## Meeting at a Glance

<table>
<thead>
<tr>
<th>TIME</th>
<th>SATURDAY, JUNE 2</th>
<th>SUNDAY, JUNE 3</th>
<th>MONDAY, JUNE 4</th>
<th>TUESDAY, JUNE 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>7:00am</td>
<td>Registration</td>
<td>Innovate! / Coffee</td>
<td>Roundtables / Coffee</td>
<td>Registration</td>
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<tr>
<td>7:30am</td>
<td>Coffee</td>
<td>Break</td>
<td>Responding to Natural Disasters</td>
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<tr>
<td>8:00am</td>
<td>Pre-Conf Workshops (4)</td>
<td>Breakout Sessions (4)</td>
<td>Exhibits &amp; Posters</td>
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<td>8:30am</td>
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<tr>
<td>9:00am</td>
<td></td>
<td>Biomonitoring, The Blooming Onion</td>
<td>Labs, Camera, Action!</td>
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<tr>
<td>9:30am</td>
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<td>Lunch provided in the Exhibit Hall — visit the exhibitor &amp; posters</td>
<td>Lunch provided in Exhibit Hall — visit the exhibitors/posters — Raffle (1:30pm)</td>
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<tr>
<td>10:00am</td>
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<td>One Hundred Years Pursuing the Pandemic</td>
<td>Activism and Stalemate</td>
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<td>Lunch on own</td>
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<td>12:30pm</td>
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<td>Break</td>
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<td>1:30pm</td>
<td>Welcome Session</td>
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<tr>
<td>5:00pm</td>
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<td>5:30pm</td>
<td>Networking Reception</td>
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<tr>
<td>6:00pm</td>
<td>Welcome Reception in Exhibit Hall</td>
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<tr>
<td>6:30pm</td>
<td>Tour of Los Angeles County Public Health Laboratory</td>
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Welcome to Pasadena!

Welcome to the 2018 Association of Public Health Laboratories (APHL) Annual Meeting and Twelfth Government Environmental Laboratory Conference. The setting of this year’s conference is Pasadena California. Pasadena is, of course, well-known as the site of the annual Rose Bowl game and the Tournament of Roses Parade. But the city is also known for its many scientific and cultural institutions such as Caltech, the Pasadena Playhouse, and the Norton Simon Museum to name but a few. And just this past April, the Pasadena Public Health Department commemorated its 125 anniversary of providing services to improve the health of the community. We are truly fortunate to be able to hold our conference in a city with such a rich history in public health, especially on this, the 100th anniversary of the 1918 influenza pandemic.

The planning committee has put together an exciting program for this year’s conference, which includes speakers addressing a plethora of public health issues, from infectious disease, to environmental health, to newborn screening, to response to natural disasters among others. A couple of sessions deserve special mention. To commemorate the 100th anniversary of the influenza pandemic of 1918, we invite you to join us as we explore the past, present and future of influenza pandemics in a session titled “One Hundred Years Pursuing the Pandemic: From the ‘Great Flu’ of 1918 to 2018”. And we are especially pleased to welcome Maryn McKenna, author of the book “Big Chicken”, which describes the history of antibiotic use in animal husbandry and its impact on human health, as the keynote speaker for the 2018 Katherine Kelley Distinguished Lecture.

We hope you will make time to visit the Exhibit Hall where 60+ exhibitors will be available to discuss the latest developments in laboratory instrumentation, reagents, and resources. More than 140 posters will be on display in the exhibit hall and we are excited to announce that, for the first time at the APHL conference, we will have a “speed dating” session in which selected poster presenters will have one minute to provide an oral summary of their poster. This is a creative way to highlight the excellent work done by attendees and enable poster presenters to hone their speaking skills. Finally, California has a robust local laboratory system with more than 30 county public health laboratories and numerous city laboratories, and this year you have the opportunity to tour two of these laboratories: the Pasadena Environmental Chemistry Laboratory and the Los Angeles County Public Health Laboratory.

On behalf of Program Planning Committee and the APHL Board of Directors, we welcome you to Pasadena. We hope that you have a productive and enjoyable experience and encourage you take full advantage of all that the conference and the city of Pasadena have to offer.

Joanne M. Bartkus, PhD, D(ABMM)
APHL President-Elect &
2018 Annual Meeting Planning Committee Chair
The Association of Public Health Laboratories

VISION: A healthier world through quality laboratory systems.

MISSION: Shape national and global health outcomes by promoting the value and contributions of public health laboratories and continuously improving the public health laboratory system and practice.

The Association Of Public Health Laboratories (APHL) is a non-profit 501(c)(3) organization representing governmental laboratories that monitor and detect public health threats, including emerging infectious disease surveillance, detection of metabolic and genetic conditions in newborns, water contamination identification and foodborne outbreak detection. APHL’s members are state, local, county and city public health laboratories, state and local environmental health laboratories, state agricultural laboratories, corporations, individual and student members with an interest in public health laboratory issues, and organizations that share common goals with APHL.

APHL IS A NATIONAL LEADER IN:

• Scientific Expertise
• Education and Training
• Health Policy

• Informatics
• Quality Assurance
• Workforce Development

• Laboratory Systems
• Global Laboratory Capacity

APHL Board of Directors

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Joanne Bartkus, PhD, D(ABMM), Minnesota, President-Elect
Bill Whitmar, MS, Missouri, Secretary-Treasurer
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Denise Toney, PhD, HCLD (ABB), Virginia, Member-at-Large
Scott Zimmerman, DrPH, MPH, HCLD(ABB), North Carolina, Member-at-Large
Maria Ishida, PhD, New York, Public Health Associate Institutional Member
Tamara Theisen, MT(ASCP), Saginaw County, MI, Local Institutional Member
Mark Wade, San Antonio, TX, Local Institutional Member
Scott Becker, MS, Executive Director (Ex-officio)

Annual Meeting Planning Committee

Joanne Bartkus, PhD, D(ABMM), Minnesota Public Health Laboratory Division, Chair
Craig Blackmore, PhD, California Department of Public Health Laboratory
Megan Crumpler, PhD, Orange County (CA) Public Health Laboratory
Nicole Green, PhD, D(ABMM), Los Angeles County Public Health Laboratory
Grace Kubin, PhD, Texas Department of State Health Services
Paul Moyer, MS, Minnesota Public Health Laboratory Division
Jennifer Rakeman, PhD, New York City Public Health Laboratory
Marie-Claire Rowlinson, PhD, D(ABMM), Florida Bureau of Public Health Laboratories
Brunie White, PhD, Centers for Disease Control and Prevention
Kenny Yeh, MS, MRIGlobal
General Information

Conference Site
Pasadena Convention Center
300 E. Green St.
Pasadena, CA 91101

Headquarters Hotel
Sheraton Pasadena
300 E. Cordova St.
Pasadena, CA 91101
626.449.4000

Session Topics

This year APHL solicited session proposals from its standing committees and the general membership, which resulted in many excellent proposals. To assist you in determining the general area of interest, we have given each session a letter symbol which corresponds with the topic that it represents. This guide is listed below.

- **C** Communications
- **EH** Environmental Health
- **ELS** Environmental Laboratory Science
- **FS** Food Safety
- **GH** Global Health
- **I** Informatics
- **ID** Infectious Disease
- **KM** Knowledge Management
- **LL** Local Public Health Laboratory
- **NBS** Newborn Screening & Genetics
- **PHPR** Public Health Preparedness & Response
- **PO** Policy
- **QS** Quality Systems
- **W** Workforce Development

Competencies

The Centers for Disease Control and Prevention (CDC) and the Association of Public Health Laboratories (APHL) published Competency Guidelines for Public Health Laboratory Professionals in a May 2015 Morbidity and Mortality Weekly Report (MMWR) supplement issue. These competency guidelines were developed with a focus on public health laboratory (PHL) practice and are intended to form the foundation of competency-based approaches to strengthen that practice, including integration into workforce development initiatives such as training and education programs.

In support of efforts to further the adoption and implementation of the Guidelines, each session in the Annual Meeting program will include one or more symbols corresponding to the related competency domain(s) that the session addresses. This guide is listed below.

- **QMS** Quality Management Systems
- **ETH** Ethics
- **MLD** Management and Leadership
- **COM** Communication
- **SEC** Security
- **EMR** Emergency Management and Response
- **WFT** Workforce Training
- **GEN** General Laboratory Practices
- **SHC** Safety Subdomain
- **SRV** Surveillance
- **INF** Informatics
- **MCB** Microbiology
- **CHM** Chemistry
- **BIO** Bioinformatics
- **RES** Research
Cancellation Policy
A $100 cancellation policy will be assessed on all registrations cancelled before May 10. No refunds will be allowed after that date. Registrations are transferable if APHL is notified beforehand.

On-site Registration Hours
Registration Desk – Ballroom DE Prefunction

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<thead>
<tr>
<th>Day</th>
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<tbody>
<tr>
<td>Friday, June 1</td>
<td>4:00 pm – 7:00 pm</td>
<td>Monday, June 4</td>
<td>7:30 am – 5:30 pm</td>
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<tr>
<td>Saturday, June 2</td>
<td>7:00 am – 6:00 pm</td>
<td>Tuesday, June 5</td>
<td>7:30 am – 12:30 pm</td>
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<tr>
<td>Sunday, June 3</td>
<td>7:30 am – 5:30 pm</td>
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Continuing Education Credits Available
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 15.0 contact hours by attending the entire conference. Attendance rosters must be signed in each attended session that credit is requested and the P.A.C.E.® certificate must be signed and certified by APHL staff at the registration desk at the end of your time at the conference.

APHL is an approved provider of Certified in Public Health (CPH) Recertification Credits through the National Board of Public Health Examiners (NBPHE). Attendees have the opportunity to earn up to 11 hours of credit by attending the entire conference. APHL will not issue certificates of attendance.

Optional Tours
Pasadena Environmental Chemistry Laboratory
Monday, June 4, 6:00 pm-8:00 pm

Please meet in the convention center lobby at 5:45 pm and the group will walk/Metro to the lab (1.3 miles away) promptly at 6:00 pm. The tour will last about an hour and everyone should be back by 8:00 pm. Those who have pre-registered for the tour will have a ticket in their registration packet. After the tour, get together with others interested in environmental health from 8:00 pm – 10:00 pm at Pitfire Pizza (730 S. Arroyo Parkway).

Los Angeles County Public Health Laboratory
Tuesday, June 5, 1:00 pm – 5:00 pm

The bus will depart from the convention center lobby promptly at 1:00 pm and return by 5:00 pm. Attendees who have pre-registered for the tour will have a ticket in their registration packet. Please meet in the convention center lobby at 12:45 pm. Unless you are staying overnight Tuesday please check out of your hotel before boarding the bus.
Consent to Use Photographic Images
Registration and attendance at or participation in APHL meetings and other activities constitutes an agreement by the registrant to APHL’s use and distribution (both now and in the future) of the registrant’s or attendee’s image or voice, without compensation, in photographs, videotapes, electronic reproductions and audiotapes of such events and activities.

Complimentary Wireless
There is complimentary wireless internet in the public areas and sleeping rooms in all three hotels. To access, follow the directions given at the front desk.

Pasadena Convention Center – There is complimentary wireless internet throughout the convention center. Provided by Roche Diagnostics.

Conference Mobile App
Sponsored by Roche Diagnostics
Access all the detailed information about sessions, exhibitors and poster abstracts at your fingertips before the meeting and onsite. Plan your experience with the My Show feature. Receive alerts and reminders onsite. The app includes these useful features:

- Interactive floor plans of the hotel and exhibit for easy navigation
- My Show, where one can personalize their experience by tagging sessions, exhibitors, city destinations and create notes
- Alerts, reminders or changes about the symposium
- APHL Blog daily symposium summary and other social media
- Speaker and sponsor profiles

To get the app, Search for APHL in the Apple or Google Play stores, or go to www.aphl.org/app in your device’s browser.
Special Events

Pre-conference Workshops
Saturday, June 2, 8:00 am – 11:30 am
Register separately for these workshops

Welcome Reception
Saturday, June 2, 5:30 pm – 7:00 pm
Sponsored by Roche Diagnostics

Innovate!
Sunday, June 3, 7:45 am – 8:45 am
Connect with your industry partners and learn of new technologies and services.

Networking Reception
Sunday, June 3, 5:30 pm – 6:30 pm

Awards Ceremony and Breakfast
Monday, June 4, 9:00 am – 10:30 am
Celebrate your colleagues’ achievements.
Sponsored by Hologic

Exhibit Hall Scavenger Hunt
Monday, June 4, 10:30 am - 1:00 pm
Participate in the exhibit hall scavenger hunt for your chance to win an additional prize during the Exhibit Hall Raffle. Details will be on the Awards Ceremony program.

Dr. Katherine Kelley Distinguished Lecture
Monday, June 4, 2:00 pm – 3:00 pm
Activism and Stalemate: How the Threat of Antibiotic Resistance Turned the US Public Against Farm Antibiotic Use
Maryn McKenna, journalist and author of Big Chicken, Super Bug and Beating Back the Devil

Exhibit Hall Raffle
Monday, June 4, 1:30 pm – 2:00 pm
Visit all the exhibitors between Saturday and Monday for your chance to win a prize such as an airline ticket, gift cards or cash.

Member Assembly
Monday, June 4, 5:00 – 6:00 pm

Optional Tour of the Pasadena Environmental Chemistry Laboratory
Monday, June 4, 6:00 pm – 8:00 pm

Optional Tour of the Los Angeles County Public Health Laboratory
Tuesday, June 5, 1:00 pm – 5:00 pm
Recharge at the APHL Experience | Exhibit Hall

Charging stations provided by Roche Diagnostics

Discover more about APHL programs and new tools, or relax in the lounge while you recharge your device. Open during exhibit hours with the following scheduled demo times (as of April 23; subject to change).

Saturday 3:30 PM – 4:30 PM (afternoon break)
Join the Conversation: News, Information and Stories through APHL Media
Michelle Forman, APHL

CollLABorate Online Communities
Linette Granen, APHL

Saturday 5:30 PM – 7:00 PM (welcome reception)
Celebrating 10 Years of the Emerging Leader Program
Kajari Shah, APHL

Working Together Across Generations and HR Q&A
Lisa Chilcote, APHL

Sunday 10:00 AM – 11:00 AM (morning break)
Resources for Sentinel Clinical Laboratories for the Detection of Biothreat Agents
Samuel Abrams, APHL

Influenza Discrepant Results Reporting Site
Stephanie Chester, APHL

Sunday 12:30 PM – 2:00 PM (exhibit hall lunch)
Laboratory System Improvement Program (L-SIP)
Tina Su, APHL • Twila Kunde
New Mexico Department of Health Scientific Laboratory Division

Federal Emergency Response Resources — Environmental
Sarah Wright, APHL • Sarah Taft and Sanjiv Shah, US EPA National Homeland Security Research Center • George Gardenier, US EPA Water Laboratory Alliance • Mia Mattioli and Kirsten Berling, CDC Waterborne Disease Prevention Branch

Sunday 3:30 PM– 4:30 PM (afternoon break)
Global Health Program and Volunteer Opportunities
Sherrie Staley, APHL

APHL Membership: Everything You Need to Know!
Drew Gaskins, APHL

Sunday 5:30 PM– 6:30 PM (networking reception)
Emerging Leader Podcast Episodes
Josh Rowland, APHL

Knowledge Retention Toolkit
Andrea Wright, Lorelei Kurimski, Michael Marsico, APHL • Amanda Hughes, State Hygienic Laboratory, University of Iowa

Monday 10:30 AM – 11:30 AM (morning break)
APHL Biosafety Resources
Michael Marsico, APHL

New Informatics Training Courses on CDC TRAIN
Rachel Shepherd, APHL

Monday 12:30 PM – 2:00 PM (exhibit hall lunch)
National Biomonitoring Network Membership
Jennifer Liebreich, APHL

Public Health Laboratory System Database (PHLSD)
Jacob Rosalez, APHL
Friday, June 1, 2018
4:00 pm – 7:00 pm
Registration
Ballroom DE Foyer

Saturday, June 2, 2018
7:00 am – 6:00 pm
Registration
Ballroom DE Foyer

8:00 am – 11:30 am
PRE-CONFERENCE WORKSHOPS
(separate registration required)

Giving Your Data Its Due: Visualizing Data in Excel

Ballroom A
Moderator: Jody DeVoll, MAT, Director of Strategic Communications, Association of Public Health Laboratories

• Data Without Snores: Communicating Your Data Effectively
  Beth Hochstedler, Education, Training and Professional Development Director, State University at the University of Iowa

• Visible Data: Effective Graphical Representation of Data
  John Thompson, PhD, MPA, MPH, Director, Newborn Screening Program, Washington State Department of Health

• Hands-on Practice: Visualizing Data in Excel
  Jacob Rosalez, Manager, Institutional Research, Association of Public Health Laboratories

Your conference presentation is approaching, and you have impressive data to share with your colleagues. But how do you translate the data into visuals that convey your key points when time and resources are limited? This hands-on workshop will show you how to develop an effective data-centric presentation using a fail-safe tool: Excel. You’ll also learn how to avoid common pitfalls that can confuse your audience or, worse, put them to sleep.

