This year’s event is hybrid, featuring both in-person AND virtual experiences! Details inside!

www.aphl.org/AC

#APHL
The APHL Annual Conference, a hybrid event for the public health laboratory community, brings together more than 700 leaders, scientists, influencers and partners to share issues, trends and best practices driving laboratory science and public health today.

Session topics explore public health laboratory issues, trends and technologies relative to COVID-19 and other emerging infectious diseases, environmental health, emergency preparedness, quality systems and safety, informatics, food safety, newborn screening, global health and more.

Attendees in Cleveland will enjoy live sessions and roundtables, networking opportunities, receptions and events such as the Dr. Katherine Kelley Distinguished Lecture and the Annual Awards Ceremony, and 100+ scientific posters and 50+ exhibitors.

Virtual attendees will have the opportunity to watch and participate in most of the sessions from wherever they are, view all sessions as recordings, and visit posters and exhibit booths on the website.

Interaction between in-person and virtual attendees will be encouraged for a well-rounded, dynamic and valuable experience!

In-Person Attendee Benefits

- 40+ sessions
- 50+ exhibitors
- In-person networking
- Receptions and events
- P.A.C.E.® and CPH CEUs
- Registration bag, raffle and other special giveaways
- Seeing friends and colleagues
- All the fun of Cleveland!
- Access to 40+ recorded sessions for 90 days

Virtual Attendee Benefits

- Livestreamed sessions with chat and Q&A
- Virtual posters and exhibitor booths
- P.A.C.E.® and CPH CEUs
- Virtual scavenger hunt
- Access to 40+ recorded sessions for 90 days

www.aphl.org/AC
Why Attend?

- Learn more about contemporary issues in laboratory science
- Network with partners and friends
- Explore new ways to manage your laboratory
- Contribute to multiple discussions
- Visit 50+ exhibitors to see the latest in laboratory technology, supplies and services
- View more than 100 posters from all levels of laboratory science

Who Attends?

- State, county and city public health laboratory directors and personnel
- Environmental and agricultural laboratory directors and scientists
- Clinical and academic institution managers and staff
- Healthcare professionals and clinicians from public health agencies
- Federal agencies and state and local public health officials
- Clinical and academic laboratory managers and staff
- Others interested in laboratory issues

Registration

Advanced registration through APHL is required. Visit www.aphl.org/AC. For questions contact Terry Reamer at 240.485.2776 or terry.reamer@aphl.org.

<table>
<thead>
<tr>
<th>In-person</th>
<th>Virtual</th>
</tr>
</thead>
<tbody>
<tr>
<td>APHL Member:</td>
<td>$650</td>
</tr>
<tr>
<td>Non-member:</td>
<td>$795</td>
</tr>
<tr>
<td>Student:</td>
<td>$200</td>
</tr>
</tbody>
</table>

A group discount is offered for virtual attendees from member public health laboratories through April 4.

COVID-19 Protocols

Up-to-date COVID-19 vaccination and booster (if eligible) and mask-wearing is required at the APHL 2022 Annual Conference for all in-person attendees, vendors, staff and support personnel. Please bear this in mind before registering for this meeting.

Continuing Education Credits

APHL is an approved provider of continuing education programs in the clinical laboratory sciences through the American Society of Clinical Laboratory Science (ASCLS) P.A.C.E.® program. Attendees have the opportunity to earn up to 40 contact hours by attending in person, or viewing online, all available sessions, both live and recorded. 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 40 contact hours by attending in person, or viewing online, all available sessions, both live and recorded.
Pre-Conference Workshops

The APHL 2022 will be preceded by the following three workshops, only presented in Cleveland for a separate registration and fee. P.A.C.E.® credits will be provided. Details may be found on the conference website.

- **Laboratory Design Matters**: May 16, 9:00 am – 5:00 pm • $299
- **Persuasive Data Story-Telling: Accelerated Power BI Interactive Dashboard Skill Building**: May 17, 8:00 am – 11:30 am • $149
- **Deploying Open-Source Bioinformatics Solutions in Public Health Laboratories**: May 17, 8:00 am – 11:30 am • $149

Tour the Ohio State Public Health Laboratory

Join colleagues for an optional tour of the Ohio State Public Health Laboratory on Friday, May 20. The bus will leave the hotel at 12:30 pm and return by 6:00 pm. You must sign up for this tour at the same time as you register for the conference. Participation is limited.

Meeting Location and Headquarters Hotel

**Huntington Convention Center**
300 Lakeside Ave, Cleveland, OH 44113

**Hilton Cleveland Downtown Hotel**
100 Lakeside Ave East, Cleveland, OH 44114
216.413.5000

APHL 2022 will be held at the Huntington Convention Center in downtown Cleveland, OH. The headquarters hotel is the Hilton Cleveland Downtown Hotel, which is attached to the Huntington Convention Center. Both are located on the lakefront within easy walking distance of numerous restaurants and shops.

The conference sleeping room rate is $189 (plus tax) per night for a single or double at the Hilton. There are a very limited number of rooms at the federal per diem rate of $137. Reservations are available on a first-come, first-served basis. This rate is valid until April 25, 2022 or until the block is filled. Reservation details may be found on the conference website.

Consent to Use Photographic Images

Registration and attendance at or participation in APHL conferences 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, video and audio recordings, and electronic reproductions of such events and activities.
Dr. Katherine Kelley Distinguished Lecture: New Approaches and Innovations to Rising STIs and the Role of the Public Health Laboratory

*Thursday, May 19, 1:30–2:30 pm ET*

Leandro Mena, MD, MPH, Director, Division of STD Prevention, Centers for Disease Control and Prevention

APHL Annual Awards Ceremony and Breakfast

*Thursday, May 19, 9:00–10:30 am ET*

The awards program highlights outstanding achievements in laboratory science, creative approaches to today’s public health challenges and exemplary support of laboratories serving the public’s health. Applaud your colleagues, cheer innovation and support the advancement of public health laboratory science and practice!

Exhibit and Poster Hall

*Tuesday, May 17, 3:00 pm – 6:30 pm ET*  
*Wednesday, May 18, 10:00 am – 6:15 pm ET*  
*Thursday May 19, 10:00 am – 1:30 pm ET*

Network with industry peers and experts! Visit with exhibitors to chat and learn of the latest products and services. Meet with poster presenters to learn the latest science, trends and practices.

Innovate! Sessions

*Wednesday, May 18 and Thursday, May 19, 7:30–8:30 am ET*

Connect with your industry partners and get the inside track on new technologies and services during 60-minute educational presentations designed for the public health laboratory community. **Note: These sessions will only be available as recordings for virtual attendees.**
List of Exhibitors

Network with industry peers and experts! Visit with exhibitors to chat and learn of the latest products and services. Contact information for these exhibitors can be found on the main conference website.

Abbott Diagnostics  
Agena Bioscience  
Agilent Technologies  
APHL Experience  
ApolloLIMS  
Applied Maths/bioMerieux, Inc.  
American Public Health Association  
Avioq  
Bio-Rad Laboratories  
Biotage, LLC  
Bruker  
Cepheid  
Clear Labs  
DiaSorin, Inc.  
Flad Architects  
Gold Standard Diagnostics  
HDR  
HLN Consulting, LLC  
HOK  
Hologic  
HORIZON Lab Systems, LLC  
IDEXX  
Illumina  
INTEGRA  
J Michael Consulting, LLC  
LightDeck Diagnostics  
Luminex Corporation  
LumiraDX  
MRIGlobal  
OpenELIS Foundation  
Ortho Clinical Diagnostics  
Oxford Nanopore Technologies  
PacBio  
PerkinElmer  
Promega Corporation  
Puritan Medical Products  
QIAGEN, LLC  
Quantabio  
Roche Diagnostics  
Ruvos  
SCIEX  
Seegene Technologies  
SpeeDx  
STAT Courier Service, Inc.  
Streck  
Theiagen Genomics  
Thermo Fisher Scientific  
University of South Florida, College of Public Health  
Visby Medical  
Waters Corporation  
Wisconsin State Laboratory of Hygiene Proficiency Testing  
Worldwide Diagnostics  
Zymo Research Corp.
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 that corresponds with the topic that it represents. This guide is listed below.

