

- *Tuberculosis - The Big Picture 2008*
Kenneth Castro, MD, Centers for Disease Control and Prevention

An update on the extent of the tuberculosis problem in the world today, challenges in the control of this disease, and future directions.

- *Essential Mycobacteriology Laboratory Services in the Era of MDR- and XDR-TB: A Clinician's Perspective*
Barbara Seaworth, MD, Heartland Regional Training and Medical Consultation Center

The presentation will include the importance of partnering with the laboratory to accurately and expeditiously diagnose drug resistance, including those at risk for acquired drug resistance during therapy, define the extent of drug resistance to enhance therapeutic choices, and to assist in monitoring the bacteriological response to treatment. Examples of successful partnership with the laboratory to provide good patient and public health outcomes will be shared.

- *Essential Mycobacteriology Laboratory Services in the Era of MDR- and XDR-TB: A TB Controller's Perspective*
James Watt, MD, MPH, CA Department of Public Health

This presentation will make the case that in the era of MDR and XDR-TB essential laboratory services include not only tests related to the identification of drug resistance, but also tests that increase the speed and accuracy of the diagnosis of tuberculous infection and disease. In the era of MDR and XDR-TB, close partnership between tuberculosis control programs and public health laboratories is essential.

10:15am-10:45am
Golden Ballroom Foyer

Break
Sponsored by BD Diagnostics

10:45am-12:00pm
Pacific Salons I-III

Plenary Session
Moderator - Tom Shinnick, PhD, Centers for Disease Control and Prevention

- *Basis of Drug Susceptibility Testing and Gaps in Drug Susceptibility Knowledge*

Tom Shinnick, PhD, Centers for Disease Control and Prevention

This presentation will describe the processes by which drug resistance develops, the molecular basis of drug resistance, the scientific basis of drug susceptibility testing methods, and currently used drug susceptibility testing methods.

- *Currently Available Drug Susceptibility Testing Methods*

Beverly Metchock, DrPH, Centers for Disease Control and Prevention

A discussion of *M. tuberculosis* drug susceptibility test methods and reagents, relative costs, and the advantages and disadvantages of each.

12:00pm-1:00pm

Lunch (on your own)

1:00pm-2:30pm

Pacific Salons I-III

Plenary Session (cont)

Moderator - Tom Shinnick, PhD, Centers for Disease Control and Prevention

- *APHL/CDC Expert Consultation Discussion*

John Ridderhof, DrPH, Centers for Disease Control and Prevention

First consider substituting "discussion" with "recommendations". This presentation will outline the discussions and recommendations from a meeting to develop new strategies to improve drug susceptibility testing in the U.S. These recommendations range from quality assurance and minimum test volume to specific drug panels and national structures to improve referral and reference testing. The recommendations will serve as a starting point for discussions on the challenges, barriers, and opportunities to improve testing practice.

- Interactive Panel Discussion: Currently Available Drug Susceptibility Testing Methods

Moderator - Betty Forbes, PhD, Virginia Commonwealth University

Beverly Metchock, John Ridderhof, Tom Shinnick, Ken Jost and David Warshauer

2:30pm-6:30pm
Golden Ballroom

Exhibit Hall Open

2:30pm-3:30pm
Golden Ballroom

Break in the Exhibit Hall

Visit Posters and Vendors - Authors at their posters

3:30pm-5:00pm
Pacific Salons I-III

Plenary Session

Moderator - Bruce Hanna, PhD, New York University School of Medicine

- Standard Diagnostic Methods: Optimal Use & Algorithms
Betty Forbes, PhD, Virginia Commonwealth University

This presentation will review current diagnostic methods for detection of mycobacteria in clinical specimens with a focus on the newly published M-48 CLSI guidelines.