At the conclusion of this session, the participant will be able to:
• Apply presentation skills to communicate data while maintaining audience interest
• Name five characteristics of effective graphical representation of data
• Analyze the quality and clarity of graphs and other representations of data
• Create an effective graph or other data visualization in Excel

(588-829-18 – 3.0 contact hours for this session)
Fostering Partnerships to Maximize the Potential of Biomonitoring

Moderator: Julianne Nassif, MS, Director of Environmental Health, Association of Public Health Laboratories

- Kathleen Attfield, ScD, Research Scientist, California Department of Public Health
- Amanda Cosser, MPH, Biomonitoring Coordinator, New Hampshire Public Health Laboratories
- Robin Christensen, MS, Biomonitoring California Grant Coordinator, California Department of Public Health
- Christine Bean, PhD, MBA, Laboratory Director, New Hampshire Public Health Laboratory
- Jessica Sagona, PhD, Data Analyst, EPHT Program, New Hampshire Department of Health and Human Services
- Jed Waldman, PhD, Chief, Environmental Health Laboratory, California Department of Public Health

This workshop will describe how partnerships can be initiated and cultivated to grow successful biomonitoring projects and programs.

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

- Explain the value of partnering with epidemiologists and exposure scientists in developing a biomonitoring program
- Develop a plan to take home and promote biomonitoring within home state to state health officials and state environmental health officials

(588-830-18 – 3.0 contact hours for this session)

Quality Considerations for Next Generation Sequencing

Moderator: Duncan MacCannell, PhD, Chief Science Officer, Office of Advanced Molecular Detection, Centers for Disease Control and Prevention

- Duncan MacCannell, PhD, Chief Science Officer, Office of Advanced Molecular Detection, Centers for Disease Control and Prevention
- Kimberlee Musser, PhD, Chief of Bacteriology, Wadsworth Center, New York State Department of Health
- Sean Wang, DVM, PhD, APHL-CDC Bioinformatics Fellow, Minnesota Public Health Laboratory

Attendees will participate in a combination of lectures and exercises that will describe approaches for validating Next Generation Sequencing (NGS) assays and the considerations for implementing quality assurance (QA) measures appropriate for NGS protocols from wet laboratory through data analysis.
At the conclusion of this session, the participant will be able to:
• Develop approaches for validation of NGS assays
• Describe the QA indicators that should be established
• Interpret various types of data output and how to verify proper analysis parameters
• Discuss a bioinformatician’s approach to designing a novel pipeline

(588-831-18 – 3.0 contact hours for this session)

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**PulseNet Surveillance for *Listeria*:** Introduction to Interpretation and Reporting of Whole Genome Sequencing (WGS) Data

**Ballroom H**

**Moderators:** Kristy Kubota, MPH, Manager, PulseNet and Jennifer Adams, Lead Specialist, PulseNet QA, Association of Public Health Laboratories

• Kelley Hise, MPH, PulseNet Database Unit Chief, Centers for Disease Control and Prevention

• Heather Carleton, PhD, MPH, Bioinformatics Coordinator, Centers for Disease Control and Prevention

• Steve Stroika, WGS Technical Lead, Centers for Disease Control and Prevention

• Jasmine Huffman, Database Manager, Centers for Disease Control and Prevention

PulseNet, the National Molecular Subtyping Surveillance Network for Foodborne Disease Surveillance, utilizes DNA fingerprinting to detect clusters of foodborne disease pathogens and is currently undergoing a transformation from pulsed-field gel electrophoresis (PFGE) to WGS methods. This session is designed to provide information regarding how surveillance is conducted for *Listeria* now that WGS has replaced PFGE as the primary subtyping method. The emphasis of this session will be to demonstrate data management for PulseNet focusing on WGS data analysis, interpretation, cluster detection and reporting to epidemiologists for national Listeriosis surveillance within the United States.

At the conclusion of this session, the participant will be able to:
• Describe the integration of WGS data for PulseNet *Listeria* surveillance
• Discuss methods to evaluate sequence quality after data is generated from the Illumina MiSeq instruments
• Describe WGS data analysis and reporting tools for PulseNet surveillance
• List how WGS data for *Listeria monocytogenes* can be managed locally and submitted to CDC for national surveillance

(588-832-18 – 3.0 contact hours for this session)

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**11:30 am – 1:30 pm**

**Lunch on your own**
1:30 pm – 3:30 pm
OPENING PLENARY SESSION
Ballroom DE

1:30 pm – 2:00 pm
Welcome to Pasadena
Ballroom DE

Moderators:
Ewa King, PhD, APHL President & Director, Rhode Island State Health Laboratories, and
Joanne Bartkus, PhD, D(ABMM), APHL President-Elect, 2018 Annual Meeting Planning Committee Chair and Director, Minnesota Public Health Laboratory Division
• Paul Kimsey, PhD, Director, California Department of Public Health Laboratory
• Nicole Green, PhD, D(ABMM), Director, Los Angeles County Public Health Laboratory
• Scott Becker, MS, Executive Director, Association of Public Health Laboratories

2:00 pm – 3:30 pm
One Hundred Years Pursuing the Pandemic: From the ‘Great Flu’ of 1918 to 2018
Ballroom DE

Moderator: Peter Shult, PhD, Wisconsin State Laboratory of Hygiene
• The Past, Present and Future of Influenza Pandemics
  Monica Schoch-Spana, PhD, Johns Hopkins Bloomberg School of Public Health
• Assessing Pandemic Risk and Evaluating US and Global Pandemic Readiness
  Jacqueline Katz, PhD, Centers for Disease Control and Prevention
• The Future of Pandemic Mitigation
  Stacey Shultz-Cherry, PhD, St. Jude Children’s Hospital

Marking the 1918 influenza pandemic centennial, this session will look at the past, present and future of influenza pandemics, reviewing the early science of virology during the 1918 pandemic and evaluating the advances since that time, positioning us to contend with similar potential pandemic public health threats. This session will highlight the progress that has been made nationally and internationally with the development of new pandemic preparedness tools and resources. This session also looks at the future of pandemic prevention through advances in vaccines and pharmaceuticals.

At the conclusion of this session, the participant will be able to:
• Review influenza history and potential future concerns
• List current efforts to thwart influenza transmission through improved human and animal surveillance, clinical practice and public health interventions
• Describe pandemic planning resources and tools now available to the public health community
(588-800-18 – 1.5 contact hours for this session)
3:30 pm – 4:00 pm
**Break in the Exhibit Hall**
Exhibit Halls AB

3:30 pm – 7:00 pm
**Exhibit Hall Open**
Exhibit Halls AB

3:30 pm – 7:00 pm
**Posters available for viewing in the exhibit hall**
Exhibit Halls AB

4:00 pm – 5:30 pm
**CONCURRENT SESSIONS**

**Addressing AntibioticResistance “Hotspots” Through a Global One Health Lens: People, Animals and the Environment**

**Ballroom DE**

**Moderators:** Romesh Gautom, PhD, MS, Washington State Public Health Laboratories, and Michael Pentella, PhD, MS, D(ABMM), State Hygienic Laboratory at the University of Iowa

- **Changing Practices to Reduce Antibiotic Resistance**
  Jean McLain, PhD, MS, University of Arizona

- **Do Clinical Microbiology Laboratory Data Reveal or Distort the Picture of Antibiotic Resistance in Humans and Domestic Animals?**
  Scott Weissman, MD, University of Washington/Seattle Children’s Hospital

- **How Culture and Circumstances Complicate the Fight Against Antimicrobial Resistance: Lessons from Tanzania**
  Douglas Call, PhD, Washington State University

Antibiotic resistance is a multi-faceted global problem that includes clinical, socio-economic, environmental and One Health issues. This session will focus on surveillance for resistance and opportunities for mitigation.

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

- Describe the impact on antimicrobial resistance from a local, global and One Health perspective
- Explain the role of social and environmental factors contributing to emergence of “hotspots” of antibiotic resistance
- Describe the use of high throughput assays used for detection of resistance in communities

(588-802-18 – 1.5 contact hours for this session)
Spotlight on Public Health Laboratory Fellowships: What Can a Fellow Do for Your Lab?

Ballroom A

**Moderators:** Jennifer Rakeman, PhD, New York City Public Health Laboratory and Marie-Claire Rowlinson, PhD, D(ABMM), Florida Bureau of Public Health Laboratories

- **Patrice Held**, PhD, FACMG, Wisconsin State Laboratory of Hygiene (Newborn Screening Fellow)
- **Sean Wang**, DVM, PhD, Minnesota Public Health Laboratory (Bioinformatics Fellow)
- **Marisabel Etter**, PhD, California Department of Public Health (ARLN Fellow)
- **Cecilia Kretz**, Centers for Disease Control and Prevention (LLS Fellow)

This session will highlight some of the important achievements of fellows in state and local public health laboratories. Fellows from CDC and APHL fellowship programs such as the Laboratory Leadership Service (LLS), Antimicrobial Resistance, and Bioinformatics fellowships will present their project work and discuss how their work has benefited the laboratory as well as how the fellowship enhances their careers in public health laboratory science. Fellowship mentors will also be available to discuss the benefits of these programs. Come and support our public health science leaders of the future!

At the conclusion of this session, the participant will be able to:
- Describe the fellowships available to train new public health laboratory scientists
- Demonstrate the value of fellows to public health laboratories
- Describe the value of fellowship programs to the public health laboratory system

(588-801-18 – 1.5 contact hours for this session)

Newborn Screening: It’s Complicated!

Ballroom B

**Moderator:** Guisou Zarbalian, MS, MPH, Association of Public Health Laboratories

- **Denise Kay**, PhD, Wadsworth Center, New York State Department of Health
- **Susan Tanksley**, PhD, Texas Department of State Health Services
- **John Thompson**, PhD, Washington State Office of Newborn Screening
- **Rachel Lee**, PhD, Texas Department of State Health Services

Recent media stories have called attention to the establishment of newborn screening (NBS) analyte cutoffs, timeliness of returning NBS results, and delays in implementing screening for newly added disorders. This session will demonstrate that NBS extends beyond a simple laboratory test and involves a system of partners to be successful; highlight the difference between screening and diagnostic testing; and show how the recent addition of new disorders to the Recommended Uniform Screening Panel (RUSP) requires implementation readiness by all parts of the program.
At the conclusion of this session, the participant will be able to:
- Identify facilitators and barriers for NBS programs in implementing universal screening for new conditions
- Describe the challenges that NBS programs face in meeting implementation timelines while also assuring quality practices and timely return of results all with newborn lives and health outcomes at stake
- Explain that NBS is a system beyond the laboratory and explain how challenges in any part of the process affect the overall NBS system

(588-803-18 – 1.5 contact hours for this session)

Per- and Poly-Fluoroalkyl Substances (PFAS): Nevertheless, They Persist

Ballroom C

Moderator: Kacee Deener, MPH, US Environmental Protection Agency
- Cindy Caporale, US Environmental Protection Agency
- Ekta Choudhary, PhD, MPH, MS, Centers for Disease Control and Prevention
- Jessica Sagona, PhD, New Hampshire Environmental Public Health Tracking

It has been said that per- and poly-fluoroalkyl substances (PFAS) will be the environmental health challenge of the next decade. As science rushes to keep up with this evolving issue, what are the current tools, resources and analytical methods that public health laboratories can use to produce quality decision-making data?

At the conclusion of this session, the participant will be able to:
- Describe new non-drinking water analytical methods for PFAS
- Explain how the ATSDR PFAS exposure assessment technical tools (PEATT) can be used to assess exposure to PFAS in community settings, including sampling methodology and other study design decisions
- Describe how a state environmental health tracking program has used data to make PFAS public health decisions

(588-804-18 – 1.5 contact hours for this session)

5:30 pm – 7:00 pm
Welcome Reception in the Exhibit Hall
Exhibit Halls AB
Sponsored by Roche Diagnostics

6:00 pm – 6:30 pm
Poster authors 1–70 standing by their posters
Exhibit Halls AB
Sunday, June 3, 2018

8:30 am – 9:00 am  
**Registration**
Ballroom DE Foyer

8:30 am – 9:00 am  
**Coffee**
Ballroom DE Foyer

7:45 am – 8:45 am  
**INNOVATE!**
Coffee & Light Breakfast Foods Provided (Conference Center)

**Chembio Diagnostic Systems, Inc.**  
• Room 211 (Conference Center)

**An Innovative Platform for Rapid Zika Testing**
Come learn about the first FDA Emergency Use Authorized Rapid Zika Test. By the end of this seminar, participants will understand the following:

- The innovative science behind Chembio's Dual Path Platform (DPP®) Technology
- How the DPP® Zika IgM Assay works and can fit into your laboratory workflow
- How to interpret the results with the DPP® Micro Reader

Speakers:
- Sharon Klugewicz, MS, President, Americas Region, Chembio Diagnostic Systems, Inc.
- Krishnan Allampallam, PhD, Global Director of Marketing, Chembio Diagnostic Systems, Inc.

**IDEXX**  
• Room 204 (Conference Center)

**Strategies and Resources for Legionnaires’ Disease Risk Reduction**
Public and Environmental Health professionals are essential to reducing the risk of Legionnaires’ disease, the most common and deadly US waterborne disease. Luckily, 9 out of 10 cases of Legionnaires’ disease are preventable with an effective Water Safety Management Plan. The session will cover:

- Standards and guidelines to reduce Legionnaires’ disease risk
- How Water Safety Management Plans can reduce exposure to Legionella pneumophila, the cause of Legionnaires’ disease
- Creating a Water Safety Management Plan and options for validating its effectiveness
- Building community partnerships to address Legionella risk

This session is for Environmental and Clinical Laboratory professionals.

Speakers:
- Patsy Root, Regulatory Affairs Manager
- Kristin Majeska, Senior Manager, Strategic Initiatives, IDEXX
PerkinElmer • Room 207 (Conference Center)

Second Tier Testing Products and Services from PerkinElmer

Data from PerkinElmer QSight® 210 MD MSMS system will be presented illustrating how several of the most common second tier tests might be performed in Public Health laboratories. In addition, PerkinElmer Genomics will present details of our sequencing and genetic counseling services that focus on Newborn Screening needs. This presentation will focus on PerkinElmer’s tools and services to meet the needs of the Public Health laboratory for second tier testing.

Speakers:

- Aaron Risinger, MBA, Sr. Mass Spectrometry Sales Specialist, PerkinElmer
- Ephrem Chin, Business Development Leader, PerkinElmer

Roche Diagnostics Corporation • Room 212/214 (Conference Center)

Innovations in Molecular Microbiology

In recent years, healthcare practice has been shifting from empirical treatment with follow-up testing for confirmation or correction, to getting the right treatment to patients the first time. The Microbiology laboratory has always been at the heart of providing clinicians with the answers they need to appropriately treat their patients. However, many of the technologies employed in Microbiology labs have been in use for over 60 years, and are not fast enough to meet these new demands. Roche has been responding to this call for new solutions by developing novel technologies which give healthcare systems the potential to provide faster, actionable, near patient answers. Join us as we take you on a tour of the exciting new innovations from Roche Molecular Microbiology.

Speaker:

- Christopher D. Newhouse, PhD, Group Marketing Manager, Microbiology, Roche Diagnostics Corporation

STACS DNA • Room 208 (Conference Center)

You Tell Us: Could This Specimen Tracking Software Expedite Your Testing and Reporting?

Check out new software that tracks specimens statewide from collection to reporting, with websites for submitters, laboratories, administrators, physicians, patients and more. It is currently in use tracking newborn screening specimens and sexual assault kits. Would this system help your lab prevent delayed and lost specimens, save lab staff time, reduce errors, improve quality, and manage inventory? Would your stakeholders benefit from real time information and an end-to-end audit trail? This is a terrific opportunity for you to tell us how specimen tracking could help meet your lab’s most urgent needs.

Speakers:

- Heather MacIntosh, VP Business Development, STACS DNA
- Kyle Kipp, Field Application Specialist, STACS DNA
- Sarah Shaw, Implementation Project Manager, OZ Systems
9:00 am – 10:00 am

**CONCURRENT SESSIONS**

**The Impact of New and Emerging Technologies on Food and Clinical Testing Laboratories**

**Ballroom DE**

**Moderator: Denise Toney**, PhD, HCLD(ABB), Virginia Division of Consolidated Laboratory Services

- **Implementation and Applications for Use of MALDI-TOF for Clinical and Food Testing**
  Dominick Centurioni, MS, Wadsworth Center, New York State Department of Health

- **Strategies to Successfully Validating Multiplex Molecular Detection Panels for GI Pathogens**
  Caitlin Murphy, PhD, D(ABMM), University of Nebraska Medical Center

- **Challenges and Best Practices for the Successful Incorporation of New and Emerging Technologies within a Traditional Laboratory Testing Workflow**
  Lauren Turner, PhD, Virginia Division of Consolidated Laboratory Services

- **Applications of Sequencing within Clinical or Food Testing Laboratories**
  Brian Caudle, Florida Department of Agriculture and Consumer Services

Traditionally, food and clinical testing laboratories have relied on the use of standardized and time consuming methodologies which typically required culture enrichments, isolation steps, and lengthy incubations. However, with the availability of so many new and improved technologies for the detection and characterization of pathogens by targeting genetic sequences or biomarkers, challenges are created with respect to implementation of these new tests within existing workflows. The most current challenges include identifying funding streams to purchase costly instrumentation, developing training programs for existing laboratory personnel, identifying approaches to test method validation, ensuring secure and confidential data storage and sharing and establishing appropriate criteria for result interpretation and reporting. This session will review the more recent technologies now available to clinical and food testing laboratories including MALDI-TOF, 16S and whole genome sequencing, and multiplex culture independent tests for gastrointestinal pathogens. Strategies used by laboratories to overcome the more common challenges associated with implementation will be discussed.

