:00	<b>Laboratory:</b> Unknowns
3:00	<b>Lecture:</b> Review Unknowns, Final Q and A
3:30	Post-Test and Evaluation
4:00	Adjourn

### FACULTY

#### **Mycotic Diseases Branch, Centers for Disease Control and Prevention, Atlanta, GA**

**Shawn Lockhart**, PhD, D(ABMM), Director, Fungal Reference Laboratory

**Mark Lindsley**, ScD, D(ABMM), Microbiologist, Mycotic Diseases Branch

**Ana Litvintseva**, PhD, Team Lead, Mycology Research Unit

**Elizabeth Berkow**, PhD, Microbiologist, Mycotic Diseases Branch

**Rory Welsh**, PhD, Microbiologist, Mycotic Diseases Branch

### INVITED FACULTY

**Karin L. McGowan**, PhD, F(AAM), MS, SM(NRCM)

### 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.

*Funding for this training was made possible by the Centers for Disease Control and Prevention. The views expressed in written training materials or publications and by speakers and moderators do not necessarily reflect the official policies of the Department of Health and Human Services, nor does the mention of trade names, commercial practices, or organizations imply endorsement by the U.S. Government. This project is funded 100% by Federal funds.*