- NAATs Methods and Algorithms

David Warshauer, PhD, WI State Laboratory of Hygiene

Nucleic acid amplification tests (NAATs) are designed to rapidly and reliably detect *M. tuberculosis* complex directly from clinical specimens. There are two FDA-cleared tests and various home-brew tests used in the U.S. The performance characteristics of these assays, testing algorithms and CDC guidelines will be presented.

- Interactive Panel Discussion: Diagnostic Methods

Bruce Hanna, Betty Forbes, Beverly Metchock, David Warshauer and Ed Desmond

5:00pm-6:30pm
Golden Ballroom

Reception in the Exhibit Hall
Visit Posters and Vendors

Tuesday, August 12, 2008

Day 2, 588-841-08, 5.5 contact hours

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

- Explain the best practices for incorporating new diagnostic methods into your laboratory to include performing and documenting validation studies
- List best practices for Quality Assurance and Proficiency Testing in the Mycobacteriology Laboratory
- Discuss the national plan for laboratory systems and describe models currently in use in several states
- Describe the issues affecting laboratory capacity building globally, nationally, and locally

7:00am-5:15pm
Golden Ballroom Foyer

Registration

8:00am-10:10am
Pacific Salons I-III

Plenary Session

Moderator - Ed Desmond, PhD, CA Department of Public Health Laboratory

- New Diagnostic Methods

Richard O'Brien, MD, Foundation for Innovative New Diagnostics

This presentation will review recent advances in diagnostic tests for tuberculosis, focusing on molecular methods for case detection and screening for drug resistant tuberculosis.

- Incorporating New Tests in the Laboratory: Validation of Conventional Tests and Second Line DSTs, Drug Stability

Edward Desmond, PhD, CA Department of Public Health Laboratory

Second line drug susceptibility testing should be done by rapid broth-based methods in limited settings where there is expertise and sufficient workload volume. Meticulous validation is required to meet CLIA standards, including critical factors such as drug stability in solution, establishing drug testing concentrations equivalent to the reference method, and inoculum protocol to assure consistent results.

- Incorporating New Tests in the Laboratory: Validation of New Molecular Tests

Kimberlee Musser, PhD, NYS Wadsworth Center

This presentation will focus on the process of validating new molecular tests for use in the laboratory

- Quality Assurance and Proficiency Testing in the Mycobacteriology Laboratory

Bruce Hanna, PhD, New York University School of Medicine

Principles of Quality Assurance (QA) and Proficiency Testing (PT) in the Mycobacteriology Laboratory are designed to ensure the timely reporting of accurate results so as to establish the diagnosis of tuberculosis in patients as well as to safeguard the public health. This session will review the basic elements of effective QA and PT programs.

- Interactive Panel Discussion: QA and Test Validation

Richard O'Brien, Ed Desmond, Kim Musser and Bruce Hanna

10:00am-4:00pm
Golden Ballroom

Exhibit Hall Open

10:10am-10:40am
Golden Ballroom

Break in the Exhibit Hall
Visit Posters and Vendors

10:40am-12:30pm
Pacific Salons I-III

Plenary Session

Moderator - John Ridderhof, DrPH, Centers for Disease Control and Prevention

- National Plan for Laboratory Systems

Angela Starks, PhD, Centers for Disease Control and Prevention

Rapid and reliable laboratory results are essential for the treatment of TB patients and the prevention of transmission. The upgrade of public health laboratories in the U.S. that occurred as a result of the resurgence of tuberculosis in the early 1990s led to many improvements including the use of fluorescence

microscopy and liquid culture as standard TB laboratory services. However, a vital step in the continued strengthening of TB laboratory capacity in the U.S. is to develop an integrated system that ensures timely laboratory testing and the timely flow of information among laboratories, clinicians and TB controller officials.

- New York Fast Track Model

Vincent Escuyer, PharmD, PhD, NYS Wadsworth Center

This presentation will include a history of the Fast Track Program in New York State, an update on the present Fast Track program and the future on the Fast Track program.