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

- Review new and approved technologies available to clinical and food testing laboratories
- Describe approaches to validation and implementation in order to comply with regulatory requirements (ie. CLIA, ISO) for testing
- Explain laboratory implementation and validation best practices
- Discuss approaches to data interpretation and result reporting

(588-805-18 – 1.0 contact hours for this session)
Strangers Among Us: Exploring the Lesser Known Arboviruses

**Ballroom A**

**Moderator: Sara Vetter**, PhD, Minnesota Department of Health

- **What Does WGS Tell Us About the Past, Present and Future of Eastern Equine Encephalitis in the US?**
  - **Lea Heberlein-Larson**, MPH, SM(ASCP), Florida Bureau of Public Health Laboratories – Tampa

- **Jamestown Canyon and Powassan Viruses: Emerging Diseases or an Issue of Better Detection?**
  - **Elizabeth Shiffman**, MPH, MA, Minnesota Department of Health

- **The Arboviruses Next Door: Orphaned and Emerging Arboviruses of the US**
  - **Holly Hughes**, PhD, Centers for Disease Control and Prevention

Much is known about Zika virus, West Nile virus, Dengue and other arboviruses that have been able to cause widespread disease over large geographic areas. However, there are many other regional and lower incidence arboviruses of importance that still pose challenges to public health every day.

At the conclusion of this session, the participant will be able to:
- Describe the origin and the reservoir of Eastern Equine Encephalitis
- Discuss recent understanding about Powassan Virus
- Describe multiple lesser known arboviruses and their potential to cause an outbreak

(588-806-18 – 1.0 contact hours for this session)

The Evolution of Data Exchange: An AIMS Informatics Town Hall

**Ballroom B**

**Moderator: Patina Zarcone-Gagne**, MPH, Association of Public Health Laboratories

- **Keith Higginbotham**, Alabama Department of Public Health
- **Frank Delin**, State Hygienic Laboratory at the University of Iowa
- **Eduardo Gonzalez Loumiet**, MBA, PMP, CPHIMS, Ruvos
- **Dariush Shirazi**, Association of Public Health Laboratories
- **Michelle Meigs**, Association of Public Health Laboratories

This town hall session will examine the evolution of data exchange (technical and non-technical developments) over the years and how APHL has helped public health laboratories understand, navigate and implement electronic data exchange that uses simple, effective standards-based methods, including the use of the AIMS Platform. The session will also allow current and prospective AIMS users to ask questions, provide suggestions and to share concerns they have regarding this platform of national significance, as much of the success and growth of AIMS is due to suggestions and comments from the user community.
At the conclusion of this session, the participant will be able to:
• Articulate the evolution of data exchange over the last ten years
• Explain how APHL has offered and continues to offer informatics assistance to help public health meet their data exchange needs
• Discuss the latest technologies and use cases on AIMS
• Describe ways to maximize AIMS' capabilities from other users and the AIMS team.

(588-808-18 – 1.0 contact hour for this session)

Out of the Weeds: The Big Picture of Cannabis Testing

Ballroom C

Moderator: Kenneth Aldous, PhD, Wadsworth Center, New York State Department of Health

• Gillian Schauer, PhD, CDC Foundation
• TBD – California Bureau of Cannabis Control, Department of Consumer Affairs
• Heather Krug, MS, Colorado Department of Public Health & Environment

This session will outline the current status of cannabis testing in states that have been doing it the longest. A speaker from the CDC Foundation will provide the lay of the land on policy issues and why cannabis is a concern for public health.

At the conclusion of this session, the participant will be able to:
• Describe the public health implications of marijuana use and legalization in the states
• List cannabis testing issues in Colorado and California
• Outline the breadth of complicated factors surrounding cannabis testing

(588-807-18 – 1.0 contact hours for this session)
10:30 am – 12:00 pm

PLENARY SESSION

Biomonitoring, the Blooming Onion: Growth at the Federal, State and Organizational Levels [EH EMR]

Ballroom DE

Moderator: Julianne Nassif, MS, Association of Public Health Laboratories

• Highlights of CDC’s National Biomonitoring Program
  Mary Mortenson, MD, MS, Centers for Disease Control and Prevention

• The National Biomonitoring Network: Its Structure, Current Developments and Reasons Your Laboratory Biomonitoring Program Should Become Involved
  Kenneth Aldous, PhD, National Biomonitoring Network Steering Committee

• Biomonitoring Communication Considerations: Reporting, Data Sharing, and Policy Initiatives
  Amanda Cosser, MPH, New Hampshire Public Health Laboratories

• Four Corners States Biomonitoring Consortium: The Benefits and Challenges of a Multi-state Biomonitoring Program
  Sanwat Chaudhuri, PhD, Utah Public Health Laboratory

This session will present biomonitoring updates from CDC and describe how to become a member of APHL’s newest collaborative powerhouse, the National Biomonitoring Network. Lessons learned from states with established biomonitoring programs, including method validation and key aspects of study design, will be discussed.

At the conclusion of this session, the participant will be able to:
  • Describe biomonitoring efforts at the national level, breaking CDC NHANES research, and the structure of the National Biomonitoring Network
  • Identify the attributes of a successful state biomonitoring program

(588-809-18 – 1.5 contact hours for this session)

12:00 pm –12:30 pm

Poster Speed Dating Session

Ballroom DE

Moderator: Duncan MacCannell, PhD, Centers for Disease Control and Prevention

This session will include short presentations of select posters. The full posters may be seen in the exhibit hall. See the list of presenters on the following pages.
Poster Speeding Dating Presentations

Sunday, June 3 – 12:00pm

P-21 Twelve Years of Strengthening Environmental Laboratories – What is the Impact?
Presenter: Sarah Wright, Association of Public Health Laboratories

P-32 Development of a Targeted Resequencing Approach to Identify and Characterize Pathogens in Respiratory Specimens from Unexplained Respiratory Disease Outbreak Responses
Presenter: Maureen Diaz, Centers for Disease Control and Prevention

P-33 Laboratory Confirmation of Enterotoxigenic Escherichia coli Detected by Culture-Independent Diagnostic Tests — Minnesota, 2015–2017
Presenter: Randy Fowler, Centers for Disease Control and Prevention

P-38 Improving the Collection and Management of Human Samples Used for Measuring Environmental Chemicals and Nutrition Indicators
Presenter: Amy Mowbray, Centers for Disease Control and Prevention

P-45 Genomic Sequence Analysis of Common Legionella pneumophila Sequence Types Recovered from Healthcare Facilities
Presenter: Brian Raphael, Centers for Disease Control and Prevention

P-53 Whole-Genome Sequencing Analysis of Neisseria meningitidis from the Urethritis Clade Causing Conjunctivitis in a Newborn Delivered by Cesarean — New York, August 2017
Presenter: Cecilia Kretz, New York City Public Health Laboratory

P-54 Analysis of Microbial Diversity- A Novel Metagenomic Approach to Decipher Beach Microbiome
Presenter: Sanjib Bhattacharyya, Milwaukee Health Laboratory

P-65 Walking In Each Other’s Shoes: The Importance of Building Relationships Between Epi and Lab
Presenter: Jamie Yeadon-Fabohun, Indiana State Department of Health

P-73 Economic Impact of the 2014-2015 Multi-state Measles Outbreak on the Local and State Public Health Sector in California
Presenter: John Diaz-Decaro, Los Angeles County Public Health Laboratories

P-76 Rapid Mycobacterial Identification using Real Time PCR and MALDI-TOF Testing
Presenter: Angie Schooley, Michigan Department of Health and Human Services

P-78 Measles and Mumps and Chickenpox, Oh My! Minnesota’s Response to Three Overlapping Outbreaks
Presenter: Anna Strain, Minnesota Department of Health

P-79 Reliable Identification Methods for Carbapenem-resistant Carbapenemase-producing Acinetobacter (CP-CRA)
Presenter: Jennifer Dale, Minnesota Public Health Laboratory

P-81 Detection and Characterization of Salmonella in Environmental Samples
Presenter: Tamar Dickerson, MRIGlobal

P-90 Comparison of ETEST® and Broth Microdilution Methods for Antimicrobial Susceptibility Testing of Shigella sp. Isolates in New York City
Presenter: Andrea DeVito, New York City Public Health Laboratory
Sunday, June 3

P-92  Arbovirus Molecular Testing at New York City Public Health Laboratory during the Zika Outbreak  
Presenter: Bisram Deocharan, New York City Public Health Laboratory

P-94  Routine Utilization of CIDT, FilmArray Gastrointestinal Panel, with Simultaneous Stool Culture Leads to Increased Isolate Recovery  
Presenter: Colleen Courtney, District of Columbia Public Health Laboratory

P-101  Whole Genome Sequence Analysis of Salmonella Montevideo Isolates from Multiple Outbreaks at a Restaurant between 1997 and 2012  
Presenter: Julia Wolfe, Orange County Public Health Laboratory

P-106  Molecular Epidemiology of Rabies Virus in New Mexico: Identification of Novel Variants and their Associated Hosts  
Presenter: Adam Aragon, New Mexico Department of Health

P-111  Validation of Instrumentation and Methodologies for CLIA Certified Laboratories  
Presenter: Robert Dixon, South Carolina Public Health Laboratory

P-117  Genomic Similarity of Legionella pneumophila Isolated from Routine Monitoring of Hospital Premise Plumbing Systems  
Presenter: Lucy DesJardin, State Hygienic Laboratory at the University of Iowa

P-125  Gastrointestinal Yersiniosis in Nebraska: A Laboratory and Epidemiological Analysis Following the Introduction of the BioFire FilmArray® Gastrointestinal Panel  
Presenter: Arryn Craney, University of Nebraska Medical Center

Presenter: Kara Levinson, University of North Carolina, Chapel Hill

P-133  Whole-Genome Sequencing of Carbapenemase-producing Klebsiella pneumoniae Isolates Recovered from a CRE Colonization Investigation  
Presenter: Emily Snavely, Wadsworth Center, New York State Department of Health

P-138  Suitability of Self-collected Swabs for Influenza and Respiratory Pathogen Detection  
Presenter: Erik Reisdorf, Wisconsin State Laboratory of Hygiene

P-139  Comparison of Sequence-based Salmonella Serotyping Methods for Use in a State Public Health Laboratory  
Presenter: Nicholas Florek, Wisconsin State Laboratory of Hygiene

For more details, be sure to view these posters in the exhibit hall through 2:00 pm on Tuesday, June 4.
12:30 pm – 2:00 pm
**Lunch in the Exhibit Hall (provided)**
Exhibit Halls AB
Visit with the exhibitors and view the posters

1:00 pm – 1:30 pm
**Poster authors 71–140 standing by their posters**
Exhibit Halls AB

2:00 pm – 3:30 pm
**CONCURRENT SESSIONS**

**On the Front Lines of Antibiotic Resistance**  
Ballroom DE

**Moderator: Kimberlee Musser**, PhD, Wadsworth Center, New York State Department of Health

- **Outbreak of VIM-producing P. aeruginosa in a Long-term Acute-care Hospital**  
  Marie-Claire Rowlinson, PhD, D(ABMM), Florida Bureau of Public Health Laboratories  
  Nychie Q. Dotson, MPH, CIC, CPHQ, Florida Bureau of Epidemiology

- **Concerning Trends in Antibiotic Resistance**  
  Jean B. Patel, PhD, D(ABMM), Centers for Disease Control and Prevention

- **ARLN Testing in an Investigation of CP-CRE in a Pennsylvania Nursing Home**  
  Dongxiang Xia, MD, PhD, D(ABMM), SV(ASCP), Pennsylvania Department of Health  
  Kimberlee Musser, PhD, Wadsworth Center, New York State Department of Health

The purpose of this session is to update participants on emerging antibiotic resistance from the perspective of the Antibiotic Resistance Laboratory Network. Through the ELC grant, most public health laboratories are now involved in antibiotic resistance testing or colonization screening. This session will highlight these activities following the 2016 initiation of this program.

At the conclusion of this session, the participant will be able to:
- Describe the emerging antibiotic-resistant threats and important trends in antibiotic resistance
- Explain how the Antibiotic Resistance Laboratory Network is developing capacities to respond to new trends
- Describe challenges and progress with laboratory testing for antibiotic resistant threats
- Review the experiences of outbreaks involving antibiotic-resistant organisms from the laboratory and epidemiology perspective
- Discuss the value of the ARLN in responding to emerging antibiotic resistance

(588-812-18 – 1.5 contact hours for this session)
It Takes a Village: Genomic Epidemiology of the Zika Epidemic

Ballroom A

Moderator: Joanne Bartkus, PhD, D(ABMM), Minnesota Department of Health

- Developing the Partnerships, Exploring the Data and Sharing the Results
  Leah D. Gillis, PhD, MS, HCLD(ABB), Florida Bureau of Public Health Laboratories — Miami

- Genomic Epidemiology Reveals Multiple Introductions and Sustained Transmission of Zika Virus in Florida
  Jason Ladner, PhD, Northern Arizona University

- The Many Hats of the Public Health Lab — A Zika Story
  Jennifer Rakeman, PhD, New York City Public Health Laboratory

- Evolution of Zika Virus and Novel Approaches Towards Combating its Infection and Associated Congenital Disorders
  Genhong Cheng, PhD, University of California, Los Angeles

Speakers in this session will present the perspectives of governmental public health and academic researchers who provided data and expertise to reveal the complex genomic epidemiology of the Zika virus in Florida and NY. Presenters will provide background on the epidemiology, public health laboratory testing and complex data analysis partnerships that led to the detection of multiple introductions of Zika into the United States. Speakers will address how the collaboration was initiated and developed, the final results of the data analysis and the significance to public health.

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

- Describe the value of public health laboratories establishing and participating in collaborations involving the analysis of large, complex data sets
- Explain the type of data shared, the research and data analyses that were conducted, and insights generated about the biology, epidemiology and transmission of Zika virus
- Describe the data use agreements that need to be in place for data sharing and what are the potential barriers and benefits to be considered when setting up a collaboration

(588-810-18 – 1.5 contact hours for this session)

Laboratory Response to the Opioid Overdose Crisis

Ballroom B

Moderator: Ewa King, PhD, Rhode Island Department of Health

- CDC Response to the Opioid Overdose Epidemic in the United States: More Timely, Localized and Actionable Data
  Grant Baldwin, PhD, MPH, Centers for Disease Control and Prevention

- LRN-C Capacity to Support Local Opioid Emergencies
  Amy Watson, PhD, Centers for Disease Control and Prevention

- The Minnesota Drug Overdose and Substance Abuse Pilot Surveillance System (MNDOSA): A Response to the Opioid Crisis
  Paul Moyer, MS, Minnesota Department of Health
This session will describe the CDC NCICP surveillance strategy for opioid overdoses, including the use of laboratory data. CDC NCEH efforts to help the states build the laboratory capabilities directed towards opioid detection in clinical samples will also be described, followed by an example of the implementation of opioid testing at a state public health laboratory (MN).

At the conclusion of this session, the participant will be able to:
• Describe the scope of the opioid overdose problem in the United States
• Discuss the surveillance strategy system in place at the CDC for opioid use overdoses
• Describe how LRN-C laboratories can implement opioid testing methods and the role of public health laboratories in the detection of opioids and novel fentanyl analogs

Successes and Challenges of Implementing Molecular Techniques in Environmental Microbial Surveillance

Ballroom C

Moderator: Sanjib Bhattacharyya, PhD, City of Milwaukee Health Department
• Kaedra Jones, MPH, ICF
• Sharon Nappier, PhD, MSPH, US Environmental Protection Agency
• Yiping Cao, PhD, Source Molecular Corporation
• Joan Rose, PhD, Michigan State University

This session will examine barriers to the application of molecular detection techniques in environmental microbial surveillance, including resource and methodology limitations. Current successes and future potential for using molecular tools in surveilling microbes in the environment will be discussed, as well as how the regulatory landscape impacts their use.

At the conclusion of this session, the participant will be able to:
• Describe current successes and the future potential of using molecular tools in surveilling microbes in environmental and public health laboratories
• Discuss resource limitations that have prohibited molecular technique implementation in environmental matrices and strategic efforts to overcome these limitations
• Explain regulatory positions and discuss the use of molecular detection data in public health decision making

3:30 pm – 4:00 pm
Break in the Exhibit Hall
Exhibit Halls AB
4:00 pm – 5:30 pm

**CONCURRENT SESSIONS**

**Weird Science: Interesting and Unusual Cases in Public Health Laboratories**

**Ballroom DE**

**Moderator:** James Beebe, PhD, D(ABMM), San Luis Obispo Public Health Laboratory

- **When the Bark is Not Worse than the Bite?**  
  Anna Strain, PhD, Minnesota Department of Public Health Laboratory

- **A Royal Mystery in Wisconsin**  
  Tim Monson, MS, Wisconsin State Laboratory of Hygiene

- **Adventures in Discordance**  
  Monica Parker, PhD, Wadsworth Center, New York State Department of Health

- **Somethings Fishy on Canal St.**  
  Scott Hughes, PhD, New York City Public Health Laboratory

- **Saturday Night Fever**  
  Shaka Brown, DC Capital Congress

Often serving as the laboratories of last resort, public health laboratories see more than their fair share of unusual pathogens or odd results, diagnostic puzzles they are tasked with solving. Our speakers will take us on a journey through a series of short presentations describing some of the year’s most challenging cases and outbreaks and see if they can stump the audience.