**AVE** Agricultural, veterinary and environmental testing technologies and practices

**BIOM** Biomonitoring and chemical threats

**BIOS** Biosafety and biosecurity

**COM** Communications, advocacy and public relations

**COV** COVID-19 and other infectious diseases (STI/STD)

**DAT** Data and analytics

**DDT** Diagnostics and new detection technologies

**FSS** Food safety and security

**INF** Informatics

**MJH** Marijuana, hemp, opioids and other controlled substances

**NGS** Next generation/long-read sequencing, metagenomics and bioinformatics

**NBS** Newborn screening and genetics

**OHA** One Health! approaches

**PAN** Pandemic preparedness and emergency response

**PAR** Partnerships, academic and research collaborations, training and outreach

**QLM** Quality laboratory management systems

**SEI** Socio-economic issues

**SLS** Strengthening laboratory systems and strategic planning

**SUR** Surveillance, outbreaks and emerging infections

**WSU** Wastewater surveillance

**WDT** Workforce development and retention

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 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 guidelines, each session in the APHL 2022 Annual Conference 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: Hazard Control

**SRV** Surveillance

**INF** Informatics

**MCB** Microbiology

**CHM** Chemistry

**BIO** Bioinformatics

**RES** Research
**Agenda at a Glance**

Events denoted with purple below are not livestreamed to the virtual platform. **Preconference workshops** (May 17) and **laboratory tour** (May 20) are only available to in-person attendees. **Innovate! sessions** will be recorded and then posted for virtual attendees 24–48 hours after the live sessions. All other sessions will be livestreamed.

<table>
<thead>
<tr>
<th>Tuesday, May 17</th>
<th>Wednesday, May 18</th>
</tr>
</thead>
<tbody>
<tr>
<td>7:00 am</td>
<td>Innovate! Sessions</td>
</tr>
<tr>
<td>7:30 am</td>
<td>Break</td>
</tr>
<tr>
<td>8:00 am</td>
<td>Lab and Epi Partners in Opioids Biosurveillance</td>
</tr>
<tr>
<td>8:30 am</td>
<td>Poster Speed Dating</td>
</tr>
<tr>
<td>9:00 am</td>
<td>Break</td>
</tr>
<tr>
<td>9:30 am</td>
<td>Concurrent Sessions</td>
</tr>
<tr>
<td>10:00 am</td>
<td>Lunch provided in the Exhibit Hall</td>
</tr>
<tr>
<td>10:30 am</td>
<td>Break</td>
</tr>
<tr>
<td>11:00 am</td>
<td>Concurrent Sessions</td>
</tr>
<tr>
<td>11:30 am</td>
<td>Break</td>
</tr>
<tr>
<td>12:00 pm</td>
<td>Concurrent Sessions</td>
</tr>
<tr>
<td>12:30 pm</td>
<td>Break</td>
</tr>
<tr>
<td>1:00 pm</td>
<td>Concurrent Sessions</td>
</tr>
<tr>
<td>1:30 pm</td>
<td>Networking Reception</td>
</tr>
<tr>
<td>2:00 pm</td>
<td>Concurrent Sessions</td>
</tr>
<tr>
<td>2:30 pm</td>
<td>Concurrent Sessions</td>
</tr>
<tr>
<td>3:00 pm</td>
<td>Welcome Reception</td>
</tr>
<tr>
<td>3:30 pm</td>
<td>Welcome Reception</td>
</tr>
<tr>
<td>4:00 pm</td>
<td>Welcome Reception</td>
</tr>
<tr>
<td>4:30 pm</td>
<td>Welcome Reception</td>
</tr>
<tr>
<td>5:00 pm</td>
<td>Welcome Reception</td>
</tr>
<tr>
<td>5:30 pm</td>
<td>Welcome Reception</td>
</tr>
<tr>
<td>6:00 pm</td>
<td>Welcome Reception</td>
</tr>
</tbody>
</table>
### Agenda at a Glance

<table>
<thead>
<tr>
<th>Thursday, May 19</th>
<th>Friday, May 20</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>7:00 am</strong></td>
<td><strong>7:00 am</strong></td>
</tr>
<tr>
<td><strong>7:30 am</strong></td>
<td><strong>Roundtable Sessions</strong></td>
</tr>
<tr>
<td><strong>8:00 am</strong></td>
<td><strong>Innovate! Sessions</strong></td>
</tr>
<tr>
<td><strong>8:30 am</strong></td>
<td><strong>Break</strong></td>
</tr>
<tr>
<td><strong>9:00 am</strong></td>
<td><strong>Break</strong></td>
</tr>
<tr>
<td><strong>9:30 am</strong></td>
<td><strong>Awards Ceremony and Breakfast</strong></td>
</tr>
<tr>
<td><strong>10:00 am</strong></td>
<td><strong>Strategic Partnerships to Strengthen Lab Systems</strong></td>
</tr>
<tr>
<td><strong>10:30 am</strong></td>
<td><strong>Break</strong></td>
</tr>
<tr>
<td><strong>11:00 am</strong></td>
<td><strong>Role of PHLs in Climate Change</strong></td>
</tr>
<tr>
<td><strong>11:30 am</strong></td>
<td><strong>APHL 2022 Adjourns</strong></td>
</tr>
<tr>
<td><strong>12:00 pm</strong></td>
<td><strong>Lunch provided in the Exhibit Hall</strong></td>
</tr>
<tr>
<td><strong>12:30 pm</strong></td>
<td><strong>Optional Tour</strong></td>
</tr>
<tr>
<td><strong>1:00 pm</strong></td>
<td><strong>Ohio State Public Health Laboratory</strong></td>
</tr>
<tr>
<td><strong>1:30 pm</strong></td>
<td><strong>Dr. Katherine Kelly Distinguished Lecture</strong></td>
</tr>
<tr>
<td><strong>2:00 pm</strong></td>
<td><strong>Break</strong></td>
</tr>
<tr>
<td><strong>2:30 pm</strong></td>
<td><strong>Concurrent Sessions</strong></td>
</tr>
<tr>
<td><strong>3:00 pm</strong></td>
<td><strong>Concurrent Sessions</strong></td>
</tr>
<tr>
<td><strong>3:30 pm</strong></td>
<td><strong>Concurrent Sessions</strong></td>
</tr>
<tr>
<td><strong>4:00 pm</strong></td>
<td><strong>Concurrent Sessions</strong></td>
</tr>
<tr>
<td><strong>4:30 pm</strong></td>
<td><strong>Break</strong></td>
</tr>
<tr>
<td><strong>5:00 pm</strong></td>
<td><strong>Member Assembly</strong></td>
</tr>
<tr>
<td><strong>5:30 pm</strong></td>
<td><strong>Member Assembly</strong></td>
</tr>
<tr>
<td><strong>6:00 pm</strong></td>
<td><strong>Member Assembly</strong></td>
</tr>
</tbody>
</table>
Monday, May 16

9:00 am – 5:00 pm  Pre-Conference Workshop ▼

Laboratory Design Matters

588-842-22  •  6.5 contact hours for this session

Moderator: Maria Landron, DrPH, Association of Public Health Laboratories

Speakers:
- Warren J. Hendrickson, AIA LEED AP, BD+C, HDR, Inc.
- Michael Mottett, LEED AP, HDR, Inc.
- Victor Waddell, PhD, Arizona Department of Health Services Laboratory

Participants will gain understanding of key principles underlying the programming and design of research, clinical and public health laboratories in domestic and international settings. Renovation and construction design principles of Biosafety Level 3 (BSL-3) laboratory space will be covered as a special topic during this workshop. The workshop will be structured with guided discussions and hands-on interactive sessions to illustrate best practice concepts and analyze existing plans with respect to the design principles under discussion.