- Wisconsin Model

David Warshauer, PhD, WI State Laboratory of Hygiene

TB patients must have access to state-of-the-art laboratory services wherever they may live. A systems approach is necessary to assure that these services are available in every jurisdiction. In Wisconsin, the Wisconsin Mycobacteriology Laboratory Network (WMLN) was established in 1998 with the major goal of providing the highest quality of TB laboratory services throughout the state. The establishment of the Wisconsin network of 30 laboratories and its role in TB patient care and TB control will be presented.

- California MGITs in the Mail Model

Edward Desmond, PhD, CA Department of Public Health

MGIT tubes are inoculated by local public health laboratories and mailed unincubated to the state laboratory. Acid-fast microscopy is performed locally and reported promptly.

- Interactive Panel Discussion: Laboratory Systems

John Ridderhof, Angela Starks, Max Salfinger, David Warshauer, Ed Desmond, Michael Lewinski and Vincent Escuyer

12:30am-2:00pm
Golden Ballroom

Lunch provided in the Exhibit Hall
Visit Posters and Vendors

2:00pm-2:50pm
Pacific Salons I-III

Plenary Session

Moderator - Ken Jost, TX Department of State Health Services

- *The Global Laboratory Initiative and Partnership Laboratory Capacity Building Efforts with WHO*
John Ridderhof, DrPH, Centers for Disease Control and Prevention

The Global Laboratory Initiative is a partnership between WHO, CDC, APHL, and many other organizations to promote shared strategies, testing methods, and collaborations for scaling up TB laboratory capacity around the world. Participants will learn why laboratory strengthening is considered the top priority for global TB control and how investments in global efforts are helping to provide technical support and models for improving practice in the US.

- *PEPFAR HIV/TB Laboratory Capacity Building*
Linda Parsons, PhD, Centers for Disease Control and Prevention

Building laboratory capacity in countries with high burdens of HIV and TB requires working together with the government ministries and national and international public and private partners to establish a National Laboratory Strategic Plan. An integrated disease-wide approach will be described, with increased emphasis on laboratory health system strengthening and sustainability.

2:50pm-3:50pm
Golden Ballroom

Break in the Exhibit Hall

Visit the Posters and Vendors - Authors with posters

3:50pm-5:00pm
Pacific Salons I-III

Plenary Session

Moderator - Anthony Tran, MPH, MT(ASCP), Association of Public Health Laboratories

- *APHL Global Health Program TB-related Activities*
Travis Jobe, Association of Public Health Laboratories

The APHL Global Health Program is involved in efforts to increase the testing capacity for TB in resource-limited settings.

This presentation will discuss APHL's current and future global TB-related activities, which are primarily focused on laboratory assessment and design, development and implementation of reference documentation, and technical training.

- *ASM Laboratory Capacity Building*

Lynee Galley, American Society for Microbiology

ASM's approach to strengthening TB diagnostics in resource-limited settings will be presented.

- *Interactive Panel Discussion: Laboratory Capacity Building*

Ken Jost, John Ridderhof, Linda Parsons, Anthony Tran, and Lynee Galley

6:00pm-10:00pm

San Diego Harbor Dinner Cruise

Sponsored by Gen-Probe

Buses begin loading at 6:00pm and leave soon after.

Wednesday, August 13, 2008

Day 3, 588-842-08, 4.0 contact hours

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

- List issues and obstacles that laboratories have faced in their implementation of IGRA
- Summarize laboratory issues associated with Mycobacterial genotyping
- Explain how mycobacterial genotyping could be applied to TB control
- Predict what a mycobacterial diagnostic laboratory might consist of in the future

7:00am-3:15pm

Golden Ballroom Foyer

Registration

8:00am-10:00am
Pacific Salons I-III

Plenary Session

Moderator - David Warshauer, PhD, WI State Laboratory of Hygiene

- *Overview of IGRAs: QuantiFERON-TB Gold and T-spot TB/Applying IGRAs to TB Control*
L. Masae Kawamura, MD, San Francisco Department of Public Health

This presentation will describe how IGRAs detect TB infection and the tests that are commercially available and FDA approved. Current guidelines, performance expectations, clinical and programmatic uses, and controversies regarding these tests will be reviewed.