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

- Describe three unique public health cases from the past year
- Discuss the approach that public health laboratorians take when participating in a public health investigation

(588-814-18 – 1.5 contact hours for this session)

**Adventures in ETOR**

**Ballroom A**

**Moderator:** Eduardo Gonzalez Loumiet, MBA, CPHIMS, Ruvos

- **New York City’s Journey Away from Paper Requisitions and Towards an Electronic Test Ordering System**  
  Altaf Shaikh and Anna Liddicoat, MPH, New York City Department of Health and Mental Hygiene

- **10 Years of ETOR – The Florida Experience**  
  Susanne Crowe, MHA, Florida Bureau of Public Health Laboratories

- **Implementing ETOR for Newborn Screening in Georgia**  
  Arthur Hagar, PhD, HCLD, Georgia Dept of Public Health Laboratory

- **APHL’s Efforts in Electronic Test Order and Result**  
  Michelle Meigs, Association of Public Health Laboratories
Electronic Test Order and Result (ETOR) implementation for differing uses comes with challenges and benefits. In this session, the attendees will hear from state and local laboratories, as well as APHL, regarding ETOR implementation. Florida has been utilizing ETOR for over ten years, and recently implemented ETOR for Newborn Screening (NBS). New York City has implemented an electronic test ordering and result reporting system in response to test order issues during outbreaks, such as Zika, that required time-consuming communication with submitters to resolve. Georgia will discuss the status of its NBS ETOR project. Lastly, APHL will discuss working with the Office of the National Coordinator for Health IT (ONC) and APHL's Informatics Committee on electronic test order and result, including how a centralized web portal could support epidemiologists in an outbreak as interoperability between submitters and laboratories continues to play a crucial role in public health.

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

- Describe how implementation of electronic orders and results improves efficiency and accuracy
- Explain how ETOR decreases the turnaround time for test results, accuracy with which results are conveyed and ultimately leads to better healthcare outcomes
- List cost savings as well common pitfalls when implementing a new IT project

(588-815-18 – 1.5 contact hours for this session)

**Grow the Talent You Have into the Leaders You Need: Internal Professional Development Programs in PHLs**

**Ballroom B**

**Moderator:** Leah D. Gillis, MS, PhD, HCLD(ABB), Florida Bureau of Public Health Laboratories — Miami

- Sara Woldehanna, MA, MS, Association of Public Health Laboratories
- Grace Kubin, PhD, Texas Department of State Health Services
- Michael Stevenson, PhD, Idaho Bureau of Laboratories
- Anna Strain, PhD, Minnesota Department of Health

APHL's latest workforce survey reveals that professional development programs and perceived career advancement opportunities are a key factor in employee retention and job satisfaction in PHLs, yet few PHLs have such programs in place. This highly-interactive session will inform participants of the latest workforce survey data and showcase three internal professional development programs from three different state PHLs. Participants will discuss lessons learned from these programs and walk away with the beginning steps to developing a program of their own.

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

- Discuss current challenges of retaining a competent workforce
- Describe three strategies PHLs can use internally to increase retention and engagement among staff
- Communicate the benefits of internal professional development programs to laboratory leadership and other stakeholders

(588-816-18 – 1.5 contact hours for this session)
Radiological Response and Readiness: A Federal Perspective

Ballroom C

**Moderator: Jack Bennett**, Lawrence Livermore National Laboratory

- **Bob Read**, Tennessee Department of Health
- **Robert Jones**, PhD, Centers for Disease Control and Prevention
- **Sarah Taft**, PhD, US Environmental Protection Agency
- **Jennifer Buzzell**, MS, Centers for Disease Control and Prevention
- **Phil Torretto**, Lawrence Livermore National Laboratory

The session will provide attendees with an overview of the steps being taken at the federal level and the tools available to respond to a variety of radiological emergencies.

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

- Describe the challenges associated with effectively responding to a radiological emergency
- Identify some of the federal agencies involved in responding to radiological events, e.g., natural disaster, accident or terrorism
- List and describe currently available resources that can help laboratories prepare for a radiological event

(588-817-18 – 1.5 contact hours for this session)

5:30 pm – 6:30 pm

**Networking Reception in the Exhibit Hall**

Exhibit Halls AB
Monday, June 4, 2018

7:30 am – 5:30 pm

Registration
Ballroom DE Foyer

7:30 am – 9:00 am

Coffee
Ballroom DE Foyer

8:00 am – 8:45 am

ROUNDTABLES (Conference Center)

Challenges of Maintaining Post-L-SIP Assessment Quality Improvement Activities
Room 207

Moderator: Twila Kunde, MPH, MBA, New Mexico Department of Health

• Sanjib Bhattacharyya, PhD, City of Milwaukee Health Department

• Tim Southern, PhD, South Dakota Public Health Laboratory

Previous Laboratory System Improvement Program (L-SIP) participants will share their experiences maintaining post-L-SIP assessment quality improvement activities. The roundtable session will give attendees ideas for developing strategies to prioritize and implement L-SIP recommendations and facilitate a discussion maintaining stakeholder ownership and engagement for continual system improvement.

WGS Bioinformatics Solutions for State Public Health Labs
Rooms 212/214

Moderator: Joel Sevinsky, PhD, Colorado Department of Public Health and Environment

• Kelly Oakeson, PhD, Utah Public Health Laboratory

• Duncan MacCannell, PhD, Centers for Disease Control and Prevention

• Xiong Wang, PhD, Minnesota Department of Health

The number of bioinformatics solutions for WGS analysis is as varied as the IT and purchasing restrictions placed on individual state PHLs. Numerous strategies will be discussed including on-site Linux servers, cloud computing solutions, and outsourcing. This session will feature success stories from several PHLs that have incorporated WGS bioinformatics into their routine operations and will provide guidance and assistance to those PHLs trying to implement their own WGS bioinformatics program.
How Does IGRA Testing Fit into the Public Health Laboratory?

Room 208

**Moderators:** Marie-Claire Rowlinson, PhD, D(ABMM), Florida Bureau of Public Health Laboratories and Angela Starks, PhD, Centers for Disease Control and Prevention  
- Nicole M Green, PhD, D(ABMM), Los Angeles County Public Health Laboratories  
- Daphne Ware, PhD, Mississippi Public Health Laboratory

Attendees will learn about current recommendations regarding IGRA utilization and implementation of testing, including the QFT-Plus in different PHLs, including discussions on the complexities of IGRA testing and meeting the pre-analytical and analytical requirements. Attendees will also learn how PHLs can partner with their TB control program and other entities within their jurisdictions (corrections, refugee health and community based organizations) to target at-risk populations and perform investigations of public health importance.

Shaping Workforce Development Initiatives: Learning from an Environmental Scan of Public Health and Clinical Laboratory Communities

Room 211

**Moderator:** Reynolds Salerno, PhD, Centers for Disease Control and Prevention  
- Renee Ned-Sykes, MMSc, PhD, Centers for Disease Control and Prevention  
- Danielle Daniely, PhD, RBP, Centers for Disease Control and Prevention  
- Anja Minnick, MSc, Centers for Disease Control and Prevention

Participants will learn about preliminary findings from an environmental scan regarding current gaps, critical needs and existing opportunities in laboratory training and workforce development. Participants will have the opportunity to brainstorm and help shape current and new initiatives to meet laboratory workforce needs.

9:00 am – 10:30 am  
**Awards Ceremony & Breakfast**  
Exhibit Halls AB  
*Sponsored by Hologic, Inc.*

9:00 am – 2:00 pm  
**Posters available for viewing in the exhibit hall**  
Exhibit Halls AB
10:00 am – 2:00 pm
**Exhibit Hall open**
Exhibit Halls AB

10:30 am - 1:00 pm
**Exhibit Hall Scavenger Hunt**
Exhibit Halls AB

10:30 am – 11:00 am
**Break in the Exhibit Hall**
Exhibit Halls AB

11:00 am – 12:30 pm
**PLENARY SESSION**

**Labs, Camera, Action! Public Health Storytelling for Podcasts, Film and News Media**

Ballroom DE

**Moderator:** Michelle Forman, Association of Public Health Laboratories

- **Sanden Totten,** American Public Media’s *Brains On!* podcast
- **Michelle Faust,** Southern California Public Radio
- **Rick Loverd,** The Science & Entertainment Exchange, National Academy of Sciences

Storytelling continues to be one of the most effective ways to convey the value of public health laboratory work to public audiences. This plenary will expose meeting attendees to these increasingly popular storytelling mediums: podcasts, digital news media and TV/film. Using a talk show format, this plenary will allow the discussion to focus on health/science storytelling and include public health lab perspectives, while also ensuring one cohesive conversation.

At the conclusion of this session, the participant will be able to:
- Explain the different ways stories are told on podcasts, in the news media and on tv and film.
- Identify specific aspects of their work that would be compelling to podcast, media and tv/film audiences
- List where to pitch those stories — their PIO, APHL communications staff, etc. — so they may be told via the proper medium and to the ideal audience

(588-818-18 – 1.5 contact hours for this session)
Monday, June 4

12:30 pm – 2:00 pm
**Lunch in the Exhibit Hall (provided)**
Exhibit Halls AB

Visit with the exhibitors and view posters

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1:30 pm
**Raffle Drawing in the Exhibit Hall**
Exhibit Halls AB

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2:00 pm – 3:00 pm
**PLENARY SESSION: Dr. Katherine Kelley Distinguished Lecture**

*Activism and Stalemate: How the Threat of Antibiotic Resistance Turned the US Public Against Farm Antibiotic Use*

Ballroom DE

**Moderator: Ewa King**, PhD, Rhode Island Department of Health

- **Maryn McKenna**, journalist and author of *Big Chicken*, *Super Bug* and *Beating Back the Devil*

Maryn McKenna, acclaimed journalist and author, will discuss the growing threat of antibiotic resistance and her latest book, *Big Chicken*. She will specifically address agricultural antibiotic use and how public pressure finally forced the government to make important changes.

At the conclusion of this session, the participant will be able to:
- Discuss how public pressure forced the government to make important changes regarding agricultural antibiotics

(588-819-18 – 1.0 contact hours for this session)

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3:00 pm – 3:30 pm
**Break**
Ballroom DE Foyer

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3:30 pm – 4:30 pm
**CONCURRENT SESSIONS**

**Laboratory Response to Hepatitis Outbreak: Detection and Sequencing Aids Remediation Effort**

Ballroom DE

**Moderator: Brett Austin**, MA, PHM, San Diego County Health and Human Services

- **Marty Soehnlen**, PhD, MPH, Michigan Department of Health and Human Services
Monday, June 4

- Sumathi Ramachandran, MS, MPH, PhD, Centers for Disease Control and Prevention
- Jill Hacker, PhD, California Department of Public Health
- Syreeta Steele, PHM, PhD, San Diego County Health and Human Services
- Tracy Basler, San Diego County Health and Human Services

This session will describe the efforts of local, state and CDC laboratories to provide molecular sequencing information as a tool for epidemiologists to use to characterize a large hepatitis A outbreak. The utility of the data and the approaches taken by several laboratories to generate that data will be described.

At the conclusion of this session, the participant will be able to:
- Describe the use of genetic cluster information in characterizing an outbreak
- List the methods used to generate sequence data

(588-821-18 – 1.0 contact hours for this session)

The ABC’s of ISO 17025: (A)ccreditation, (B)est Practices, (C)osts to Implement and Sustain

Ballroom A

Moderator: Denise Toney, PhD, HCLD(ABB), Virginia Division of Consolidated Laboratory Services

- FDA Goals for FSMA and ISO Accreditation for Food Testing Labs
  Terri McConnell, MS, US Food and Drug Administration

- Impact of ISO Accreditation on State Food Testing Labs and the Role of Data Acceptance Criteria
  Yvonne Salfinger, MS, Association of Public Health Laboratories

- Strategies for Obtaining and Sustaining ISO 17025 Accreditation: The Process, Preparing Your Lab, Implementation Best Practices, Quality Management Tracking, Funding and So Much More
  Cynthia Mangione, New York State Department of Agriculture and Markets

- ISO Lab Mentorship Program — Benefits of Mentor/Mentee Collaborations
  Brenda Jackson, MS, North Carolina Department of Agriculture and Consumer Services
  Kitty Prapayotin-Riveros, Connecticut Agriculture Experiment Station

- Costs Associated with Accreditation: Laboratory Survey
  Robyn Randolph, MS, Association of Public Health Laboratories

The Food Safety and Modernization Act aims to ensure the safety of the US food supply by shifting the focus from response to prevention. Laboratory accreditation supports food safety by ensuring the validity, traceability and accountability of food testing data so that regulatory agencies can respond quickly. Many federal programs encourage laboratories to be accredited to ISO 17025, a set of quality standards that are internationally recognized and respected. Despite the long-term benefits gained from accreditation, many laboratories continue to face challenges with implementing and sustaining accreditation. This session will not only discuss the time and financial investments associated with laboratory accreditation but also highlight available resources, best practices, lessons learned from laboratories, quality management tools, and costs during the different stages along the accreditation process.
At the conclusion of this session, the participant will be able to:
• Discuss the regulatory requirements and benefits of laboratory accreditation
• Explain the role of data acceptance with respect to ISO accreditation
• Obtain guidance from mentor and mentee laboratories and ways to obtain assistance with ISO 17025 accreditation
• Describe strategies and best practices for obtaining and sustaining ISO 17025 accreditation
(588-820-18 – 1.0 contact hour for this session)

The Next Generation of QA/QC with Next Generation Sequencing
Ballroom B
Moderator: Collette Fitzgerald, PhD, Centers for Diseases Control and Prevention
• Lauren Turner, PhD, Virginia Division of Consolidated Laboratory Services
• Kimberlee Musser, PhD, Wadsworth Center, New York State Department of Health
• Atis Muehlenbachs, MD, Center for Disease Control and Prevention

As with any new laboratory test, the issue of developing new quality assurance and control can pose challenges. Next Generation Sequencing (NGS) is a very complex method, generating large amounts of data, which creates more complications in quality assurance and control approaches. This session will provide an opportunity for APHL members and CDC partners to share resources they have generated to aid in QA/QC and receive input from PHLs on resources still needed.

At the conclusion of this session, the participant will be able to:
• Explain the process of CLIA validation for an NGS test
• Identify the process of establishing QA/QC protocols for NGS protocols
• Describe the current priorities and resources on QA/QC and CLIA validation being developed at CDC to assist with the implementation and use of NGS
(588-822-18 – 1.0 contact hours for this session)

Public Health Environmental Laboratories’ Challenges and Opportunities for Water Quality
Ballroom C
Moderator: Susie Dai, PhD, State Hygienic Laboratory at the University of Iowa
• James Schauer, PhD, PE, MBA, Wisconsin State Laboratory of Hygiene
• John Griffith, PhD, Southern California Coastal Water Research Project
• Dustin May, State Hygienic Laboratory at the University of Iowa
• Junesoo Park, PhD, California Environmental Protection Agency

Government laboratories play a fundamental role in protecting water quality and minimizing harmful human exposure. This science-driven session will focus on analytical environmental testing as the first line of public health protection related to hazards in US water, including emerging chemical contaminants, microbiological pathogens from recreational waters, radiological contamination and per- and polyfluoroalkyl substances (PFAS).
At the conclusion of this session, the participant will be able to:

• Describe how science and public health laboratories help mitigate public health risks of chemical, biological and radiological water contaminants
• Explain how technologies have progressed in water analysis and how policy could enhance monitoring activities

(588-823-18 – 1.0 contact hours for this session)

4:30 pm – 5:00 pm  
**Break**  
Ballroom DE Foyer

5:00 pm – 6:00 pm  
**Member Assembly**  
Ballroom DE

6:00 pm – 8:00 pm  
**Optional Tour of the Pasadena Environmental Chemistry Laboratory**
Tuesday, June 5, 2018

7:30 am – 12:30 pm
Registration
Ballroom DE Foyer

7:30 am – 9:00 am
Coffee
Ballroom DE Foyer

8:00 am – 8:45 am
ROUNDTABLES (Conference Center)
Podcasting: Telling the Public Health Laboratory’s Stories
Room 207
Moderators: Amanda Hughes, State Hygienic Laboratory at the University of Iowa and Kate Wainwright, PhD, D(ABMM), HCLD (ABB), Indiana State Department of Health

• Emerging Leader Program Cohort 10

As their group project, Emerging Leader Program (ELP) Cohort 10 will produce episodes for APHL’s podcast to promote the work of public health laboratories (PHL). The group will share their experiences and facilitate a discussion with attendees to encourage other PHL professionals to use podcasts to tell their stories as a way of engaging with public audiences.

Is Your Food Making You Sick? Detecting and Regulating Allergens in Food
Room 208
Moderator: Cynthia Mangione, New York State Department of Agriculture & Markets

• Robert Sheridan, New York State Department of Agriculture & Markets
• Joseph Baumert, PhD, University of Nebraska-Lincoln

This session will provide public health laboratory staff with information about the most commonly found food allergens. It will describe potential tools and strategies to effectively incorporate testing for these allergens into the laboratory’s surveillance activities.
Partnering Together to Solve Challenges Around Next Generation Sequencing (NGS)

Room 211

- **Lucy DesJardin**, PhD, State Hygienic Laboratory at the University of Iowa
- **Sandra Smole**, PhD, William A. Hinton State Laboratory Institute (MA)

The use of next generation sequencing (NGS) technologies in public health laboratories has highlighted gaps in the current workforce around bioinformatics capabilities and capacity which several public health laboratories have attempted to address through unique partnerships with academia, industry and other PHLs. This session will describe a few examples of how these partnerships have impacted implementation of advanced molecular detection by laboratories, as well as the challenges and opportunities associated with forming these partnerships.