Note: This is a full-day pre-conference workshop with a separate registration fee of $299. Attendance in Cleveland is required and is limited to 50.

4:00 pm – 7:00 pm  Registration

Please keep in mind that this schedule is a work in progress and is subject to change.
**Persuasive Data Story-Telling: Accelerated Power BI Interactive Dashboard Skill Building**

588-843-22 • 3.0 contact hours for this session

Moderator: Lorelei Kurimski, MS, Association of Public Health Laboratories

Speakers:
- Anewar Burka, MA, Association of Public Health Laboratories
- Laila Natiq, MSPH, Association of Public Health Laboratories
- Sudaba Parnian, MA, MBA, Association of Public Health Laboratories

Data visualization is an effective presentation of complex data in a graphical format; it enables decision-makers to understand data-driven insights. Visualizations provide for easy analysis of trends, errors, and finding patterns. This workshop will provide hands-on training on data visualization basics. Participants will learn data cleaning techniques, create visualizations and an interactive dashboard, interpret findings for story-telling, list common software and tools to create visualizations, and select appropriate visualization based on data type.

**Deploying Open-Source Bioinformatics Solutions in Public Health Laboratories**

588-844-22 • 3.0 contact hours for this session

Moderator: Christin Hanigan, PhD, Association of Public Health Laboratories

Speakers:
- Logan Fink, MS, Virginia Division of Consolidated Laboratory Services
- Kelsey Florek, PhD, Wisconsin Public Health Laboratory
- Kelly Oakeson, PhD, Utah Public Health Laboratory

With the introduction of Next Generation Sequencing (NGS) into public health laboratories, one of the biggest challenges is access to bioinformatics capacity. With the rise of open-source options, we will discuss how a lab should evaluate different options and how these things can be deployed at a PHL.

*Note: These are half-day pre-conference workshops with a separate registration fee of $149. Attendance in Cleveland is required.*
11:30 am – 1:30 pm  Lunch (on your own)
11:30 am – 1:00 pm  Laboratory Directors Lunch (invite only)
1:30 pm – 2:00 pm  Welcome to Cleveland
2:00 pm – 3:00 pm  Opening Plenary Session ▼

Continued Challenges and Evolving Solutions for US Public Health Laboratories during COVID-19 Pandemic and Beyond ▼

Moderator: Vaneet Arora, MD, MPH, Kentucky State Public Health Laboratory

US Public Health Laboratories During COVID-19 and Beyond: Challenges, Solutions and Lessons Learned

Christina Potter, Johns Hopkins Center for Health Security

Panelists:
- Scott Shone, PhD, HCLD (ABB), North Carolina State Laboratory of Public Health
- Denise Toney, PhD, HCLD, Virginia Division of Consolidated Laboratory Services
- Megan Crumpler, PhD, HCLD, Orange County Public Health Laboratory
- Brandi Limbago, PhD, Centers for Disease Control and Prevention

The session will start with a short presentation from APHL and Johns Hopkins Outbreak Observatory collaborative project to understand the challenges faced and adaptations made by public health laboratories during the pandemic. This will segue into a panel discussion on continued challenges and evolving solutions for now and beyond, where panelists will discuss some critical issues including short term (e.g., supply chain), long term (e.g., what to do with all the platforms acquired), technical/regulatory issues (e.g., handling Ct value and variant reporting) and much more.

3:00 pm – 3:30 pm  Poster Speed Dating
3:00 pm – 6:30 pm  Exhibit Hall and Posters Open
3:30 pm – 4:00 pm  Break — sponsored by Cepheid
4:00 pm – 5:00 pm  Plenary Session ▼

Fireside Chat (TBD)

588-801-22 • 1.0 contact hour for this session

5:00 pm – 6:30 pm  Welcome Reception

Sponsored in part by Roche Diagnostics
Wednesday, May 18

7:00 am – 5:30 pm  Registration
7:00 am – 9:00 am  Coffee Break
7:30 am – 8:30 am  Innovate! Sessions ▼

Syndemic Approaches to Laboratory Testing for HIV-1/Hepatitis and STIs • Abbott
Jose Santiago, PhD, Abbott

Renewed interest in patient-centric responses to the HIV, STI and hepatitis syndemic requires the integration of programs and services to maximize flexibility and resources utilization. An effective public health response relies on the coordination of efforts at all levels, including laboratory services. The application of flexible molecular testing technologies can help optimize and consolidate laboratory testing services through the optimization of testing workflows and level of service delivery.

Old Pathogens Meet New Testing Practices: Updates to Diagnostic Testing with Panther Scalable Solution • Hologic

While the pandemic has necessitated significant focus on lab testing of a single pathogen, the last two years have also brought critical changes to testing for other important pathogens such as those associated with STIs. Come join us for a discussion on how the Panther Scalable Solution can offer efficiencies in consolidation of testing on a single device. As labs return to routine testing, using broad menu, high-throughput platforms with tests that have comprehensive indications is more important than ever.

The Future of NGS-based Surveillance: A One-health Approach • Illumina

The COVID-19 pandemic has accelerated our ability to address public health challenges through NGS-based approaches. In this session, speakers will outline developing approaches to move beyond clinical sample-based surveillance. Wastewater-based methods and zoonotic reservoir surveillance inclusive of pan-pathogen identification and anti-microbial resistance will be discussed.

Increasing the Odds of Outpacing the Virus — How Labs Are Leveraging COVID-19 Solutions • PerkinElmer
Arvind Kothandaraman, PerkinElmer

The SARS-CoV-2 pandemic continues to evolve. In this presentation, we will discuss PerkinElmer’s role in assisting labs adapt to screening, surveillance and diagnostic needs. We will review latest molecular tools employed in dynamic laboratory settings that demand flexibility in relation to test methodology and sample processing capacity.
Building Your Dream Assay, Strategies for Using Your Omni Utility Channel • Roche Diagnostics Corporation

- Robin Thomas, PhD, Roche Diagnostics Corporation
- Sara Blosser, PhD, D(ABMM), Roche Diagnostics Corporation

The cobas omni Utility Channel allows users to strategically streamline their laboratory developed testing workflow but how do you start to use this powerful tool? This session will review the basics of primer/real-time PCR design, assay optimization strategies and validations design theory. Using published protocols relevant to the public health laboratory, the presenters will provide an overview of the cobas omni Optimization Kit, Agile Assay Design software and other MSA-supported activities to help users start using their cobs omni Utility Channel.

Beyond COVID • Thermo Fisher Scientific

Brian Plew, Thermo Fisher Scientific

This session cover the following topics:

- HCC Content on OA, TAC, plates — how to use your instruments; Connecticut with TrueMark Respiratory
- Wastewater — Sample Prep, Digital PCR and Sequencing
- CMD — Toxicology, drug screening
- Mutation Analysis — TaqPath v1 & v2, COVID/FLU, COVID/FLU/RSV, RPP
- PHL wish list and collaboration moving out of COVID

The Lifecycle of Forever Chemicals: The Analytical Pathway for Monitoring the Impact of PFAS • Waters Corporation

- Larry Zintek, US EPA Region 5 Laboratory
- Kari Organtini, Waters Corporation

Per- and Polyfluoroalkyl Substances (PFAS) have become the hottest topic in the environmental world, even making their way into the public interest through intense media coverage of these “forever chemicals.” As we take steps to understand the impact of decades of PFAS manufacture, use, and disposal, we have found they have permeated into just about every commonly analyzed matrix. We will take an analytical journey through the pathway of discharge to consumption and discuss approaches for analysis of PFAS in water, soil, food, cosmetics, and biological fluids. Strategies for sample preparation of this vast array of matrices as well as targeted and non-targeted mass spectrometry techniques will be examined, and will highlight the tools available for gaining continued insights to the environmental impacts and public health exposure of this emerging group of compounds.