- *Implementation of QuantiFERON-TB Gold in Public Health Laboratories*
Anthony Tran, MPH, MT(ASCP), Association of Public Health Laboratories

This presentation will provide an overview of QuantiFERON-TB Gold (QFT-G) usage in public health laboratories including a discussion of how the test is being utilized in the laboratory and issues encountered during implementation. Results from APHL's survey on QFT-G will be reviewed in addition to recent information regarding the implementation of the new QFT-G In-Tube assay.

- *Operational Issues with Implementation of QuantiFERON-TB Gold in State and Local Public Health Laboratories*
Michael Pentella, PhD, University Hygienic Laboratory and
Aline Grigorian, PhD, San Diego County Public Health Laboratory

This presentation will review the practical aspects of validation and implementation in a state with a low incidence of TB. Issues with the implementation of QuantiFERON-TB Gold at the San Diego Public Health Laboratory (local PHL) will be discussed including the initial use of QuantiFERON-TB Gold and the progression in the In-Tube method.

- *Interactive Panel Discussion: IGRAs*

David Warshauer, Masae Kawamura, Anthony Tran,
Michael Pentella and Aline Grigorian

10:00am-10:30am
Golden Ballroom Foyer

Break

10:30am-12:30pm
Pacific Salons I-III

Plenary Session

Moderator - Max Salfinger, MD, FL Bureau of Laboratories

- *Genotyping: Laboratory Aspects*

Sonia Lugo, BS, Michigan Dept. of Community Health

An inside look at the Michigan TB Genotyping laboratory - a closer inspection of the routine assays performed to identify various strains of TB for epidemiological purposes.

- *Genotyping: Applications to TB Control*

Marisa Moore, MD, MPH, Centers for Disease Control and
Prevention and San Diego County Health and Human
Services Agency

To provide an overview and examples of the uses and potential usefulness of genotyping in TB control programs.

- *Mycobacterial Population Genetics and Genomics*

Stefan Niemann, PhD, National Reference Center for
Mycobacteria

Overview on recent knowledge on population structure of the *M. tuberculosis* complex, the level of genetic diversity among clinical isolates and its importance for virulence and disease.

- *The Mycobacteriology Laboratory of the Future*

Michael Wilson, MD, Denver Public Health Laboratory

This presentation will review the future role of mycobacteriology laboratories in patient care, Public Health and scientific and medical research. The emphasis will be on the varying roles of mycobacteriology laboratories in different settings, with particular emphasis on global health issues.

12:30pm

Conference Concludes

12:30pm-1:30pm

Lunch (on your own)

1:30pm-3:00pm
Pacific Salons I-III

Post Conference Workshop
588-843-08, 1.5 contact hours

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

- Describe the CDC TB Cooperative Agreement Process
- Identify how the CDC TB Cooperative Agreement process affects your laboratory

Moderator - Tom Shinnick, PhD, Centers for Disease Control and Prevention

- *CDC Cooperative Agreements and US Public Health Laboratory Services*
CDC Staff

This session is intended for state and local public health laboratories receiving direct funding through the CDC Tuberculosis Elimination cooperative agreements. CDC staff will present the findings made by the Laboratory Component FY2010 Funding Formula Workgroup and answer all of your questions concerning the proposed funding formula for the FY2010 Cooperative Agreement.

3:00pm

Post-Conference Workshop Concludes

The following companies will be exhibiting at the 5th National Conference on Laboratory Aspects of Tuberculosis on August 11-12, 2008. Be sure to stop by and visit with them.

Akonni Biosystems, Inc.
Alpha-Tec Systems
American Society for Microbiology
AutoGenomics, Inc.
BD Diagnostics, Inc.
Btb Software
Cellestis, Inc.