Risky Business: The Trials and Tribulations of Educating Clinical Partners on Biosafety and Biorisk Management

Room 212/214

**Moderator:** Randal Fowler, PhD, D(ABMM), Centers for Diseases Control and Prevention

- **Drew Fayram**, MS, State Hygienic Laboratory at the University of Iowa
- **Erin Bowles**, MT(ASCP), Wisconsin State Laboratory of Hygiene
- **Robert Nickla**, M(ASCP), Oregon State Public Health Laboratory

Public health and clinical laboratories partnerships are essential for maintaining and advancing biosafety practices. Learning about different experiences from APHL members tasked with biosafety outreach will promote discussion on the challenges and strategies to promote successful biosafety training programs.

9:00 am – 10:30 am

**CONCURRENT SESSIONS**

**Biosafety: Today and Tomorrow**

Ballroom DE

**Moderator:** Marian Downing, RBP, CBSP, SM(NRCM), ABSA International

- **Changing Biosafety Practices**  
  Michael A. Pentella, PhD, D(ABMM), State Hygienic Laboratory at the University of Iowa

- **Advancing Biosafety Across the US Clinical Laboratory Community**  
  Reynolds M Salerno, PhD, Centers for Disease Control and Prevention

- **Working with Clinical Laboratories to Improve Biosafety**  
  Erin Bowles, MT(ASCP), Wisconsin State Laboratory of Hygiene

CDC and APHL have focused on improving biosafety practices in clinical laboratories since 2015. To further this mission, APHL created a “Partners Forum” to collaborate with representatives of the clinical laboratory community. This session will serve to review both successes and failures and predict future directions for the Forum, such as regulatory requirements.
At the conclusion of this session, the participant will be able to:
• Describe the impact on biosafety practices that CDC and APHL efforts have achieved
• Explain how CDC, APHL and other organizations are working to advance clinical laboratory biosafety nationwide, and what gaps remain
• Describe approaches biosafety officers can use to work with clinical laboratories to improve biosafety

The Evolving Analysis of Vaccine Preventable Outbreaks and Their Causative Agents  ID MCB
Ballroom A

Moderator: Kirsten St. George, PhD, Wadsworth Center, New York State Department of Health

• The Bacterial Meningitis Genome Analysis Platform for Surveillance
  Adam Retchless, PhD, Centers for Disease Control and Prevention

• Enhanced Analysis of Mumps Outbreaks with Next Generation/Whole Genome Sequence Analysis
  Kirsten St. George, PhD, Wadsworth Center, New York State Department of Health

• Whole Genome MLST for Strain Differentiation and Cluster Analysis of Bordetella pertussis
  Michael Weigand, PhD, Centers for Disease Control and Prevention

• Molecular Clade Analysis and the Discrimination of Vaccine Strain from Wild Type Virus in CNS and Non-CNS VZV Disease
  Sara Griesemer, MS, Wadsworth Center, New York State Department of Health

While vaccination efforts have provided enormous achievements in infectious disease control during the 20th century, vaccine preventable diseases (VPDs) continue to pose considerable public health threats with ongoing responsibilities for public health laboratories. Increasingly sophisticated methods for the detection and analysis of VPD agents have been developed in recent years, with positive consequences for tracking outbreaks and clusters, as well as understanding disease processes and distinguishing the most important strains. New assays, platforms, software and automation continue to provide increasingly easy access to more detailed data at a cheaper rate, on more user-friendly devices, making the methods potentially accessible to a wider range of users.

At the conclusion of this session, the participant will be able to:
• Define some of the sophisticated molecular methods and platforms that have been recently developed
• Identify additional analytical tools such as those used for clade analysis and specialized real-time assays to distinguish vaccine and wild type strains, as well as some of the new software and pipelines for NGS data processing and management
• Describe how these techniques have been applied to recent VPD outbreaks to analyze disease spread, where previous techniques were insufficiently powerful to facilitate such an analysis

(588-824-18 – 1.5 contact hours for this session)
The Laboratory Twinning Experience: Creating Connections Between US and International Public Health Laboratories

Ballroom B

Moderators: Lucy Maryogo-Robinson, MPH and Sherrie Staley, MPH, Association of Public Health Laboratories

- Overview of the Public Health Institute and the Lab’s Role
  Lucy Maryogo-Robinson, MPH, Association of Public Health Laboratories
  Sherrie Staley, MPH, Association of Public Health Laboratories

- Experience on the Ground, Highlighting Uganda’s Achievements from Twinning
  Steven Aisu, Uganda Ministry of Health

- What Does It Take for Twinning to Take Place: The Uganda Experience
  Dave Mills, PhD, New Mexico Scientific Laboratory Division (retired)

- The Utah-Barbados Experience
  Patrick Luedtke, MD, MPH, Lane County (OR) Department of Health & Human Services

Lab twinning is the building of a long-term relationship between a US public health laboratory and a partner in a low-middle income country. The goals of creating the partnership include providing mentorship, generating sustainability and using global networking to improve public health systems. In this session participants will learn how the pairing provides sustained opportunities for professional development, technical assistance and continuing education in a mutually beneficial partnership.

At the conclusion of this session, the participant will be able to:
- Describe what lab twinning is and how they and their PHL can be involved
- List how APHL supports the development of the relationship that forms the basis of the partnership
- Describe how laboratories benefit from the partnership and exchange of information

(588-825-18 – 1.5 contact hours for this session)

Risk Communication When Cyanotoxin Response Changes from Emergent to Monitoring

Ballroom C

Moderator: Henry Leibovitz, PhD, Rhode Island Department of Health

- Nikola Dzamov, PhD, Ohio Environmental Protection Agency
- Cindy Sonich-Mullin, MS, US Environmental Protection Agency
- Kacee Deener, MPH, US Environmental Protection Agency

Emergency response communication requires the use and interpretation of laboratory methods and data to accurately convey the potential risk. This session will explore the risk communication challenges faced by the Ohio EPA Laboratory and the EPA Office of Research and Development’s (ORD) Cincinnati-based research laboratory when harmful algal blooms resulted in the contamination of the City of Toledo drinking water supply and the Ohio River with cyanotoxins, threatening drinking water supplies that use the Ohio River as their drinking water source.
At the conclusion of this session, the participant will be able to:

- Describe how EPA Ohio and EPA ORD collaborated during the Toledo crisis
- Explain how laboratories collaborate with programs to communicate to emergency responders and the public

(588-827-18 – 1.5 contact hours for this session)

10:30 am – 11:00 am

**Break**

Ballroom DE Foyer

11:00 am – 12:30 pm

**PLENARY SESSION**

**Responding to Natural Disasters: Hurricane Season**

Ballroom DE

**Moderator:** Tyler Wolford, MS, Association of Public Health Laboratories

- **Andrew Cannons**, PhD, Florida Bureau of Public Health Laboratories—Tampa
- **Eduardo O’Neill La Luz**, LCDR, PhD, MS, MPH, Centers for Disease Control and Prevention
- **Christine Bean**, PhD, New Hampshire Public Health Laboratory
- **Larry Seigler**, PhD, Houston Public Health Laboratory

Presenters in this interactive session will discuss the course of action taken to respond to a natural disaster, including first-person experiences during Hurricanes Irma, Harvey and Maria in 2017. Viewpoints will be provided from the federal, state and local government perspective.

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

- Discuss how to engage partners and utilize information sharing to manage responses
- Describe steps to restore essential laboratory testing services when they are affected by natural disasters
- List the lessons learned from a natural disaster in order to be better prepared to respond to future incidents
- Discuss challenges from natural disasters and its impacts on laboratory system testing capabilities

(588-828-18 – 1.5 contact hours for this session)

12:30 pm

**Meeting adjourns**

1:00 pm – 5:00 pm

**Optional Tour of the Los Angeles County Public Health Laboratory**
THANKS TO OUR GENEROUS SPONSORS!

Awards Breakfast

Welcome Reception

Meeting Mobile App, WiFi & Charging Stations

Tote Bags

Notebooks

General Conference Support

Water Bottles
Exhibit Hall Schedule

Saturday, June 2
3:30 pm – 7:00 pm Hall Open
3:30 pm – 4:00 pm Afternoon Break
5:30 pm – 7:00 pm Welcome Reception
6:00 pm – 6:30 pm Poster authors #1-70 available for questions

Sunday, June 3
10:00 am – 6:30 pm Hall Open
10:00 am – 10:30 am Morning Break
12:30 pm – 2:00 pm Lunch (provided in the hall)
1:00 pm – 1:30 pm Poster authors #71-141 available for questions
3:30 pm – 4:00 pm Afternoon Break
5:30 pm – 6:30 pm Networking Reception

Monday, June 4
10:00 am – 2:00 pm Hall Open
10:30 am – 11:00 am Morning Break
10:30 am – 1:00 pm Exhibit Hall Scavenger Hunt
12:30 pm – 2:00 pm Lunch (provided in the hall)
1:30 pm – 2:00 pm Raffle Drawing

Exhibit Hall Scavenger Hunt
Visit the exhibitors in their last few hours on the floor for your chance to win an additional prize during the Exhibit Hall Raffle! Details will be available on the back of the Awards Ceremony program. Turn in your completed form to the registration desk no later than 1:00 pm on Monday, June 4. The winner will be announced during the Exhibit Hall Raffle. You must be present to win.

Exhibit Hall Raffle
Visit with the vendors and win prizes! Take the exhibit raffle card from your totebag and visit each exhibit booth. Ask one of the booth personnel to sign their initials in the box corresponding to their booth number. When all of the boxes are filled, turn in the card at the registration desk. Cards must be turned in at the registration desk no later than 1:00 pm on Monday, June 4. Be sure to include your name on the card. Winners of the prizes will be announced starting at 1:30 pm on Monday in the exhibit hall. You must be present to win.

Prizes include the following:
- Two coach airline tickets on Delta to anywhere in the continental US
- ABSA webinar (compliments of ABSA International)
- One complimentary registration to the 2019 APHL Annual Meeting
- Gift basket of Humboldt County (CA) produced items (compliments of BtB Software)
- Pair of Powerbeats3 Wireless Earphones (compliments of Streck)
- One coach airline ticket on Delta to anywhere in the continental US
- $100 Amazon gift card (compliments of MRIGlobal)
- One coach airline ticket on American to anywhere in the continental US
- Samsung Galaxy tablet (compliments of Applied Maths)
- Mystery box of Pasadena/California memorabilia
- $200 Amazon gift card (compliments of InBios International)
- JBC Wireless over ear headphones (compliments of Puritan Medical Products)
- SCIEX logo backpack with surprises (compliments of SCIEX)
- $100 Visa gift card (compliments of SU Group)
- Amazon Echo smart speaker with Alexa (compliments of LexaGene)
- Agilent logo messenger bag (Agilent Technologies)

APHL Staff and exhibitors are not eligible. Legal notice: Winners are responsible for any taxes that may be due on their prizes. Please consult your tax advisor for details.
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* The Aptima HBV Quant assay is not FDA cleared to run on the Panther Fusion system.
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The full poster abstracts may be found on the conference website — www.aphl.org/AM — or on the mobile app. The posters may be viewed in the exhibit hall during exhibit hall hours on Saturday, Sunday and Monday, June 2–4.

*Posters that have been selected to be part of the Poster Speed Dating Session on Sunday, June 3.

P-01

**ABSA International Outreach -- What Can We Do For You?**

*M. Downing, ABSA International, Mundelein, IL*

**Presenter:** Marian Downing, ABSA International, Mundelein, IL, Phone: 866.425.1385, Email: mmdowning1@gmail.com

P-02

**Electronic Test Order and Result**

*K. Higginbotham1, M. Meigs2, D. Shirazi2, S. Crowe3, G. Click4; 1Alabama Department of Public Health, Montgomery, AL, 2Association of Public Health Laboratories, Silver Spring, MD, 3Florida Department Of Public Health, Tallahassee, FL, 4J Michael Consulting, Atlanta, GA*

**Presenter:** Keith Higginbotham, Alabama Department of Public Health, Bureau of Information Technology, Montgomery, AL, Phone: 334.206.7040, Email: keith.higginbotham@adph.state.al.us

P-03

**Development of a Human Pathogen Specific Next Generation Sequencing Assay**

*J. Chen1,2, S. DeRonde2, L. Jones2; 1Alaska State Public Health Virology Laboratory, Fairbanks, AK; 2University of Alaska Fairbanks, Fairbanks, AK*

**Presenter:** Jack Chen, PhD, Alaska State Public Health Laboratories, Anchorage, AK, Phone: 907.474.6966, Email: jiguo.chen@alaska.gov
P-04
Effects of the BioRad BioPlex 2200 Human Immunodeficiency Virus Ag-Ab Assay Results on Current HIV Testing Algorithms

J. Parker, M.L. Walmsley¹, F. Carrasco²; ¹Alaska State Virology Laboratory, Fairbanks, AK, ²University of Alaska, Fairbanks, AK

Presenter: Jayme Parker, MSPH, MB(ASCP), Alaska State Virology Laboratory, Fairbanks, AK, Phone: 907.371.1005, Email: jayme.parker@alaska.gov

P-05
Resources for Sentinel Clinical Lab Partnerships

S. Abrams, Association of Public Health Laboratories, Silver Spring, MD

Presenter: Samuel Abrams, Association of Public Health Laboratories, Silver Spring, MD, Phone: 240.485.2731, Email: samuel.abrams@aphl.org

P-06
Funding Laboratory Preparedness and Response

S. Abrams, Association of Public Health Laboratories, Silver Spring, MD

Presenter: Samuel Abrams, Association of Public Health Laboratories, Silver Spring, MD, Phone: 240.485.2731, Email: samuel.abrams@aphl.org

P-07 — Withdrawn

P-08
Evaluating Progress Achieved through a Two-Year Quality Assurance Laboratory Mentor Program

S. Chester¹, P. Kennedy², M. Warren¹, E. Reisdorf², N. Tavakoli³, R. Alexander, J. Parker⁵, S. Bino, A. Moen²; ¹Association of Public Health Laboratories, Silver Spring, MD, ²Centers for Disease Control and Prevention, Atlanta, GA, ³Wisconsin State Laboratory of Hygiene, Madison, WI, ⁴Wadsworth Center, New York State Department of Health, Albany, NY, ⁵Alaska State Virology Laboratory, Fairbanks, AK

Presenter: Stephanie Chester, Association of Public Health Laboratories, Silver Spring, MD, Phone: 240.485.2740, Email: stephanie.chester@aphl.org
P-09
The 2017 APHL Membership Survey: Results Are In!
L. Granen, D. Gaskins and K. Albrecht, Association of Public Health Laboratories, Silver Spring, MD

Presenter: Linette Granen, MT(ASCP)DLM, Association of Public Health Laboratories, Silver Spring, MD, Phone: 240.485.2723, Email: linette.granen@aphl.org

P-10
APHL Biosafety Officer Leadership Workshop
M. Marsico, Association of Public Health Laboratories, Silver Spring, MD

Presenter: Michael Marsico, Association of Public Health Laboratories, Silver Spring, MD, Phone: 240.485.2710, Email: michael.marsico@aphl.org

P-11
Biosafety Peer Network: Connecting the Dots in Biosafety
M. Marsico, C. Mangal and S. Page, Association of Public Health Laboratories, Silver Spring, MD

Presenter: Drew Fayam, MS, State Hygienic Laboratory at the University of Iowa, Coralville, IA, Phone: 319.335.4864, Email: drew-fayram@uiowa.edu

P-12
Analysis from the APHL 2016 and 2017 Biosafety and Biosecurity Surveys
M. Marsico¹, C. Mangali¹, J. Rosalez¹, S. Woldehanna¹, D. Fayram²; ¹Association of Public Health Laboratories, Silver Spring, MD, ²State Hygienic Laboratory at the University of Iowa, Coralville, IA

Presenter: Michael Marsico, Association of Public Health Laboratories, Silver Spring, MD, Phone: 240.485.2710, Email: michael.marsico@aphl.org

P-13
Emerging Leaders Program (ELP) Theory of Change (2017-2018)
K. Shah., P. Ray, S. Woldehanna, K. Albrecht, A. Wright and L. Siegel, Association of Public Health Laboratories, Silver Spring, MD

Presenter: Kajari Shah, Association of Public Health Laboratories, Silver Spring, MD, Phone: 240.485.2725, Email: kajari.shah@aphl.org
P-14  
Increased Use of ‘Council to Improve Foodborne Outbreak Response’ Products through Branding and Messaging  
S. Shea¹, L. Granen¹, R. Atkinson-Dunn²; ¹Association of Public Health Laboratories, Silver Spring, MD, ²Utah State Public Health Laboratory, Taylorsville, UT  
Presenter: Shari Shea, MHS, MT (ASCP), Association of Public Health Laboratories, Silver Spring, MD, Phone: 240.485.2777, Email: sharon.shea@aphl.org and Robyn Atkinson-Dunn, PhD, HCLD/PHLD, Utah Public Health Laboratory, Taylorsville, UT, Phone: 801.965.2424, Email: rmatkinson@utah.gov

P-15  
Evolution of APHL’s Informatics Technical Assistance Program  
V. Holley, L. Carlton, R. Hamilton, D. Sanderson and R. Merrick, Association of Public Health Laboratories, Silver Spring, MD  
Presenter: Vanessa Holley, MPH, Association of Public Health Laboratories, Silver Spring, MD, Phone: 240.485.2755, Email: vanessa.holley@aphl.org

P-16  
Using APHL Tools to Inform Informatics Strategy  
V. Holley¹, R. Shepherd¹, M. Kourbage², M.K. Yost-Daljev²; ¹Association of Public Health Laboratories, Silver Spring, MD, ²J Michael Consulting, Atlanta, GA  
Presenter: Vanessa Holley, MPH, Association of Public Health Laboratories, Silver Spring, MD, Phone: 240.485.2755, Email: vanessa.holley@aphl.org