8:30 am – 9:00 am Coffee Break
9:00 am – 10:00 am  Plenary Session ▼

Piecing the Puzzle Together — Lab and Epi Partnerships Elucidate Alarming Trends in Opioid Overdoses

588-802-22 • 1.0 contact hour for this session

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

Speakers:
• Kristen St. John, Rhode Island Department of Health
• Desiree Mustaquim, Centers for Disease Control and Prevention
• Karry Leblanc, Florida Bureau of Public Health Laboratories

This session will highlight the evolving role of public health laboratories in responding to the opioids epidemic and CDC’s efforts to improve state opioids biosurveillance testing programs through Overdose Data to Action (OD2A) cooperative agreement funding. State laboratory success stories and challenges in the implementation of opioids biosurveillance programs, including newly published/reported laboratory data will be presented.

10:00 am – 10:30 am  Poster Speed Dating

10:00 am – 6:15 pm  Exhibit Hall and Posters Open

10:30 am – 11:00 am  Coffee Break
  sponsored by Zymo Research Corp.

11:00 am – 12:00 pm  Concurrent Sessions ▼

Dried Blood Spots, Beyond Newborn Screening

588-803-22 • 1.0 contact hour for this session

Moderator: Sara Blosser, PhD, D(ABMM), Roche Diagnostics Corporation

Use of Dried Blood Spots in the HIV Arena: Experience from Analyses of Point-of-Care and Self-Collected Specimens
Silvina Masciotra, MSc, Centers for Disease Control and Prevention

Dried Blood Spots for HIV and HCV Diagnostics: Benefits, Challenges and Lessons Learned
Monica Parker, PhD, New York State Department of Health

Dried Blood Spot Sampling as a Tool for Research and Surveillance in Population Health
Thomas McDade, PhD, Northwestern University

The COVID-19 pandemic has shined a spotlight on the need for at-home specimen collection for both infectious disease and chronic disease management. Although
most commonly encountered in the newborn screening field, dried blood spot testing (DBS) has the potential to bring at-home specimen collection to the forefront of fields such as HIV, Hepatitis C, and population health.

**Delta: Not Just a COVID Variant! Delta 8 THC and Why Public Health Should be Concerned**

588-804-22 • 1.0 contact hour for this session

Moderator – Heather Krug, Colorado State Public Health Laboratory

Speakers:

- TBD, Food and Drug Administration
- Brooke Hoots, Centers for Disease Control and Prevention

CDC and FDA speakers will provide information on Delta-8 tetrahydrocannabinol (THC) and outline their agency responses to Delta-8. On September 14, 2021, CDC issued a HAN to alert public health departments and laboratories to the increased availability of cannabis products containing delta-8 THC and the potential for poisonings due to insufficient labeling of products containing THC and cannabidiol (CBD) as well as production methods of Delta-8, including use of chemicals to synthetically convert cannabinoids from hemp to Delta-8 THC.

**Say YES to Interoperability: Case Studies in Laboratory Efficiency**

588-805-22 • 1.0 contact hour for this session

Moderator: Matthew McCarroll, MS, DC Department of Forensic Sciences

Speakers:

- CPT David Lau, MA, Food and Drug Administration
- Katherine Morris, MPH, DC Department of Forensic Sciences
- Cheryl-Lynn Daquip, Hawaii State Laboratories Division

In today’s world, there are a myriad of stakeholders requesting laboratory results, such that it is more important than ever to obtain and transfer timely, accurate and actionable data. The implementation of paperless workflows solves this problem, however interoperability between systems remains an issue. This session will detail three laboratories’ evolution towards the development of paperless workflows to improve efficiencies across the various platforms.
A Real Whodunit — Finding Danger in Unusual Places

588-806-22 • 1.0 contact hour for this session

Moderator: Robyn Randolph, MS, Association of Public Health Laboratories

Worst Queso Scenario: A Cooler Full of Brucellosis
• Maria Bye, MPH, Minnesota Department of Health

Presentation Title TBD
• Brendalee Viveiros, PhD, Rhode Island Division of Environmental Health

Multistate Outbreak of Non-Travel Associated Burkholderia pseudomallei Infections in Four Patients
• Mindy Glass Elrod, Centers for Disease Control and Prevention

This session will provide an overview of three investigations involving unusual vehicles of exposure, including an outbreak of Brucella melitensis originating from cheese, toxic metal poisonings linked to cake decorating luster dust, and a multistate outbreak of Burkholderia pseudomallei linked to scented room spray. Speakers will highlight how agencies worked together to find the unlikely sources of contamination.

12:00 pm – 1:30 pm Lunch (in the exhibit hall)

1:30 pm – 2:30 pm Concurrent Sessions ▼

Exploring Equity Across the NBS System: From Discourse to Action

588-807-22 • 1.0 contact hour for this session

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

New Tools, Same Questions: Do all Babies Receive Equal Testing and Follow-Up?
• Amy Gaviglio, MS, CGC, 4ES Corporation

From Bench to Bedside: How Lack of Representation and Barriers to Treatment are Different Sides of the Same Coin
• Aaron Goldenberg, PhD, MPH, Case Western Reserve University

Small Wins to Big Changes: Action-oriented Opportunities for Addressing Gaps in NBS
• Beth Tarini, MD, Children’s National Hospital

The Not So Squeaky Wheel: Education and Advocacy Through the Lens of Equity and Parity
• Natasha Bonhomme, PhD, Expecting Health and Genetic Alliance

Health equity is a central tenet of public health and refers to each person having the opportunity to achieve their highest level of health. While newborn screening
is often thought to provide universal access to the benefits of early detection, inequities across the newborn screening process are coming to light. This session will highlight areas of inequity within newborn screening, the need for better data to quantify inequities, and provide potential solutions to address them while modeling approaches that can be used in other areas of public health.

**The Juice is Worth the Squeeze — Demonstrating the Value of State Biomonitoring Programs**

588-808-22 • 1.0 contact hour for this session

Moderator: Patrick Parsons, PhD, New York State Department of Health

Speakers:
- Jessica Nelson, PhD, MPH, Minnesota Department of Health
- Andrea Amico, MS, Testing for Pease
- Kathleen Bush, PhD, New Hampshire Division of Public Health Services

This session will highlight state biomonitoring program successes and their impact on informing public health policy and interventions. Policy impacts of the implementation of the Population-Based Biomonitoring is a Fundamental Public Health Practice That Should Be in Every State position statement will be discussed.

**Parasites: A Cause for Concern as an Emerging Food Safety Threat**

588-809-22 • 1.0 contact hour for this session

Moderator: Alyssa Dickey, PhD, New York State Department of Agriculture and Markets Food Laboratory

- Kelli L. Hiett, PhD, Food and Drug Administration
- Socrates Trujillo, PhD, Food and Drug Administration

**Establishing Cyclospora cayetanensis Testing at the New York State Food Laboratory: How it Went**

- Gregory Delulio, PhD, New York State Department of Agriculture and Markets Food Laboratory

**Advanced Molecular Typing Methods for Cryptosporidium Surveillance and the Future State of CryptoNet Implementation**

- Dawn M. Roellig, MS, PhD, Centers for Disease Control and Prevention

Parasitic infections remain the largest contributor to the burden of waterborne illnesses and have also been implicated in foodborne outbreaks, with *Cyclospora cayetanensis* and *Cryptosporidium spp.* as the species of most concern. This session will highlight the PHL response to rapidly implementing new methods and testing programs for detecting and ultimately preventing parasites in food and water.
A Hot Wash of the COVID Impact on Public Health Laboratories

588-810-22 • 1.0 contact hour for this session

Moderator: Michael Pentella, PhD, D(ABMM), State Hygienic Laboratory at the University of Iowa

Speaker: Andrew Cannons, PhD, HCLD/CC(ABB), Florida Bureau of Public Health Laboratories – Tampa

This session will be a “hot wash” about the use of resources and personnel in response to COVID. A panel of laboratory leaders will discuss re-direction and deployment of funds. In most cases this was a success, and there is also room for growth and improvement.