Gen-Probe
Hain Lifescience
Innogenetics, Inc.
MIDI, Inc.
Olympus America, Inc.
Oxford Immunotec, Inc.
TREK Diagnostic Systems

Registration

Advanced registration through APHL is required.

Registration Fee: \$250/Full Conference, \$125/One Day, \$100/Student. Payment may be made by credit card or check. Purchase orders are no longer accepted.

If you are paying by credit card you may click on, or paste into your browser, the online registration webpage listed below to register. If you have not registered for an APHL/NL TN meeting online before, you will need to sign up for a login and password before you can register. Step by step online registration (credit card only) directions are provided.

If you are paying by check or are receiving a complimentary registration you must register using the registration form on the main conference webpage and fax or mail the form.

If you have any questions or problems, please contact Terry Reamer at 240.485.2776 or terry.reamer@aphl.org.

Main conference page - <http://www.aphl.org/TBConference>

Online registration -

http://www.aphlnet.org/eweb/Dynamicpage.aspx?webcode=EventInfoc&evt_key=81cfc5a0-f667-431a-8c19-f6c64e6f6561

Hotel

The 5th National TB Conference will be held at the Town and Country Resort in San Diego, CA. The hotel is located in the middle of Mission Valley. It is across the street from the trolley station (light rail) with direct access to downtown San Diego. The Fashion Valley Mall is also across the street with many shopping, dining and entertainment options.

The conference room rate is \$139.00 single/double (plus tax) per night. This is the federal government per diem. You may make your reservation by calling the hotel directly at 800.772.8527 or 619.291.7131. Be sure you mention that you are attending the "APHL TB Conference" to receive this rate. The room block may fill quickly so be sure to book early. **Reservations must be made no later than July 18, 2008.**

Town and Country Resort, 500 Hotel Circle North, San Diego, CA 92108, 619.291.7131, www.towncountry.com.

General Information

Hotel

Town and Country Resort
500 Hotel Circle North
San Diego, CA 92108
619.291.7131
www.towncountry.com

Continuing Education Credits

APHL is an approved provider of continuing education programs in the clinical laboratory sciences through the American Society of Clinical Laboratory Science (ASCLS) P.A.C.E.[®] program. Attendees have the opportunity to earn up to 15.5 contact hours by attending the entire conference plus 1.5 contact hours for the post conference workshop. Attendance rosters must be signed in each attended session that credit is requested for and the P.A.C.E.[®] certificate must be signed and certified by APHL staff at the registration booth at the end of your time at the conference.

Cancellation Policy

A \$100 cancellation fee will be assessed on all registrations cancelled before July 11. No refunds will be allowed after that date. Registrations are transferable if APHL is notified before-hand.

On-Site Registration Hours

Sunday, August 10	4:00pm-6:00pm	Golden Ballroom Foyer
Monday, August 11	7:00am-5:15pm	Golden Ballroom Foyer
Tuesday, August 12	7:00am-5:15pm	Golden Ballroom Foyer
Wednesday, August 13	7:00am-3:15pm	Golden Ballroom Foyer

San Diego Harbor Dinner Cruise - Tuesday, August 12

This harbor cruise, sponsored by Gen-Probe, includes a 3 hour cruise around San Diego Harbor, a buffet dinner and cash bar. There is a limit of 140 people and participation will be first come, first served. Buses will leave outside the hotel convention center entrance at 6:00pm and return after 10:00pm. You may wish to bring a light jacket as it can get cool on the water as the sun goes down.

Becoming More Environmentally Friendly

As we move to become a more environmentally friendly conference, you will notice several changes at this meeting. These include using recycled or eco-friendly totebags, providing water stations with tap water instead of bottled water, providing for the recycling of name badge holders and lanyards. We welcome your suggestions for other ways we can reduce our carbon footprint at our meetings. Please add these suggestions to your evaluation form, which will be electronic next time round.