P-17  
Improving Technologies for Biological Threat Detection  
T. Wolford and S. Abrams, Association of Public Health Laboratories, Silver Spring, MD  
Presenter: Tyler Wolford, BS, MS, Association of Public Health Laboratories, Silver Spring, MD, Phone: 240.485.2775, Email: tyler.wolford@aphl.org
P-18
J. Rosalez, B. Su and A. Wright, Association of Public Health Laboratories, Silver Spring, MD

Presenter: Jacob Rosalez, Association of Public Health Laboratories, Silver Spring, MD, Phone: 240.485.3830, Email: jacob.rosalez@aphl.org

P-19
What We Know About State Public Health Laboratories Funding and Spending
S. Woldehanna and J. Rosalez, Association of Public Health Laboratories, Silver Spring, MD

Presenter: Sara Woldehanna, MA, MS, Association of Public Health Laboratories, Silver Spring, MD, Phone: 240.485.2797, Email: sara.woldehanna@aphl.org

P-20
The Contributions of Public Health Laboratories: How Systematic Reviews of Literature Focusing on Return on Investment (ROI) Can Help Justify the Value of your Laboratory Programs
S. Woldehanna1, L. Kurimski, D. S hostrom2; 1Association of Public Health Laboratories, Silver Spring, MD, 2State Hygienic Laboratory at the University of Iowa, Iowa City, IA

Presenter: Lorelei Kurimski, MS, Association of Public Health Laboratories, Silver Spring, MD, Phone: 240.485.2703, Email: lorelei.kurimski@aphl.org

P-21*
Twelve Years of Strengthening Environmental Laboratories — What is the Impact?
S. Wright1, L. Mapp2; 1Association of Public Health Laboratories, Silver Spring, MD, 2US Environmental Protection Agency, Washington, DC

Presenter: Sarah Wright, MS, Association of Public Health Laboratories, Silver Spring, MD, Phone: 240.485.2730, Email sarah.wright@aphl.org
P-22
Using Whole Genome Sequencing Data for Salmonella Serotype Prediction
A. Stewart, Texas Department of State Health Services, Austin, TX
Presenter: Alesha Stewart, PhD, APHL/CDC ARLN Fellow, Texas Department of State Health Services, Austin, TX, Phone: 512.776.7591, Email: alesha.stewart@dshs.texas.gov

P-23
Whole Genome MLST-based Typing and Strain Nomenclature for Clostridium difficile Isolates
S. Kiekens¹, K. De Bryune¹, K. Kingsley²; ¹Applied Maths NV, Sint-Martens-Latem, Belgium, ²Applied Maths, Inc., Austin, TX
Presenter: Kyle Kingsley, Applied Maths, Inc., Austin, TX, Phone: 512.482.9700, Email: kyle.kingsley@biomerieux.com

P-24
Gas Chromatography/Tandem Mass Spectrometry Analysis of Volatile Organic Compounds
K. Castor, T. Kim and M. Koltunov, California Department of Toxic Substances Control, Pasadena, CA
Presenter: Katherine Castor, PhD, California Department of Toxic Substances Control, Pasadena, CA, Phone: 626.304.2692, Email: katherine.castor@dtsc.ca.gov

P-25
Gas Chromatography/Tandem Mass Spectrometry Analysis of Pesticides
K. Castor, J. Men and M. Koltunov, California Department of Toxic Substances Control, Pasadena, CA
Presenter: Katherine Castor, PhD, California Department of Toxic Substances Control, Pasadena, CA, Phone: 626.304.2692, Email: katherine.castor@dtsc.ca.gov
P-26
Gas Chromatography/Tandem Mass Spectrometry Analysis of Polychlorinated Biphenyl Aroclors
K. Castor, E. Lui and M. Koltunov, California Department of Toxic Substances Control, Pasadena, CA
Presenter: Katherine Castor, PhD, California Department of Toxic Substances Control, Pasadena, CA, Phone: 626.304.2692, Email: katherine.castor@dtsc.ca.gov

P-27
Evaluating Associations between PFAS Detected in Drinking Water and Human Serum in Northern California
S. Crispo Smith, M. Petreas and J.S. Park, California Department of Toxic Substances Control, Pasadena, CA
Presenter: Juan Villaromero, California Department of Toxic Substances Control, Pasadena, CA, Email: juan.villaromero@dtsc.ca.gov

P-28
Comparison of Automated Extraction Methods Using the CDC Human Influenza Virus Real-time RT-PCR Detection and Characterization Panels
L.S. Berman1, J.R. Murray2, J. Liu3, C.M. Warnes4, K. Wu4, S. Burke5, S. Lindstrom6; 1Centers for Disease Control and Prevention, Atlanta, GA, 2CDC/Battelle, Atlanta, GA, 3CDC/ARED, Atlanta, GA
Presenter: LaSondra Berman, PhD, Centers for Disease Control and Prevention, Atlanta, GA, Phone: 404.639.1686, Email: zhj5@cdc.gov

P-29
Epidemiology and Laboratory Capacity for Infectious Diseases Cooperative Agreement (ELC)’s Enhanced Biosafety Project: Progress toward Biosafety Milestones and Outcomes
K. Bellis, C. Chung, A. Shultz, A. O’Connor and A. Pullman, Centers for Disease Control and Prevention, Atlanta, GA
Presenter: Christina Chung, Centers for Disease Control and Prevention, Atlanta, GA, Email: vym4@cdc.gov
P-30
Incorporation of Non-Influenza Respiratory Virus Detections from the Public Health Laboratory Interoperability Project into the National Respiratory and Enteric Virus Surveillance System
R. Dahl, A. Haynes, M. Prill and S. Gerber, Centers for Disease Control and Prevention, Atlanta, GA
Presenter: Rebecca Dahl, Centers for Disease Control and Prevention, Atlanta, GA, Email: itm6@cdc.gov

P-31
Flipping it Inside Out! Making Biosafety Training Available to Clinical and Public Health Laboratories
D. Daniely, R. Ned-Sykes and Y. Wilkins, Centers for Disease Control and Prevention, Atlanta, GA
Presenter: Danielle Daniely, Centers for Disease Control and Prevention, Atlanta, GA, Phone: 404.498.0104, Email: ljv9@cdc.gov

P-32*
Development of a Targeted Resequencing Approach to Identify and Characterize Pathogens in Respiratory Specimens from Unexplained Respiratory Disease Outbreak Responses
M. Diaz1, A. Benitez1, B.J. Wolff1, S.S. Morison1, T. Fink2, G. Gallagher2, G. Liu3, D. Boxrud2, S. Smole, J. Winchell1; 1Centers for Disease Control and Prevention, Atlanta, GA, 2Massachusetts Department of Public Health, Boston, MA, 3Minnesota Department of Health, St. Paul, MN
Presenter: Maureen Diaz, MPH, PhD, Centers for Disease Control and Prevention, Atlanta, GA, Phone: 773.329.5803, Email: iqs5@cdc.gov

P-33*
Laboratory Confirmation of Enterotoxigenic Escherichia coli Detected by Culture-Independent Diagnostic Tests — Minnesota, 2015–2017
R. Fowler1, D. Boxrud2, E. Cebelinski2, S. Vetter2; 1Centers for Disease Control and Prevention, Atlanta, GA, 2Minnesota Public Health Laboratory, St. Paul, MN
Presenter: Randal Fowler, PhD, Centers for Disease Control and Prevention, Atlanta, GA, Phone: 303.345.1159, Email: randy.fowler@state.mn.us
P-34
Collaborative Recovery Efforts to Restore Public Health Laboratory Testing Following Landfall of a Category 4 Hurricane in the Tropics — Puerto Rico, 2017

M.C. Hardy, Centers for Disease Control and Prevention, Atlanta, GA

Presenter: Margaret Hardy, MSc, PhD, Centers for Disease Control and Prevention, Atlanta, GA, Phone: 404.639.3217, Email: nrl4@cdc.gov

P-35
Respiratory Virus Seasonality in the US, 2007-2017: An Overview from the National Respiratory and Enteric Virus Surveillance System

A. Haynes, M. Prill, R. Dahl, J. Watson and S. Gerber, Centers for Disease Control and Prevention, Atlanta, GA

Presenter: Amber Haynes, Centers for Disease Control and Prevention, Atlanta, GA, Email: vtj2@cdc.gov

P-36
Evaluating the Flocked Swab as a Tool to Sample and Recover Healthcare Pathogens from Nitrile Gloves

H. Houston¹, L. Rose¹, J.C. Whitworth¹, J.K. Johnson², G. Robinson², S. Leekha², J. Noble-Wang³; ¹Centers for Disease Control and Prevention, Atlanta, GA, ²University of Maryland School of Medicine, Baltimore, MD

Presenter: Hollis Houston, Centers for Disease Control and Prevention, Atlanta, GA, Email: vvk6@cdc.gov

P-37
Lab-Aid: A New Endeavor for CDC to Provide Field Laboratory Assistance to Public Health Laboratories

X. Liu, S. Theodore, M.K. Glynn, D. Eaton and E. Pevzner, Centers for Disease Control and Prevention, Atlanta, GA

Presenter: Xin Liu, Centers for Disease Control and Prevention, Atlanta, GA, Phone: 404.498.6013, Email: xal7@cdc.gov
P-38*
Improving the Collection and Management of Human Samples Used for Measuring Environmental Chemicals and Nutrition Indicators
A. Mowbray¹, W. Neal², L. Romanoff³, W. Onyenwe¹, M. Mortensen¹, R. Jones¹, A. Calafat¹, C. Pfeiffer¹, R. Johnson¹, H. Vesper¹, B. Blount¹; ¹Centers for Disease Control and Prevention, Atlanta, GA, ²McKing Consulting Corporation, Atlanta, GA

Presenter: Amy Mowbray, PhD, Centers for Disease Control and Prevention, Atlanta, GA, Phone: 770.488.1083, Email: amowbray@cdc.gov

P-39
At Your Fingertips: Laboratory Workforce Development and Training Resources of CDC’s Division of Laboratory Systems
R. Ned-Sykes, D. Daniely and Y. Wilkins, Centers for Disease Control and Prevention, Atlanta, GA

Presenter: Renee Ned-Sykes, MMSc, PhD, Centers for Disease Control and Prevention, Atlanta, GA, Phone: 404.498.0125, Email: rin1@cdc.gov

P-40
C.D. Pham, J. Papp, K. Schlanger, E. Torrone, D. Trees, K. Gernert, E. Nash, K. Pettus, S. Sharpe, T. Hennig, E. Kersh, CDC AR-Ng Workgroup, AR Lab Network, Centers for Disease Control and Prevention, Atlanta, GA

Presenter: Ellen Kersh, PhD, Centers for Disease Control and Prevention, Atlanta, GA, Phone: 404.639.2728, Email: egk6@cdc.gov

P-41 — Withdrawn

P-42
Developing a Framework for a Quality Management Systems Training Curriculum for CDC Research Laboratories
J. Pompey, B. White, C. Potts, K. Kines, E. Dietrich, D. Riner, J. Ricaldi and A. Clayton, Centers for Disease Control and Prevention, Atlanta, GA

Presenter: Justine Pompey, Centers for Disease Control and Prevention, Atlanta, GA, Phone: 404.718.4413, Email: jpmpey@cdc.gov
P-43
M. Precit\textsuperscript{1}, K. Kauber\textsuperscript{2}, M. D’Angeli\textsuperscript{2}, K. Robinson\textsuperscript{2}, M. Tran\textsuperscript{2}, S. Weissman\textsuperscript{3}, B. Hiatt\textsuperscript{2}, S. Hun\textsuperscript{1}, T. Robinson\textsuperscript{2}, R. Gautom\textsuperscript{2}, W. Glover\textsuperscript{2}; \textsuperscript{1}Centers for Disease Control and Prevention, Atlanta, GA, \textsuperscript{2}Washington State Public Health Laboratories, Shoreline, WA, \textsuperscript{3}University of Washington, Seattle, WA

Presenter: Mimi Precit, Centers for Disease Control and Prevention/Washington State Public Health Laboratories, Shoreline, WA, Email: mimi.precit@doh.wa.gov

P-44
Quality Assurance of Qualitative DNA Detection Assays for Long-term Surveillance Studies of Human Papillomavirus

Presenter: Troy Querec, PhD, Centers for Disease Control and Prevention, Atlanta, GA, Phone: 404.639.2864, Email: hep0@cdc.gov

P-45*
Genomic Sequence Analysis of Common Legionella pneumophila Sequence Types Recovered from Healthcare Facilities
B. Raphael\textsuperscript{1}, J. Smith\textsuperscript{1}, L. Cooley\textsuperscript{1}, S. Roberts\textsuperscript{2}, E. Brown\textsuperscript{1}, L. Lie\textsuperscript{2}, M. Ishaq\textsuperscript{2}, J. Winchell\textsuperscript{1}; \textsuperscript{1}Centers for Disease Control and Prevention, Atlanta, GA, \textsuperscript{2}IHRC, Inc., Atlanta, GA

Presenter: Brian Raphael, PhD, Centers for Disease Control and Prevention, Atlanta, GA, Phone: 404.639.4292, Email: braphael@cdc.gov

P-46 — Withdrawn

P-47 — Withdrawn
P-48
Enterprise-level Risk Assessment in the Public Health Laboratory: A Case Study from a Prospective Polio-Essential Facility

R. Stinnett1, J. Anstadt1, C. Burns1, W. Nix1, E. Rhoden2, W. Weldon1, L. Stanford1, S. Bernstein2, H. Vu2, M. Oberste1, L. Haynes1; 1Centers for Disease Control and Prevention, Atlanta, GA, 2Booz Allen Hamilton/ Centers for Disease Control and Prevention, Atlanta, GA

Presenter: Rita Stinnett, MHS, PhD, Centers for Disease Control and Prevention, Atlanta, GA, Phone: 404.718.6779, Email: nrk2@cdc.gov

P-49
Facility Assessments Rapidly Identify Public Health Laboratory Needs following Hurricane Maria – Puerto Rico, 2017


Presenter: Rita Stinnett, MHS, PhD, Centers for Disease Control and Prevention, Atlanta, GA, Phone: 404.718.6779, Email: nrk2@cdc.gov

P-50
New Online Course to Help Laboratory Professionals and Healthcare Providers Improve Preanalytic Processes of Biochemical Genetic Testing

B. Chen1, B. Su2; 1Centers for Disease Control and Prevention, Atlanta, GA, 2Association of Public Health Laboratories, Silver Spring, MD

Presenter: Bertina Su, MPH, Association of Public Health Laboratories, Silver Spring, MD, Phone: 240.485.2729, Email: bertina.su@aphl.org

P-51
An Analysis of Laboratory Response Network for Biological Threat Preparedness (LRN-B) Member Laboratory Test Data, 2009-2016

J. Villanueva, B. Schweitzer, M. Odle and T. Aden, Centers for Disease Control and Prevention, Atlanta, GA

Presenter: Julie Villanueva, PhD, Centers for Disease Control and Prevention, Atlanta, GA, Phone: 404.639.3851, Email: jfv3@cdc.gov
P-52
Initial Public Health Laboratory Response in Puerto Rico after Hurricane Maria — Puerto Rico, 2017

B. White, Centers for Disease Control and Prevention, Atlanta, GA

Presenter: Brunie White, Centers for Disease Control and Prevention, Atlanta, GA, Phone: 404.639.3673, Email: wr2@cdc.gov

P-53*
Whole-Genome Sequencing Analysis of Neisseria meningitidis from the Urethritis Clade Causing Conjunctivitis in a Newborn Delivered by Cesarean — New York, August 2017


Presenter: Cecilia Kretz, CDC/ New York City Public Health Laboratory, New York, NY, Phone: 323.309.1770, Email: ckretz@health.nyc.gov

P-54*
Analysis of Microbial Diversity — A Novel Metagenomic Approach to Decipher Beach Microbiome

M. Khubbar1, B. Fanelli2, N. Hasan2, J. Wojnar1, V. Kalve1, R. Colwell3, S. Bhattacharyya1; 1Milwaukee Health Department Laboratory, Milwaukee, WI, 2CosmosID, Inc., Rockville, MD, 3University of Maryland, Baltimore, MD

Presenter: Sanjib Bhattacharyya, PhD, City of Milwaukee Health Department Laboratory, Milwaukee, WI, Phone: 414.286.5702, Email: sbhatt@milwaukee.gov

P-55
A Semi-Automated Method to Analyze, and Report Data from Neisseria gonorrhoeae Antimicrobial Susceptibility Testing

J. Weiner, M. Khubbar and S. Bhattacharyya, City of Milwaukee Health Department Laboratory, Milwaukee, WI

Presenter: Sanjib Bhattacharyya, PhD, City of Milwaukee Health Department Laboratory, Milwaukee, WI, Phone: 414.286.5702, Email: sbhatt@milwaukee.gov
P-56

Evaluation of Five Test Methods for Syphilis Screening, Serodiagnosis and Titer Determination in Contra Costa County

L. Sanders, M. Rickard, K. Riddle, C.L. Truong and M. Hung-Fan, Contra Costa Public Health Laboratory, Martinez, CA

Presenter: Kelly Riddle, Contra Costa Public Health Laboratory, Martinez, CA, Phone: 925.370.5775, Email: kelly.riddle@hsd.cccounty.us