2:30 pm – 3:00 pm Break

3:00 pm – 4:00 pm Concurrent Sessions ▼

Environmental Data Sharing: How to Play Nicely in a Great Big Sandbox

588-811-22 • 1.0 contact hour for this session

Moderator: Tina Fan, PhD, New Jersey Department of Health

A State’s Multiple Agency Approach to Handling Emerging Contaminants
• Keri Fisher, MLS (ASCP)CM, ASQ CQPA, LSSGB, Michigan Bureau of Laboratories

CDC’s National Environmental Public Health Tracking Network
• Fuyuen Yip, PhD, MPH, Centers for Disease Control and Prevention

Playing FAIR with Other People’s Data: Lessons Learned from the HHEAR Data Center
• Jeanette Stingone, PhD, MPH, Columbia University Mailman School of Public Health
• Susan Teitelbaum, PhD, Icahn School of Medicine at Mount Sinai

Speakers from state and federal agencies will discuss how environmental data is currently used, stored, and how some states may be sharing and handling the data. This session will highlight how to standardize methods and quality control measures and tighten up variables so that data is comparable and shareable.
Foodborne Disease Surveillance in Action: Lettuce Tell You a Story

588-812-22 • 1.0 contact hour for this session
Moderator: Jennifer K. Adams, Association of Public Health Laboratories

Crunching into the Epi
• Shana M. Altman, Illinois Department of Public Health

Squeaky Clean Isn’t Always Safe: A Salmonella Sequencing Story
• Jennifer K. Adams, Association of Public Health Laboratories

You Never Know What Your Neighbor May be Harboring... An Investigative Journey to the Find the Culprit
• Monica M. McClure, Food and Drug Administration

This session will discuss some of the challenges of continuing to surveil for foodborne illness and detect outbreaks during the height of the pandemic. Presenters will tell a story of a particularly interesting Salmonella outbreak linked to leafy greens, describe their role in the outbreak and discuss how they overcame any pandemic-related challenges to continue to ensure the safety of our food supply.

Understanding Privilege

588-813-22 • 1.0 contact hour for this session
Marilyn Freeman, PhD, M(ASCP), Virginia Division of Consolidated Laboratory Services

One of the diversity, equity, and inclusion (DEI) topics frequently heard, but not always understood, is privilege. This session seeks to unpack the conversation regarding privilege by understanding what it means, explaining its underpinnings, and ways it can be used to benefit the collective whole.

Weird Science: Unusual Cases in Infectious Diseases

588-814-22 • 1.0 contact hour for this session
Moderator: Sara Vetter, PhD, D(ABMM), Minnesota Department of Health

Speakers:
• Allen Bateman, PhD, D(ABMM), Wisconsin State Laboratory of Hygiene
• Courtney Demontigny, MS, Minnesota Department of Health
• Wade Aldous, PhD, D(ABMM), State Hygienic Laboratory at the University of Iowa

Panelists:
• Kimberlee Musser, PhD, New York State Department of Health
• Timothy Southern, PhD, D(ABMM), South Dakota Public Health Laboratory
• Megan Crumpler, PhD, HCLD, Orange County Public Health Laboratory
• Grace Kubin, PhD, Texas Public Health Laboratory
The public health laboratory is often the laboratory of last resort for diagnosis of unusual cases, detection of emerging infectious diseases and outbreaks. In its fifth year, Weird Science will continue to challenge a panel of experts with diagnostic conundrums, along with the audience, through an interactive quiz format. Our panel of experts will consist of two teams who will compete against each other. Let’s see which team triumphs! Or will it be the audience that solves the public health laboratories’ most challenging infectious disease puzzles?

4:00 pm – 4:15 pm Break

4:15 pm – 5:15 pm Concurrent Sessions ▼

PFAS: The Promise of New Methods and Regulations to Address the Greatest Environmental Issue of Our Lifetime

588-815-22 • 1.0 contact hour for this session

Moderator: Sin Urban, PhD, Maryland Department of Health

EPA Method 1633: The Promise of Pan-matrix Data
• Adrian Hanley, US Environmental Protection Agency

Trials and Tribulations in Bringing up Draft EPA Method 1633 — PFAS in Aqueous, Solid and Biosolid Samples by LC-MS/MS
• Katherine Hamblin, PhD, California Environmental Protection Agency

Innovating PFAS Testing in Maryland — A State Public Health Lab’s Perspective
• Sin Urban, PhD, Maryland Department of Health

Using New Testing Data to Guide EPA Regulatory Action on PFAS
• Deborah G. Nagle, US Environmental Protection Agency

The EPA administrator called per- and polyfluoroalkyl substances (PFAS) “the greatest environmental issue of our lifetime” due to their ubiquity in the environment, the paucity of testing methods, and the need to regulate thousands of chemicals in exposures ranging from water, to food, household products, and even air. This session will examine EPA’s new, highly anticipated method for testing PFAS across matrices, share how states are implementing this complex testing regimen, and describe how regulators are approaching using this potential data renaissance to protecting public health.
Sequencing a Pandemic: How NGS Kept Up with the Ever-Evolving SARS-CoV-2

588-816-22 • 1.0 contact hour for this session

Moderator: Kristina Hsieh, Clear Labs, Inc.

Novel Solutions for Next Generation Sequencing to Enhance the Democratization of Genomics in Public Health Laboratories

• Sharon Messenger, PhD, California Department of Public Health

Challenges and Solutions to Pandemic Surveillance Using Next Generation Sequencing

• Noah Hull, PhD, MPH, Association of Public Health Laboratories

Preparing for the Next Pandemic with Rapid Automated High Throughput Sequencing

• Steve Hinrichs, MD, University of Nebraska Medical Center

This session will focus on the applications of NGS in the public health laboratory, solutions to challenges encountered with NGS, and utilization of NGS data analysis pipelines to guide public health response plans during the Covid-19 pandemic. During the session, speakers will share how they have overcome technical obstacles associated with implementing NGS as part of their clinical workflow to successfully employ this technology for tracking SARS-CoV-2 as well as emerging and re-emerging pathogens.

Responding to Legionella Outbreaks in the Time of COVID-19

588-817-22 • 1.0 contact hour for this session

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

Within the Mist: Legionella Response in North Carolina

• William A. Glover II, PhD, D(ABMM), MT(ASCP), North Carolina State Laboratory of Public Health

Michigan’s Flint, Factories, and Fun: Legionella Response Efforts

• Marty K. Soehnlen, PhD, MPH, PHLD(ABB), Michigan Bureau of Laboratories

The Minnesota Experience

• Paula M. Snippes Vagnone, MT(ASCP), Minnesota Department of Health

Modernizing Methods and Maximizing Quality: Updates from CDC’s Legionella Laboratory

• Melisa Willby, PhD, Centers for Disease Control and Prevention

The closure of many buildings during the COVID-19 pandemic has led to stagnant building water systems and conditions that support Legionella proliferation. Human infections with Legionella bacteria were already on the rise, and the re-opening of buildings further increases the risk for Legionella exposure and infection. This session will present practical, real-life examples of how public health laboratories are
responding to Legionella outbreaks and improving their clinical and environmental Legionella detection and characterization methods.

**Power in Partnerships: SURRG Sharpens Focus to Reduce Antibiotic-Resistant Gonorrhea**

588-818-22 • 1.0 contact hour for this session

Moderator: Sanjib Bhattacharyya, PhD, City of Milwaukee Health Department Laboratory

Speakers:

- Olusegun Soge, PhD, University of Washington
- Godfred Masinde, PhD, MBS, HCLD(ABB), San Francisco Public Health Laboratories
- Brian Raphael, PhD, Centers for Disease Control and Prevention

Antibiotic-resistant Gonorrhea in the US and globally is an increasing public health concern. While CDC monitors gonorrhea through Gonococcal Isolate Surveillance Project (GISP) and STD Surveillance Network (SSUN), Strengthening the United States Response to Resistant Gonorrhea (SURRG), a collaborative effort for rapid detection and response to drug-resistant gonorrhea in eight jurisdictions around the country, was launched in 2016. The session will capture five years of SURRG Gonorrhea antimicrobial susceptibility testing activities- successes, challenges and future.

5:15 pm – 6:15 pm **Networking Reception**

sponsored by Thermo Fisher Scientific
Thursday, May 19

7:00 am – 6:00 pm  Registration

7:00 am – 9:00 am  Coffee Break

7:30 am – 8:30 am  Innovate! Sessions ▼

**Leveraging a Turn-key Automated Isolate Whole Genome Sequencing (WGS) Platform to Advance Pathogen Genomics** • Clear Labs

- Kristina Hsieh, Clear Labs
- Ramin Khaksar, Clear Labs

A review of the Clear Labs Isolate WGS testing platform and its utility in the public health laboratory for improving outbreak surveillance and antimicrobial resistance monitoring and a discussion with the audience about what they envision for this product.

**Matrix Recovery and Fecal Normalization Controls for Wastewater Surveillance** • IDEXX

Brian Swalla, PhD, IDEXX

Wastewater surveillance for SARS-CoV-2 provides valuable, independent data on the spread of COVID-19. Experts agree that the use of certain controls are critical. The US CDC and the European Union Joint Research Centre recommend the use of a separate matrix recovery control and human fecal normalization control. IDEXX Water has recently released a multiplexed Matrix and Fecal Control Kit. This session will outline the importance of these controls and their implementation with the IDEXX system.

**QIAcuity Digital PCR: A Look at the FLOW and BUZZ of the Technology** • QIAGEN

- John Paul Chuckalovcak, QIAGEN
- James Scott, Ohio Department of Health
- Abelardo Moncayo, Tennessee Department of Health

Laboratories that require identification or quantification of rare nucleic acid targets often struggle to detect faint signals amongst the noise of complex and inhibitory background matrices. Join us in this Innovate! session to explore the QIAcuity digital PCR instrument and its utility in pathogen genome detection from wastewater and vector-borne samples. Come see how the QIAcuity has contributed to SARS-CoV-2 testing with wastewater FLOW samples and the BUZZ around its use with mosquito testing.
7:30 am – 8:30 am  **Roundtable Sessions ▼**

**So Your Rad Lab Just Got Audited... Radioanalytical Techniques and Challenges in Testing Drinking Water**  
AVE  CHM  588-819-22 • 1.0 contact hour for this session

Moderator: Jack Bennett, Lawrence Livermore National Laboratory
- Bob Shannon, QRS, LLC
- Kathryn Wangsness, Arizona State Public Health Laboratory
- Peixue Ma, New Jersey Department of Health

The session will be a roundtable discussion for sharing common problems and common solutions for radiochemistry issues in drinking water testing. Participants will share results of internal and external audits, quality control, method validation, and best practices. This session will support governmental laboratories doing radiochemistry testing and strengthen existing radiochemistry lab programs.

**Working with Epidemiologists to Use NGS Data More Effectively**  
NGS  BIO  588-820-22 • 1.0 contact hour for this session

Moderator: Marty Soehnlen, PhD, MPH, PHLD(ABB), Michigan Bureau of Laboratories
Speakers:
- Arianna Miles-Jay, Michigan Bureau of Laboratories
- Krisandra Allen, Washington State Department of Health

Next Generation Sequencing (NGS) data can provide an enormous amount of insight into understanding outbreaks and in disease surveillance. While public health laboratories continue to grow in their use and expertise of bioinformatics tools to properly analyze this data, there remains a gap in how the analysis is used for public health decision-making. Epidemiologists are often not trained in NGS data and greater communication is needed about what the data means. This will be a conversation about potential solutions to maximize the potential of NGS data to improve public health.

**Hurry, Clean-Up!  CLIA is Coming Over**  
QLM  QMS  MLD  588-821-22 • 1.0 contact hour for this session

Speakers:
- Deborah Severson, MT(ASCP), Fairfax County Health Department Laboratory
- Mary Bonifas, BS, CQA(ASQ), Michigan Bureau of Laboratories

The Clinical Laboratory Improvement Amendment (CLIA) is a broad piece of legislation that requires in-depth knowledge, understanding, and application of its contents for successful ongoing certification. This roundtable will summarize the major categories.
of the CLIA regulation and highlight a new beneficial tool for use within clinical laboratories to assist with the laboratory’s preparation prior to the audit.

**Teamwork Divides the Task and Multiplies the Success**

588-822-22 • 1.0 contact hour for this session

Speakers:

- Keri Fisher, MLS (ASCP)CM, ASQ CQPA, LSSGB, Michigan Department of Health and Human Services
- Dustin May, State Hygienic Laboratory at the University of Iowa
- Meghan Fuschino, New York State Department of Health
- Deanna Jones, Centers for Disease Control and Prevention
- Melissa Warren, Association of Public Health Laboratories

Members from the Emerging Leaders Cohort 13 Spring will provide an overview of the Teambuilding Toolkit available at APHL.org. The session will include a discussion of the importance of teambuilding and an interactive teambuilding activity described in the toolkit (if COVID-19 restrictions permit).

8:30 am – 9:00 am **Coffee Break**

9:00 am – 10:30 am **Awards Breakfast**

sponsored by Hologic, Inc.

10:00 am – 1:30 pm **Exhibit Hall and Posters Open**

10:30 am – 11:00 am **Coffee Break**

11:00 am – 12:00 pm ** Concurrent Sessions ▼**

**Pandemic Truth Tellers: Building Trust Through Public Health Communication**

588-823-22 • 1.0 contact hour for this session

Moderator: Michelle Forman, Association of Public Health Laboratories

Speakers: TBD

From the beginning of the SARS-CoV-2 pandemic, misinformation spread as quickly the virus itself. APHL and public health lab staff found themselves in a new role when it came to communicating with the public: the role of “truth-tellers.” Ensuring that fact-based information was making its way into the media was vital in the effort to slow COVID-19. It was also critical in the effort to communicate the role public health labs played and the challenges their teams faced. What did it mean to assume this role? What did we all learn from it? And what do we hope continues – and ends – after the pandemic?
Food Chemistry, More Than Molecular Gastronomy and Mixology: Safety Response Stories

588-824-22 • 1.0 contact hour for this session

Moderator: Shane Wyatt, Virginia Division of Consolidated Laboratory Services

Speakers:

• Alexander Domesle, MS, JD, Food Safety and Inspection Service, USDA
• Lissa A. Sirois, MPH, RD, IBCLC, New Hampshire Department of Health and Human Services
• Keri Fisher, MLS (ASCP)CM, ASQ CQPA, LSSGB, Michigan Bureau of Laboratories

Speakers from state and federal agencies will discuss how they collaborate on responses to food safety incidents where potential exposure to emerging contaminants are identified.