P-57

Pseudomonas aeruginosa Alters Staphylococcus aureus Sensitivity to Antibiotics

G. Orazi, K. Ruoff and G. O'Toole, Geisel School of Medicine, Dartmouth College, Hanover, New Hampshire

Presenter: Giulia Orazi, Dartmouth College, Geisel School of Medicine, Hanover, New Hampshire, Email: giulia.orazi.gr@dartmouth.edu

P-58

A Multiplexed Chemiluminescent Screening Assay for Determination of IgG Antibodies to Measles, Mumps, Rubella and Varicella Zoster virus (VZV)

C. Randall, C. Budd, R. Wolfert, J. Harley, E. Harley and R. Budd, Dynex Technologies, Inc., Chantilly, VA

Presenter: Robert Wolfert, PhD, Dynex Technologies, Inc., Chantilly, VA, Phone: 703.803.1254, Email: rwolfert@dynex.com

P-59

Novel ELISA Based on Antigens from Strongyloides papillosus Instead of Strongyloides ratti Exhibits Increased Serological Specificity

B. Menge1, O. Klemens1, A. Streit2, O. Sendscheid3, J. Klemens1, K. Steinhagen1; 1EUROIMMUN, Lubeck, Germany, 2Max Planck Institute for Developmental Biology, Tubingen, Germany, 3EUROIMMUN US, Inc., Mountain Lakes, NJ

Presenter: Oliver Sendscheid, PhD, EUROIMMUN US, Inc., Mountain Lakes, NJ, Phone: 973.656.1000 x130, Email: oliver.sendscheid@euroimmun.us
P-60

Development of a Novel NS1-based ELISA for Detection of Specific IgG Antibodies Against West-Nile Virus

O. Klemens¹, C. Pannwitt¹, A. Hachid², J. Klemens¹, O. Sendscheid³, J. Fraune¹, W. Schlumberger¹, K. Steinhagen¹; ¹EUROIMMUN, Lubeck, Germany, ²Institut Pasteur d’Algérie, Dely-Brahim, Algeria ³EUROIMMUN US, Inc., Mountain Lakes, NJ

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P-61

Random Sampling Versus Blending: Improving Pathogen Detection in Food Samples

N. Mitchell, P. Hanson and P. Lewandowski, Florida Department of Agriculture and Consumer Services, Tallahassee, FL

Presenter: Nicole Mitchell, Florida Department of Agriculture and Consumer Services, Tallahassee, FL, Email: nicole.mitchell@freshfromflorida.com

P-62

Public Health Laboratory Internship with the United States Naval Academy: Experiences of the Inaugural Year

M. Vignoles, E. Quaye, S. White and L. Gillis, Florida Bureau of Public Health Laboratories-Miami, Miami, FL

Presenter: Stephen White, MS, MLS(ASCP), Florida Department of Health, Bureau of Public Health Laboratories-Miami, Miami, FL, Phone: 305.325.2538, Email: stephen.white@flhealth.gov

P-63

A Simple Analysis of 4-Methylimidizole using Automated Solid Phase Extraction and High Performance Liquid Chromatography with MS/UV Detection

W. Jones¹, A. Cannon¹, M. Ebitson¹, P. Monroy²; ¹Horizon Technology, Salem, NH, ²Babcock Laboratories, Riverside, CA

Presenter: Bill Jones, Horizon Technology, Salem, NH, Phone: 603.386.3638, Email: wrj@horizontechinc.com
P-64
Decreasing Specimen Cancellation Rates through Submitter Education
S. Dalenberg, J. Madlem, N. Epie, K. Wainwright and J. Lovchik, Indiana State Department of Health, Indianapolis, IN
Presenter: Stephanie Dalenberg, Indiana State Department of Health, Indianapolis, IN, Phone: 317.921.5535, Email: sdalenberg@isdh.in.gov

P-65*
Walking In Each Other’s Shoes: The Importance of Building Relationships between Epi and Lab
J. Yeadon-Fagbohun, Indiana State Department of Health, Indianapolis, IN
Presenter: Jamie Yeadon-Fabohun, Indiana State Department of Health, Indianapolis, IN, Phone: 317.921.5853, Email: jhadley@isdh.in.gov

P-66
Rapid Concentration of Biological Particles from Environmental Samples
A. Lewis, M. Hornback and A. Page, InnovaPrep, Drexel, MO
Presenter: Ariel Lewis, InnovaPrep, Drexel, MO, Phone: 816.619.3375, x104, Email: alewis@innovaprep.com

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Colorectal Cancer Incidence and the Occurrence of Radium in Public Drinking Water Supplies in Iowa
D. May, State Hygienic Laboratory at the University of Iowa, Coralville, IA
Presenter: Dustin May, State Hygienic Laboratory at the University of Iowa, Coralville, IA, Phone: 319.335.4245, Email: dustin-may@uiowa.edu

P-68
Teaching Public Health Laboratory Informatics
M.K. Yost-Daljev, J. Lipsky, S. Downer and M. Kourbage, J Michael Consulting LLC, Atlanta, GA
Presenter: Jon Lipsky, J Michael Consulting LLC, Atlanta, GA, Phone 770.309.3124, Email jlipsky@jmichael-consulting.com
P-69
Playing with Building Blocks: The Newborn Screening Health IT Implementation Guide and Toolkit
M.K. Yost-Daljev1, S. Downer1, A. Padgett1, J. Miller2, W. Andrews3; 1J Michael Consulting, Atlanta, GA, 2Colorado School of Public Health, Denver, CO, 3Virginia Division of Consolidated Laboratory Services, Richmond, VA
Presenter: Willie Andrews, Virginia Division of Consolidated Laboratory Services, Richmond, VA, Phone 804.648.4480, Email willie.andrews@dgs.virginia.gov

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Designing Reusable and Scalable Options for Public Health Data Exchange
J. Park1, R. Byres1, N. Raketich1, M. Kourbage1, L. Carlton2, Davis Sanderson2; 1J Michael Consulting, LLC, 2Association of Public Health Laboratories, Silver Spring, MD
Presenter: Jon Lipsky, J Michael Consulting LLC, Atlanta, GA, Phone: 770.309.3124, Email jlipsky@jmichael-consulting.com

P-71
Advantages of Self-Directed Regional Public Health Laboratory Networks
Presenter: Susanne Zanto, MPH, MLS, SM, Laboratory SolutionZ LLC, Helena, MT, Phone: 406.459.1076, Email: laboratoriesolutionz@gmail.com
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Carriage of Neisseria meningitidis Among Men Who Have Sex with Men in Los Angeles County

S. Buono, L. Pandes, B. Schwarz and N. Green, Los Angeles County Department of Public Health, Downey, CA

Presenter: Sean Buono, Los Angeles County Department of Public Health, Downey, CA, Email: sbuono@ph.lacounty.gov

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Economic Impact of the 2014-2015 Multi-state Measles Outbreak on the Local and State Public Health Sector in California

J. Diaz-Decaro1, 2, R. Basurto-Davila3, N. Green1, 2; 1Los Angeles County Public Health Laboratories, Downey, CA, 2UCLA Fielding School of Public Health, Los Angeles, CA, 3Los Angeles County Department of Public Health, Downey, CA

Presenter: John Diaz-Decaro, PhD, Los Angeles County Public Health Laboratories, UCLA Fielding School of Public Health, Los Angeles, CA, Phone: 562.658.1330, Email: jdiazdecaro@ph.lacounty.gov

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Laboratory Response Network – Chemical (LRN-C) Level 3 Resource Handbook

S. Yerabati1, T. Miller2, R.E. Nickla3; 1California Department of Public Health, Richmond, CA, 2Michigan Department of Health and Human Services, Lansing, MI, 3Oregon State Public Health Laboratory, Hillsboro, OR

Presenter: Teresa Miller, Michigan Department of Health and Human Services, Lansing, MI, Phone: 517.241.0925, Email: millert28@michigan.gov

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Creating a Knowledge Sharing Hub for Biosecurity Using an Online Collaborative Tool

A. Tseng2, L. Musralina2, E. Rzayev3, E. Marshall4, M. Adams4, K. Yeh5; 2McGill University, Montreal, PQ, Canada, 3Institute of General Genetics and Cytology, Almaty, Kazakhstan, 4Republican Veterinary Laboratory of Azerbaijan, 4Washington State University, Pullman, WA, 5MRIGlobal, Gaithersburg, MD

Presenter: Lyazzat Musralina, Institute of General Genetics and Cytology, Almaty, Kazakhstan, Email: musralinal@gmail.com
P-76*
Rapid Mycobacterial Identification using Real Time PCR and MALDI-TOF Testing
A. Schooley, J. Vanneste, S. Church, H. Seymour and M. Soehnlen, Michigan Department of Health and Human Services, Lansing, MI

Presenter: Angie Schooley, BSMT, Michigan Department of Health and Human Services, Lansing, MI, Phone: 517.335.9637, E-mail: schooleya@michigan.gov

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Identification of Carbapenem Resistant Enterobacteriaceae from Rectal Swabs using the ABI 7500
M. Bashore, M. Soehnlen and K. Jones, Michigan Department of Health and Human Services, Lansing, MI

Presenter: Matthew Bashore, Michigan Department of Health and Human Services, Lansing, MI, Phone: 517.335.8373, Email: bashorem@michigan.gov

P-78*
Measles and Mumps and Chickenpox, Oh My! Minnesota’s Response to Three Overlapping Outbreaks
A. Strain, E. Banerjee, N. Bekele, D. Boxrud, K. Harry, V. Lappi, K. Martin, M. McMahon and B. Neffzger; Minnesota Department of Health, St. Paul, MN

Presenter: Anna Strain, PhD, Minnesota Department of Health, St. Paul, MN, Phone: 651.201.5035, Email: anna.strain@state.mn.us

P-79*
Reliable Identification Methods for Carbapenem-resistant Carbapenemase-producing Acinetobacter (CP-CRA)
J. Dale and P. Snippes-Vagnone, Minnesota Department of Health Public Health Laboratory, St. Paul, MN

Presenter: Jennifer Dale, PhD, Minnesota Department of Health Public Health Laboratory, St. Paul, MN, Phone: 612.201.5043, Email: jennifer.dale@state.mn.us
P-80
Evaluation of Laboratory Procedures for Detection of Mycobacterium tuberculosis in Gastric Fluid

J. Coffin, E. Tacheny, T. Dickerson, R. Howard and F.A. Hamill, MRIGlobal, Gaithersburg, MD

Presenter: Jeanette Coffin, MRIGlobal, Gaithersburg, MD, Phone: 240.361.4006, Email: jcoffin@mriglobal.org

P-81*
Detection and Characterization of Salmonella in Environmental Samples

T. Dickerson¹, J. Russell¹, E. Reed², C. M. Ferreira², J. Baugher², G. Cao², R. Pfunter³, L Truitt³, L. Strawn³, S. Rideout³, R. Bell², H. Wang², M. Allard², E. Brown², J. Jacobs¹;¹MRIGlobal, Gaithersburg, MD, ²US Food and Drug Administration, College Park, MD, ³Virginia Tech-Eastern Shore AREC, Painter, VA

Presenter: Tamar Dickerson, MRIGlobal, Gaithersburg, MD, Phone: 240.361.4039, Email: tdickerson@mriglobal.org

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A Quality-Integrated and Leadership-Focused Approach to Biorisk Management Training In West Africa

J. Alam, C. Asbun, B. Karlstrand, M. Mar, D. Roberts, S. Shearrer, L. Presser and S. Altman, MRIGlobal, Gaithersburg, MD

Presenter: Jane Alam, MRIGlobal, Gaithersburg, MD, Phone: 240.361.4043, Email: jalam@mriglobal.org

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Building Social Networks for Sustainable Local Outbreak Response Capabilities

D. Dasgupta, G. Olinger and J. Michelotti, MRIGlobal, Inc., Gaithersburg, MD

Presenter: Julia Michelotti, PhD, MRIGlobal, Inc., Gaithersburg, MD, Phone: 240.361.4001, Email: jmichelotti@mriglobal.org
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Triple Quadrupole ICP-MS for Biomonitoring Applications
K. Aviado, C. Dingman, J. Schneider and C. Bean, New Hampshire Public Health Laboratories, Concord, NH

Presenter: Kimberly Aviado, PhD, New Hampshire Public Health Laboratories, Concord, NH, Phone: 603.271.9072, Email: kimberly.aviado@dhhs.nh.gov

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Validation of a High Throughput Method for Measuring Exposure to Perfluoroalkyl Substances (PFAS) in a Statewide Biomonitoring Study
C. Dingman, K. Aviado, J. Schneider and C. Bean, New Hampshire Public Health Laboratories, Concord, NH

Presenter: Carleen Dingman, New Hampshire Public Health Laboratories, Concord, NH, Email: carleen.dingman@dhhs.nh.gov

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Serum Concentration of Polychlorinated Biphenyls (PCBs) in New Jersey Residence
S. Du, N. Patterson and C.D. Riker, New Jersey Department of Health, Ewing, NJ

Presenter: C. David Riker, New Jersey Department of Health, Ewing, NJ, Phone: 609.530.8728, Email: collin.riker@doh.nj.gov

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Public Health Laboratory Internship & Employee Engagement — What the Student Leaves Behind
S. Mikorski and S. Robinson, New Jersey Department of Health, Ewing, NJ

Presenter: Sharon Robinson, New Jersey Department of Health, Ewing, NJ, Phone: 609.530.2818, Email: sharon.robinson@doh.nj.gov

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Workflow Analysis of the New Jersey Public Health Mycobacteriology Laboratory
D. Woell and T. Kirn, New Jersey Department of Health Public Health and Environmental Laboratory, Ewing, NJ

Presenter: Dana Woell, MPH, New Jersey Public Health and Environmental Laboratory, Ewing, NJ, Phone: 609.671.6428, Email: dana.woell@doh.nj.gov
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A Community Biomonitoring Study to Assess PFASs Body Burdens from PFNA-Contaminated Drinking Water in New Jersey
C.H. Yu1, C. Weisel2, S. Alimokhtari2, S. Minchala2, D. Riker1, Z. Fan1; 1New Jersey Public Health and Environmental Laboratory, Ewing, NJ, 2Rutgers University, New Brunswick, NJ
Presenter: Zhihua (Tina) Fan, PhD, New Jersey Department of Health/PHEL/ECLS, Ewing, NJ, Phone: 609.530.2803, Email: tina.fan@doh.nj.gov

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Comparison of ETEST® and Broth Microdilution Methods for Antimicrobial Susceptibility Testing of Shigella sp. Isolates in New York City
A. DeVito1, G. Zayas1, J. Rakeman2; 1New York City Department of Health and Mental Hygiene, New York, NY, 2New York City Public Health Laboratory, New York, NY
Presenter: Andrea DeVito, MPH, CPH, New York City Department of Health and Mental Hygiene, New York, NY, Phone: 212.671.5742, Email: adevito@health.nyc.gov

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Laboratory Testing for HIV on OCME Specimens at the New York City Public Health Laboratory: History and Opportunity
A. DeVito1, M. Moy1, K. Rabinovitz1, V. Streva1, E. Westheimer1, S. Ly1, S. Braunstein1, J. Rakeman2; 1New York City Department of Health and Mental Hygiene, New York, NY, 2New York City Public Health Laboratory, New York, NY
Presenter: Andrea DeVito, MPH, CPH, New York City Department of Health and Mental Hygiene, New York, NY, Phone: 212.671.5742, Email: adevito@health.nyc.gov

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Arbovirus Molecular Testing at New York City Public Health Laboratory during the Zika Outbreak
B. Deocharan, J. Fu, R. Gu, M. Rasul, J. Hom, S. Glaesker, D. Liu, J. Rakeman, New York City Public Health Laboratory, New York, NY
Presenter: Bisram Deocharan, PhD, New York City Public Health Laboratory, New York, NY, Phone: 212.671.5734, Email: bdeochar@health.nyc.gov
P-93
Zika Virus Antibody Testing using the DiaSorin LIAISON XL Zika Capture IgM Assay
D. Liu¹, V. Streva², W. Ren², M. Younis², R. Basea², H. Doo², S. Sayeed², M. Moy², A. Dupuis², L. Kramer², A. Shukla³, R. Limberger², J. Rakeman²; ¹New York City Public Health Laboratory, New York, NY, ²New York City Department of Health and Mental Hygiene, New York, NY, ³Diasorin, Inc., Stillwater, MN
Presenter: Dakai Liu, PhD, New York City Public Health Laboratory, New York, NY, Phone: 212.447.2858, Email: dliu@health.nyc.gov

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Routine Utilization of CIDT, FilmArray Gastrointestinal Panel, with Simultaneous Stool Culture Leads to Increased Isolate Recovery
C. Courtney¹, J. Rakeman², K. Inglima¹, M. Aguero-Rosenfeld²; ¹New York City Public Health Laboratory, New York NY, ²New York University Langone Medical Center, New York, NY
Presenter: Colleen Courtney, PhD, Chief of Molecular Diagnostics, DC Public Health Laboratory, Washington, DC, Phone: 202.481.3533, Email: colleen.courtney@dc.gov

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New York City Public Health Laboratory Ordering and Reporting Portal
R. Garcia Guzman¹, M. Moy², A. Shaikh¹, S. Alam¹, J. Rakeman¹; ¹New York City Public Health Laboratory, New York, NY, ²New York City Department of Health and Mental Hygiene, New York, NY
Presenter: Reyes Garcia Guzman, New York City Public Health Laboratory, New York, NY, Email: rgarciaguzman@health.nyc.gov