Implementing Sequencing Technologies in the Laboratory Response Network for Biological Threats Preparedness (LRN-B)

588-825-22 • 1.0 contact hour for this session

Moderator: Jarad Schiffer, MS, Centers for Disease Control and Prevention

Rapid Bacillus anthracis Whole Genome Sequencing (WGS) Using a Portable Sequencer (MinION) at the Wadsworth Center Laboratories

• David Sue, PhD, Centers for Disease Control and Prevention

Perspectives from the Field

• Dominick Centurioni, MS, New York State Department of Health

Wait… It isn’t COVID?

• Courtney Demontigny, MS, Minnesota Department of Health

Today’s whole genome sequencing (WGS) technologies and approaches are faster, more affordable, and could provide vital information about biological threat agents to public health laboratories in the Laboratory Response Network for Biological Threats Preparedness (LRN-B), leading scientists to quickly uncover sources, identify potential genetic engineering and detect evidence of antimicrobial resistance. This session will discuss the role of WGS in the LRN-B and how laboratories can utilize the technology to improve threat agent detection capabilities.
SHARPening Laboratory Tools to Combat Antimicrobial Resistance

Moderator: Paula Snippes Vagnone, MT(ASCP), Minnesota Department of Health

• Stephanie Gumbis, Centers for Disease Control and Prevention
• TBD — Oregon State Public Health Laboratory
• Marie-Claire Rowlinson, PhD, D(ABMM), New York State Department of Health

CDC’s recent $385 million ‘Strengthening HAI/AR Program Capacity’ (SHARP) initiative will increase the availability of laboratory testing for antimicrobial resistance in the AR Lab Network. This session will describe how PHLs will utilize those funds to positively impact antimicrobial resistance.

12:00 pm – 1:30 pm  Lunch (in the exhibit hall)
Raffle drawing at 1:00 pm
Exhibit Hall closes at 1:30 pm

1:30 pm – 2:30 pm  Plenary Session ▼

Dr. Katherine Kelley Distinguished Lecture: New Approaches and Innovations to Rising STIs and the Role of the Public Health Laboratory

Moderator: Daphne Ware, PhD, Mississippi Public Health Laboratory

Dr. Leandro Mena, MD, MPH, Director, Division of STD Prevention, Centers for Disease Control and Prevention

Public health laboratories hold a key role in stemming rising STIs. With STIs in the United States reaching all-time highs, addressing the rise will require innovation and collaboration across public health programs to promote holistic, equitable approaches to STI care.

2:30 pm – 3:00 pm  Break
3:00 pm – 4:00 pm  Concurrent Sessions ▼

**CyanoBoom! Predictive Methods and Tools for HAB Monitoring**

588-828-22 • 1.0 contact hour for this session

Moderator: J. Hunter Adams, MS, City of Wichita Falls, TX Environmental Laboratory

**Monitoring Harmful Algal Blooms in Ohio**
- Ruth Briland, PhD, Ohio Environmental Protection Agency

**Machine Learning Enabled Forecasts of Harmful Algal Blooms in Small-to-medium Sized Lakes Across the Continental US**
- James R. Watson, PhD, Oregon State University

**Cyanobacteria Quantitation and Predicting Cyanotoxin Occurrence Using qPCR**
- Pamela J. Higgins, PhD, Pennsylvania Department of Environmental Protection Bureau of Laboratories

**Overview of APHL Cyanotoxin Guidance Document**
- J. Hunter Adams, MS, City of Wichita Falls, TX Environmental Laboratory

This session will highlight predictive tools, such as qPCR and water quality indicators, for the presence of Harmful Algal Blooms (HABs) and cyanotoxins in recreational waters. APHL’s revised Cyanotoxin Guidance Document for PHLs will also be discussed.

**How Are Public Health Laboratories Advancing the Data Modernization Initiative?**

588-829-22 • 1.0 contact hour for this session

Moderator: Peter Kyriacopoulos, Association of Public Health Laboratories

Speakers:
- Dan Jernigan, MD, MPH, Centers for Disease Control and Prevention
- Emily Hopkins, MS, Virginia Division of Consolidated Laboratory Services
- Matthew McCarroll, MS, DC Department of Forensic Sciences

This session will provide an overview of the Digital Modernization Initiative (DMI), and will feature initiatives and innovations currently underway at a selection of PHLs as part of DMI. How are PHLs enhancing their data, technology, and workforce capabilities to prepare for tomorrow’s needs?
NGS Training in a Pandemic: Thinking Inside and Outside of the Box

588-830-22 • 1.0 contact hour for this session

Moderator: Noah Hull, PhD, MPH, and Eugene Yeboah, MS, Association of Public Health Laboratories

Introduction of Training Request and Framework
- Noah Hull, PhD, MPH, and Eugene Yeboah, MS, Association of Public Health Laboratories

International Virtual Bioinformatics Training using the Terra.bio Platform
- Kevin Libuit, MS, Theiagen Genomics

Domestic Virtual Bioinformatics Onboarding and Training using the Terra.bio Platform
- Frank Ambrosio, MS, Theiagen Genomics

Virtual Training for Basic Bioinformatics using the Command Line Interface
- Daryl Domman, PhD, Independent Consultant

Virtual NGS Wet Bench Training for Various Platforms and Skill Levels
- Darrell Dinwiddie, PhD, Independent Consultant

This session will address next generation sequencing laboratory training and associated bioinformatic training using a variety of analysis platform. Lessons learned and best practices will be provided for remote and in-person training that is broadly applicable to domestic and global audiences.

What’s In My Backyard? Exploring the Geographic Expansion of Once Exotic Arboviruses

588-831-22 • 1.0 contact hour for this session

Moderator: Sara Vetter, PhD, Minnesota Public Health Laboratory

JCV Vector Ecology and Recommendations for Surveillance
- Joseph D. Poggi, MS candidate, Cornell University

Recent Changes in Mosquito Vector Distribution in the United States
- Roxanne Connelly, MS, PhD, Centers for Disease Control and Prevention

Presentation Title TBD
- Diana Riner, PhD, Michigan Department of Health & Human Services

Presentation Title TBD
- Lea Heberlein-Larson, DrPH, Florida Bureau of Public Health Laboratories

This session is will provide an insight into ecological changes impacting vector populations in the United States. These changes have led to the need for expanded
testing capability in public health laboratories. The session will focus on the impact of the geographic expansion of common arboviruses, followed by a talk on the ecology of Jamestown Canyon Virus in New Hampshire, and finally leading into a discussion on perspectives from public health laboratory members on how laboratories can implement and sustain new vector-borne disease testing capacities.

4:00 pm – 4:15 pm  Break

4:15 pm – 5:15 pm  Concurrent Sessions ▼

Wastewater Epidemiological Surveillance: An Innovative Tool in Public Health Response  

588-832-22  • 1.0 contact hour for this session

Moderator: Enoma Omoregie, PhD, New York City Department of Health and Mental Hygiene

Speakers:
- Rachel Baker, MPH, Ohio Department of Health
- Virginia T. Guidry, PhD, North Carolina Department of Health and Human Services
- Amy Kirby, PhD, MPH, Centers for Disease Control and Prevention
- Nichole Brinkman, PhD, US Environmental Protection Agency

The COVID-19 pandemic has led to an explosion in interest in wastewater epidemiological surveillance (WES). In this session we will explore how WES has been used to support existing public health strategies at the state and local level; and present a vision for how this tool will continue to revolutionize public health surveillance.

Case Studies in Biosafety: A Look into Laboratory Exposures

588-833-22  • 1.0 contact hour for this session

Moderator: Christina Egan, PhD, New York State Department of Health

Speakers:
- Anna J. Liddicoat, MPH, RBP (ABSA), North Carolina Department of Health and Human Services
- Eric Lundquist, MLS(ASCP)CM, Minnesota Department of Health
- Lori Lane, MT(ASCP), WakeMed Health and Hospitals

Attendees will learn about exposures that occurred in the laboratory as a result of gaps in biosafety procedures and practices. The session will highlight the importance of maintaining biosafety practices at all times in the laboratory.
The Bioinformatics Toolbox: A Look at What is Available, and Approaches for Evaluation, Accessing and Sharing These New, Critically Important Tools for Public Health Labs

588-834-22 • 1.0 contact hour for this session
Moderator: Marie-Claire Rowlinson, PhD, D(ABMM), New York State Department of Health
Speakers:
• Kimberlee Musser, PhD, New York State Department of Health
• Heather Blankenship, Michigan Bureau of Laboratories
• Heather Carleton, MPH, PhD, Centers for Disease Control and Prevention

As more public health laboratories have integrated next generation sequencing workflows for different pathogens beyond foodborne, finding bioinformatics resources that provide the appropriate analysis for that pathogen is important. This session will look at different bioinformatics resources available for laboratories and delve into approaches for sharing and accessing pipelines. Speakers will share examples from SARS-CoV2, PulseNet, and tuberculosis and different considerations and options for identifying, evaluating and sharing bioinformatics resources.

A Call to Action: Creating a Laboratory Workforce Pipeline through Academic Partnerships

588-835-22 • 1.0 contact hour for this session
Moderator: Leah D. Gillis, MS, PhD, HCLD(ABB), University of South Florida College of Public Health
Speakers:
• Teresa M. Wolfe, PhD, MT(ASCP), Oregon State Public Health Laboratory
• Drew Fayram, MS, RBP(ABSA), State Hygienic Laboratory at the University of Iowa
• Marty Soehnlen, PhD, MPH, PHLD(ABB), Michigan Bureau of Laboratories

A survey done mid-2021 yielded over 200 responses from clinical laboratory MLT/MLS programs around the county when asked about their relationship with a PHL. Most programs indicated that they do not have a relationship but that they are interested in establishing one. This is an opportunity for PHLs to advocate and build a pipeline of future employees. This session will discuss how some PHLs established a partnership with academia and what some of the academic programs indicated as their areas of interest. Resources and tools useful for developing the partnership will be shared.

5:15 pm – 5:30 pm Break
5:30 pm – 6:30 pm Member Assembly
Friday, May 20

7:00 am – 12:00 pm  Registration
7:00 am – 9:00 am  Coffee Break
7:30 am – 8:30 am  Roundtable Sessions ▼

Successful Use of Point-of-Care CLIA-waived Tests in both Diagnostic and Surveillance Programs in the US  
588-836-22 • 1.0 contact hour for this session
Moderator: Jill Taylor, PhD, Association of Public Health Laboratories

The San Francisco PHL Community’s Experience with HIV POC Testing
• Mark Pandori, PhD, D(ABMM), Nevada State Public Health Laboratory

Rapid Tests as a Component of Influenza Virus Surveillance
• Allen Bateman, PhD, MPH, D(ABMM), Wisconsin State Laboratory of Hygiene.

SARS-CoV-2 Antigen Testing Program for Schools in California
• Debra Wadford, PhD, MS, PHM, M(ASCP)CM, California Department of Public Health

Looking Forward: Using Rapid Testing to Reach Underserved Communities in a Rural State
• Tim Southern, PhD, D(ABMM), South Dakota Public Health Laboratory

At this point in the pandemic, it is clear that point-of-care tests are here to stay, but there is a lot of confusion about how best to use them and where they fit into the public health field. There are clearly situations where we already use rapid tests successfully for public health surveillance. In this Roundtable we will describe those uses and then discuss future uses, and how to reach underserved communities.

Hot Topics in HIV, Viral Hepatitis and STD Testing  
588-837-22 • 1.0 contact hour for this session
Moderator: Marty K. Soehnlen, PhD, MPH, PHLD(ABB), Michigan Bureau of Health and Human Services

Speakers:
• Marie-Claire Rowlinson, PhD, D(ABMM), New York State Department of Health
• Megan Crumpler, PhD, HCLD, Orange County Public Health Laboratory
• Barbara Van Der Pol, PhD, MPH, University of Alabama, Birmingham

Public Health Laboratories must continue to adapt to new technology, regulations and testing recommendations to remain relevant in their role. As new technologies emerge, PHLs must also grapple with the benefits and limitations of changing
workflows inside their laboratory and the impact to their submitters. This session will provide highlights on the trending topics and best practices in HIV, Viral Hepatitis and STD testing and updates from recent national conferences and publications.

The Future of PulseNet and Foodborne Surveillance in the US and Beyond

588-838-22 • 1.0 contact hour for this session

Moderator: Kristy Kubota, MPH, Association of Public Health Laboratories

Speakers:
• Heather Carleton, MPH, PhD, Centers for Disease Control and Prevention
• Kelley Hise, MPH, Centers for Disease Control and Prevention
• Evonne Woodson, PhD, Centers for Disease Control and Prevention

PulseNet, the National Molecular Subtyping Network for Foodborne Disease Surveillance, has been an integral part of national and international surveillance of bacterial enteric pathogens for more than 25 years. In 2019, PulseNet transitioned its laboratory and analysis methods to whole genome sequencing and is now working to modernize its data analysis platform to meet the data demands of the 21st century and beyond. This session will explore the strategies PulseNet Central at CDC is developing to create a new software platform for the PulseNet network.

Money Talks: Successfully Rewarding Your Workforce

588-839-22 • 1.0 contact hour for this session

Moderator: Larry Seigler, PhD, D(ABMM), Houston Health Department Laboratory

Speakers:
• Deborah Severson, MT(ASCP), Fairfax County Health Department Laboratory
• Richard Steece, PhD, Tennessee Department of Health: Laboratory Services

In 2019, APHL surveyed public health laboratory directors and conducted a focus group comprised of 12 millennial laboratorians from across the country, and both groups agreed that the salary scale for employees is the biggest barrier to the recruitment and retention of staff. This roundtable discussion will feature two lab directors who will explain how they were able to successfully increase the salaries for their staff and the lessons they learned during the process.

8:30 am – 9:00 am Coffee Break
Strategic Partnerships to Strengthen the Laboratory System

Moderator: Jasmine Chaitram, MPH, MT (ASCP), Centers for Disease Control and Prevention

Speakers:
- Tom Sparkman, American Clinical Laboratory Association
- Andrew Cannons, PhD, HCLD (ABB), Florida Bureau of Public Health Laboratories — Tampa
- Matthew Mauldin, PhD, Centers for Disease Control and Prevention
- Manohar Mutnal, PhD, HCLD (ABB), Baylor Scott & White Health Medical Center

Laboratories are a critical component of health care and public health systems. Public and private laboratories provide essential test services to detect disease in individuals and in the broader population. The coronavirus disease (COVID-19) pandemic further illustrated the need to foster partnerships with diverse laboratories — that is, large commercial, smaller private clinical, academic and other facilities, in advance of a response. This session will describe activities undertaken at the US Centers for Disease Control and Prevention (CDC), public and private laboratories as well as national organizations to prepare for and respond to surge events.

The Role for Public Health Laboratories in Climate Change: Adapting to a Changing World

Moderator: Jed Waldman, PhD, California Department of Public Health (retired)

Speakers:
- John Balbus, MD, MPH, Interim Director, Office of Climate Change and Health Equity, US Department of Health and Human Services
- Paul Schramm, MS, MPH, Climate Science Lead, Climate Science Program, Centers for Disease Control and Prevention
- Rebecca Clark, MPH, Executive Lead, National Program Manager for Regional Laboratories, US Environmental Protection Agency

The panelists from three key federal programs will discuss their climate change activities and strategies, and how laboratory testing could be developed and utilized across infectious diseases and environmental health programs to support their policy goals.
11:30 am  APHL 2022 Adjourns
12:30 pm – 6:00 pm  Optional Tour of the Ohio State Public Health Laboratory  (2-hour drive)

Agenda is as of February 22. Please keep in mind that this schedule is a work in progress and is subject to change.