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Impact of Rapid Mycobacterium tuberculosis Complex Identification on Turnaround Time and Drug Resistance Predictions at the New York City Public Health Laboratory
J. Lemon, C. Courtney, Q. Liu and J. Rakeman, New York City Public Health Laboratory, New York, NY
Presenter: Jamie Lemon, PhD, D(ABMM), New York City Public Health Laboratory, New York, NY, Phone: 212.671.5668, Email: jlemon@health.nyc.gov
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An Assessment of Serum for Six Perfluoroalkyl Substances from a Small Human Population

*L. Blum, S. Donovan and D. Schiller, NMS Labs*

**Presenter:** Lee Blum, PhD, NMS Labs, Willow Grove, PA, Phone: 215.366.1224, Email: lee.blum@nmslabs.com

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Health Concerns Addressed in North Carolina through Public Health Laboratory Practices

*C. Daron and M. Mash; North Carolina State Laboratory of Public Health, Raleigh, NC*

**Presenter:** Caitlyn Daron, MS, North Carolina State Laboratory of Public Health, Raleigh, NC, Phone: 919.807.8943, Email: caitlyn.daron@dhhs.nc.gov

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Advancing Public Health Laboratory Websites: Northern Plains Consortium - Emerging Leaders Program

*H. Sease¹, S. Alexander¹, K. Manion², L. Beasley-Morrison³, G. Stevens⁴, W. Lutkemeier⁵; ¹North Dakota Department of Health, Bismarck, ND, ²Montana Public Health Laboratory, Helena, MT, ³Idaho Bureau of Laboratories, Boise, ID, ⁴Wyoming Public Health Laboratory, Cheyenne, WY, ⁵South Dakota Public Health Laboratory, Pierre, SD*

**Presenter:** Heather Sease, MLS(ASCP), North Dakota Department of Health, Division of Microbiology, Bismarck, ND, Phone: 701.328.6279, Email: hrsease@nd.gov

**P-100**

Performance Evaluation and Clinical Application of the GeneXpert MTB/RIF Assay in a Local Public Health Laboratory

*M. Zhowandai, M. Ghajar, S. Prabhu, J. Low and M. Crumpler, Orange County Public Health Laboratory, Santa Ana, CA*

**Presenter:** Minoo Ghajar, MPH, Orange County Public Health Laboratory, Santa Ana, CA, Phone: 714.834.8292, Email: mghajar@ochca.com
P-101*
Whole Genome Sequence Analysis of Salmonella Montevideo Isolates from Multiple Outbreaks at a Restaurant between 1997 and 2012
J. Wolfe, S. Klish, M. Zahn, J. Sevinsky, L. Fink, M. Cheung, M. Crumpler; 1Orange County Public Health Laboratory, Santa Ana, CA, 2Orange County Health Care Agency, Santa Ana, CA, 3Colorado Department of Public Health and Environment, Denver, CO
Presenter: Julia Wolfe, MPH, Orange County Public Health Laboratory, Santa Ana, CA, Phone: 714.834.8277, Email: jwolfe@ochca.com

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An International Collaboration to Develop Laboratory Leadership Competencies to Strengthen Laboratory Workforce Development in Support of Global Health Security
J. Isadore, S. Dittrich; 1Public Health Works, LLC, Holliston, MA, 2Association of Public Health Laboratories, Silver Spring, MD
Presenter: Jocelyn Isadore, Public Health Works, LLC, Holliston, MA, Phone: 508.446.4097, Email: joc.isadore@gmail.com

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Transition of a Manually-Performed Laboratory-Developed Test (LDT) to the Fully Automated cobas® 6800/8800 Systems Using the cobas® omni Utility Channel
Presenter: Chris McGowin, PhD, Roche Diagnostics, Inc., Indianapolis, IN, Phone: 985.212.4261, Email: chris.mcgowin@roche.com

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Comparison of Water Quality Indicator Methods for Recreational Water in San Diego County
S. Steele, M. Victorio and B. Austin, San Diego County Health and Human Services Agency, San Diego, CA
Presenter: Syreeta Steele, PhD, San Diego County Health and Human Services Agency, Public Health Laboratory, San Diego, CA, Phone: 619.692.8500, Email: Syreeta.steele@sdcounty.ca.gov
P-105
Next Generation Sequencing of the Hepatitis A Virus Outbreak in San Diego County
S. Steele, T. Basler and B. Austin, San Diego County Health and Human Services Agency, San Diego, CA

Presenter: Tracy Basler, San Diego County Health and Human Services Agency, Public Health Laboratory, San Diego, CA, Phone: 619.692.8500, Email: tracy.bassler@sdcounty.ca.gov

P-106*
Molecular Epidemiology of Rabies Virus in New Mexico: Identification of Novel Variants and Their Associated Hosts
K. Pesko, M. Breckenridge, L. Washington, A. Aragon and L. Liu, New Mexico Scientific Laboratory Division, Albuquerque, NM

Presenter: Adam Aragon, Scientific Laboratory Division, New Mexico Department of Health, Albuquerque, NM, Phone: 505.383.9124, Email: adam.aragon@state.nm.us

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Single-Injection Screening of 664 Forensic Toxicology Compounds using an Innovative Benchtop High Resolution Mass Spectrometer
O. Cabrices\(^1\), C. Schwarz\(^2\), X. He\(^1\), H. McCall\(^1\), L. Baker\(^1\), A. Wange\(^1\), A. Taylor\(^2\); \(^1\)SCIEX, Redwood City, CA, \(^2\)SCIEX Canada, Concord, ON, Canada

Presenter: Oscar Cabrices, PhD, SCIEX, Redwood City, CA, Phone: 908.472.4797, Email: oscar.cabrices@sciex.com

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Quantitative Analysis of Dicamba and Related Acid Herbicides and Metabolites
P. Winkler\(^1\), K.C. Hyland\(^1\), S. Krepich\(^2\); \(^1\)SCIEX, Redwood City, CA, \(^2\)Phenomenex, Torrance, CA

Presenter: Paul Winkler, SCIEX, Redwood City, CA, Email: paul.winkler@sciex.com

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Microcystins in Drinking Water Utilizing High Resolution Mass Spectrometry
K. Hyland, SCIEX, Redwood City, CA

Presenter: Paul Winkler, SCIEX, Redwood City, CA, Email: paul.winkler@sciex.com
P-110
Using Process Mapping to Actively Improve Laboratory Processing in TB Contact Investigations

M. Davis and R. Dixon, South Carolina Public Health Laboratory, Columbia, SC

Presenter: Megan Davis, MS, South Carolina Public Health Laboratory, Columbia, SC, Phone: 803.896.0870, Email: davismm@dhec.sc.gov

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Validation of Instrumentation and Methodologies for CLIA Certified Laboratories

R. Dixon, H-Y. Kan, P. Myers and L. Gleaton, South Carolina Public Health Laboratory, Columbia, SC

Presenter: Robert Dixon, PhD, HCLD(ABB), FAACC, South Carolina Public Health Laboratory, Columbia, SC, Phone: 803.896.0965, Email: dixonrb@dhec.sc.gov

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Method Evaluation and Qualification for an ABSciex 5500 Triple Quadrupole Mass Spectrometer

J. LaPalme, Y. Wang, O. Adair and R. Dixon, South Carolina Public Health Laboratory, Columbia, SC

Presenter: James LaPalme, South Carolina Public Health Laboratory, Columbia, SC, Phone: 803.896.3866, Email: lapalmjh@dhec.sc.gov

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Method Validation for Testing of Trichomonas from Urine Samples

H-Y. Kan, S. Stevens, B. Hastle, M. Davis and R. Dixon, South Carolina Public Health Laboratory, Columbia, SC

Presenter: Horng-Yuan Kan, PhD, South Carolina Public Health Laboratory, Columbia, SC, Phone: 803.896.9725, Email: kanh@dhec.sc.gov

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Using Podcasts to tell Public Health Stories

O. Adair¹, M. Bradke², S. Johnson³; ¹South Carolina Public Health Laboratory, Columbia, SC, ²Arkansas Public Health Laboratory, Little Rock, AR, ³Missouri State Public Health Laboratory, Jefferson City, MO

Presenter: Ona Adair, PhD, South Carolina Public Health Laboratory, Columbia, SC, Phone: 803.896.0991, Email: adairoo@dhec.sc.gov
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Reducing Time to Treatment by Tracking Specimens
H. MacIntosh, STACS DNA, Ottawa, ON, Canada
Presenter: Heather MacIntosh, STACS DNA, Ottawa, ON, Canada, Phone: 613.274.7822, Email: heather.macintosh@stacsdna.com

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Clinical Laboratory Tests of Public Health Significance: What is Really Necessary?
W. Aldous, State Hygienic Laboratory at the University of Iowa, Coralville, IA
Presenter: Wade Aldous, PhD D(ABMM), State Hygienic Laboratory at the University of Iowa, Coralville, IA, Phone: 319.335.4765, Email: wade-aldous@uiowa.edu

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Genomic Similarity of Legionella pneumophila Isolated from Routine Monitoring of Hospital Premise Plumbing Systems
L. DesJardin¹, W. Hottel², V. Reeb¹, N. Hall¹; ¹State Hygienic Laboratory at the University of Iowa, Coralville, IA, ²University of Iowa College of Public Health, Iowa City, IA
Presenter: Lucy DesJardin, PhD, State Hygienic Laboratory at the University of Iowa, Coralville, IA, Phone: 319.335.4339, Email: lucy-desjardin@uiowa.edu

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An Alternative to Liquid Handling Robots in Next-Generation Sequencing: Streamlined Semi-Automated DNA Library Preparation Incorporating Electronically Adjustable Tip Spacing Pipettes
E. Twait, V. Reeb, J. Benfer and L. DesJardin, State Hygienic Laboratory at the University of Iowa, Coralville, IA
Presenter: Erik Twait, State Hygienic Laboratory at the University of Iowa, Coralville, IA, Phone: 319.335.4500, Email: erik-twai@uiowa.edu
P-119
Implementing a Real-time Method for Aedes aegypti Surveillance for the Tennessee Department of Health

T. Moore, E. Hassett, A. Rodriguez and A. Moncayo, Tennessee Department of Health, Nashville, TN

Presenter: Thomas Moore, MS, Tennessee Department of Health, Vector-Borne Diseases Program, Nashville, TN, Email: tcmoore07@gmail.com

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Laboratory Surveillance of Enterobacteriaceae Isolated from Patients in Tennessee

V. Stone1, N. Smith2, T. Woodard4, T. McLemore4, X. Qian1, J. Gibson1, R. Steece1, M. Kainer2; 1Tennessee Department of Health: Laboratory Services, Nashville, TN, 2Tennessee Department of Health: Healthcare Associated Infections and Antimicrobial Resistance Program, Nashville, TN

Presenter: Victoria Stone, PhD, Tennessee Department of Health: Laboratory Services, Nashville, TN, Phone: 615.262.6462, Email: victoria.stone@tn.gov

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The EPA’s Water Contaminant Information Tool (WCIT): A Look at Three New Contaminant Profiles; Perfluorooctane sulfonate (PFOS), Perfluorooctanoic acid (PFOA) and Legionella

J. Bain, G. Gardenier and L. Mapp, U.S. Environmental Protection Agency, Washington, DC

Presenter: George Gardenier, US Environmental Protection Agency, Washington, DC, Phone: 202.272.0167, Email: gardenier.george@epa.gov

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Increasing Preparedness through Laboratory Full-Scale Exercises

G. Gardenier and L. Mapp, US Environmental Protection Agency, Washington, DC

Presenter: George Gardenier, US Environmental Protection Agency, Washington, DC, Phone: 202.272.0167, Email: gardenier.george@epa.gov
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A Closer Look at U.S Environmental Protection Agency Facilities

M. Burns and M. Linnenbrink, US Environmental Protection Agency, Washington, DC

Presenter: Michaela Burns, US Environmental Protection Agency, Washington, DC,
Email: burns.michaela@epa.gov

P-124
Laboratory Biosafety and Biosecurity Partners Forum, Looking into the Future

M. Pentella¹, C. Mangal², R. Salerno³, M. Marsico²; ¹University of Iowa, Iowa City, IA,
²Association of Public Health Laboratories, Silver Spring, MD, ³Centers for Disease Control and Prevention, Atlanta, GA

Presenter: Michael Pentella, PhD, MS, D(ABMM), University of Iowa, Iowa City, IA,
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Gastrointestinal Yersiniosis in Nebraska: A Laboratory and Epidemiological Analysis Following the Introduction of the BioFire FilmArray® Gastrointestinal Panel

A. Craney¹, A. Bartlin², K. Flaherty², R. Fowler², B. Loeck³, P. Iwen²; ¹University of Nebraska Medical Center, Omaha, NE, ²Nebraska Public Health Laboratory, Omaha, NE, ³Nebraska Department of Health and Human Services, Lincoln, NE

Presenter: Arryn Craney, University of Nebraska Medical Center, Omaha, NE,
Nebraska Public Health Laboratory, Omaha, NE, Email: arryn.craney@unmc.edu

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M. Mash¹, K. Levinson², M. Miller¹, S. Greene¹, T. Lawson¹; ¹North Carolina State Laboratory of Public Health, Raleigh, NC, ²UNC Hospitals, University of North Carolina, Chapel Hill

Presenters: Kara Levinson, MPH, PhD, University of North Carolina, Chapel Hill, UNC Hospitals, Chapel Hill, NC, Phone: 984.974.1443, Email: kara.Levinson@unchealth.unc.edu and Michael Mash, MS, North Carolina State Laboratory of Public Health, Raleigh, NC, Phone: 919.807.8942, Email: michael.mash@dhhs.nc.gov
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Genomic Investigation of a Protracted Carbapenem Resistant Enterobacter aerogenes Outbreak in a Cardiac ICU at a Tertiary Care Center in Rochester, New York

A. Malek, S. Taffner, H. Mostafa, J. Wang, S. Petry, L. Fine, P. Graman, D. Hardy, N. Pecora; University of Rochester Medical Center, Rochester, NY

Presenter: Adel Malek University of Rochester Medical Center, Department of Pathology and Laboratory Medicine, Rochester, NY, Email: adel_malek@urmc.rochester.edu

P-128
Strengthening Clinical and Veterinary Laboratory Systems and Capacity in Cambodia through Mentoring and Training

N. Ndefru, P. Sadate-Ngatchou, S.K. Ong, S. Sek, S. Song, S. Sokunna, M. Uch, O. Kimsan, S. Sam, L. Perrone; I-TECH, University of Washington, Seattle, WA, Department of Hospital Services

Presenter: Nayah Ndefru, University of Washington, I-TECH, Seattle, WA, Email: nndefru@uw.edu

P-129
Development of a National Strategic Plan 2017-2020 for the Laboratory System in Côte D’Ivoire


Presenter: Pat Sadate-Ngatchou, University of Washington, I-TECH, Seattle, WA, Email: psn@uw.edu

P-130
Application of Whole Genome Sequencing to an Outbreak of E. Coli O157:H7 in a Rural Community in Utah and Arizona

K. Oakeson, Utah Public Health Laboratory, Taylorsville, UT

Presenter: Kelly Oakeson, PhD, Utah Public Health Laboratory, Taylorsville, UT, Phone: 801.965.2400, Email: koakeson@utah.gov
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Informatics Self Assessment Tool
W. Andrews¹, R. Shepherd², G. Peterson³; ¹Virginia Division of Consolidated Laboratory Services, Richmond, VA, ²Association of Public Health Laboratories, Silver Spring, MD, ³Yahara Software, Madison, WI
Presenter: Rachel Shepherd, Association of Public Health Laboratories, Silver Spring, MD, Phone: 240.485.2796, Email: rachel.shepherd@aphl.org

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Validation of a Six-Gene Next Generation Sequencing (NGS) Panel for Second-Tier Newborn Screening
Presenter: Holly Schwab, Wadsworth Center, New York State Department of Health, Albany, NY, Phone: 518.705.0417, Email: schwabh4444@gmail.com

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Whole-Genome Sequencing of Carbapenemase-producing Klebsiella pneumoniae Isolates Recovered from a CRE Colonization Investigation
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Expanding the Timeframe for Whole Genome Sequence Analysis of Listeria monocytogenes: New York State’s Experience with an Outbreak Spanning Multiple Years
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Validation of a Real-time PCR Assay for Rapid Detection of Emerging Multidrug-resistant C. auris from Blood
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Public Health Role in Reducing Legionnaires’ Disease Risk
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Facilitating the Transition to Accurate Hormone Testing: Activities of the Partnership for the Accurate Testing of Hormones (PATH)
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Suitability of Self-collected Swabs for Influenza and Respiratory Pathogen Detection
E. Reisdorf1, P. Shult1, J. Temte2, M. Wedig1, S. Barlow2, A. Uzicanin3, Y. Zheteyeva3, M. Landsverk2, A. Schemmel2, E. Temte2, L. Comp2, B. Maerz2; 1Wisconsin State Laboratory of Hygiene, Madison, WI, 2University of Wisconsin Dept. of Family Medicine, Madison, WI, 3Centers for Disease Control and Prevention, Atlanta, GA

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Comparison of Sequence-based Salmonella Serotyping Methods for Use in a State Public Health Laboratory

N. Florek, S. Wagner, K. Gundlach, A. Jaedike, A. Bateman and D. Warshauer, Wisconsin State Laboratory of Hygiene, Madison, WI

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Reduced Viability of Candida auris and Other Candida Species from MALDI-TOF Extractions

A. Sterkel, A. Bateman, A. Valley, D. Warshauer, Wisconsin State Laboratory of Hygiene, Madison, WI

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One of These Things is Not Like the Other...Or is it? Why Informatics Should Lean Heavily on Lessons Learned in Disparate Industries to Create Novel Solutions

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